

Standardizing Generator Synchronization Using Fuzzy Logic

By

William H. Martin

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Abstract

The electric utility industry is undergoing a transformation to become deregulated. This transformation is similar to that of long distance phone service in the late 1980's. This change is leading to a greater demand of electric power, yet the number of large power plants remains the same. To increase the supply of electrical power, private owners are installing small and medium sized generators to supply power during expensive, peak times of the day. An electrical generator can safely supply power back to the power grid when it is synchronized to the utility power line. Today, automated generator synchronization control algorithms are dependent on the type of prime mover and the reference bus frequency. This project will propose a generator synchronization control algorithm that can be used on most generator sets independent of the prime mover and reference bus frequency. By capturing the manual synchronization characteristics of a generator operator, these characteristics can be implemented using Fuzzy Logic control theory. The project discusses how the Fuzzy Logic control algorithm can be used on multiple generator sets regardless of the reference bus frequency, and it is compared against traditional automated generation synchronization methods. The Fuzzy Logic generator synchronization control algorithm can be implemented in standard, off of the shelf automation equipment; or it can be implemented in a stand-alone unit. Therefore, this new control methodology can be used on most generator sets allowing generator manufacturers and integrators to reduce their implementation costs.

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Nomenclature

Breaker Closure Time

The time it takes for a circuit breaker to close its contacts after the close signal has been applied [1]. The closure time of various types of breakers and manufacturers can range from a few cycles to 500 milliseconds [2]. This information can be obtained from the specific circuit breaker manufacturer's specifications.

Circuit Breaker

A mechanical device that make, carry, and interrupt currents under normal, specific abnormal, and fault conditions [1].

Frequency

Frequency is the number of times in one second that an AC voltage wave repeats its pattern, and it is specified in Hertz (Hz) [3]. An example of a 60 Hz signal is shown in Figure 1.

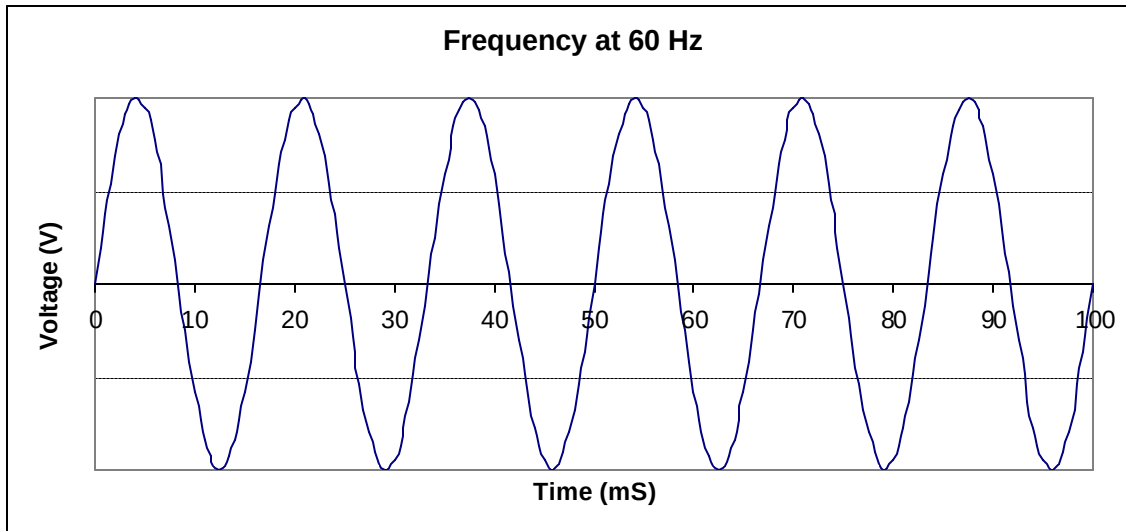


Figure 1: Frequency at 60 Hz

Lamp Method of Synchronizing

The lamp method of synchronizing uses electrical circuitry to determine if the voltage, frequency, and phase angle of the oncoming generator matches that of the reference bus. If the voltage, frequency, and phase angle of the oncoming generator matches the reference bus then the lamps will not illuminate. If the frequency and voltage match but the phase angle does not, then the lamps will remain illuminated as shown in Figure 2. If the frequency does not match, then the lamps will blink. The circuit for this method is shown in Figure 3. The basic principal for this circuit is that the lamps will only illuminate when there is a voltage difference between the generator and reference bus. There is not voltage difference across the lamps when the oncoming generators voltage, frequency, and phase angle match that of the reference bus [1].

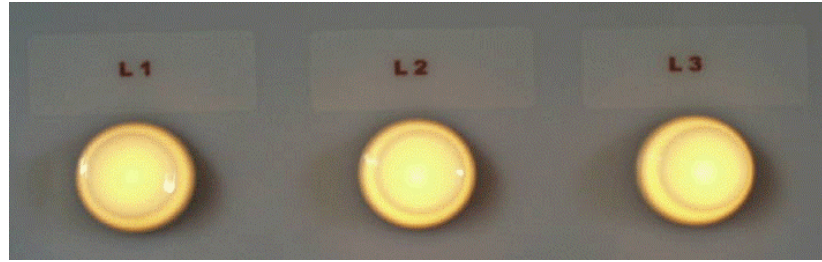


Figure 2: Lamps for 3-Phase Generator Synchronization [1]

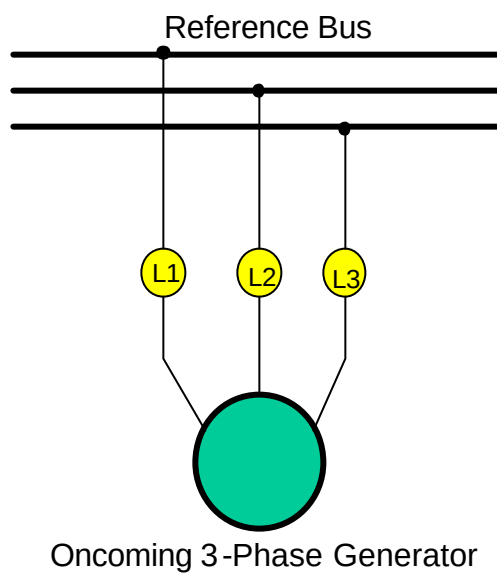


Figure 3: The Lamp Method Synchronization Circuit for a 3-Phase System [1]

Oncoming Generator

The oncoming generator is the generator that is to be synchronized and connected to the reference bus. A generator creates electrical energy from mechanical energy by creating a voltage when a field is excited and there is movement between the field and armature windings. The generator's voltage output varies directly with the strength of the field and speed of the prime mover [1].

On Peak Power

The power supplied by the electric provider when user demand is the highest, which is usually during the working day. This is the most expensive time of the day to consume electrical power [3].

Phase Angle

Phase angle is the relative difference between two sine waves, and it is usually expressed in degrees. For generator synchronization, phase angle is the difference between the voltage signals of the oncoming generator with respect to the reference bus [1].

Phase Sequence

Phase sequence is the order in which the 3 voltage signals appear from a 3-phase power system. Phase sequence is also known as phase rotation, and it can be expressed as ABC or ACB phase sequence [1]. Figure 4 shows an example of an ABC phase sequence.

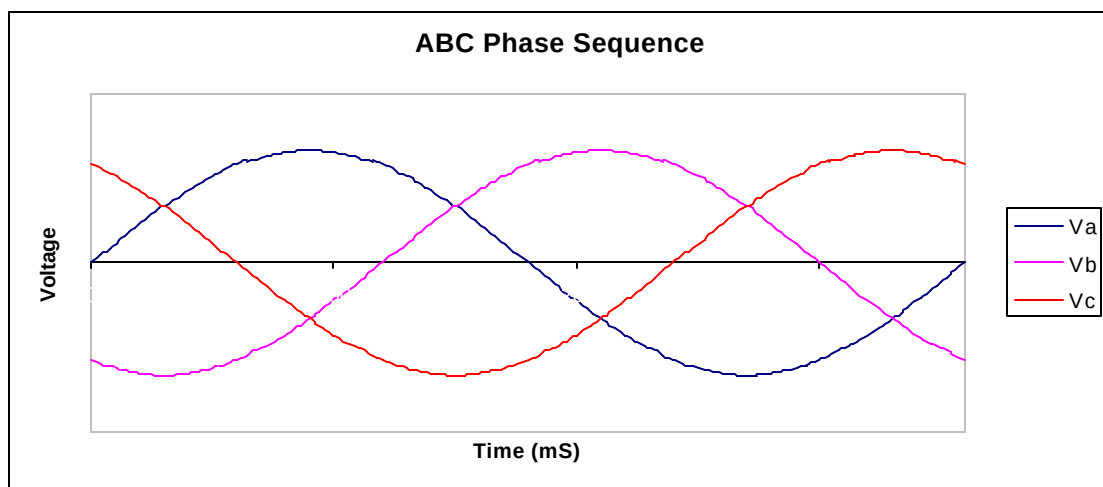


Figure 4: ABC Phase Sequence [1]

Prime Mover

A prime mover is mechanical device that provides the mechanical energy needed for a generator to maintain its desired electrical output. Some examples of prime movers are [1]:

- *Internal Combustion Engine (gas, diesel)*
- *Wind Turbine*
- *Gas Turbine*
- *Steam Turbine*
- *Water Turbine*

Reference Bus

A point in a system that serves as a common connection for two electrical systems. One of the systems is not being controlled, but it is used as a reference for generator synchronization [3][4]. Some examples of reference buses would include electric utility lines or other generators.

Slip Frequency

Slip frequency is the difference in frequency between the oncoming generator and reference bus. For example, if the oncoming generator frequency is 61 Hertz (Hz) and the reference bus frequency is 60 Hz, then the slip frequency is 1 Hz [1]. With generator synchronization it is common for the operator to have a slight slip frequency (the generator's frequency is slightly greater than the reference bus) to avoid the possibility of motoring the generator at the instant the circuit breaker is closed [2].

Synchronizing Bus

Several conductors that serve as a common connection for an electrical system that is to be controlled to match that of the reference bus [3][4]. The output of the oncoming generator is the synchronizing bus for generator synchronization.

Synchroscope

A synchroscope is an analog device that provides a visual indication of the instantaneous frequency and phase difference between the oncoming generator and the reference bus. If the frequency of the oncoming generator is greater than the reference bus frequency, then the synchroscope will rotate clockwise (fast direction). If the frequency of the oncoming generator is less than the reference bus, then the synchroscope will rotate counter clock-wise (slow direction). If the synchroscope stops at a position other than 12 o'clock; then the oncoming generator and reference bus have the same frequency, but their phase angle does not match. When the frequency and phase angle of the oncoming generator matches the reference bus, the synchroscope will point at a 12 o'clock position [1]. A synchroscope is shown on Figure 5.



Figure 5: A Synchroscope

1. **Introduction**

The electric utility industry is transitioning from a regulated industry to a deregulated industry similar to long distance phone service and the airline industry. States such as California, New York, Pennsylvania, Michigan, and Illinois have adopted laws that allow large power users to choose their utility provider. The goal of electric deregulation is to lower the cost of electricity. However, the number of large power plants is not increasing due to political and environmental concerns, but the demand for electric power increases. To increase the supply of electric power, private owners are installing small and medium size generating facilities. These facilities operate when electrical rates are higher than the cost of operating the generator itself.

To add these additional generating facilities, the generators themselves need to be synchronized with respect to voltage, frequency, and phase angle to the existing power grid. Today, generator synchronization is performed manually or through synchronizing devices that use generator-specific proportional, integral, and derivative (PID) control loops. Automated generator synchronization control systems are dependent on the type of prime mover and the reference bus frequency that the generator is synchronizing to. Because of this dependence, generator manufacturers and integrators must spend a significant number of resources to create automated synchronization control algorithms for each generator set that is being deployed. This effort is transferred to the generator's end customer via high integration costs.

What is interesting about manual synchronization is that the generator operator performs similar operations regardless of the prime mover type and reference bus frequency. If a control system could emulate the functions of a generator operator, then installation and operational costs could be greatly reduced for both the generator manufacturer and end customer. A technology exists today that can capture human-like functions and execute them in a control system; this technology is known as Fuzzy Logic.

This paper will discuss a generator synchronization control algorithm that will synchronize a generator's frequency and phase angle to a reference bus using Fuzzy Logic control. The goal of this project is to create a control algorithm that can be used on most types of generators independent of the prime mover and reference bus. This algorithm can be used with existing automation control components or implemented in a stand-alone unit.

2. Literature Review

Fuzzy Logic – Intelligence, Control, and Information was written by John Yen and Reza Langari in 1999 [10]. The book describes the fundamental concepts of Fuzzy Logic. It also describes how to apply fuzzy logic in control systems. After reading this book, the author was able to properly design my fuzzy sets so that the new control algorithm would be more stiff.

IEEE Spectrum is a publication written by the Institute of Electrical and Electronics Engineers (IEEE) [7, 8]. The magazine contains various articles relating to electrical engineering. Some articles written in the July 1992 and October 1992 issues discuss the early developments of Fuzzy Logic. The articles, “Japan Goes Fuzzy” and “Fuzzy Fundamentals”, influenced the author’s decision to pursue a Fuzzy Logic generator control algorithm. These articles were published when Fuzzy Logic was first becoming popular. These articles provided the fundamental principles of Fuzzy Logic from which the generator synchronization control algorithm was conceived.

Introduction to Synchronization is a white paper that was written by Basler Electric, Inc. Basler Electric designs and manufactures components for automated generator synchronization control [1]. This white paper describes the basic theory of generator synchronization, and it describes how the products of Basler Electric can be used to automate generator synchronization.

Line Synchronization Module Installation and Operation Manual is an owner's guide for the Allen-Bradley Bulletin 1402 Line Synchronization Module [4]. The manual covers the basic fundamentals of generator synchronization. It also describes how this module for an Allen-Bradley PLC-5 programmable logic controller (PLC) can be used in conjunction with the PLC-5 to synchronize a generator to a reference bus. The manual includes examples of ladder logic that can be used to control a generator using two proportional, integral, and derivative (PID) control loops.

3. Generator Synchronization

Generator synchronization is the process of electrically connecting additional generators to an existing bus or other generators on the same bus. Failure to properly synchronize an oncoming generator to the reference bus could result in equipment damage and personal injury. When the oncoming generator's voltage, frequency, and phase angle do not match that of the reference bus and the two systems are electrically connected together, a voltage potential exists across low impedance. This causes a surge of current to enter the generator from the reference bus. This surge could be shown as an anomaly on the reference bus, or it could be large enough to create torque on the shaft of the generator, which could damage the generator or the device providing the mechanical power [5].

The phase angle between the generator and the reference bus at the time of the circuit breaker closure should be zero. In reality zero phase difference is hard to accomplish. A generator can handle a phase angle difference of less than 10 degrees leading or lagging [2]. Scott Neumueller of General Electric Power Systems describes what happens when the phase angle difference is greater than 10 degrees:

Anything greater than 10 degrees and you'll feel a "thump" in the floor at the time the breaker closes because the generator rotor and its drive train just got magnetically "jerked" into synchronization. The worst one I ever experienced was a 160 MW hydro turbine in Alberta that was put on-line 30 degrees out of phase with me standing less than 20 feet from it. I thought that damn thing was going to come out of the floor. The plant people had run the synch-scope sensing lines through an isolation transformer and forgot to compensate the synch-scope for it [2].

Generator synchronization must also be considered when generators are installed for the following electrical and economical reasons [1]:

- *New load demands exceed the rated capacity of the existing generation system.*
- *Considerations for the reliability of a single generator versus multiple generators.*
- *The ability to add or remove different types of generator sets when efficiency is concerned.*
- *Considerations to use cogeneration to offset electric utility costs during expensive peak times.*

3.1. Methods of Generator Synchronization

There are three methods of synchronizing an oncoming generator: manual, manual with some sort of permissive relay, and fully automatic synchronizing [1].

3.1.1. Manual Synchronization

Manual synchronization is the most versatile method of synchronization, for it can be used on many different types of generator sets. This type of synchronization uses synchronizing lamps, a synchroscope, instruments to monitor system parameters, and a breaker control device [1]. The operator adjusts the speed of the prime mover to control the frequency, voltage, and phase angle of the generator. When all three of these parameters match that of the reference bus, the operator engages the breaker control device [1].

The advantage of manual synchronization is its simplicity and low cost [1]. The disadvantage of manual synchronization is that “it requires a disciplined operator with enough knowledge to avoid damage to the” generator itself [1].

3.1.2. Manual With Permissive Relay

This method of synchronization is very similar to manual synchronization. This type of synchronization uses synchronizing lamps, a synchroscope, instruments to monitor system parameters, a breaker control device, and a sync-check device [1]. The operator adjusts the speed of the prime mover to control the frequency, voltage, and phase angle of the generator. When all three of these parameters match that of the reference bus, the operator engages the breaker control device. The sync-check device verifies the operator’s decision to close the circuit breaker [1]. Many times, the operator will hold the circuit breaker control switch closed while adjusting the speed of the prime mover using the sync-check device to determine when to close the circuit breaker [1].

3.1.3. Fully Automatic Synchronization

Fully automatic synchronization automates the manual generator synchronization procedures of a generator operator. A synchronizing device monitors the voltage, frequency, and phase angle of the generator with reference to the reference bus [1]. This device provides error correction signals to a control system that controls the speed of the prime mover [1]. The synchronizing device also provides a circuit breaker closing contact, which verifies that the voltage, frequency, and phase angle match that of the reference bus allowing for a safe circuit breaker closure [1].

3.2. Types of Generator Synchronization Control

There are two types of control algorithms that can be used to synchronize an oncoming generator: phase matching and slip-frequency [2]. The method that is used is dependent on the following conditions:

- *The stiffness of the prime mover driving the generator.*
- *The stiffness of the reference bus that the generator is connecting with.*
- *The capability of the prime mover.*

Stiffness refers to the summation of the frequency deviation both in terms of magnitude and velocity. A synchroscope provides a visual summation of the phase error between the generator and the reference bus. The speed that the synchroscope pointer moves indicates the slip-frequency and is expressed in degrees/second. Fortunately, in North America the electric utilities provide a fairly stiff reference bus in terms of frequency. The voltage may fluctuate occasionally, but the frequency is reliably at 60 Hertz (Hz) [2].

3.2.1. Phase Matching

If the prime mover and generator have a lot of inertia and the control system is stiff, one can use phase matching [2]. Phase matching involves three steps:

1. *Control the speed of the prime mover such that the oncoming generator's frequency matches the reference bus.*
2. *Adjust the voltage level using oncoming generator's voltage regulator such that it matches the reference bus.*
3. *Slightly adjust the speed of the prime mover, so the phase angle of the oncoming generator matches the reference bus.*

When all three of these steps are completed successfully, the operator or control system can close the circuit breaker allowing the generator to provide power on the reference bus.

3.2.2. Slip-Frequency

Generator integrators use positive slip-frequency control when the prime mover is not stiff, the reference bus is not stiff, or the prime mover cannot tolerate connecting to the reference bus when the generator signal is lagging the reference bus. Positive slip is also known as "fast-scope" because the synchroscope pointer is moving slowly clockwise. The circuit breaker close signal is provided early such that the synchroscope pointer passes through the 12 o'clock position when the circuit breaker makes contact [2].

Some prime movers such as gas turbines and reciprocating engines cannot tolerate negative slip. Negative slip occurs when the circuit breaker closes when the synchroscope pointer moves in the slow direction. At the time of the circuit breaker closure, the prime mover that is driving the oncoming generator is turning slower than the reference bus that it was just connected to. The system is now dragging the prime mover;

also known as motoring [2]. Scott Neumueller of General Electric Power Systems explains what happens to a gas turbine when the circuit breaker is closed during negative slip:

On the LM6000 gas turbines I work on, you'll flame the thing out because you'll throw in more air than you have fuel for and "WHOOOF!!" Out she goes. I have reverse-power protection in my digital generator protection relay set to 0.25 sec. that will pop the breaker and save my engine if something goes wrong [2].

4. Proportional, Integral, and Derivative Control

A popular method of control for feedback control systems is proportional, integral, and derivative (PID) control. A PID control system is a great way to control a process when a specific set point is desired for a specific type of process. PID control uses a mathematical representation of the process to control the system. Gains for the proportional, integral, and derivative components of this mathematical equation will affect how the process starts up, stabilizes to a desired value, and reacts to sudden changes in the system. Typically, these constants need to be fine tuned for specific applications. To gain a better understanding of PID control, one needs to understand how each of the three components affects the control system.

4.1. Proportional Control

Proportional control is the simplest form of control. The error signal of the control system's output is related to the input of the control system by a proportional constant [6]. The result of this type of control system for a step input is a high overshoot of the desired set point. As the system tries to recover from the overshoot, it will undershoot the desired set point. This cyclic process will continue until the system eventually stabilizes. Ideally, a control system would like a short amount of time in which the actual value matches that of the desired set point with no overshoot or undershoot. To help with this effort, a derivative component can be added to the control system [6].

4.2. Proportional-Derivative Control

A proportional-derivative control system not only adjusts its output signal proportionally to its input signal, but it also takes into account the rate at which the actual value differs from the desired value. By having this additional control component, the control system can anticipate the direction of error and use that information to control the system better. A proportional control system would allow a large overshoot to occur, but the derivative component predicts the overshoot ahead of time and makes the appropriate corrective action before a large overshoot actually occurs [6].

The benefit of proportional-derivative control is that it will improve damping, reduce maximum overshoot, reduce rise time, and reduce settling time. Derivative control affects the steady-state error of a system only if the steady-state error varies with time. If the steady-state error is constant, then the derivative of the error is zero. Thus, the derivative component of the control system is not used [6]. To take into account constant steady-state error, an integral control component is needed.

4.3. Proportional-Integral Control

A proportional-integral control system not only adjusts its output signal proportionally to its input signal, but it also takes into account constant steady-state error from which the actual value differs from the desired value. This type of control system could improve steady-state error, but it could do it at the expense of stability. However, if the appropriate proportional and integral constants were selected, this type of control system can improve damping and steady-state error [6].

The benefit of a proportional-integral control system is that it can improve damping and reduce the maximum overshoot. Unfortunately, the amount of time needed for the actual value to match that of the desired value increases as a result [6]. Ideally, a control system should have all of the characteristics of the three control systems mentioned above.

4.4. Proportional-Integral-Derivative Control

By understanding the positive characteristics of the proportional, proportional-derivative, and proportional-integral control systems, one could design a control system with all these components. This type of control system is known as a PID control system. To design this type of control system, the proportional and integral components should be designed first. These components will fulfill the control system's stability requirements. Next, the derivative component should be designed to handle the unit step input response [6]. The person designing the PID control system will have to experiment with the proportional, integral, and derivative gains; however, the end result is a control system that can accurately control a process at a desired set point.

5. Fuzzy Logic

Fuzzy Logic is a type of control that is very different from that of classical control methods such as PID. Fuzzy Logic control is used when PID control cannot be used to solve complex problems. Its methodology involves sets of values with word-based rules. The theory of fuzzy sets has been around since 1965 when Dr. Lotfi A. Zadeh first introduced it. Fuzzy Logic is relatively easy to implement using three concepts: fuzzification, rule evaluation, and defuzzification. Today Fuzzy Logic is being used to control car speed, cameras, transmissions, and other processes [7].

5.1. History of Fuzzy Logic

Dr. Lotfi A. Zadeh, a professor at the University of California Berkeley, first introduced Fuzzy Logic. Dr. Zadeh was trying to develop a type of control that resembles human control instead of discrete, logical control; for at that time humans were better at control than machines. He began by writing a paper on *fuzzy sets*, which are sets of values that have different degrees of membership. In 1973 he published a paper in the *IEEE Transactions on Systems, Man, and Cybernetics*. This paper described the concept of linguistic variables and using them with IF-THEN rules. In 1975 the first industrial fuzzy application was used at the F.L. Smith Corp. cement kiln plant in Denmark. Today, Fuzzy Logic is used in cruise control for automobiles, auto-focus in cameras, automatic transmissions on automobiles, and many other applications [7].

5.2. Concept of Fuzzy Logic

Fuzzy Logic is a type of control that uses words or phases as variables instead of discrete values. Traditional discrete logic consists of two states such as on/off, 0/1, or true/false. Fuzzy Logic consists of non-discrete states such as partially on, 0.85, or a little true. This methodology allows for a type of control similar to that of human control. This type of logic may seem complicated to achieve; however, it only involves some minor calculations and the human experience. The real power behind Fuzzy Logic does not revolve around complicated mathematical equations; however, it uses verbal descriptions of how a human would control something. To achieve this, three steps are needed to calculate a fuzzy conclusion or result; these are fuzzification, rule evaluation, and defuzzification [7].

5.2.1. Fuzzification

The first step in calculating a fuzzy value is called fuzzification, which involves converting a real value into a fuzzy value. This is accomplished by using a real input value and comparing it to a fuzzy set. A fuzzy set is a mathematical set of numbers that have a degree of membership ranging from zero to one [7]. Examples of some fuzzy sets are shown in Figure 6.

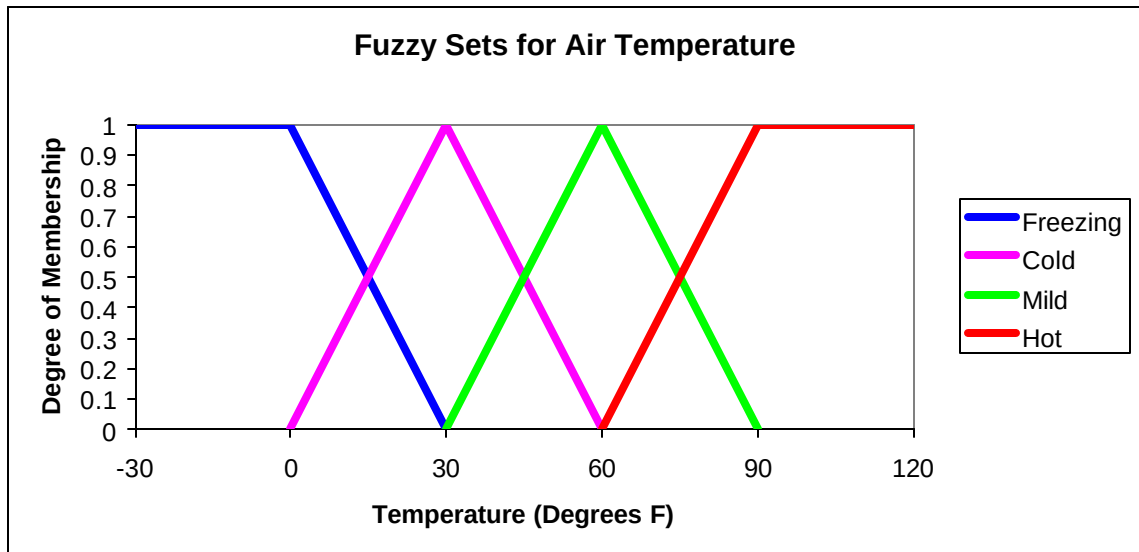


Figure 6: Examples of Fuzzy Sets

Once a fuzzy set has been defined, a real input value such as 50 is compared to the fuzzy sets as seen in Figure 7. The degree of membership is found for each set that the real value is a member of.

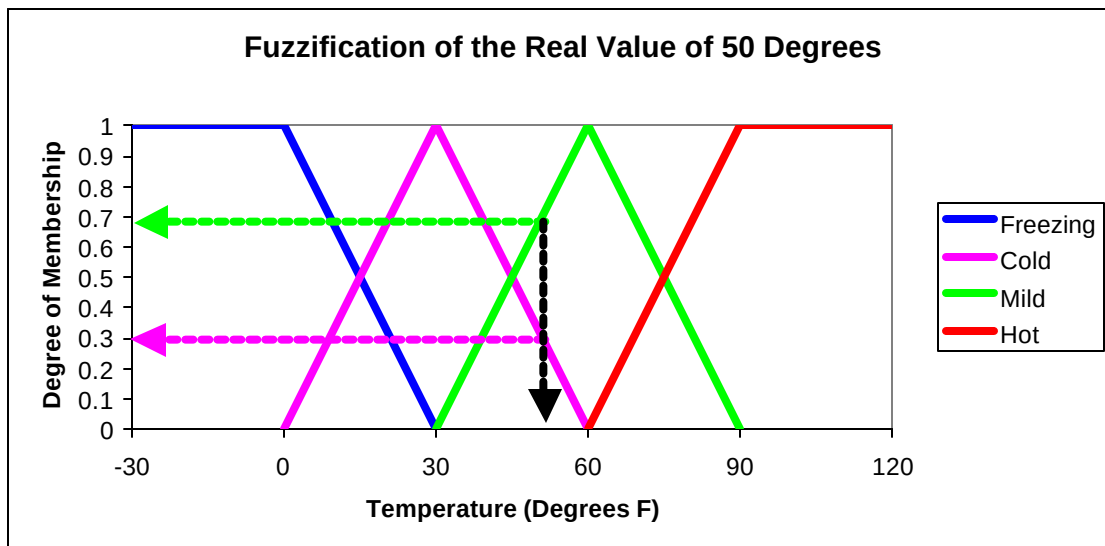


Figure 7: Fuzzification of a Real Value

The real input value of 50 belongs to two fuzzy sets as shown with the vertical black arrow, Mild and Cold. The degree of membership for each group is shown with the horizontal arrow, which is 0.70 for Mild and 0.30 for Cold.

5.2.2. Rule Evaluation

The second step, rule evaluation, can be performed when the fuzzy value is known. Rule evaluation is the process of deciding which fuzzy output set will be used [8]. The following statements are examples of some Fuzzy Logic rules:

1. *If air temperature is freezing, then heat is high.*
2. *If air temperature is cold, then heat is medium.*
3. *If air temperature is mild, then heat is low.*

Since the air temperature of 50 exists in fuzzy sets Cold and Mild from Figure 7, rules 2 and 3 will be used. To use the fuzzy rules effectively, there are three steps involved with rule evaluation; these are fuzzy matching, inference, and combination [10].

5.2.2.1. Fuzzy Matching

“Fuzzy matching calculates the degree to which the input data matches the condition of the fuzzy rules.” [10] When more than one condition exists for a fuzzy rule, the conditions can be combined using the AND conjunction or the OR disjunction. To calculate the resulting degree of membership for a fuzzy rule using the AND conjunction, a minimum operator can be used; or a product operator can be used. For the OR disjunction, a maximum operator is used [10]. For example, the fuzzy rule:

If air temperature is freezing and water temperature is freezing, then heat is high.

The degree of membership for air temperature and water temperature is determined to be 0.5 and 0.3 respectively. The resultant degree of membership for this rule calculates to be 0.3 using the minimum operator compared to 0.15 using the product operator.

5.2.2.2. Inference

“The inference step calculates the rule’s conclusion based on its degree of membership.”

[10] There are two methods that can be used generate the inferred conclusion: Clipping Method and Scaling Method.

“The Clipping Method removes the top of the output fuzzy set that is greater than the degree of membership.” [10] This can be accomplished by using a logical minimum operator. An example of the Clipping Method is shown in Figure 8.

“The scaling method scales down the output fuzzy set in proportion to the degree of membership.” [10] This can be achieved by using a logical product operator. An example of the clipping method is shown in Figure 9.

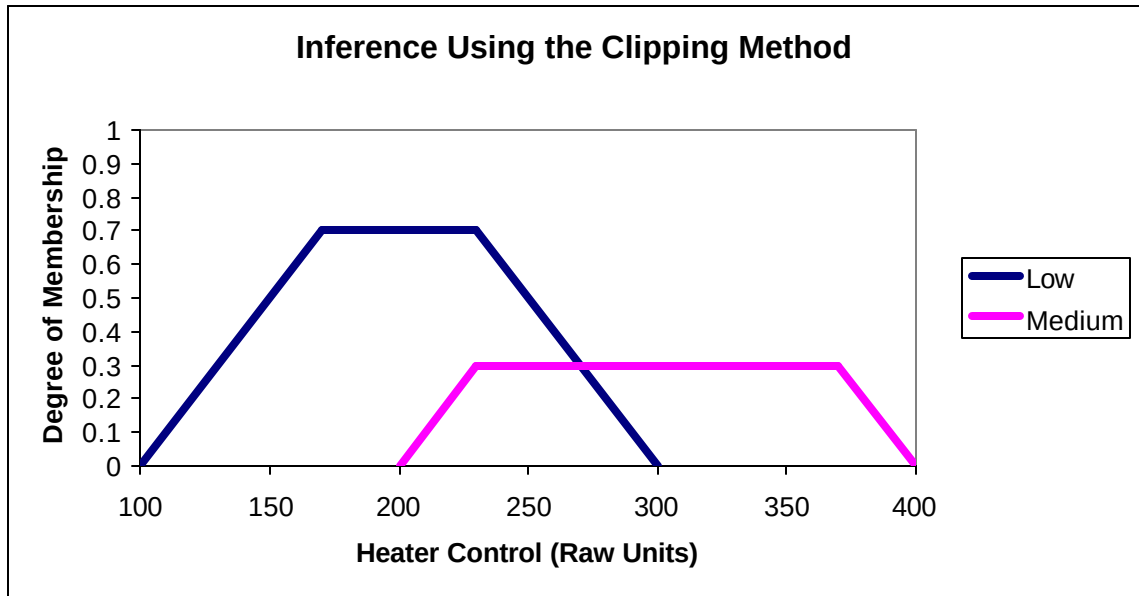


Figure 8: Inference Using the Clipping Method

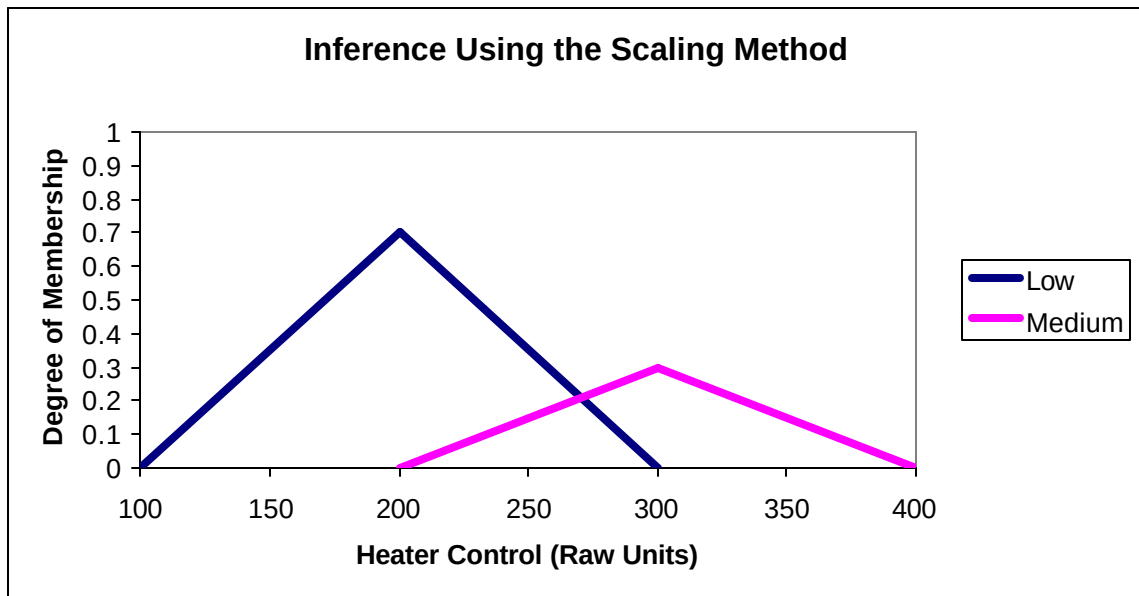


Figure 9: Inference Using the Scaling Method

5.2.2.3. Combination

“Combination combines the conclusions of all the fuzzy rules into a final conclusion.”

[10] There are two methods of combination: superimposition and addition.

Superimposition combines the resulting output fuzzy sets after the inference step into one final set of data points. This can be accomplished using a maximum operator. An example of combination using superimposition is shown in Figure 10 using the fuzzy sets from Figure 8.

Addition sums the resulting output fuzzy sets after the inference step into a final set of data points. This can be accomplished using a summation operator. An example of combination using addition is shown in Figure 11 using the fuzzy sets from Figure 9.

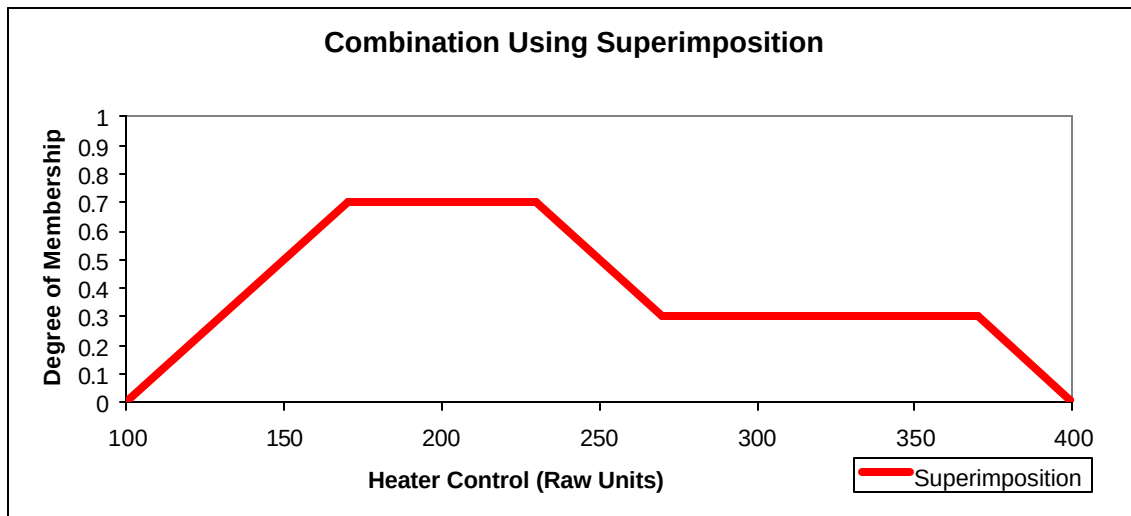


Figure 10: Combination Using Superimposition

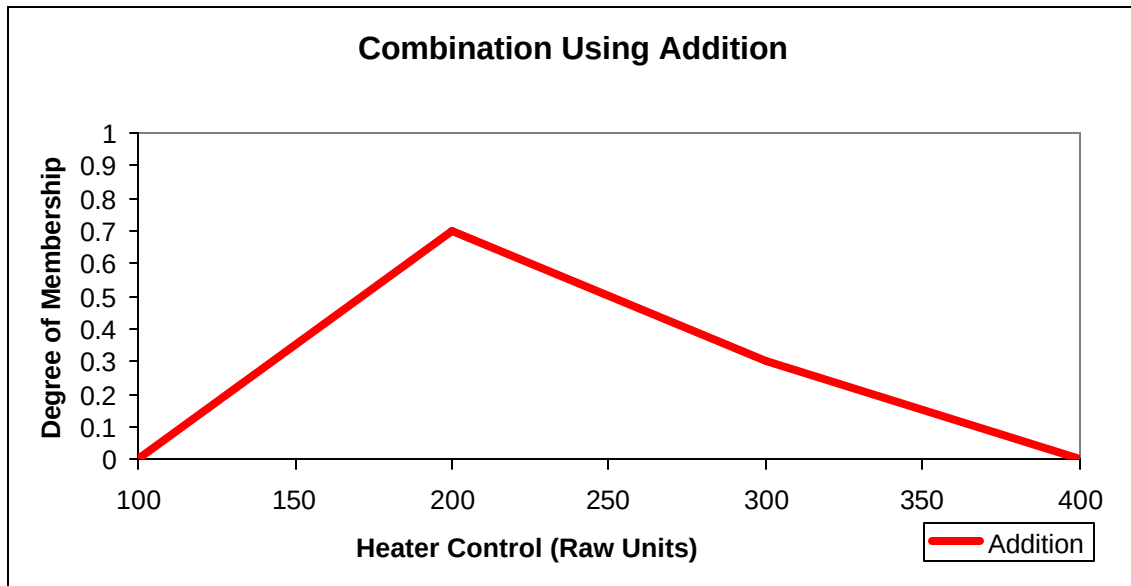


Figure 11: Combination Using Addition

5.2.3. Defuzzification

After the rules have been analyzed and the resulting output set of data points have been defined, the final step of defuzzification can be performed. Defuzzification is the process of converting a fuzzy value back to a real value. This real value would be used in the control system [2]. There are three methods of defuzzification: Centroid Method, Mean of Maximum Method, and the Singleton Method.

5.2.3.1. Centroid Method

The Centroid Method is the most common method of defuzzification. It involves calculating the centroid of the resultant fuzzy output sets [7]. As seen in Figure 7, the degree of membership for the input value of 50 is 0.70 for the Mild and 0.30 for the Cold

fuzzy sets. Rules 2 and 3 are used to determine the output value, which use the Medium and Low fuzzy sets. Using the Clipping Method and superimposition, the resultant output fuzzy set is shown as a red polygon in Figure 12.

Defuzzification using the Centroid Method takes the total area of this new shape and calculates the centroid of it. The x-coordinate of the centroid is the real output value, for the black dot in Figure 12 shows the x-coordinate of the centroid to be 230.

5.2.3.2. Mean of Maximum Method

The Mean of Maximum Method calculates the average of the output fuzzy set with the highest degree of membership [10]. An example of the Mean of Maximum Method is shown in Figure 13. The black dot in Figure 13 shows the average value of the highest degree of membership to be 200.

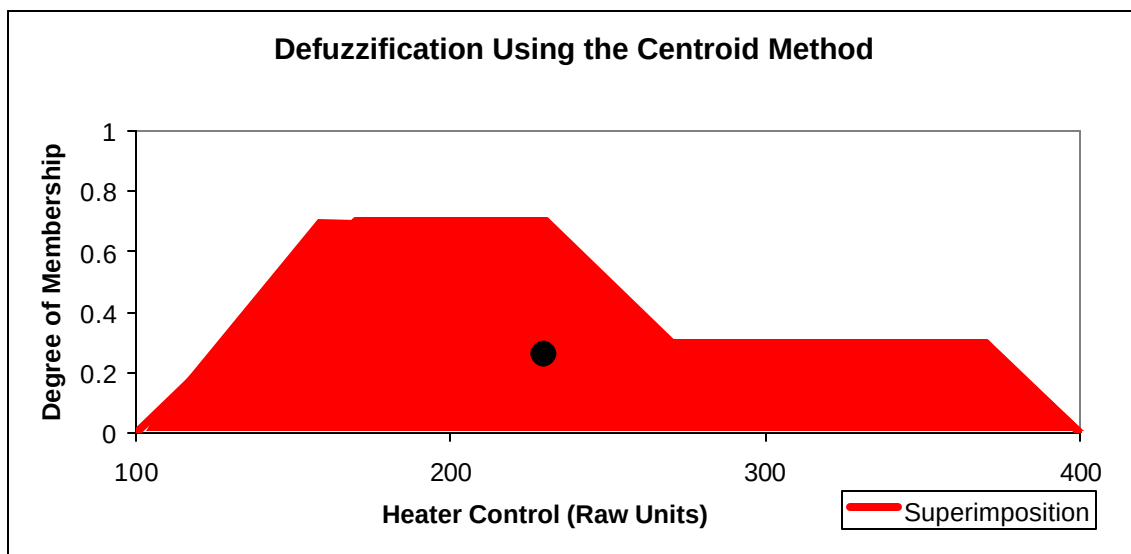


Figure 12: Defuzzification Using the Centroid Method

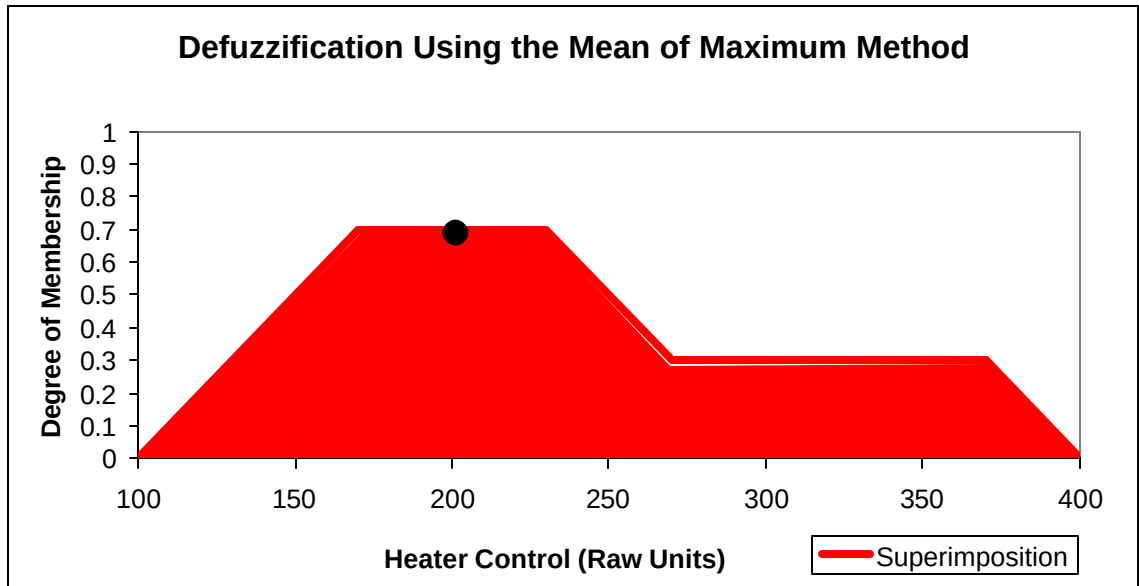


Figure 13: Defuzzification Using the Mean of Maximum Method

A limitation of the Mean of Maximum Method is that it does not take into account the overall shape of the output fuzzy set. Two output fuzzy sets with the same peak points but different shapes would have identical results.

5.2.3.3. Singleton Method

The Singleton Method is also known as the Height Method. This method is the easiest to implement. A singleton is a single point used to represent a fuzzy output set. “Since a singleton only intersects the x-axis at one point, the center-of-gravity calculation reduces to just a weighted average calculation of x-axis points and rule strengths, with the rule strengths used as weights.” [9] This makes the defuzzification calculation less of a burden [9]. The defuzzified value is calculated using [1].

$$\text{Value} = \text{Sum} (\text{Output Value} \times \text{Degree of Membership}) \quad (1)$$

An example of a fuzzy output set for the Singleton Method is shown in Figure 14. The dotted arrows show the degree of membership for the Low and Medium output fuzzy sets. The real output value calculates to be 230 as shown in (2).

$$230 = \{(200 \times 0.70) + (300 \times 0.30)\} \quad (2)$$

Because the math is simple, any microprocessor or micro controller can be used to calculate the output values. “The disadvantage of the Singleton Method is that it is not well justified, and it is considered to be an approximation to the Centroid Method.” [10]

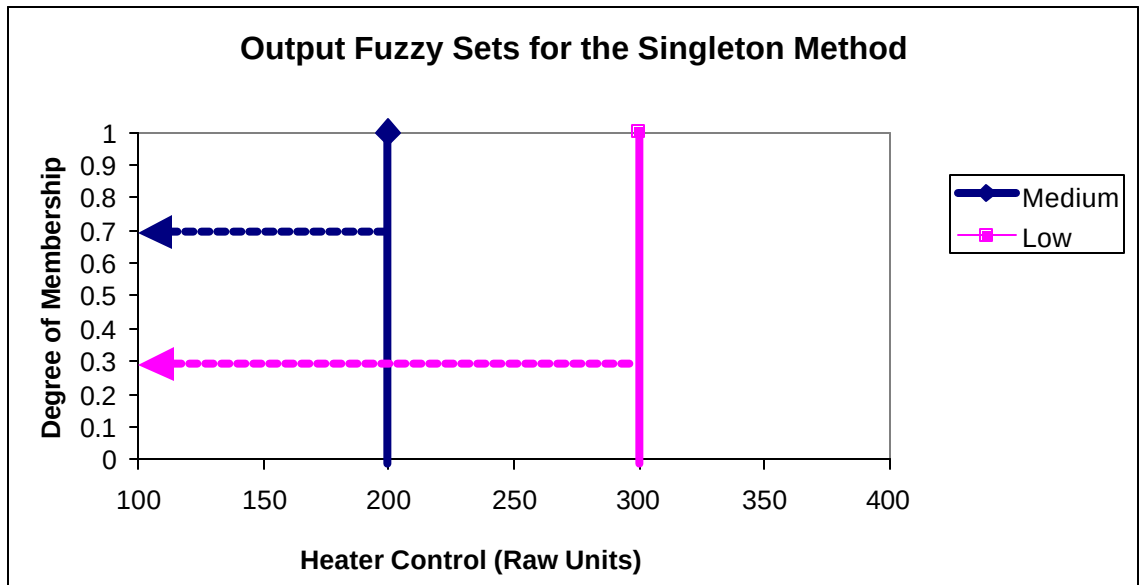


Figure 14: Output Fuzzy Sets for the Singleton Method

5.3. Fuzzy Logic in Control Systems

Using Fuzzy Logic to control a system involves translating external performance specifications and observations of system behavior into a rule-based linguistic control strategy. Instead of creating a mathematic representation of a system like PID control, Fuzzy Logic uses fuzzy sets and linguistic rules to emulate human behavior. When designing fuzzy sets for system inputs, the designer should follow the rules listed below to design a stable control system [10]:

- *Each membership function overlaps only with the closest neighboring membership functions.*
- *For any possible input value, the corresponding degree of membership values in all relevant fuzzy sets should sum as close as possible to 1.0.*

After the fuzzy sets for the input values have been defined, linguistic rules need to be established to control the system. Two types of rules exist for systems using Fuzzy Logic [10]:

1. *Fuzzy Mapping Rules*
2. *Fuzzy Implication Rules*

5.3.1. Fuzzy Mapping Rules

“A fuzzy mapping rule describes a functional mapping relationship between input and outputs using linguistics terms. The foundation of a fuzzy mapping rule is a fuzzy graph. Fuzzy mapping rules can be used for function approximation techniques in system identification and artificial neural networks. Most industrial applications use fuzzy

mapping rules in their fuzzy control systems. The need to approximate a function of interest is based on the following reasons:

- *The mathematical structure of the function is not precisely known.*
- *The function is so complex that finding the precise mathematical representation may be impossible or too costly.*
- *Implementing a function using its precise mathematical representation may be unfeasible.” [10]*

5.3.2. Fuzzy Implication Rules

“A fuzzy implication rule describes a generalized logic implication relationship between two logic formulas involving linguistic variables and imprecise linguistics terms. Their goal is to mimic human reasoning in its ability to reason with ideas that are imprecise by nature. These types of fuzzy rules are related to classical two-valued logic and multi-valued logic. Fuzzy implication rules are used for handling imprecision, which can be used in applications such as diagnostics and high-level decision-making.” [10]

“Most control systems that use Fuzzy Logic use fuzzy mapping rules.” [10] There are three types of models for rules that handle function approximation:

1. *Mamdani Model*
2. *Takagi-Sugeno-Kang Model*
3. *Standard Additive Model*

5.3.3. Mamdani Model

“The Mamdani Model was introduced by E. H. Mamdani who developed the first Fuzzy Logic controller. Most control systems in the 1980’s used this model. The model consists of linguistic rules that describe a mapping of an input value for a corresponding output value based on the degree of membership of the fuzzy input set.” [10] The output fuzzy set of the Mamdani Model is the aggregation of outputs from all of the rules using the clipping inference method [10].

5.3.4. Takagi-Sugeno-Kang Model

“The Takagi-Sugeno-Kang (TSK) model was introduced by T. Takagi, M. Sugeno, and K. T. Kang. This model was developed to reduce the number of rules required by the Mamdani model for complex and high-dimensional problems. Instead of using an output fuzzy set, the TSK Model uses a linear equation of the input values. The inference performed by the TSK Model is an interpolation of all the relevant linear models. The degree of relevance of a linear model is determined by the degree the input data belongs to the fuzzy subspace associated with the linear model. These degrees of relevance become the weight in the interpolation. This provides a powerful tool for modeling complex systems, and it can express a nonlinear functional relation using a small number of rules. Because of this capability, some common neuro-fuzzy systems are based on the TSK model.”[10]

5.3.5. Standard Additive Model

The Standard Additive Model (SAM) was developed by B. Kosko in 1996. “SAM is very similar to the Mamdani model” [10]; however, there are some inherent differences

listed in Table 1. “The advantage of SAM is that it uses very efficient computation methods.” [10]

Table 1: Differences Between SAM and the Mamdani Model [10]

SAM	Mamdani Model
Uses actual input values.	Can handle actual input values and fuzzy inputs.
Uses the scaling inference method.	Uses the clipping inference method.
Uses addition to combine the conclusions of fuzzy rules.	Uses superimposition to combine the conclusion of fuzzy rules.
Uses the Centroid Method for defuzzification.	Does not specify a specific defuzzification technique.

6. Developing a Fuzzy Logic Algorithm for Synchronization

While working with power management applications at Rockwell Automation (a manufacturer of industrial automation equipment brands such as Allen-Bradley), it seemed to make sense that fuzzy logic would be a good tool to automate the synchronization of oncoming generators. Typically, an operator would develop his/her own set of rules from experience to control the speed of a prime mover to synchronize the generator. After listening to many operators over the last 7 years, their rules seemed to be very similar. Some of the general rules that operators mentioned are listed below:

- *“I quickly spin up the generator until I read a voltage”*
- *“I back the generator down when the frequency is close to 60 Hz”*
- *“I ‘bump’ the generator until the frequency matches”*

By harnessing these experiences and executing them in a control system, one could develop a general algorithm that could be used to synchronize multiple types of generators. Fuzzy logic seems to be the one tool that can allow a control system to emulate the rules developed from the human experience. By defining what it physically means to “quickly speed up” and “bump”, these definitions can be applied to word-based rules. These rules could resemble the experiences listed above. By developing rules and applying real world values to these rules, one could develop an automated control system using Fuzzy Logic [8].

6.1. Determining the Appropriate Fuzzy Logic Methods

A control system to control the prime mover for synchronizing an oncoming generator to a reference bus involves adjusting the speed of a prime mover to affect the generator's frequency and phase angle. The control system needed for this application is a standard feedback control system. Two inputs are needed for this control system:

1. Frequency Match Error - *The difference in frequency between the generator and reference bus.*
2. Phase Match Error – *The difference in phase angle between the generator and reference bus.*

The control system needs to quickly increase the speed of the prime mover if the frequency match error is high. As the frequency match error decreases, the rate at which the prime mover increases its speed should become lower. This action closely matches the functionality of fuzzy mapping rules; therefore, fuzzy mapping rules should be used. Because the output is dependent on the approximation of the input value, the Mamdani model should be used [10].

6.2. Designing the Fuzzy Sets for Synchronization

Fuzzy input and output sets need to be created for the Mamdani model. Generator operators adjust their prime mover speed differently when the frequency match error was:

- *Very High*
- *High*
- *Close, but High*

- *Zero*
- *Close, but Low*
- *Low*
- *Very Low*

Using this information, the input fuzzy sets for frequency match error were designed as shown in Figure 15. In a similar manner, the output reaction of the operator would also be based on the seven states listed above. Knowing this, the output fuzzy sets for frequency speed increment were designed as shown in Figure 16 [11].

The operators would act in a different manner when controlling the prime mover speed to adjust for the phase match error. They would slightly increase or decrease the speed of the prime mover until the phase angle of the oncoming generator matches that of the reference bus. Using this information, the input and output fuzzy sets for phase match error were designed as shown in Figures 17 and 18 respectively [11].

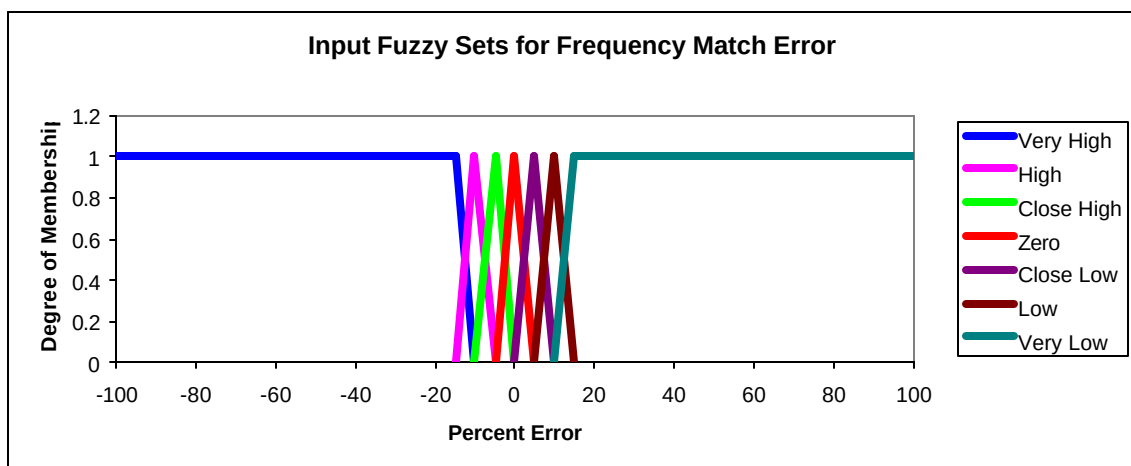


Figure 15: Input Fuzzy Sets for Frequency Match Error [11]

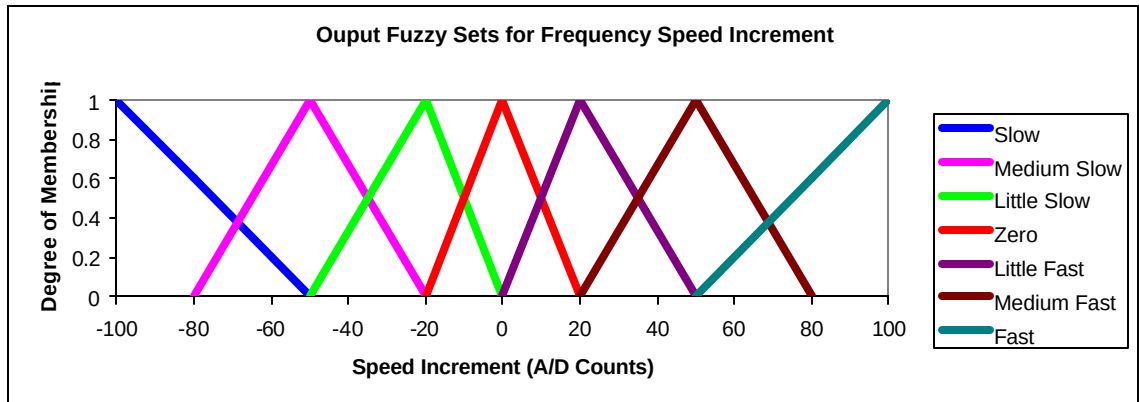


Figure 16: Output Fuzzy Sets for Frequency Speed Increment [11]

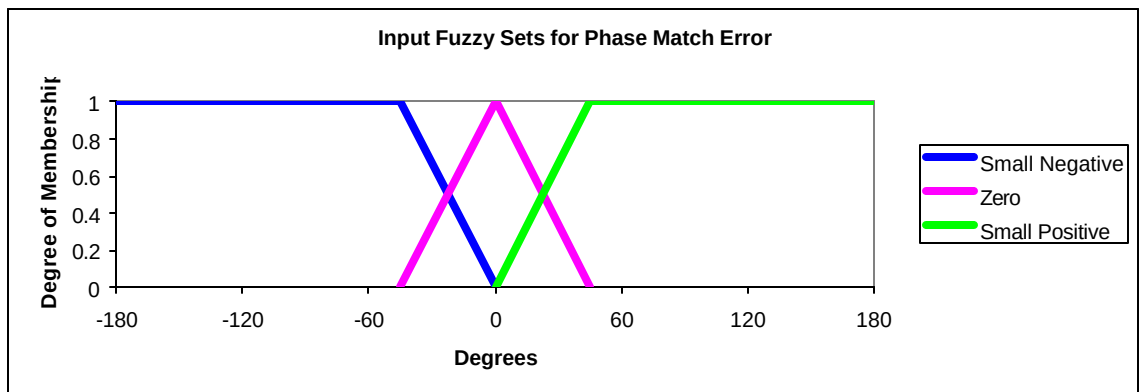


Figure 17: Input Fuzzy Sets for Phase Match Error [11]

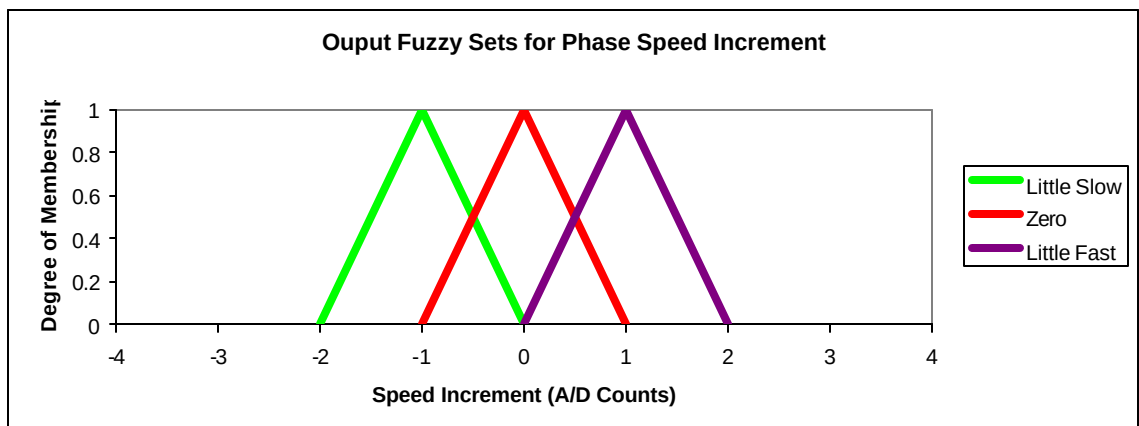


Figure 18: Fuzzy Output Sets for Phase Speed Increment [11]

6.3. Designing the Fuzzy Rules

Using the newly defined fuzzy sets, linguistic rules need to be established to create the desired output signal based on the system inputs. The rules need to take into account all scenarios of synchronization. For example, when the frequency match error is very high, then the frequency speed increment value should also be high. The rules that were created are listed below:

- *If Frequency Error is Close Low, then Frequency Speed Increment is Little Fast.*
- *If Frequency Error is Low, then Frequency Speed Increment is Medium Fast.*
- *If Frequency Error is Very Low, then Frequency Speed Increment is Fast.*
- *If Voltage is Zero and Frequency Error is Zero, then Frequency Speed Increment is Fast.*
- *If Frequency Error is Very High, then Frequency Speed Increment is Slow.*
- *If Frequency Error is High, then Frequency Speed Increment is Medium Slow.*
- *If Frequency Error is Close High, then Frequency Speed Increment is Little Slow.*
- *If Frequency Error is Zero and Voltage is not Zero, then Frequency Speed Increment is Zero.*
- *If Phase Error is Zero, then Phase Speed Increment is Zero.*
- *If Phase Error is Small Negative, then Phase Speed Increment is Little Fast.*
- *If Phase Error is Small Positive, then Phase Speed Increment is Little Slow.*

6.4. Obtaining Test Equipment

To test these fuzzy sets and rules a generator and prime mover would be needed.

Measuring equipment to determine voltage levels, frequency, and phase angles would also be needed. Finally, some type of controller that would gather input voltage, frequency, and phase information would be needed. This controller would have to control the prime mover that would drive the generator based on the input information.

The Power & Energy Management Solutions group of Rockwell Automation had recently developed a semi-portable, single-phase generator demonstration case to demonstrate their Bulletin 1402 Line Synchronization Module [4]. Permission was given by their management to use their equipment. This demonstration case, as shown in Figure 19, contains the following pieces of equipment [11]:

- *1.5 Horse Power Reliance Electric AC Motor*
- *Allen-Bradley Bulletin 160 Variable Frequency Drive*
- *4 kW Generator*
- *Allen-Bradley PLC-5/20E*
- *Allen-Bradley Bulletin 1402 Line Synchronization Module*
- *PLC-5 120 VAC input module*
- *PLC-5 120 VAC output module*
- *PLC-5 10 VDC analog output module*
- *Synchroscope*
- *Oscilloscope*



Figure 19: Line Synchronization Module Demonstration Case

The demonstration case has an AC motor controlled by a variable frequency drive (VFD) that can be used to simulate a prime mover. The 4kW single-phase generator can be synchronized to the incoming power. Off the shelf automation equipment, equipment that generator manufacturers use today, can be used to gather synchronization information and control the prime mover. A synchroscope and oscilloscope can be used to verify that the generator is fully synchronized. The control system is shown in Figure 20. This control system will provide an ideal way to test the algorithm. Not only could a real-world generator be controlled with these common components, but this algorithm could also be implemented into a microprocessor based stand-alone device.

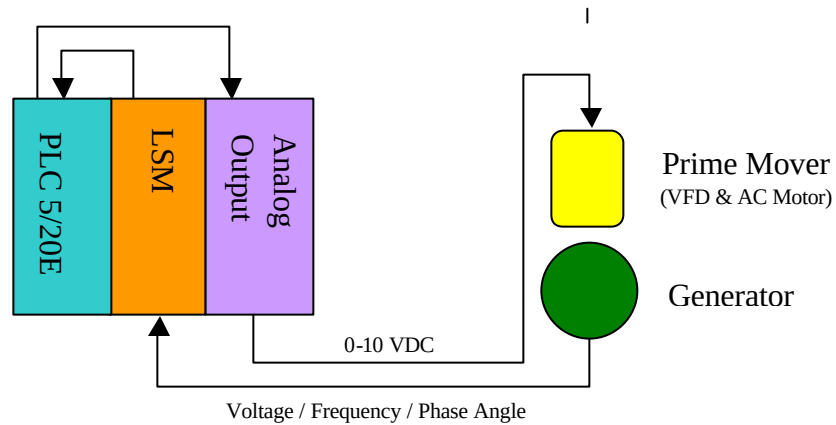


Figure 20: Diagram of the Generator Synchronization Control System

6.5. Obtaining Software

With the test equipment identified and gathered, software would be needed to generate the fuzzy sets and rules. Software would also be needed to implement the algorithm in the control system. *Excel* (Microsoft) could have been used to simulate the fuzzy sets, and custom ladder logic would have to be written to implement Fuzzy Logic in this specific control system. However, Dr. Welch introduced some commercially available software that was developed by Rockwell Automation called *AB-Flex* [12]. *AB-Flex* is specifically designed to implement fuzzy logic control in Allen-Bradley PLC-5 and SLC-500 programmable logic controllers. It allows a controls designer to create and test specific fuzzy sets and rules, and it has ladder logic that can be downloaded into Allen-Bradley PLC to implement these rules [13]. After a week of searching Rockwell Automation, a copy of *AB-Flex* was obtained along with a copy of *RSLogix5* to program the PLC-5.

6.6. Wiring the Control System

With the test equipment and software in hand, the loose pieces of equipment needed to be connected together and tested. The generator was coupled to the prime mover. The variable frequency drive was connected to the AC motor and incoming power. Finally, the remaining components of the Bulletin 1402 demonstration case were connected as shown in Figure 21 [11].

To test the electrical and mechanical connections, power was applied to the variable frequency drive. The output speed of the variable frequency drive was manually increased until the generator created a 60-Hertz sine wave [14]. After adjusting the AC motor and generator mountings, the output of the generator could be reliably controlled by adjusting the speed of the prime mover. Manual synchronization of the generator was

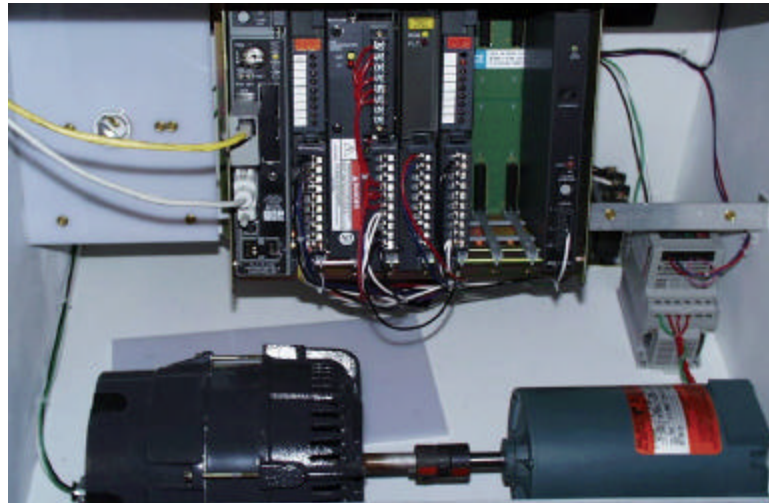


Figure 21: Wiring of the Generator Control System [11]

achieved by controlling the speed of the prime mover. This method of manual synchronization verified the fuzzy sets and rules that were previously designed.

6.7. Testing the Control System Components

With the mechanical and electrical systems working properly, the control system needed to be tested. After reading the manuals of the variable frequency drive, the Line Synchronization Module, the PLC-5, and the analog output module, the following items were concluded:

- *The variable frequency drive needs a 0-10 VDC signal to vary the speed of the motor from 0-75 Hz [14].*
- *The Line Synchronization Module requires special PLC-5 ladder logic to obtain the generator voltage, frequency, and phase angle values [4].*
- *The analog output module must be physically configured for a 0-10 VDC signal, and it requires special PLC-5 ladder logic [15].*

Ladder logic was written for both the analog output module and Line Synchronization Module. The Line Synchronization Module needed a sequence of block transfer read (BTR) commands to read the synchronization data as shown in Figure 22 [15]. After a little debugging and re-reading the various manuals, the PLC-5 was able to control the speed of the prime mover and read the voltage, frequency, and phase angle of the generator. Again, manual synchronization of the generator was achieved using the values coming into the PLC-5 and controlling the prime mover with the analog output module.

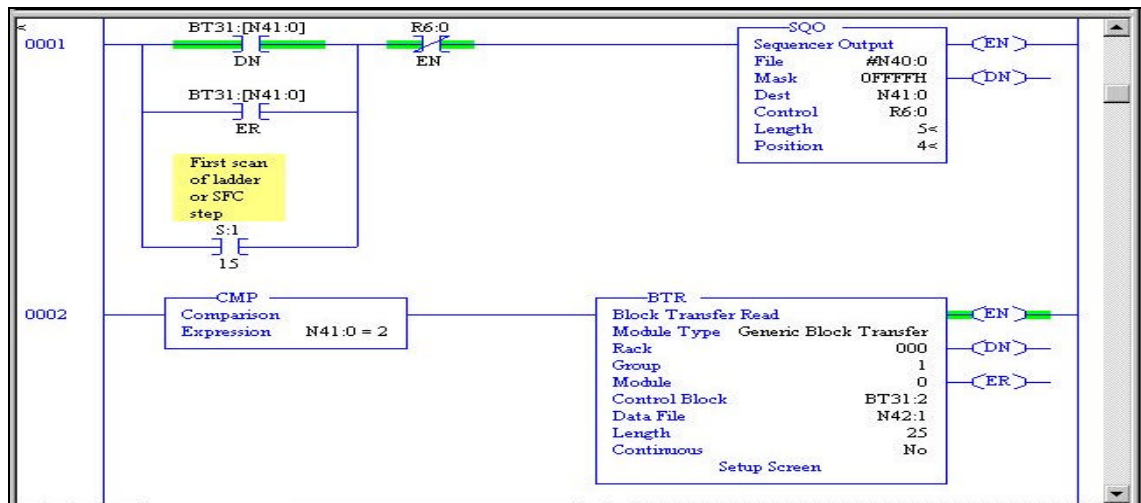


Figure 22: Ladder Logic for the Line Synchronization Module

This test proved that this specific control system is capable of automated synchronization [11].

6.8. Using AB-Flex

The fuzzy rules and sets shown in Figures 15, 16, 17, and 18 were entered into *AB-Flex*. Communications was established with the PLC-5 using *AB-Flex*, for this allows the user to make changes to the fuzzy rules and sets on the fly. *AB-Flex* is an invaluable tool to design fuzzy logic systems. The fuzzy rules and sets were successfully downloaded into the PLC-5. The project was executed; and the generator's frequency began synchronizing to the reference bus (the incoming power). Figure 23 shows the system synchronizing the frequency.



Figure 23: Synchronizing Frequency

The system was successful synchronizing the frequency of the generator to the reference bus; however, the system was overshooting the phase angle. Then the thought of the generator operator “bumping” the prime mover, which means to quickly increment then decrement the speed of the prime mover, was remembered. The control system needed a way to automatically “bump” the prime mover when needed.

6.9. Controlling the Prime Mover Speed for Phase Angle

The phase angle overshoot problem was mentioned to my project committee members, and Dr. Henry Welch from the Milwaukee School of Engineering mentioned that the change in phase match error should be considered [16]. His idea was used, and the collection of this parameter was implemented in the PLC-5 as shown in Figure 24. Using this information, seven fuzzy input sets were created, and additional fuzzy output sets were added to the phase speed increment output fuzzy sets. This combination will

represent control system “bumping” the prime mover. These new fuzzy input and output sets are shown Figures 25 and 26.

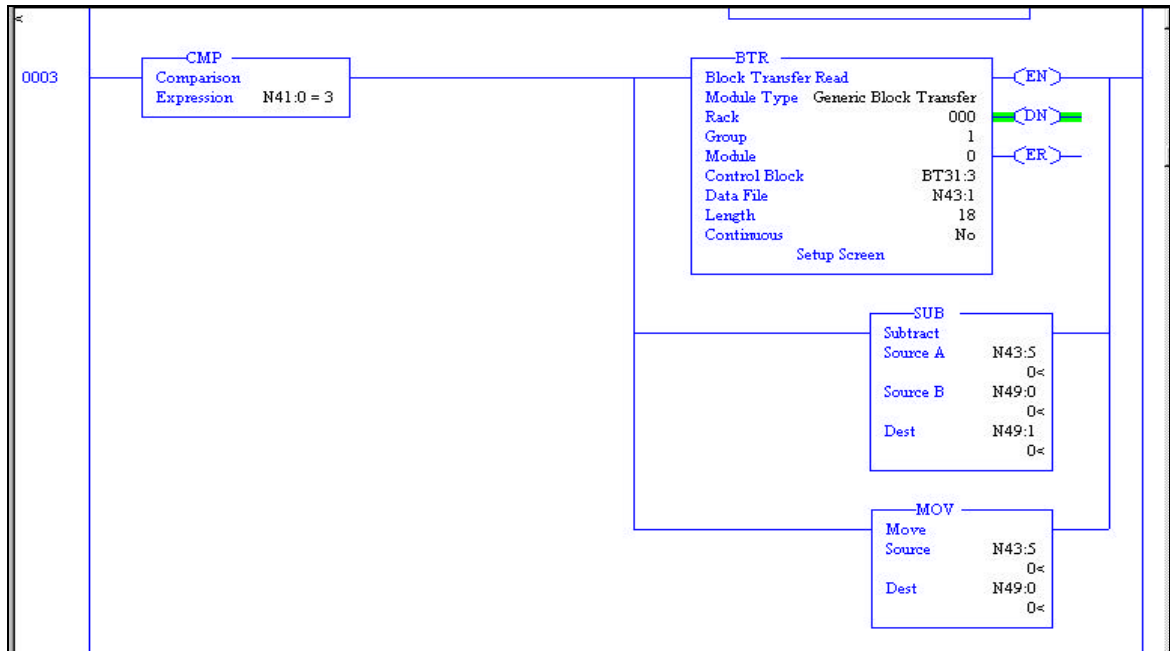


Figure 24: Ladder Logic Used to Collect the Change in Phase Match Error

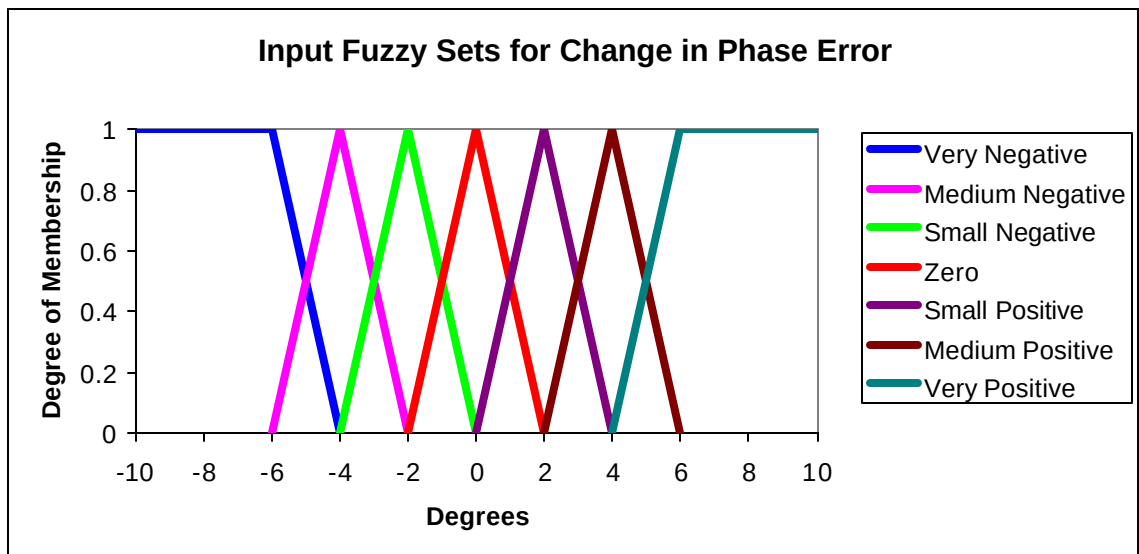


Figure 25: Input Fuzzy Set for Change in Phase Error

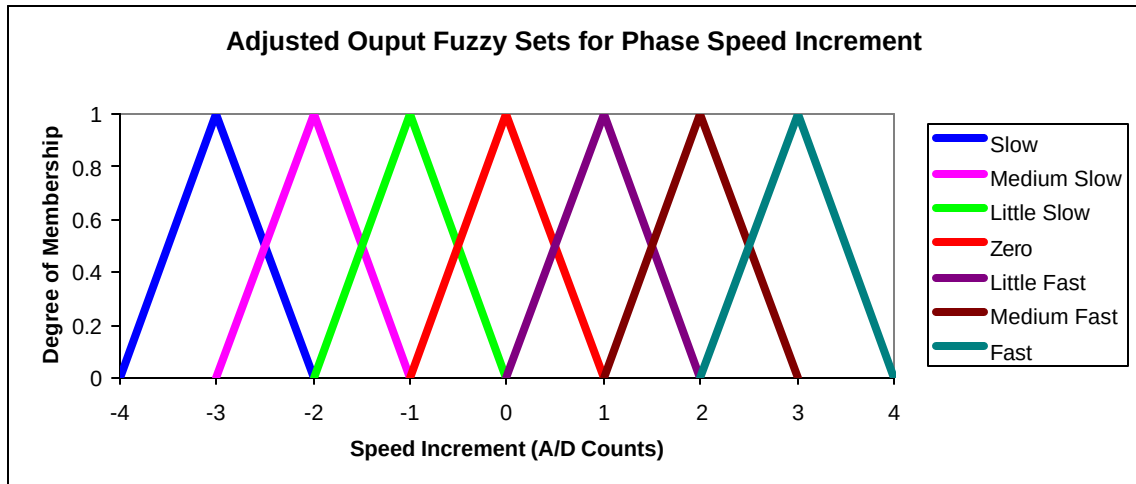


Figure 26: Adjusted Output Fuzzy Sets for Phase Speed Increment

Finally, the fuzzy rules were modified to include these new parameters as shown below:

- *If Frequency Error is Close Low, then Frequency Speed Increment is Little Fast.*
- *If Frequency Error is Low, then Frequency Speed Increment is Medium Fast.*
- *If Frequency Error is Very Low, then Frequency Speed Increment is Fast.*
- *If Voltage is Zero and Frequency Error is Zero, then Frequency Speed Increment is Fast.*
- *If Frequency Error is Very High, then Frequency Speed Increment is Slow.*
- *If Frequency Error is High, then Frequency Speed Increment is Medium Slow.*
- *If Frequency Error is Close High, then Frequency Speed Increment is Little Slow.*

- *If Frequency Error is Zero and Voltage is not Zero, then Frequency Speed Increment is Zero.*
- *If Phase Error is Zero and Phase Change Error is Zero, then Phase Speed Increment is Zero.*
- *If Phase Error is Zero and Phase Change Error is Small Negative, then Phase Speed Increment is Little Fast.*
- *If Phase Error is Zero and Phase Change Error is Medium Negative, then Phase Speed Increment is Medium Fast.*
- *If Phase Error is Zero and Phase Change Error is Very Negative, then Phase Speed Increment is Fast.*
- *If Phase Error is Zero and Phase Change Error is Very Positive, then Phase Speed Increment is Slow.*
- *If Phase Error is Zero and Phase Change Error is Medium Positive, then Phase Speed Increment is Medium Slow.*
- *If Phase Error is Zero and Phase Change Error is Small Positive, then Phase Speed Increment is Little Slow.*
- *If Phase Error is Small Negative, then Phase Speed Increment is Little Fast.*
- *If Phase Error is Small Positive, then Phase Speed Increment is Little Slow.*

After a little fine-tuning of the ladder logic, fuzzy sets, and fuzzy rules, the control system successfully synchronized the generator to the reference bus. The successful synchronization is shown in Figure 27.



Figure 27: Successful Synchronization of the Generator to the Reference Bus

7. Implementing PID Control for Generator Synchronization

To compare the performance of the Fuzzy Logic control system for generator synchronization, an automated control system that exists today for generator synchronization needed to be implemented. The control system that Rockwell Automation suggests for its Allen-Bradley Bulletin 1402 Line Synchronization Module was a PID control system [4]. The sample ladder logic that was retrieved did not have its rungs commented, so the control system needed to be reverse engineered. After the initial investigation, it was found that the sample ladder logic used two PID control loops. The ladder logic that was implemented had three states.

7.1. State 1: Bringing the Generator Up to Speed

The first step of the PID control system is to move the prime mover fast enough for the oncoming generator to produce a voltage signal. The purpose for this state is to create a voltage level high enough for the Line Synchronization Module to detect. The Line Synchronization Module will only monitor voltage, frequency, and phase angle when the generator outputs a voltage signal greater than 80 volts. By setting the prime mover to half of its maximum speed, the generator will produce the appropriate signal [4]. The ladder logic used to implement this state is shown in Figure 28. With the Line Synchronization Module monitoring the needed parameters for synchronization, state 2 is ready to be implemented.

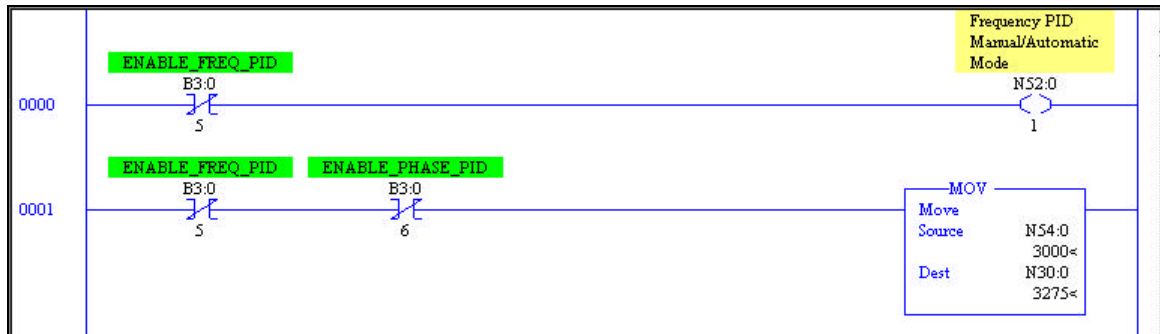


Figure 28: Ladder Logic Used to Startup the Prime Mover

7.2. State 2: Synchronizing Frequency

With the control system monitoring voltage, frequency, and phase angle, the speed of the prime mover can be adjusted for the proper frequency. A PID loop is used to set and maintain the prime mover speed such that the oncoming generator's frequency is 60.0 Hz as shown in Figure 29 [4]. When the oncoming generator's frequency is 60.0 Hz, state 3 can be executed.

7.3. State 3: Synchronizing Phase

With the control system maintaining the oncoming generator's frequency at 60.0 Hz, the prime mover's speed needs to be adjusted such that the phase angle of the generator matches that of the reference bus. To do this, a second PID loop is used as shown in Figure 30 [4]. Finally, when the frequency and phase angle match that of the reference bus, the close circuit breaker signal can be issued.

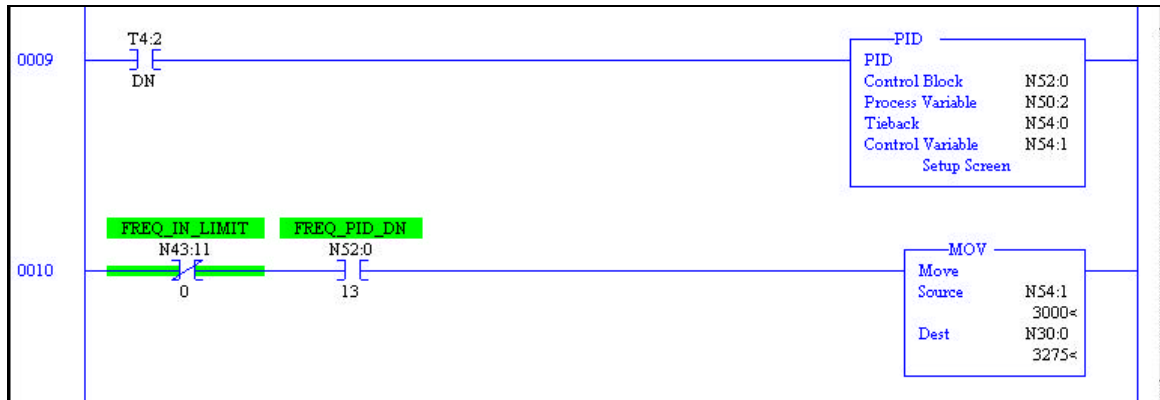


Figure 29: PID Loop used to Synchronize Frequency

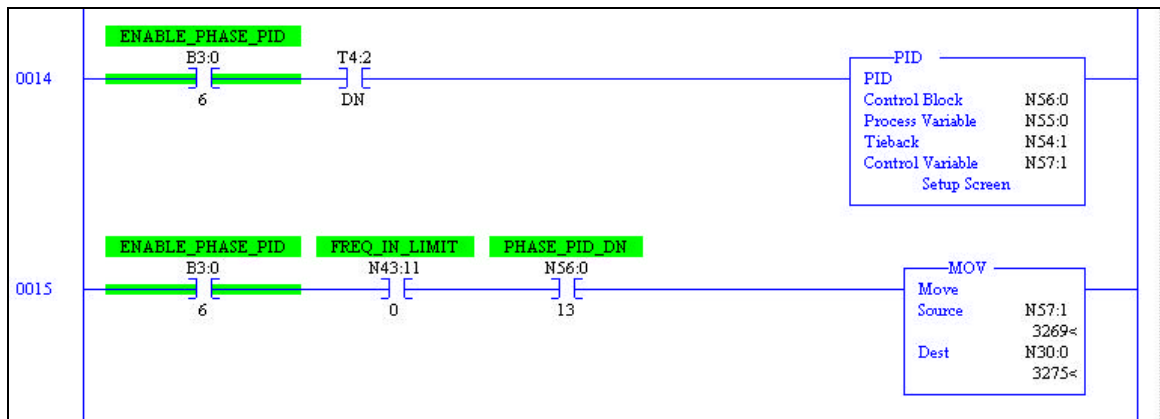


Figure 30: PID Loop Used to Synchronize Phase Angle

After implementing this ladder logic, the control system was able to synchronize the generator to the reference bus repetitively. Now, another control system is available to compare the Fuzzy Logic generator synchronization control system against. To compare the automated generator synchronization against manual synchronization, a method for manual synchronization needed to be implemented.

8. Manual Generator Synchronization

Manual generator synchronization is the easiest of the synchronization methods to implement. All that is needed is a control mechanism to manually adjust the speed of the prime mover. In the case of my test control system, all that is needed is a way to control the value going to the analog output card [15]. A computer based human machine interface software package called *RSView32* from Rockwell Software was used. This software allows the user to move a slider bar that changes the value going to the analog output card. The ladder logic used to control the voltage of the analog output card is shown in Figure 31. The *RSView32* user interface screen is shown in Figure 32.

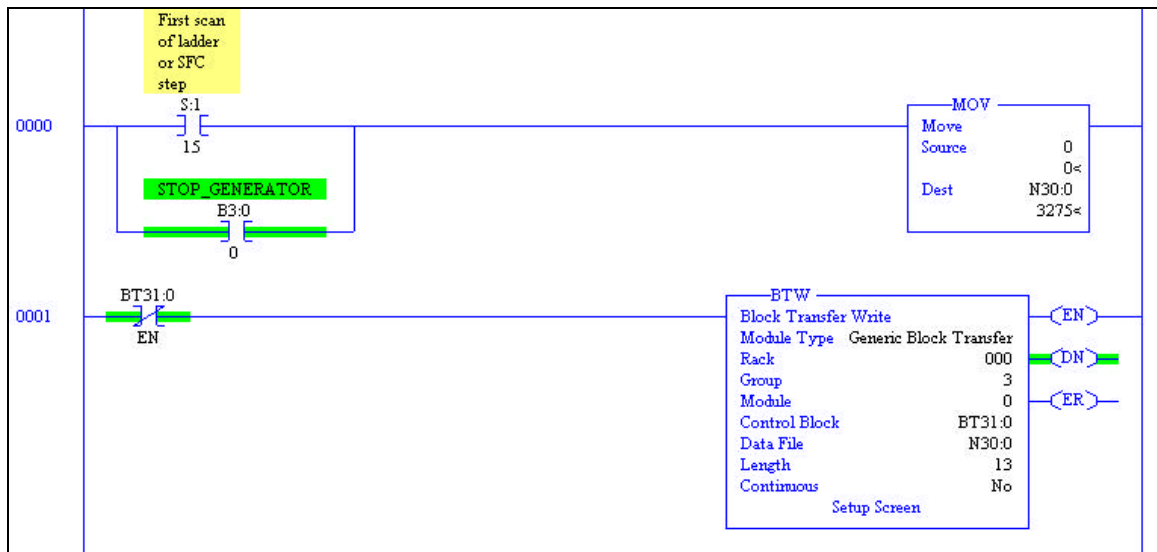


Figure 31: Ladder Logic Used to Change the Signal of the Analog Output Module

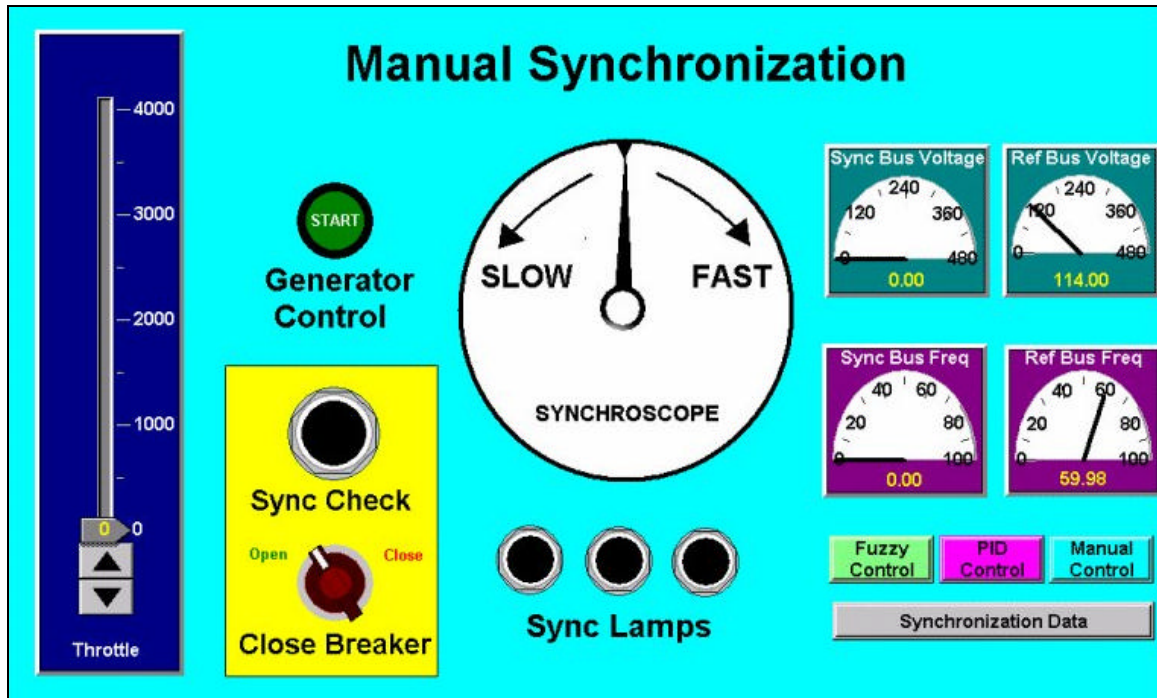


Figure 32: RSView32 Screen for Manual Synchronization

9. Setting Up the System Tests

With a way to implement manual, PID, and Fuzzy Logic generator synchronization, a test plan and equipment were needed to compare the performance of each method for specific situations. The tests that need to be performed are the following:

- *Record the performance of manual synchronization for a 3-phase generator using a 60 Hz reference bus.*
- *Record the performance of PID synchronization for a 3-phase generator using a 60 Hz reference bus.*
- *Record the performance of Fuzzy Logic synchronization for a 3-phase generator using a 60 Hz reference bus.*
- *Record the performance of manual synchronization for a single-phase generator using a 60 Hz reference bus.*
- *Record the performance of PID synchronization for a single-phase generator using the same algorithm as the 3-phase generator.*
- *Record the performance of Fuzzy Logic synchronization for a single-phase generator using the same algorithm as the 3-phase generator.*
- *Record the performance of Fuzzy Logic synchronization for a 3-phase generator when the reference bus changes from 60 Hz to 50 Hz.*
- *Record the performance of PID synchronization for a 3-phase generator when the reference bus changes from 60 Hz to 50 Hz.*
- *Record the performance of PID synchronization for a 3-phase generator with a 50 Hz reference bus.*

- *Record the performance of PID synchronization for a single-phase generator when a load is applied to the oncoming generator it is synchronized to the reference bus.*
- *Record the performance of Fuzzy Logic synchronization for a single-phase generator when a load is applied to the oncoming generator before it is synchronized to the reference bus.*

With the tests being defined, equipment was needed to perform the tests and collect the data. *RSView32* has data collection capabilities, and it would allow a user to switch between control systems with some additions to the PLC-5 ladder logic. Figure 33 shows the ladder logic used to switch between the PID and Fuzzy Logic control algorithms. Appendix A contains the complete PLC-5 ladder logic used with this experiment. Figure 34 shows the *RSView32* screen used to execute PID synchronization. Figure 35 show the *RSView32* screen used to execute Fuzzy Logic synchronization. Figure 36 shows the *RSView32* screen used to collect the synchronization performance data.

Another generator set would be needed to carry out these system tests. The people in Rockwell Automation's Power & Energy Management Solutions group provided a 240-volt, 3-phase generator using an Allen-Bradley Bulletin 1305 Variable Frequency Drive and AC motor as its prime mover. The group also allowed the use of a Pacific 3-phase, programmable power supply, which can be used as a reference bus. This programmable power supply would allow a person to change reference bus frequencies on the fly.

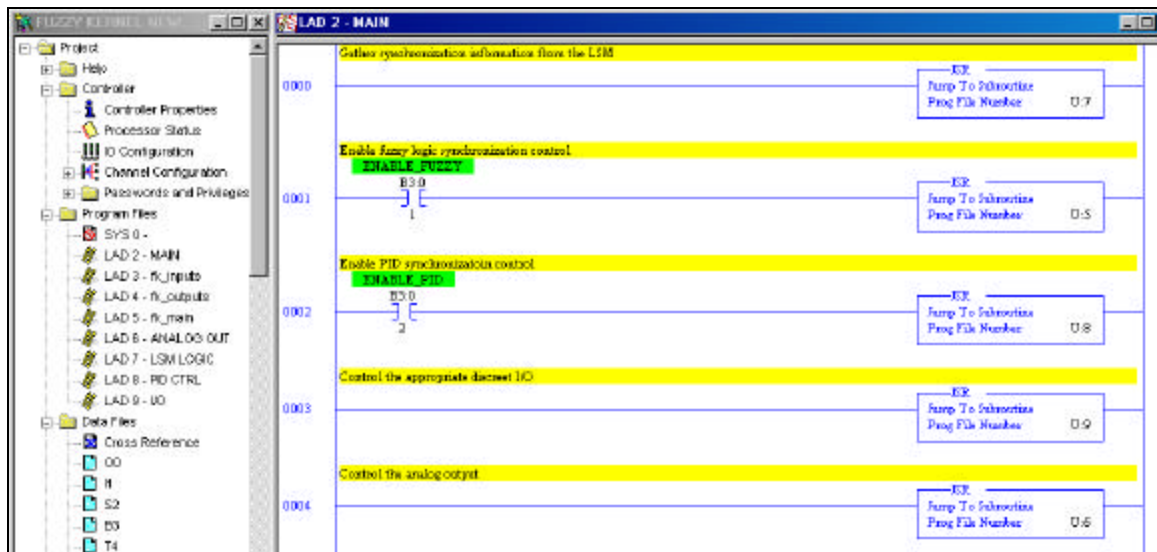


Figure 33: Ladder Logic Used to Switch Between Control Systems

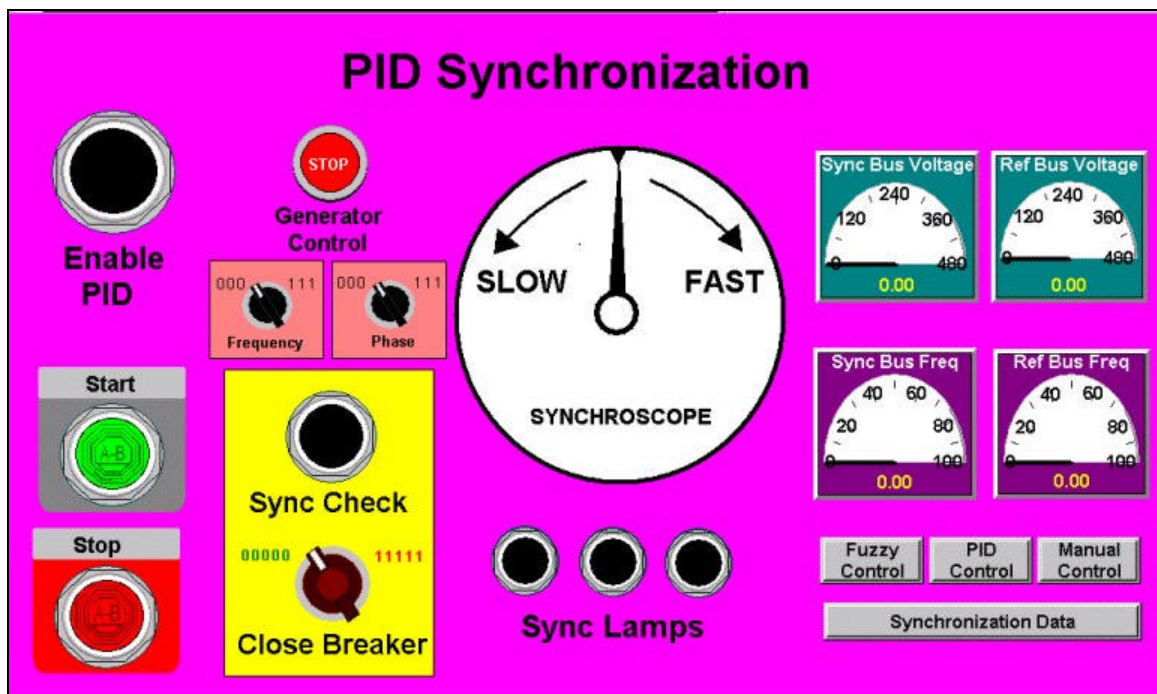


Figure 34: RSView32 Screen Used to Execute PID Synchronization

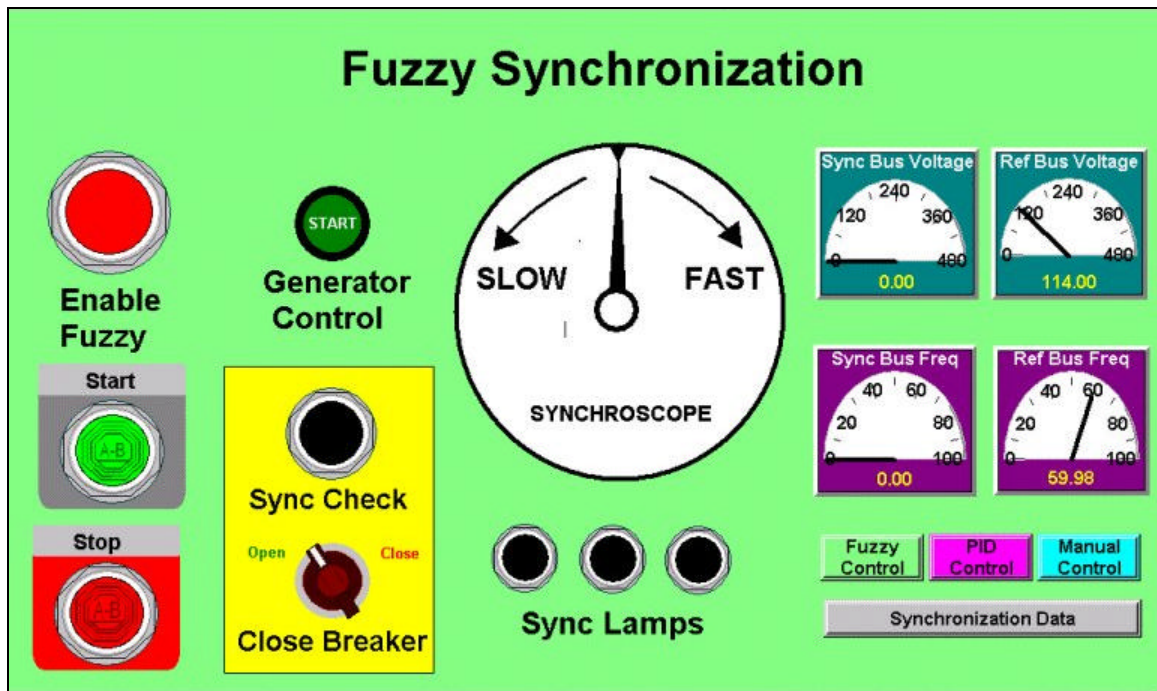


Figure 35: RSView32 Screen Used to Execute Fuzzy Logic Synchronization

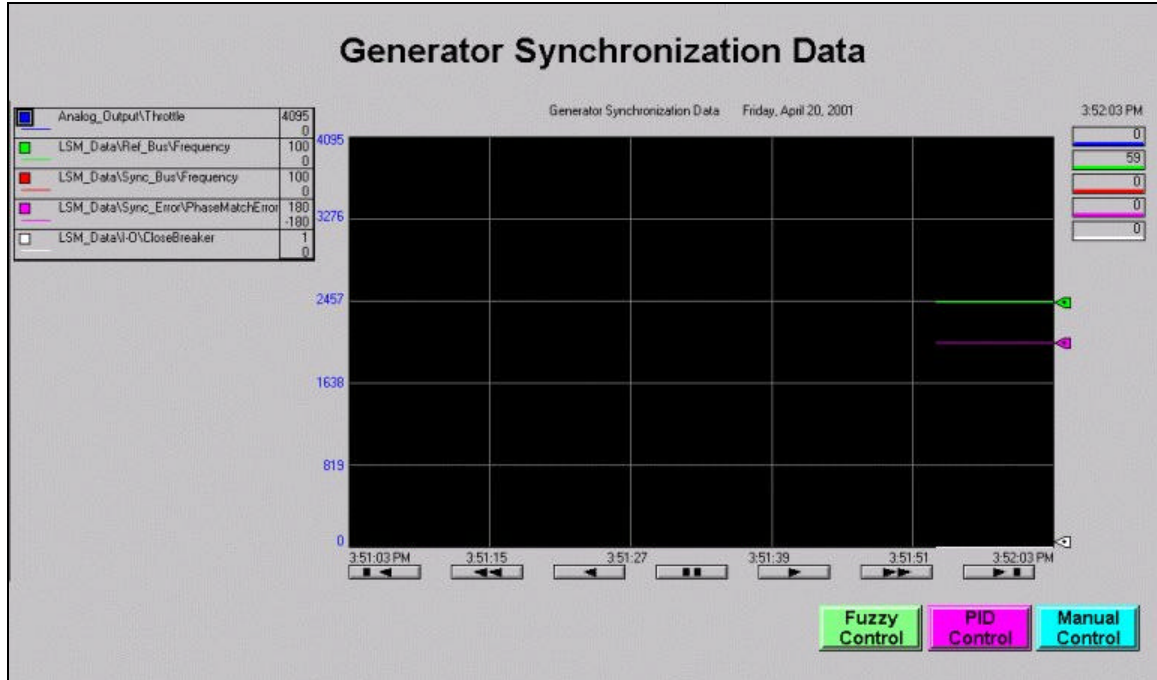


Figure 36: RSView32 Screen Used to Collect Synchronization Performance Data

Permissive synchronization was used for testing the control system, for all synchronization conditions must be met in which a signal is provided indicating that the circuit breaker can be closed. To determine when the close breaker command can be issued, the following conditions must be met:

- *The generator's frequency must be within 0.25 Hz of the reference bus.*
- *The generator's phase angle must be leading or lagging the reference bus less than 6 degrees.*
- *The two conditions listed above must be met for an accumulative time of 500 milliseconds; otherwise, the accumulative time is reset when frequency and phase angle go out of range.*

A bit will be set in the PLC-5, and the pilot light above the close breaker switch on the RSVIEW32 screen will illuminate when these conditions are met. The generator will not be electrically connected to the reference bus during these tests.

10. Synchronization Test Results

The raw data from all of the tests that were performed are shown in Appendix B. For each test, the following data points were collected at a 500 millisecond interval [11]:

- *Throttle position (A/D Counts)*
- *Reference bus frequency (Hertz)*
- *Generator frequency (Hertz)*
- *Phase match error (Degrees)*
- *Close breaker signal (Open/Close)*

10.1. Manual Synchronization for a 3-Phase Generator at 60 Hz

Ten sets of data were collected for manually synchronizing a 3-phase generator to a 60 Hz reference bus. One of those data sets is shown in Figure 37. . The collected data shows that the operator quickly increased the speed of the prime mover until the generator produced a voltage and frequency signal that was recognized by the Line Synchronization Module [11]. Next, the prime mover speed was slowly incremented to match the frequency. In this case, the frequency of the generator slightly exceeded that of the reference bus. Finally, the prime mover speed was gradually altered to match the phase angles. On average it took 51.823 seconds to synchronize the generator to the reference bus. It took a couple of times to understand how to perform manual synchronization. After a little practice, my timing improved.

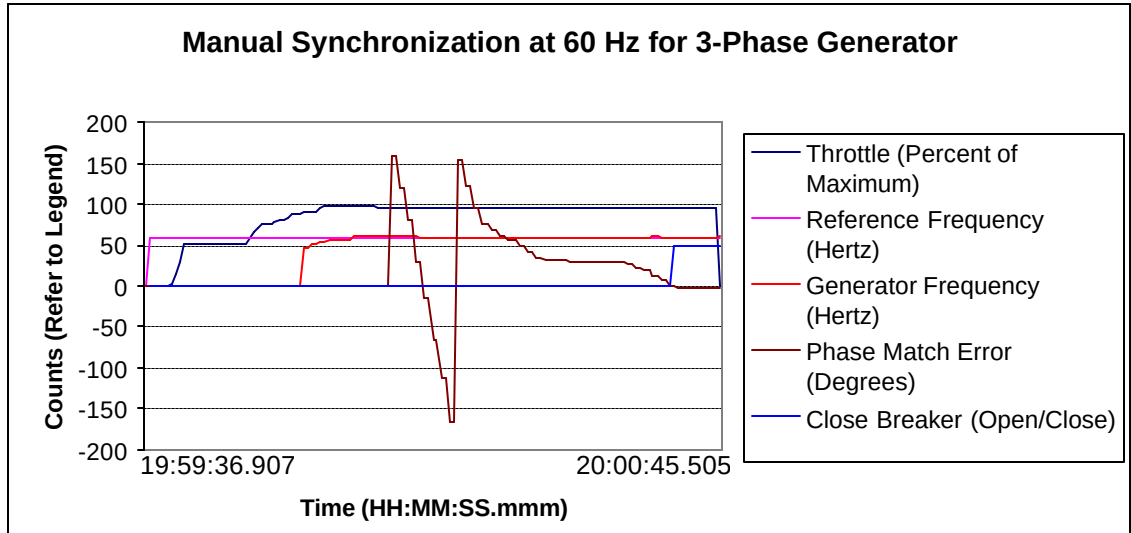


Figure 37: Manual Synchronization at 60 Hz for 3-Phase Generator

10.2. PID Synchronization for a 3-Phase Generator at 60 Hz

Ten sets of data were collected for PID synchronization of a 3-phase generator to a reference bus of 60 Hz. One of those data sets is shown in Figure 38. The throttle position for the prime mover shows three levels of activity, which shows the 3 states for the PID algorithm. This control system successfully synchronized the generator to the 60 Hz reference bus. On average, it took 24.686 seconds to synchronize the generator [11]. This took approximately half of the time of manual synchronization.

10.3. Fuzzy Logic Synchronization for a 3-Phase Generator at 60 Hz

Ten sets of data were collected for the Fuzzy Logic synchronization of a 3-phase generator to a 60 Hz reference bus. One of the data sets is shown in Figure 39. This control system also synchronized the generator successfully to the reference bus [11].

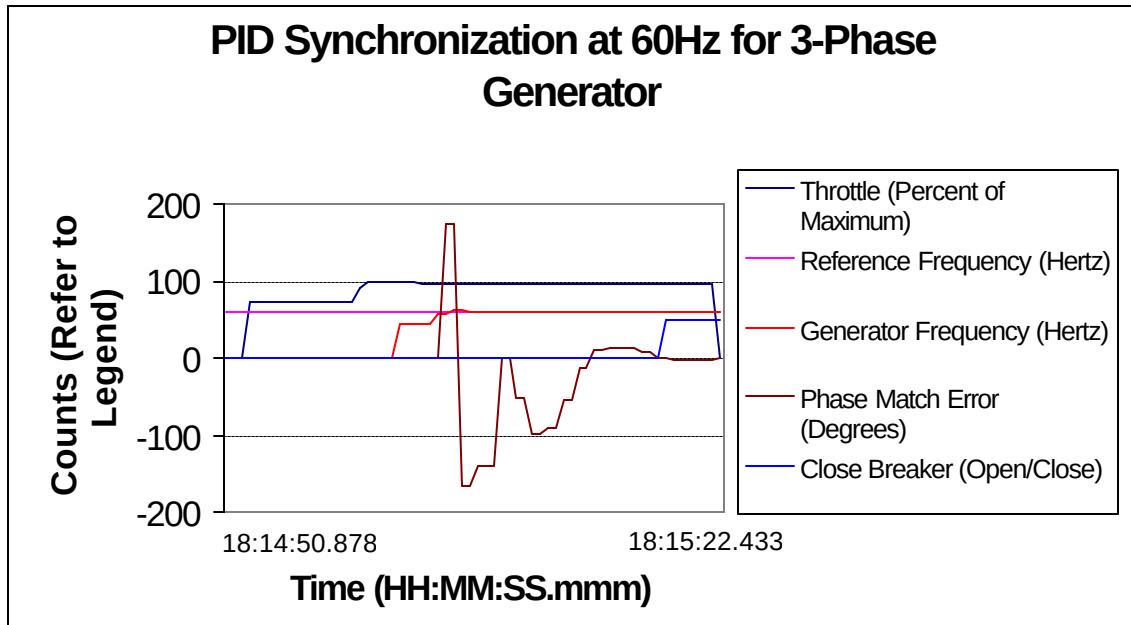


Figure 38: PID Synchronization at 60 Hz for 3-Phase Generator

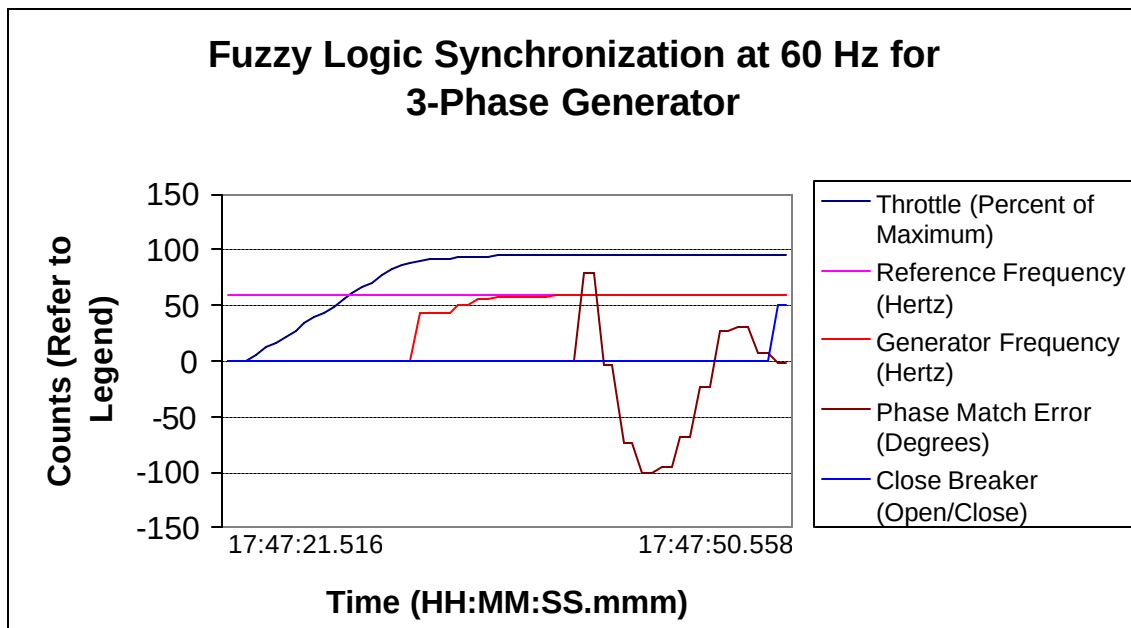


Figure 39: Fuzzy Logic Synchronization at 60 Hz for 3-Phase Generator

It took an average of 33.999 seconds for the generator to synchronize. This method was not as fast on average as the PID control system, but it took 2/3 of the time of manual synchronization without an operator.

10.4. Manual Synchronization for a Single-Phase Generator at 60 Hz

Ten sets of data were collected for the manual synchronization of a single-phase generator to a 60 Hz reference bus. One of the data sets is shown in Figure 40. The single-phase generator was not as stiff as the 3-phase generator. The collected data shows that the phase match error changes rapidly when the frequencies are matched [11]. On average, it took 70.703 seconds to synchronize the generator to the reference bus.

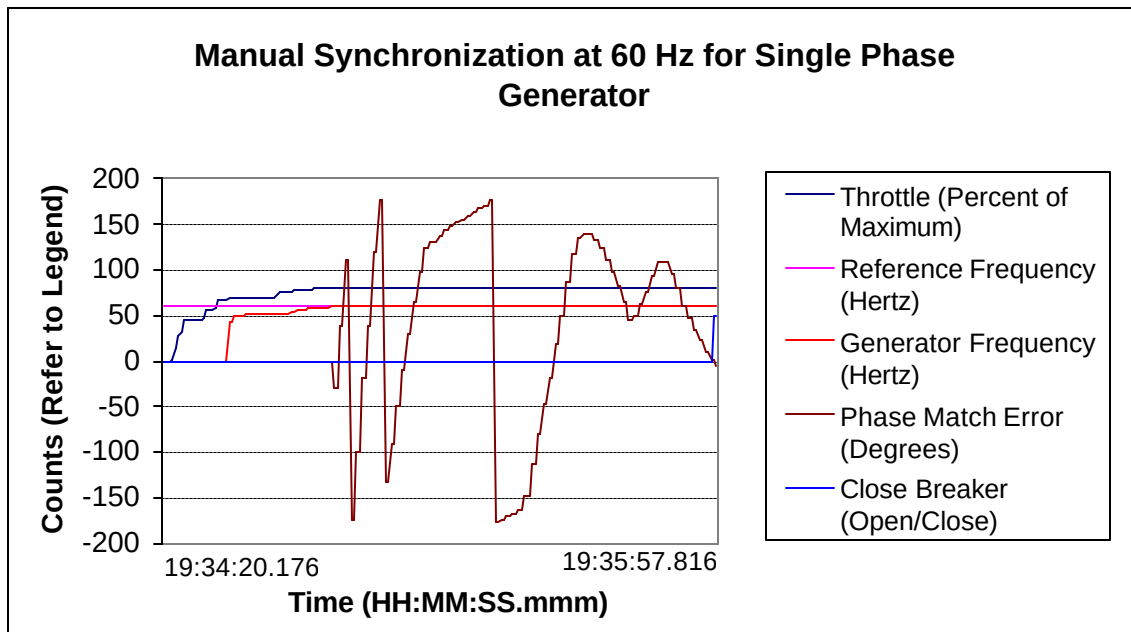


Figure 40: Manual Synchronization at 60 Hz for Single-Phase Generator

10.5. PID Synchronization for a Single-Phase Generator at 60 Hz

Ten sets of data were collected for the PID synchronization of a single-phase generator to a 60 Hz reference bus. One of the data sets is shown in Figure 41. The system started by increasing the speed of the prime mover too much, for the generator was reading 71 Hz. Afterwards, the control system synchronized the frequency. Next, the phase angle was synchronized. On average, it took 30.144 seconds to synchronize the generator to the reference bus. Again, the single-phase generator was not as stiff as the 3-phase generator. The phase angle was not stiff initially; however, it did stabilize after a short period of time. Because the PID loop was tuned for the 3-phase generator, the control parameters for PID control of the single-phase generator would be different. This would explain why the initial prime mover speed was set so high [11]. However, the PID control system was approximately twice as fast as manual synchronization.

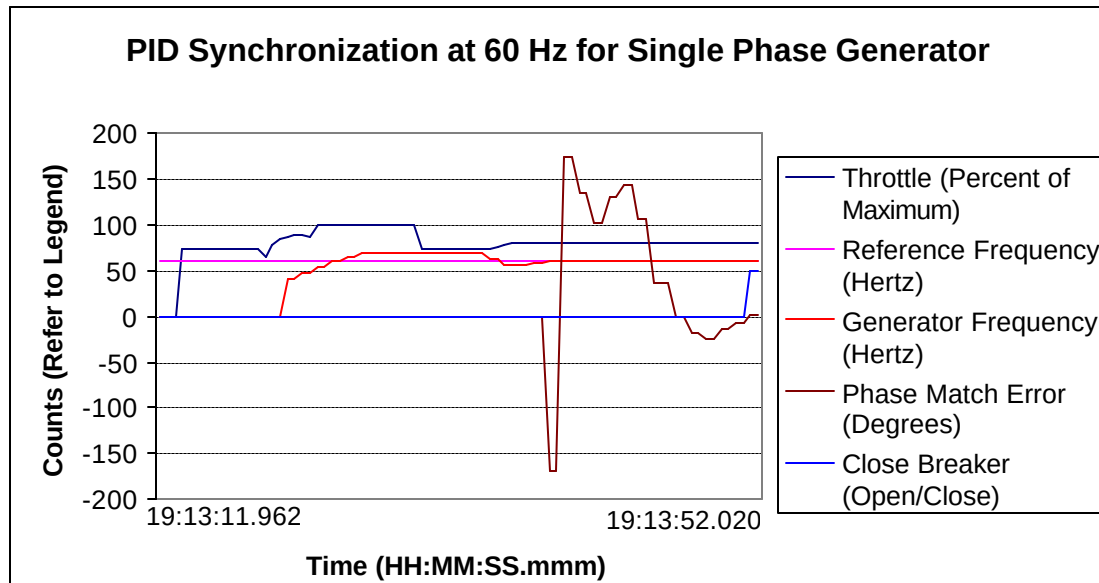


Figure 41: PID Synchronization at 60 Hz for Single-Phase Generator

10.6. Fuzzy Logic Synchronization for a Single-Phase Generator at 60 Hz

Ten sets of data were collected for the Fuzzy Logic synchronization of a single-phase generator to a 60 Hz reference bus. One data set is shown in Figure 42. The Fuzzy Logic control system quickly synchronized the generator's frequency. The control system did successfully synchronize the generator to the reference bus at an average of 47.970 seconds [11]. This performance was approximately 2/3 as fast as manual synchronization.

10.7. Fuzzy Logic Synchronization When Reference Bus Frequency Changes

Ten sets of data were collected for Fuzzy Logic synchronization when the reference bus changes from 60 Hz to 50 Hz. One of the data sets is shown in Figure 43. The Fuzzy Logic control system successfully re-synchronized the generator to 50 Hz at

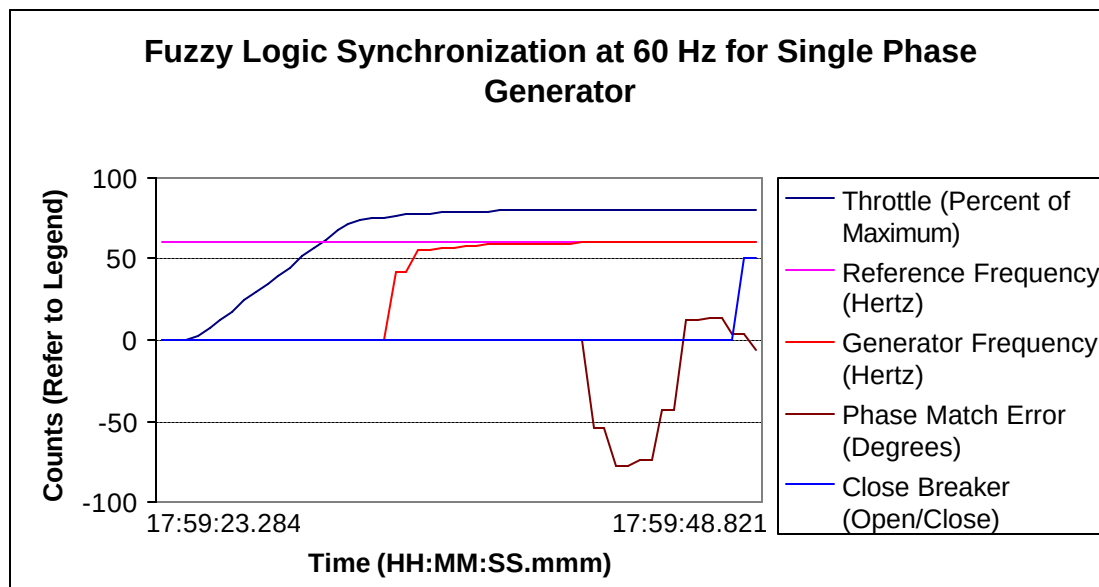


Figure 42: Fuzzy Logic Synchronization at 60 Hz for Single Phase Generator

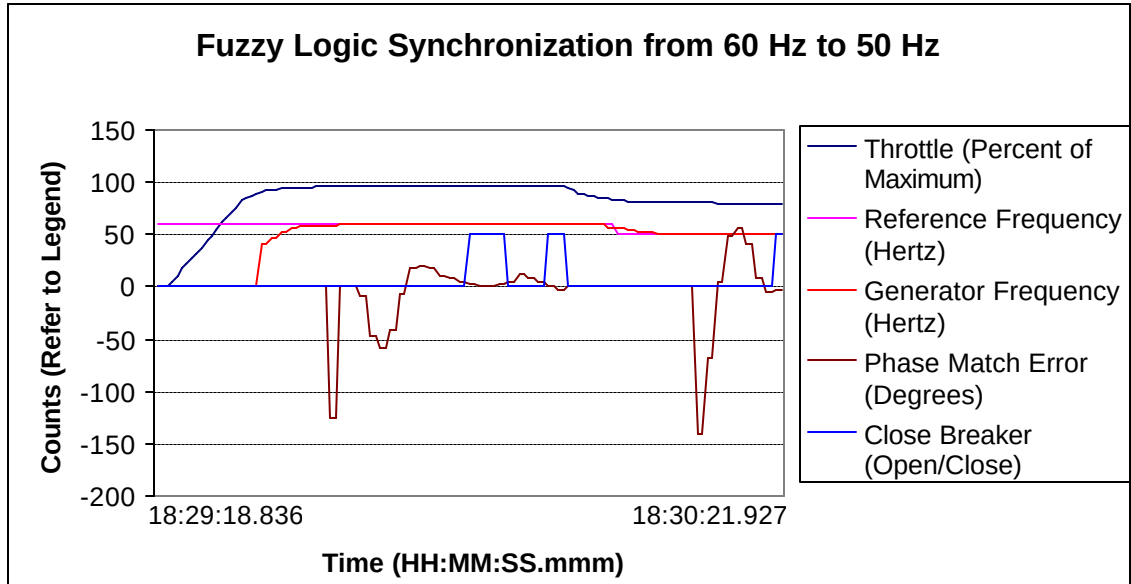


Figure 43: Fuzzy Logic Synchronization from 60 Hz to 50 Hz

an average of 19.167 seconds. This test shows that the same Fuzzy Logic control system can be used for multiple reference bus frequencies including 50 Hz and 60 Hz [11].

10.8. PID Synchronization When Reference Bus Frequency Changes

The results for PID synchronization when the reference bus changes from 60 Hz to 50 are shown in Figure 44. The PID control system was not able to adjust to the change in reference bus frequency, for the PID parameters in an Allen-Bradley PLC-5 are treated as constants. When the reference bus frequency changed, the control system still tried to maintain the prime mover speed for a generator output of 60 Hz. These results make sense for this type of control system. The PID loops were specifically designed for a 60 Hz reference bus with the set point set to 60 Hz. [11].

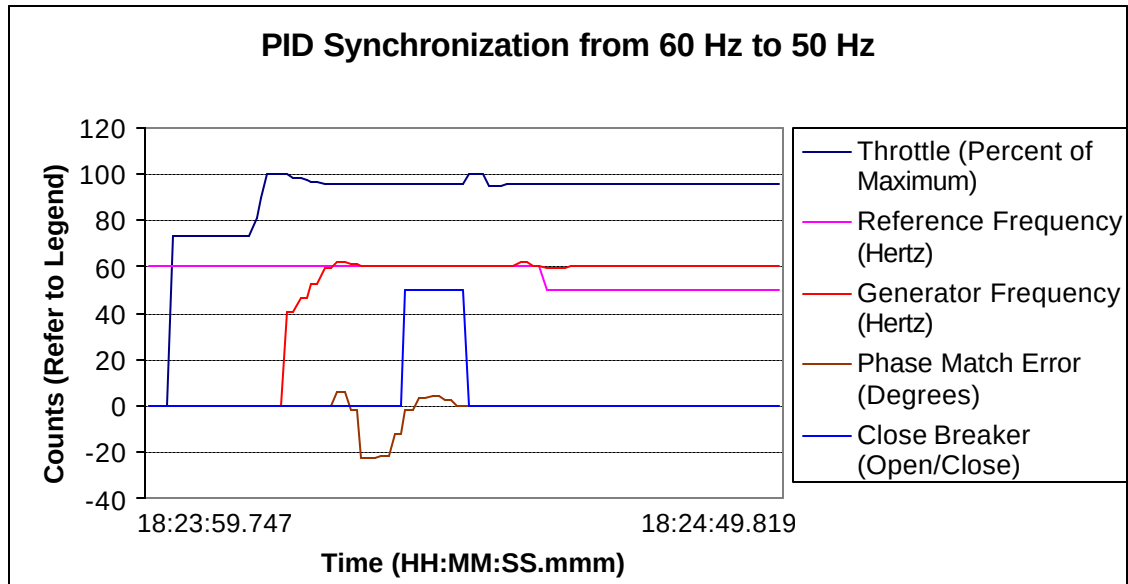


Figure 44: PID Synchronization from 60 Hz to 50 Hz

10.9. PID Synchronization at 50 Hz for 3-Phase Generator

Ten sets of data were collected for PID synchronization when the parameters for the PID instruction in the Allen-Bradley PLC-5 were specifically set for 50.0 Hz. One of the data sets is shown in Figure 45. Initially, the prime mover's speed was incremented too much, but the control system lowered the speed until the frequency and phase angle matched the 50.0 Hz reference bus. On average, it took 24.485 seconds to synchronize the generator to the reference bus. This test shows that the Allen-Bradley PLC-5 can synchronize a generator to a 50.0 Hz reference bus using a PID instruction. However, the PID parameters must be specifically set to 50.0 Hz.

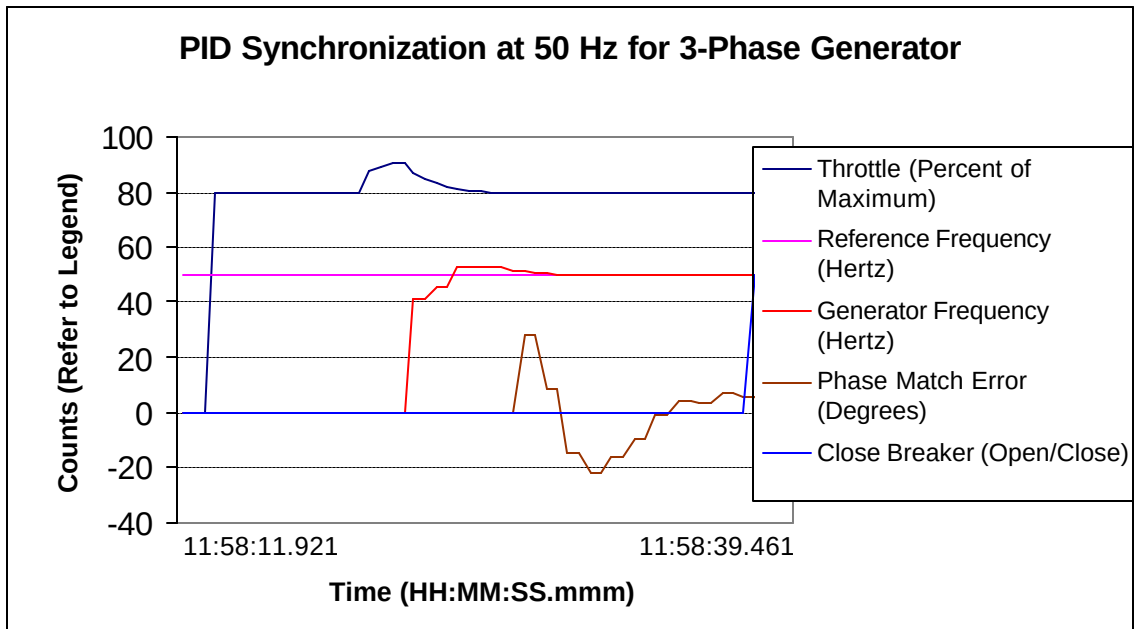


Figure 45: PID Synchronization at 50 Hz for 3-Phase Generator

10.10. PID Synchronization When a Load is Applied

Ten sets of data were collected for PID synchronization when a load is applied to the oncoming generator, which is a single-phase generator. One of the data sets is shown in Figure 46. Initially, the prime mover's speed was incremented too much. Eventually, the frequencies are matched, and a load (a box fan) is applied to the oncoming generator bus. The phase angle of the generator is immediately affected. However, the PID control system regains control and synchronizes the generator to the reference bus in an average of 27.790 seconds [11].

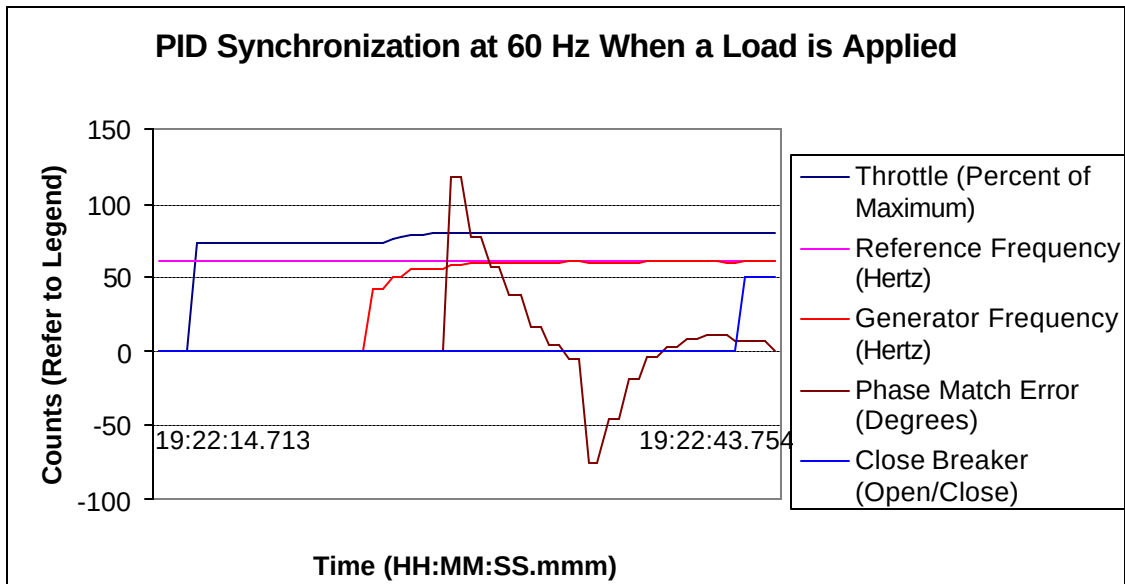


Figure 46: PID Synchronization at 60 Hz When a Load is Applied

10.11. Fuzzy Logic Synchronization When a Load is Applied

Ten sets of data were collected for Fuzzy Logic synchronization when a load is applied to the oncoming generator, which is a single-phase generator. One of the data sets is shown in Figure 47. The control system increases the prime mover's speed until the frequencies are matched. As the phase angles become synchronized, a load (a box fan) is applied to the oncoming generator bus. The phase angle is immediately affected. However, the control system regains control and synchronizes the generator to the reference bus in an average of 37.907 seconds [11]. This performance was not as fast as the PID control loop, but the PID control system was tuned for that specific frequency.

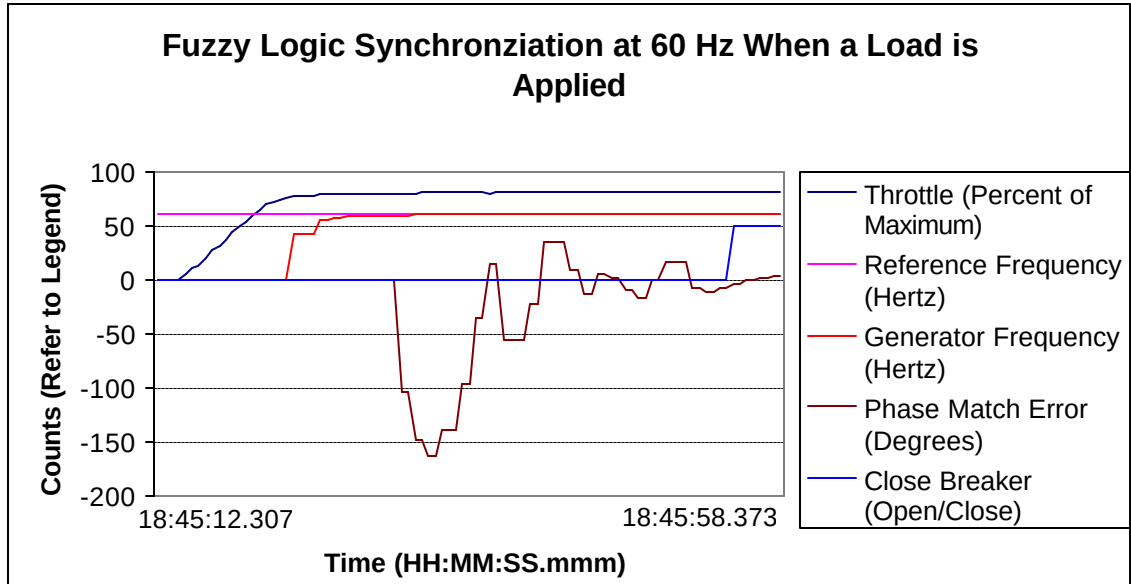


Figure 47: Fuzzy Logic Synchronziation at 60 Hz When a Load is Applied

These tests show that both the PID and Fuzzy Logic synchronization control systems perform better than manual synchronization. The performance of the Fuzzy Logic control system was found to be very similar when applied to both the 3-phase and single phase generators [11]. Table 10 summarizes the collected data by showing the average, minimum, and maximum time for each test.

Table 2: A Summary of the Test Results

Test Name	Average Time (Seconds)	Minimum Time (Seconds)	Maximum Time (Seconds)
Manual Synchronization at 60 Hz for 3-Phase Generator	51.823	36.553	77.107
PID Synchronization for a 3-Phase Generator at 60 Hz	24.686	17.025	26.548
Fuzzy Logic Synchronization for a 3-Phase Generator at 60 Hz	33.999	27.539	41.059
Manual Synchronization for a Single-Phase Generator at 60 Hz	70.703	37.564	103.649
PID Synchronization for a Single-Phase Generator at 60 Hz	30.144	19.528	38.055
Fuzzy Logic Synchronization for a Single-Phase Generator at 60 Hz	47.970	23.534	81.617
Fuzzy Logic Synchronization When Reference Bus Frequency Changes	19.167	16.524	23.033
PID Synchronization When Reference Bus Frequency Changes	N/A	N/A	N/A
PID Synchronization at 50 Hz for 3-Phase Generator	24.485	22.032	30.043
PID Synchronization When a Load is Applied	27.790	22.532	34.049
Fuzzy Logic Synchronization When a Load is Applied	37.907	27.539	66.605

11. Conclusions

This project shows that Fuzzy Logic can be used to automate the synchronization of generator frequency and phase angle to that of a reference bus. The tests show that the same control architecture can be used for different generators synchronizing to different reference bus frequencies using an Allen-Bradley PLC-5. PID generator synchronization control is also a valid means to automate this process; however, its performance capabilities are dependant on the reference bus frequency and the generator system.

The test results show that PID control using an Allen-Bradley PLC-5 and its PID instruction could not synchronize to other reference bus frequencies using the same PID parameters. The PID parameters in an Allen-Bradley PLC-5 are treated as constants. Therefore, the PID parameters will vary based on the reference bus. The tests also show that the parameters of the PID control system affect the performance of generator synchronization based on the generator system. This was seen when the PID control system for the 3-phase generator was used on the single-phase generator. The initial prime mover speed was too high for the single-phase generator. Furthermore, Fuzzy Logic generator synchronization provides financial benefits, and it is convenient to implement.

11.1. Financial Benefits

Because this Fuzzy Logic generator synchronization control system is not dependant on reference bus frequency and generator type, generator manufacturers and integrators will

find that this control system will reduce generator implementation time. By having one control system to automate generator synchronization for multiple generator systems, the people who use this technology will have the benefit of reducing implementation and operation costs. A technician is not needed to fine-tune the parameters of the control system, and different control systems are not needed to for different generators. As a result, the generator implementation savings can be passed to the end customer or used to increase profit margins for the generator manufacturer.

11.2. Convenient Implementation of Fuzzy Logic Generator Synchronization

This project also shows that the Fuzzy Logic generator synchronization control system can be implemented with existing industrial automation equipment. Specialized hardware and software are no longer required. This control system could also be implemented in a cost effective manner in a stand-alone unit that is microprocessor based.

It is recommended that this Fuzzy Logic generator synchronization control system be tested on a wide variety of generator platforms. From hydroelectric to steam turbine powered systems, the fuzzy sets and rules might need a little fine-tuning to become a control system that can be used on any type of generator system. Fuzzy sets and rules should also be created to control the voltage output of a generator. Because the scope of this project was to create a control system to control the prime mover, fuzzy sets and rules were not created for voltage control. Voltage regulation is not a direct function of the prime mover.

A standard control system for generator synchronization is closer to reality. Fuzzy Logic provides the theoretical foundation to make this dream possible. Ultimately, Fuzzy Logic generator synchronization provides a means for electric consumers to receive relatively inexpensive and reliable power.

12. References

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13. Appendix A

The following pages contain the ladder logic used for the PLC-5.

FUZZY KERNEL REVISED

PID Configuration

PID - Rung #8:9 - N52:0

PID Equation: AB	Feed Forward: 0	Setpoint: 3840
Mode: Auto	Max Scaled Input: 4095	Proportional Gain(Kc) (.01): 15
Error: SP - PV	Min Scaled Input: 0	Res. Time(Ti) [.01 mins]: 900
Output Limiting: No	Deadband: 0	Derivative Rate (Td) [0.1 mins]: 2
Set Output Mode: No	Set Output Value %: 0	Loop Update Time: 5
Setpoint Scaling: Yes	Upper CV Limit%: 100	Lower CV Limit%: 0
Derivative Input: Error	Scaled PV Value: 3838	Scaled Error: 2

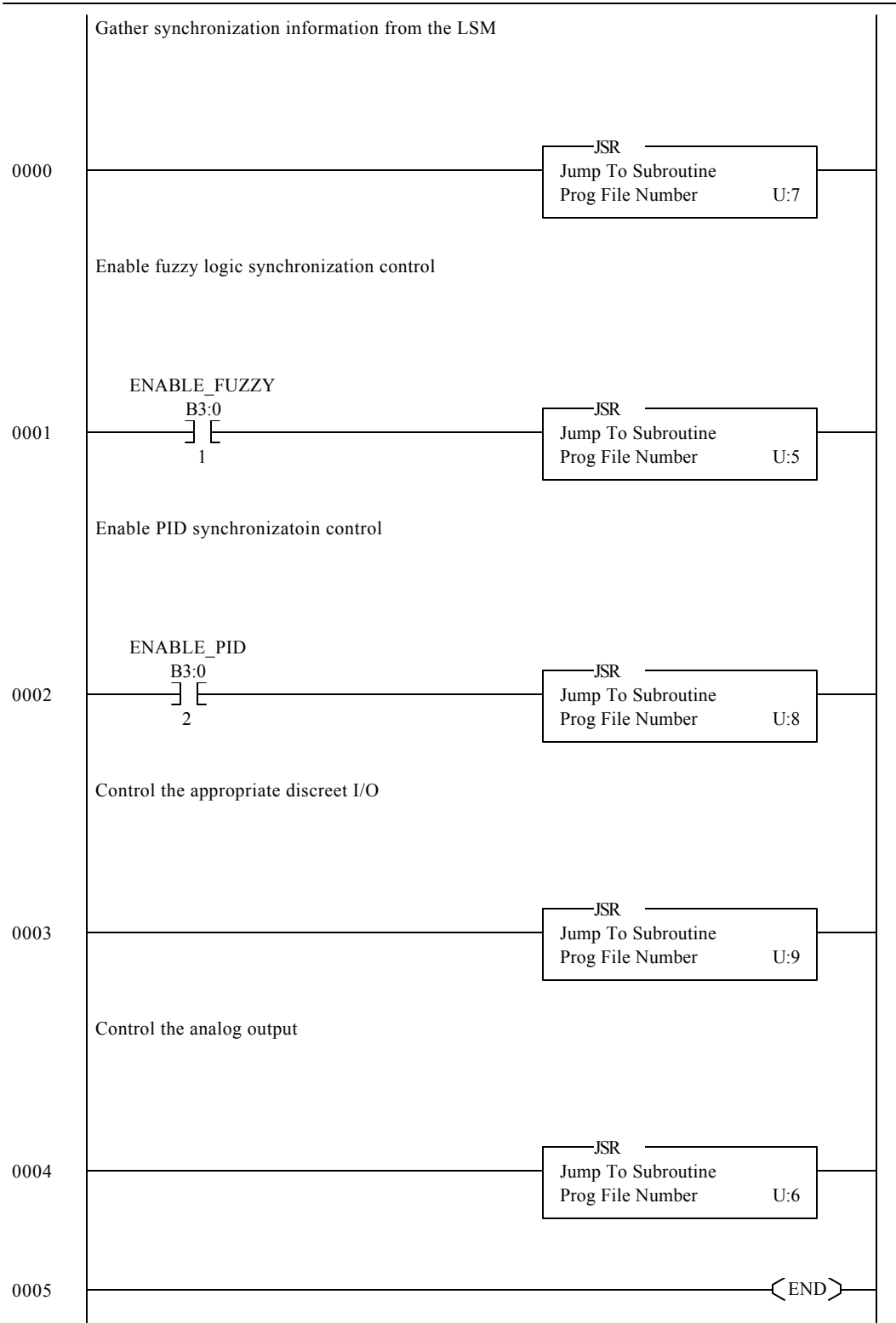
PID - Rung #8:14 - N56:0

PID Equation: AB	Feed Forward: 0	Setpoint: 180
Mode: Auto	Max Scaled Input: 0	Proportional Gain(Kc) (.01): 20
Error: SP - PV	Min Scaled Input: 0	Res. Time(Ti) [.01 mins]: 150
Output Limiting: No	Deadband: 0	Derivative Rate (Td) [0.1 mins]: 10
Set Output Mode: No	Set Output Value %: 0	Loop Update Time: 5
Setpoint Scaling: No	Upper CV Limit%: 100	Lower CV Limit%: 0
Derivative Input: Error	Scaled PV Value: 182	Scaled Error: 65534

FUZZY KERNEL REVISED

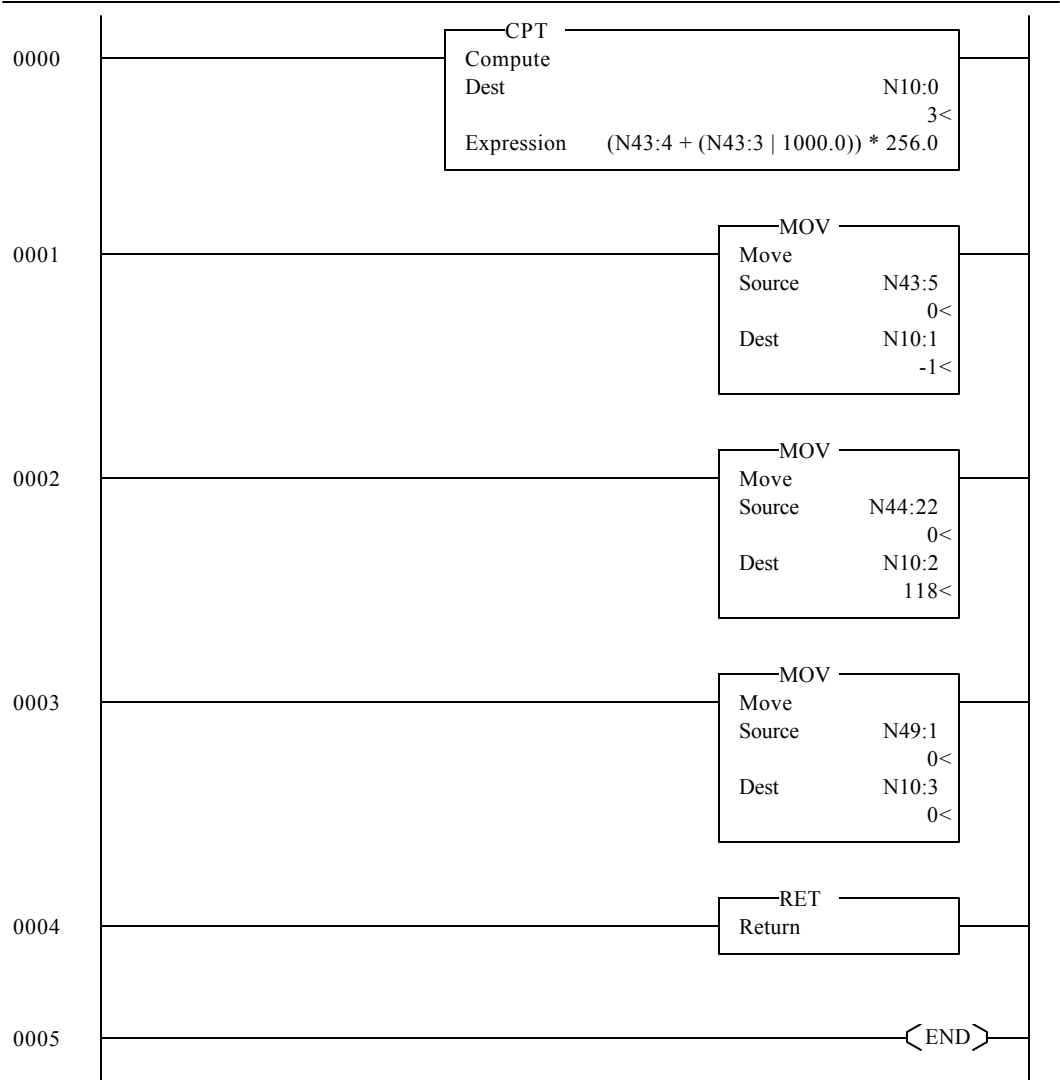
Program File List

Name	Number	Type	Rungs	Debug
[SYSTEM]	0	SYS	0	No
MAIN	2	Ladder File	6	No
fk_inputs	3	Ladder File	6	No
fk_outputs	4	Ladder File	5	No
fk_main	5	Ladder File	60	No
ANALOG OUT	6	Ladder File	4	No
LSM LOGIC	7	Ladder File	12	No
PID CTRL	8	Ladder File	18	No
I/O	9	Ladder File	10	No



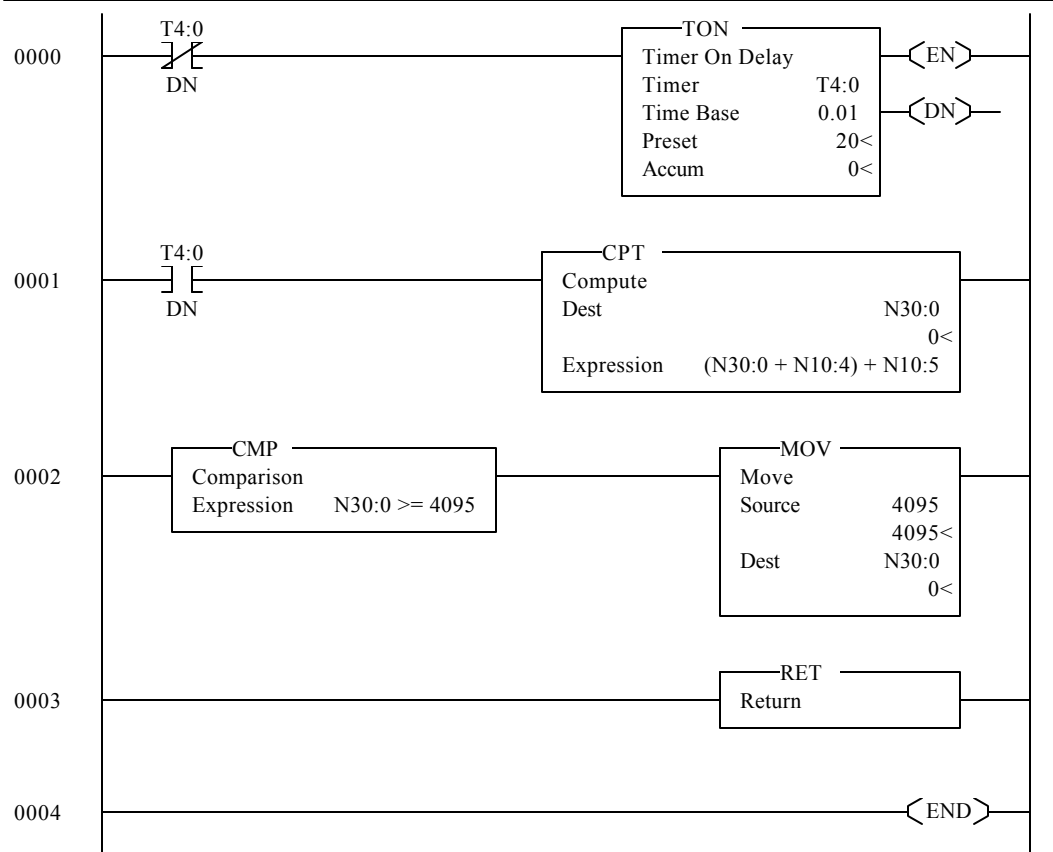
FUZZY KERNEL REVISED

LAD 3 - fk_inputs --- Total Rungs in File = 6



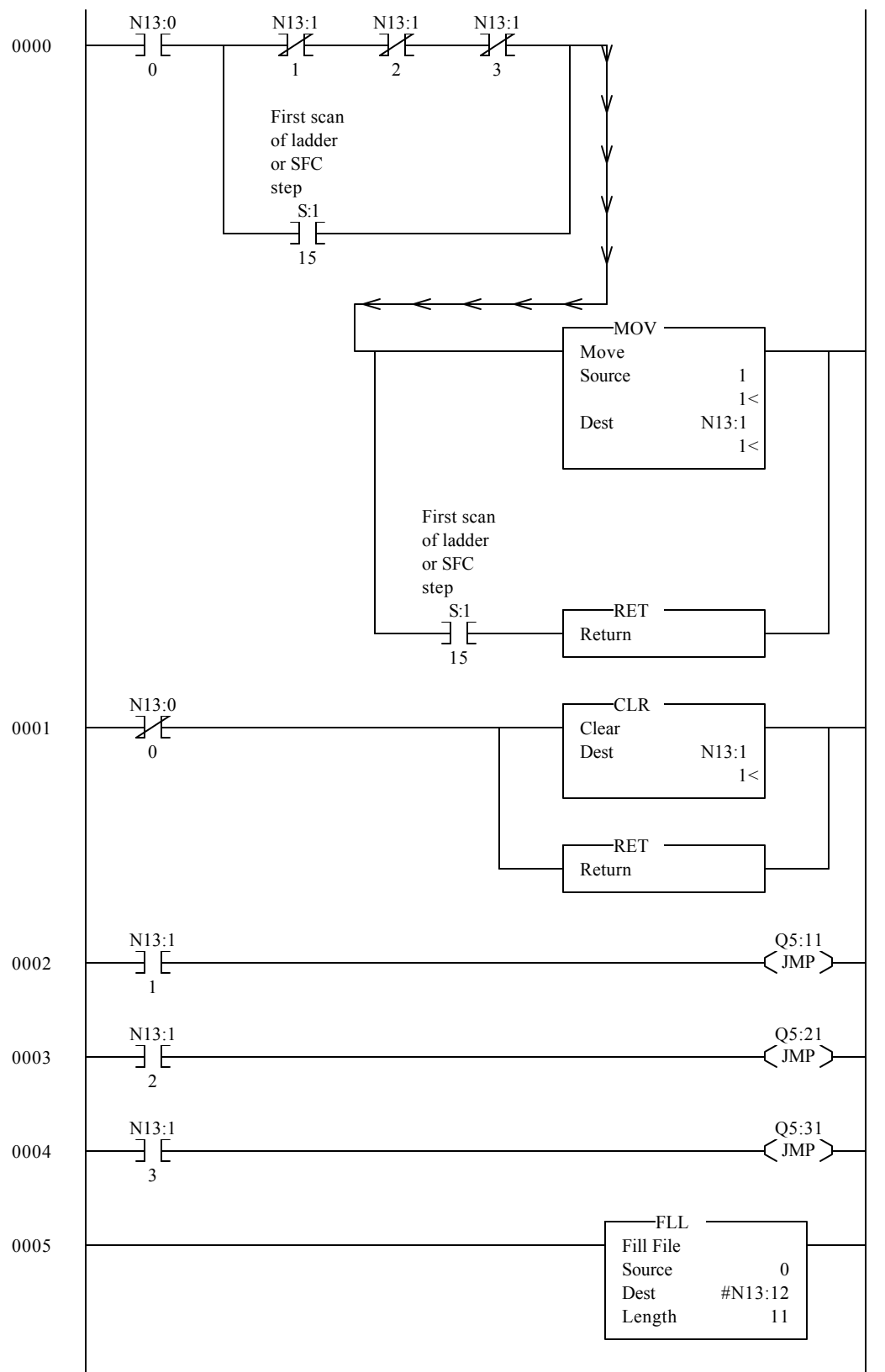
FUZZY KERNEL REVISED

LAD 4 - fk_outputs --- Total Rungs in File = 5



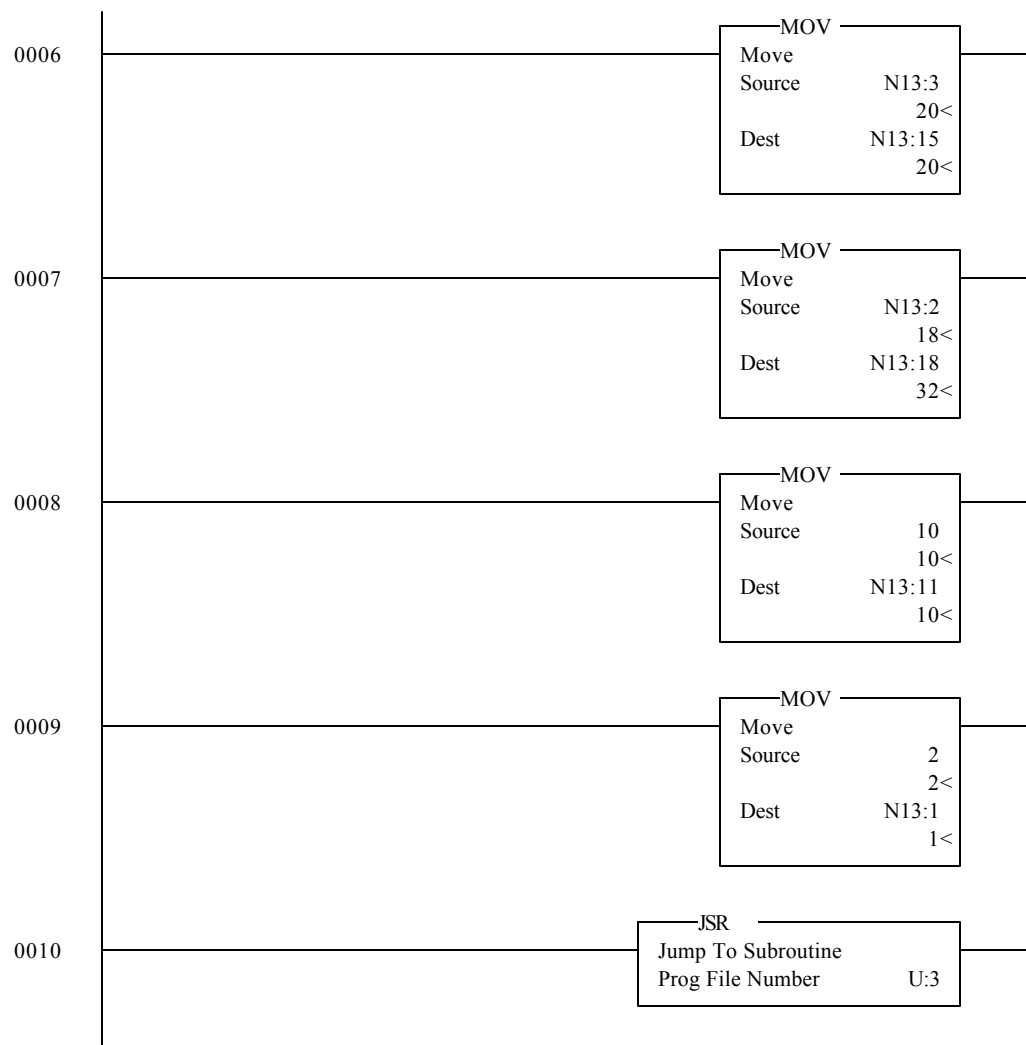
FUZZY KERNEL REVISED

LAD 5 - fk_main --- Total Rungs in File = 60



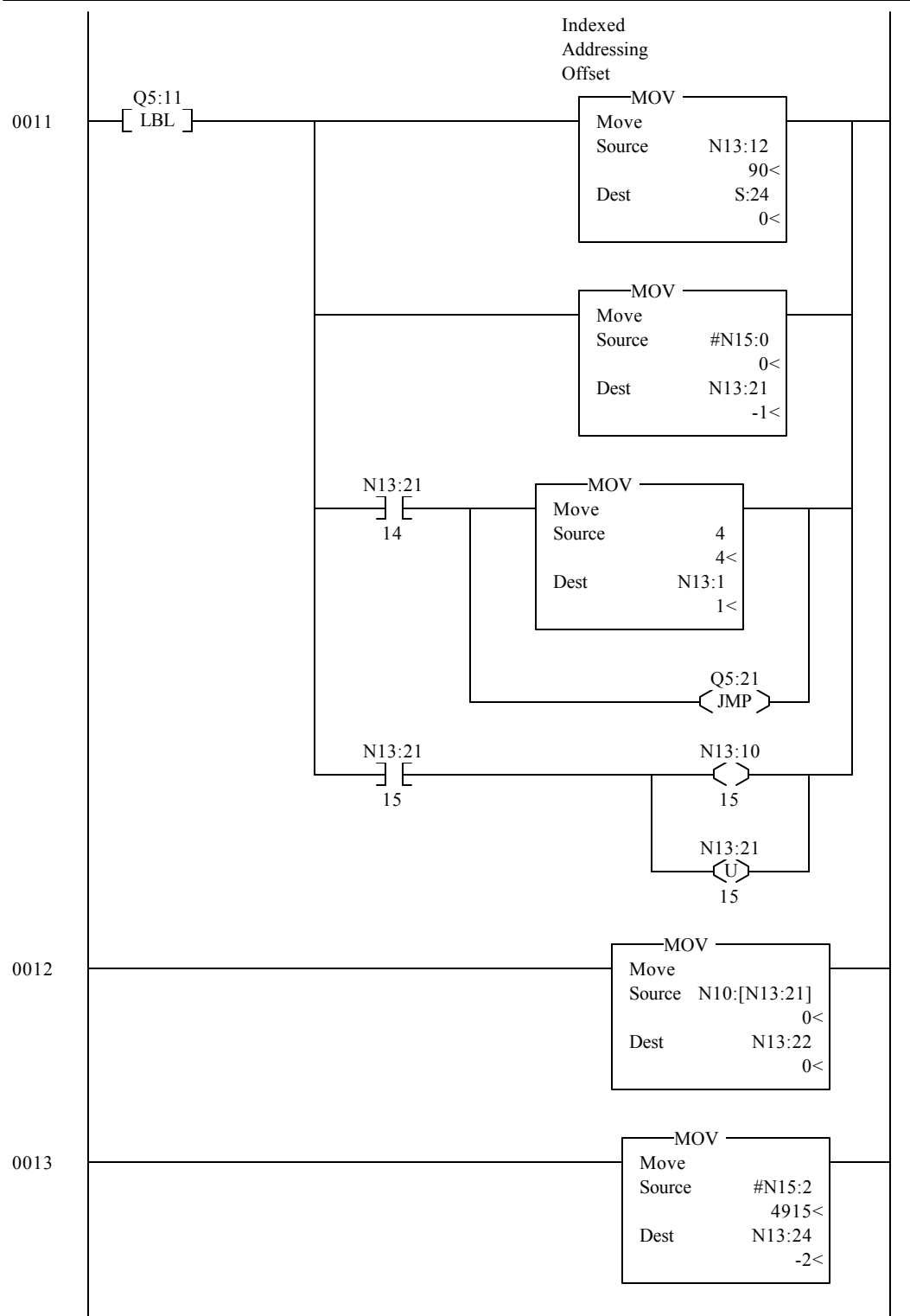
FUZZY KERNEL REVISED

LAD 5 - fk_main --- Total Rungs in File = 60



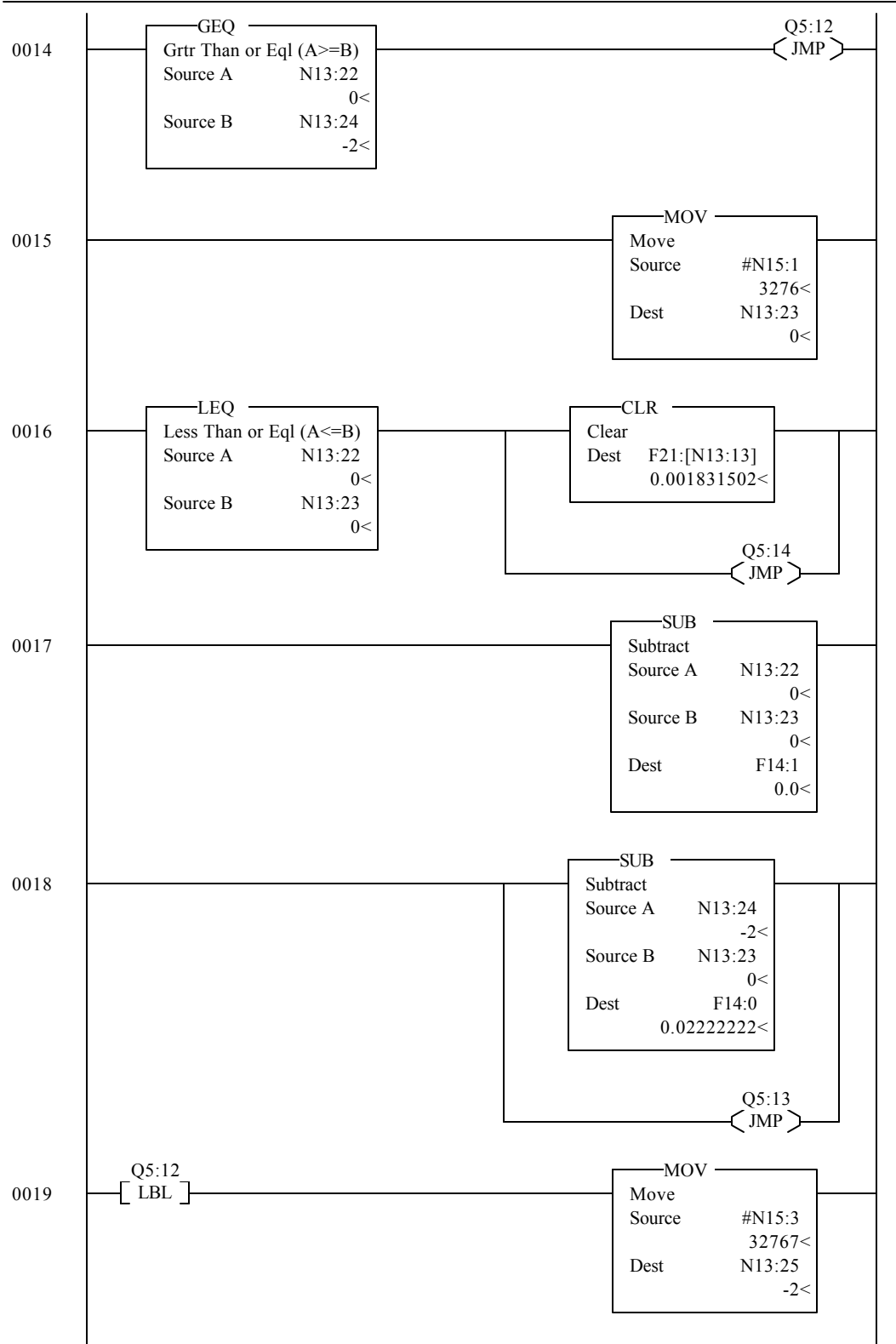
FUZZY KERNEL REVISED

LAD 5 - fk_main --- Total Rungs in File = 60



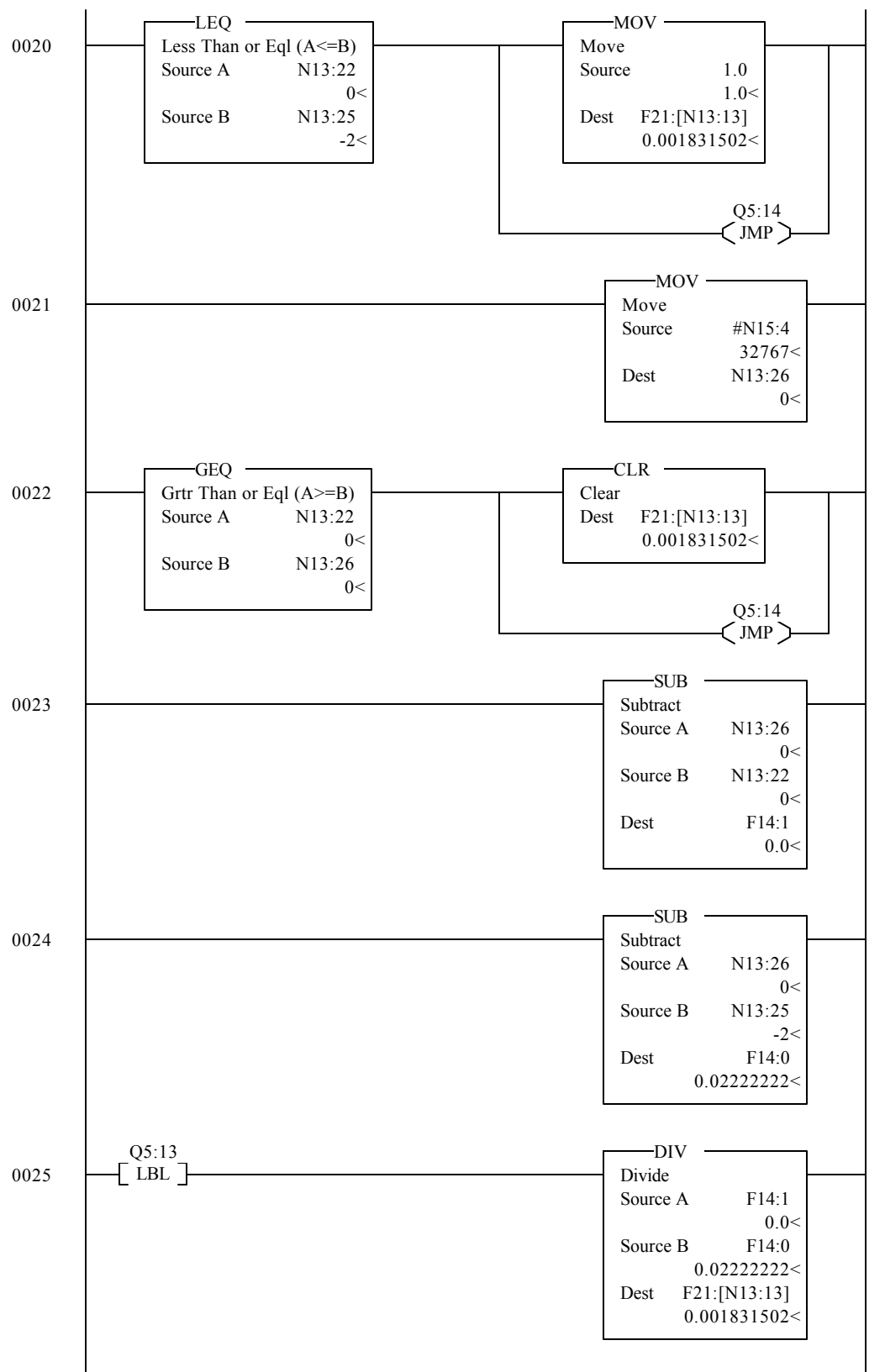
FUZZY KERNEL REVISED

LAD 5 - fk_main --- Total Rungs in File = 60



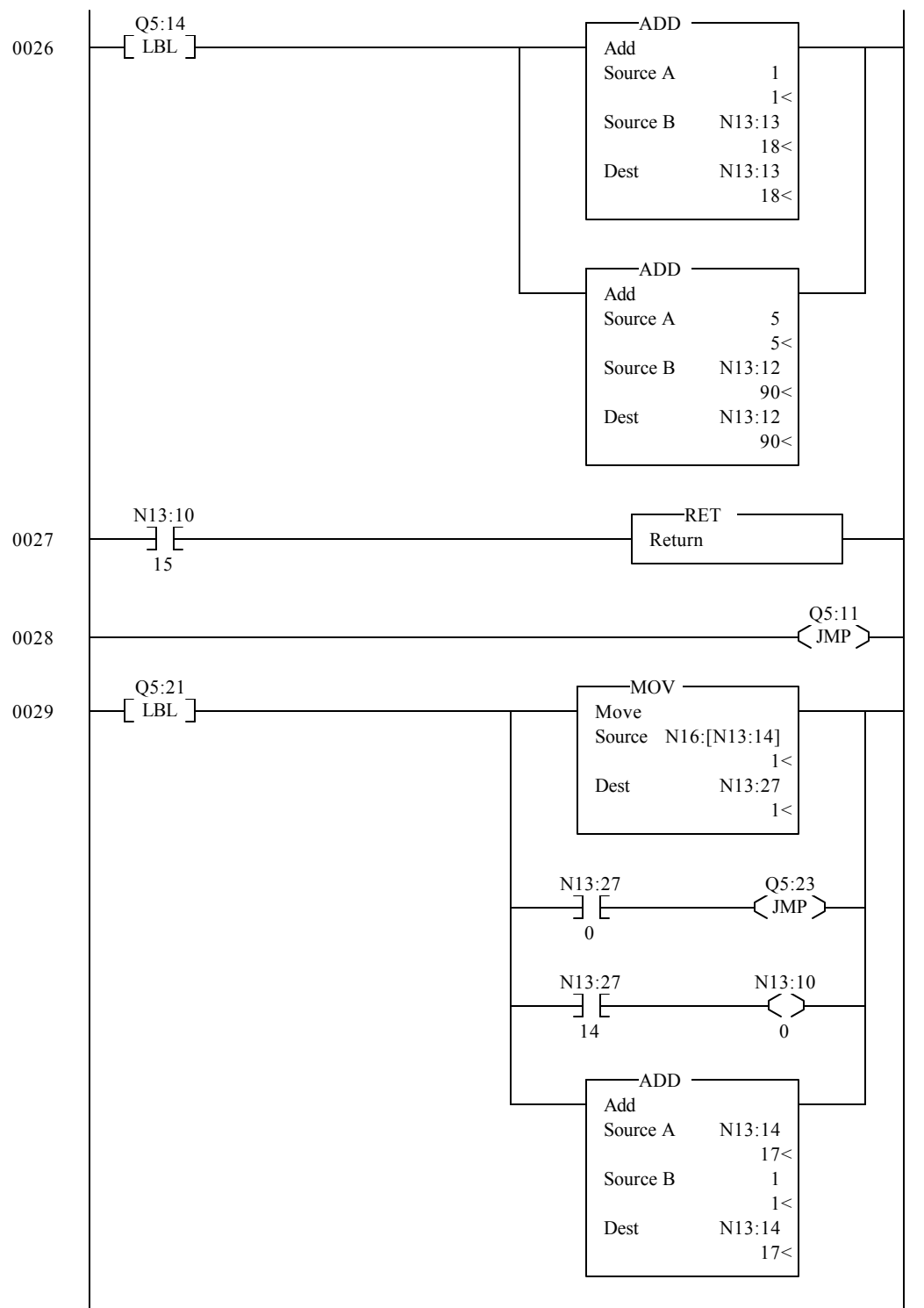
FUZZY KERNEL REVISED

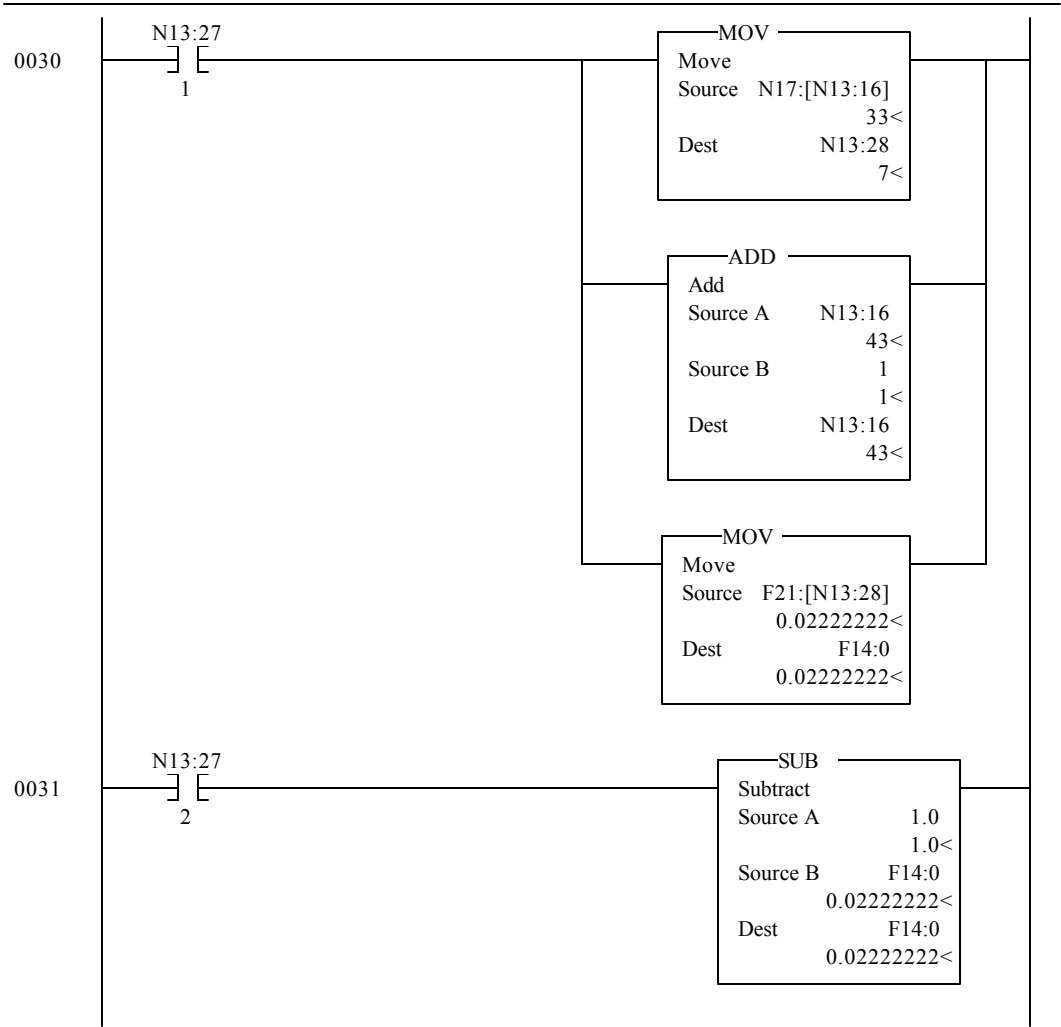
LAD 5 - fk_main --- Total Rungs in File = 60



FUZZY KERNEL REVISED

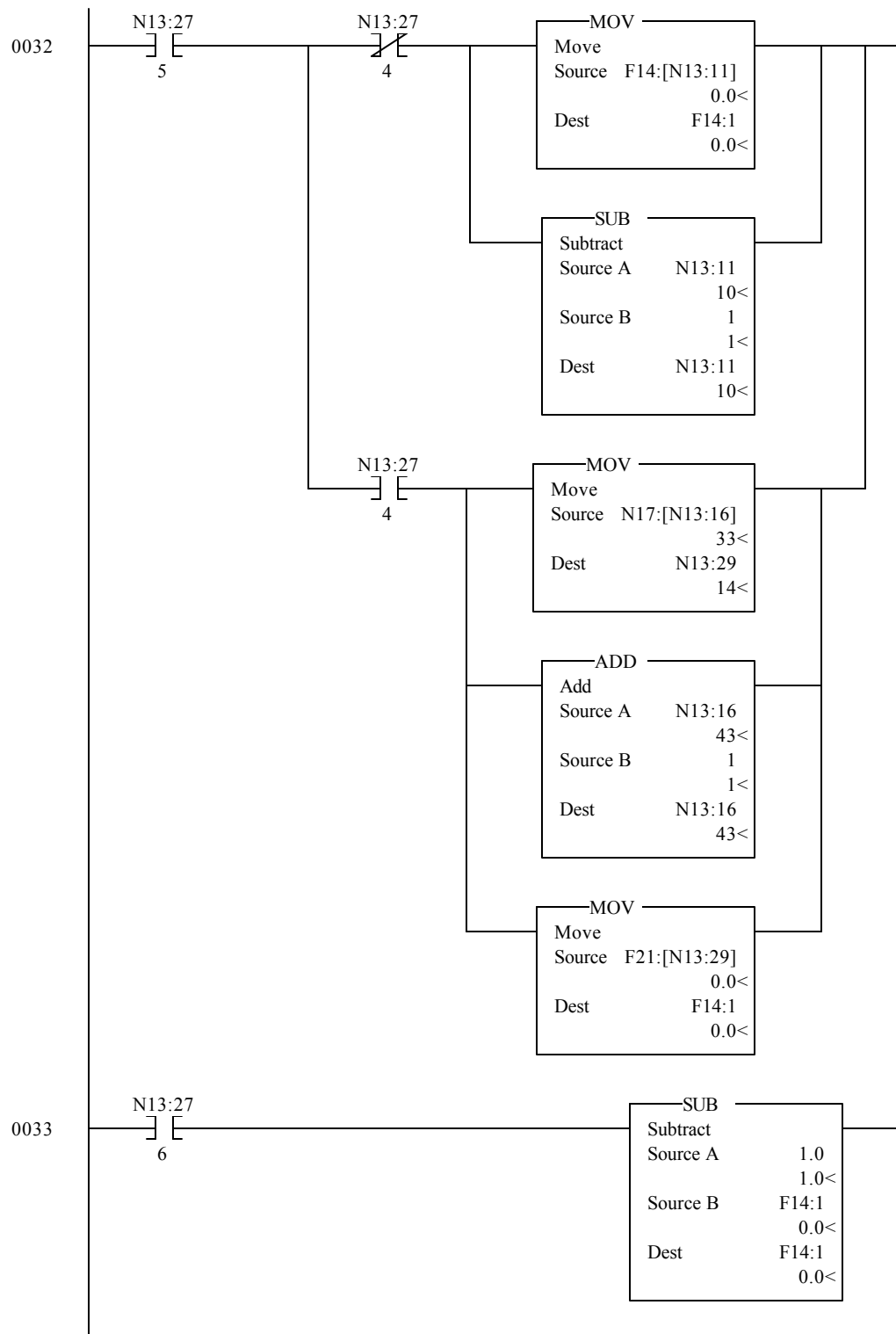
LAD 5 - fk_main --- Total Rungs in File = 60





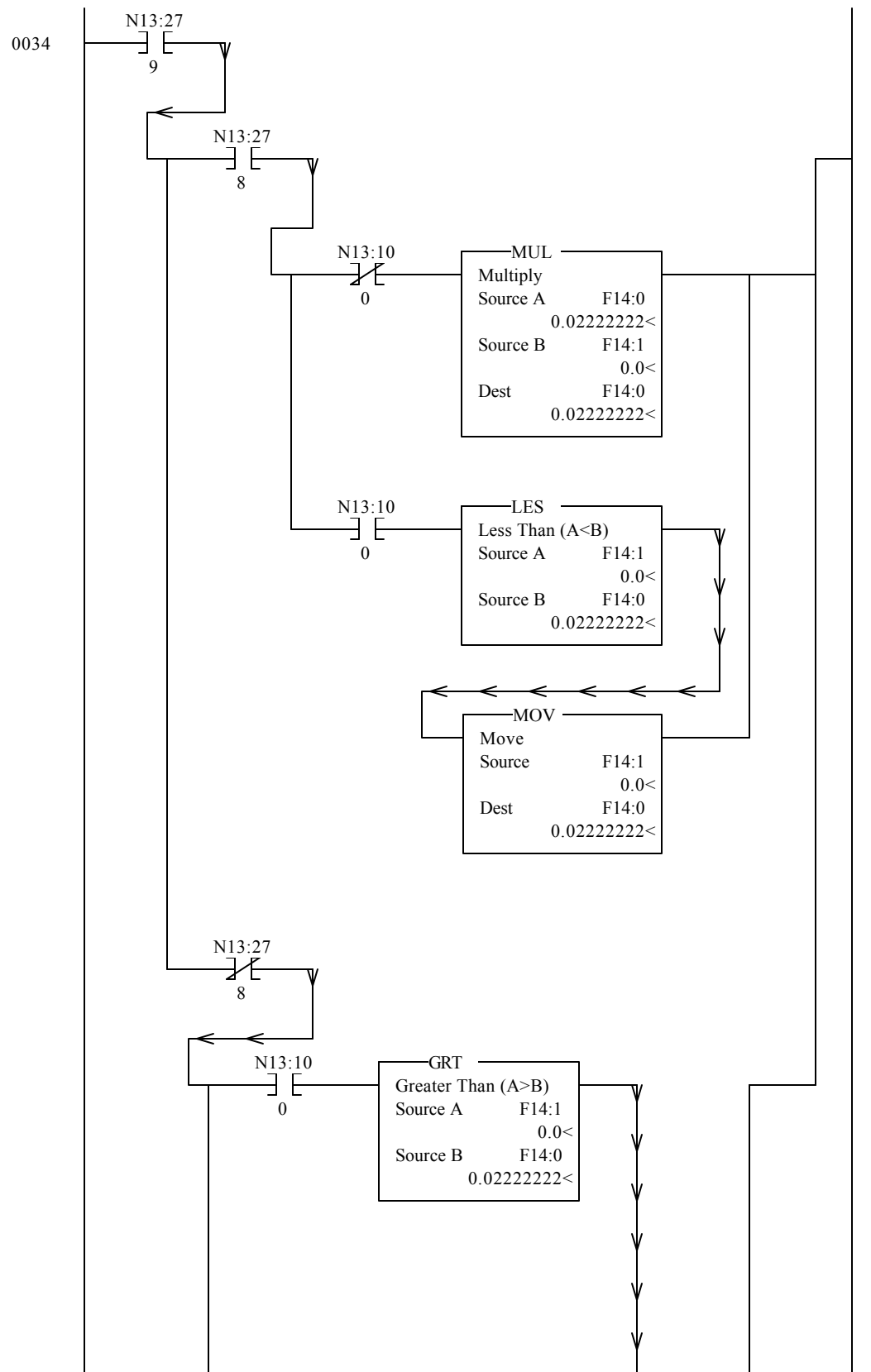
FUZZY KERNEL REVISED

LAD 5 - fk_main --- Total Rungs in File = 60



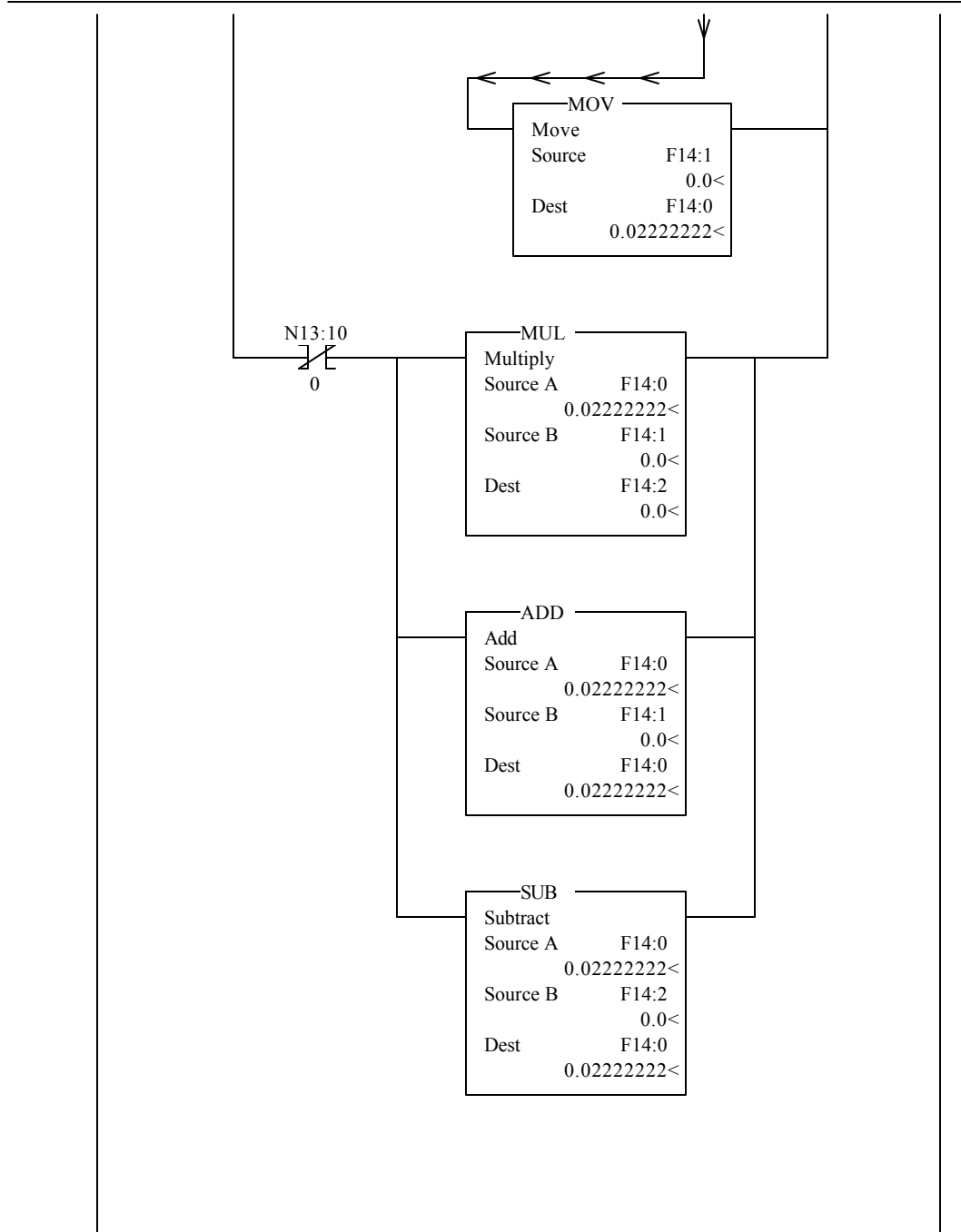
FUZZY KERNEL REVISED

LAD 5 - fk_main --- Total Rungs in File = 60



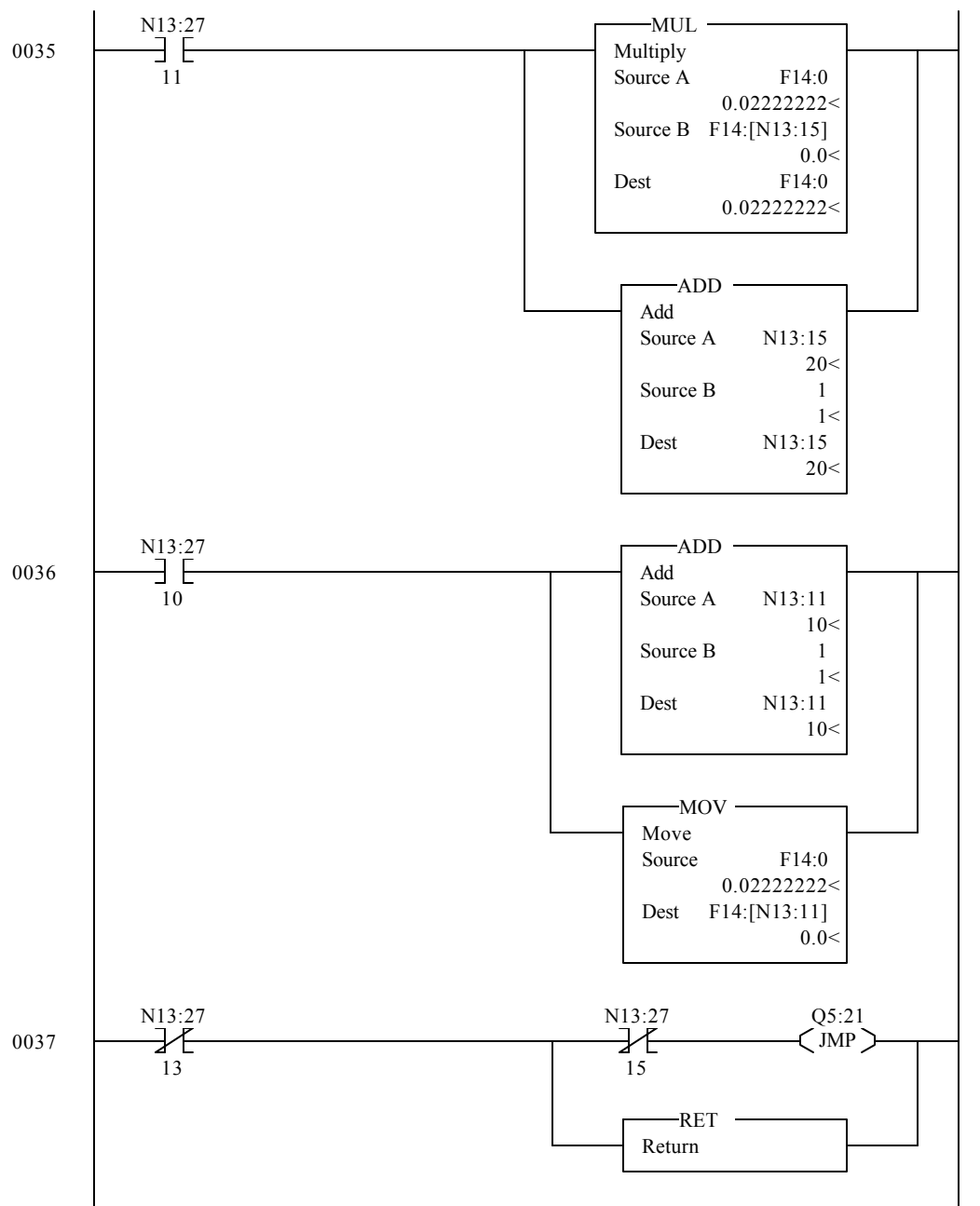
FUZZY KERNEL REVISED

LAD 5 - fk_main --- Total Rungs in File = 60



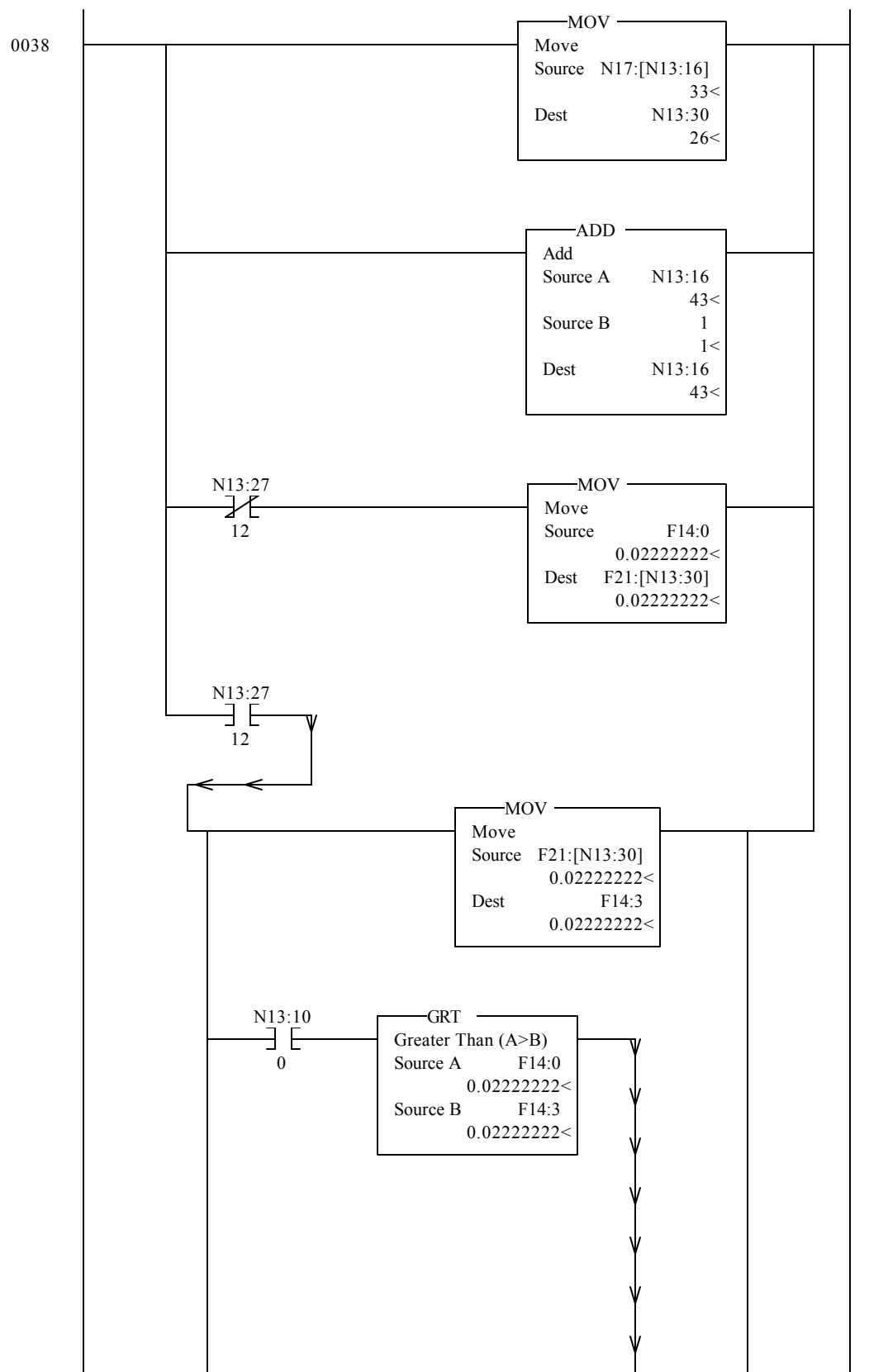
FUZZY KERNEL REVISED

LAD 5 - fk_main --- Total Rungs in File = 60



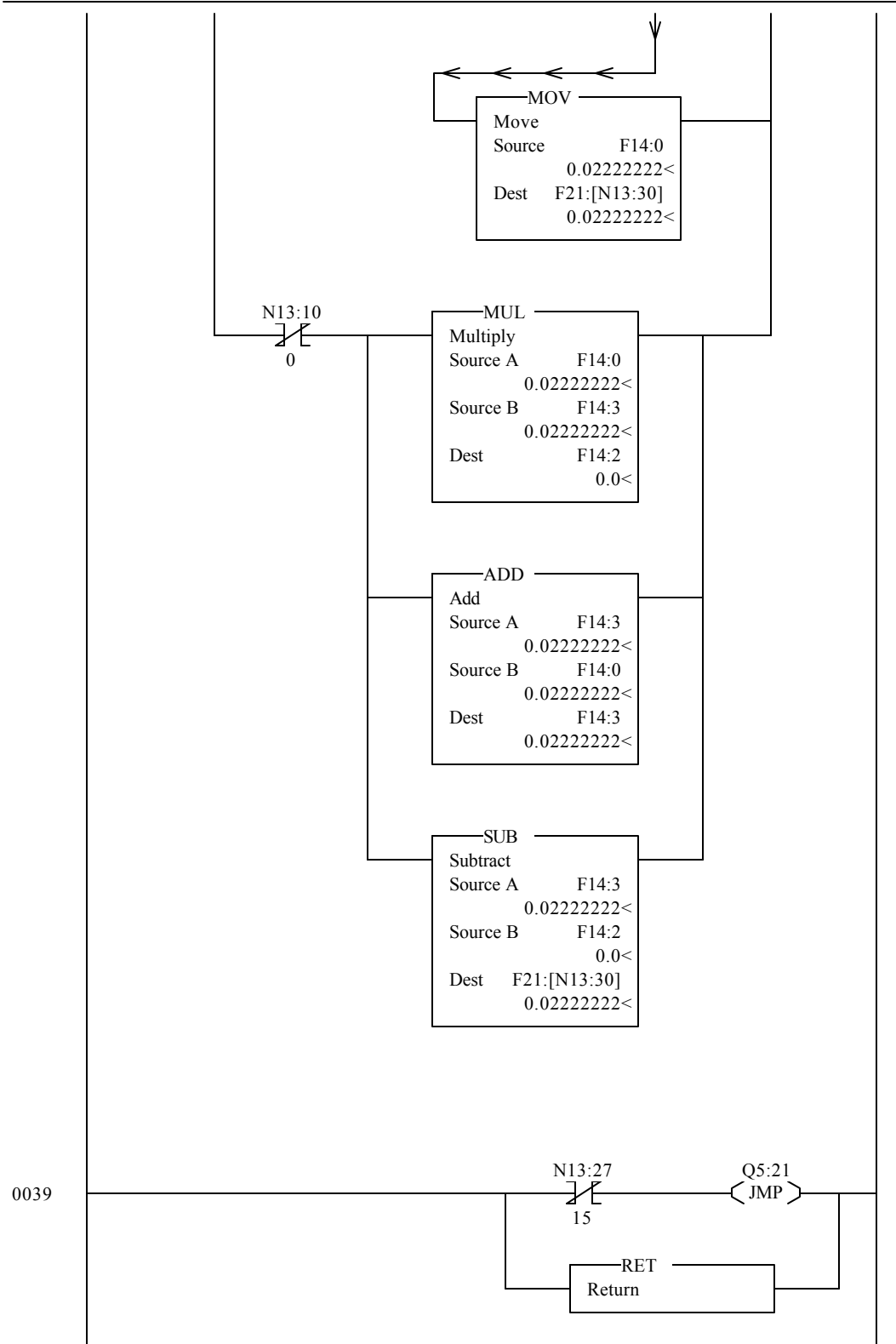
FUZZY KERNEL REVISED

LAD 5 - fk_main --- Total Rungs in File = 60



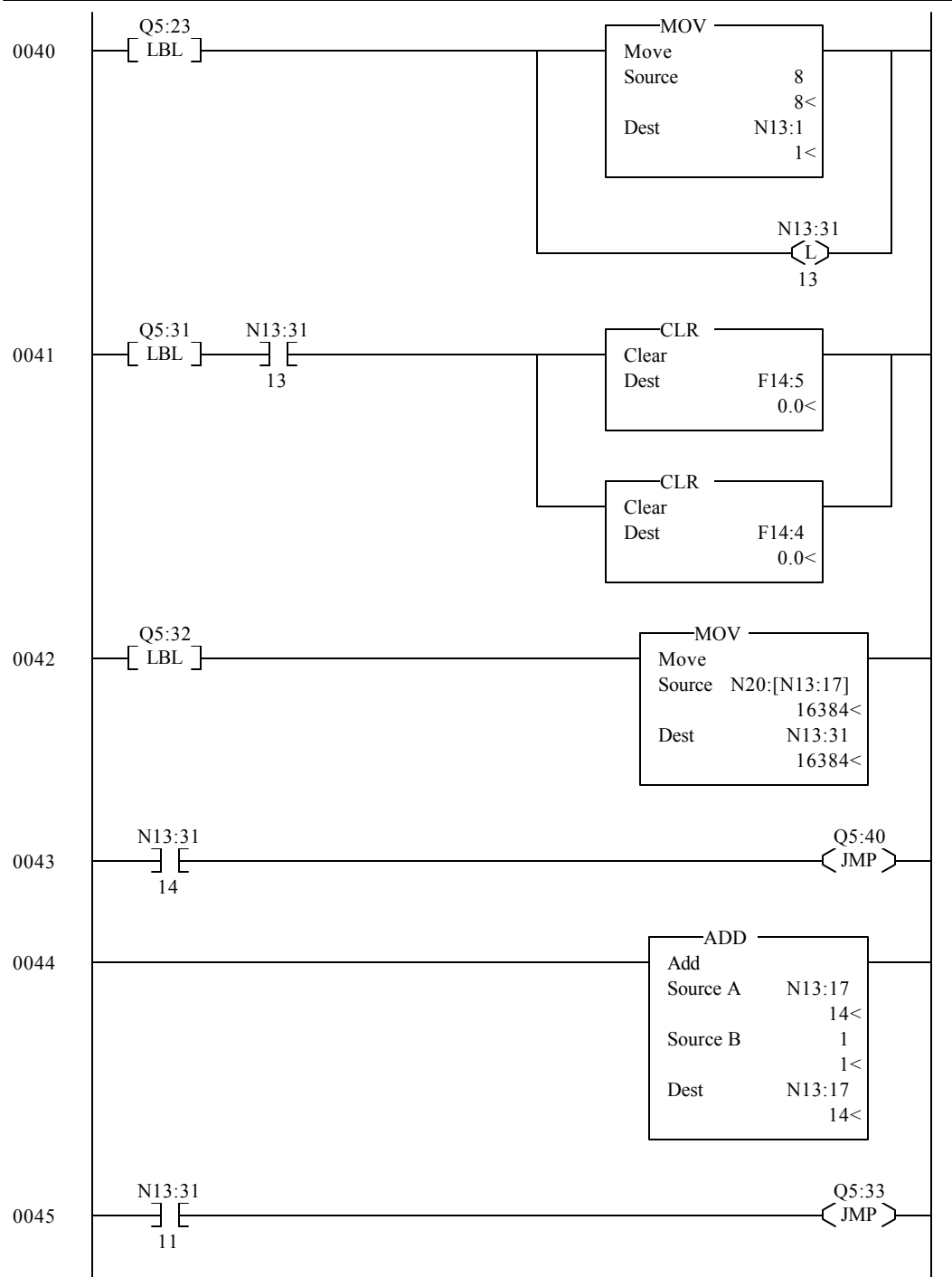
FUZZY KERNEL REVISED

LAD 5 - fk_main --- Total Rungs in File = 60



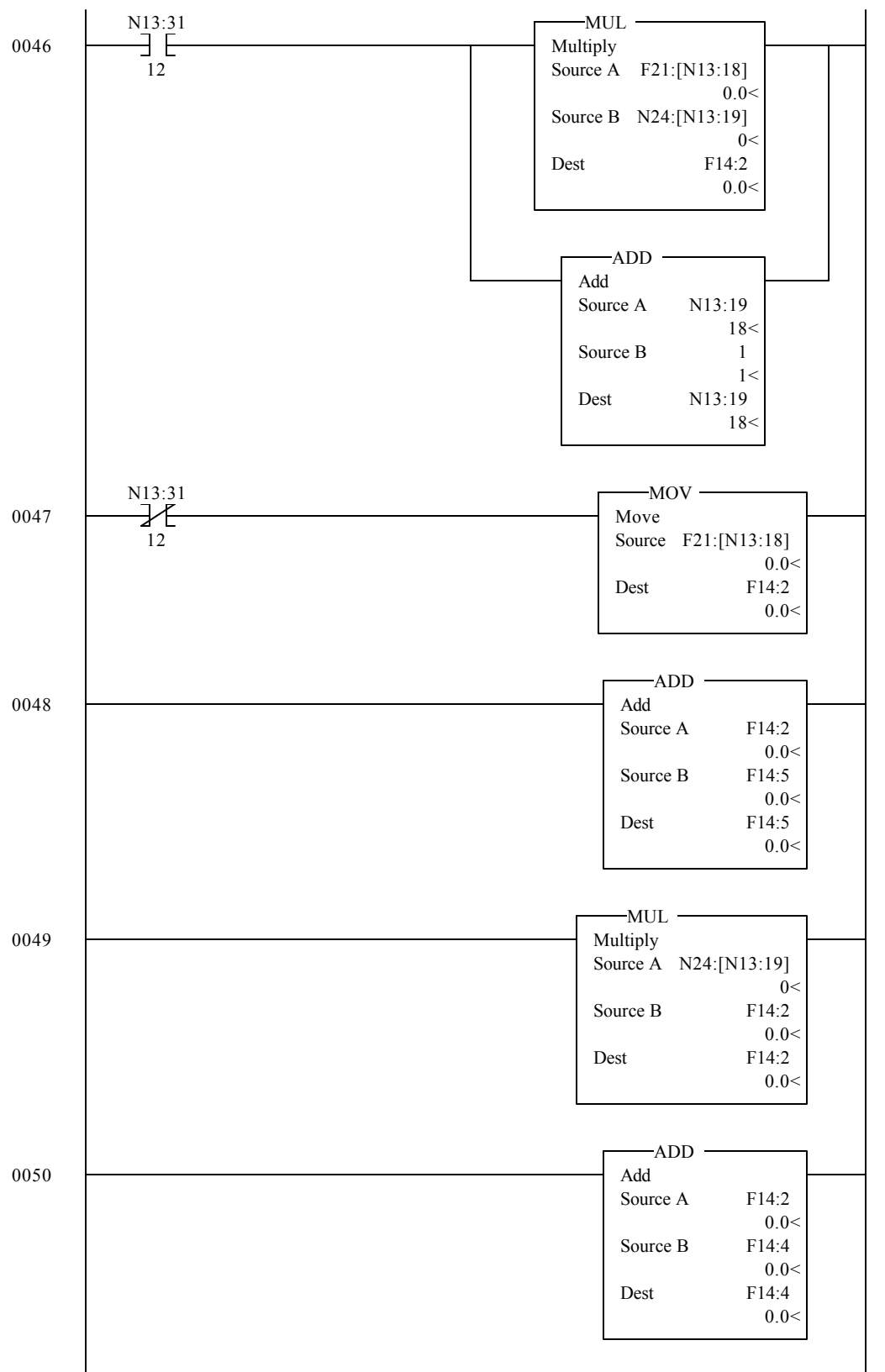
FUZZY KERNEL REVISED

LAD 5 - fk_main --- Total Rungs in File = 60



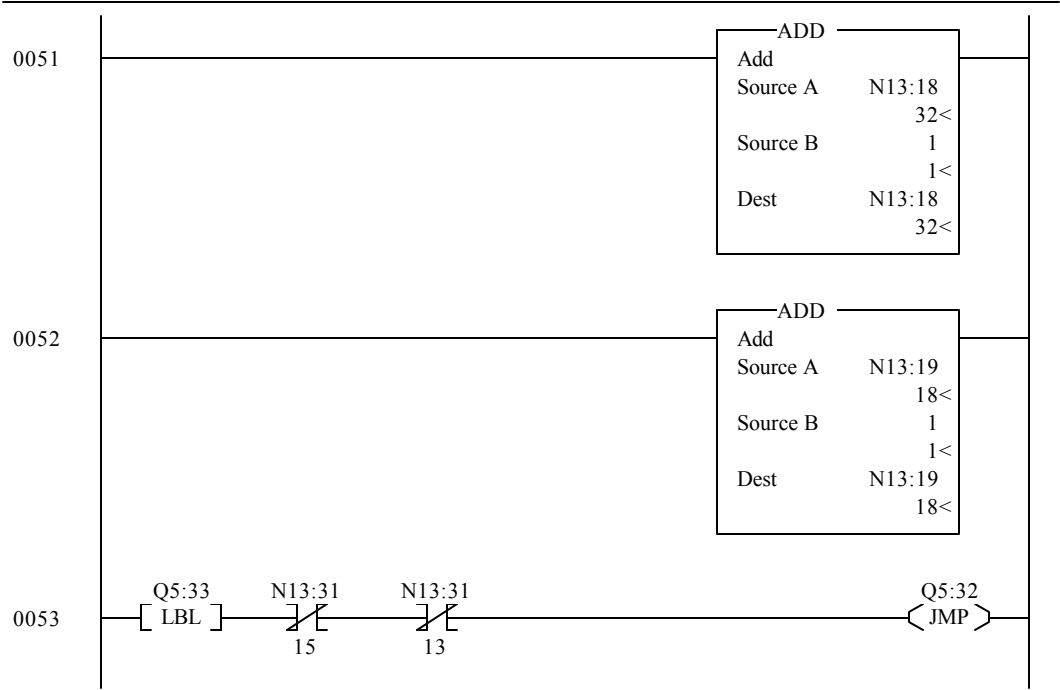
FUZZY KERNEL REVISED

LAD 5 - fk_main --- Total Rungs in File = 60



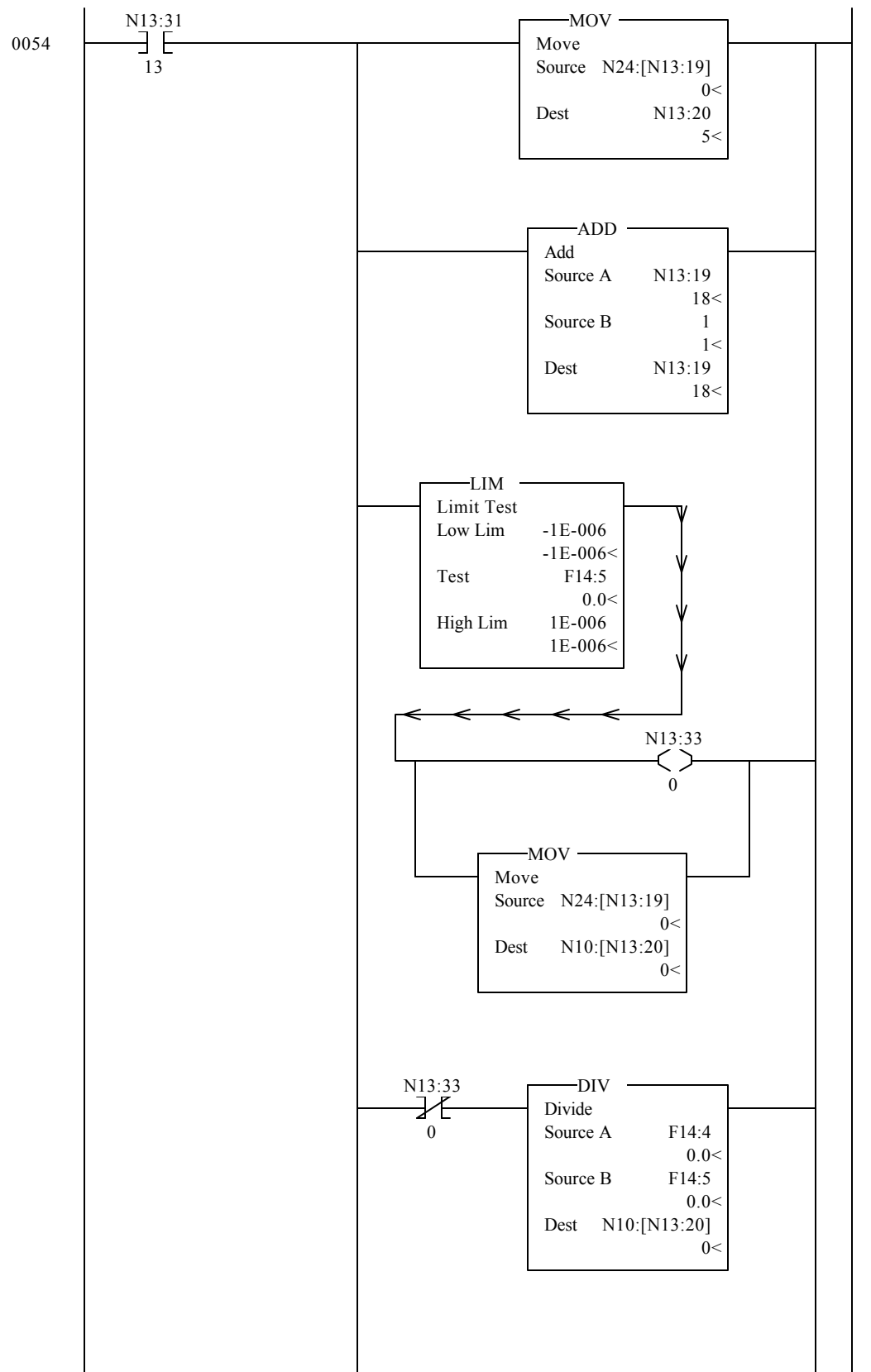
FUZZY KERNEL REVISED

LAD 5 - fk_main --- Total Rungs in File = 60



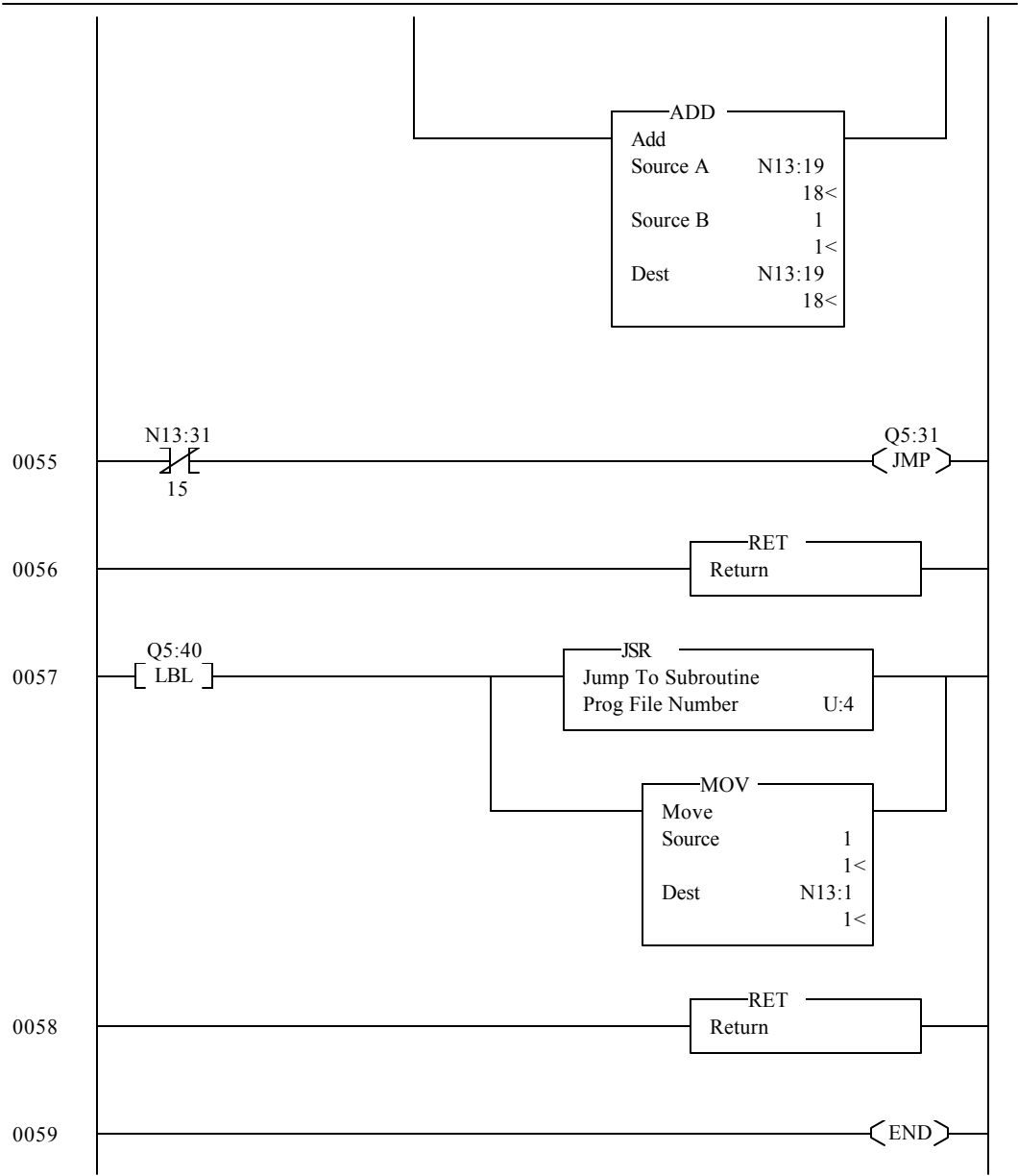
FUZZY KERNEL REVISED

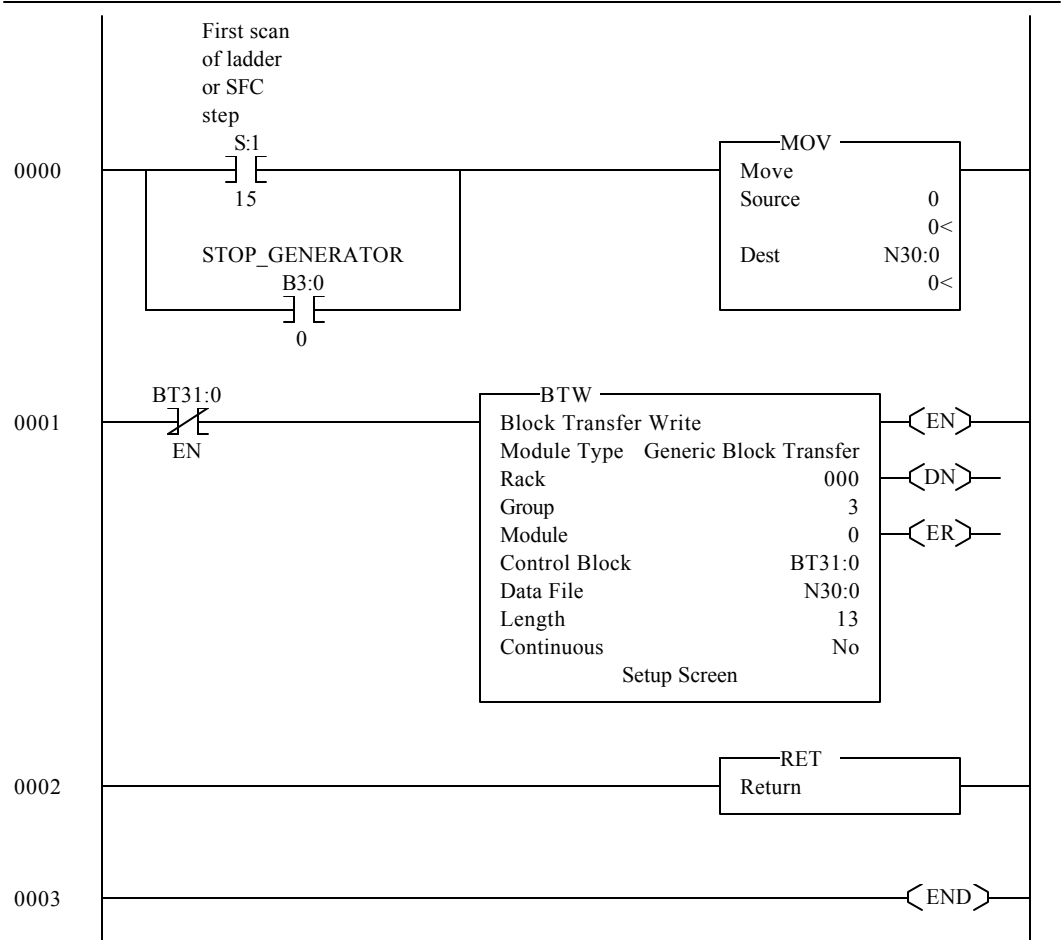
LAD 5 - fk_main --- Total Rungs in File = 60

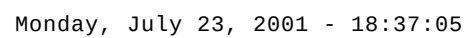


FUZZY KERNEL REVISED

LAD 5 - fk_main --- Total Rungs in File = 60

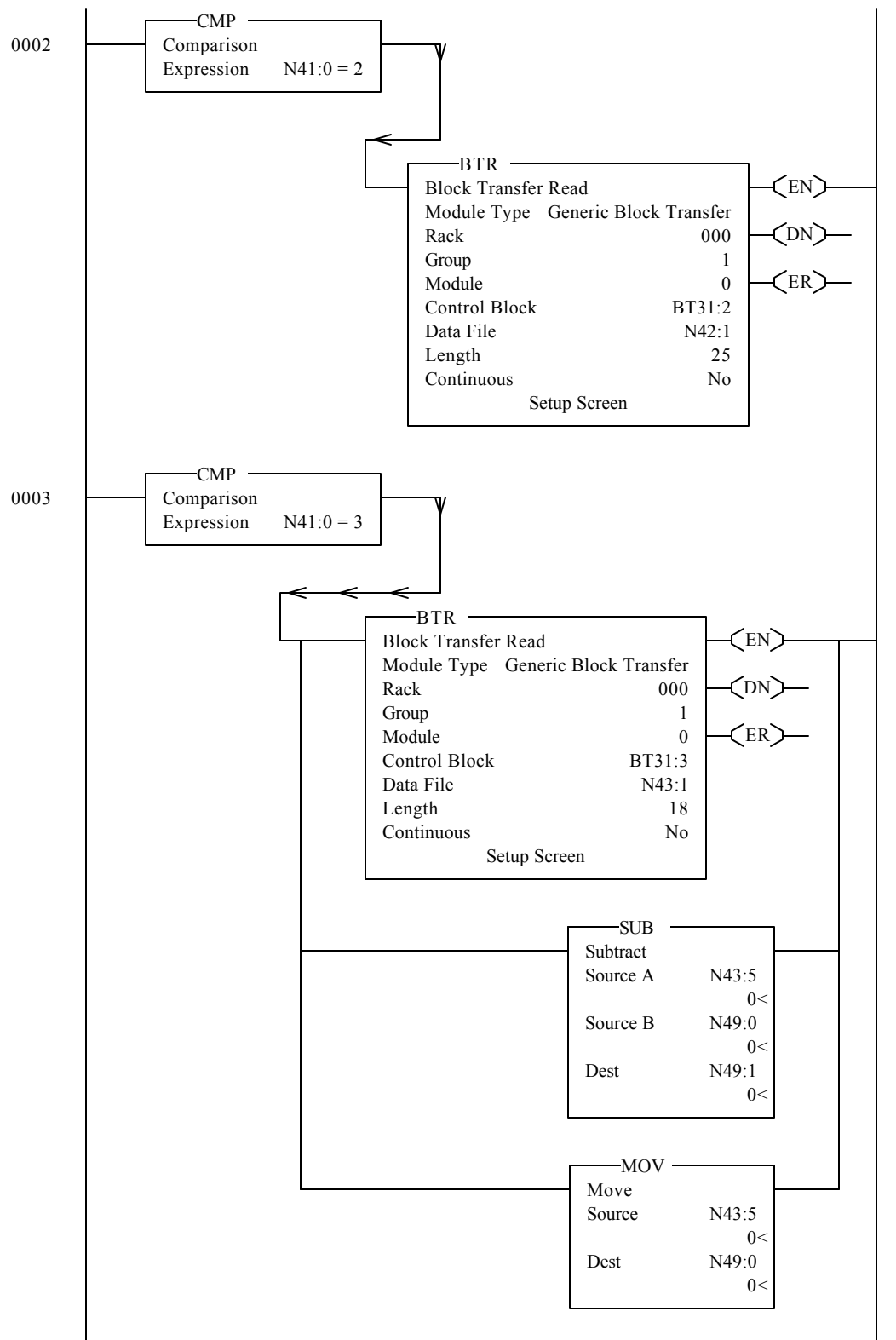


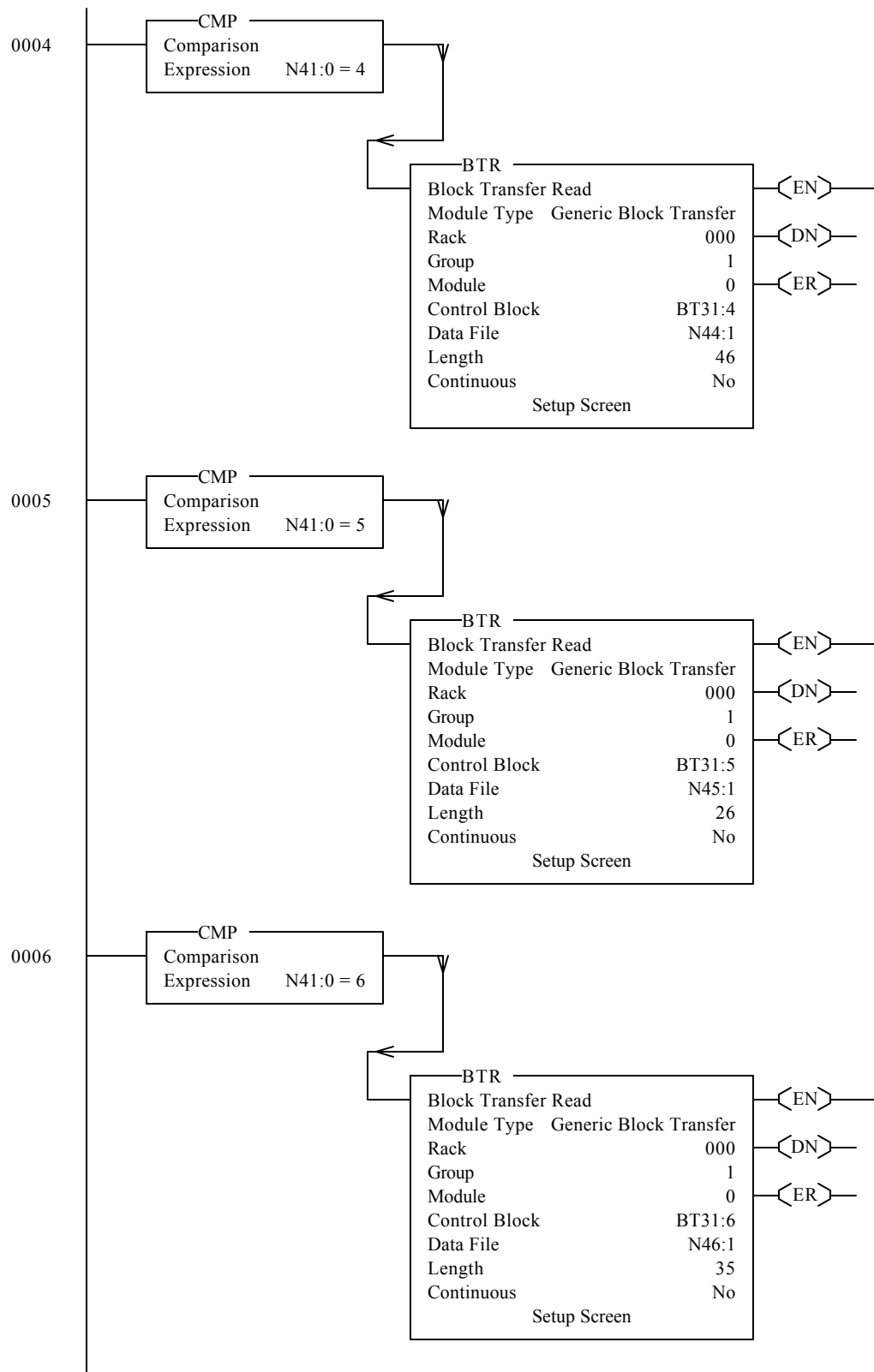




FUZZY KERNEL REVISED

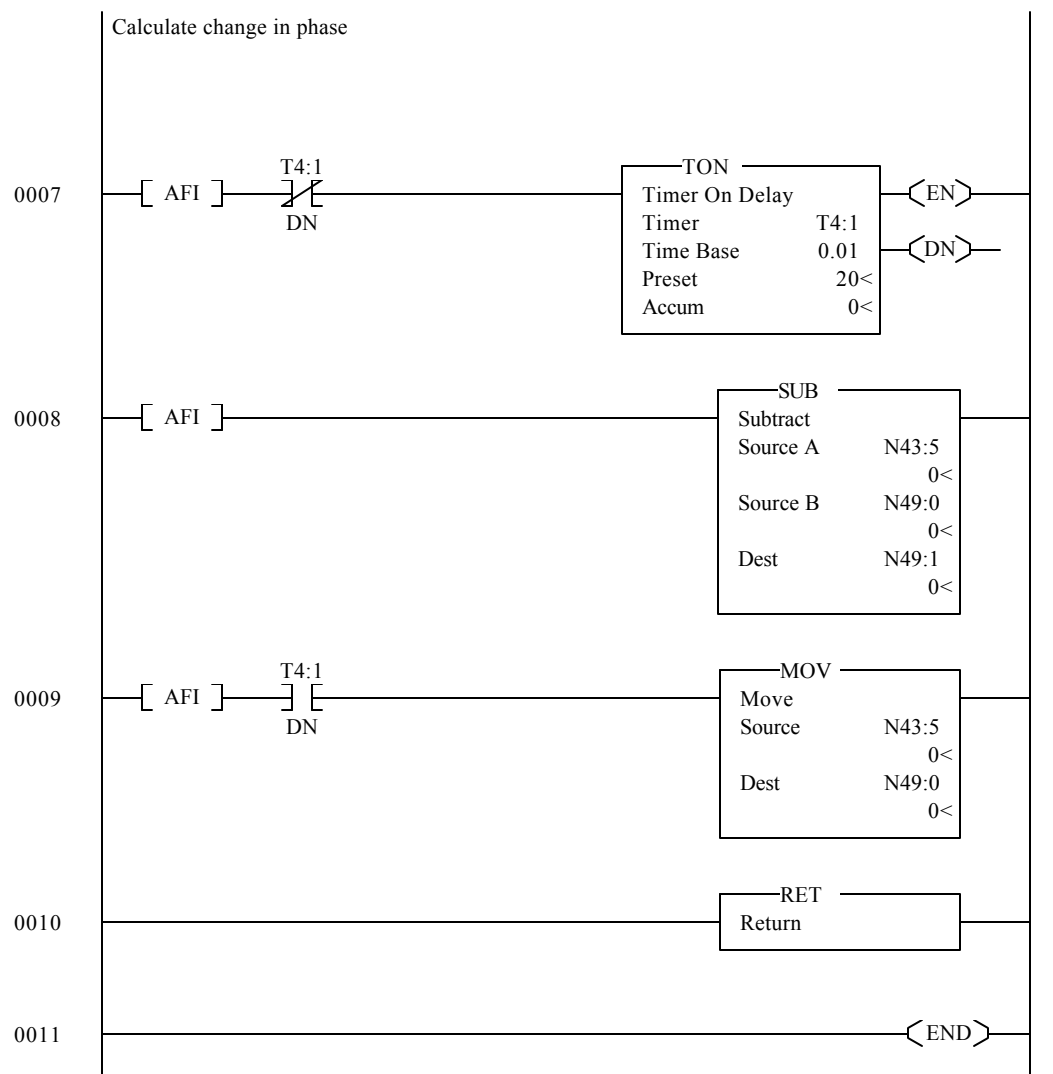
LAD 7 - LSM LOGIC --- Total Rungs in File = 12





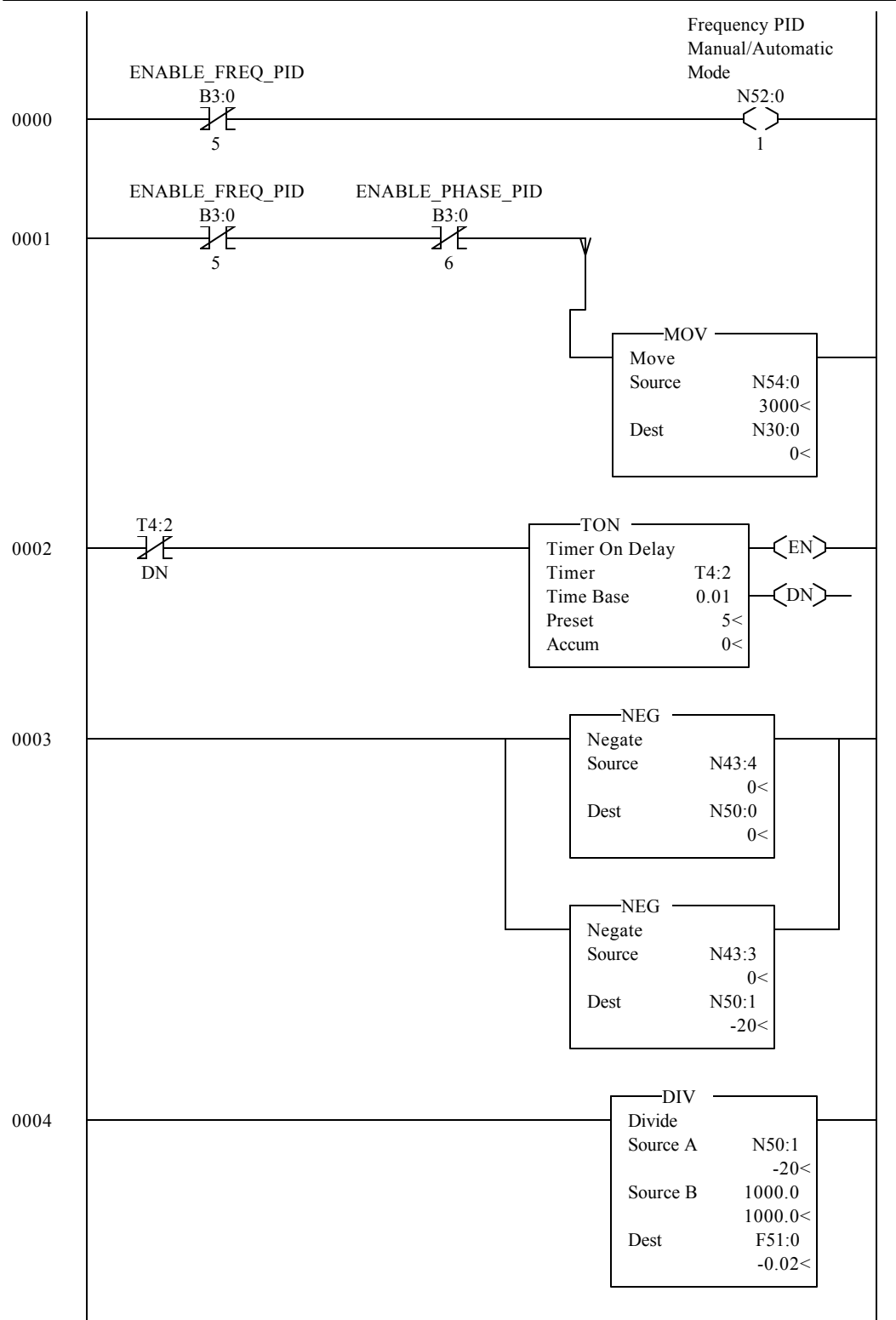
FUZZY KERNEL REVISED

LAD 7 - LSM LOGIC --- Total Rungs in File = 12



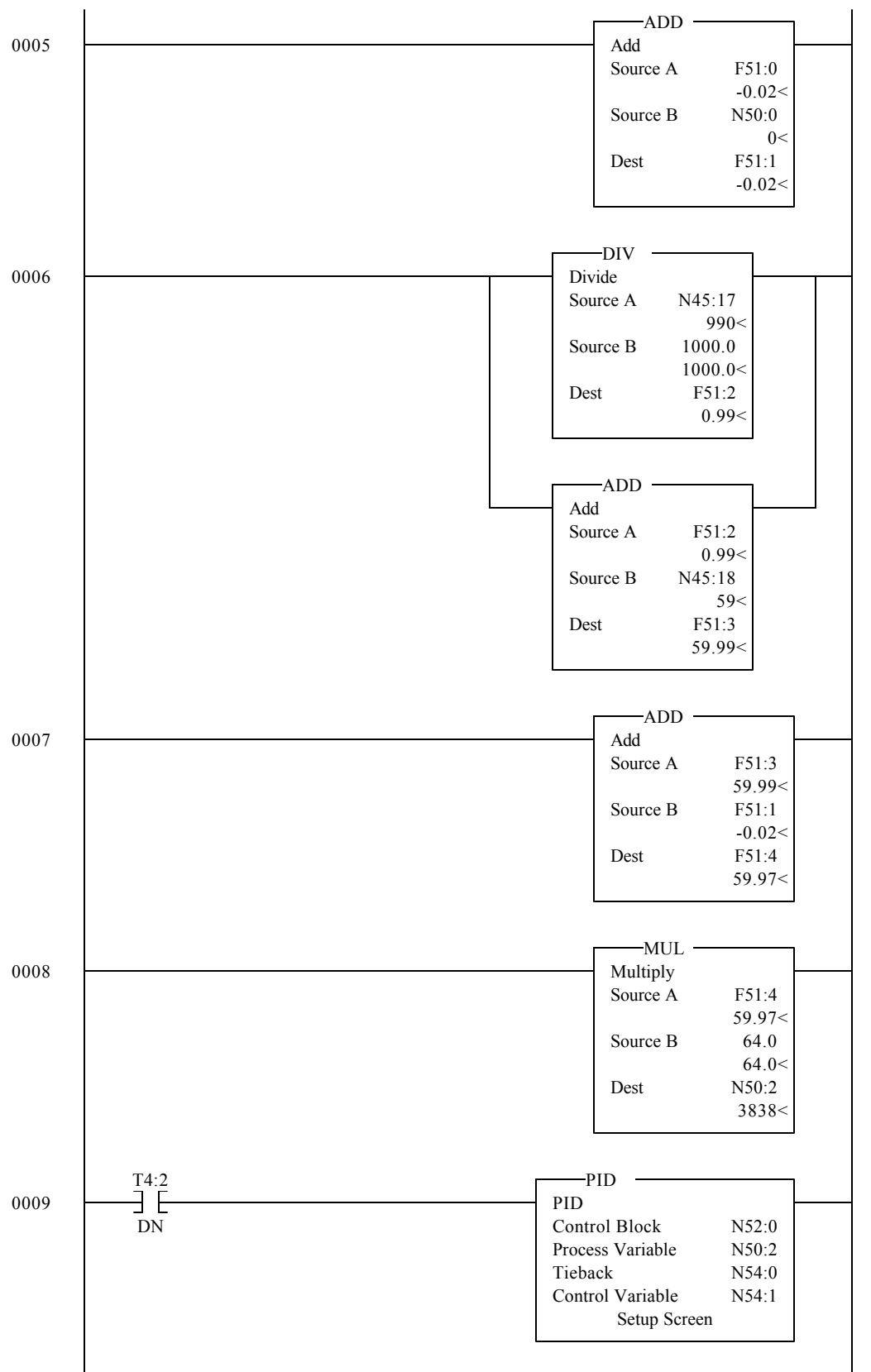
FUZZY KERNEL REVISED

LAD 8 - PID CTRL --- Total Rungs in File = 18



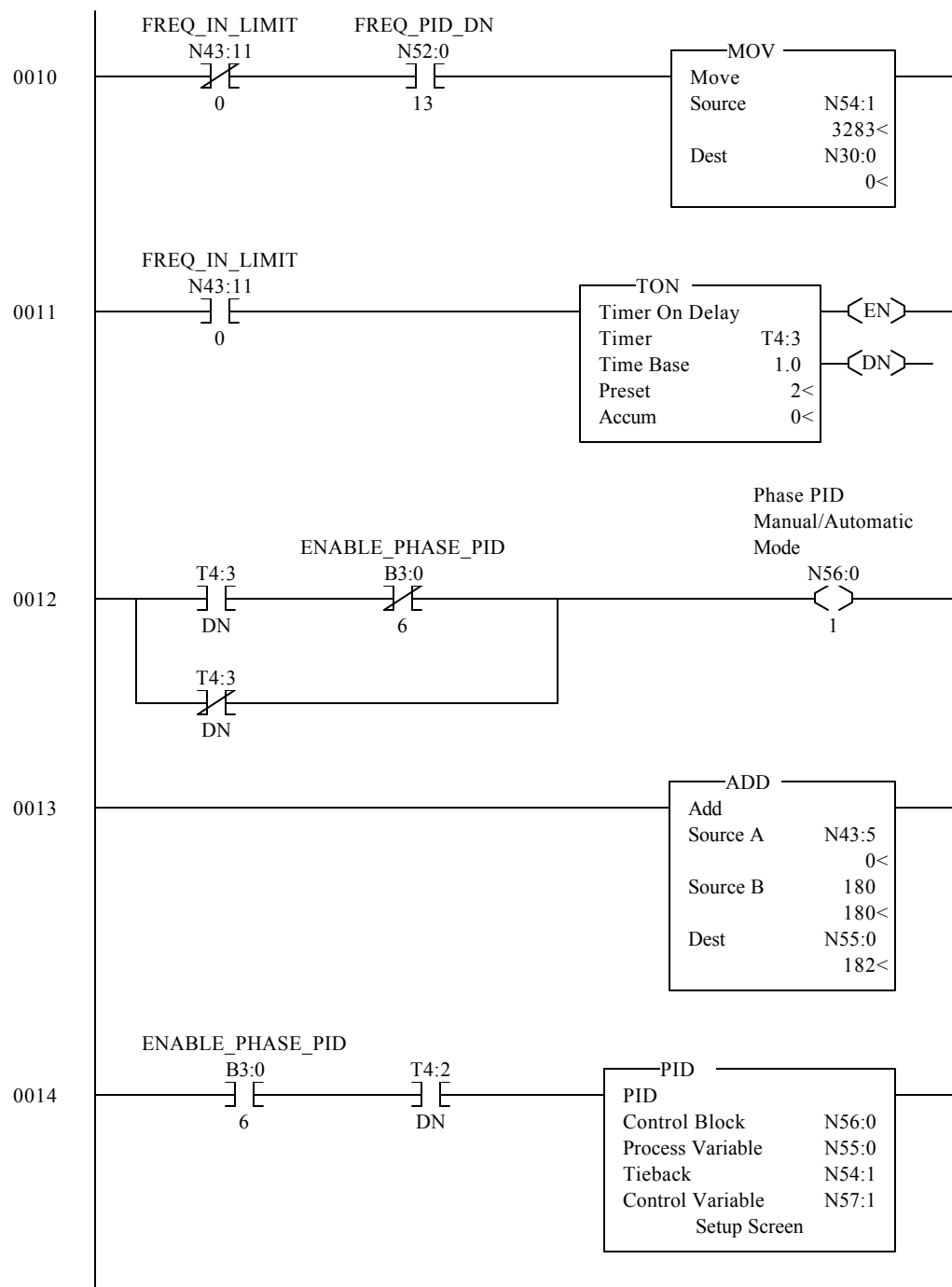
FUZZY KERNEL REVISED

LAD 8 - PID CTRL --- Total Rungs in File = 18



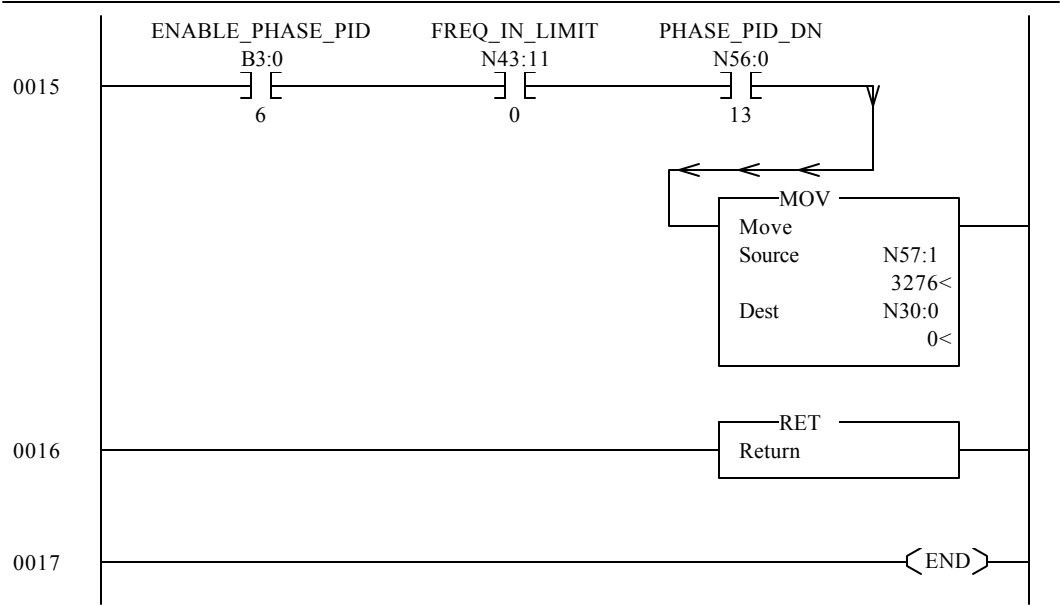
FUZZY KERNEL REVISED

LAD 8 - PID CTRL --- Total Rungs in File = 18



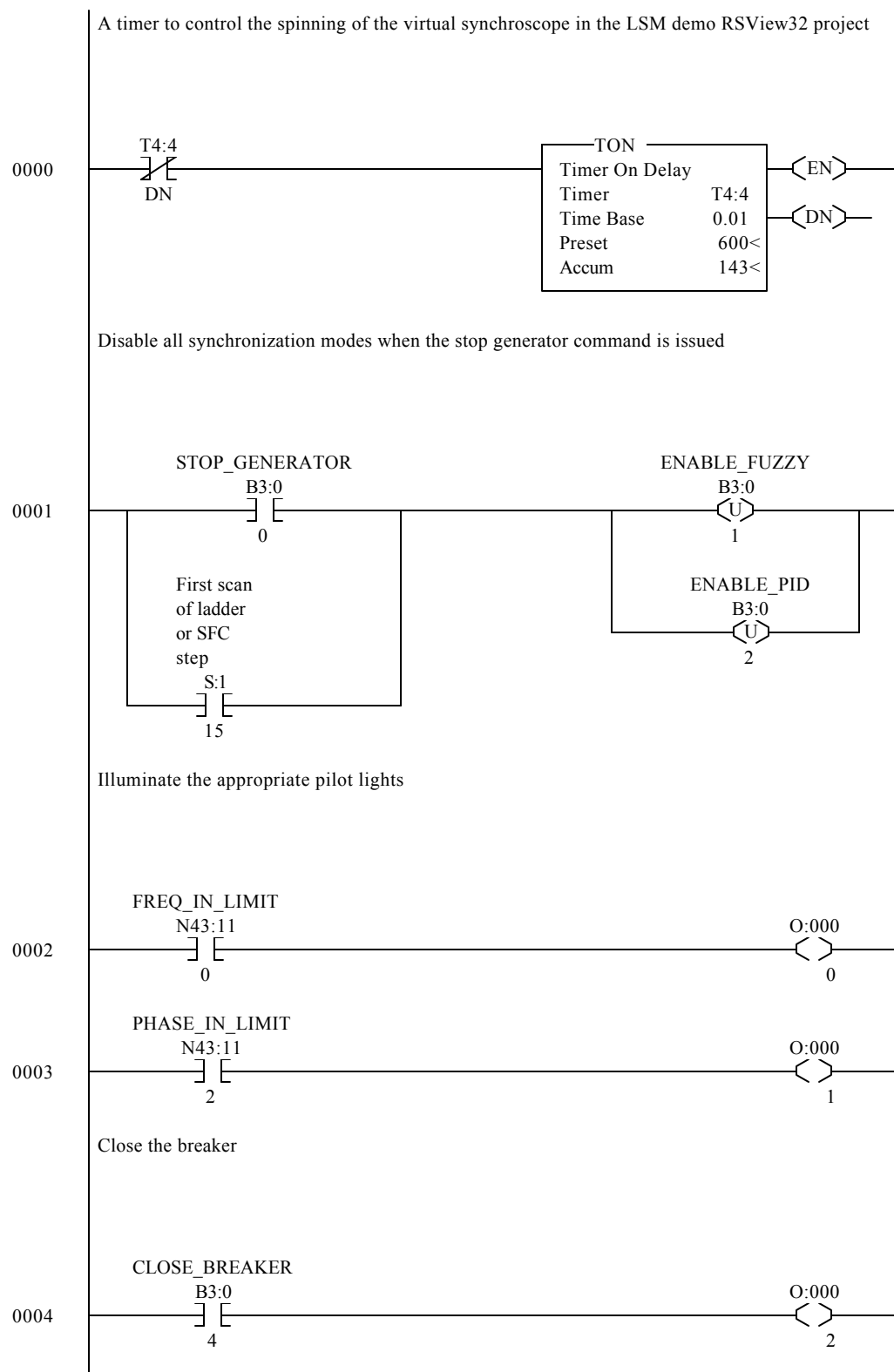
FUZZY KERNEL REVISED

LAD 8 - PID CTRL --- Total Rungs in File = 18



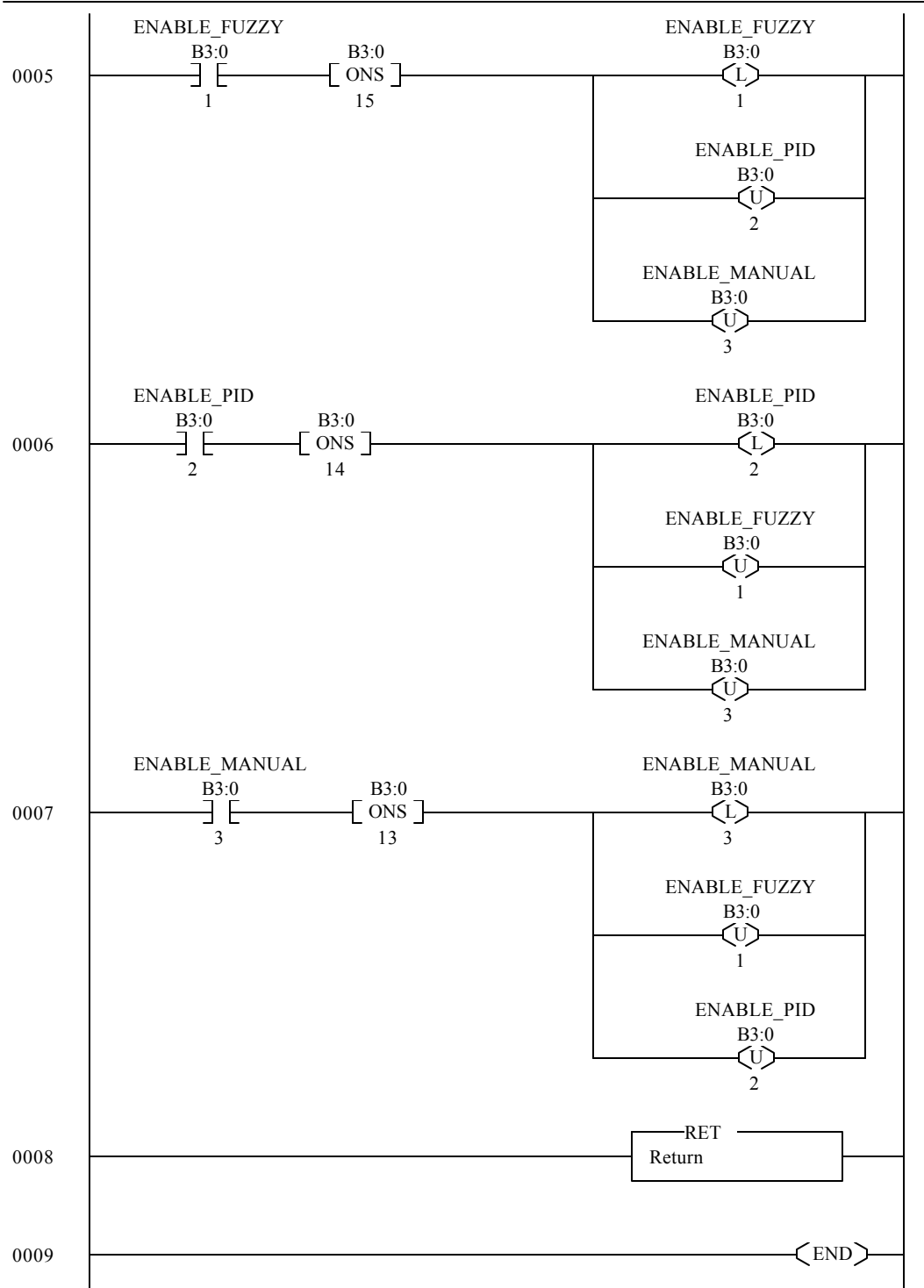
FUZZY KERNEL REVISED

LAD 9 - I/O --- Total Rungs in File = 10



FUZZY KERNEL REVISED

LAD 9 - I/O --- Total Rungs in File = 10



FUZZY KERNEL REVISED

File 00 (bin)

Offset	17	16	15	14	13	12	11	10	7	6	5	4	3	2	1	0
0:000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0:001	1	1	0	0	0	0	0	1	0	0	0	0	0	0	0	0
0:002	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0:003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0:004	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0:005	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0:006	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0:007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0:010	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0:011	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0:012	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0:013	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0:014	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0:015	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0:016	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0:017	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0:020	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0:021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0:022	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0:023	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0:024	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0:025	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0:026	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0:027	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0:030	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0:031	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0:032	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0:033	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0:034	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0:035	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0:036	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
0:037	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

FUZZY KERNEL REVISED

File I1 (bin)

Offset	17	16	15	14	13	12	11	10	7	6	5	4	3	2	1	0
I:000	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
I:001	0	0	0	0	0	0	0	0	0	0	1	0	0	1	0	1
I:002	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
I:003	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
I:004	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
I:005	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
I:006	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
I:007	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
I:010	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
I:011	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
I:012	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
I:013	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
I:014	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
I:015	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
I:016	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
I:017	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
I:020	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
I:021	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
I:022	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
I:023	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
I:024	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
I:025	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
I:026	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
I:027	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
I:030	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
I:031	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
I:032	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
I:033	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
I:034	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
I:035	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
I:036	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
I:037	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

FUZZY KERNEL REVISED

File N30 (dec) -- ANALOG OUT

Offset	0	1	2	3	4	5	6	7	8
N30:0	0	0	0	0	-32768	0	4095	0	0
N30:10	0	0	0						

FUZZY KERNEL REVISED

File N32 (dec) -- LSM CFG W

Offset	0	1	2	3	4	5	6	7	8
N32:0	0	1	120	0	5	0	5	0	0
N32:10	25	0	-25	250	0	-250	0	6	-6
N32:20	0	0	0	5	0	0	2	0	0
N32:30	0	0	0	0	0	0			

FUZZY KERNEL REVISED

File N40 (dec) -- SEQ FILES

Offset	0	1	2	3	4	5	6	7	8
N40:0	2	2	3	4	5	6			

14. Appendix B

The following pages contain the raw data collected by RSView32 when the generator synchronization tests were being performed.

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Degrees)	Close Breaker (Open/Close)
5/12/01	19:59:36	907	0	59.99	0.00	0.00	0
5/12/01	19:59:37	408	0	59.99	0.00	0.00	0
5/12/01	19:59:37	908	0	59.99	0.00	0.00	0
5/12/01	19:59:38	409	0	59.99	0.00	0.00	0
5/12/01	19:59:38	910	0	59.99	0.00	0.00	0
5/12/01	19:59:39	410	65	59.99	0.00	0.00	0
5/12/01	19:59:39	911	630	59.99	0.00	0.00	0
5/12/01	19:59:40	412	1250	59.99	0.00	0.00	0
5/12/01	19:59:40	913	2098	59.99	0.00	0.00	0
5/12/01	19:59:41	413	2098	59.99	0.00	0.00	0
5/12/01	19:59:41	914	2098	59.99	0.00	0.00	0
5/12/01	19:59:42	415	2098	59.99	0.00	0.00	0
5/12/01	19:59:42	915	2098	59.99	0.00	0.00	0
5/12/01	19:59:43	416	2098	59.99	0.00	0.00	0
5/12/01	19:59:43	917	2098	59.99	0.00	0.00	0
5/12/01	19:59:44	418	2098	59.99	0.00	0.00	0
5/12/01	19:59:44	918	2098	59.99	0.00	0.00	0
5/12/01	19:59:45	419	2098	59.99	0.00	0.00	0
5/12/01	19:59:45	920	2098	59.99	0.00	0.00	0
5/12/01	19:59:46	420	2098	59.99	0.00	0.00	0
5/12/01	19:59:46	981	2098	59.99	0.00	0.00	0
5/12/01	19:59:47	422	2098	59.99	0.00	0.00	0
5/12/01	19:59:47	923	2098	59.99	0.00	0.00	0
5/12/01	19:59:48	423	2141	59.99	0.00	0.00	0
5/12/01	19:59:48	924	2402	60.02	0.00	0.00	0
5/12/01	19:59:49	425	2685	60.02	0.00	0.00	0
5/12/01	19:59:49	926	2913	60.02	0.00	0.00	0
5/12/01	19:59:50	426	3087	60.02	0.00	0.00	0
5/12/01	19:59:50	927	3087	60.02	0.00	0.00	0
5/12/01	19:59:51	428	3087	60.02	0.00	0.00	0
5/12/01	19:59:51	928	3163	60.02	0.00	0.00	0
5/12/01	19:59:52	429	3348	60.02	0.00	0.00	0
5/12/01	19:59:52	930	3348	60.02	0.00	0.00	0
5/12/01	19:59:53	431	3424	60.02	0.00	0.00	0
5/12/01	19:59:53	931	3620	60.02	0.00	0.00	0
5/12/01	19:59:54	432	3620	60.02	0.00	0.00	0
5/12/01	19:59:54	933	3620	60.02	0.00	0.00	0
5/12/01	19:59:55	443	3739	60.02	47.24	0.00	0
5/12/01	19:59:55	934	3739	60.02	47.24	0.00	0
5/12/01	19:59:56	435	3739	60.02	51.14	0.00	0
5/12/01	19:59:56	936	3739	60.02	51.14	0.00	0
5/12/01	19:59:57	436	3859	60.02	54.65	0.00	0
5/12/01	19:59:57	937	3967	60.02	54.65	0.00	0
5/12/01	19:59:58	438	3967	60.02	55.25	0.00	0
5/12/01	19:59:58	938	3967	60.02	55.25	0.00	0
5/12/01	19:59:59	439	4000	59.97	57.07	0.00	0
5/12/01	19:59:59	940	4000	59.97	57.07	0.00	0
5/12/01	20:00:00	441	4000	59.97	57.09	0.00	0
5/12/01	20:00:00	941	4000	59.97	57.09	0.00	0
5/12/01	20:00:01	442	4000	59.97	60.47	0.00	0
5/12/01	20:00:01	943	4000	59.97	60.47	0.00	0
5/12/01	20:00:02	444	4000	59.97	60.74	0.00	0
5/12/01	20:00:02	944	4000	59.97	60.74	0.00	0
5/12/01	20:00:03	445	4000	59.97	61.02	0.00	0
5/12/01	20:00:03	946	4000	59.97	61.02	0.00	0
5/12/01	20:00:04	446	3946	60.01	61.01	0.00	0
5/12/01	20:00:04	947	3924	60.01	61.01	0.00	0
5/12/01	20:00:05	448	3924	60.01	61.03	0.00	0
5/12/01	20:00:05	949	3924	60.01	61.03	160.00	0
5/12/01	20:00:06	449	3924	60.01	61.01	160.00	0
5/12/01	20:00:06	950	3924	60.01	61.01	119.00	0
5/12/01	20:00:07	451	3924	60.01	60.98	119.00	0
5/12/01	20:00:07	951	3924	60.01	60.98	81.00	0
5/12/01	20:00:08	452	3924	60.01	60.04	81.00	0
5/12/01	20:00:08	953	3924	60.01	60.04	29.00	0
5/12/01	20:00:09	454	3924	60.00	59.86	29.00	0
5/12/01	20:00:09	954	3924	60.00	59.86	-15.00	0
5/12/01	20:00:10	455	3924	60.00	59.83	-15.00	0
5/12/01	20:00:10	956	3924	60.00	59.83	-66.00	0
5/12/01	20:00:11	456	3924	60.00	59.89	-66.00	0
5/12/01	20:00:11	957	3924	60.00	59.89	-113.00	0
5/12/01	20:00:12	458	3924	60.00	59.83	-113.00	0
5/12/01	20:00:12	959	3925	60.00	59.83	-166.00	0
5/12/01	20:00:13	459	3926	60.01	59.83	-166.00	0
5/12/01	20:00:13	960	3926	60.01	59.83	153.00	0
5/12/01	20:00:14	461	3926	60.01	59.83	153.00	0
5/12/01	20:00:14	962	3926	60.01	59.83	122.00	0
5/12/01	20:00:15	462	3927	60.01	59.83	122.00	0
5/12/01	20:00:15	963	3929	60.01	59.86	96.00	0
5/12/01	20:00:16	464	3930	60.01	59.86	96.00	0
5/12/01	20:00:16	964	3930	60.01	59.92	76.00	0
5/12/01	20:00:17	465	3930	60.01	59.92	76.00	0
5/12/01	20:00:17	966	3930	60.01	59.92	69.00	0
5/12/01	20:00:18	467	3930	60.01	59.92	69.00	0
5/12/01	20:00:18	967	3930	60.01	59.94	61.00	0
5/12/01	20:00:19	468	3930	60.01	59.94	61.00	0
5/12/01	20:00:19	969	3930	60.01	59.99	55.00	0
5/12/01	20:00:20	469	3930	60.01	59.99	55.00	0
5/12/01	20:00:20	970	3930	60.01	59.95	55.00	0
5/12/01	20:00:21	471	3930	60.01	59.95	50.00	0
5/12/01	20:00:21	972	3930	60.01	59.98	50.00	0
5/12/01	20:00:22	472	3930	60.01	59.98	43.00	0
5/12/01	20:00:22	973	3930	60.01	60.00	43.00	0
5/12/01	20:00:23	474	3932	60.01	60.00	35.00	0
5/12/01	20:00:23	974	3932	59.99	59.97	35.00	0
5/12/01	20:00:24	475	3932	59.99	59.97	33.00	0
5/12/01	20:00:24	976	3932	59.99	59.94	33.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Degrees)	Close Breaker (Open/Close)
5/12/01	20:00:25	477	3932	59.99	59.94	32.00	0
5/12/01	20:00:25	977	3932	59.99	59.99	32.00	0
5/12/01	20:00:26	478	3932	59.99	59.99	31.00	0
5/12/01	20:00:26	979	3932	59.99	60.00	31.00	0
5/12/01	20:00:27	480	3932	59.99	60.00	29.00	0
5/12/01	20:00:27	980	3932	59.99	59.96	29.00	0
5/12/01	20:00:28	481	3932	59.99	59.96	30.00	0
5/12/01	20:00:28	982	3932	59.99	60.00	30.00	0
5/12/01	20:00:29	482	3932	59.99	60.00	29.00	0
5/12/01	20:00:29	983	3932	59.99	59.98	29.00	0
5/12/01	20:00:30	484	3932	59.99	59.98	30.00	0
5/12/01	20:00:30	985	3932	59.99	60.00	30.00	0
5/12/01	20:00:31	485	3932	59.99	60.00	29.00	0
5/12/01	20:00:31	986	3932	59.99	60.00	29.00	0
5/12/01	20:00:32	487	3931	59.99	60.00	30.00	0
5/12/01	20:00:32	987	3931	59.99	59.96	30.00	0
5/12/01	20:00:33	488	3931	59.99	59.96	29.00	0
5/12/01	20:00:33	989	3931	59.99	59.96	29.00	0
5/12/01	20:00:34	490	3931	59.99	59.99	27.00	0
5/12/01	20:00:34	990	3930	59.99	59.99	27.00	0
5/12/01	20:00:35	491	3930	59.99	59.98	23.00	0
5/12/01	20:00:35	992	3930	59.99	59.98	23.00	0
5/12/01	20:00:36	492	3930	59.99	59.98	19.00	0
5/12/01	20:00:36	993	3930	59.99	59.98	19.00	0
5/12/01	20:00:37	494	3930	59.99	60.04	13.00	0
5/12/01	20:00:37	995	3930	59.99	60.04	13.00	0
5/12/01	20:00:38	495	3930	59.99	59.96	8.00	0
5/12/01	20:00:38	996	3930	59.99	59.96	8.00	0
5/12/01	20:00:39	497	3930	59.99	59.96	0.00	0
5/12/01	20:00:39	998	3932	59.99	59.96	0.00	1
5/12/01	20:00:40	498	3932	59.99	60.03	-3.00	1
5/12/01	20:00:40	999	3932	59.99	60.03	-3.00	1
5/12/01	20:00:41	500	3932	59.99	59.93	-2.00	1
5/12/01	20:00:42	0	3932	59.99	59.93	-2.00	1
5/12/01	20:00:42	501	3932	59.99	59.99	-3.00	1
5/12/01	20:00:43	2	3932	59.99	59.99	-3.00	1
5/12/01	20:00:43	503	3932	59.99	59.98	-2.00	1
5/12/01	20:00:44	3	3932	59.99	59.98	-2.00	1
5/12/01	20:00:44	504	3932	59.98	59.99	-2.00	1
5/12/01	20:00:45	5	3932	59.98	59.99	-2.00	1
5/12/01	20:00:45	505	0	59.98	60.04	-2.00	1
5/12/01	20:00:46	6	0	59.98	60.04	0.00	0
5/12/01	20:00:46	507	0	59.98	59.94	0.00	0
5/12/01	20:00:47	8	0	59.98	59.94	0.00	0
5/12/01	20:00:47	508	0	59.98	59.94	0.00	0
5/12/01	20:00:48	9	0	59.98	59.94	0.00	0
5/12/01	20:00:48	510	0	59.98	53.80	0.00	0
5/12/01	20:00:49	10	0	59.98	53.80	0.00	0
5/12/01	20:00:49	511	0	59.96	47.52	0.00	0
5/12/01	20:00:50	12	0	59.96	47.52	0.00	0
5/12/01	20:00:50	513	0	59.96	47.52	0.00	0
5/12/01	20:00:51	13	0	59.96	47.52	0.00	0
5/12/01	20:00:51	514	0	59.96	0.00	0.00	0
5/12/01	20:00:52	15	0	59.96	0.00	0.00	0
5/12/01	20:00:52	516	0	59.96	0.00	0.00	0
5/12/01	20:00:53	16	0	59.96	0.00	0.00	0
5/12/01	20:00:53	517	0	59.96	0.00	0.00	0
5/12/01	20:00:54	18	0	59.96	0.00	0.00	0
5/12/01	20:00:54	518	0	59.97	0.00	0.00	0
5/12/01	20:00:55	19	0	59.97	0.00	0.00	0
5/12/01	20:00:55	520	0	59.97	0.00	0.00	0
5/12/01	20:00:56	21	0	59.97	0.00	0.00	0
5/12/01	20:00:56	521	0	59.97	0.00	0.00	0
5/12/01	20:00:57	22	0	59.97	0.00	0.00	0
5/12/01	20:00:57	523	0	59.97	0.00	0.00	0
5/12/01	20:00:58	23	0	59.97	0.00	0.00	0
5/12/01	20:00:58	524	0	59.97	0.00	0.00	0
5/12/01	20:00:59	25	0	60.00	0.00	0.00	0
5/12/01	20:00:59	526	913	60.00	0.00	0.00	0
5/12/01	20:01:00	26	3467	60.00	0.00	0.00	0
5/12/01	20:01:00	527	3761	60.00	0.00	0.00	0
5/12/01	20:01:01	28	3859	60.00	0.00	0.00	0
5/12/01	20:01:01	528	3859	60.00	0.00	0.00	0
5/12/01	20:01:02	29	3859	60.00	0.00	0.00	0
5/12/01	20:01:02	530	3859	60.00	0.00	0.00	0
5/12/01	20:01:03	31	3859	60.00	0.00	0.00	0
5/12/01	20:01:03	531	3859	60.00	0.00	0.00	0
5/12/01	20:01:04	32	3859	59.99	0.00	0.00	0
5/12/01	20:01:04	533	3859	59.99	0.00	0.00	0
5/12/01	20:01:05	34	3859	59.99	0.00	0.00	0
5/12/01	20:01:05	534	3859	59.99	0.00	0.00	0
5/12/01	20:01:06	35	3859	59.99	0.00	0.00	0
5/12/01	20:01:06	536	3859	59.99	0.00	0.00	0
5/12/01	20:01:07	36	3859	59.99	0.00	0.00	0
5/12/01	20:01:07	537	3859	59.99	0.00	0.00	0
5/12/01	20:01:08	38	3859	59.99	0.00	0.00	0
5/12/01	20:01:08	539	3859	59.99	0.00	0.00	0
5/12/01	20:01:09	39	3859	59.94	40.31	0.00	0
5/12/01	20:01:09	540	3859	59.94	40.31	0.00	0
5/12/01	20:01:10	41	3859	59.94	47.15	0.00	0
5/12/01	20:01:10	541	3859	59.94	47.15	0.00	0
5/12/01	20:01:11	42	3859	59.94	53.92	0.00	0
5/12/01	20:01:11	543	3859	59.94	53.92	0.00	0
5/12/01	20:01:12	44	3859	59.94	58.82	0.00	0
5/12/01	20:01:12	544	3859	59.94	58.82	0.00	0
5/12/01	20:01:13	45	3859	59.94	58.91	0.00	0
5/12/01	20:01:13	546	3859	59.94	58.91	0.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Degrees)	Close Breaker (Open/Close)
5/12/01	20:01:14	46	3924	59.94	58.87	0.00	0
5/12/01	20:01:14	547	3924	59.94	58.87	168.00	0
5/12/01	20:01:15	48	3924	59.98	58.88	168.00	0
5/12/01	20:01:15	549	3924	59.98	58.88	122.00	0
5/12/01	20:01:16	49	3924	59.98	58.95	122.00	0
5/12/01	20:01:16	550	3924	59.98	58.95	77.00	0
5/12/01	20:01:17	51	3924	59.98	59.92	77.00	0
5/12/01	20:01:17	552	3924	59.98	59.92	77.00	0
5/12/01	20:01:18	52	3924	59.98	59.84	32.00	0
5/12/01	20:01:18	553	3924	59.98	59.84	32.00	0
5/12/01	20:01:19	54	3924	60.00	59.84	-19.00	0
5/12/01	20:01:19	554	3924	60.00	59.84	-19.00	0
5/12/01	20:01:20	55	3924	60.00	59.84	-61.00	0
5/12/01	20:01:20	556	3924	60.00	59.91	-61.00	0
5/12/01	20:01:21	57	3924	60.00	59.91	-107.00	0
5/12/01	20:01:21	557	3924	60.00	59.90	-107.00	0
5/12/01	20:01:22	58	3924	60.00	59.90	-155.00	0
5/12/01	20:01:22	559	3924	60.00	59.87	-155.00	0
5/12/01	20:01:23	59	3924	60.00	59.87	164.00	0
5/12/01	20:01:23	560	3924	60.00	59.86	164.00	0
5/12/01	20:01:24	61	3924	60.00	59.86	111.00	0
5/12/01	20:01:24	562	3924	59.98	59.89	111.00	0
5/12/01	20:01:25	62	3924	59.98	59.89	67.00	0
5/12/01	20:01:25	563	3924	59.98	59.87	67.00	0
5/12/01	20:01:26	74	3967	59.98	59.87	16.00	0
5/12/01	20:01:26	564	3967	59.98	59.85	16.00	0
5/12/01	20:01:27	65	3967	59.98	59.85	14.00	0
5/12/01	20:01:27	566	3967	59.98	59.92	14.00	0
5/12/01	20:01:28	67	3967	59.98	59.92	0.00	0
5/12/01	20:01:28	567	3967	59.98	59.92	0.00	0
5/12/01	20:01:29	68	3967	59.98	59.92	0.00	0
5/12/01	20:01:29	569	3967	59.95	60.20	0.00	0
5/12/01	20:01:30	70	3967	59.95	60.20	0.00	0
5/12/01	20:01:30	570	3967	59.95	60.52	0.00	0
5/12/01	20:01:31	71	3967	59.95	60.52	0.00	0
5/12/01	20:01:31	572	3961	59.95	60.53	0.00	0
5/12/01	20:01:32	72	3953	59.95	60.53	0.00	0
5/12/01	20:01:32	573	3950	59.95	60.56	0.00	0
5/12/01	20:01:33	74	3950	59.95	60.56	0.00	0
5/12/01	20:01:33	575	3950	59.95	60.54	0.00	0
5/12/01	20:01:34	75	3950	59.95	60.54	0.00	0
5/12/01	20:01:34	586	3939	60.01	60.54	133.00	0
5/12/01	20:01:35	77	3929	60.01	60.54	133.00	0
5/12/01	20:01:35	577	3927	60.01	60.27	173.00	0
5/12/01	20:01:36	78	3927	60.01	60.27	173.00	0
5/12/01	20:01:36	579	3927	60.01	60.32	173.00	0
5/12/01	20:01:37	80	3927	60.01	60.32	146.00	0
5/12/01	20:01:37	580	3927	60.01	60.32	146.00	0
5/12/01	20:01:38	81	3927	60.01	60.02	115.00	0
5/12/01	20:01:38	582	3927	60.01	60.02	115.00	0
5/12/01	20:01:39	82	3927	60.01	59.88	93.00	0
5/12/01	20:01:39	583	3927	60.01	59.88	93.00	0
5/12/01	20:01:40	84	3927	60.00	59.89	63.00	0
5/12/01	20:01:40	585	3927	60.00	59.89	63.00	0
5/12/01	20:01:41	85	3927	60.00	59.90	35.00	0
5/12/01	20:01:41	586	3928	60.00	59.90	35.00	0
5/12/01	20:01:42	87	3928	60.00	59.92	11.00	0
5/12/01	20:01:42	588	3928	60.00	59.92	11.00	0
5/12/01	20:01:43	88	3928	60.00	59.92	-7.00	0
5/12/01	20:01:43	589	3928	60.00	59.92	-7.00	0
5/12/01	20:01:44	90	3928	60.00	59.87	-29.00	0
5/12/01	20:01:44	590	3930	60.00	59.87	-29.00	0
5/12/01	20:01:45	91	3931	60.04	59.92	-29.00	0
5/12/01	20:01:45	592	3932	60.04	59.92	-43.00	0
5/12/01	20:01:46	93	3932	60.04	59.94	-43.00	0
5/12/01	20:01:46	593	3932	60.04	59.94	-44.00	0
5/12/01	20:01:47	94	3932	60.04	59.97	-44.00	0
5/12/01	20:01:47	595	3932	60.04	59.97	-44.00	0
5/12/01	20:01:48	95	3932	60.04	60.00	-44.00	0
5/12/01	20:01:48	596	3932	60.04	60.00	-42.00	0
5/12/01	20:01:49	97	3934	60.04	59.96	-42.00	0
5/12/01	20:01:49	598	3934	60.04	59.96	-41.00	0
5/12/01	20:01:50	98	3934	59.99	59.93	-41.00	0
5/12/01	20:01:50	599	3934	59.99	59.93	-27.00	0
5/12/01	20:01:51	100	3934	59.99	59.93	-27.00	0
5/12/01	20:01:51	600	3934	59.99	60.00	-15.00	0
5/12/01	20:01:52	101	3932	59.99	60.00	-15.00	0
5/12/01	20:01:52	602	3932	59.99	60.04	0.00	1
5/12/01	20:01:53	103	3932	59.99	60.04	0.00	1
5/12/01	20:01:53	603	3932	59.99	60.02	2.00	1
5/12/01	20:01:54	104	3932	59.99	60.02	2.00	1
5/12/01	20:01:54	605	3932	60.05	60.06	3.00	1
5/12/01	20:01:55	106	3932	60.05	60.06	3.00	1
5/12/01	20:01:55	606	3932	60.05	60.00	3.00	1
5/12/01	20:01:56	107	3932	60.05	60.00	4.00	1
5/12/01	20:01:56	608	0	60.05	59.99	4.00	1
5/12/01	20:01:57	108	0	60.05	59.99	0.00	0
5/12/01	20:01:57	609	0	60.05	60.02	0.00	0
5/12/01	20:01:58	110	0	60.05	60.02	0.00	0
5/12/01	20:01:58	611	0	60.05	60.00	0.00	0
5/12/01	20:01:59	111	0	60.05	60.00	0.00	0
5/12/01	20:01:59	612	0	60.03	58.65	0.00	0
5/12/01	20:02:00	113	0	60.03	58.65	0.00	0
5/12/01	20:02:00	613	0	60.03	52.33	0.00	0
5/12/01	20:02:01	114	0	60.03	52.33	0.00	0
5/12/01	20:02:01	615	0	60.03	46.66	0.00	0
5/12/01	20:02:02	116	0	60.03	46.66	0.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Degrees)	Close Breaker (Open/Close)
5/12/01	20:02:02	616	0	60.03	0.00	0.00	0
5/12/01	20:02:03	117	0	60.03	0.00	0.00	0
5/12/01	20:02:03	618	0	60.03	0.00	0.00	0
5/12/01	20:02:04	118	0	60.03	0.00	0.00	0
5/12/01	20:02:04	619	0	60.00	0.00	0.00	0
5/12/01	20:02:05	120	0	60.00	0.00	0.00	0
5/12/01	20:02:05	621	0	60.00	0.00	0.00	0
5/12/01	20:02:06	121	0	60.00	0.00	0.00	0
5/12/01	20:02:06	622	0	60.00	0.00	0.00	0
5/12/01	20:02:07	123	0	60.00	0.00	0.00	0
5/12/01	20:02:07	634	0	60.00	0.00	0.00	0
5/12/01	20:02:08	124	0	60.00	0.00	0.00	0
5/12/01	20:02:08	625	0	60.00	0.00	0.00	0
5/12/01	20:02:09	126	0	60.00	0.00	0.00	0
5/12/01	20:02:09	626	0	60.00	0.00	0.00	0
5/12/01	20:02:10	137	109	59.99	0.00	0.00	0
5/12/01	20:02:10	628	1087	59.99	0.00	0.00	0
5/12/01	20:02:11	139	2185	59.99	0.00	0.00	0
5/12/01	20:02:11	629	2707	59.99	0.00	0.00	0
5/12/01	20:02:12	130	3217	59.99	0.00	0.00	0
5/12/01	20:02:12	631	3533	59.99	0.00	0.00	0
5/12/01	20:02:13	131	3652	59.99	0.00	0.00	0
5/12/01	20:02:13	632	3652	59.99	0.00	0.00	0
5/12/01	20:02:14	133	3652	59.99	0.00	0.00	0
5/12/01	20:02:14	634	3652	59.99	0.00	0.00	0
5/12/01	20:02:15	134	3652	60.06	0.00	0.00	0
5/12/01	20:02:15	635	3652	60.06	0.00	0.00	0
5/12/01	20:02:16	136	3652	60.06	0.00	0.00	0
5/12/01	20:02:16	636	3652	60.06	0.00	0.00	0
5/12/01	20:02:17	137	3652	60.06	0.00	0.00	0
5/12/01	20:02:17	638	3652	60.06	0.00	0.00	0
5/12/01	20:02:18	139	3652	60.06	0.00	0.00	0
5/12/01	20:02:18	639	3652	60.06	0.00	0.00	0
5/12/01	20:02:19	140	3652	60.06	0.00	0.00	0
5/12/01	20:02:19	641	3652	60.06	0.00	0.00	0
5/12/01	20:02:20	142	3652	59.99	40.47	0.00	0
5/12/01	20:02:20	642	3652	59.99	40.47	0.00	0
5/12/01	20:02:21	143	3652	59.99	47.92	0.00	0
5/12/01	20:02:21	644	3652	59.99	47.92	0.00	0
5/12/01	20:02:22	144	3652	59.99	54.05	0.00	0
5/12/01	20:02:22	645	3652	59.99	54.05	0.00	0
5/12/01	20:02:23	146	3652	59.99	55.76	0.00	0
5/12/01	20:02:23	647	3652	59.99	55.76	0.00	0
5/12/01	20:02:24	147	3652	59.99	55.75	0.00	0
5/12/01	20:02:24	648	3652	59.99	55.75	0.00	0
5/12/01	20:02:25	149	3652	60.00	55.74	0.00	0
5/12/01	20:02:25	649	3652	60.00	55.74	0.00	0
5/12/01	20:02:26	150	3652	60.00	55.75	0.00	0
5/12/01	20:02:26	651	3652	60.00	55.75	0.00	0
5/12/01	20:02:27	152	3652	60.00	55.74	0.00	0
5/12/01	20:02:27	652	3652	60.00	55.74	0.00	0
5/12/01	20:02:28	153	3652	60.00	55.75	0.00	0
5/12/01	20:02:28	654	3652	60.00	55.75	0.00	0
5/12/01	20:02:29	154	3652	60.00	55.76	0.00	0
5/12/01	20:02:29	655	3652	60.00	55.76	0.00	0
5/12/01	20:02:30	156	3652	60.00	55.72	0.00	0
5/12/01	20:02:30	657	3652	60.00	55.72	0.00	0
5/12/01	20:02:31	157	3804	60.00	55.78	0.00	0
5/12/01	20:02:31	668	3837	60.00	55.78	0.00	0
5/12/01	20:02:32	159	3837	60.00	55.74	0.00	0
5/12/01	20:02:32	660	3837	60.00	55.74	0.00	0
5/12/01	20:02:33	160	3837	60.00	55.67	0.00	0
5/12/01	20:02:33	661	3837	60.00	55.67	0.00	0
5/12/01	20:02:34	162	3837	60.00	58.54	0.00	0
5/12/01	20:02:34	662	3837	60.00	58.54	0.00	0
5/12/01	20:02:35	163	3837	59.99	58.57	0.00	0
5/12/01	20:02:35	664	3837	59.99	58.57	0.00	0
5/12/01	20:02:36	165	3837	59.99	58.56	0.00	0
5/12/01	20:02:36	665	3837	59.99	58.56	0.00	0
5/12/01	20:02:37	166	3837	59.99	58.59	0.00	0
5/12/01	20:02:37	667	3837	59.99	58.59	0.00	0
5/12/01	20:02:38	167	3837	59.99	58.59	0.00	0
5/12/01	20:02:38	668	3837	59.99	58.56	0.00	0
5/12/01	20:02:39	169	3924	59.99	58.56	0.00	0
5/12/01	20:02:39	670	3924	59.99	58.55	0.00	0
5/12/01	20:02:40	170	3924	59.99	58.55	0.00	0
5/12/01	20:02:40	671	3924	59.99	58.62	164.00	0
5/12/01	20:02:41	172	3924	59.99	58.62	164.00	0
5/12/01	20:02:41	672	3924	59.99	58.57	121.00	0
5/12/01	20:02:42	173	3924	59.99	58.57	121.00	0
5/12/01	20:02:42	674	3924	59.99	59.85	71.00	0
5/12/01	20:02:43	175	3924	59.99	59.85	71.00	0
5/12/01	20:02:43	675	3924	59.99	59.88	25.00	0
5/12/01	20:02:44	176	3924	59.99	59.88	25.00	0
5/12/01	20:02:44	677	3924	59.99	59.87	-25.00	0
5/12/01	20:02:45	178	3924	59.99	59.87	-25.00	0
5/12/01	20:02:45	678	3924	59.98	59.87	-70.00	0
5/12/01	20:02:46	179	3925	59.98	59.87	-70.00	0
5/12/01	20:02:46	680	3926	59.98	59.85	-112.00	0
5/12/01	20:02:47	180	3929	59.98	59.85	-112.00	0
5/12/01	20:02:47	681	3930	59.98	59.86	-112.00	0
5/12/01	20:02:48	182	3930	59.98	59.86	-141.00	0
5/12/01	20:02:48	683	3930	59.98	59.90	-141.00	0
5/12/01	20:02:49	183	3930	59.98	59.90	-155.00	0
5/12/01	20:02:49	684	3933	59.98	59.94	-155.00	0
5/12/01	20:02:50	185	3933	59.98	59.94	-156.00	0
5/12/01	20:02:50	685	3934	59.97	59.99	-156.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Degrees)	Close Breaker (Open/Close)
5/12/01	20:02:51	186	3936	59.97	59.99	-147.00	0
5/12/01	20:02:51	687	3936	59.97	59.94	-147.00	0
5/12/01	20:02:52	188	3936	59.97	59.94	-124.00	0
5/12/01	20:02:52	688	3936	59.97	60.00	-124.00	0
5/12/01	20:02:53	189	3936	59.97	60.00	-107.00	0
5/12/01	20:02:53	690	3936	59.97	60.04	-107.00	0
5/12/01	20:02:54	190	3936	59.97	60.04	-85.00	0
5/12/01	20:02:54	691	3935	59.97	60.03	-85.00	0
5/12/01	20:02:55	192	3935	59.97	60.03	-62.00	0
5/12/01	20:02:55	693	3934	60.02	59.99	-62.00	0
5/12/01	20:02:56	193	3934	60.02	59.99	-43.00	0
5/12/01	20:02:56	694	3934	60.02	59.99	-43.00	0
5/12/01	20:02:57	195	3934	60.02	60.05	-26.00	0
5/12/01	20:02:57	696	3932	60.02	60.05	-26.00	0
5/12/01	20:02:58	196	3932	60.02	60.06	-10.00	0
5/12/01	20:02:58	697	3932	60.02	60.06	-10.00	0
5/12/01	20:02:59	198	3932	60.02	60.03	-10.00	0
5/12/01	20:02:59	698	3932	60.02	60.03	-10.00	0
5/12/01	20:03:00	199	3932	60.00	60.05	-8.00	0
5/12/01	20:03:00	700	3932	60.00	60.05	-8.00	0
5/12/01	20:03:01	201	3932	60.00	59.98	-5.00	0
5/12/01	20:03:01	701	3932	60.00	59.98	-5.00	0
5/12/01	20:03:02	202	3932	60.00	59.99	-5.00	0
5/12/01	20:03:02	703	3932	60.00	59.99	-4.00	1
5/12/01	20:03:03	203	3932	60.00	60.01	-3.00	1
5/12/01	20:03:03	704	3932	60.00	60.01	-3.00	1
5/12/01	20:03:04	205	3932	60.00	60.00	-3.00	1
5/12/01	20:03:04	706	3932	60.00	60.00	-1.00	1
5/12/01	20:03:05	206	3932	59.97	59.92	-1.00	1
5/12/01	20:03:05	707	3932	59.97	59.92	0.00	1
5/12/01	20:03:06	208	3932	59.97	59.97	0.00	1
5/12/01	20:03:06	708	3932	59.97	59.97	3.00	1
5/12/01	20:03:07	209	3932	59.97	59.94	3.00	1
5/12/01	20:03:07	710	0	59.97	59.94	3.00	1
5/12/01	20:03:08	211	0	59.97	59.98	3.00	1
5/12/01	20:03:08	711	0	59.97	59.98	0.00	0
5/12/01	20:03:09	212	0	59.97	60.00	0.00	0
5/12/01	20:03:09	713	0	59.97	60.00	0.00	0
5/12/01	20:03:10	214	0	60.01	56.63	0.00	0
5/12/01	20:03:10	714	0	60.01	56.63	0.00	0
5/12/01	20:03:11	215	0	60.01	56.63	0.00	0
5/12/01	20:03:11	716	0	60.01	50.96	0.00	0
5/12/01	20:03:12	216	0	60.01	50.96	0.00	0
5/12/01	20:03:12	717	0	60.01	50.96	0.00	0
5/12/01	20:03:13	218	0	60.01	50.96	0.00	0
5/12/01	20:03:13	719	0	60.01	0.00	0.00	0
5/12/01	20:03:14	219	0	60.01	0.00	0.00	0
5/12/01	20:03:14	720	0	60.01	0.00	0.00	0
5/12/01	20:03:15	221	0	60.01	0.00	0.00	0
5/12/01	20:03:15	721	0	59.97	0.00	0.00	0
5/12/01	20:03:16	222	0	59.97	0.00	0.00	0
5/12/01	20:03:16	723	0	59.97	0.00	0.00	0
5/12/01	20:03:17	224	0	59.97	0.00	0.00	0
5/12/01	20:03:17	724	0	59.97	0.00	0.00	0
5/12/01	20:03:18	225	0	59.97	0.00	0.00	0
5/12/01	20:03:18	726	0	59.97	0.00	0.00	0
5/12/01	20:03:19	226	0	59.97	0.00	0.00	0
5/12/01	20:03:19	727	0	59.97	0.00	0.00	0
5/12/01	20:03:20	228	0	59.97	0.00	0.00	0
5/12/01	20:03:20	729	2250	60.01	0.00	0.00	0
5/12/01	20:03:21	239	3761	60.01	0.00	0.00	0
5/12/01	20:03:21	740	3761	60.01	0.00	0.00	0
5/12/01	20:03:22	241	3761	60.01	0.00	0.00	0
5/12/01	20:03:22	742	3761	60.01	0.00	0.00	0
5/12/01	20:03:23	242	3761	60.01	0.00	0.00	0
5/12/01	20:03:23	743	3761	60.01	0.00	0.00	0
5/12/01	20:03:24	244	3761	60.01	0.00	0.00	0
5/12/01	20:03:24	744	3761	60.01	0.00	0.00	0
5/12/01	20:03:25	245	3761	60.01	0.00	0.00	0
5/12/01	20:03:25	746	3761	59.98	0.00	0.00	0
5/12/01	20:03:26	247	3761	59.98	0.00	0.00	0
5/12/01	20:03:26	747	3761	59.98	0.00	0.00	0
5/12/01	20:03:27	248	3761	59.98	0.00	0.00	0
5/12/01	20:03:27	749	3761	59.98	0.00	0.00	0
5/12/01	20:03:28	249	3761	59.98	0.00	0.00	0
5/12/01	20:03:28	750	3761	59.98	0.00	0.00	0
5/12/01	20:03:29	251	3761	59.98	0.00	0.00	0
5/12/01	20:03:29	752	3761	59.98	0.00	0.00	0
5/12/01	20:03:30	252	3761	59.98	41.89	0.00	0
5/12/01	20:03:30	753	3761	59.98	41.89	0.00	0
5/12/01	20:03:31	254	3837	60.01	48.63	0.00	0
5/12/01	20:03:31	754	3880	60.01	48.63	0.00	0
5/12/01	20:03:32	255	3880	60.01	54.73	0.00	0
5/12/01	20:03:32	756	3880	60.01	54.73	0.00	0
5/12/01	20:03:33	257	3880	60.01	57.64	0.00	0
5/12/01	20:03:33	757	3880	60.01	57.64	0.00	0
5/12/01	20:03:34	258	3880	60.01	59.22	0.00	0
5/12/01	20:03:34	759	3880	60.01	59.22	0.00	0
5/12/01	20:03:35	260	3880	60.01	59.22	0.00	0
5/12/01	20:03:35	770	3880	60.01	59.22	0.00	0
5/12/01	20:03:36	261	3880	60.00	59.21	0.00	0
5/12/01	20:03:36	762	3880	60.00	59.21	0.00	0
5/12/01	20:03:37	262	3880	60.00	59.21	0.00	0
5/12/01	20:03:37	763	3880	60.00	59.21	0.00	0
5/12/01	20:03:38	264	3880	60.00	59.20	0.00	0
5/12/01	20:03:38	765	3924	60.00	59.20	0.00	0
5/12/01	20:03:39	265	3935	60.00	59.17	0.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Degrees)	Close Breaker (Open/Close)
5/12/01	20:03:39	766	3935	60.00	59.17	0.00	0
5/12/01	20:03:40	267	3935	60.00	59.25	-150.00	0
5/12/01	20:03:40	767	3935	60.00	59.25	-150.00	0
5/12/01	20:03:41	268	3935	60.02	59.23	-130.00	0
5/12/01	20:03:41	769	3935	60.02	59.23	-130.00	0
5/12/01	20:03:42	270	3935	60.02	59.21	-110.00	0
5/12/01	20:03:42	770	3935	60.02	59.21	-110.00	0
5/12/01	20:03:43	271	3935	60.02	60.04	-89.00	0
5/12/01	20:03:43	772	3935	60.02	60.04	-89.00	0
5/12/01	20:03:44	272	3935	60.02	60.06	-70.00	0
5/12/01	20:03:44	773	3935	60.02	60.06	-70.00	0
5/12/01	20:03:45	274	3935	60.05	60.06	-49.00	0
5/12/01	20:03:45	775	3936	60.05	60.06	-49.00	0
5/12/01	20:03:46	275	3936	60.05	60.01	-32.00	0
5/12/01	20:03:46	776	3936	60.05	60.01	-32.00	0
5/12/01	20:03:47	277	3936	60.05	60.06	-8.00	0
5/12/01	20:03:47	778	3936	60.05	60.06	-8.00	0
5/12/01	20:03:48	278	3936	60.05	60.06	15.00	0
5/12/01	20:03:48	779	3936	60.05	60.02	15.00	0
5/12/01	20:03:49	280	3936	60.05	60.02	36.00	0
5/12/01	20:03:49	780	3935	60.05	60.05	36.00	0
5/12/01	20:03:50	281	3934	60.05	60.05	36.00	0
5/12/01	20:03:50	782	3934	59.98	60.06	59.00	0
5/12/01	20:03:51	283	3934	59.98	60.06	59.00	0
5/12/01	20:03:51	783	3934	59.98	60.04	74.00	0
5/12/01	20:03:52	284	3933	59.98	60.04	74.00	0
5/12/01	20:03:52	785	3933	59.98	60.05	87.00	0
5/12/01	20:03:53	285	3933	59.98	60.05	87.00	0
5/12/01	20:03:53	786	3932	59.98	60.05	93.00	0
5/12/01	20:03:54	287	3932	59.98	60.05	93.00	0
5/12/01	20:03:54	788	3932	59.98	60.02	91.00	0
5/12/01	20:03:55	288	3932	59.98	60.02	91.00	0
5/12/01	20:03:55	789	3932	60.00	60.01	89.00	0
5/12/01	20:03:56	290	3931	60.00	60.01	89.00	0
5/12/01	20:03:56	800	3931	60.00	59.98	87.00	0
5/12/01	20:03:57	291	3930	60.00	59.98	87.00	0
5/12/01	20:03:57	792	3930	60.00	60.06	84.00	0
5/12/01	20:03:58	293	3930	60.00	60.06	84.00	0
5/12/01	20:03:58	793	3930	60.00	59.98	79.00	0
5/12/01	20:03:59	294	3928	60.00	59.98	79.00	0
5/12/01	20:03:59	795	3928	60.00	59.96	72.00	0
5/12/01	20:04:00	296	3928	60.00	59.96	72.00	0
5/12/01	20:04:00	796	3928	60.00	59.98	49.00	0
5/12/01	20:04:01	297	3928	60.00	59.98	49.00	0
5/12/01	20:04:01	798	3928	60.00	59.97	31.00	0
5/12/01	20:04:02	298	3930	60.00	59.97	31.00	0
5/12/01	20:04:02	799	3932	60.00	59.96	31.00	0
5/12/01	20:04:03	300	3932	60.00	59.96	11.00	0
5/12/01	20:04:03	801	3932	60.00	59.95	11.00	0
5/12/01	20:04:04	301	3932	60.00	59.95	10.00	0
5/12/01	20:04:04	802	3932	60.00	59.95	10.00	0
5/12/01	20:04:05	303	3932	60.00	59.93	13.00	0
5/12/01	20:04:05	803	3932	60.00	59.93	13.00	0
5/12/01	20:04:06	304	3932	59.96	59.96	12.00	0
5/12/01	20:04:06	805	3932	59.96	59.96	12.00	0
5/12/01	20:04:07	306	3932	59.96	60.00	12.00	0
5/12/01	20:04:07	806	3931	59.96	60.00	12.00	0
5/12/01	20:04:08	307	3931	59.96	59.97	11.00	0
5/12/01	20:04:08	808	3931	59.96	59.97	11.00	0
5/12/01	20:04:09	308	3931	59.96	60.00	9.00	0
5/12/01	20:04:09	809	3931	59.96	60.00	9.00	0
5/12/01	20:04:10	310	3931	59.96	59.99	8.00	0
5/12/01	20:04:10	811	3931	59.96	59.99	8.00	0
5/12/01	20:04:11	311	3931	60.01	60.05	5.00	0
5/12/01	20:04:11	812	3931	60.01	60.05	5.00	0
5/12/01	20:04:12	313	3931	60.01	59.99	4.00	1
5/12/01	20:04:12	814	3931	60.01	59.99	4.00	1
5/12/01	20:04:13	314	3931	60.01	59.95	2.00	1
5/12/01	20:04:13	815	3933	60.01	59.95	2.00	1
5/12/01	20:04:14	316	3933	60.01	60.03	1.00	1
5/12/01	20:04:14	816	3931	60.01	60.03	1.00	1
5/12/01	20:04:15	317	3931	60.01	60.03	4.00	1
5/12/01	20:04:15	818	3930	60.01	60.03	4.00	1
5/12/01	20:04:16	319	3930	60.02	60.02	0.00	1
5/12/01	20:04:16	819	3930	60.02	60.02	0.00	1
5/12/01	20:04:17	320	3930	60.02	59.98	-6.00	0
5/12/01	20:04:17	821	0	60.02	59.98	-6.00	0
5/12/01	20:04:18	321	0	60.02	60.00	0.00	0
5/12/01	20:04:18	822	0	60.02	60.00	0.00	0
5/12/01	20:04:19	323	0	60.02	60.02	0.00	0
5/12/01	20:04:19	824	0	60.02	60.02	0.00	0
5/12/01	20:04:20	324	0	59.93	59.90	0.00	0
5/12/01	20:04:20	825	0	59.93	59.90	0.00	0
5/12/01	20:04:21	326	0	59.93	53.69	0.00	0
5/12/01	20:04:21	826	0	59.93	53.69	0.00	0
5/12/01	20:04:22	327	0	59.93	47.41	0.00	0
5/12/01	20:04:22	828	0	59.93	47.41	0.00	0
5/12/01	20:04:23	329	0	59.93	47.41	0.00	0
5/12/01	20:04:23	829	0	59.93	41.19	0.00	0
5/12/01	20:04:24	330	0	59.93	41.19	0.00	0
5/12/01	20:04:24	831	0	59.93	0.00	0.00	0
5/12/01	20:04:25	332	0	59.93	0.00	0.00	0
5/12/01	20:04:25	832	0	60.07	0.00	0.00	0
5/12/01	20:04:26	333	0	60.07	0.00	0.00	0
5/12/01	20:04:26	834	0	60.07	0.00	0.00	0
5/12/01	20:04:27	334	0	60.07	0.00	0.00	0
5/12/01	20:04:27	835	0	60.07	0.00	0.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Degrees)	Close Breaker (Open/Close)
5/12/01	20:04:28	336	0	60.07	0.00	0.00	0
5/12/01	20:04:28	837	0	60.07	0.00	0.00	0
5/12/01	20:04:29	337	0	60.07	0.00	0.00	0
5/12/01	20:04:29	838	0	60.07	0.00	0.00	0
5/12/01	20:04:30	339	0	60.07	0.00	0.00	0
5/12/01	20:04:30	839	0	59.96	0.00	0.00	0
5/12/01	20:04:31	340	0	59.96	0.00	0.00	0
5/12/01	20:04:31	841	0	59.96	0.00	0.00	0
5/12/01	20:04:32	342	0	59.96	0.00	0.00	0
5/12/01	20:04:32	842	0	59.96	0.00	0.00	0
5/12/01	20:04:33	343	0	59.96	0.00	0.00	0
5/12/01	20:04:33	844	0	59.96	0.00	0.00	0
5/12/01	20:04:34	344	1228	59.96	0.00	0.00	0
5/12/01	20:04:34	845	3359	59.96	0.00	0.00	0
5/12/01	20:04:35	346	3587	59.96	0.00	0.00	0
5/12/01	20:04:35	847	3772	59.98	0.00	0.00	0
5/12/01	20:04:36	347	3848	59.98	0.00	0.00	0
5/12/01	20:04:36	848	3848	59.98	0.00	0.00	0
5/12/01	20:04:37	349	3848	59.98	0.00	0.00	0
5/12/01	20:04:37	850	3848	59.98	0.00	0.00	0
5/12/01	20:04:38	350	3848	59.98	0.00	0.00	0
5/12/01	20:04:38	861	3848	59.98	0.00	0.00	0
5/12/01	20:04:39	352	3848	59.98	0.00	0.00	0
5/12/01	20:04:39	852	3848	59.98	0.00	0.00	0
5/12/01	20:04:40	353	3848	59.98	0.00	0.00	0
5/12/01	20:04:40	854	3848	60.00	0.00	0.00	0
5/12/01	20:04:41	355	3848	60.00	0.00	0.00	0
5/12/01	20:04:41	855	3848	60.00	0.00	0.00	0
5/12/01	20:04:42	356	3848	60.00	0.00	0.00	0
5/12/01	20:04:42	857	3848	60.00	41.35	0.00	0
5/12/01	20:04:43	357	3848	60.00	41.35	0.00	0
5/12/01	20:04:43	858	3848	60.00	48.80	0.00	0
5/12/01	20:04:44	359	3848	60.00	48.80	0.00	0
5/12/01	20:04:44	860	3848	60.00	55.01	0.00	0
5/12/01	20:04:45	360	3848	60.00	55.01	0.00	0
5/12/01	20:04:45	861	3848	59.99	58.68	0.00	0
5/12/01	20:04:46	362	3848	59.99	58.68	0.00	0
5/12/01	20:04:46	862	3848	59.99	58.71	0.00	0
5/12/01	20:04:47	363	3848	59.99	58.71	0.00	0
5/12/01	20:04:47	864	3848	59.99	58.72	0.00	0
5/12/01	20:04:48	365	3848	59.99	58.72	0.00	0
5/12/01	20:04:48	875	3848	59.99	58.71	0.00	0
5/12/01	20:04:49	366	3935	59.99	58.71	0.00	0
5/12/01	20:04:49	867	3935	59.99	58.73	-164.00	0
5/12/01	20:04:50	368	3935	59.99	58.73	-164.00	0
5/12/01	20:04:50	868	3935	59.99	58.73	-146.00	0
5/12/01	20:04:51	369	3935	59.99	58.73	-146.00	0
5/12/01	20:04:51	870	3935	59.99	60.08	-126.00	0
5/12/01	20:04:52	370	3935	59.99	60.08	-126.00	0
5/12/01	20:04:52	871	3935	59.99	60.08	-109.00	0
5/12/01	20:04:53	372	3935	59.99	60.08	-109.00	0
5/12/01	20:04:53	873	3935	59.99	60.06	-85.00	0
5/12/01	20:04:54	373	3935	59.99	60.06	-85.00	0
5/12/01	20:04:54	874	3935	59.99	60.03	-68.00	0
5/12/01	20:04:55	375	3935	59.99	60.03	-68.00	0
5/12/01	20:04:55	875	3935	59.99	60.03	-52.00	0
5/12/01	20:04:56	376	3935	60.00	60.04	-52.00	0
5/12/01	20:04:56	877	3935	60.00	60.04	-30.00	0
5/12/01	20:04:57	378	3935	60.00	60.00	-30.00	0
5/12/01	20:04:57	878	3935	60.00	60.00	-8.00	0
5/12/01	20:04:58	379	3935	60.00	60.05	-8.00	0
5/12/01	20:04:58	880	3935	60.00	60.05	13.00	0
5/12/01	20:04:59	380	3934	60.00	59.97	13.00	0
5/12/01	20:04:59	881	3934	60.00	59.97	13.00	0
5/12/01	20:05:00	382	3933	60.00	60.05	34.00	0
5/12/01	20:05:00	883	3932	60.00	60.05	47.00	0
5/12/01	20:05:01	383	3932	59.94	60.05	47.00	0
5/12/01	20:05:01	884	3932	59.94	60.05	49.00	0
5/12/01	20:05:02	385	3932	59.94	60.01	49.00	0
5/12/01	20:05:02	886	3932	59.94	60.01	49.00	0
5/12/01	20:05:03	386	3932	59.94	59.96	48.00	0
5/12/01	20:05:03	887	3932	59.94	59.96	48.00	0
5/12/01	20:05:04	388	3932	59.94	60.01	49.00	0
5/12/01	20:05:04	888	3931	59.94	60.01	49.00	0
5/12/01	20:05:05	389	3929	59.94	59.99	48.00	0
5/12/01	20:05:05	890	3929	59.94	59.99	48.00	0
5/12/01	20:05:06	391	3929	59.93	59.94	44.00	0
5/12/01	20:05:06	891	3929	59.93	59.94	30.00	0
5/12/01	20:05:07	392	3929	59.93	59.94	30.00	0
5/12/01	20:05:07	893	3929	59.93	59.99	17.00	0
5/12/01	20:05:08	393	3930	59.93	59.99	17.00	0
5/12/01	20:05:08	894	3930	59.93	59.95	17.00	0
5/12/01	20:05:09	395	3931	59.93	59.95	6.00	0
5/12/01	20:05:09	896	3931	59.93	59.99	6.00	0
5/12/01	20:05:10	396	3931	59.93	59.99	4.00	0
5/12/01	20:05:10	897	3931	59.93	59.94	4.00	1
5/12/01	20:05:11	398	3931	59.93	59.94	3.00	1
5/12/01	20:05:11	898	3931	59.98	60.05	3.00	1
5/12/01	20:05:12	399	3931	59.98	60.05	0.00	1
5/12/01	20:05:12	900	3931	59.98	59.93	0.00	1
5/12/01	20:05:13	401	3931	59.98	59.93	-1.00	1
5/12/01	20:05:13	901	3931	59.98	59.99	-1.00	1
5/12/01	20:05:14	402	3931	59.98	59.99	-3.00	1
5/12/01	20:05:14	903	0	59.98	59.97	-3.00	1
5/12/01	20:05:15	404	0	59.98	59.97	0.00	1
5/12/01	20:05:15	904	0	59.98	59.99	0.00	0
5/12/01	20:05:16	405	0	59.98	59.99	0.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Degrees)	Close Breaker (Open/Close)
5/12/01	20:05:16	906	0	59.98	60.01	0.00	0
5/12/01	20:05:17	406	0	59.98	60.01	0.00	0
5/12/01	20:05:17	907	0	59.98	53.81	0.00	0
5/12/01	20:05:18	408	0	59.98	53.81	0.00	0
5/12/01	20:05:18	909	0	59.98	48.11	0.00	0
5/12/01	20:05:19	409	0	59.98	48.11	0.00	0
5/12/01	20:05:19	910	0	59.98	41.19	0.00	0
5/12/01	20:05:20	411	0	59.98	41.19	0.00	0
5/12/01	20:05:20	911	0	59.98	41.19	0.00	0
5/12/01	20:05:21	412	0	59.95	0.00	0.00	0
5/12/01	20:05:21	913	0	59.95	0.00	0.00	0
5/12/01	20:05:22	414	0	59.95	0.00	0.00	0
5/12/01	20:05:22	914	0	59.95	0.00	0.00	0
5/12/01	20:05:23	415	0	59.95	0.00	0.00	0
5/12/01	20:05:23	916	0	59.95	0.00	0.00	0
5/12/01	20:05:24	416	0	59.95	0.00	0.00	0
5/12/01	20:05:24	917	0	59.95	0.00	0.00	0
5/12/01	20:05:25	418	0	59.95	0.00	0.00	0
5/12/01	20:05:25	919	0	59.95	0.00	0.00	0
5/12/01	20:05:26	419	0	59.98	0.00	0.00	0
5/12/01	20:05:26	920	0	59.98	0.00	0.00	0
5/12/01	20:05:27	421	0	59.98	0.00	0.00	0
5/12/01	20:05:27	922	0	59.98	0.00	0.00	0
5/12/01	20:05:28	422	0	59.98	0.00	0.00	0
5/12/01	20:05:28	923	0	59.98	0.00	0.00	0
5/12/01	20:05:29	424	0	59.98	0.00	0.00	0
5/12/01	20:05:29	924	0	59.98	0.00	0.00	0
5/12/01	20:05:30	425	0	59.98	0.00	0.00	0
5/12/01	20:05:30	926	0	59.98	0.00	0.00	0
5/12/01	20:05:31	427	0	59.98	0.00	0.00	0
5/12/01	20:05:31	927	0	59.98	0.00	0.00	0
5/12/01	20:05:32	428	2185	59.98	0.00	0.00	0
5/12/01	20:05:32	929	3750	59.98	0.00	0.00	0
5/12/01	20:05:33	429	3783	59.98	0.00	0.00	0
5/12/01	20:05:33	930	3783	59.98	0.00	0.00	0
5/12/01	20:05:34	431	3783	59.98	0.00	0.00	0
5/12/01	20:05:34	932	3783	59.98	0.00	0.00	0
5/12/01	20:05:35	432	3783	59.98	0.00	0.00	0
5/12/01	20:05:35	933	3783	59.98	0.00	0.00	0
5/12/01	20:05:36	434	3783	60.00	0.00	0.00	0
5/12/01	20:05:36	934	3783	60.00	0.00	0.00	0
5/12/01	20:05:37	435	3783	60.00	0.00	0.00	0
5/12/01	20:05:37	936	3783	60.00	0.00	0.00	0
5/12/01	20:05:38	437	3783	60.00	0.00	0.00	0
5/12/01	20:05:38	937	3783	60.00	0.00	0.00	0
5/12/01	20:05:39	438	3783	60.00	0.00	0.00	0
5/12/01	20:05:39	939	3783	60.00	0.00	0.00	0
5/12/01	20:05:40	440	3783	60.00	0.00	0.00	0
5/12/01	20:05:40	940	3783	60.00	0.00	0.00	0
5/12/01	20:05:41	441	3783	60.03	0.00	0.00	0
5/12/01	20:05:41	942	3783	60.03	0.00	0.00	0
5/12/01	20:05:42	442	3783	60.03	44.84	0.00	0
5/12/01	20:05:42	943	3783	60.03	44.84	0.00	0
5/12/01	20:05:43	444	3783	60.03	51.62	0.00	0
5/12/01	20:05:43	945	3783	60.03	51.62	0.00	0
5/12/01	20:05:44	445	3815	60.03	57.72	0.00	0
5/12/01	20:05:44	946	3924	60.03	57.72	0.00	0
5/12/01	20:05:45	447	3924	60.03	57.68	0.00	0
5/12/01	20:05:45	947	3924	60.03	57.68	-28.00	0
5/12/01	20:05:46	448	3924	59.99	57.78	-28.00	0
5/12/01	20:05:46	949	3924	59.99	57.78	-67.00	0
5/12/01	20:05:47	450	3924	59.99	59.76	-67.00	0
5/12/01	20:05:47	950	3924	59.99	59.76	-115.00	0
5/12/01	20:05:48	451	3924	59.99	59.87	-115.00	0
5/12/01	20:05:48	952	3924	59.99	59.87	-166.00	0
5/12/01	20:05:49	452	3924	59.99	59.87	-166.00	0
5/12/01	20:05:49	953	3924	59.99	59.89	151.00	0
5/12/01	20:05:50	454	3924	59.99	59.89	151.00	0
5/12/01	20:05:50	955	3924	59.99	59.85	151.00	0
5/12/01	20:05:51	455	3926	59.99	59.85	95.00	0
5/12/01	20:05:51	956	3931	60.00	59.85	95.00	0
5/12/01	20:05:52	457	3942	60.00	59.85	56.00	0
5/12/01	20:05:52	958	3942	60.00	59.89	56.00	0
5/12/01	20:05:53	458	3942	60.00	59.89	84.00	0
5/12/01	20:05:53	959	3942	60.00	59.85	84.00	0
5/12/01	20:05:54	460	3942	60.00	59.85	141.00	0
5/12/01	20:05:54	960	3942	60.00	60.10	141.00	0
5/12/01	20:05:55	461	3941	60.00	60.10	-169.00	0
5/12/01	20:05:55	962	3940	60.00	60.15	-169.00	0
5/12/01	20:05:56	463	3939	60.00	60.15	-114.00	0
5/12/01	20:05:56	963	3939	60.00	60.10	-114.00	0
5/12/01	20:05:57	464	3939	60.00	60.10	-76.00	0
5/12/01	20:05:57	965	3939	60.00	60.14	-76.00	0
5/12/01	20:05:58	465	3939	60.00	60.14	-30.00	0
5/12/01	20:05:58	966	3939	60.00	60.11	-30.00	0
5/12/01	20:05:59	467	3939	60.00	60.11	11.00	0
5/12/01	20:05:59	968	3938	60.00	60.11	11.00	0
5/12/01	20:06:00	478	3936	60.00	60.11	58.00	0
5/12/01	20:06:00	969	3935	60.00	60.04	58.00	0
5/12/01	20:06:01	470	3935	60.00	60.04	83.00	0
5/12/01	20:06:01	970	3935	60.00	60.07	83.00	0
5/12/01	20:06:02	471	3935	60.00	60.07	104.00	0
5/12/01	20:06:02	972	3933	60.00	60.07	104.00	0
5/12/01	20:06:03	473	3931	60.00	60.07	120.00	0
5/12/01	20:06:03	973	3931	60.00	60.08	120.00	0
5/12/01	20:06:04	474	3931	60.00	60.08	120.00	0
5/12/01	20:06:04	975	3931	60.00	60.08	120.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Degrees)	Close Breaker (Open/Close)
5/12/01	20:06:05	476	3931	60.00	60.08	115.00	0
5/12/01	20:06:05	976	3931	60.00	59.99	115.00	0
5/12/01	20:06:06	477	3931	60.00	59.99	111.00	0
5/12/01	20:06:06	978	3931	60.00	59.99	111.00	0
5/12/01	20:06:07	478	3930	59.98	59.97	107.00	0
5/12/01	20:06:07	979	3930	59.98	59.97	107.00	0
5/12/01	20:06:08	480	3928	59.98	59.93	100.00	0
5/12/01	20:06:08	981	3928	59.98	59.93	100.00	0
5/12/01	20:06:09	481	3928	59.98	60.01	100.00	0
5/12/01	20:06:09	982	3928	59.98	60.01	78.00	0
5/12/01	20:06:10	483	3928	59.98	59.93	78.00	0
5/12/01	20:06:10	983	3928	59.98	59.93	54.00	0
5/12/01	20:06:11	494	3928	59.98	59.97	54.00	0
5/12/01	20:06:11	985	3928	59.98	59.97	34.00	0
5/12/01	20:06:12	486	3928	59.97	59.91	34.00	0
5/12/01	20:06:12	986	3928	59.97	59.91	11.00	0
5/12/01	20:06:13	487	3929	59.97	59.93	11.00	0
5/12/01	20:06:13	988	3929	59.97	59.93	-9.00	0
5/12/01	20:06:14	488	3931	59.97	59.96	-9.00	0
5/12/01	20:06:14	989	3931	59.97	59.96	-18.00	0
5/12/01	20:06:15	490	3931	59.97	60.00	-18.00	0
5/12/01	20:06:15	991	3931	59.97	60.00	-22.00	0
5/12/01	20:06:16	491	3931	59.97	59.97	-22.00	0
5/12/01	20:06:16	992	3931	59.97	59.97	-25.00	0
5/12/01	20:06:17	493	3931	59.98	59.97	-25.00	0
5/12/01	20:06:17	994	3931	59.98	59.97	-26.00	0
5/12/01	20:06:18	494	3931	59.98	59.97	-26.00	0
5/12/01	20:06:18	995	3931	59.98	59.97	-27.00	0
5/12/01	20:06:19	496	3932	59.98	59.96	-27.00	0
5/12/01	20:06:19	996	3932	59.98	59.96	-28.00	0
5/12/01	20:06:20	497	3932	59.98	60.00	-28.00	0
5/12/01	20:06:20	998	3932	59.98	60.00	-29.00	0
5/12/01	20:06:21	499	3932	59.98	60.00	-29.00	0
5/12/01	20:06:21	999	3933	59.98	60.00	-29.00	0
5/12/01	20:06:22	500	3934	59.99	59.99	-29.00	0
5/12/01	20:06:23	1	3934	59.99	59.99	-27.00	0
5/12/01	20:06:23	501	3934	59.99	59.97	-27.00	0
5/12/01	20:06:24	2	3934	59.99	59.97	-13.00	0
5/12/01	20:06:24	503	3932	59.99	60.02	-13.00	0
5/12/01	20:06:25	4	3932	59.99	60.02	3.00	0
5/12/01	20:06:25	504	3931	59.99	60.02	3.00	0
5/12/01	20:06:26	5	3931	59.99	60.02	3.00	1
5/12/01	20:06:26	506	3931	59.99	60.01	3.00	1
5/12/01	20:06:27	6	3931	59.99	60.01	0.00	1
5/12/01	20:06:27	507	3931	59.99	60.00	0.00	1
5/12/01	20:06:28	8	3931	59.99	60.00	-3.00	1
5/12/01	20:06:28	509	3931	59.99	59.96	-3.00	1
5/12/01	20:06:29	9	0	59.99	59.96	-6.00	0
5/12/01	20:06:29	510	0	59.99	60.02	-6.00	0
5/12/01	20:06:30	11	0	59.99	60.02	0.00	0
5/12/01	20:06:30	512	0	59.99	59.96	0.00	0
5/12/01	20:06:31	12	0	59.99	59.96	0.00	0
5/12/01	20:06:31	513	0	59.99	60.04	0.00	0
5/12/01	20:06:32	14	0	59.99	60.04	0.00	0
5/12/01	20:06:32	514	0	59.99	60.04	0.00	0
5/12/01	20:06:33	15	0	60.01	54.62	0.00	0
5/12/01	20:06:33	516	0	60.01	54.62	0.00	0
5/12/01	20:06:34	17	0	60.01	48.94	0.00	0
5/12/01	20:06:34	688	0	60.01	41.97	0.00	0
5/12/01	20:06:35	18	0	60.01	41.97	0.00	0
5/12/01	20:06:35	519	0	60.01	41.97	0.00	0
5/12/01	20:06:36	19	0	60.01	0.00	0.00	0
5/12/01	20:06:36	520	0	60.01	0.00	0.00	0
5/12/01	20:06:37	91	0	60.01	0.00	0.00	0
5/12/01	20:06:37	522	0	60.01	0.00	0.00	0
5/12/01	20:06:38	22	0	59.96	0.00	0.00	0
5/12/01	20:06:38	523	0	59.96	0.00	0.00	0
5/12/01	20:06:39	24	0	59.96	0.00	0.00	0
5/12/01	20:06:39	524	0	59.96	0.00	0.00	0
5/12/01	20:06:40	25	0	59.96	0.00	0.00	0
5/12/01	20:06:40	526	0	59.96	0.00	0.00	0
5/12/01	20:06:41	27	0	59.96	0.00	0.00	0
5/12/01	20:06:41	527	0	59.96	0.00	0.00	0
5/12/01	20:06:42	38	87	60.00	0.00	0.00	0
5/12/01	20:06:42	529	3261	60.00	0.00	0.00	0
5/12/01	20:06:43	30	3543	60.00	0.00	0.00	0
5/12/01	20:06:43	530	3761	60.00	0.00	0.00	0
5/12/01	20:06:44	31	3793	60.00	0.00	0.00	0
5/12/01	20:06:44	532	3793	60.00	0.00	0.00	0
5/12/01	20:06:45	32	3793	60.00	0.00	0.00	0
5/12/01	20:06:45	533	3793	60.00	0.00	0.00	0
5/12/01	20:06:46	34	3793	60.00	0.00	0.00	0
5/12/01	20:06:46	535	3793	60.00	0.00	0.00	0
5/12/01	20:06:47	35	3793	59.97	0.00	0.00	0
5/12/01	20:06:47	536	3793	59.97	0.00	0.00	0
5/12/01	20:06:48	37	3793	59.97	0.00	0.00	0
5/12/01	20:06:48	537	3793	59.97	0.00	0.00	0
5/12/01	20:06:49	38	3793	59.97	0.00	0.00	0
5/12/01	20:06:49	539	3793	59.97	0.00	0.00	0
5/12/01	20:06:50	40	3793	59.97	0.00	0.00	0
5/12/01	20:06:50	540	3793	59.97	0.00	0.00	0
5/12/01	20:06:51	41	3793	59.97	0.00	0.00	0
5/12/01	20:06:51	542	3793	59.97	0.00	0.00	0
5/12/01	20:06:52	42	3793	60.02	42.99	0.00	0
5/12/01	20:06:52	543	3793	60.02	42.99	0.00	0
5/12/01	20:06:53	44	3793	60.02	49.85	0.00	0
5/12/01	20:06:53	545	3793	60.02	49.85	0.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Degrees)	Close Breaker (Open/Close)
5/12/01	20:06:54	45	3793	60.02	55.98	0.00	0
5/12/01	20:06:54	546	3793	60.02	55.98	0.00	0
5/12/01	20:06:55	47	3793	60.02	55.98	0.00	0
5/12/01	20:06:55	548	3793	60.02	57.88	0.00	0
5/12/01	20:06:56	48	3793	60.02	57.88	0.00	0
5/12/01	20:06:56	549	3793	60.02	57.85	0.00	0
5/12/01	20:06:57	50	3793	60.02	57.85	0.00	0
5/12/01	20:06:57	550	3793	59.99	57.85	0.00	0
5/12/01	20:06:58	51	3848	59.99	57.85	0.00	0
5/12/01	20:06:58	552	3880	59.99	57.88	0.00	0
5/12/01	20:06:59	53	3880	59.99	57.88	0.00	0
5/12/01	20:06:59	553	3880	59.99	57.94	0.00	0
5/12/01	20:07:00	54	3880	59.99	57.94	0.00	0
5/12/01	20:07:00	555	3880	59.99	57.86	0.00	0
5/12/01	20:07:01	55	3880	59.99	57.86	0.00	0
5/12/01	20:07:01	566	3880	59.99	59.22	0.00	0
5/12/01	20:07:02	67	3880	59.99	59.22	0.00	0
5/12/01	20:07:02	568	3880	60.01	59.18	0.00	0
5/12/01	20:07:03	68	3880	60.01	59.18	0.00	0
5/12/01	20:07:03	569	3913	60.01	59.20	0.00	0
5/12/01	20:07:04	70	3957	60.01	59.20	0.00	0
5/12/01	20:07:04	570	3957	60.01	59.24	0.00	0
5/12/01	20:07:05	71	3957	60.01	59.24	0.00	0
5/12/01	20:07:05	572	3957	60.01	59.21	0.00	0
5/12/01	20:07:06	73	3957	60.01	59.21	0.00	0
5/12/01	20:07:06	573	3957	60.01	59.16	0.00	0
5/12/01	20:07:07	74	3957	60.01	59.16	0.00	0
5/12/01	20:07:07	575	3935	59.95	60.39	0.00	0
5/12/01	20:07:08	76	3935	59.95	60.39	140.00	0
5/12/01	20:07:08	576	3935	59.95	60.35	140.00	0
5/12/01	20:07:09	77	3935	59.95	60.35	171.00	0
5/12/01	20:07:09	578	3935	59.95	60.35	171.00	0
5/12/01	20:07:10	78	3935	59.95	60.35	-171.00	0
5/12/01	20:07:10	579	3935	59.95	60.09	-171.00	0
5/12/01	20:07:11	80	3935	59.95	60.09	-154.00	0
5/12/01	20:07:11	581	3935	59.95	60.03	-154.00	0
5/12/01	20:07:12	81	3935	59.95	60.03	-154.00	0
5/12/01	20:07:12	582	3935	59.99	60.00	-132.00	0
5/12/01	20:07:13	83	3935	59.99	60.00	-132.00	0
5/12/01	20:07:13	583	3935	59.99	60.05	-116.00	0
5/12/01	20:07:14	84	3935	59.99	60.05	-116.00	0
5/12/01	20:07:14	585	3935	59.99	60.02	-97.00	0
5/12/01	20:07:15	86	3935	59.99	60.02	-97.00	0
5/12/01	20:07:15	586	3935	59.99	60.03	-77.00	0
5/12/01	20:07:16	87	3935	59.99	60.03	-77.00	0
5/12/01	20:07:16	588	3935	59.99	60.03	-57.00	0
5/12/01	20:07:17	88	3935	59.99	60.08	-57.00	0
5/12/01	20:07:17	589	3935	59.99	60.08	-38.00	0
5/12/01	20:07:18	90	3934	59.99	60.08	-38.00	0
5/12/01	20:07:18	591	3934	59.99	60.08	-19.00	0
5/12/01	20:07:19	91	3932	59.99	60.02	-19.00	0
5/12/01	20:07:19	592	3932	59.99	60.02	-6.00	0
5/12/01	20:07:20	93	3932	59.99	60.05	-6.00	0
5/12/01	20:07:20	594	3932	59.99	60.05	-5.00	0
5/12/01	20:07:21	94	3932	59.99	60.07	-5.00	0
5/12/01	20:07:21	595	3932	59.99	60.07	-5.00	0
5/12/01	20:07:22	96	3932	59.99	59.96	-5.00	0
5/12/01	20:07:22	596	3932	59.99	59.96	-5.00	1
5/12/01	20:07:23	97	3932	59.98	59.98	-5.00	1
5/12/01	20:07:23	598	3932	59.98	59.98	-4.00	1
5/12/01	20:07:24	99	3932	59.98	59.98	-4.00	1
5/12/01	20:07:24	599	3932	59.98	59.98	-4.00	1
5/12/01	20:07:25	100	3932	59.98	59.99	-4.00	1
5/12/01	20:07:25	601	0	59.98	59.99	-4.00	0
5/12/01	20:07:26	101	0	59.98	59.98	-4.00	0
5/12/01	20:07:26	602	0	59.98	59.98	0.00	0
5/12/01	20:07:27	103	0	59.98	59.98	0.00	0
5/12/01	20:07:27	604	0	59.98	59.98	0.00	0
5/12/01	20:07:28	104	0	59.98	58.83	0.00	0
5/12/01	20:07:28	605	0	59.98	58.83	0.00	0
5/12/01	20:07:29	106	0	59.98	52.51	0.00	0
5/12/01	20:07:29	606	0	59.98	52.51	0.00	0
5/12/01	20:07:30	107	0	59.98	46.79	0.00	0
5/12/01	20:07:30	608	0	59.98	46.79	0.00	0
5/12/01	20:07:31	109	0	59.98	0.00	0.00	0
5/12/01	20:07:31	609	0	59.98	0.00	0.00	0
5/12/01	20:07:32	110	0	59.98	0.00	0.00	0
5/12/01	20:07:32	611	0	59.98	0.00	0.00	0
5/12/01	20:07:33	112	0	59.98	0.00	0.00	0
5/12/01	20:07:33	612	0	59.98	0.00	0.00	0
5/12/01	20:07:34	113	0	59.98	0.00	0.00	0
5/12/01	20:07:34	614	0	59.98	0.00	0.00	0
5/12/01	20:07:35	114	0	59.98	0.00	0.00	0
5/12/01	20:07:35	615	0	59.98	0.00	0.00	0
5/12/01	20:07:36	116	0	59.98	0.00	0.00	0
5/12/01	20:07:36	617	0	59.98	0.00	0.00	0
5/12/01	20:07:37	117	0	59.98	0.00	0.00	0
5/12/01	20:07:37	618	0	59.98	0.00	0.00	0
5/12/01	20:07:38	119	0	59.98	0.00	0.00	0
5/12/01	20:07:38	619	0	59.98	0.00	0.00	0
5/12/01	20:07:39	120	0	59.98	0.00	0.00	0
5/12/01	20:07:39	621	0	59.98	0.00	0.00	0
5/12/01	20:07:40	122	0	59.98	0.00	0.00	0
5/12/01	20:07:40	622	0	59.98	0.00	0.00	0
5/12/01	20:07:41	123	0	59.98	0.00	0.00	0
5/12/01	20:07:41	624	0	59.98	0.00	0.00	0
5/12/01	20:07:42	124	0	59.98	0.00	0.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Degrees)	Close Breaker (Open/Close)
5/12/01	20:07:42	635	11	59.98	0.00	0.00	0
5/12/01	20:07:43	126	978	59.97	0.00	0.00	0
5/12/01	20:07:43	627	3370	59.97	0.00	0.00	0
5/12/01	20:07:44	127	3793	59.97	0.00	0.00	0
5/12/01	20:07:44	628	3859	59.97	0.00	0.00	0
5/12/01	20:07:45	129	3859	59.97	0.00	0.00	0
5/12/01	20:07:45	630	3859	59.97	0.00	0.00	0
5/12/01	20:07:46	130	3859	59.97	0.00	0.00	0
5/12/01	20:07:46	631	3859	59.97	0.00	0.00	0
5/12/01	20:07:47	132	3859	59.97	0.00	0.00	0
5/12/01	20:07:47	632	3859	59.97	0.00	0.00	0
5/12/01	20:07:48	133	3859	60.01	0.00	0.00	0
5/12/01	20:07:48	634	3859	60.01	0.00	0.00	0
5/12/01	20:07:49	135	3859	60.01	0.00	0.00	0
5/12/01	20:07:49	635	3859	60.01	0.00	0.00	0
5/12/01	20:07:50	136	3859	60.01	0.00	0.00	0
5/12/01	20:07:50	637	3859	60.01	0.00	0.00	0
5/12/01	20:07:51	137	3859	60.01	0.00	0.00	0
5/12/01	20:07:51	638	3859	60.01	0.00	0.00	0
5/12/01	20:07:52	139	3859	60.01	0.00	0.00	0
5/12/01	20:07:52	640	3859	60.01	40.93	0.00	0
5/12/01	20:07:53	140	3859	60.01	40.93	0.00	0
5/12/01	20:07:53	641	3859	60.02	48.34	0.00	0
5/12/01	20:07:54	142	3859	60.02	48.34	0.00	0
5/12/01	20:07:54	642	3859	60.02	54.54	0.00	0
5/12/01	20:07:55	143	3859	60.02	54.54	0.00	0
5/12/01	20:07:55	644	3902	60.02	58.90	0.00	0
5/12/01	20:07:56	145	3902	60.02	58.90	0.00	0
5/12/01	20:07:56	645	3902	60.02	58.85	0.00	0
5/12/01	20:07:57	146	3902	60.02	58.85	0.00	0
5/12/01	20:07:57	647	3902	59.99	58.94	0.00	0
5/12/01	20:07:58	148	3902	59.99	58.94	0.00	0
5/12/01	20:07:58	648	3902	59.99	59.35	0.00	0
5/12/01	20:07:59	149	3924	59.99	59.35	0.00	0
5/12/01	20:07:59	650	3924	59.99	59.55	0.00	0
5/12/01	20:08:00	150	3924	59.99	59.55	0.00	0
5/12/01	20:08:00	651	3924	59.99	59.55	-107.00	0
5/12/01	20:08:01	152	3924	59.99	59.55	-107.00	0
5/12/01	20:08:01	653	3924	59.99	59.54	-153.00	0
5/12/01	20:08:02	153	3924	59.99	59.54	-153.00	0
5/12/01	20:08:02	654	3924	60.02	59.59	158.00	0
5/12/01	20:08:03	155	3924	60.02	59.59	158.00	0
5/12/01	20:08:03	655	3924	60.02	59.87	115.00	0
5/12/01	20:08:04	156	3924	60.02	59.87	115.00	0
5/12/01	20:08:04	657	3924	60.02	59.85	67.00	0
5/12/01	20:08:05	158	3925	60.02	59.85	67.00	0
5/12/01	20:08:05	658	3925	60.02	59.84	22.00	0
5/12/01	20:08:06	159	3925	60.02	59.84	22.00	0
5/12/01	20:08:06	660	3925	60.02	59.79	-12.00	0
5/12/01	20:08:07	160	3926	60.02	59.79	-12.00	0
5/12/01	20:08:07	661	3928	59.98	59.84	-43.00	0
5/12/01	20:08:08	162	3929	59.98	59.84	-43.00	0
5/12/01	20:08:08	663	3930	59.98	59.91	-71.00	0
5/12/01	20:08:09	163	3932	59.98	59.91	-71.00	0
5/12/01	20:08:09	664	3932	59.98	59.89	-77.00	0
5/12/01	20:08:10	165	3932	59.98	59.89	-77.00	0
5/12/01	20:08:10	666	3932	59.98	59.92	-78.00	0
5/12/01	20:08:11	166	3932	59.98	59.92	-78.00	0
5/12/01	20:08:11	667	3932	59.98	59.99	-78.00	0
5/12/01	20:08:12	168	3932	59.98	59.99	-78.00	0
5/12/01	20:08:12	668	3932	59.99	60.00	-79.00	0
5/12/01	20:08:13	169	3932	59.99	60.00	-79.00	0
5/12/01	20:08:13	670	3933	59.99	60.04	-81.00	0
5/12/01	20:08:14	171	3934	59.99	60.04	-81.00	0
5/12/01	20:08:14	671	3935	59.99	59.97	-79.00	0
5/12/01	20:08:15	172	3935	59.99	59.97	-79.00	0
5/12/01	20:08:15	673	3935	59.99	59.97	-60.00	0
5/12/01	20:08:16	173	3935	59.99	59.98	-60.00	0
5/12/01	20:08:16	674	3935	59.99	59.98	-44.00	0
5/12/01	20:08:17	175	3935	59.99	60.05	-44.00	0
5/12/01	20:08:17	676	3935	59.99	60.05	-22.00	0
5/12/01	20:08:18	176	3933	59.96	60.02	-22.00	0
5/12/01	20:08:18	677	3931	59.96	60.02	-4.00	0
5/12/01	20:08:19	178	3931	59.96	60.03	-4.00	0
5/12/01	20:08:19	678	3931	59.96	60.03	-5.00	0
5/12/01	20:08:20	179	3931	59.96	60.01	-5.00	0
5/12/01	20:08:20	680	3931	59.96	60.01	-8.00	0
5/12/01	20:08:21	181	3931	59.96	60.04	-8.00	0
5/12/01	20:08:21	691	3932	59.96	60.04	-11.00	0
5/12/01	20:08:22	182	3932	59.96	59.96	-11.00	0
5/12/01	20:08:22	683	3932	59.96	59.96	-11.00	0
5/12/01	20:08:23	184	3932	60.00	59.94	-11.00	0
5/12/01	20:08:23	684	3932	60.00	59.94	-10.00	0
5/12/01	20:08:24	185	3932	60.00	59.97	-10.00	0
5/12/01	20:08:24	686	3932	60.00	59.97	-9.00	0
5/12/01	20:08:25	186	3932	60.00	59.99	-9.00	0
5/12/01	20:08:25	687	3932	60.00	59.99	-6.00	0
5/12/01	20:08:26	188	3932	60.00	60.00	-6.00	0
5/12/01	20:08:26	689	3932	60.00	60.00	-8.00	0
5/12/01	20:08:27	189	3932	60.00	59.98	-8.00	0
5/12/01	20:08:27	690	3932	60.00	59.98	-8.00	0
5/12/01	20:08:28	191	3932	60.01	60.03	-8.00	0
5/12/01	20:08:28	691	3932	60.01	60.03	-6.00	0
5/12/01	20:08:29	192	3932	60.01	59.98	-6.00	0
5/12/01	20:08:29	693	3932	60.01	59.98	-7.00	0
5/12/01	20:08:30	194	3932	60.01	60.04	-7.00	0
5/12/01	20:08:30	694	3932	60.01	60.04	-6.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Degrees)	Close Breaker (Open/Close)
5/12/01	20:08:31	195	3932	60.01	60.03	-6.00	0
5/12/01	20:08:31	696	3932	60.01	60.03	-6.00	0
5/12/01	20:08:32	196	3932	60.01	60.03	-6.00	0
5/12/01	20:08:32	697	3932	60.01	59.98	-6.00	0
5/12/01	20:08:33	198	3932	60.01	59.98	-6.00	0
5/12/01	20:08:33	699	3933	60.00	59.99	-6.00	0
5/12/01	20:08:34	199	3933	60.00	59.99	-6.00	0
5/12/01	20:08:34	700	3933	60.00	60.00	2.00	1
5/12/01	20:08:35	201	3931	60.00	60.00	2.00	1
5/12/01	20:08:35	702	3931	60.00	60.05	5.00	1
5/12/01	20:08:36	202	3931	60.00	60.05	5.00	1
5/12/01	20:08:36	703	3931	60.00	59.97	3.00	1
5/12/01	20:08:37	204	3931	60.00	59.97	3.00	1
5/12/01	20:08:37	704	3931	60.00	59.98	1.00	1
5/12/01	20:08:38	205	3931	60.00	59.98	1.00	1
5/12/01	20:08:38	706	0	59.97	59.93	0.00	1
5/12/01	20:08:39	207	0	59.97	59.93	0.00	1
5/12/01	20:08:39	707	0	59.97	60.02	0.00	0
5/12/01	20:08:40	208	0	59.97	60.02	0.00	0
5/12/01	20:08:40	709	0	59.97	60.02	0.00	0
5/12/01	20:08:41	209	0	59.97	60.02	0.00	0
5/12/01	20:08:41	710	0	59.97	59.96	0.00	0
5/12/01	20:08:42	271	0	59.97	59.96	0.00	0
5/12/01	20:08:42	712	0	59.97	55.35	0.00	0
5/12/01	20:08:43	212	0	59.97	55.35	0.00	0
5/12/01	20:08:43	713	0	60.00	49.72	0.00	0
5/12/01	20:08:44	214	0	60.00	49.72	0.00	0
5/12/01	20:08:44	714	0	60.00	0.00	0.00	0
5/12/01	20:08:45	215	0	60.00	0.00	0.00	0
5/12/01	20:08:45	716	0	60.00	0.00	0.00	0
5/12/01	20:08:46	217	0	60.00	0.00	0.00	0
5/12/01	20:08:46	717	0	60.00	0.00	0.00	0
5/12/01	20:08:47	218	0	60.00	0.00	0.00	0
5/12/01	20:08:47	719	0	60.00	0.00	0.00	0
5/12/01	20:08:48	220	0	60.00	0.00	0.00	0
5/12/01	20:08:48	720	0	59.96	0.00	0.00	0
5/12/01	20:08:49	221	0	59.96	0.00	0.00	0
5/12/01	20:08:49	722	0	59.96	0.00	0.00	0
5/12/01	20:08:50	222	0	59.96	0.00	0.00	0
5/12/01	20:08:50	723	0	59.96	0.00	0.00	0
5/12/01	20:08:51	224	0	59.96	0.00	0.00	0
5/12/01	20:08:51	725	0	59.96	0.00	0.00	0
5/12/01	20:08:52	225	0	59.96	0.00	0.00	0
5/12/01	20:08:52	726	239	59.96	0.00	0.00	0
5/12/01	20:08:53	227	2935	59.96	0.00	0.00	0
5/12/01	20:08:53	727	3728	59.96	0.00	0.00	0
5/12/01	20:08:54	228	3728	59.96	0.00	0.00	0
5/12/01	20:08:54	729	3728	59.98	0.00	0.00	0
5/12/01	20:08:55	230	3728	59.98	0.00	0.00	0
5/12/01	20:08:55	730	3728	59.98	0.00	0.00	0
5/12/01	20:08:56	231	3728	59.98	0.00	0.00	0
5/12/01	20:08:56	732	3728	59.98	0.00	0.00	0
5/12/01	20:08:57	232	3728	59.98	0.00	0.00	0
5/12/01	20:08:57	733	3728	59.98	0.00	0.00	0
5/12/01	20:08:58	234	3728	59.98	0.00	0.00	0
5/12/01	20:08:58	735	3728	59.98	0.00	0.00	0
5/12/01	20:08:59	235	3728	59.98	0.00	0.00	0
5/12/01	20:08:59	736	3728	59.99	0.00	0.00	0
5/12/01	20:09:00	237	3728	59.99	0.00	0.00	0
5/12/01	20:09:00	738	3728	59.99	0.00	0.00	0
5/12/01	20:09:01	238	3728	59.99	0.00	0.00	0
5/12/01	20:09:01	739	3728	59.99	0.00	0.00	0
5/12/01	20:09:02	240	3728	59.99	0.00	0.00	0
5/12/01	20:09:02	740	3728	59.99	0.00	0.00	0
5/12/01	20:09:03	241	3859	59.99	40.76	0.00	0
5/12/01	20:09:03	742	3902	59.99	40.76	0.00	0
5/12/01	20:09:04	243	3902	59.99	54.33	0.00	0
5/12/01	20:09:04	743	3902	59.99	54.33	0.00	0
5/12/01	20:09:05	244	3902	59.97	56.89	0.00	0
5/12/01	20:09:05	745	3902	59.97	56.89	0.00	0
5/12/01	20:09:06	245	3902	59.97	59.35	0.00	0
5/12/01	20:09:06	746	3902	59.97	59.35	0.00	0
5/12/01	20:09:07	247	3902	59.97	59.52	0.00	0
5/12/01	20:09:07	748	3902	59.97	59.52	0.00	0
5/12/01	20:09:08	248	3902	59.97	59.55	0.00	0
5/12/01	20:09:08	749	3902	59.97	59.55	0.00	0
5/12/01	20:09:09	250	3902	59.98	59.53	0.00	0
5/12/01	20:09:09	761	3935	59.98	59.53	0.00	0
5/12/01	20:09:10	251	3967	59.98	59.56	0.00	0
5/12/01	20:09:10	752	3967	59.98	59.56	0.00	0
5/12/01	20:09:11	253	3967	59.98	59.56	0.00	0
5/12/01	20:09:11	753	3967	59.98	59.56	0.00	0
5/12/01	20:09:12	254	3967	59.98	59.50	0.00	0
5/12/01	20:09:12	755	3967	59.98	59.50	0.00	0
5/12/01	20:09:13	256	3935	59.98	59.68	0.00	0
5/12/01	20:09:13	756	3935	59.98	59.68	0.00	0
5/12/01	20:09:14	257	3935	59.99	60.54	0.00	0
5/12/01	20:09:14	758	3935	59.99	60.54	26.00	0
5/12/01	20:09:15	258	3935	59.99	60.54	26.00	0
5/12/01	20:09:15	759	3935	59.99	60.54	54.00	0
5/12/01	20:09:16	260	3935	59.99	60.37	54.00	0
5/12/01	20:09:16	761	3935	59.99	60.37	72.00	0
5/12/01	20:09:17	261	3935	59.99	60.37	72.00	0
5/12/01	20:09:17	762	3935	59.99	60.37	88.00	0
5/12/01	20:09:18	263	3934	59.99	60.04	88.00	0
5/12/01	20:09:18	763	3933	59.99	60.04	107.00	0
5/12/01	20:09:19	264	3933	59.98	60.02	107.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Degrees)	Close Breaker (Open/Close)
5/12/01	20:09:19	765	3933	59.98	60.02	115.00	0
5/12/01	20:09:20	266	3933	59.98	59.97	115.00	0
5/12/01	20:09:20	766	3933	59.98	59.97	117.00	0
5/12/01	20:09:21	267	3931	59.98	60.04	117.00	0
5/12/01	20:09:21	768	3931	59.98	60.04	124.00	0
5/12/01	20:09:22	268	3931	59.98	60.04	124.00	0
5/12/01	20:09:22	769	3931	59.98	60.03	118.00	0
5/12/01	20:09:23	270	3931	59.98	60.03	118.00	0
5/12/01	20:09:23	771	3931	59.98	59.96	117.00	0
5/12/01	20:09:24	281	3931	59.98	59.96	117.00	0
5/12/01	20:09:24	782	3931	60.01	59.97	112.00	0
5/12/01	20:09:25	283	3931	60.01	59.97	112.00	0
5/12/01	20:09:25	784	3931	60.01	59.96	108.00	0
5/12/01	20:09:26	284	3930	60.01	59.96	108.00	0
5/12/01	20:09:26	785	3930	60.01	59.99	104.00	0
5/12/01	20:09:27	286	3930	60.01	59.99	104.00	0
5/12/01	20:09:27	786	3930	60.01	59.97	97.00	0
5/12/01	20:09:28	287	3930	60.01	59.97	97.00	0
5/12/01	20:09:28	788	3930	60.01	59.96	91.00	0
5/12/01	20:09:29	289	3930	60.01	59.96	91.00	0
5/12/01	20:09:29	789	3930	59.99	59.95	83.00	0
5/12/01	20:09:30	290	3930	59.99	59.95	83.00	0
5/12/01	20:09:30	791	3930	59.99	59.93	74.00	0
5/12/01	20:09:31	291	3930	59.99	59.93	74.00	0
5/12/01	20:09:31	792	3930	59.99	59.94	69.00	0
5/12/01	20:09:32	293	3930	59.99	59.94	69.00	0
5/12/01	20:09:32	794	3930	59.99	59.94	61.00	0
5/12/01	20:09:33	294	3930	59.99	59.94	61.00	0
5/12/01	20:09:33	795	3930	59.99	59.99	56.00	0
5/12/01	20:09:34	296	3929	59.99	59.99	56.00	0
5/12/01	20:09:34	797	3929	60.01	59.95	46.00	0
5/12/01	20:09:35	297	3929	60.01	59.95	46.00	0
5/12/01	20:09:35	798	3929	60.01	59.96	35.00	0
5/12/01	20:09:36	299	3930	60.01	59.96	35.00	0
5/12/01	20:09:36	799	3930	60.01	59.96	25.00	0
5/12/01	20:09:37	300	3932	60.01	59.96	25.00	0
5/12/01	20:09:37	801	3932	60.01	59.93	21.00	0
5/12/01	20:09:38	302	3932	60.01	59.93	21.00	0
5/12/01	20:09:38	802	3932	60.01	59.94	19.00	0
5/12/01	20:09:39	303	3932	60.01	59.94	19.00	0
5/12/01	20:09:39	804	3932	59.93	59.90	19.00	0
5/12/01	20:09:40	304	3932	59.93	59.90	19.00	0
5/12/01	20:09:40	805	3932	59.93	59.98	18.00	0
5/12/01	20:09:41	306	3932	59.93	59.98	18.00	0
5/12/01	20:09:41	807	3931	59.93	59.97	18.00	0
5/12/01	20:09:42	307	3929	59.93	59.97	18.00	0
5/12/01	20:09:42	808	3929	59.93	59.99	18.00	0
5/12/01	20:09:43	309	3929	59.93	59.99	13.00	0
5/12/01	20:09:43	809	3929	59.93	60.00	13.00	0
5/12/01	20:09:44	310	3930	59.93	60.00	2.00	0
5/12/01	20:09:44	811	3930	59.97	59.98	2.00	0
5/12/01	20:09:45	312	3930	59.97	59.98	-4.00	0
5/12/01	20:09:45	812	3930	59.97	59.96	-4.00	0
5/12/01	20:09:46	313	3930	59.97	59.96	-9.00	0
5/12/01	20:09:46	814	3932	59.97	60.00	-9.00	0
5/12/01	20:09:47	315	3932	59.97	60.00	-12.00	0
5/12/01	20:09:47	815	3932	59.97	60.00	-12.00	0
5/12/01	20:09:48	316	3932	59.97	60.00	-13.00	0
5/12/01	20:09:48	817	3930	59.97	59.96	-13.00	0
5/12/01	20:09:49	317	3930	59.97	59.96	-17.00	0
5/12/01	20:09:49	818	3931	59.96	59.95	-17.00	0
5/12/01	20:09:50	319	3931	59.96	59.95	-22.00	0
5/12/01	20:09:50	820	3933	59.96	59.96	-22.00	0
5/12/01	20:09:51	320	3933	59.96	59.96	-25.00	0
5/12/01	20:09:51	821	3933	59.96	59.97	-25.00	0
5/12/01	20:09:52	322	3933	59.96	59.97	-22.00	0
5/12/01	20:09:52	822	3933	59.96	60.00	-22.00	0
5/12/01	20:09:53	323	3933	59.96	60.00	-19.00	0
5/12/01	20:09:53	824	3933	59.96	60.00	-19.00	0
5/12/01	20:09:54	325	3933	59.96	60.02	-17.00	0
5/12/01	20:09:54	825	3933	59.96	60.02	-17.00	0
5/12/01	20:09:55	326	3933	59.99	60.01	-14.00	0
5/12/01	20:09:55	827	3933	59.99	60.01	-14.00	0
5/12/01	20:09:56	327	3933	59.99	59.96	-11.00	0
5/12/01	20:09:56	828	3933	59.99	59.96	-11.00	0
5/12/01	20:09:57	329	3933	59.99	59.98	-10.00	0
5/12/01	20:09:57	830	3933	59.99	59.98	-10.00	0
5/12/01	20:09:58	330	3933	59.99	60.02	-10.00	0
5/12/01	20:09:58	831	3933	59.99	60.02	-7.00	0
5/12/01	20:09:59	332	3933	59.99	59.98	-7.00	0
5/12/01	20:09:59	833	3933	59.99	59.98	-3.00	1
5/12/01	20:10:00	333	3933	59.98	60.01	-3.00	1
5/12/01	20:10:00	834	3933	59.98	60.01	0.00	1
5/12/01	20:10:01	335	3933	59.98	60.01	0.00	1
5/12/01	20:10:01	835	0	59.98	60.01	3.00	1
5/12/01	20:10:02	336	0	59.98	60.01	3.00	0
5/12/01	20:10:02	837	0	59.98	60.01	0.00	0
5/12/01	20:10:03	338	0	59.98	59.96	0.00	0
5/12/01	20:10:03	838	0	59.98	59.96	0.00	0
5/12/01	20:10:04	339	0	59.98	56.47	0.00	0
5/12/01	20:10:04	840	0	59.98	56.47	0.00	0
5/12/01	20:10:05	340	0	59.98	50.86	0.00	0
5/12/01	20:10:05	841	0	59.98	50.86	0.00	0
5/12/01	20:10:06	342	0	59.98	44.58	0.00	0
5/12/01	20:10:06	843	0	59.98	44.58	0.00	0
5/12/01	20:10:07	343	0	59.98	0.00	0.00	0
5/12/01	20:10:07	844	0	59.98	0.00	0.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Degrees)	Close Breaker (Open/Close)
5/12/01	20:10:08	345	0	59.98	0.00	0.00	0
5/12/01	20:10:08	845	0	59.98	0.00	0.00	0
5/12/01	20:10:09	346	0	59.98	0.00	0.00	0
5/12/01	20:10:09	847	0	59.98	0.00	0.00	0
5/12/01	20:10:10	348	0	60.00	0.00	0.00	0
5/12/01	20:10:10	848	0	60.00	0.00	0.00	0
5/12/01	20:10:11	349	0	60.00	0.00	0.00	0
5/12/01	20:10:11	850	0	60.00	0.00	0.00	0
5/12/01	20:10:12	351	0	60.00	0.00	0.00	0
5/12/01	20:10:12	861	0	60.00	0.00	0.00	0
5/12/01	20:10:13	352	0	60.00	0.00	0.00	0
5/12/01	20:10:13	853	0	60.00	0.00	0.00	0
5/12/01	20:10:14	353	0	60.00	0.00	0.00	0
5/12/01	20:10:14	854	0	60.00	0.00	0.00	0
5/12/01	20:10:15	355	2511	60.00	0.00	0.00	0
5/12/01	20:10:15	856	3033	60.01	0.00	0.00	0
5/12/01	20:10:16	356	3739	60.01	0.00	0.00	0
5/12/01	20:10:16	857	3761	60.01	0.00	0.00	0
5/12/01	20:10:17	358	3761	60.01	0.00	0.00	0
5/12/01	20:10:17	858	3761	60.01	0.00	0.00	0
5/12/01	20:10:18	359	3761	60.01	0.00	0.00	0
5/12/01	20:10:18	860	3761	60.01	0.00	0.00	0
5/12/01	20:10:19	361	3761	60.01	0.00	0.00	0
5/12/01	20:10:19	861	3761	60.01	0.00	0.00	0
5/12/01	20:10:20	362	3761	60.01	0.00	0.00	0
5/12/01	20:10:20	863	3761	60.02	0.00	0.00	0
5/12/01	20:10:21	363	3761	60.02	0.00	0.00	0
5/12/01	20:10:21	864	3761	60.02	0.00	0.00	0
5/12/01	20:10:22	365	3761	60.02	0.00	0.00	0
5/12/01	20:10:22	866	3761	60.02	0.00	0.00	0
5/12/01	20:10:23	366	3761	60.02	0.00	0.00	0
5/12/01	20:10:23	867	3761	60.02	0.00	0.00	0
5/12/01	20:10:24	368	3761	60.02	0.00	0.00	0
5/12/01	20:10:24	869	3761	60.02	42.03	0.00	0
5/12/01	20:10:25	369	3761	60.02	42.03	0.00	0
5/12/01	20:10:25	870	3761	59.98	48.86	0.00	0
5/12/01	20:10:26	371	3761	59.98	48.86	0.00	0
5/12/01	20:10:26	871	3761	59.98	55.06	0.00	0
5/12/01	20:10:27	372	3761	59.98	55.06	0.00	0
5/12/01	20:10:27	873	3761	59.98	57.39	0.00	0
5/12/01	20:10:28	374	3761	59.98	57.39	0.00	0
5/12/01	20:10:28	874	3761	59.98	57.36	0.00	0
5/12/01	20:10:29	375	3761	59.98	57.36	0.00	0
5/12/01	20:10:29	876	3761	59.98	57.39	0.00	0
5/12/01	20:10:30	376	3793	59.98	57.39	0.00	0
5/12/01	20:10:30	877	3891	60.02	57.48	0.00	0
5/12/01	20:10:31	378	3891	60.02	57.48	0.00	0
5/12/01	20:10:31	879	3891	60.02	57.34	0.00	0
5/12/01	20:10:32	379	3891	60.02	57.34	0.00	0
5/12/01	20:10:32	880	3891	60.02	57.44	0.00	0
5/12/01	20:10:33	381	3891	60.02	57.44	0.00	0
5/12/01	20:10:33	881	3924	60.02	57.79	0.00	0
5/12/01	20:10:34	382	3924	60.02	57.79	0.00	0
5/12/01	20:10:34	883	3924	60.02	59.32	0.00	0
5/12/01	20:10:35	384	3924	60.02	59.32	47.00	0
5/12/01	20:10:35	884	3924	59.99	59.38	47.00	0
5/12/01	20:10:36	385	3924	59.99	59.38	6.00	0
5/12/01	20:10:36	886	3924	59.99	59.66	6.00	0
5/12/01	20:10:37	387	3924	59.99	59.66	-45.00	0
5/12/01	20:10:37	887	3924	59.99	59.83	-45.00	0
5/12/01	20:10:38	388	3924	59.99	59.83	-86.00	0
5/12/01	20:10:38	889	3924	59.99	59.86	-86.00	0
5/12/01	20:10:39	389	3933	59.99	59.86	-143.00	0
5/12/01	20:10:39	890	3937	59.99	59.84	-143.00	0
5/12/01	20:10:40	391	3937	59.99	59.84	-152.00	0
5/12/01	20:10:40	892	3937	60.07	59.86	-152.00	0
5/12/01	20:10:41	392	3937	60.07	59.86	-121.00	0
5/12/01	20:10:41	893	3937	60.07	60.10	-121.00	0
5/12/01	20:10:42	394	3936	60.07	60.10	-96.00	0
5/12/01	20:10:42	894	3936	60.07	60.08	-96.00	0
5/12/01	20:10:43	395	3936	60.07	60.08	-62.00	0
5/12/01	20:10:43	896	3936	60.07	60.06	-62.00	0
5/12/01	20:10:44	397	3936	60.07	60.06	-39.00	0
5/12/01	20:10:44	897	3936	60.07	60.05	-39.00	0
5/12/01	20:10:45	398	3936	60.07	60.05	-15.00	0
5/12/01	20:10:45	899	3936	60.07	60.05	-15.00	0
5/12/01	20:10:46	409	3936	59.98	60.03	9.00	0
5/12/01	20:10:46	900	3934	59.98	60.03	9.00	0
5/12/01	20:10:47	401	3932	59.98	60.06	27.00	0
5/12/01	20:10:47	902	3932	59.98	60.06	27.00	0
5/12/01	20:10:48	402	3932	59.98	60.08	30.00	0
5/12/01	20:10:48	903	3932	59.98	60.08	30.00	0
5/12/01	20:10:49	404	3932	59.98	60.05	29.00	0
5/12/01	20:10:49	905	3932	59.98	60.05	29.00	0
5/12/01	20:10:50	405	3932	60.02	59.98	31.00	0
5/12/01	20:10:50	906	3932	60.02	59.98	31.00	0
5/12/01	20:10:51	407	3931	60.02	59.99	31.00	0
5/12/01	20:10:51	907	3931	60.02	59.99	31.00	0
5/12/01	20:10:52	408	3929	60.02	59.99	31.00	0
5/12/01	20:10:52	909	3929	60.02	59.99	30.00	0
5/12/01	20:10:53	410	3929	60.02	59.98	30.00	0
5/12/01	20:10:53	910	3929	60.02	59.98	22.00	0
5/12/01	20:10:54	411	3929	60.02	59.96	22.00	0
5/12/01	20:10:54	912	3929	60.02	59.96	10.00	0
5/12/01	20:10:55	412	3930	59.98	59.98	10.00	0
5/12/01	20:10:55	913	3930	59.98	59.98	0.00	1
5/12/01	20:10:56	414	3932	59.98	60.01	0.00	1

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Degrees)	Close Breaker (Open/Close)
5/12/01	20:10:56	915	3932	59.98	60.01	-2.00	1
5/12/01	20:10:57	415	3932	59.98	59.92	-2.00	1
5/12/01	20:10:57	916	3932	59.98	59.92	-3.00	1
5/12/01	20:10:58	417	3932	59.98	59.98	-3.00	1
5/12/01	20:10:58	917	3932	59.98	59.98	0.00	1
5/12/01	20:10:59	418	3932	59.98	60.03	0.00	1
5/12/01	20:10:59	919	3932	59.98	60.03	0.00	1
5/12/01	20:11:00	420	3932	59.98	60.00	0.00	1
5/12/01	20:11:00	920	3932	59.98	60.00	0.00	1
5/12/01	20:11:01	421	0	59.98	60.01	0.00	1
5/12/01	20:11:01	922	0	59.98	60.01	0.00	0
5/12/01	20:11:02	423	0	59.98	59.93	0.00	0
5/12/01	20:11:02	923	0	59.98	59.93	0.00	0
5/12/01	20:11:03	424	0	59.98	60.00	0.00	0
5/12/01	20:11:03	925	0	59.98	60.00	0.00	0
5/12/01	20:11:04	425	0	59.98	54.60	0.00	0
5/12/01	20:11:04	926	0	59.98	54.60	0.00	0
5/12/01	20:11:05	427	0	60.01	48.31	0.00	0
5/12/01	20:11:05	928	0	60.01	48.31	0.00	0
5/12/01	20:11:06	428	0	60.01	48.31	0.00	0
5/12/01	20:11:06	969	0	60.01	48.31	0.00	0
5/12/01	20:11:07	430	0	60.01	42.00	0.00	0
5/12/01	20:11:07	930	0	60.01	42.00	0.00	0
5/12/01	20:11:08	431	0	60.01	42.00	0.00	0
5/12/01	20:11:08	932	0	60.01	0.00	0.00	0
5/12/01	20:11:09	433	0	60.01	0.00	0.00	0
5/12/01	20:11:09	933	0	60.01	0.00	0.00	0
5/12/01	20:11:10	434	0	60.01	0.00	0.00	0
5/12/01	20:11:10	935	0	59.99	0.00	0.00	0
5/12/01	20:11:11	435	0	59.99	0.00	0.00	0
5/12/01	20:11:11	936	0	59.99	0.00	0.00	0
5/12/01	20:11:12	437	0	59.99	0.00	0.00	0
5/12/01	20:11:12	938	0	59.99	0.00	0.00	0
5/12/01	20:11:13	438	0	59.99	0.00	0.00	0
5/12/01	20:11:13	939	0	59.99	0.00	0.00	0
5/12/01	20:11:14	440	0	59.99	0.00	0.00	0
5/12/01	20:11:14	941	0	59.99	0.00	0.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Degrees)	Close Breaker (Open/Close)
5/12/01	18:14:50	878	0	59.99	0.00	0.00	0
5/12/01	18:14:51	379	0	59.99	0.00	0.00	0
5/12/01	18:14:51	879	0	59.99	0.00	0.00	0
5/12/01	18:14:52	380	3000	59.99	0.00	0.00	0
5/12/01	18:14:52	881	3000	59.98	0.00	0.00	0
5/12/01	18:14:53	382	3000	59.98	0.00	0.00	0
5/12/01	18:14:53	892	3000	59.98	0.00	0.00	0
5/12/01	18:14:54	393	3000	59.98	0.00	0.00	0
5/12/01	18:14:54	894	3000	59.98	0.00	0.00	0
5/12/01	18:14:55	394	3001	59.98	0.00	0.00	0
5/12/01	18:14:55	895	3001	59.98	0.00	0.00	0
5/12/01	18:14:56	396	3000	59.98	0.00	0.00	0
5/12/01	18:14:56	897	3000	59.98	0.00	0.00	0
5/12/01	18:14:57	397	3000	59.98	0.00	0.00	0
5/12/01	18:14:57	898	3001	60.00	0.00	0.00	0
5/12/01	18:14:58	399	3001	60.00	0.00	0.00	0
5/12/01	18:14:58	899	3002	60.00	0.00	0.00	0
5/12/01	18:14:59	400	3740	60.00	0.00	0.00	0
5/12/01	18:14:59	901	4041	60.00	0.00	0.00	0
5/12/01	18:15:00	402	4095	60.00	0.00	0.00	0
5/12/01	18:15:00	902	4095	60.00	0.00	0.00	0
5/12/01	18:15:01	403	4095	60.00	0.00	0.00	0
5/12/01	18:15:01	904	4094	60.00	44.52	0.00	0
5/12/01	18:15:02	404	4057	60.00	44.52	0.00	0
5/12/01	18:15:02	905	4026	60.00	44.52	0.00	0
5/12/01	18:15:03	406	3972	60.00	44.52	0.00	0
5/12/01	18:15:03	907	3955	60.00	44.52	0.00	0
5/12/01	18:15:04	407	3958	60.00	57.46	0.00	0
5/12/01	18:15:04	908	3936	60.00	57.46	175.00	0
5/12/01	18:15:05	409	3935	60.00	62.14	175.00	0
5/12/01	18:15:05	910	3936	60.00	62.14	-166.00	0
5/12/01	18:15:06	410	3939	60.00	61.16	-166.00	0
5/12/01	18:15:06	911	3949	60.00	61.16	-140.00	0
5/12/01	18:15:07	412	3929	60.01	60.19	-140.00	0
5/12/01	18:15:07	912	3949	60.01	60.19	-140.00	0
5/12/01	18:15:08	413	3922	60.01	60.04	0.00	0
5/12/01	18:15:08	914	3925	60.01	60.04	0.00	0
5/12/01	18:15:09	415	3925	60.01	60.07	-51.00	0
5/12/01	18:15:09	915	3929	60.01	60.07	-51.00	0
5/12/01	18:15:10	416	3943	60.01	60.15	-98.00	0
5/12/01	18:15:10	917	3936	60.01	60.15	-98.00	0
5/12/01	18:15:11	417	3942	60.01	60.17	-90.00	0
5/12/01	18:15:11	918	3943	60.01	60.17	-90.00	0
5/12/01	18:15:12	419	3925	60.00	59.92	-53.00	0
5/12/01	18:15:12	920	3942	60.00	59.92	-53.00	0
5/12/01	18:15:13	420	3924	60.00	60.03	-12.00	0
5/12/01	18:15:13	921	3936	60.00	60.03	-12.00	0
5/12/01	18:15:14	422	3930	60.00	60.14	12.00	0
5/12/01	18:15:14	922	3933	60.00	60.14	12.00	0
5/12/01	18:15:15	423	3931	60.00	60.08	15.00	0
5/12/01	18:15:15	924	3931	60.00	60.08	15.00	0
5/12/01	18:15:16	425	3930	60.00	60.04	13.00	0
5/12/01	18:15:16	925	3934	60.00	60.04	13.00	0
5/12/01	18:15:17	426	3932	59.98	60.03	8.00	0
5/12/01	18:15:17	927	3930	59.98	60.03	8.00	0
5/12/01	18:15:18	428	3931	59.98	59.96	2.00	0
5/12/01	18:15:18	928	3931	59.98	59.96	2.00	1
5/12/01	18:15:19	429	3931	59.98	59.96	-2.00	1
5/12/01	18:15:19	930	3932	59.98	59.96	-2.00	1
5/12/01	18:15:20	430	3932	59.98	60.00	-3.00	1
5/12/01	18:15:20	931	3932	59.98	60.00	-3.00	1
5/12/01	18:15:21	432	3932	59.98	60.05	-3.00	1
5/12/01	18:15:21	933	3933	59.98	60.05	-3.00	1
5/12/01	18:15:22	433	0	59.96	59.97	0.00	1
5/12/01	18:15:22	934	0	59.96	59.97	0.00	0
5/12/01	18:15:23	435	0	59.96	59.97	0.00	0
5/12/01	18:15:23	935	0	59.96	59.97	0.00	0
5/12/01	18:15:24	436	0	59.96	60.06	0.00	0
5/12/01	18:15:24	937	0	59.96	60.06	0.00	0
5/12/01	18:15:25	438	0	59.96	57.68	0.00	0
5/12/01	18:15:25	938	0	59.96	57.68	0.00	0
5/12/01	18:15:26	439	0	59.96	51.31	0.00	0
5/12/01	18:15:26	940	0	59.96	51.31	0.00	0
5/12/01	18:15:27	440	0	60.00	45.68	0.00	0
5/12/01	18:15:27	941	0	60.00	45.68	0.00	0
5/12/01	18:15:28	442	0	60.00	0.00	0.00	0
5/12/01	18:15:28	943	0	60.00	0.00	0.00	0
5/12/01	18:15:29	443	0	60.00	0.00	0.00	0
5/12/01	18:15:29	944	0	60.00	0.00	0.00	0
5/12/01	18:15:30	445	0	60.00	0.00	0.00	0
5/12/01	18:15:30	946	0	60.00	0.00	0.00	0
5/12/01	18:15:31	446	0	60.00	0.00	0.00	0
5/12/01	18:15:31	947	0	60.00	0.00	0.00	0
5/12/01	18:15:32	448	0	60.00	0.00	0.00	0
5/12/01	18:15:32	948	0	60.00	0.00	0.00	0
5/12/01	18:15:33	449	0	60.00	0.00	0.00	0
5/12/01	18:15:33	950	0	60.00	0.00	0.00	0
5/12/01	18:15:34	451	0	60.00	0.00	0.00	0
5/12/01	18:15:34	951	0	60.00	0.00	0.00	0
5/12/01	18:15:35	452	0	60.00	0.00	0.00	0
5/12/01	18:15:35	953	0	60.00	0.00	0.00	0
5/12/01	18:15:36	453	0	60.00	0.00	0.00	0
5/12/01	18:15:36	954	0	60.00	0.00	0.00	0
5/12/01	18:15:37	455	0	60.00	0.00	0.00	0
5/12/01	18:15:37	956	0	60.00	0.00	0.00	0
5/12/01	18:15:38	456	0	60.00	0.00	0.00	0
5/12/01	18:15:38	957	0	60.00	0.00	0.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Degrees)	Close Breaker (Open/Close)
5/12/01	18:15:39	458	3000	60.00	0.00	0.00	0
5/12/01	18:15:39	958	3000	60.00	0.00	0.00	0
5/12/01	18:15:40	459	3000	60.00	0.00	0.00	0
5/12/01	18:15:40	960	3001	60.00	0.00	0.00	0
5/12/01	18:15:41	461	3001	60.00	0.00	0.00	0
5/12/01	18:15:41	961	3001	60.00	0.00	0.00	0
5/12/01	18:15:42	462	3001	60.00	0.00	0.00	0
5/12/01	18:15:42	963	3001	60.00	0.00	0.00	0
5/12/01	18:15:43	464	3001	60.00	0.00	0.00	0
5/12/01	18:15:43	964	3001	60.00	0.00	0.00	0
5/12/01	18:15:44	465	3002	60.00	0.00	0.00	0
5/12/01	18:15:44	966	3002	60.00	0.00	0.00	0
5/12/01	18:15:45	466	3002	60.00	0.00	0.00	0
5/12/01	18:15:45	967	3358	60.00	0.00	0.00	0
5/12/01	18:15:46	468	3860	60.00	0.00	0.00	0
5/12/01	18:15:46	969	4087	60.00	0.00	0.00	0
5/12/01	18:15:47	469	4095	60.00	0.00	0.00	0
5/12/01	18:15:47	970	4095	59.93	0.00	0.00	0
5/12/01	18:15:48	471	4095	59.93	0.00	0.00	0
5/12/01	18:15:48	971	4088	59.93	40.11	0.00	0
5/12/01	18:15:49	472	4037	59.93	40.11	0.00	0
5/12/01	18:15:49	973	4001	59.93	47.56	0.00	0
5/12/01	18:15:50	474	3967	59.93	47.56	0.00	0
5/12/01	18:15:50	974	3955	59.93	54.36	0.00	0
5/12/01	18:15:51	475	3947	59.93	54.36	0.00	0
5/12/01	18:15:51	976	3939	59.93	61.71	0.00	0
5/12/01	18:15:52	476	3936	59.93	61.71	116.00	0
5/12/01	18:15:52	977	3937	59.99	60.57	116.00	0
5/12/01	18:15:53	478	3933	59.99	60.57	145.00	0
5/12/01	18:15:53	979	3929	59.99	60.26	145.00	0
5/12/01	18:15:54	479	3928	59.99	60.26	164.00	0
5/12/01	18:15:54	980	3915	59.99	60.07	164.00	0
5/12/01	18:15:55	481	3937	59.99	60.07	121.00	0
5/12/01	18:15:55	982	3924	59.99	60.07	121.00	0
5/12/01	18:15:56	482	3916	59.99	60.07	55.00	0
5/12/01	18:15:56	983	3924	59.99	59.88	55.00	0
5/12/01	18:15:57	484	3931	59.99	59.88	-2.00	0
5/12/01	18:15:57	984	3928	60.00	59.84	-2.00	0
5/12/01	18:15:58	485	3935	60.00	59.84	-23.00	0
5/12/01	18:15:58	986	3933	60.00	59.79	-23.00	0
5/12/01	18:15:59	487	3935	60.00	59.79	-27.00	0
5/12/01	18:15:59	987	3933	60.00	59.91	-27.00	0
5/12/01	18:16:00	488	3935	60.00	59.91	-16.00	0
5/12/01	18:16:00	989	3935	60.00	60.00	-16.00	0
5/12/01	18:16:01	489	3932	60.00	60.00	-6.00	0
5/12/01	18:16:01	990	3930	60.00	60.01	-6.00	0
5/12/01	18:16:02	491	3933	60.00	60.01	2.00	0
5/12/01	18:16:02	992	3930	60.00	60.08	2.00	0
5/12/01	18:16:03	492	3932	60.00	60.08	6.00	0
5/12/01	18:16:03	993	3931	60.00	60.02	6.00	0
5/12/01	18:16:04	494	3931	60.00	60.02	3.00	1
5/12/01	18:16:04	994	3931	60.00	60.06	3.00	1
5/12/01	18:16:05	495	3932	60.00	60.06	1.00	1
5/12/01	18:16:05	996	3932	60.00	59.98	1.00	1
5/12/01	18:16:06	497	3932	60.00	59.98	0.00	1
5/12/01	18:16:06	997	0	60.00	59.99	0.00	1
5/12/01	18:16:07	498	0	60.00	59.99	0.00	0
5/12/01	18:16:07	999	0	59.99	59.97	0.00	0
5/12/01	18:16:08	500	0	59.99	59.97	0.00	0
5/12/01	18:16:09	0	0	59.99	59.98	0.00	0
5/12/01	18:16:09	501	0	59.99	59.98	0.00	0
5/12/01	18:16:10	2	0	59.99	59.98	0.00	0
5/12/01	18:16:10	502	0	59.99	56.70	0.00	0
5/12/01	18:16:11	3	0	59.99	56.70	0.00	0
5/12/01	18:16:11	504	0	59.99	51.02	0.00	0
5/12/01	18:16:12	5	0	59.99	51.02	0.00	0
5/12/01	18:16:12	505	0	59.99	44.64	0.00	0
5/12/01	18:16:13	6	0	59.99	44.64	0.00	0
5/12/01	18:16:13	507	0	59.96	0.00	0.00	0
5/12/01	18:16:14	7	0	59.96	0.00	0.00	0
5/12/01	18:16:14	508	0	59.96	0.00	0.00	0
5/12/01	18:16:15	9	0	59.96	0.00	0.00	0
5/12/01	18:16:15	510	0	59.96	0.00	0.00	0
5/12/01	18:16:16	10	0	59.96	0.00	0.00	0
5/12/01	18:16:16	511	0	59.96	0.00	0.00	0
5/12/01	18:16:17	12	0	59.96	0.00	0.00	0
5/12/01	18:16:17	512	0	59.96	0.00	0.00	0
5/12/01	18:16:18	13	0	59.96	0.00	0.00	0
5/12/01	18:16:18	514	0	59.99	0.00	0.00	0
5/12/01	18:16:19	15	0	59.99	0.00	0.00	0
5/12/01	18:16:19	515	0	59.99	0.00	0.00	0
5/12/01	18:16:20	16	0	59.99	0.00	0.00	0
5/12/01	18:16:20	517	0	59.99	0.00	0.00	0
5/12/01	18:16:21	18	0	59.99	0.00	0.00	0
5/12/01	18:16:21	518	0	59.99	0.00	0.00	0
5/12/01	18:16:22	19	0	59.99	0.00	0.00	0
5/12/01	18:16:22	520	0	59.99	0.00	0.00	0
5/12/01	18:16:23	20	0	59.99	0.00	0.00	0
5/12/01	18:16:23	521	0	59.98	0.00	0.00	0
5/12/01	18:16:24	22	0	59.98	0.00	0.00	0
5/12/01	18:16:24	523	0	59.98	0.00	0.00	0
5/12/01	18:16:25	23	0	59.98	0.00	0.00	0
5/12/01	18:16:25	524	0	59.98	0.00	0.00	0
5/12/01	18:16:26	25	3000	59.98	0.00	0.00	0
5/12/01	18:16:26	525	3000	59.98	0.00	0.00	0
5/12/01	18:16:27	26	3000	59.98	0.00	0.00	0
5/12/01	18:16:27	537	3000	60.01	0.00	0.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Degrees)	Close Breaker (Open/Close)
5/12/01	18:16:28	28	3001	60.01	0.00	0.00	0
5/12/01	18:16:28	528	3000	60.01	0.00	0.00	0
5/12/01	18:16:29	29	3001	60.01	0.00	0.00	0
5/12/01	18:16:29	530	3001	60.01	0.00	0.00	0
5/12/01	18:16:30	30	3001	60.01	0.00	0.00	0
5/12/01	18:16:30	531	3002	60.01	0.00	0.00	0
5/12/01	18:16:31	32	3002	60.01	0.00	0.00	0
5/12/01	18:16:31	533	3002	60.01	0.00	0.00	0
5/12/01	18:16:32	33	3001	60.01	0.00	0.00	0
5/12/01	18:16:32	534	3001	60.01	0.00	0.00	0
5/12/01	18:16:33	35	3536	60.01	0.00	0.00	0
5/12/01	18:16:33	536	4027	60.01	0.00	0.00	0
5/12/01	18:16:34	36	4090	60.01	0.00	0.00	0
5/12/01	18:16:34	537	4095	60.01	0.00	0.00	0
5/12/01	18:16:35	38	4095	60.01	0.00	0.00	0
5/12/01	18:16:35	538	4095	60.01	41.07	0.00	0
5/12/01	18:16:36	39	4053	60.01	41.07	0.00	0
5/12/01	18:16:36	540	4012	60.01	47.29	0.00	0
5/12/01	18:16:37	41	3976	60.01	47.29	0.00	0
5/12/01	18:16:37	541	3949	59.94	54.14	0.00	0
5/12/01	18:16:38	42	3936	59.94	54.14	0.00	0
5/12/01	18:16:38	543	3935	59.94	60.29	0.00	0
5/12/01	18:16:39	43	3933	59.94	60.29	124.00	0
5/12/01	18:16:39	544	3933	59.94	60.93	124.00	0
5/12/01	18:16:40	45	3931	59.94	60.93	132.00	0
5/12/01	18:16:40	546	3924	59.94	60.93	132.00	0
5/12/01	18:16:41	46	3928	59.94	60.08	129.00	0
5/12/01	18:16:41	547	3915	59.94	60.08	129.00	0
5/12/01	18:16:42	48	3916	59.94	59.96	79.00	0
5/12/01	18:16:42	548	3928	59.94	59.96	79.00	0
5/12/01	18:16:43	49	3920	59.99	59.97	23.00	0
5/12/01	18:16:43	550	3935	59.99	59.97	23.00	0
5/12/01	18:16:44	51	3929	59.99	59.86	-11.00	0
5/12/01	18:16:44	551	3931	59.99	59.86	-11.00	0
5/12/01	18:16:45	52	3934	59.99	59.84	-22.00	0
5/12/01	18:16:45	553	3932	59.99	59.84	-22.00	0
5/12/01	18:16:46	54	3931	59.99	59.84	-20.00	0
5/12/01	18:16:46	554	3934	59.99	59.84	-20.00	0
5/12/01	18:16:47	55	3929	59.99	59.91	-9.00	0
5/12/01	18:16:47	556	3934	59.99	59.91	-9.00	0
5/12/01	18:16:48	56	3933	59.99	59.96	-1.00	0
5/12/01	18:16:48	557	3933	59.99	59.96	-1.00	1
5/12/01	18:16:49	58	3931	59.99	60.00	1.00	1
5/12/01	18:16:49	559	3933	59.99	60.00	1.00	1
5/12/01	18:16:50	59	3933	59.99	60.03	2.00	1
5/12/01	18:16:50	560	3931	59.99	60.03	2.00	0
5/12/01	18:16:51	61	3932	59.99	60.00	2.00	0
5/12/01	18:16:51	561	3932	59.99	60.00	3.00	1
5/12/01	18:16:52	62	0	59.99	60.00	3.00	1
5/12/01	18:16:52	563	0	59.99	60.00	2.00	0
5/12/01	18:16:53	64	0	60.02	60.01	2.00	0
5/12/01	18:16:53	564	0	60.02	60.01	0.00	0
5/12/01	18:16:54	65	0	60.02	60.02	0.00	0
5/12/01	18:16:54	566	0	60.02	60.02	0.00	0
5/12/01	18:16:55	66	0	60.02	59.81	0.00	0
5/12/01	18:16:55	567	0	60.02	59.81	0.00	0
5/12/01	18:16:56	68	0	60.02	59.81	0.00	0
5/12/01	18:16:56	569	0	60.02	54.22	0.00	0
5/12/01	18:16:57	69	0	60.02	54.22	0.00	0
5/12/01	18:16:57	570	0	60.02	47.89	0.00	0
5/12/01	18:16:58	71	0	60.02	47.89	0.00	0
5/12/01	18:16:58	572	0	60.00	41.61	0.00	0
5/12/01	18:16:59	72	0	60.00	41.61	0.00	0
5/12/01	18:16:59	573	0	60.00	0.00	0.00	0
5/12/01	18:17:00	74	0	60.00	0.00	0.00	0
5/12/01	18:17:00	574	0	60.00	0.00	0.00	0
5/12/01	18:17:01	75	0	60.00	0.00	0.00	0
5/12/01	18:17:01	576	0	60.00	0.00	0.00	0
5/12/01	18:17:02	77	0	60.00	0.00	0.00	0
5/12/01	18:17:02	577	0	60.00	0.00	0.00	0
5/12/01	18:17:03	78	0	60.00	0.00	0.00	0
5/12/01	18:17:03	579	0	60.01	0.00	0.00	0
5/12/01	18:17:04	79	0	60.01	0.00	0.00	0
5/12/01	18:17:04	580	0	60.01	0.00	0.00	0
5/12/01	18:17:05	81	0	60.01	0.00	0.00	0
5/12/01	18:17:05	582	0	60.01	0.00	0.00	0
5/12/01	18:17:06	82	0	60.01	0.00	0.00	0
5/12/01	18:17:06	583	0	60.01	0.00	0.00	0
5/12/01	18:17:07	84	0	60.01	0.00	0.00	0
5/12/01	18:17:07	584	0	60.01	0.00	0.00	0
5/12/01	18:17:08	85	0	60.01	0.00	0.00	0
5/12/01	18:17:08	586	0	59.97	0.00	0.00	0
5/12/01	18:17:09	87	0	59.97	0.00	0.00	0
5/12/01	18:17:09	587	0	59.97	0.00	0.00	0
5/12/01	18:17:10	88	0	59.97	0.00	0.00	0
5/12/01	18:17:10	589	0	59.97	0.00	0.00	0
5/12/01	18:17:11	90	0	59.97	0.00	0.00	0
5/12/01	18:17:11	590	0	59.97	0.00	0.00	0
5/12/01	18:17:12	91	0	59.97	0.00	0.00	0
5/12/01	18:17:12	592	3000	59.97	0.00	0.00	0
5/12/01	18:17:13	92	3000	59.97	0.00	0.00	0
5/12/01	18:17:13	593	3000	59.97	0.00	0.00	0
5/12/01	18:17:14	94	3000	59.97	0.00	0.00	0
5/12/01	18:17:14	595	3000	59.97	0.00	0.00	0
5/12/01	18:17:15	95	2999	59.97	0.00	0.00	0
5/12/01	18:17:15	596	2999	59.97	0.00	0.00	0
5/12/01	18:17:16	97	2999	59.97	0.00	0.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Degrees)	Close Breaker (Open/Close)
5/12/01	18:17:16	597	2999	59.97	0.00	0.00	0
5/12/01	18:17:17	98	2999	59.97	0.00	0.00	0
5/12/01	18:17:17	599	2999	59.97	0.00	0.00	0
5/12/01	18:17:18	100	2999	59.97	0.00	0.00	0
5/12/01	18:17:18	600	3000	60.00	0.00	0.00	0
5/12/01	18:17:19	101	3000	60.00	0.00	0.00	0
5/12/01	18:17:19	602	3546	60.00	0.00	0.00	0
5/12/01	18:17:20	102	3853	60.00	0.00	0.00	0
5/12/01	18:17:20	603	4095	60.00	0.00	0.00	0
5/12/01	18:17:21	104	4095	60.00	0.00	0.00	0
5/12/01	18:17:21	605	4095	60.00	0.00	0.00	0
5/12/01	18:17:22	105	4095	60.00	0.00	0.00	0
5/12/01	18:17:22	606	4074	60.00	42.00	0.00	0
5/12/01	18:17:23	107	4014	60.00	42.00	0.00	0
5/12/01	18:17:23	608	3989	59.98	48.83	0.00	0
5/12/01	18:17:24	108	3966	59.98	48.83	0.00	0
5/12/01	18:17:24	609	3941	59.98	61.80	0.00	0
5/12/01	18:17:25	110	3924	59.98	61.80	0.00	0
5/12/01	18:17:25	610	3919	59.98	61.14	0.00	0
5/12/01	18:17:26	111	3914	59.98	61.14	-56.00	0
5/12/01	18:17:26	612	3909	59.98	60.80	-56.00	0
5/12/01	18:17:27	113	3914	59.98	60.80	-49.00	0
5/12/01	18:17:27	613	3919	59.98	60.43	-49.00	0
5/12/01	18:17:28	114	3924	59.98	60.43	-124.00	0
5/12/01	18:17:28	615	3927	60.00	60.06	-124.00	0
5/12/01	18:17:29	115	3928	60.00	60.06	-171.00	0
5/12/01	18:17:29	616	4003	60.00	60.06	-171.00	0
5/12/01	18:17:30	117	3909	60.00	59.69	0.00	0
5/12/01	18:17:30	618	3921	60.00	59.69	0.00	0
5/12/01	18:17:31	118	3928	60.00	59.86	-142.00	0
5/12/01	18:17:31	619	3931	60.00	59.86	-142.00	0
5/12/01	18:17:32	120	3931	60.00	59.90	-166.00	0
5/12/01	18:17:32	620	3939	60.00	59.90	-166.00	0
5/12/01	18:17:33	121	3934	59.96	60.65	-164.00	0
5/12/01	18:17:33	622	3924	59.96	60.65	-164.00	0
5/12/01	18:17:34	123	3925	59.96	59.91	-118.00	0
5/12/01	18:17:34	623	3926	59.96	59.91	-118.00	0
5/12/01	18:17:35	124	3931	59.96	59.93	-118.00	0
5/12/01	18:17:35	625	3926	59.96	59.93	-151.00	0
5/12/01	18:17:36	126	3935	59.96	60.12	-151.00	0
5/12/01	18:17:36	626	3939	59.96	60.12	-167.00	0
5/12/01	18:17:37	127	3932	59.96	59.89	-167.00	0
5/12/01	18:17:37	628	3952	59.96	59.89	-128.00	0
5/12/01	18:17:38	128	3949	59.98	59.96	-128.00	0
5/12/01	18:17:38	629	3936	59.98	59.96	-56.00	0
5/12/01	18:17:39	130	3926	59.98	60.09	-56.00	0
5/12/01	18:17:39	631	3934	59.98	60.09	-2.00	0
5/12/01	18:17:40	131	3935	59.98	60.19	-2.00	0
5/12/01	18:17:40	632	3930	59.98	60.19	26.00	0
5/12/01	18:17:41	133	3930	59.98	60.17	26.00	0
5/12/01	18:17:41	633	3929	59.98	60.17	27.00	0
5/12/01	18:17:42	134	3928	59.98	60.12	27.00	0
5/12/01	18:17:42	635	3931	59.98	60.12	15.00	0
5/12/01	18:17:43	136	3929	59.97	60.04	15.00	0
5/12/01	18:17:43	636	3930	59.97	60.04	3.00	0
5/12/01	18:17:44	137	3930	59.97	59.90	3.00	0
5/12/01	18:17:44	638	3931	59.97	59.90	-1.00	0
5/12/01	18:17:45	138	3931	59.97	59.96	-1.00	0
5/12/01	18:17:45	639	3934	59.97	59.96	-6.00	0
5/12/01	18:17:46	140	3933	59.97	59.94	-6.00	0
5/12/01	18:17:46	641	3933	59.97	59.94	-7.00	0
5/12/01	18:17:47	141	3936	59.97	60.01	-7.00	0
5/12/01	18:17:47	642	3933	59.97	60.01	-3.00	1
5/12/01	18:17:48	143	3933	60.02	60.02	-3.00	1
5/12/01	18:17:48	644	0	60.02	60.02	0.00	0
5/12/01	18:17:49	144	0	60.02	60.00	0.00	0
5/12/01	18:17:49	645	0	60.02	60.00	0.00	0
5/12/01	18:17:50	146	0	60.02	59.96	0.00	0
5/12/01	18:17:50	646	0	60.02	59.96	0.00	0
5/12/01	18:17:51	147	0	60.02	59.66	0.00	0
5/12/01	18:17:51	648	0	60.02	59.66	0.00	0
5/12/01	18:17:52	149	0	60.02	59.66	0.00	0
5/12/01	18:17:52	649	0	60.02	53.29	0.00	0
5/12/01	18:17:53	150	0	60.02	53.29	0.00	0
5/12/01	18:17:53	651	0	59.97	47.60	0.00	0
5/12/01	18:17:54	151	0	59.97	47.60	0.00	0
5/12/01	18:17:54	652	0	59.97	40.70	0.00	0
5/12/01	18:17:55	153	0	59.97	40.70	0.00	0
5/12/01	18:17:55	654	0	59.97	0.00	0.00	0
5/12/01	18:17:56	154	0	59.97	0.00	0.00	0
5/12/01	18:17:56	655	0	59.97	0.00	0.00	0
5/12/01	18:17:57	156	0	59.97	0.00	0.00	0
5/12/01	18:17:57	656	0	59.97	0.00	0.00	0
5/12/01	18:17:58	157	0	59.97	0.00	0.00	0
5/12/01	18:17:58	658	0	59.95	0.00	0.00	0
5/12/01	18:17:59	159	0	59.95	0.00	0.00	0
5/12/01	18:17:59	659	0	59.95	0.00	0.00	0
5/12/01	18:18:00	160	0	59.95	0.00	0.00	0
5/12/01	18:18:00	661	0	59.95	0.00	0.00	0
5/12/01	18:18:01	162	0	59.95	0.00	0.00	0
5/12/01	18:18:01	662	0	59.95	0.00	0.00	0
5/12/01	18:18:02	163	0	59.95	0.00	0.00	0
5/12/01	18:18:02	664	0	59.95	0.00	0.00	0
5/12/01	18:18:03	164	0	59.95	0.00	0.00	0
5/12/01	18:18:03	665	0	59.97	0.00	0.00	0
5/12/01	18:18:04	166	0	59.97	0.00	0.00	0
5/12/01	18:18:04	667	0	59.97	0.00	0.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Degrees)	Close Breaker (Open/Close)
5/12/01	18:18:05	167	0	59.97	0.00	0.00	0
5/12/01	18:18:05	668	0	59.97	0.00	0.00	0
5/12/01	18:18:06	169	0	59.97	0.00	0.00	0
5/12/01	18:18:06	669	0	59.97	0.00	0.00	0
5/12/01	18:18:07	170	3000	59.97	0.00	0.00	0
5/12/01	18:18:07	671	3000	59.97	0.00	0.00	0
5/12/01	18:18:08	172	3001	59.97	0.00	0.00	0
5/12/01	18:18:08	672	2999	60.00	0.00	0.00	0
5/12/01	18:18:09	173	2999	60.00	0.00	0.00	0
5/12/01	18:18:09	684	3000	60.00	0.00	0.00	0
5/12/01	18:18:10	174	3000	60.00	0.00	0.00	0
5/12/01	18:18:10	675	3000	60.00	0.00	0.00	0
5/12/01	18:18:11	176	3001	60.00	0.00	0.00	0
5/12/01	18:18:11	677	3001	60.00	0.00	0.00	0
5/12/01	18:18:12	177	3001	60.00	0.00	0.00	0
5/12/01	18:18:12	678	3001	60.00	0.00	0.00	0
5/12/01	18:18:13	179	3001	60.00	0.00	0.00	0
5/12/01	18:18:13	680	3312	60.02	0.00	0.00	0
5/12/01	18:18:14	180	3676	60.02	0.00	0.00	0
5/12/01	18:18:14	681	3958	60.02	0.00	0.00	0
5/12/01	18:18:15	182	4095	60.02	0.00	0.00	0
5/12/01	18:18:15	682	4095	60.02	0.00	0.00	0
5/12/01	18:18:16	183	4095	60.02	0.00	0.00	0
5/12/01	18:18:16	684	4081	60.02	40.18	0.00	0
5/12/01	18:18:17	185	4029	60.02	40.18	0.00	0
5/12/01	18:18:17	685	3996	60.02	53.73	0.00	0
5/12/01	18:18:18	186	3977	60.02	53.73	0.00	0
5/12/01	18:18:18	687	3951	59.99	60.04	0.00	0
5/12/01	18:18:19	187	3934	59.99	60.04	0.00	0
5/12/01	18:18:19	688	3937	59.99	61.21	0.00	0
5/12/01	18:18:20	189	3935	59.99	61.21	78.00	0
5/12/01	18:18:20	690	3934	59.99	60.89	78.00	0
5/12/01	18:18:21	190	3933	59.99	60.89	96.00	0
5/12/01	18:18:21	691	3925	59.99	60.06	96.00	0
5/12/01	18:18:22	192	3922	59.99	60.06	92.00	0
5/12/01	18:18:22	692	3926	59.99	60.09	92.00	0
5/12/01	18:18:23	193	3941	59.99	60.09	60.00	0
5/12/01	18:18:23	694	3924	59.99	59.98	60.00	0
5/12/01	18:18:24	195	3924	59.99	59.98	18.00	0
5/12/01	18:18:24	695	3930	59.99	59.85	18.00	0
5/12/01	18:18:25	196	3928	59.99	59.85	-3.00	0
5/12/01	18:18:25	697	3931	59.99	59.85	-3.00	0
5/12/01	18:18:26	198	3932	59.99	59.85	-16.00	0
5/12/01	18:18:26	698	3933	59.99	59.88	-16.00	0
5/12/01	18:18:27	199	3933	59.99	59.88	-15.00	0
5/12/01	18:18:27	700	3934	59.99	59.91	-15.00	0
5/12/01	18:18:28	200	3933	59.99	59.91	-8.00	0
5/12/01	18:18:28	701	3933	59.97	59.95	-8.00	0
5/12/01	18:18:29	202	3933	59.97	59.95	-1.00	0
5/12/01	18:18:29	703	3934	59.97	60.03	-1.00	0
5/12/01	18:18:30	203	3932	59.97	60.03	0.00	1
5/12/01	18:18:30	704	3932	59.97	60.03	0.00	1
5/12/01	18:18:31	205	3932	59.97	59.97	0.00	1
5/12/01	18:18:31	705	3932	59.97	59.97	0.00	1
5/12/01	18:18:32	206	3932	59.97	60.01	0.00	1
5/12/01	18:18:32	707	3932	59.97	60.01	0.00	1
5/12/01	18:18:33	208	3933	59.97	59.97	-1.00	1
5/12/01	18:18:33	708	0	59.97	59.97	-1.00	1
5/12/01	18:18:34	209	0	59.99	59.97	0.00	1
5/12/01	18:18:34	710	0	59.99	59.97	0.00	1
5/12/01	18:18:35	210	0	59.99	59.99	0.00	0
5/12/01	18:18:35	711	0	59.99	59.99	0.00	0
5/12/01	18:18:36	212	0	59.99	59.98	0.00	0
5/12/01	18:18:36	713	0	59.99	59.98	0.00	0
5/12/01	18:18:37	213	0	59.99	57.26	0.00	0
5/12/01	18:18:37	714	0	59.99	57.26	0.00	0
5/12/01	18:18:38	215	0	59.99	51.53	0.00	0
5/12/01	18:18:38	716	0	59.99	51.53	0.00	0
5/12/01	18:18:39	216	0	59.98	45.28	0.00	0
5/12/01	18:18:39	717	0	59.98	45.28	0.00	0
5/12/01	18:18:40	218	0	59.98	0.00	0.00	0
5/12/01	18:18:40	718	0	59.98	0.00	0.00	0
5/12/01	18:18:41	219	0	59.98	0.00	0.00	0
5/12/01	18:18:41	720	0	59.98	0.00	0.00	0
5/12/01	18:18:42	221	0	59.98	0.00	0.00	0
5/12/01	18:18:42	721	0	59.98	0.00	0.00	0
5/12/01	18:18:43	222	0	59.98	0.00	0.00	0
5/12/01	18:18:43	723	0	59.98	0.00	0.00	0
5/12/01	18:18:44	223	0	60.00	0.00	0.00	0
5/12/01	18:18:44	724	0	60.00	0.00	0.00	0
5/12/01	18:18:45	225	0	60.00	0.00	0.00	0
5/12/01	18:18:45	726	0	60.00	0.00	0.00	0
5/12/01	18:18:46	226	0	60.00	0.00	0.00	0
5/12/01	18:18:46	727	0	60.00	0.00	0.00	0
5/12/01	18:18:47	228	0	60.00	0.00	0.00	0
5/12/01	18:18:47	728	0	60.00	0.00	0.00	0
5/12/01	18:18:48	229	0	60.00	0.00	0.00	0
5/12/01	18:18:48	730	0	60.00	0.00	0.00	0
5/12/01	18:18:49	231	0	59.99	0.00	0.00	0
5/12/01	18:18:49	731	0	59.99	0.00	0.00	0
5/12/01	18:18:50	232	0	59.99	0.00	0.00	0
5/12/01	18:18:50	733	0	59.99	0.00	0.00	0
5/12/01	18:18:51	234	0	59.99	0.00	0.00	0
5/12/01	18:18:51	734	0	59.99	0.00	0.00	0
5/12/01	18:18:52	235	0	59.99	0.00	0.00	0
5/12/01	18:18:52	736	0	59.99	0.00	0.00	0
5/12/01	18:18:53	236	0	59.99	0.00	0.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Degrees)	Close Breaker (Open/Close)
5/12/01	18:18:53	737	3000	59.99	0.00	0.00	0
5/12/01	18:18:54	238	3000	59.97	0.00	0.00	0
5/12/01	18:18:54	739	3000	59.97	0.00	0.00	0
5/12/01	18:18:55	239	3001	59.97	0.00	0.00	0
5/12/01	18:18:55	740	3001	59.97	0.00	0.00	0
5/12/01	18:18:56	241	3002	59.97	0.00	0.00	0
5/12/01	18:18:56	741	3003	59.97	0.00	0.00	0
5/12/01	18:18:57	242	3003	59.97	0.00	0.00	0
5/12/01	18:18:57	743	3004	59.97	0.00	0.00	0
5/12/01	18:18:58	244	3005	59.97	0.00	0.00	0
5/12/01	18:18:58	744	3006	59.97	0.00	0.00	0
5/12/01	18:18:59	245	3006	59.96	0.00	0.00	0
5/12/01	18:18:59	746	3007	59.96	0.00	0.00	0
5/12/01	18:19:00	246	3007	59.96	0.00	0.00	0
5/12/01	18:19:00	747	3548	59.96	0.00	0.00	0
5/12/01	18:19:01	248	3883	59.96	0.00	0.00	0
5/12/01	18:19:01	749	4095	59.96	0.00	0.00	0
5/12/01	18:19:02	249	4077	59.96	0.00	0.00	0
5/12/01	18:19:02	750	4095	59.96	0.00	0.00	0
5/12/01	18:19:03	251	4070	59.96	47.47	0.00	0
5/12/01	18:19:03	752	4070	59.96	47.47	0.00	0
5/12/01	18:19:04	252	4015	60.08	54.19	0.00	0
5/12/01	18:19:04	753	3986	60.08	54.19	0.00	0
5/12/01	18:19:05	254	3965	60.08	60.31	0.00	0
5/12/01	18:19:05	754	3938	60.08	60.31	0.00	0
5/12/01	18:19:06	255	3923	60.08	61.58	0.00	0
5/12/01	18:19:06	756	3910	60.08	61.58	0.00	0
5/12/01	18:19:07	257	3910	60.08	60.85	140.00	0
5/12/01	18:19:07	757	3923	60.08	60.85	140.00	0
5/12/01	18:19:08	258	3926	60.08	60.48	53.00	0
5/12/01	18:19:08	759	3927	60.08	60.48	53.00	0
5/12/01	18:19:09	259	3930	59.95	59.69	14.00	0
5/12/01	18:19:09	760	3932	59.95	59.69	14.00	0
5/12/01	18:19:10	261	3931	59.95	59.87	1.00	0
5/12/01	18:19:10	762	3931	59.95	59.87	1.00	1
5/12/01	18:19:11	262	3931	59.95	59.91	-1.00	1
5/12/01	18:19:11	763	3931	59.95	59.91	-1.00	1
5/12/01	18:19:12	264	3932	59.95	60.02	-2.00	1
5/12/01	18:19:12	764	3932	59.95	60.02	-2.00	1
5/12/01	18:19:13	265	3932	59.95	59.95	-4.00	1
5/12/01	18:19:13	766	3933	59.95	59.95	-4.00	1
5/12/01	18:19:14	267	3932	59.95	59.95	-4.00	1
5/12/01	18:19:14	767	0	60.01	59.97	-4.00	1
5/12/01	18:19:15	268	0	60.01	59.97	0.00	1
5/12/01	18:19:15	769	0	60.01	59.99	0.00	0
5/12/01	18:19:16	270	0	60.01	59.99	0.00	0
5/12/01	18:19:16	770	0	60.01	59.94	0.00	0
5/12/01	18:19:17	271	0	60.01	59.94	0.00	0
5/12/01	18:19:17	772	0	60.01	59.97	0.00	0
5/12/01	18:19:18	272	0	60.01	59.97	0.00	0
5/12/01	18:19:18	773	0	59.99	55.44	0.00	0
5/12/01	18:19:19	274	0	59.99	55.44	0.00	0
5/12/01	18:19:19	775	0	59.99	49.20	0.00	0
5/12/01	18:19:20	275	0	59.99	49.20	0.00	0
5/12/01	18:19:20	776	0	59.99	42.91	0.00	0
5/12/01	18:19:21	277	0	59.99	42.91	0.00	0
5/12/01	18:19:21	777	0	59.99	0.00	0.00	0
5/12/01	18:19:22	278	0	59.99	0.00	0.00	0
5/12/01	18:19:22	779	0	59.99	0.00	0.00	0
5/12/01	18:19:23	280	0	59.99	0.00	0.00	0
5/12/01	18:19:23	780	0	60.00	0.00	0.00	0
5/12/01	18:19:24	281	0	60.00	0.00	0.00	0
5/12/01	18:19:24	782	0	60.00	0.00	0.00	0
5/12/01	18:19:25	282	0	60.00	0.00	0.00	0
5/12/01	18:19:25	783	0	60.00	0.00	0.00	0
5/12/01	18:19:26	284	0	60.00	0.00	0.00	0
5/12/01	18:19:26	785	0	60.00	0.00	0.00	0
5/12/01	18:19:27	285	0	60.00	0.00	0.00	0
5/12/01	18:19:27	786	0	60.00	0.00	0.00	0
5/12/01	18:19:28	287	0	60.00	0.00	0.00	0
5/12/01	18:19:28	788	0	59.98	0.00	0.00	0
5/12/01	18:19:29	288	0	59.98	0.00	0.00	0
5/12/01	18:19:29	789	0	59.98	0.00	0.00	0
5/12/01	18:19:30	290	0	59.98	0.00	0.00	0
5/12/01	18:19:30	790	0	59.98	0.00	0.00	0
5/12/01	18:19:31	291	0	59.98	0.00	0.00	0
5/12/01	18:19:31	792	0	59.98	0.00	0.00	0
5/12/01	18:19:32	293	0	59.98	0.00	0.00	0
5/12/01	18:19:32	793	0	59.98	0.00	0.00	0
5/12/01	18:19:33	294	0	59.98	0.00	0.00	0
5/12/01	18:19:33	795	0	59.98	0.00	0.00	0
5/12/01	18:19:34	295	0	59.99	0.00	0.00	0
5/12/01	18:19:34	796	0	59.99	0.00	0.00	0
5/12/01	18:19:35	297	0	59.99	0.00	0.00	0
5/12/01	18:19:35	798	3000	59.99	0.00	0.00	0
5/12/01	18:19:36	298	3000	59.99	0.00	0.00	0
5/12/01	18:19:36	799	3000	59.99	0.00	0.00	0
5/12/01	18:19:37	300	3002	59.99	0.00	0.00	0
5/12/01	18:19:37	800	3002	59.99	0.00	0.00	0
5/12/01	18:19:38	301	3003	59.99	0.00	0.00	0
5/12/01	18:19:38	802	3003	59.99	0.00	0.00	0
5/12/01	18:19:39	303	3004	59.97	0.00	0.00	0
5/12/01	18:19:39	803	3004	59.97	0.00	0.00	0
5/12/01	18:19:40	304	3004	59.97	0.00	0.00	0
5/12/01	18:19:40	805	3003	59.97	0.00	0.00	0
5/12/01	18:19:41	306	3005	59.97	0.00	0.00	0
5/12/01	18:19:41	806	3006	59.97	0.00	0.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Degrees)	Close Breaker (Open/Close)
5/12/01	18:19:42	307	3326	59.97	0.00	0.00	0
5/12/01	18:19:42	808	3822	59.97	0.00	0.00	0
5/12/01	18:19:43	308	4027	59.97	0.00	0.00	0
5/12/01	18:19:43	809	4095	59.97	0.00	0.00	0
5/12/01	18:19:44	310	4071	59.93	0.00	0.00	0
5/12/01	18:19:44	811	4095	59.93	0.00	0.00	0
5/12/01	18:19:45	311	4054	59.93	43.93	0.00	0
5/12/01	18:19:45	812	4022	59.93	43.93	0.00	0
5/12/01	18:19:46	313	4006	59.93	48.93	0.00	0
5/12/01	18:19:46	813	3959	59.93	48.93	0.00	0
5/12/01	18:19:47	314	3943	59.93	55.11	0.00	0
5/12/01	18:19:47	815	3923	59.93	55.11	0.00	0
5/12/01	18:19:48	316	3915	59.93	61.14	0.00	0
5/12/01	18:19:48	816	3910	59.93	61.14	177.00	0
5/12/01	18:19:49	317	3909	60.00	60.78	177.00	0
5/12/01	18:19:49	818	3918	60.00	60.78	0.00	0
5/12/01	18:19:50	318	3922	60.00	60.47	0.00	0
5/12/01	18:19:50	829	3925	60.00	60.47	92.00	0
5/12/01	18:19:51	320	3928	60.00	60.04	92.00	0
5/12/01	18:19:51	821	3931	60.00	60.04	92.00	0
5/12/01	18:19:52	321	3931	60.00	59.69	69.00	0
5/12/01	18:19:52	822	3929	60.00	59.69	69.00	0
5/12/01	18:19:53	323	3926	60.00	59.86	57.00	0
5/12/01	18:19:53	824	3933	60.00	59.86	57.00	0
5/12/01	18:19:54	324	3931	60.04	59.93	36.00	0
5/12/01	18:19:54	825	3926	60.04	59.93	36.00	0
5/12/01	18:19:55	326	3929	60.04	60.00	13.00	0
5/12/01	18:19:55	826	3930	60.04	60.00	13.00	0
5/12/01	18:19:56	327	3930	60.04	59.95	0.00	0
5/12/01	18:19:56	828	3930	60.04	59.95	0.00	0
5/12/01	18:19:57	329	3931	60.04	59.94	-6.00	0
5/12/01	18:19:57	829	3932	60.04	59.94	-6.00	0
5/12/01	18:19:58	330	3933	60.04	59.97	-10.00	0
5/12/01	18:19:58	831	3933	60.04	59.97	-10.00	0
5/12/01	18:19:59	331	3933	60.00	60.02	-6.00	0
5/12/01	18:19:59	832	3933	60.00	60.02	-6.00	0
5/12/01	18:20:00	333	3934	60.00	60.00	-5.00	0
5/12/01	18:20:00	834	3928	60.00	60.00	-5.00	0
5/12/01	18:20:01	334	3933	60.00	60.00	0.00	1
5/12/01	18:20:01	835	3933	60.00	60.00	0.00	1
5/12/01	18:20:02	336	3934	60.00	60.05	3.00	1
5/12/01	18:20:02	836	3932	60.00	60.05	3.00	1
5/12/01	18:20:03	337	3932	60.00	60.01	3.00	1
5/12/01	18:20:03	838	3932	60.00	60.01	3.00	1
5/12/01	18:20:04	339	0	60.00	60.01	2.00	1
5/12/01	18:20:04	839	0	59.99	60.00	2.00	1
5/12/01	18:20:05	340	0	59.99	60.00	0.00	0
5/12/01	18:20:05	841	0	59.99	60.00	0.00	0
5/12/01	18:20:06	342	0	59.99	60.00	0.00	0
5/12/01	18:20:06	842	0	59.99	59.99	0.00	0
5/12/01	18:20:07	343	0	59.99	59.99	0.00	0
5/12/01	18:20:07	844	0	59.99	56.06	0.00	0
5/12/01	18:20:08	344	0	59.99	56.06	0.00	0
5/12/01	18:20:08	845	0	59.99	49.86	0.00	0
5/12/01	18:20:09	346	0	59.99	49.86	0.00	0
5/12/01	18:20:09	847	0	60.01	43.53	0.00	0
5/12/01	18:20:10	347	0	60.01	43.53	0.00	0
5/12/01	18:20:10	848	0	60.01	0.00	0.00	0
5/12/01	18:20:11	349	0	60.01	0.00	0.00	0
5/12/01	18:20:11	849	0	60.01	0.00	0.00	0
5/12/01	18:20:12	350	0	60.01	0.00	0.00	0
5/12/01	18:20:12	851	0	60.01	0.00	0.00	0
5/12/01	18:20:13	352	0	60.01	0.00	0.00	0
5/12/01	18:20:13	852	0	60.01	0.00	0.00	0
5/12/01	18:20:14	353	0	60.01	0.00	0.00	0
5/12/01	18:20:14	854	0	59.98	0.00	0.00	0
5/12/01	18:20:15	354	0	59.98	0.00	0.00	0
5/12/01	18:20:15	855	0	59.98	0.00	0.00	0
5/12/01	18:20:16	356	0	59.98	0.00	0.00	0
5/12/01	18:20:16	857	0	59.98	0.00	0.00	0
5/12/01	18:20:17	357	0	59.98	0.00	0.00	0
5/12/01	18:20:17	858	0	59.98	0.00	0.00	0
5/12/01	18:20:18	359	0	59.98	0.00	0.00	0
5/12/01	18:20:18	860	0	59.98	0.00	0.00	0
5/12/01	18:20:19	360	0	59.98	0.00	0.00	0
5/12/01	18:20:19	861	0	60.02	0.00	0.00	0
5/12/01	18:20:20	362	0	60.02	0.00	0.00	0
5/12/01	18:20:20	862	0	60.02	0.00	0.00	0
5/12/01	18:20:21	363	0	60.02	0.00	0.00	0
5/12/01	18:20:21	864	3000	60.02	0.00	0.00	0
5/12/01	18:20:22	365	3000	60.02	0.00	0.00	0
5/12/01	18:20:22	865	3000	60.02	0.00	0.00	0
5/12/01	18:20:23	366	3000	60.02	0.00	0.00	0
5/12/01	18:20:23	867	3001	60.02	0.00	0.00	0
5/12/01	18:20:24	367	3002	60.02	0.00	0.00	0
5/12/01	18:20:24	868	3002	59.97	0.00	0.00	0
5/12/01	18:20:25	369	3002	59.97	0.00	0.00	0
5/12/01	18:20:25	870	3003	59.97	0.00	0.00	0
5/12/01	18:20:26	370	3004	59.97	0.00	0.00	0
5/12/01	18:20:26	871	3004	59.97	0.00	0.00	0
5/12/01	18:20:27	372	3004	59.97	0.00	0.00	0
5/12/01	18:20:27	872	3004	59.97	0.00	0.00	0
5/12/01	18:20:28	373	3004	59.97	0.00	0.00	0
5/12/01	18:20:28	874	3591	59.97	0.00	0.00	0
5/12/01	18:20:29	375	3848	59.97	0.00	0.00	0
5/12/01	18:20:29	875	4082	60.00	0.00	0.00	0
5/12/01	18:20:30	376	4095	60.00	0.00	0.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Degrees)	Close Breaker (Open/Close)
5/12/01	18:20:30	877	4095	60.00	0.00	0.00	0
5/12/01	18:20:31	378	4095	60.00	0.00	0.00	0
5/12/01	18:20:31	878	4078	60.00	47.97	0.00	0
5/12/01	18:20:32	379	4014	60.00	47.97	0.00	0
5/12/01	18:20:32	880	3995	60.00	54.71	0.00	0
5/12/01	18:20:33	380	3965	60.00	54.71	0.00	0
5/12/01	18:20:33	881	3949	60.00	60.86	0.00	0
5/12/01	18:20:34	382	3937	60.00	60.86	0.00	0
5/12/01	18:20:34	883	3930	60.01	61.81	0.00	0
5/12/01	18:20:35	383	3930	60.01	61.81	0.00	0
5/12/01	18:20:35	884	3932	60.01	60.68	-66.00	0
5/12/01	18:20:36	385	3931	60.01	60.68	-66.00	0
5/12/01	18:20:36	885	3936	60.01	60.30	-67.00	0
5/12/01	18:20:37	386	3938	60.01	60.30	-67.00	0
5/12/01	18:20:37	887	3936	60.01	60.04	-55.00	0
5/12/01	18:20:38	388	3939	60.01	60.04	-55.00	0
5/12/01	18:20:38	888	3929	60.01	59.99	-24.00	0
5/12/01	18:20:39	389	3933	60.01	59.99	-24.00	0
5/12/01	18:20:39	890	3933	60.01	60.05	0.00	0
5/12/01	18:20:40	390	3934	60.01	60.05	0.00	0
5/12/01	18:20:40	891	3933	60.01	60.02	8.00	0
5/12/01	18:20:41	392	3931	60.01	60.02	8.00	0
5/12/01	18:20:41	893	3931	60.01	60.03	13.00	0
5/12/01	18:20:42	393	3930	60.01	60.03	13.00	0
5/12/01	18:20:42	894	3930	60.01	60.03	8.00	0
5/12/01	18:20:43	395	3930	60.01	60.02	8.00	0
5/12/01	18:20:43	896	3931	60.01	60.02	4.00	0
5/12/01	18:20:44	396	3931	60.00	59.95	4.00	1
5/12/01	18:20:44	897	3931	60.00	59.95	0.00	1
5/12/01	18:20:45	398	3933	60.00	59.91	0.00	1
5/12/01	18:20:45	898	3932	60.00	59.91	-3.00	1
5/12/01	18:20:46	399	3932	60.00	60.01	-3.00	1
5/12/01	18:20:46	900	3933	60.00	60.01	-5.00	1
5/12/01	18:20:47	401	0	60.00	59.96	-5.00	0
5/12/01	18:20:47	901	0	60.00	59.96	0.00	0
5/12/01	18:20:48	402	0	60.00	59.94	0.00	0
5/12/01	18:20:48	903	0	60.00	59.94	0.00	0
5/12/01	18:20:49	403	0	59.96	59.98	0.00	0
5/12/01	18:20:49	904	0	59.96	59.98	0.00	0
5/12/01	18:20:50	405	0	59.96	59.40	0.00	0
5/12/01	18:20:50	906	0	59.96	59.40	0.00	0
5/12/01	18:20:51	406	0	59.96	53.06	0.00	0
5/12/01	18:20:51	907	0	59.96	53.06	0.00	0
5/12/01	18:20:52	408	0	59.96	46.74	0.00	0
5/12/01	18:20:52	908	0	59.96	46.74	0.00	0
5/12/01	18:20:53	409	0	59.96	40.43	0.00	0
5/12/01	18:20:53	910	0	59.96	40.43	0.00	0
5/12/01	18:20:54	411	0	59.97	0.00	0.00	0
5/12/01	18:20:54	911	0	59.97	0.00	0.00	0
5/12/01	18:20:55	412	0	59.97	0.00	0.00	0
5/12/01	18:20:55	913	0	59.97	0.00	0.00	0
5/12/01	18:20:56	414	0	59.97	0.00	0.00	0
5/12/01	18:20:56	914	0	59.97	0.00	0.00	0
5/12/01	18:20:57	415	0	59.97	0.00	0.00	0
5/12/01	18:20:57	916	0	59.97	0.00	0.00	0
5/12/01	18:20:58	416	0	59.97	0.00	0.00	0
5/12/01	18:20:58	917	0	59.97	0.00	0.00	0
5/12/01	18:20:59	418	0	59.99	0.00	0.00	0
5/12/01	18:20:59	919	0	59.99	0.00	0.00	0
5/12/01	18:21:00	419	0	59.99	0.00	0.00	0
5/12/01	18:21:00	920	0	59.99	0.00	0.00	0
5/12/01	18:21:01	421	0	59.99	0.00	0.00	0
5/12/01	18:21:01	921	0	59.99	0.00	0.00	0
5/12/01	18:21:02	422	0	59.99	0.00	0.00	0
5/12/01	18:21:02	923	0	59.99	0.00	0.00	0
5/12/01	18:21:03	424	0	59.99	0.00	0.00	0
5/12/01	18:21:03	924	0	59.99	0.00	0.00	0
5/12/01	18:21:04	425	0	59.98	0.00	0.00	0
5/12/01	18:21:04	926	0	59.98	0.00	0.00	0
5/12/01	18:21:05	426	0	59.98	0.00	0.00	0
5/12/01	18:21:05	927	0	59.98	0.00	0.00	0
5/12/01	18:21:06	428	0	59.98	0.00	0.00	0
5/12/01	18:21:06	929	0	59.98	0.00	0.00	0
5/12/01	18:21:07	429	0	59.98	0.00	0.00	0
5/12/01	18:21:07	930	0	59.98	0.00	0.00	0
5/12/01	18:21:08	431	3000	59.98	0.00	0.00	0
5/12/01	18:21:08	932	3000	59.98	0.00	0.00	0
5/12/01	18:21:09	432	3000	59.97	0.00	0.00	0
5/12/01	18:21:09	933	3000	59.97	0.00	0.00	0
5/12/01	18:21:10	434	3002	59.97	0.00	0.00	0
5/12/01	18:21:10	934	3002	59.97	0.00	0.00	0
5/12/01	18:21:11	435	3002	59.97	0.00	0.00	0
5/12/01	18:21:11	936	3001	59.97	0.00	0.00	0
5/12/01	18:21:12	437	3002	59.97	0.00	0.00	0
5/12/01	18:21:12	937	3002	59.97	0.00	0.00	0
5/12/01	18:21:13	438	3003	59.97	0.00	0.00	0
5/12/01	18:21:13	939	3003	59.97	0.00	0.00	0
5/12/01	18:21:14	439	3004	59.99	0.00	0.00	0
5/12/01	18:21:14	940	3322	59.99	0.00	0.00	0
5/12/01	18:21:15	441	3620	59.99	0.00	0.00	0
5/12/01	18:21:15	942	4095	59.99	0.00	0.00	0
5/12/01	18:21:16	442	4095	59.99	0.00	0.00	0
5/12/01	18:21:16	943	4095	59.99	0.00	0.00	0
5/12/01	18:21:17	444	4091	59.99	0.00	0.00	0
5/12/01	18:21:17	944	4083	59.99	0.00	0.00	0
5/12/01	18:21:18	445	4056	59.99	46.54	0.00	0
5/12/01	18:21:18	946	4006	59.99	46.54	0.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Degrees)	Close Breaker (Open/Close)
5/12/01	18:21:19	447	3968	60.00	53.28	0.00	0
5/12/01	18:21:19	947	3950	60.00	53.28	0.00	0
5/12/01	18:21:20	448	3931	60.00	59.53	0.00	0
5/12/01	18:21:20	949	3922	60.00	59.53	0.00	0
5/12/01	18:21:21	450	3913	60.00	62.05	0.00	0
5/12/01	18:21:21	950	3912	60.00	62.05	0.00	0
5/12/01	18:21:22	451	3910	60.00	60.59	26.00	0
5/12/01	18:21:22	952	3919	60.00	60.59	26.00	0
5/12/01	18:21:23	452	3922	60.00	60.20	-37.00	0
5/12/01	18:21:23	953	3943	60.00	60.20	-37.00	0
5/12/01	18:21:24	454	3933	59.97	59.86	-80.00	0
5/12/01	18:21:24	955	3934	59.97	59.86	-80.00	0
5/12/01	18:21:25	455	3934	59.97	59.80	-68.00	0
5/12/01	18:21:25	956	3941	59.97	59.80	-68.00	0
5/12/01	18:21:26	457	3939	59.97	59.97	-35.00	0
5/12/01	18:21:26	957	3933	59.97	59.97	-35.00	0
5/12/01	18:21:27	458	3925	59.97	60.09	-6.00	0
5/12/01	18:21:27	959	3935	59.97	60.09	-6.00	0
5/12/01	18:21:28	460	3933	59.97	60.07	11.00	0
5/12/01	18:21:28	960	3931	59.97	60.07	11.00	0
5/12/01	18:21:29	461	3930	59.97	60.07	12.00	0
5/12/01	18:21:29	962	3933	59.98	60.08	12.00	0
5/12/01	18:21:30	462	3931	59.98	60.08	9.00	0
5/12/01	18:21:30	963	3931	59.98	60.03	9.00	0
5/12/01	18:21:31	464	3931	59.98	60.03	6.00	0
5/12/01	18:21:31	965	3931	59.98	59.99	6.00	0
5/12/01	18:21:32	465	3931	59.98	59.99	2.00	0
5/12/01	18:21:32	966	3931	59.98	59.97	2.00	1
5/12/01	18:21:33	467	3931	59.98	59.97	0.00	1
5/12/01	18:21:33	968	3931	59.98	59.99	0.00	1
5/12/01	18:21:34	468	3931	59.98	59.99	-2.00	1
5/12/01	18:21:34	969	3932	59.96	59.99	-2.00	1
5/12/01	18:21:35	470	3932	59.96	59.99	-3.00	1
5/12/01	18:21:35	970	3928	59.96	60.01	-3.00	1
5/12/01	18:21:36	471	0	59.96	60.01	-3.00	1
5/12/01	18:21:36	972	0	59.96	60.00	-3.00	0
5/12/01	18:21:37	483	0	59.96	60.00	0.00	0
5/12/01	18:21:37	973	0	59.96	60.01	0.00	0
5/12/01	18:21:38	474	0	59.96	60.01	0.00	0
5/12/01	18:21:38	975	0	59.96	60.00	0.00	0
5/12/01	18:21:39	475	0	59.96	60.00	0.00	0
5/12/01	18:21:39	976	0	60.00	56.20	0.00	0
5/12/01	18:21:40	477	0	60.00	56.20	0.00	0
5/12/01	18:21:40	978	0	60.00	49.86	0.00	0
5/12/01	18:21:41	478	0	60.00	49.86	0.00	0
5/12/01	18:21:41	979	0	60.00	43.60	0.00	0
5/12/01	18:21:42	480	0	60.00	43.60	0.00	0
5/12/01	18:21:42	980	0	60.00	0.00	0.00	0
5/12/01	18:21:43	481	0	60.00	0.00	0.00	0
5/12/01	18:21:43	982	0	60.00	0.00	0.00	0
5/12/01	18:21:44	483	0	60.00	0.00	0.00	0
5/12/01	18:21:44	983	0	60.00	0.00	0.00	0
5/12/01	18:21:45	484	0	60.00	0.00	0.00	0
5/12/01	18:21:45	985	0	60.00	0.00	0.00	0
5/12/01	18:21:46	486	0	60.00	0.00	0.00	0
5/12/01	18:21:46	986	0	60.00	0.00	0.00	0
5/12/01	18:21:47	487	0	60.00	0.00	0.00	0
5/12/01	18:21:47	988	0	60.00	0.00	0.00	0
5/12/01	18:21:48	488	0	60.00	0.00	0.00	0
5/12/01	18:21:48	989	0	60.00	0.00	0.00	0
5/12/01	18:21:49	490	0	60.00	0.00	0.00	0
5/12/01	18:21:49	991	0	59.99	0.00	0.00	0
5/12/01	18:21:50	491	0	59.99	0.00	0.00	0
5/12/01	18:21:50	992	0	59.99	0.00	0.00	0
5/12/01	18:21:51	493	0	59.99	0.00	0.00	0
5/12/01	18:21:51	993	0	59.99	0.00	0.00	0
5/12/01	18:21:52	494	0	59.99	0.00	0.00	0
5/12/01	18:21:52	995	0	59.99	0.00	0.00	0
5/12/01	18:21:53	496	0	59.99	0.00	0.00	0
5/12/01	18:21:53	996	0	59.99	0.00	0.00	0
5/12/01	18:21:54	497	0	59.99	0.00	0.00	0
5/12/01	18:21:54	998	0	59.99	0.00	0.00	0
5/12/01	18:21:55	498	0	59.99	0.00	0.00	0
5/12/01	18:21:55	999	3000	59.99	0.00	0.00	0
5/12/01	18:21:56	500	3000	59.99	0.00	0.00	0
5/12/01	18:21:57	1	3000	59.99	0.00	0.00	0
5/12/01	18:21:57	501	3000	59.99	0.00	0.00	0
5/12/01	18:21:58	2	3001	59.99	0.00	0.00	0
5/12/01	18:21:58	503	3001	59.99	0.00	0.00	0
5/12/01	18:21:59	4	3002	59.99	0.00	0.00	0
5/12/01	18:21:59	504	3002	59.99	0.00	0.00	0
5/12/01	18:22:00	5	3004	59.94	0.00	0.00	0
5/12/01	18:22:00	506	3003	59.94	0.00	0.00	0
5/12/01	18:22:01	6	3004	59.94	0.00	0.00	0
5/12/01	18:22:01	507	3004	59.94	0.00	0.00	0
5/12/01	18:22:02	8	3004	59.94	0.00	0.00	0
5/12/01	18:22:02	509	3739	59.94	0.00	0.00	0
5/12/01	18:22:03	9	3651	59.94	0.00	0.00	0
5/12/01	18:22:03	510	3953	59.94	0.00	0.00	0
5/12/01	18:22:04	11	4095	59.94	0.00	0.00	0
5/12/01	18:22:04	511	4095	59.94	0.00	0.00	0
5/12/01	18:22:05	12	4095	60.01	0.00	0.00	0
5/12/01	18:22:05	513	4086	60.01	0.00	0.00	0
5/12/01	18:22:06	24	4088	60.01	43.15	0.00	0
5/12/01	18:22:06	514	4006	60.01	43.15	0.00	0
5/12/01	18:22:07	15	3986	60.01	43.15	0.00	0
5/12/01	18:22:07	516	3962	60.01	49.98	0.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Degrees)	Close Breaker (Open/Close)
5/12/01	18:22:08	16	3945	60.01	49.98	0.00	0
5/12/01	18:22:08	517	3931	60.01	56.16	0.00	0
5/12/01	18:22:09	18	3917	60.01	56.16	0.00	0
5/12/01	18:22:09	519	3918	60.01	62.18	0.00	0
5/12/01	18:22:10	19	3916	60.01	62.18	-151.00	0
5/12/01	18:22:10	520	3918	59.98	61.09	-151.00	0
5/12/01	18:22:11	21	3925	59.98	61.09	155.00	0
5/12/01	18:22:11	522	3927	59.98	60.38	155.00	0
5/12/01	18:22:12	22	3929	59.98	60.38	115.00	0
5/12/01	18:22:12	523	3931	59.98	60.02	115.00	0
5/12/01	18:22:13	24	3928	59.98	60.02	99.00	0
5/12/01	18:22:13	524	3922	59.98	59.85	99.00	0
5/12/01	18:22:14	25	3935	59.98	59.85	67.00	0
5/12/01	18:22:14	526	3937	59.98	59.94	67.00	0
5/12/01	18:22:15	27	3930	59.98	59.94	27.00	0
5/12/01	18:22:15	527	3930	59.95	59.99	27.00	0
5/12/01	18:22:16	28	3926	59.95	59.99	27.00	0
5/12/01	18:22:16	529	3930	59.95	59.88	-3.00	0
5/12/01	18:22:17	29	3931	59.95	59.88	-3.00	0
5/12/01	18:22:17	530	3932	59.95	59.89	-14.00	0
5/12/01	18:22:18	31	3933	59.95	59.89	-14.00	0
5/12/01	18:22:18	532	3934	59.95	59.96	-16.00	0
5/12/01	18:22:19	32	3933	59.95	59.96	-16.00	0
5/12/01	18:22:19	533	3936	59.95	59.98	-9.00	0
5/12/01	18:22:20	34	3933	59.95	59.98	-9.00	0
5/12/01	18:22:20	534	3934	59.99	59.98	-4.00	0
5/12/01	18:22:21	35	3933	59.99	59.98	-4.00	1
5/12/01	18:22:21	536	3933	59.99	59.99	0.00	1
5/12/01	18:22:22	37	3933	59.99	59.99	0.00	1
5/12/01	18:22:22	537	3932	59.99	60.00	4.00	1
5/12/01	18:22:23	38	3932	59.99	60.00	4.00	1
5/12/01	18:22:23	549	3932	59.99	59.98	2.00	1
5/12/01	18:22:24	40	3932	59.99	59.98	2.00	1
5/12/01	18:22:24	540	3932	59.99	59.93	0.00	1
5/12/01	18:22:25	41	3930	59.99	59.93	0.00	1
5/12/01	18:22:25	542	3934	60.00	60.01	2.00	1
5/12/01	18:22:26	42	3932	60.00	60.01	2.00	1
5/12/01	18:22:26	543	0	60.00	60.03	0.00	1
5/12/01	18:22:27	44	0	60.00	60.03	0.00	0
5/12/01	18:22:27	545	0	60.00	60.01	0.00	0
5/12/01	18:22:28	55	0	60.00	60.01	0.00	0
5/12/01	18:22:28	546	0	60.00	59.97	0.00	0
5/12/01	18:22:29	47	0	60.00	59.97	0.00	0
5/12/01	18:22:29	547	0	60.00	59.97	0.00	0
5/12/01	18:22:30	48	0	60.00	54.89	0.00	0
5/12/01	18:22:30	549	0	60.00	54.89	0.00	0
5/12/01	18:22:31	50	0	59.99	49.20	0.00	0
5/12/01	18:22:31	650	0	59.99	42.91	0.00	0
5/12/01	18:22:32	51	0	59.99	42.91	0.00	0
5/12/01	18:22:32	552	0	59.99	42.91	0.00	0
5/12/01	18:22:33	52	0	59.99	42.91	0.00	0
5/12/01	18:22:33	553	0	59.99	42.91	0.00	0
5/12/01	18:22:34	54	0	59.99	0.00	0.00	0
5/12/01	18:22:34	555	0	59.99	0.00	0.00	0
5/12/01	18:22:35	55	0	59.99	0.00	0.00	0
5/12/01	18:22:35	556	0	59.99	0.00	0.00	0
5/12/01	18:22:36	57	0	60.00	0.00	0.00	0
5/12/01	18:22:36	558	0	60.00	0.00	0.00	0
5/12/01	18:22:37	58	0	60.00	0.00	0.00	0
5/12/01	18:22:37	559	0	60.00	0.00	0.00	0
5/12/01	18:22:38	60	0	60.00	0.00	0.00	0
5/12/01	18:22:38	560	0	60.00	0.00	0.00	0
5/12/01	18:22:39	61	0	60.00	0.00	0.00	0
5/12/01	18:22:39	562	0	60.00	0.00	0.00	0
5/12/01	18:22:40	63	0	60.00	0.00	0.00	0
5/12/01	18:22:40	563	0	60.00	0.00	0.00	0

Date	Time	Millitm	M Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Degrees)	Close Breaker (Open/Close)
5/12/01	17:47:21	516	0	60.00	0.00	0.00	0
5/12/01	17:47:22	17	0	60.00	0.00	0.00	0
5/12/01	17:47:22	518	0	59.98	0.00	0.00	0
5/12/01	17:47:23	18	200	59.98	0.00	0.00	0
5/12/01	17:47:23	519	500	59.98	0.00	0.00	0
5/12/01	17:47:24	20	700	59.98	0.00	0.00	0
5/12/01	17:47:24	521	900	59.98	0.00	0.00	0
5/12/01	17:47:25	21	1100	59.98	0.00	0.00	0
5/12/01	17:47:25	522	1400	59.98	0.00	0.00	0
5/12/01	17:47:26	23	1600	59.98	0.00	0.00	0
5/12/01	17:47:26	523	1800	59.98	0.00	0.00	0
5/12/01	17:47:27	24	2000	59.98	0.00	0.00	0
5/12/01	17:47:27	525	2300	60.01	0.00	0.00	0
5/12/01	17:47:28	26	2500	60.01	0.00	0.00	0
5/12/01	17:47:28	526	2700	60.01	0.00	0.00	0
5/12/01	17:47:29	27	2900	60.01	0.00	0.00	0
5/12/01	17:47:29	528	3198	60.01	0.00	0.00	0
5/12/01	17:47:30	28	3372	60.01	0.00	0.00	0
5/12/01	17:47:30	529	3509	60.01	0.00	0.00	0
5/12/01	17:47:31	30	3603	60.01	0.00	0.00	0
5/12/01	17:47:31	531	3706	60.01	43.99	0.00	0
5/12/01	17:47:32	31	3744	60.01	43.99	0.00	0
5/12/01	17:47:32	532	3768	60.01	43.99	0.00	0
5/12/01	17:47:33	33	3790	60.01	43.99	0.00	0
5/12/01	17:47:33	534	3819	60.01	50.18	0.00	0
5/12/01	17:47:34	34	3833	60.01	50.18	0.00	0
5/12/01	17:47:34	535	3846	60.01	55.73	0.00	0
5/12/01	17:47:35	36	3858	60.01	55.73	0.00	0
5/12/01	17:47:35	536	3874	60.01	57.14	0.00	0
5/12/01	17:47:36	37	3883	60.01	57.14	0.00	0
5/12/01	17:47:36	538	3891	60.01	58.05	0.00	0
5/12/01	17:47:37	39	3896	60.01	58.05	0.00	0
5/12/01	17:47:37	539	3902	60.04	58.33	0.00	0
5/12/01	17:47:38	40	3906	60.04	58.33	0.00	0
5/12/01	17:47:38	541	3910	60.04	59.06	0.00	0
5/12/01	17:47:39	41	3912	60.04	59.06	0.00	0
5/12/01	17:47:39	542	3916	60.04	59.39	0.00	0
5/12/01	17:47:40	43	3916	60.04	59.39	79.00	0
5/12/01	17:47:40	544	3916	60.04	59.51	79.00	0
5/12/01	17:47:41	44	3916	60.04	59.51	-4.00	0
5/12/01	17:47:41	545	3922	60.04	59.76	-4.00	0
5/12/01	17:47:42	46	3926	60.04	59.76	-73.00	0
5/12/01	17:47:42	546	3929	59.99	59.73	-73.00	0
5/12/01	17:47:43	47	3931	59.99	59.73	-100.00	0
5/12/01	17:47:43	548	3934	59.99	59.79	-100.00	0
5/12/01	17:47:44	49	3936	59.99	59.79	-95.00	0
5/12/01	17:47:44	549	3938	59.99	59.87	-95.00	0
5/12/01	17:47:45	50	3940	59.99	59.87	-68.00	0
5/12/01	17:47:45	551	3942	59.99	60.00	-68.00	0
5/12/01	17:47:46	52	3941	59.99	60.00	-24.00	0
5/12/01	17:47:46	552	3937	59.99	60.00	-24.00	0
5/12/01	17:47:47	53	3934	60.03	60.07	27.00	0
5/12/01	17:47:47	554	3929	60.03	60.07	27.00	0
5/12/01	17:47:48	54	3928	60.03	60.12	30.00	0
5/12/01	17:47:48	555	3927	60.03	60.12	30.00	0
5/12/01	17:47:49	56	3928	60.03	60.11	8.00	0
5/12/01	17:47:49	557	3930	60.03	60.11	8.00	0
5/12/01	17:47:50	57	3930	60.03	60.02	-2.00	1
5/12/01	17:47:50	558	3931	60.03	60.02	-2.00	1
5/12/01	17:47:51	59	3932	60.03	59.96	-6.00	0
5/12/01	17:47:51	559	3932	60.03	59.96	-6.00	0
5/12/01	17:47:52	60	3932	59.99	59.91	-6.00	0
5/12/01	17:47:52	561	3932	59.99	59.91	-5.00	0
5/12/01	17:47:53	62	3932	59.99	59.97	-5.00	0
5/12/01	17:47:53	562	3932	59.99	59.97	-4.00	1
5/12/01	17:47:54	63	3932	59.99	59.98	-4.00	1
5/12/01	17:47:54	564	0	59.99	59.98	-3.00	1
5/12/01	17:47:55	64	0	59.99	59.99	-3.00	1
5/12/01	17:47:55	565	0	59.99	59.99	0.00	0
5/12/01	17:47:56	66	0	59.99	59.95	0.00	0
5/12/01	17:47:56	567	0	59.99	59.95	0.00	0
5/12/01	17:47:57	67	0	59.99	60.03	0.00	0
5/12/01	17:47:57	568	0	59.99	60.03	0.00	0
5/12/01	17:47:58	69	0	59.99	58.30	0.00	0
5/12/01	17:47:58	570	0	59.99	58.30	0.00	0
5/12/01	17:47:59	70	0	59.99	52.00	0.00	0
5/12/01	17:47:59	571	0	59.99	52.00	0.00	0
5/12/01	17:48:00	72	0	59.99	46.41	0.00	0
5/12/01	17:48:00	572	0	59.99	46.41	0.00	0
5/12/01	17:48:01	73	0	59.99	0.00	0.00	0
5/12/01	17:48:01	574	0	59.99	0.00	0.00	0
5/12/01	17:48:02	75	0	59.99	0.00	0.00	0
5/12/01	17:48:02	575	0	59.99	0.00	0.00	0
5/12/01	17:48:03	76	0	59.99	0.00	0.00	0
5/12/01	17:48:03	577	0	59.99	0.00	0.00	0
5/12/01	17:48:04	77	0	59.99	0.00	0.00	0
5/12/01	17:48:04	578	0	59.99	0.00	0.00	0
5/12/01	17:48:05	79	0	59.99	0.00	0.00	0
5/12/01	17:48:05	580	0	59.99	0.00	0.00	0
5/12/01	17:48:06	80	0	59.99	0.00	0.00	0
5/12/01	17:48:06	581	0	59.99	0.00	0.00	0
5/12/01	17:48:07	82	0	59.98	0.00	0.00	0
5/12/01	17:48:07	582	0	59.98	0.00	0.00	0
5/12/01	17:48:08	83	0	59.98	0.00	0.00	0
5/12/01	17:48:08	584	0	59.98	0.00	0.00	0
5/12/01	17:48:09	85	0	59.98	0.00	0.00	0
5/12/01	17:48:09	585	0	59.98	0.00	0.00	0

Date	Time	Millitm	M Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Degrees)	Close Breaker (Open/Close)
5/12/01	17:48:10	86	0	59.98	0.00	0.00	0
5/12/01	17:48:10	587	0	59.98	0.00	0.00	0
5/12/01	17:48:11	88	0	59.98	0.00	0.00	0
5/12/01	17:48:11	588	0	59.98	0.00	0.00	0
5/12/01	17:48:12	89	0	59.98	0.00	0.00	0
5/12/01	17:48:12	590	0	59.98	0.00	0.00	0
5/12/01	17:48:13	90	0	59.98	0.00	0.00	0
5/12/01	17:48:13	591	300	59.98	0.00	0.00	0
5/12/01	17:48:14	92	500	59.98	0.00	0.00	0
5/12/01	17:48:14	593	700	59.98	0.00	0.00	0
5/12/01	17:48:15	93	900	59.98	0.00	0.00	0
5/12/01	17:48:15	594	1200	59.98	0.00	0.00	0
5/12/01	17:48:16	95	1400	59.98	0.00	0.00	0
5/12/01	17:48:16	595	1600	59.98	0.00	0.00	0
5/12/01	17:48:17	96	1800	60.02	0.00	0.00	0
5/12/01	17:48:17	597	2100	60.02	0.00	0.00	0
5/12/01	17:48:18	98	2300	60.02	0.00	0.00	0
5/12/01	17:48:18	598	2500	60.02	0.00	0.00	0
5/12/01	17:48:19	99	2700	60.02	0.00	0.00	0
5/12/01	17:48:19	600	3000	60.02	0.00	0.00	0
5/12/01	17:48:20	100	3195	60.02	0.00	0.00	0
5/12/01	17:48:20	601	3357	60.02	0.00	0.00	0
5/12/01	17:48:21	102	3495	60.02	0.00	0.00	0
5/12/01	17:48:21	603	3625	60.02	0.00	0.00	0
5/12/01	17:48:22	103	3684	60.02	0.00	0.00	0
5/12/01	17:48:22	604	3723	59.97	42.85	0.00	0
5/12/01	17:48:23	105	3750	59.97	42.85	0.00	0
5/12/01	17:48:23	606	3787	59.97	49.72	0.00	0
5/12/01	17:48:24	106	3805	59.97	49.72	0.00	0
5/12/01	17:48:24	607	3821	59.97	55.23	0.00	0
5/12/01	17:48:25	108	3844	59.97	55.23	0.00	0
5/12/01	17:48:25	608	3863	59.97	56.82	0.00	0
5/12/01	17:48:26	109	3875	59.97	56.82	0.00	0
5/12/01	17:48:26	610	3885	59.97	57.75	0.00	0
5/12/01	17:48:27	111	3895	59.97	57.75	0.00	0
5/12/01	17:48:27	611	3906	59.98	58.43	0.00	0
5/12/01	17:48:28	112	3911	59.98	58.43	0.00	0
5/12/01	17:48:28	613	3915	59.98	58.77	0.00	0
5/12/01	17:48:29	113	3918	59.98	58.77	0.00	0
5/12/01	17:48:29	614	3923	59.98	59.10	0.00	0
5/12/01	17:48:30	115	3926	59.98	59.10	-120.00	0
5/12/01	17:48:30	616	3930	59.98	59.33	-120.00	0
5/12/01	17:48:31	116	3932	59.98	59.33	-146.00	0
5/12/01	17:48:31	617	3935	59.98	59.71	-146.00	0
5/12/01	17:48:32	118	3937	59.98	59.71	-145.00	0
5/12/01	17:48:32	618	3939	60.02	59.92	-145.00	0
5/12/01	17:48:33	119	3940	60.02	59.92	-106.00	0
5/12/01	17:48:33	620	3942	60.02	60.02	-106.00	0
5/12/01	17:48:34	121	3942	60.02	60.02	-59.00	0
5/12/01	17:48:34	621	3942	60.02	60.06	-59.00	0
5/12/01	17:48:35	122	3939	60.02	60.06	-8.00	0
5/12/01	17:48:35	623	3934	60.02	60.13	-8.00	0
5/12/01	17:48:36	124	3933	60.02	60.13	24.00	0
5/12/01	17:48:36	624	3931	60.02	60.18	24.00	0
5/12/01	17:48:37	125	3929	60.02	60.18	29.00	0
5/12/01	17:48:37	626	3928	59.99	60.11	29.00	0
5/12/01	17:48:38	126	3926	59.99	60.11	21.00	0
5/12/01	17:48:38	627	3926	59.99	60.05	21.00	0
5/12/01	17:48:39	128	3928	59.99	60.05	-3.00	0
5/12/01	17:48:39	629	3930	59.99	59.96	-3.00	0
5/12/01	17:48:40	129	3931	59.99	59.96	-14.00	0
5/12/01	17:48:40	630	3932	59.99	59.90	-14.00	0
5/12/01	17:48:41	131	3932	59.99	59.90	-15.00	0
5/12/01	17:48:41	631	3932	59.99	59.96	-15.00	0
5/12/01	17:48:42	132	3932	59.99	59.96	-15.00	0
5/12/01	17:48:42	633	3932	59.96	59.94	-15.00	0
5/12/01	17:48:43	134	3932	59.96	59.94	-15.00	0
5/12/01	17:48:43	634	3932	59.96	59.98	-15.00	0
5/12/01	17:48:44	135	3932	59.96	59.98	-15.00	0
5/12/01	17:48:44	636	3932	59.96	59.99	-15.00	0
5/12/01	17:48:45	136	3932	59.96	59.99	-13.00	0
5/12/01	17:48:45	637	3932	59.96	60.03	-13.00	0
5/12/01	17:48:46	138	3931	59.96	60.03	-10.00	0
5/12/01	17:48:46	639	3932	59.96	60.09	-10.00	0
5/12/01	17:48:47	139	3933	59.96	60.09	-10.00	0
5/12/01	17:48:47	640	3933	60.01	60.02	-10.00	0
5/12/01	17:48:48	141	3932	60.01	60.02	-10.00	0
5/12/01	17:48:48	642	3932	60.01	59.99	1.00	0
5/12/01	17:48:49	142	3932	60.01	59.99	1.00	1
5/12/01	17:48:49	643	3932	60.01	60.04	1.00	1
5/12/01	17:48:50	144	3932	60.01	60.04	1.00	1
5/12/01	17:48:50	644	3932	60.01	59.98	1.00	1
5/12/01	17:48:51	145	3931	60.01	59.98	1.00	1
5/12/01	17:48:51	646	3930	60.01	59.96	3.00	1
5/12/01	17:48:52	147	3930	60.01	59.96	3.00	1
5/12/01	17:48:52	647	0	59.99	60.00	-1.00	1
5/12/01	17:48:53	148	0	59.99	60.00	-1.00	0
5/12/01	17:48:53	649	0	59.99	60.02	0.00	0
5/12/01	17:48:54	149	0	59.99	60.02	0.00	0
5/12/01	17:48:54	650	0	59.99	59.99	0.00	0
5/12/01	17:48:55	151	0	59.99	59.99	0.00	0
5/12/01	17:48:55	652	0	59.99	56.24	0.00	0
5/12/01	17:48:56	152	0	59.99	56.24	0.00	0
5/12/01	17:48:56	653	0	59.99	56.24	0.00	0
5/12/01	17:48:57	154	0	59.99	49.99	0.00	0
5/12/01	17:48:57	654	0	59.99	49.99	0.00	0
5/12/01	17:48:58	155	0	60.00	43.63	0.00	0

Date	Time	Millitm	M Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Degrees)	Close Breaker (Open/Close)
5/12/01	17:48:58	656	0	60.00	43.63	0.00	0
5/12/01	17:48:59	157	0	60.00	0.00	0.00	0
5/12/01	17:48:59	657	0	60.00	0.00	0.00	0
5/12/01	17:49:00	158	0	60.00	0.00	0.00	0
5/12/01	17:49:00	659	0	60.00	0.00	0.00	0
5/12/01	17:49:01	160	0	60.00	0.00	0.00	0
5/12/01	17:49:01	660	0	60.00	0.00	0.00	0
5/12/01	17:49:02	161	0	60.00	0.00	0.00	0
5/12/01	17:49:02	662	0	60.00	0.00	0.00	0
5/12/01	17:49:03	162	0	59.99	0.00	0.00	0
5/12/01	17:49:03	663	0	59.99	0.00	0.00	0
5/12/01	17:49:04	164	0	59.99	0.00	0.00	0
5/12/01	17:49:04	665	0	59.99	0.00	0.00	0
5/12/01	17:49:05	165	0	59.99	0.00	0.00	0
5/12/01	17:49:05	666	0	59.99	0.00	0.00	0
5/12/01	17:49:06	167	0	59.99	0.00	0.00	0
5/12/01	17:49:06	667	0	59.99	0.00	0.00	0
5/12/01	17:49:07	168	200	59.99	0.00	0.00	0
5/12/01	17:49:07	669	400	59.99	0.00	0.00	0
5/12/01	17:49:08	170	700	60.00	0.00	0.00	0
5/12/01	17:49:08	670	1000	60.00	0.00	0.00	0
5/12/01	17:49:09	171	1200	60.00	0.00	0.00	0
5/12/01	17:49:09	672	1400	60.00	0.00	0.00	0
5/12/01	17:49:10	172	1600	60.00	0.00	0.00	0
5/12/01	17:49:10	673	1900	60.00	0.00	0.00	0
5/12/01	17:49:11	174	2100	60.00	0.00	0.00	0
5/12/01	17:49:11	675	2200	60.00	0.00	0.00	0
5/12/01	17:49:12	175	2500	60.00	0.00	0.00	0
5/12/01	17:49:12	676	2800	60.00	0.00	0.00	0
5/12/01	17:49:13	177	3000	59.96	0.00	0.00	0
5/12/01	17:49:13	678	3200	59.96	0.00	0.00	0
5/12/01	17:49:14	178	3363	59.96	0.00	0.00	0
5/12/01	17:49:14	679	3531	59.96	0.00	0.00	0
5/12/01	17:49:15	180	3609	59.96	0.00	0.00	0
5/12/01	17:49:15	680	3665	59.96	0.00	0.00	0
5/12/01	17:49:16	181	3701	59.96	0.00	0.00	0
5/12/01	17:49:16	682	3747	59.96	0.00	0.00	0
5/12/01	17:49:17	183	3774	59.96	44.72	0.00	0
5/12/01	17:49:17	683	3796	59.96	44.72	0.00	0
5/12/01	17:49:18	184	3817	60.00	50.88	0.00	0
5/12/01	17:49:18	685	3840	60.00	50.88	0.00	0
5/12/01	17:49:19	185	3853	60.00	55.96	0.00	0
5/12/01	17:49:19	686	3865	60.00	55.96	0.00	0
5/12/01	17:49:20	187	3875	60.00	56.94	0.00	0
5/12/01	17:49:20	688	3889	60.00	56.94	0.00	0
5/12/01	17:49:21	188	3896	60.00	58.20	0.00	0
5/12/01	17:49:21	689	3902	60.00	58.20	0.00	0
5/12/01	17:49:22	190	3906	60.00	58.53	0.00	0
5/12/01	17:49:22	690	3912	60.00	58.53	0.00	0
5/12/01	17:49:23	191	3914	59.98	58.91	0.00	0
5/12/01	17:49:23	692	3914	59.98	58.91	0.00	0
5/12/01	17:49:24	193	3918	59.98	59.20	0.00	0
5/12/01	17:49:24	693	3919	59.98	59.20	0.00	0
5/12/01	17:49:25	194	3919	59.98	59.55	131.00	0
5/12/01	17:49:25	695	3919	59.98	59.55	131.00	0
5/12/01	17:49:26	196	3919	59.98	59.73	61.00	0
5/12/01	17:49:26	696	3920	59.98	59.73	61.00	0
5/12/01	17:49:27	197	3925	59.98	59.84	-13.00	0
5/12/01	17:49:27	698	3929	59.98	59.84	-13.00	0
5/12/01	17:49:28	198	3931	60.00	59.80	-13.00	0
5/12/01	17:49:28	699	3934	60.00	59.80	-44.00	0
5/12/01	17:49:29	200	3936	60.00	59.80	-44.00	0
5/12/01	17:49:29	701	3936	60.00	59.80	-40.00	0
5/12/01	17:49:30	201	3937	60.00	59.83	-40.00	0
5/12/01	17:49:30	702	3936	60.00	59.83	-9.00	0
5/12/01	17:49:31	203	3933	60.00	60.05	-9.00	0
5/12/01	17:49:31	703	3932	60.00	60.05	16.00	0
5/12/01	17:49:32	204	3930	60.00	60.03	16.00	0
5/12/01	17:49:32	705	3929	60.00	60.03	24.00	0
5/12/01	17:49:33	206	3929	60.00	60.03	24.00	0
5/12/01	17:49:33	706	3930	60.00	60.08	16.00	0
5/12/01	17:49:34	207	3930	60.00	60.08	16.00	0
5/12/01	17:49:34	708	3931	60.00	60.03	5.00	0
5/12/01	17:49:35	208	3931	60.00	60.03	5.00	0
5/12/01	17:49:35	709	3931	60.00	59.95	1.00	0
5/12/01	17:49:36	210	3931	60.00	59.95	1.00	1
5/12/01	17:49:36	711	3932	60.00	59.92	-1.00	1
5/12/01	17:49:37	211	3932	60.00	59.92	-1.00	1
5/12/01	17:49:37	712	3933	59.98	59.98	-1.00	1
5/12/01	17:49:38	213	3933	59.98	59.98	-1.00	1
5/12/01	17:49:38	714	3933	59.98	59.97	0.00	1
5/12/01	17:49:39	214	3932	59.98	59.97	0.00	1
5/12/01	17:49:39	715	3932	59.98	59.95	4.00	1
5/12/01	17:49:40	216	0	59.98	59.95	4.00	1
5/12/01	17:49:40	716	0	59.98	60.00	0.00	1
5/12/01	17:49:41	217	0	59.98	60.00	0.00	0
5/12/01	17:49:41	718	0	59.98	60.02	0.00	0
5/12/01	17:49:42	219	0	59.98	60.02	0.00	0
5/12/01	17:49:42	719	0	59.96	60.00	0.00	0
5/12/01	17:49:43	220	0	59.96	60.00	0.00	0
5/12/01	17:49:43	721	0	59.96	54.04	0.00	0
5/12/01	17:49:44	221	0	59.96	54.04	0.00	0
5/12/01	17:49:44	722	0	59.96	48.40	0.00	0
5/12/01	17:49:45	223	0	59.96	48.40	0.00	0
5/12/01	17:49:45	724	0	59.96	42.00	0.00	0
5/12/01	17:49:46	224	0	59.96	42.00	0.00	0
5/12/01	17:49:46	725	0	59.96	0.00	0.00	0

Date	Time	Millitm	M Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Degrees)	Close Breaker (Open/Close)
5/12/01	17:49:47	226	0	59.96	0.00	0.00	0
5/12/01	17:49:47	726	0	59.97	0.00	0.00	0
5/12/01	17:49:48	227	0	59.97	0.00	0.00	0
5/12/01	17:49:48	728	0	59.97	0.00	0.00	0
5/12/01	17:49:49	229	0	59.97	0.00	0.00	0
5/12/01	17:49:49	729	0	59.97	0.00	0.00	0
5/12/01	17:49:50	230	0	59.97	0.00	0.00	0
5/12/01	17:49:50	731	0	59.97	0.00	0.00	0
5/12/01	17:49:51	232	0	59.97	0.00	0.00	0
5/12/01	17:49:51	732	0	59.97	0.00	0.00	0
5/12/01	17:49:52	233	0	59.97	0.00	0.00	0
5/12/01	17:49:52	734	0	59.97	0.00	0.00	0
5/12/01	17:49:53	234	0	60.01	0.00	0.00	0
5/12/01	17:49:53	735	0	60.01	0.00	0.00	0
5/12/01	17:49:54	236	0	60.01	0.00	0.00	0
5/12/01	17:49:54	737	0	60.01	0.00	0.00	0
5/12/01	17:49:55	237	0	60.01	0.00	0.00	0
5/12/01	17:49:55	738	200	60.01	0.00	0.00	0
5/12/01	17:49:56	239	400	60.01	0.00	0.00	0
5/12/01	17:49:56	739	700	60.01	0.00	0.00	0
5/12/01	17:49:57	240	900	60.01	0.00	0.00	0
5/12/01	17:49:57	741	1100	60.01	0.00	0.00	0
5/12/01	17:49:58	242	1300	60.03	0.00	0.00	0
5/12/01	17:49:58	742	1600	60.03	0.00	0.00	0
5/12/01	17:49:59	243	1800	60.03	0.00	0.00	0
5/12/01	17:49:59	744	2000	60.03	0.00	0.00	0
5/12/01	17:50:00	244	2200	60.03	0.00	0.00	0
5/12/01	17:50:00	745	2500	60.03	0.00	0.00	0
5/12/01	17:50:01	246	2700	60.03	0.00	0.00	0
5/12/01	17:50:01	747	2900	60.03	0.00	0.00	0
5/12/01	17:50:02	247	3100	60.03	0.00	0.00	0
5/12/01	17:50:02	748	3371	60.03	0.00	0.00	0
5/12/01	17:50:03	249	3495	60.00	0.00	0.00	0
5/12/01	17:50:03	750	3586	60.00	0.00	0.00	0
5/12/01	17:50:04	250	3657	60.00	0.00	0.00	0
5/12/01	17:50:04	751	3720	60.00	0.00	0.00	0
5/12/01	17:50:05	252	3749	60.00	44.56	0.00	0
5/12/01	17:50:05	752	3774	60.00	44.56	0.00	0
5/12/01	17:50:06	253	3795	60.00	50.58	0.00	0
5/12/01	17:50:06	754	3824	60.00	50.58	0.00	0
5/12/01	17:50:07	255	3841	60.00	56.24	0.00	0
5/12/01	17:50:07	755	3853	60.00	56.24	0.00	0
5/12/01	17:50:08	256	3864	59.99	57.24	0.00	0
5/12/01	17:50:08	757	3873	59.99	57.24	0.00	0
5/12/01	17:50:09	257	3883	59.99	57.59	0.00	0
5/12/01	17:50:09	758	3889	59.99	57.59	0.00	0
5/12/01	17:50:10	259	3895	59.99	58.83	0.00	0
5/12/01	17:50:10	760	3901	59.99	58.83	0.00	0
5/12/01	17:50:11	260	3905	59.99	59.16	0.00	0
5/12/01	17:50:11	761	3909	59.99	59.16	0.00	0
5/12/01	17:50:12	262	3912	59.99	59.33	0.00	0
5/12/01	17:50:12	762	3916	59.99	59.33	0.00	0
5/12/01	17:50:13	263	3919	60.03	59.41	-105.00	0
5/12/01	17:50:13	764	3922	60.03	59.41	-105.00	0
5/12/01	17:50:14	265	3924	60.03	59.61	169.00	0
5/12/01	17:50:14	765	3923	60.03	59.61	169.00	0
5/12/01	17:50:15	266	3922	60.03	59.68	129.00	0
5/12/01	17:50:15	767	3921	60.03	59.68	129.00	0
5/12/01	17:50:16	268	3921	60.03	59.89	67.00	0
5/12/01	17:50:16	768	3921	60.03	59.89	67.00	0
5/12/01	17:50:17	269	3922	60.03	59.92	14.00	0
5/12/01	17:50:17	770	3924	60.03	59.92	14.00	0
5/12/01	17:50:18	270	3929	60.03	59.92	-35.00	0
5/12/01	17:50:18	771	3933	60.00	59.84	-35.00	0
5/12/01	17:50:19	272	3935	60.00	59.84	-48.00	0
5/12/01	17:50:19	773	3937	60.00	59.89	-48.00	0
5/12/01	17:50:20	273	3938	60.00	59.89	-24.00	0
5/12/01	17:50:20	774	3937	60.00	59.84	-24.00	0
5/12/01	17:50:21	275	3934	60.00	59.84	18.00	0
5/12/01	17:50:21	775	3933	60.00	59.95	18.00	0
5/12/01	17:50:22	276	3931	60.00	59.95	32.00	0
5/12/01	17:50:22	777	3928	60.00	60.11	32.00	0
5/12/01	17:50:23	278	3927	60.00	60.11	25.00	0
5/12/01	17:50:23	778	3928	59.96	60.04	25.00	0
5/12/01	17:50:24	279	3928	59.96	60.04	1.00	0
5/12/01	17:50:24	780	3928	59.96	59.95	1.00	0
5/12/01	17:50:25	280	3930	59.96	59.95	-17.00	0
5/12/01	17:50:25	781	3932	59.96	59.97	-17.00	0
5/12/01	17:50:26	282	3933	59.96	59.97	-20.00	0
5/12/01	17:50:26	783	3933	59.96	59.92	-20.00	0
5/12/01	17:50:27	283	3933	59.96	59.92	-14.00	0
5/12/01	17:50:27	784	3933	59.96	59.93	-14.00	0
5/12/01	17:50:28	285	3932	59.96	59.93	-10.00	0
5/12/01	17:50:28	786	3932	59.99	60.00	-10.00	0
5/12/01	17:50:29	286	3932	59.99	60.00	-10.00	0
5/12/01	17:50:29	787	3932	59.99	60.00	-10.00	0
5/12/01	17:50:30	288	3932	59.99	60.00	-10.00	0
5/12/01	17:50:30	788	3932	59.99	59.99	-10.00	0
5/12/01	17:50:31	289	3932	59.99	59.99	-10.00	0
5/12/01	17:50:31	790	3932	59.99	59.98	-11.00	0
5/12/01	17:50:32	291	3932	59.99	59.98	-11.00	0
5/12/01	17:50:32	791	3932	59.99	59.94	-13.00	0
5/12/01	17:50:33	292	3932	59.99	59.94	-13.00	0
5/12/01	17:50:33	793	3932	60.01	59.97	-13.00	0
5/12/01	17:50:34	293	3933	60.01	59.97	-13.00	0
5/12/01	17:50:34	794	3933	60.01	60.02	-14.00	0
5/12/01	17:50:35	295	3933	60.01	60.02	-14.00	0

Date	Time	Millitm	M Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Degrees)	Close Breaker (Open/Close)
5/12/01	17:50:35	796	3932	60.01	59.96	-7.00	0
5/12/01	17:50:36	296	3932	60.01	59.96	-7.00	0
5/12/01	17:50:36	797	3932	60.01	59.97	0.00	1
5/12/01	17:50:37	298	3932	60.01	59.97	0.00	1
5/12/01	17:50:37	798	3932	60.01	60.03	-1.00	1
5/12/01	17:50:38	299	3932	60.01	60.03	-1.00	1
5/12/01	17:50:38	800	3932	60.01	60.00	-1.00	1
5/12/01	17:50:39	301	3932	60.01	60.00	-1.00	1
5/12/01	17:50:39	801	3933	60.01	60.01	-2.00	1
5/12/01	17:50:40	302	3933	60.01	60.01	-2.00	1
5/12/01	17:50:40	803	0	60.01	60.03	-3.00	1
5/12/01	17:50:41	304	0	60.01	60.03	-3.00	1
5/12/01	17:50:41	804	0	60.01	59.98	0.00	0
5/12/01	17:50:42	305	0	60.01	59.98	0.00	0
5/12/01	17:50:42	806	0	60.01	60.01	0.00	0
5/12/01	17:50:43	306	0	60.01	60.01	0.00	0
5/12/01	17:50:43	807	0	59.98	57.05	0.00	0
5/12/01	17:50:44	308	0	59.98	57.05	0.00	0
5/12/01	17:50:44	809	0	59.98	50.87	0.00	0
5/12/01	17:50:45	309	0	59.98	50.87	0.00	0
5/12/01	17:50:45	810	0	59.98	44.51	0.00	0
5/12/01	17:50:46	311	0	59.98	44.51	0.00	0
5/12/01	17:50:46	811	0	59.98	0.00	0.00	0
5/12/01	17:50:47	312	0	59.98	0.00	0.00	0
5/12/01	17:50:47	813	0	59.98	0.00	0.00	0
5/12/01	17:50:48	314	0	59.98	0.00	0.00	0
5/12/01	17:50:48	814	0	59.96	0.00	0.00	0
5/12/01	17:50:49	315	0	59.96	0.00	0.00	0
5/12/01	17:50:49	816	0	59.96	0.00	0.00	0
5/12/01	17:50:50	316	0	59.96	0.00	0.00	0
5/12/01	17:50:50	817	0	59.96	0.00	0.00	0
5/12/01	17:50:51	318	0	59.96	0.00	0.00	0
5/12/01	17:50:51	819	0	59.96	0.00	0.00	0
5/12/01	17:50:52	319	0	59.96	0.00	0.00	0
5/12/01	17:50:52	820	0	59.96	0.00	0.00	0
5/12/01	17:50:53	321	0	59.96	0.00	0.00	0
5/12/01	17:50:53	822	0	59.98	0.00	0.00	0
5/12/01	17:50:54	322	0	59.98	0.00	0.00	0
5/12/01	17:50:54	823	0	59.98	0.00	0.00	0
5/12/01	17:50:55	324	100	59.98	0.00	0.00	0
5/12/01	17:50:55	824	400	59.98	0.00	0.00	0
5/12/01	17:50:56	325	600	59.98	0.00	0.00	0
5/12/01	17:50:56	826	900	59.98	0.00	0.00	0
5/12/01	17:50:57	327	1100	59.98	0.00	0.00	0
5/12/01	17:50:57	827	1300	59.98	0.00	0.00	0
5/12/01	17:50:58	328	1500	59.98	0.00	0.00	0
5/12/01	17:50:58	829	1800	59.98	0.00	0.00	0
5/12/01	17:50:59	329	2000	59.98	0.00	0.00	0
5/12/01	17:50:59	830	2200	59.98	0.00	0.00	0
5/12/01	17:51:00	331	2400	59.98	0.00	0.00	0
5/12/01	17:51:00	832	2700	59.98	0.00	0.00	0
5/12/01	17:51:01	332	2900	59.98	0.00	0.00	0
5/12/01	17:51:01	833	3100	59.98	0.00	0.00	0
5/12/01	17:51:02	334	3283	59.98	0.00	0.00	0
5/12/01	17:51:02	834	3470	59.98	0.00	0.00	0
5/12/01	17:51:03	335	3567	59.98	0.00	0.00	0
5/12/01	17:51:03	836	3632	59.97	0.00	0.00	0
5/12/01	17:51:04	337	3685	59.97	0.00	0.00	0
5/12/01	17:51:04	837	3734	59.97	45.18	0.00	0
5/12/01	17:51:05	338	3758	59.97	45.18	0.00	0
5/12/01	17:51:05	839	3782	59.97	51.36	0.00	0
5/12/01	17:51:06	340	3804	59.97	51.36	0.00	0
5/12/01	17:51:06	840	3828	59.97	56.93	0.00	0
5/12/01	17:51:07	341	3842	59.97	56.93	0.00	0
5/12/01	17:51:07	842	3855	59.97	57.92	0.00	0
5/12/01	17:51:08	342	3866	59.97	57.92	0.00	0
5/12/01	17:51:08	843	3881	59.95	58.19	0.00	0
5/12/01	17:51:09	344	3889	59.95	58.19	0.00	0
5/12/01	17:51:09	845	3897	59.95	58.19	0.00	0
5/12/01	17:51:10	345	3903	59.95	58.19	0.00	0
5/12/01	17:51:10	846	3909	59.95	58.57	0.00	0
5/12/01	17:51:11	347	3911	59.95	58.57	0.00	0
5/12/01	17:51:11	847	3913	59.95	58.89	71.00	0
5/12/01	17:51:12	348	3914	59.95	58.89	71.00	0
5/12/01	17:51:12	849	3917	59.95	59.24	-17.00	0
5/12/01	17:51:13	350	3919	59.95	59.24	-17.00	0
5/12/01	17:51:13	860	3923	60.01	59.65	-108.00	0
5/12/01	17:51:14	351	3926	60.01	59.65	-108.00	0
5/12/01	17:51:14	852	3929	60.01	59.73	-144.00	0
5/12/01	17:51:15	352	3931	60.01	59.73	-144.00	0
5/12/01	17:51:15	853	3933	60.01	59.73	-161.00	0
5/12/01	17:51:16	354	3935	60.01	59.80	-161.00	0
5/12/01	17:51:16	855	3938	60.01	59.80	-149.00	0
5/12/01	17:51:17	355	3940	60.01	59.87	-149.00	0
5/12/01	17:51:17	856	3941	60.01	59.87	-115.00	0
5/12/01	17:51:18	357	3941	59.99	59.98	-115.00	0
5/12/01	17:51:18	858	3942	59.99	59.98	-61.00	0
5/12/01	17:51:19	358	3942	59.99	60.06	-61.00	0
5/12/01	17:51:19	859	3939	59.99	60.06	-2.00	0
5/12/01	17:51:20	360	3935	59.99	60.08	-2.00	0
5/12/01	17:51:20	860	3933	59.99	60.08	37.00	0
5/12/01	17:51:21	361	3931	59.99	60.11	37.00	0
5/12/01	17:51:21	862	3929	59.99	60.11	42.00	0
5/12/01	17:51:22	363	3927	59.99	60.16	42.00	0
5/12/01	17:51:22	863	3925	59.99	60.16	27.00	0
5/12/01	17:51:23	364	3926	59.96	60.14	27.00	0
5/12/01	17:51:23	865	3929	59.96	60.14	-3.00	0

Date	Time	Millitm	M Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Degrees)	Close Breaker (Open/Close)
5/12/01	17:51:24	365	3929	59.96	59.97	-3.00	0
5/12/01	17:51:24	866	3931	59.96	59.97	-12.00	0
5/12/01	17:51:25	367	3932	59.96	59.93	-12.00	0
5/12/01	17:51:25	868	3933	59.96	59.93	-14.00	0
5/12/01	17:51:26	368	3933	59.96	59.94	-14.00	0
5/12/01	17:51:26	869	3933	59.96	59.94	-5.00	0
5/12/01	17:51:27	370	3933	59.96	59.97	-5.00	0
5/12/01	17:51:27	870	3933	59.96	59.97	0.00	1
5/12/01	17:51:28	371	3931	59.98	60.05	0.00	1
5/12/01	17:51:28	872	3931	59.98	60.05	6.00	0
5/12/01	17:51:29	373	3931	59.98	60.05	6.00	0
5/12/01	17:51:29	873	3931	59.98	60.05	5.00	1
5/12/01	17:51:30	374	3931	59.98	60.07	5.00	1
5/12/01	17:51:30	875	3931	59.98	60.07	5.00	1
5/12/01	17:51:31	376	3931	59.98	59.98	3.00	1
5/12/01	17:51:31	876	3931	59.98	59.98	3.00	1
5/12/01	17:51:32	377	3931	59.98	59.98	2.00	1
5/12/01	17:51:32	878	0	59.98	59.98	2.00	1
5/12/01	17:51:33	378	0	59.96	59.97	0.00	1
5/12/01	17:51:33	879	0	59.96	59.97	0.00	1
5/12/01	17:51:34	380	0	59.96	59.97	0.00	0
5/12/01	17:51:34	881	0	59.96	59.97	0.00	0
5/12/01	17:51:35	381	0	59.96	59.99	0.00	0
5/12/01	17:51:35	882	0	59.96	59.99	0.00	0
5/12/01	17:51:36	383	0	59.96	56.79	0.00	0
5/12/01	17:51:36	883	0	59.96	56.79	0.00	0
5/12/01	17:51:37	384	0	59.96	50.41	0.00	0
5/12/01	17:51:37	885	0	59.96	50.41	0.00	0
5/12/01	17:51:38	386	0	59.99	44.78	0.00	0
5/12/01	17:51:38	886	0	59.99	44.78	0.00	0
5/12/01	17:51:39	387	0	59.99	44.78	0.00	0
5/12/01	17:51:39	888	0	59.99	44.78	0.00	0
5/12/01	17:51:40	388	0	59.99	0.00	0.00	0
5/12/01	17:51:40	889	0	59.99	0.00	0.00	0
5/12/01	17:51:41	390	0	59.99	0.00	0.00	0
5/12/01	17:51:41	891	0	59.99	0.00	0.00	0
5/12/01	17:51:42	391	0	59.99	0.00	0.00	0
5/12/01	17:51:42	892	0	59.99	0.00	0.00	0
5/12/01	17:51:43	393	0	59.98	0.00	0.00	0
5/12/01	17:51:43	894	0	59.98	0.00	0.00	0
5/12/01	17:51:44	394	0	59.98	0.00	0.00	0
5/12/01	17:51:44	895	0	59.98	0.00	0.00	0
5/12/01	17:51:45	396	0	59.98	0.00	0.00	0
5/12/01	17:51:45	896	0	59.98	0.00	0.00	0
5/12/01	17:51:46	397	0	59.98	0.00	0.00	0
5/12/01	17:51:46	898	0	59.98	0.00	0.00	0
5/12/01	17:51:47	399	0	59.98	0.00	0.00	0
5/12/01	17:51:47	899	0	59.98	0.00	0.00	0
5/12/01	17:51:48	400	0	60.01	0.00	0.00	0
5/12/01	17:51:48	901	200	60.01	0.00	0.00	0
5/12/01	17:51:49	401	400	60.01	0.00	0.00	0
5/12/01	17:51:49	902	600	60.01	0.00	0.00	0
5/12/01	17:51:50	403	800	60.01	0.00	0.00	0
5/12/01	17:51:50	904	1100	60.01	0.00	0.00	0
5/12/01	17:51:51	404	1300	60.01	0.00	0.00	0
5/12/01	17:51:51	905	1500	60.01	0.00	0.00	0
5/12/01	17:51:52	406	1700	60.01	0.00	0.00	0
5/12/01	17:51:52	906	2000	60.01	0.00	0.00	0
5/12/01	17:51:53	407	2200	59.96	0.00	0.00	0
5/12/01	17:51:53	908	2400	59.96	0.00	0.00	0
5/12/01	17:51:54	409	2600	59.96	0.00	0.00	0
5/12/01	17:51:54	909	2800	59.96	0.00	0.00	0
5/12/01	17:51:55	410	3100	59.96	0.00	0.00	0
5/12/01	17:51:55	911	3292	59.96	0.00	0.00	0
5/12/01	17:51:56	412	3436	59.96	0.00	0.00	0
5/12/01	17:51:56	912	3583	59.96	0.00	0.00	0
5/12/01	17:51:57	413	3650	59.96	0.00	0.00	0
5/12/01	17:51:57	914	3695	59.96	40.36	0.00	0
5/12/01	17:51:58	414	3725	59.96	40.36	0.00	0
5/12/01	17:51:58	915	3765	59.96	47.14	0.00	0
5/12/01	17:51:59	416	3787	59.96	47.14	0.00	0
5/12/01	17:51:59	917	3807	59.96	53.42	0.00	0
5/12/01	17:52:00	417	3827	59.96	53.42	0.00	0
5/12/01	17:52:00	918	3849	59.96	56.32	0.00	0
5/12/01	17:52:01	419	3861	59.96	56.32	0.00	0
5/12/01	17:52:01	919	3871	59.96	57.20	0.00	0
5/12/01	17:52:02	420	3880	59.96	57.20	0.00	0
5/12/01	17:52:02	921	3887	59.96	58.46	0.00	0
5/12/01	17:52:03	422	3896	59.96	58.46	0.00	0
5/12/01	17:52:03	922	3901	60.00	58.82	0.00	0
5/12/01	17:52:04	423	3905	60.00	58.82	0.00	0
5/12/01	17:52:04	924	3911	60.00	59.14	0.00	0
5/12/01	17:52:05	424	3915	60.00	59.14	0.00	0
5/12/01	17:52:05	925	3915	60.00	59.43	0.00	0
5/12/01	17:52:06	426	3915	60.00	59.43	122.00	0
5/12/01	17:52:06	927	3915	60.00	59.67	122.00	0
5/12/01	17:52:07	427	3919	60.00	59.67	0.00	0
5/12/01	17:52:07	928	3922	60.00	59.70	0.00	0
5/12/01	17:52:08	429	3925	60.00	59.70	-60.00	0
5/12/01	17:52:08	930	3927	60.01	59.69	-60.00	0
5/12/01	17:52:09	430	3930	60.01	59.69	-94.00	0
5/12/01	17:52:09	931	3932	60.01	59.81	-94.00	0
5/12/01	17:52:10	442	3934	60.01	59.81	-110.00	0
5/12/01	17:52:10	932	3936	60.01	59.91	-110.00	0
5/12/01	17:52:11	433	3939	60.01	59.91	-99.00	0
5/12/01	17:52:11	934	3941	60.01	59.97	-99.00	0
5/12/01	17:52:12	435	3943	60.01	59.97	-65.00	0

Date	Time	Millitm	M Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Degrees)	Close Breaker (Open/Close)
5/12/01	17:52:12	935	3941	60.01	60.07	-65.00	0
5/12/01	17:52:13	436	3937	60.01	60.07	3.00	0
5/12/01	17:52:13	937	3936	60.00	60.16	3.00	0
5/12/01	17:52:14	437	3933	60.00	60.16	44.00	0
5/12/01	17:52:14	938	3930	60.00	60.17	44.00	0
5/12/01	17:52:15	439	3928	60.00	60.17	52.00	0
5/12/01	17:52:15	940	3926	60.00	60.11	52.00	0
5/12/01	17:52:16	440	3924	60.00	60.11	34.00	0
5/12/01	17:52:16	941	3924	60.00	60.03	34.00	0
5/12/01	17:52:17	442	3924	60.00	60.03	-5.00	0
5/12/01	17:52:17	942	3928	60.00	60.02	-5.00	0
5/12/01	17:52:18	443	3930	60.00	60.02	-44.00	0
5/12/01	17:52:18	944	3933	60.00	59.85	-44.00	0
5/12/01	17:52:19	445	3935	60.00	59.85	-47.00	0
5/12/01	17:52:19	945	3937	60.00	59.85	-47.00	0
5/12/01	17:52:20	446	3938	60.00	59.85	-31.00	0
5/12/01	17:52:20	947	3936	60.00	60.07	-31.00	0
5/12/01	17:52:21	448	3933	60.00	60.07	5.00	0
5/12/01	17:52:21	948	3933	60.00	60.02	5.00	0
5/12/01	17:52:22	449	3931	60.00	60.02	22.00	0
5/12/01	17:52:22	950	3931	60.00	60.10	22.00	0
5/12/01	17:52:23	450	3931	60.00	60.10	21.00	0
5/12/01	17:52:23	951	3931	60.00	59.94	21.00	0
5/12/01	17:52:24	452	3931	60.00	59.94	17.00	0
5/12/01	17:52:24	953	3931	60.00	60.02	17.00	0
5/12/01	17:52:25	453	3931	60.00	60.02	17.00	0
5/12/01	17:52:25	954	3931	60.00	60.00	13.00	0
5/12/01	17:52:26	455	3931	60.00	60.00	13.00	0
5/12/01	17:52:26	955	3931	60.00	59.99	11.00	0
5/12/01	17:52:27	456	3931	60.00	59.99	11.00	0
5/12/01	17:52:27	957	3931	60.00	59.96	7.00	0
5/12/01	17:52:28	458	3931	60.00	59.96	7.00	0
5/12/01	17:52:28	958	3931	59.97	60.08	5.00	0
5/12/01	17:52:29	459	3931	59.97	60.08	5.00	0
5/12/01	17:52:29	960	3931	59.97	60.00	3.00	1
5/12/01	17:52:30	460	3931	59.97	60.00	3.00	1
5/12/01	17:52:30	961	3931	59.97	59.94	0.00	1
5/12/01	17:52:31	462	3932	59.97	59.94	0.00	1
5/12/01	17:52:31	963	3932	59.97	59.94	-2.00	1
5/12/01	17:52:32	463	3932	59.97	59.98	-2.00	1
5/12/01	17:52:32	964	3932	59.97	59.98	-2.00	1
5/12/01	17:52:33	465	0	59.97	60.00	-2.00	1
5/12/01	17:52:33	966	0	59.97	60.00	0.00	0
5/12/01	17:52:34	466	0	60.02	60.01	0.00	0
5/12/01	17:52:34	967	0	60.02	60.01	0.00	0
5/12/01	17:52:35	468	0	60.02	59.95	0.00	0
5/12/01	17:52:35	968	0	60.02	59.95	0.00	0
5/12/01	17:52:36	469	0	60.02	55.32	0.00	0
5/12/01	17:52:36	970	0	60.02	55.32	0.00	0
5/12/01	17:52:37	471	0	60.02	49.05	0.00	0
5/12/01	17:52:37	971	0	60.02	49.05	0.00	0
5/12/01	17:52:38	472	0	60.02	42.70	0.00	0
5/12/01	17:52:38	973	0	60.02	42.70	0.00	0
5/12/01	17:52:39	473	0	60.00	42.70	0.00	0
5/12/01	17:52:39	974	0	60.00	42.70	0.00	0
5/12/01	17:52:40	475	0	60.00	0.00	0.00	0
5/12/01	17:52:40	976	0	60.00	0.00	0.00	0
5/12/01	17:52:41	476	0	60.00	0.00	0.00	0
5/12/01	17:52:41	977	0	60.00	0.00	0.00	0
5/12/01	17:52:42	478	0	60.00	0.00	0.00	0
5/12/01	17:52:42	978	0	60.00	0.00	0.00	0
5/12/01	17:52:43	479	0	60.00	0.00	0.00	0
5/12/01	17:52:43	980	0	60.00	0.00	0.00	0
5/12/01	17:52:44	481	0	60.02	0.00	0.00	0
5/12/01	17:52:44	981	0	60.02	0.00	0.00	0
5/12/01	17:52:45	482	0	60.02	0.00	0.00	0
5/12/01	17:52:45	983	0	60.02	0.00	0.00	0
5/12/01	17:52:46	484	0	60.02	0.00	0.00	0
5/12/01	17:52:46	984	0	60.02	0.00	0.00	0
5/12/01	17:52:47	485	0	60.02	0.00	0.00	0
5/12/01	17:52:47	986	0	60.02	0.00	0.00	0
5/12/01	17:52:48	486	0	59.99	0.00	0.00	0
5/12/01	17:52:48	987	0	59.99	0.00	0.00	0
5/12/01	17:52:49	488	0	59.99	0.00	0.00	0
5/12/01	17:52:49	989	0	59.99	0.00	0.00	0
5/12/01	17:52:50	489	200	59.99	0.00	0.00	0
5/12/01	17:52:51	0	400	59.99	0.00	0.00	0
5/12/01	17:52:51	501	700	59.99	0.00	0.00	0
5/12/01	17:52:51	991	900	59.99	0.00	0.00	0
5/12/01	17:52:52	492	1100	59.99	0.00	0.00	0
5/12/01	17:52:52	993	1400	59.99	0.00	0.00	0
5/12/01	17:52:53	494	1500	59.97	0.00	0.00	0
5/12/01	17:52:53	994	1800	59.97	0.00	0.00	0
5/12/01	17:52:54	495	2000	59.97	0.00	0.00	0
5/12/01	17:52:54	996	2300	59.97	0.00	0.00	0
5/12/01	17:52:55	496	2400	59.97	0.00	0.00	0
5/12/01	17:52:55	997	2700	59.97	0.00	0.00	0
5/12/01	17:52:56	498	3000	59.97	0.00	0.00	0
5/12/01	17:52:56	999	3200	59.97	0.00	0.00	0
5/12/01	17:52:57	499	3352	59.97	0.00	0.00	0
5/12/01	17:52:58	0	3480	59.97	0.00	0.00	0
5/12/01	17:52:58	501	3608	59.96	0.00	0.00	0
5/12/01	17:52:59	2	3666	59.96	0.00	0.00	0
5/12/01	17:52:59	502	3702	59.96	0.00	0.00	0
5/12/01	17:53:00	3	3732	59.96	40.44	0.00	0
5/12/01	17:53:00	504	3771	59.96	40.44	0.00	0
5/12/01	17:53:01	4	3793	59.96	52.78	0.00	0

Date	Time	Millitm	M Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Degrees)	Close Breaker (Open/Close)
5/12/01	17:53:01	505	3814	59.96	52.78	0.00	0
5/12/01	17:53:02	6	3831	59.96	56.14	0.00	0
5/12/01	17:53:02	507	3845	59.96	56.14	0.00	0
5/12/01	17:53:03	7	3863	59.96	57.09	0.00	0
5/12/01	17:53:03	508	3874	59.96	57.09	0.00	0
5/12/01	17:53:04	9	3883	59.99	57.69	0.00	0
5/12/01	17:53:04	509	3894	59.99	57.69	0.00	0
5/12/01	17:53:05	10	3900	59.99	58.32	0.00	0
5/12/01	17:53:05	511	3904	59.99	58.32	0.00	0
5/12/01	17:53:06	12	3908	59.99	59.04	0.00	0
5/12/01	17:53:06	512	3911	59.99	59.04	0.00	0
5/12/01	17:53:07	13	3913	59.99	59.39	0.00	0
5/12/01	17:53:07	514	3915	59.99	59.39	0.00	0
5/12/01	17:53:08	14	3918	59.99	59.53	-114.00	0
5/12/01	17:53:08	515	3923	59.99	59.53	-114.00	0
5/12/01	17:53:09	16	3922	59.99	59.67	166.00	0
5/12/01	17:53:09	517	3922	59.99	59.67	166.00	0
5/12/01	17:53:10	17	3922	59.99	59.73	112.00	0
5/12/01	17:53:10	518	3921	59.99	59.73	112.00	0
5/12/01	17:53:11	19	3920	59.99	59.78	66.00	0
5/12/01	17:53:11	520	3920	59.99	59.78	66.00	0
5/12/01	17:53:12	20	3922	59.99	59.84	-4.00	0
5/12/01	17:53:12	521	3930	59.99	59.84	-4.00	0
5/12/01	17:53:13	22	3932	59.99	59.83	-36.00	0
5/12/01	17:53:13	522	3934	59.99	59.83	-36.00	0
5/12/01	17:53:14	23	3935	59.98	59.82	-31.00	0
5/12/01	17:53:14	524	3936	59.98	59.82	-31.00	0
5/12/01	17:53:15	25	3932	59.98	59.96	-9.00	0
5/12/01	17:53:15	525	3930	59.98	59.96	-9.00	0
5/12/01	17:53:16	26	3930	59.98	60.07	-7.00	0
5/12/01	17:53:16	527	3930	59.98	60.07	-7.00	0
5/12/01	17:53:17	27	3932	59.98	59.99	-12.00	0
5/12/01	17:53:17	528	3932	59.98	59.99	-12.00	0
5/12/01	17:53:18	29	3933	59.98	59.98	-12.00	0
5/12/01	17:53:18	530	3933	59.98	59.98	-12.00	0
5/12/01	17:53:19	30	3933	59.99	59.97	-12.00	0
5/12/01	17:53:19	531	3933	59.99	59.97	-6.00	0
5/12/01	17:53:20	32	3931	59.99	59.97	-6.00	0
5/12/01	17:53:20	532	3931	59.99	59.97	0.00	1
5/12/01	17:53:21	33	3931	59.99	59.97	0.00	1
5/12/01	17:53:21	534	3932	59.99	59.99	-2.00	1
5/12/01	17:53:22	35	3932	59.99	59.99	-2.00	1
5/12/01	17:53:22	535	3932	59.99	59.96	-4.00	1
5/12/01	17:53:23	36	3933	59.99	59.96	-4.00	1
5/12/01	17:53:23	537	3933	59.99	59.95	-5.00	1
5/12/01	17:53:24	38	3933	59.99	59.95	-5.00	1
5/12/01	17:53:24	538	0	60.00	59.98	-3.00	0
5/12/01	17:53:25	39	0	60.00	59.98	-3.00	0
5/12/01	17:53:25	540	0	60.00	60.00	0.00	0
5/12/01	17:53:26	40	0	60.00	60.00	0.00	0
5/12/01	17:53:26	541	0	60.00	60.00	0.00	0
5/12/01	17:53:27	42	0	60.00	60.00	0.00	0
5/12/01	17:53:27	543	0	60.00	57.08	0.00	0
5/12/01	17:53:28	43	0	60.00	57.08	0.00	0
5/12/01	17:53:28	544	0	60.00	51.46	0.00	0
5/12/01	17:53:29	45	0	60.00	51.46	0.00	0
5/12/01	17:53:29	545	0	59.97	45.12	0.00	0
5/12/01	17:53:30	46	0	59.97	45.12	0.00	0
5/12/01	17:53:30	547	0	59.97	0.00	0.00	0
5/12/01	17:53:31	48	0	59.97	0.00	0.00	0
5/12/01	17:53:31	548	0	59.97	0.00	0.00	0
5/12/01	17:53:32	49	0	59.97	0.00	0.00	0
5/12/01	17:53:32	550	0	59.97	0.00	0.00	0
5/12/01	17:53:33	50	0	59.97	0.00	0.00	0
5/12/01	17:53:33	551	0	59.97	0.00	0.00	0
5/12/01	17:53:34	52	0	59.97	0.00	0.00	0
5/12/01	17:53:34	553	0	60.00	0.00	0.00	0
5/12/01	17:53:35	53	0	60.00	0.00	0.00	0
5/12/01	17:53:35	554	0	60.00	0.00	0.00	0
5/12/01	17:53:36	55	0	60.00	0.00	0.00	0
5/12/01	17:53:36	556	0	60.00	0.00	0.00	0
5/12/01	17:53:37	56	0	60.00	0.00	0.00	0
5/12/01	17:53:37	557	0	60.00	0.00	0.00	0
5/12/01	17:53:38	58	0	60.00	0.00	0.00	0
5/12/01	17:53:38	558	0	60.00	0.00	0.00	0
5/12/01	17:53:39	59	0	60.00	0.00	0.00	0
5/12/01	17:53:39	560	0	59.99	0.00	0.00	0
5/12/01	17:53:40	61	0	59.99	0.00	0.00	0
5/12/01	17:53:40	561	0	59.99	0.00	0.00	0
5/12/01	17:53:41	62	0	59.99	0.00	0.00	0
5/12/01	17:53:41	563	0	59.99	0.00	0.00	0
5/12/01	17:53:42	63	0	59.99	0.00	0.00	0
5/12/01	17:53:42	564	0	59.99	0.00	0.00	0
5/12/01	17:53:43	65	0	59.99	0.00	0.00	0
5/12/01	17:53:43	566	0	59.99	0.00	0.00	0
5/12/01	17:53:44	66	0	59.99	0.00	0.00	0
5/12/01	17:53:44	567	200	59.99	0.00	0.00	0
5/12/01	17:53:45	68	500	59.99	0.00	0.00	0
5/12/01	17:53:45	568	700	59.99	0.00	0.00	0
5/12/01	17:53:46	69	900	59.99	0.00	0.00	0
5/12/01	17:53:46	570	1100	59.99	0.00	0.00	0
5/12/01	17:53:47	71	1400	59.99	0.00	0.00	0
5/12/01	17:53:47	571	1600	59.99	0.00	0.00	0
5/12/01	17:53:48	72	1800	59.99	0.00	0.00	0
5/12/01	17:53:48	573	2000	59.99	0.00	0.00	0
5/12/01	17:53:49	74	2300	59.99	0.00	0.00	0
5/12/01	17:53:49	574	2500	60.01	0.00	0.00	0

Date	Time	Millitm	M Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Degrees)	Close Breaker (Open/Close)
5/12/01	17:53:50	75	2700	60.01	0.00	0.00	0
5/12/01	17:53:50	576	2900	60.01	0.00	0.00	0
5/12/01	17:53:51	76	3200	60.01	0.00	0.00	0
5/12/01	17:53:51	577	3365	60.01	0.00	0.00	0
5/12/01	17:53:52	78	3481	60.01	0.00	0.00	0
5/12/01	17:53:52	579	3568	60.01	0.00	0.00	0
5/12/01	17:53:53	79	3635	60.01	0.00	0.00	0
5/12/01	17:53:53	580	3700	60.01	0.00	0.00	0
5/12/01	17:53:54	81	3732	59.95	46.75	0.00	0
5/12/01	17:53:54	581	3758	59.95	46.75	0.00	0
5/12/01	17:53:55	82	3792	59.95	52.94	0.00	0
5/12/01	17:53:55	583	3814	59.95	52.94	0.00	0
5/12/01	17:53:56	84	3831	59.95	56.01	0.00	0
5/12/01	17:53:56	584	3845	59.95	56.01	0.00	0
5/12/01	17:53:57	85	3857	59.95	57.08	0.00	0
5/12/01	17:53:57	586	3873	59.95	57.08	0.00	0
5/12/01	17:53:58	97	3882	59.95	57.95	0.00	0
5/12/01	17:53:58	587	3890	59.95	57.95	0.00	0
5/12/01	17:53:59	88	3900	60.05	58.39	0.00	0
5/12/01	17:53:59	589	3904	60.05	58.39	0.00	0
5/12/01	17:54:00	89	3908	60.05	58.71	0.00	0
5/12/01	17:54:00	590	3910	60.05	58.71	0.00	0
5/12/01	17:54:01	91	3913	60.05	59.35	0.00	0
5/12/01	17:54:01	592	3915	60.05	59.35	0.00	0
5/12/01	17:54:02	92	3916	60.05	59.60	89.00	0
5/12/01	17:54:02	593	3919	60.05	59.60	89.00	0
5/12/01	17:54:03	104	3920	60.05	59.65	-16.00	0
5/12/01	17:54:03	594	3925	60.05	59.65	-16.00	0
5/12/01	17:54:04	105	3929	60.00	59.72	-73.00	0
5/12/01	17:54:04	596	3931	60.00	59.72	-73.00	0
5/12/01	17:54:05	97	3933	60.00	59.78	-92.00	0
5/12/01	17:54:05	597	3936	60.00	59.78	-92.00	0
5/12/01	17:54:06	98	3938	60.00	59.95	-88.00	0
5/12/01	17:54:06	599	3939	60.00	59.95	-88.00	0
5/12/01	17:54:07	99	3940	60.00	60.02	-59.00	0
5/12/01	17:54:07	600	3942	60.00	60.02	-59.00	0
5/12/01	17:54:08	101	3937	60.00	60.01	-9.00	0
5/12/01	17:54:08	602	3937	60.00	60.01	-9.00	0
5/12/01	17:54:09	102	3935	60.00	60.09	35.00	0
5/12/01	17:54:09	603	3932	60.00	60.09	35.00	0
5/12/01	17:54:10	104	3930	60.00	60.13	48.00	0
5/12/01	17:54:10	604	3928	60.00	60.13	48.00	0
5/12/01	17:54:11	105	3926	60.00	60.08	42.00	0
5/12/01	17:54:11	606	3923	60.00	60.08	42.00	0
5/12/01	17:54:12	107	3927	60.00	60.05	7.00	0
5/12/01	17:54:12	607	3928	60.00	60.05	7.00	0
5/12/01	17:54:13	108	3932	60.00	59.92	-22.00	0
5/12/01	17:54:13	609	3933	60.00	59.92	-22.00	0
5/12/01	17:54:14	110	3935	59.99	59.83	-21.00	0
5/12/01	17:54:14	610	3935	59.99	59.83	-21.00	0
5/12/01	17:54:15	111	3935	59.99	59.92	0.00	0
5/12/01	17:54:15	612	3935	59.99	59.92	0.00	0
5/12/01	17:54:16	112	3933	59.99	59.95	18.00	0
5/12/01	17:54:16	623	3933	59.99	59.95	18.00	0
5/12/01	17:54:17	114	3931	59.99	60.12	27.00	0
5/12/01	17:54:17	615	3930	59.99	60.12	27.00	0
5/12/01	17:54:18	115	3929	59.99	60.06	20.00	0
5/12/01	17:54:18	616	3929	59.99	60.06	20.00	0
5/12/01	17:54:19	117	3929	59.98	60.00	8.00	0
5/12/01	17:54:19	617	3929	59.98	60.00	8.00	0
5/12/01	17:54:20	118	3931	59.98	59.96	-1.00	0
5/12/01	17:54:20	619	3932	59.98	59.96	-1.00	1
5/12/01	17:54:21	120	3932	59.98	59.98	-2.00	1
5/12/01	17:54:21	620	3932	59.98	59.98	-2.00	1
5/12/01	17:54:22	121	3932	59.98	59.94	-1.00	1
5/12/01	17:54:22	622	3932	59.98	59.94	-1.00	1
5/12/01	17:54:23	122	3933	59.98	59.99	-1.00	1
5/12/01	17:54:23	623	3933	59.98	59.99	-1.00	1
5/12/01	17:54:24	124	3932	60.00	59.99	-1.00	1
5/12/01	17:54:24	625	3931	60.00	60.00	9.00	0
5/12/01	17:54:25	125	3931	60.00	60.02	9.00	0
5/12/01	17:54:25	626	3931	60.00	60.02	7.00	0
5/12/01	17:54:26	127	3931	60.00	60.02	7.00	0
5/12/01	17:54:26	628	0	60.00	60.02	4.00	1
5/12/01	17:54:27	128	0	60.00	59.97	4.00	1
5/12/01	17:54:27	629	0	60.00	59.97	0.00	0
5/12/01	17:54:28	130	0	60.00	59.97	0.00	0
5/12/01	17:54:28	630	0	60.00	59.94	0.00	0
5/12/01	17:54:29	131	0	60.00	59.94	0.00	0
5/12/01	17:54:29	632	0	59.98	55.15	0.00	0
5/12/01	17:54:30	133	0	59.98	55.15	0.00	0
5/12/01	17:54:30	633	0	59.98	49.47	0.00	0
5/12/01	17:54:31	134	0	59.98	49.47	0.00	0
5/12/01	17:54:31	635	0	59.98	43.25	0.00	0
5/12/01	17:54:32	135	0	59.98	43.25	0.00	0
5/12/01	17:54:32	636	0	59.98	0.00	0.00	0
5/12/01	17:54:33	137	0	59.98	0.00	0.00	0
5/12/01	17:54:33	638	0	59.98	0.00	0.00	0
5/12/01	17:54:34	138	0	59.98	0.00	0.00	0
5/12/01	17:54:34	639	0	60.01	0.00	0.00	0
5/12/01	17:54:35	140	0	60.01	0.00	0.00	0
5/12/01	17:54:35	640	0	60.01	0.00	0.00	0
5/12/01	17:54:36	141	0	60.01	0.00	0.00	0
5/12/01	17:54:36	642	0	60.01	0.00	0.00	0
5/12/01	17:54:37	143	0	60.01	0.00	0.00	0
5/12/01	17:54:37	643	0	60.01	0.00	0.00	0
5/12/01	17:54:38	144	0	60.01	0.00	0.00	0

Date	Time	Millitm	M Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Degrees)	Close Breaker (Open/Close)
5/12/01	17:54:38	645	0	60.01	0.00	0.00	0
5/12/01	17:54:39	146	0	60.01	0.00	0.00	0
5/12/01	17:54:39	646	0	59.96	0.00	0.00	0
5/12/01	17:54:40	147	0	59.96	0.00	0.00	0
5/12/01	17:54:40	648	0	59.96	0.00	0.00	0
5/12/01	17:54:41	148	0	59.96	0.00	0.00	0
5/12/01	17:54:41	649	0	59.96	0.00	0.00	0
5/12/01	17:54:42	150	0	59.96	0.00	0.00	0
5/12/01	17:54:42	651	0	59.96	0.00	0.00	0
5/12/01	17:54:43	151	0	59.96	0.00	0.00	0
5/12/01	17:54:43	652	0	59.96	0.00	0.00	0
5/12/01	17:54:44	153	0	59.96	0.00	0.00	0
5/12/01	17:54:44	653	0	60.00	0.00	0.00	0
5/12/01	17:54:45	154	0	60.00	0.00	0.00	0
5/12/01	17:54:45	655	0	60.00	0.00	0.00	0
5/12/01	17:54:46	156	300	60.00	0.00	0.00	0
5/12/01	17:54:46	656	500	60.00	0.00	0.00	0
5/12/01	17:54:47	157	700	60.00	0.00	0.00	0
5/12/01	17:54:47	658	900	60.00	0.00	0.00	0
5/12/01	17:54:48	158	1200	60.00	0.00	0.00	0
5/12/01	17:54:48	659	1400	60.00	0.00	0.00	0
5/12/01	17:54:49	160	1600	60.00	0.00	0.00	0
5/12/01	17:54:49	661	1800	60.01	0.00	0.00	0
5/12/01	17:54:50	161	2100	60.01	0.00	0.00	0
5/12/01	17:54:50	662	2300	60.01	0.00	0.00	0
5/12/01	17:54:51	163	2500	60.01	0.00	0.00	0
5/12/01	17:54:51	664	2700	60.01	0.00	0.00	0
5/12/01	17:54:52	164	3000	60.01	0.00	0.00	0
5/12/01	17:54:52	665	3200	60.01	0.00	0.00	0
5/12/01	17:54:53	166	3375	60.01	0.00	0.00	0
5/12/01	17:54:53	666	3502	60.01	0.00	0.00	0
5/12/01	17:54:54	167	3591	60.01	0.00	0.00	0
5/12/01	17:54:54	668	3681	60.02	0.00	0.00	0
5/12/01	17:54:55	169	3724	60.02	0.00	0.00	0
5/12/01	17:54:55	669	3753	60.02	42.74	0.00	0
5/12/01	17:54:56	170	3788	60.02	42.74	0.00	0
5/12/01	17:54:56	671	3809	60.02	48.93	0.00	0
5/12/01	17:54:57	171	3829	60.02	48.93	0.00	0
5/12/01	17:54:57	672	3844	60.02	55.08	0.00	0
5/12/01	17:54:58	173	3856	60.02	55.08	0.00	0
5/12/01	17:54:58	674	3872	60.02	57.04	0.00	0
5/12/01	17:54:59	174	3881	60.02	57.04	0.00	0
5/12/01	17:54:59	675	3888	60.04	58.31	0.00	0
5/12/01	17:55:00	176	3897	60.04	58.31	0.00	0
5/12/01	17:55:00	676	3901	60.04	58.68	0.00	0
5/12/01	17:55:01	177	3905	60.04	58.68	0.00	0
5/12/01	17:55:01	678	3908	60.04	59.03	0.00	0
5/12/01	17:55:02	179	3911	60.04	59.03	0.00	0
5/12/01	17:55:02	679	3913	60.04	59.33	0.00	0
5/12/01	17:55:03	180	3915	60.04	59.33	0.00	0
5/12/01	17:55:03	681	3916	60.04	59.55	0.00	0
5/12/01	17:55:04	182	3918	60.04	59.55	0.00	0
5/12/01	17:55:04	682	3925	59.98	59.67	0.00	0
5/12/01	17:55:05	193	3929	59.98	59.67	-56.00	0
5/12/01	17:55:05	684	3931	59.98	59.72	-56.00	0
5/12/01	17:55:06	184	3933	59.98	59.72	-74.00	0
5/12/01	17:55:06	685	3935	59.98	59.78	-74.00	0
5/12/01	17:55:07	186	3938	59.98	59.78	-68.00	0
5/12/01	17:55:07	687	3940	59.98	59.88	-68.00	0
5/12/01	17:55:08	187	3941	59.98	59.88	-41.00	0
5/12/01	17:55:08	688	3941	59.98	59.98	-41.00	0
5/12/01	17:55:09	189	3936	59.98	59.98	17.00	0
5/12/01	17:55:09	689	3933	60.00	60.06	17.00	0
5/12/01	17:55:10	200	3931	60.00	60.06	37.00	0
5/12/01	17:55:10	691	3929	60.00	60.14	37.00	0
5/12/01	17:55:11	192	3927	60.00	60.14	33.00	0
5/12/01	17:55:11	692	3927	60.00	60.07	33.00	0
5/12/01	17:55:12	193	3931	60.00	60.07	11.00	0
5/12/01	17:55:12	694	3931	60.00	59.98	11.00	0
5/12/01	17:55:13	194	3931	60.00	59.98	3.00	0
5/12/01	17:55:13	695	3931	60.00	59.91	3.00	1
5/12/01	17:55:14	196	3931	60.00	59.91	0.00	1
5/12/01	17:55:14	697	3931	60.00	59.99	0.00	1
5/12/01	17:55:15	197	3932	60.00	59.99	-4.00	1
5/12/01	17:55:15	698	3934	60.00	59.98	-4.00	1
5/12/01	17:55:16	199	3934	60.00	59.98	1.00	1
5/12/01	17:55:16	700	3933	60.00	59.98	1.00	0
5/12/01	17:55:17	200	3933	60.00	59.98	13.00	0
5/12/01	17:55:17	701	0	60.00	59.98	13.00	0
5/12/01	17:55:18	202	0	60.00	60.06	0.00	0
5/12/01	17:55:18	702	0	60.00	60.06	0.00	0
5/12/01	17:55:19	203	0	60.00	60.01	0.00	0
5/12/01	17:55:19	704	0	60.00	60.01	0.00	0
5/12/01	17:55:20	205	0	59.97	60.00	0.00	0
5/12/01	17:55:20	705	0	59.97	60.00	0.00	0
5/12/01	17:55:21	206	0	59.97	56.71	0.00	0
5/12/01	17:55:21	717	0	59.97	56.71	0.00	0
5/12/01	17:55:22	207	0	59.97	51.13	0.00	0
5/12/01	17:55:22	708	0	59.97	51.13	0.00	0
5/12/01	17:55:23	209	0	59.97	44.87	0.00	0
5/12/01	17:55:23	710	0	59.97	44.87	0.00	0
5/12/01	17:55:24	210	0	59.97	0.00	0.00	0
5/12/01	17:55:24	711	0	59.97	0.00	0.00	0
5/12/01	17:55:25	212	0	59.99	0.00	0.00	0
5/12/01	17:55:25	712	0	59.99	0.00	0.00	0
5/12/01	17:55:26	213	0	59.99	0.00	0.00	0
5/12/01	17:55:26	714	0	59.99	0.00	0.00	0

Date	Time	Millitm	M Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Degrees)	Close Breaker (Open/Close)
5/12/01	17:55:27	215	0	59.99	0.00	0.00	0
5/12/01	17:55:27	715	0	59.99	0.00	0.00	0
5/12/01	17:55:28	216	0	59.99	0.00	0.00	0
5/12/01	17:55:28	717	0	59.99	0.00	0.00	0
5/12/01	17:55:29	218	0	59.99	0.00	0.00	0
5/12/01	17:55:29	718	0	59.99	0.00	0.00	0
5/12/01	17:55:30	219	0	60.00	0.00	0.00	0
5/12/01	17:55:30	720	0	60.00	0.00	0.00	0
5/12/01	17:55:31	220	0	60.00	0.00	0.00	0
5/12/01	17:55:31	721	0	60.00	0.00	0.00	0
5/12/01	17:55:32	222	0	60.00	0.00	0.00	0
5/12/01	17:55:32	723	0	60.00	0.00	0.00	0
5/12/01	17:55:33	223	0	60.00	0.00	0.00	0
5/12/01	17:55:33	724	0	60.00	0.00	0.00	0
5/12/01	17:55:34	225	0	60.00	0.00	0.00	0
5/12/01	17:55:34	725	0	60.00	0.00	0.00	0
5/12/01	17:55:35	226	0	59.97	0.00	0.00	0
5/12/01	17:55:35	727	0	59.97	0.00	0.00	0
5/12/01	17:55:36	228	0	59.97	0.00	0.00	0
5/12/01	17:55:36	728	0	59.97	0.00	0.00	0
5/12/01	17:55:37	229	0	59.97	0.00	0.00	0
5/12/01	17:55:37	730	0	59.97	0.00	0.00	0
5/12/01	17:55:38	230	0	59.97	0.00	0.00	0
5/12/01	17:55:38	731	0	59.97	0.00	0.00	0
5/12/01	17:55:39	232	0	59.97	0.00	0.00	0
5/12/01	17:55:39	733	0	59.97	0.00	0.00	0
5/12/01	17:55:40	233	0	59.98	0.00	0.00	0
5/12/01	17:55:40	734	200	59.98	0.00	0.00	0
5/12/01	17:55:41	235	400	59.98	0.00	0.00	0
5/12/01	17:55:41	736	600	59.98	0.00	0.00	0
5/12/01	17:55:42	236	800	59.98	0.00	0.00	0
5/12/01	17:55:42	737	1100	59.98	0.00	0.00	0
5/12/01	17:55:43	238	1400	59.98	0.00	0.00	0
5/12/01	17:55:43	738	1500	59.98	0.00	0.00	0
5/12/01	17:55:44	239	1800	59.98	0.00	0.00	0
5/12/01	17:55:44	740	2000	59.98	0.00	0.00	0
5/12/01	17:55:45	241	2300	60.00	0.00	0.00	0
5/12/01	17:55:45	741	2500	60.00	0.00	0.00	0
5/12/01	17:55:46	242	2700	60.00	0.00	0.00	0
5/12/01	17:55:46	743	2900	60.00	0.00	0.00	0
5/12/01	17:55:47	243	3196	60.00	0.00	0.00	0
5/12/01	17:55:47	744	3368	60.00	0.00	0.00	0
5/12/01	17:55:48	245	3501	60.00	0.00	0.00	0
5/12/01	17:55:48	746	3597	60.00	0.00	0.00	0
5/12/01	17:55:49	246	3694	60.00	0.00	0.00	0
5/12/01	17:55:49	747	3733	60.00	0.00	0.00	0
5/12/01	17:55:50	248	3758	60.02	46.07	0.00	0
5/12/01	17:55:50	748	3794	60.02	46.07	0.00	0
5/12/01	17:55:51	249	3813	60.02	52.26	0.00	0
5/12/01	17:55:51	750	3829	60.02	52.26	0.00	0
5/12/01	17:55:52	251	3844	60.02	56.66	0.00	0
5/12/01	17:55:52	751	3858	60.02	56.66	0.00	0
5/12/01	17:55:53	252	3876	60.02	57.15	0.00	0
5/12/01	17:55:53	753	3886	60.02	57.15	0.00	0
5/12/01	17:55:54	254	3896	60.02	57.95	0.00	0
5/12/01	17:55:54	754	3904	60.02	57.95	0.00	0
5/12/01	17:55:55	255	3913	60.01	58.29	0.00	0
5/12/01	17:55:55	756	3918	60.01	58.29	0.00	0
5/12/01	17:55:56	256	3920	60.01	58.96	0.00	0
5/12/01	17:55:56	757	3922	60.01	58.96	175.00	0
5/12/01	17:55:57	258	3922	60.01	59.32	175.00	0
5/12/01	17:55:57	759	3922	60.01	59.32	132.00	0
5/12/01	17:55:58	259	3922	60.01	59.59	132.00	0
5/12/01	17:55:58	760	3922	60.01	59.59	74.00	0
5/12/01	17:55:59	261	3921	60.01	59.85	74.00	0
5/12/01	17:55:59	761	3923	60.01	59.85	18.00	0
5/12/01	17:56:00	262	3924	60.01	59.85	18.00	0
5/12/01	17:56:00	763	3926	59.99	59.84	-31.00	0
5/12/01	17:56:01	264	3929	59.99	59.84	-31.00	0
5/12/01	17:56:01	764	3931	59.99	59.85	-58.00	0
5/12/01	17:56:02	265	3933	59.99	59.85	-58.00	0
5/12/01	17:56:02	766	3935	59.99	59.89	-58.00	0
5/12/01	17:56:03	266	3938	59.99	59.89	-58.00	0
5/12/01	17:56:03	767	3940	59.99	59.92	-33.00	0
5/12/01	17:56:04	278	3937	59.99	59.92	-33.00	0
5/12/01	17:56:04	769	3933	59.99	60.02	3.00	0
5/12/01	17:56:05	269	3933	59.99	60.02	3.00	0
5/12/01	17:56:05	770	3933	60.00	60.01	14.00	0
5/12/01	17:56:06	271	3933	60.00	60.01	14.00	0
5/12/01	17:56:06	772	3932	60.00	60.11	16.00	0
5/12/01	17:56:07	272	3932	60.00	60.11	16.00	0
5/12/01	17:56:07	773	3932	60.00	59.97	17.00	0
5/12/01	17:56:08	274	3932	60.00	59.97	17.00	0
5/12/01	17:56:08	774	3932	60.00	59.95	16.00	0
5/12/01	17:56:09	275	3932	60.00	59.95	16.00	0
5/12/01	17:56:09	776	3932	60.00	60.04	16.00	0
5/12/01	17:56:10	277	3932	60.00	60.04	16.00	0
5/12/01	17:56:10	777	3932	60.03	60.01	15.00	0
5/12/01	17:56:11	278	3932	60.03	60.01	15.00	0
5/12/01	17:56:11	779	3932	60.03	59.96	15.00	0
5/12/01	17:56:12	279	3932	60.03	59.96	15.00	0
5/12/01	17:56:12	780	3932	60.03	60.00	15.00	0
5/12/01	17:56:13	281	3932	60.03	60.00	15.00	0
5/12/01	17:56:13	782	3932	60.03	59.91	15.00	0
5/12/01	17:56:14	282	3932	60.03	59.91	15.00	0
5/12/01	17:56:14	783	3932	60.03	59.93	15.00	0
5/12/01	17:56:15	284	3932	60.03	59.93	13.00	0

Date	Time	Millitm	M Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Degrees)	Close Breaker (Open/Close)
5/12/01	17:56:15	784	3931	59.99	59.98	13.00	0
5/12/01	17:56:16	285	3931	59.99	59.98	13.00	0
5/12/01	17:56:16	786	3931	59.99	59.97	13.00	0
5/12/01	17:56:17	287	3931	59.99	59.97	11.00	0
5/12/01	17:56:17	787	3931	59.99	59.98	11.00	0
5/12/01	17:56:18	288	3931	59.99	59.98	8.00	0
5/12/01	17:56:18	789	3931	59.99	59.99	8.00	0
5/12/01	17:56:19	290	3931	59.99	59.99	6.00	0
5/12/01	17:56:19	790	3931	59.99	59.96	6.00	0
5/12/01	17:56:20	291	3931	59.99	59.96	3.00	0
5/12/01	17:56:20	792	3931	60.00	59.98	3.00	1
5/12/01	17:56:21	292	3931	60.00	59.98	1.00	1
5/12/01	17:56:21	793	3931	60.00	59.97	1.00	1
5/12/01	17:56:22	294	3932	60.00	59.97	-1.00	1
5/12/01	17:56:22	795	3933	60.00	60.01	-1.00	1
5/12/01	17:56:23	295	3932	60.00	60.01	0.00	1
5/12/01	17:56:23	796	3931	60.00	60.01	0.00	1
5/12/01	17:56:24	297	3931	60.00	59.99	2.00	1
5/12/01	17:56:24	797	3931	60.00	59.99	2.00	1
5/12/01	17:56:25	298	3931	60.00	59.94	0.00	1
5/12/01	17:56:25	799	3932	60.00	59.94	0.00	1
5/12/01	17:56:26	300	3932	60.00	60.03	-1.00	1
5/12/01	17:56:26	800	3932	60.00	60.03	-1.00	1
5/12/01	17:56:27	301	3932	60.00	59.96	-1.00	1
5/12/01	17:56:27	802	0	60.00	59.96	-1.00	1
5/12/01	17:56:28	302	0	60.00	59.95	0.00	1
5/12/01	17:56:28	803	0	60.00	59.95	0.00	0
5/12/01	17:56:29	304	0	60.00	60.01	0.00	0
5/12/01	17:56:29	805	0	60.00	60.01	0.00	0
5/12/01	17:56:30	305	0	60.00	59.99	0.00	0
5/12/01	17:56:30	806	0	60.00	59.99	0.00	0
5/12/01	17:56:31	307	0	60.00	55.93	0.00	0
5/12/01	17:56:31	808	0	60.00	55.93	0.00	0
5/12/01	17:56:32	308	0	60.00	49.65	0.00	0
5/12/01	17:56:32	809	0	60.00	49.65	0.00	0
5/12/01	17:56:33	310	0	60.00	43.38	0.00	0
5/12/01	17:56:33	810	0	60.00	43.38	0.00	0
5/12/01	17:56:34	311	0	60.00	0.00	0.00	0
5/12/01	17:56:34	812	0	60.00	0.00	0.00	0
5/12/01	17:56:35	313	0	60.00	0.00	0.00	0
5/12/01	17:56:35	813	0	60.00	0.00	0.00	0
5/12/01	17:56:36	314	0	59.99	0.00	0.00	0
5/12/01	17:56:36	815	0	59.99	0.00	0.00	0
5/12/01	17:56:37	315	0	59.99	0.00	0.00	0
5/12/01	17:56:37	816	0	59.99	0.00	0.00	0
5/12/01	17:56:38	317	0	59.99	0.00	0.00	0
5/12/01	17:56:38	818	0	59.99	0.00	0.00	0
5/12/01	17:56:39	318	0	59.99	0.00	0.00	0
5/12/01	17:56:39	819	0	59.99	0.00	0.00	0
5/12/01	17:56:40	320	0	59.99	0.00	0.00	0
5/12/01	17:56:40	820	0	59.99	0.00	0.00	0
5/12/01	17:56:41	321	0	60.00	0.00	0.00	0
5/12/01	17:56:41	822	0	60.00	0.00	0.00	0
5/12/01	17:56:42	323	0	60.00	0.00	0.00	0
5/12/01	17:56:42	823	0	60.00	0.00	0.00	0
5/12/01	17:56:43	334	0	60.00	0.00	0.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Degrees)	Close Breaker (Open/Close)
5/12/01	19:34:20	176	0	59.96	0.00	0.00	0
5/12/01	19:34:20	677	0	59.96	0.00	0.00	0
5/12/01	19:34:21	177	0	59.96	0.00	0.00	0
5/12/01	19:34:21	678	87	59.96	0.00	0.00	0
5/12/01	19:34:22	179	565	59.96	0.00	0.00	0
5/12/01	19:34:22	679	1087	59.96	0.00	0.00	0
5/12/01	19:34:23	180	1261	59.96	0.00	0.00	0
5/12/01	19:34:23	681	1804	59.99	0.00	0.00	0
5/12/01	19:34:24	182	1804	59.99	0.00	0.00	0
5/12/01	19:34:24	682	1804	59.99	0.00	0.00	0
5/12/01	19:34:25	183	1804	59.99	0.00	0.00	0
5/12/01	19:34:25	684	1804	59.99	0.00	0.00	0
5/12/01	19:34:26	184	1804	59.99	0.00	0.00	0
5/12/01	19:34:26	685	1804	59.99	0.00	0.00	0
5/12/01	19:34:27	196	1913	59.99	0.00	0.00	0
5/12/01	19:34:27	687	2283	59.99	0.00	0.00	0
5/12/01	19:34:28	187	2283	59.99	0.00	0.00	0
5/12/01	19:34:28	688	2283	59.99	0.00	0.00	0
5/12/01	19:34:29	189	2402	59.99	0.00	0.00	0
5/12/01	19:34:29	690	2707	59.99	0.00	0.00	0
5/12/01	19:34:30	190	2707	59.99	0.00	0.00	0
5/12/01	19:34:30	691	2707	59.99	0.00	0.00	0
5/12/01	19:34:31	192	2707	59.99	0.00	0.00	0
5/12/01	19:34:31	692	2793	59.99	42.08	0.00	0
5/12/01	19:34:32	193	2793	59.99	42.08	0.00	0
5/12/01	19:34:32	694	2793	59.99	48.62	0.00	0
5/12/01	19:34:33	195	2793	59.99	48.62	0.00	0
5/12/01	19:34:33	745	2793	59.97	49.88	0.00	0
5/12/01	19:34:34	196	2793	59.97	49.88	0.00	0
5/12/01	19:34:34	697	2793	59.97	51.38	0.00	0
5/12/01	19:34:35	197	2793	59.97	51.38	0.00	0
5/12/01	19:34:35	698	2793	59.97	51.37	0.00	0
5/12/01	19:34:36	199	2793	59.97	51.37	0.00	0
5/12/01	19:34:36	700	2793	59.97	51.37	0.00	0
5/12/01	19:34:37	200	2793	59.97	51.37	0.00	0
5/12/01	19:34:37	751	2793	59.97	51.38	0.00	0
5/12/01	19:34:38	202	2793	59.97	51.38	0.00	0
5/12/01	19:34:38	702	2793	59.99	51.37	0.00	0
5/12/01	19:34:39	203	2793	59.99	51.37	0.00	0
5/12/01	19:34:39	704	2837	59.99	51.37	0.00	0
5/12/01	19:34:40	205	3011	59.99	51.37	0.00	0
5/12/01	19:34:40	705	3076	59.99	51.37	0.00	0
5/12/01	19:34:41	206	3076	59.99	51.37	0.00	0
5/12/01	19:34:41	707	3076	59.99	51.35	0.00	0
5/12/01	19:34:42	208	3076	59.99	51.35	0.00	0
5/12/01	19:34:42	708	3076	59.99	54.31	0.00	0
5/12/01	19:34:43	209	3196	59.99	54.31	0.00	0
5/12/01	19:34:43	710	3196	59.99	56.47	0.00	0
5/12/01	19:34:44	210	3196	59.99	56.47	0.00	0
5/12/01	19:34:44	711	3196	59.99	56.46	0.00	0
5/12/01	19:34:45	212	3196	59.99	56.46	0.00	0
5/12/01	19:34:45	713	3196	59.99	57.08	0.00	0
5/12/01	19:34:46	213	3196	59.99	57.08	0.00	0
5/12/01	19:34:46	714	3261	59.99	58.57	0.00	0
5/12/01	19:34:47	215	3261	59.99	58.57	0.00	0
5/12/01	19:34:47	715	3261	59.99	58.57	0.00	0
5/12/01	19:34:48	216	3261	59.99	58.57	0.00	0
5/12/01	19:34:48	717	3261	60.01	58.61	0.00	0
5/12/01	19:34:49	218	3293	60.01	58.61	0.00	0
5/12/01	19:34:49	718	3293	60.01	59.71	0.00	0
5/12/01	19:34:50	219	3293	60.01	59.71	-31.00	0
5/12/01	19:34:50	720	3293	60.01	59.68	-31.00	0
5/12/01	19:34:51	220	3293	60.01	59.68	38.00	0
5/12/01	19:34:51	721	3293	60.01	59.78	38.00	0
5/12/01	19:34:52	222	3293	60.01	59.78	110.00	0
5/12/01	19:34:52	723	3293	60.01	59.78	110.00	0
5/12/01	19:34:53	223	3293	60.01	60.18	-174.00	0
5/12/01	19:34:53	724	3293	60.01	60.18	-174.00	0
5/12/01	19:34:54	225	3293	59.99	60.17	-100.00	0
5/12/01	19:34:54	726	3293	59.99	60.17	-100.00	0
5/12/01	19:34:55	226	3292	59.99	60.19	-18.00	0
5/12/01	19:34:55	727	3292	59.99	60.19	-18.00	0
5/12/01	19:34:56	228	3291	59.99	60.19	39.00	0
5/12/01	19:34:56	728	3291	59.99	60.19	39.00	0
5/12/01	19:34:57	229	3289	59.99	60.20	120.00	0
5/12/01	19:34:57	730	3289	59.99	60.20	120.00	0
5/12/01	19:34:58	231	3289	59.99	60.19	178.00	0
5/12/01	19:34:58	731	3289	59.99	60.19	178.00	0
5/12/01	19:34:59	232	3289	60.00	60.20	-134.00	0
5/12/01	19:34:59	733	3289	60.00	60.20	-134.00	0
5/12/01	19:35:00	233	3289	60.00	60.10	-91.00	0
5/12/01	19:35:00	734	3289	60.00	60.10	-91.00	0
5/12/01	19:35:01	235	3289	60.00	60.10	-50.00	0
5/12/01	19:35:01	736	3288	60.00	60.10	-50.00	0
5/12/01	19:35:02	236	3288	60.00	60.11	-11.00	0
5/12/01	19:35:02	737	3287	60.00	60.11	-11.00	0
5/12/01	19:35:03	238	3287	60.00	60.12	30.00	0
5/12/01	19:35:03	738	3287	60.00	60.12	30.00	0
5/12/01	19:35:04	239	3287	60.00	60.12	65.00	0
5/12/01	19:35:04	740	3287	60.00	60.12	65.00	0
5/12/01	19:35:05	241	3287	60.00	60.11	97.00	0
5/12/01	19:35:05	741	3285	60.00	60.11	97.00	0
5/12/01	19:35:06	242	3285	60.00	60.06	123.00	0
5/12/01	19:35:06	743	3284	60.00	60.06	123.00	0
5/12/01	19:35:07	244	3282	60.00	60.07	131.00	0
5/12/01	19:35:07	744	3282	60.00	60.07	131.00	0
5/12/01	19:35:08	245	3282	60.00	60.07	131.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Degrees)	Close Breaker (Open/Close)
5/12/01	19:35:08	746	3282	60.00	60.07	136.00	0
5/12/01	19:35:09	246	3282	60.00	60.03	136.00	0
5/12/01	19:35:09	747	3282	60.00	60.03	144.00	0
5/12/01	19:35:10	248	3282	60.00	60.03	144.00	0
5/12/01	19:35:10	749	3282	60.00	60.03	147.00	0
5/12/01	19:35:11	249	3282	60.00	60.03	147.00	0
5/12/01	19:35:11	750	3282	60.00	60.00	152.00	0
5/12/01	19:35:12	251	3283	60.00	60.00	152.00	0
5/12/01	19:35:12	751	3283	60.00	60.00	155.00	0
5/12/01	19:35:13	252	3283	60.00	60.00	155.00	0
5/12/01	19:35:13	753	3283	60.00	60.00	160.00	0
5/12/01	19:35:14	254	3283	60.00	60.00	160.00	0
5/12/01	19:35:14	754	3283	60.00	59.99	164.00	0
5/12/01	19:35:15	255	3283	60.00	59.99	164.00	0
5/12/01	19:35:15	756	3283	60.00	60.01	167.00	0
5/12/01	19:35:16	256	3284	60.00	60.01	167.00	0
5/12/01	19:35:16	757	3284	60.00	60.00	171.00	0
5/12/01	19:35:17	258	3284	60.00	60.00	171.00	0
5/12/01	19:35:17	759	3284	60.00	60.01	178.00	0
5/12/01	19:35:18	259	3284	60.00	60.01	178.00	0
5/12/01	19:35:18	760	3284	60.00	60.01	-178.00	0
5/12/01	19:35:19	261	3284	60.00	60.01	-178.00	0
5/12/01	19:35:19	762	3284	60.00	60.01	-175.00	0
5/12/01	19:35:20	262	3284	60.00	60.01	-175.00	0
5/12/01	19:35:20	763	3284	60.00	60.01	-170.00	0
5/12/01	19:35:21	264	3285	60.00	60.01	-170.00	0
5/12/01	19:35:21	764	3285	60.00	60.01	-168.00	0
5/12/01	19:35:22	265	3285	60.00	60.01	-168.00	0
5/12/01	19:35:22	766	3286	60.00	60.00	-164.00	0
5/12/01	19:35:23	267	3286	60.00	60.00	-164.00	0
5/12/01	19:35:23	767	3286	59.99	60.00	-147.00	0
5/12/01	19:35:24	268	3286	59.99	60.00	-147.00	0
5/12/01	19:35:24	769	3286	59.99	60.00	-147.00	0
5/12/01	19:35:25	269	3286	59.99	60.00	-113.00	0
5/12/01	19:35:25	770	3286	59.99	60.00	-113.00	0
5/12/01	19:35:26	271	3285	59.99	60.00	-81.00	0
5/12/01	19:35:26	772	3285	59.99	60.08	-81.00	0
5/12/01	19:35:27	272	3285	59.99	60.08	-48.00	0
5/12/01	19:35:27	773	3283	59.99	60.08	-48.00	0
5/12/01	19:35:28	274	3283	59.99	60.08	-19.00	0
5/12/01	19:35:28	774	3283	60.01	60.08	-19.00	0
5/12/01	19:35:29	275	3283	60.01	60.08	19.00	0
5/12/01	19:35:29	776	3283	60.01	60.08	19.00	0
5/12/01	19:35:30	277	3283	60.01	60.10	50.00	0
5/12/01	19:35:30	777	3283	60.01	60.10	50.00	0
5/12/01	19:35:31	288	3283	60.01	60.09	87.00	0
5/12/01	19:35:31	779	3282	60.01	60.09	87.00	0
5/12/01	19:35:32	280	3282	60.01	60.09	117.00	0
5/12/01	19:35:32	780	3282	60.01	60.09	117.00	0
5/12/01	19:35:33	281	3282	60.01	60.08	135.00	0
5/12/01	19:35:33	782	3282	60.01	60.08	135.00	0
5/12/01	19:35:34	282	3281	60.00	60.07	139.00	0
5/12/01	19:35:34	783	3281	60.00	60.07	139.00	0
5/12/01	19:35:35	284	3281	60.00	60.07	139.00	0
5/12/01	19:35:35	785	3281	60.00	60.07	139.00	0
5/12/01	19:35:36	285	3280	60.00	60.01	134.00	0
5/12/01	19:35:36	786	3280	60.00	60.01	134.00	0
5/12/01	19:35:37	287	3280	60.00	59.97	123.00	0
5/12/01	19:35:37	787	3280	60.00	59.97	123.00	0
5/12/01	19:35:38	288	3280	60.00	59.96	111.00	0
5/12/01	19:35:38	789	3280	60.00	59.96	111.00	0
5/12/01	19:35:39	290	3280	60.00	59.97	97.00	0
5/12/01	19:35:39	790	3280	60.00	59.97	97.00	0
5/12/01	19:35:40	291	3280	60.00	59.97	82.00	0
5/12/01	19:35:40	792	3280	60.00	59.97	82.00	0
5/12/01	19:35:41	292	3280	60.00	59.96	65.00	0
5/12/01	19:35:41	793	3280	60.00	59.96	65.00	0
5/12/01	19:35:42	294	3282	60.00	59.96	44.00	0
5/12/01	19:35:42	795	3282	60.00	59.96	44.00	0
5/12/01	19:35:43	295	3282	60.00	59.95	49.00	0
5/12/01	19:35:43	796	3282	60.00	59.95	49.00	0
5/12/01	19:35:44	297	3280	60.00	59.94	62.00	0
5/12/01	19:35:44	798	3280	60.00	59.94	62.00	0
5/12/01	19:35:45	298	3280	60.00	60.04	75.00	0
5/12/01	19:35:45	799	3280	60.00	60.04	75.00	0
5/12/01	19:35:46	300	3280	60.00	60.03	94.00	0
5/12/01	19:35:46	800	3280	60.00	60.03	94.00	0
5/12/01	19:35:47	301	3280	60.00	60.05	108.00	0
5/12/01	19:35:47	802	3280	60.00	60.05	108.00	0
5/12/01	19:35:48	303	3280	60.00	60.04	108.00	0
5/12/01	19:35:48	803	3280	60.00	60.04	109.00	0
5/12/01	19:35:49	304	3280	59.97	60.04	109.00	0
5/12/01	19:35:49	805	3280	59.97	60.04	95.00	0
5/12/01	19:35:50	305	3280	59.97	60.04	95.00	0
5/12/01	19:35:50	806	3280	59.97	59.97	80.00	0
5/12/01	19:35:51	307	3280	59.97	59.97	80.00	0
5/12/01	19:35:51	808	3280	59.97	59.93	61.00	0
5/12/01	19:35:52	308	3280	59.97	59.93	61.00	0
5/12/01	19:35:52	809	3280	59.97	59.95	47.00	0
5/12/01	19:35:53	310	3280	59.97	59.95	47.00	0
5/12/01	19:35:53	810	3280	59.97	59.95	34.00	0
5/12/01	19:35:54	311	3280	59.97	59.95	34.00	0
5/12/01	19:35:54	812	3280	60.00	59.96	22.00	0
5/12/01	19:35:55	313	3281	60.00	59.96	22.00	0
5/12/01	19:35:55	813	3281	60.00	59.97	11.00	0
5/12/01	19:35:56	314	3281	60.00	59.97	11.00	0
5/12/01	19:35:56	815	3281	60.00	59.97	1.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Degrees)	Close Breaker (Open/Close)
5/12/01	19:35:57	316	3281	60.00	59.97	1.00	1
5/12/01	19:35:57	816	3281	60.00	59.96	-5.00	1
5/12/01	19:35:58	317	3281	60.00	59.96	-5.00	0
5/12/01	19:35:58	818	3281	60.00	59.98	-12.00	0
5/12/01	19:35:59	318	2033	60.00	59.98	-12.00	0
5/12/01	19:35:59	819	837	59.98	59.98	-12.00	0
5/12/01	19:36:00	320	196	59.98	59.98	-12.00	0
5/12/01	19:36:00	821	0	59.98	59.98	-12.00	0
5/12/01	19:36:01	321	0	59.98	59.98	0.00	0
5/12/01	19:36:01	822	0	59.98	59.96	0.00	0
5/12/01	19:36:02	323	0	59.98	59.96	0.00	0
5/12/01	19:36:02	823	0	59.98	53.64	0.00	0
5/12/01	19:36:03	324	0	59.98	53.64	0.00	0
5/12/01	19:36:03	825	0	60.00	46.74	0.00	0
5/12/01	19:36:04	326	0	60.00	46.74	0.00	0
5/12/01	19:36:04	826	0	60.00	0.00	0.00	0
5/12/01	19:36:05	327	0	60.00	0.00	0.00	0
5/12/01	19:36:05	828	0	60.00	0.00	0.00	0
5/12/01	19:36:06	328	0	60.00	0.00	0.00	0
5/12/01	19:36:06	829	0	60.00	0.00	0.00	0
5/12/01	19:36:07	741	0	60.00	0.00	0.00	0
5/12/01	19:36:08	81	0	60.00	0.00	0.00	0
5/12/01	19:36:08	582	0	60.00	0.00	0.00	0
5/12/01	19:36:09	82	0	59.98	0.00	0.00	0
5/12/01	19:36:09	583	0	59.98	0.00	0.00	0
5/12/01	19:36:10	84	0	59.98	0.00	0.00	0
5/12/01	19:36:10	585	0	59.98	0.00	0.00	0
5/12/01	19:36:11	85	0	59.98	0.00	0.00	0
5/12/01	19:36:11	586	0	59.98	0.00	0.00	0
5/12/01	19:36:12	87	0	59.98	0.00	0.00	0
5/12/01	19:36:12	587	250	59.98	0.00	0.00	0
5/12/01	19:36:13	88	902	59.98	0.00	0.00	0
5/12/01	19:36:13	589	1370	59.98	0.00	0.00	0
5/12/01	19:36:14	90	1957	59.98	0.00	0.00	0
5/12/01	19:36:14	590	2391	59.98	0.00	0.00	0
5/12/01	19:36:15	91	2902	59.98	0.00	0.00	0
5/12/01	19:36:15	592	3076	59.98	0.00	0.00	0
5/12/01	19:36:16	93	3076	60.01	0.00	0.00	0
5/12/01	19:36:16	593	3076	60.01	0.00	0.00	0
5/12/01	19:36:17	104	3076	60.01	0.00	0.00	0
5/12/01	19:36:17	595	3076	60.01	0.00	0.00	0
5/12/01	19:36:18	95	3076	60.01	0.00	0.00	0
5/12/01	19:36:18	596	3076	60.01	0.00	0.00	0
5/12/01	19:36:19	97	3076	60.01	0.00	0.00	0
5/12/01	19:36:19	598	3076	60.01	0.00	0.00	0
5/12/01	19:36:20	98	3076	60.01	43.03	0.00	0
5/12/01	19:36:20	599	3076	60.01	43.03	0.00	0
5/12/01	19:36:21	100	3076	59.99	49.05	0.00	0
5/12/01	19:36:21	600	3076	59.99	49.05	0.00	0
5/12/01	19:36:22	101	3076	59.99	55.44	0.00	0
5/12/01	19:36:22	602	3076	59.99	55.44	0.00	0
5/12/01	19:36:23	103	3076	59.99	56.52	0.00	0
5/12/01	19:36:23	603	3076	59.99	56.52	0.00	0
5/12/01	19:36:24	104	3076	59.99	56.46	0.00	0
5/12/01	19:36:24	605	3076	59.99	56.46	0.00	0
5/12/01	19:36:25	105	3076	59.99	56.49	0.00	0
5/12/01	19:36:25	606	3076	59.99	56.49	0.00	0
5/12/01	19:36:26	107	3163	59.99	56.49	0.00	0
5/12/01	19:36:26	608	3228	59.97	56.48	0.00	0
5/12/01	19:36:27	108	3228	59.97	56.48	0.00	0
5/12/01	19:36:27	609	3228	59.97	56.48	0.00	0
5/12/01	19:36:28	110	3228	59.97	56.48	0.00	0
5/12/01	19:36:28	611	3228	59.97	57.71	0.00	0
5/12/01	19:36:29	111	3228	59.97	57.71	0.00	0
5/12/01	19:36:29	612	3228	59.97	59.16	0.00	0
5/12/01	19:36:30	113	3228	59.97	59.16	0.00	0
5/12/01	19:36:30	613	3228	59.97	59.12	0.00	0
5/12/01	19:36:31	114	3228	59.97	59.12	0.00	0
5/12/01	19:36:31	615	3228	59.99	59.12	0.00	0
5/12/01	19:36:32	116	3228	59.99	59.12	0.00	0
5/12/01	19:36:32	616	3272	59.99	59.12	0.00	0
5/12/01	19:36:33	117	3315	59.99	59.12	0.00	0
5/12/01	19:36:33	618	3315	59.99	59.11	0.00	0
5/12/01	19:36:34	118	3315	59.99	59.11	0.00	0
5/12/01	19:36:34	619	3315	59.99	59.12	0.00	0
5/12/01	19:36:35	120	3315	59.99	59.12	0.00	0
5/12/01	19:36:35	621	3315	59.99	60.48	0.00	0
5/12/01	19:36:36	121	3315	59.99	60.48	0.00	0
5/12/01	19:36:36	622	3315	59.99	60.57	0.00	0
5/12/01	19:36:37	123	3315	59.99	60.57	0.00	0
5/12/01	19:36:37	623	3315	59.99	60.57	0.00	0
5/12/01	19:36:38	134	3315	59.99	60.57	0.00	0
5/12/01	19:36:38	625	3315	59.99	60.58	0.00	0
5/12/01	19:36:39	126	3315	59.99	60.58	0.00	0
5/12/01	19:36:39	626	3283	59.99	60.58	0.00	0
5/12/01	19:36:40	127	3283	59.99	60.58	-85.00	0
5/12/01	19:36:40	628	3283	59.99	60.56	-85.00	0
5/12/01	19:36:41	129	3283	59.99	60.56	-74.00	0
5/12/01	19:36:41	629	3283	59.98	60.57	-74.00	0
5/12/01	19:36:42	130	3283	59.98	60.57	-63.00	0
5/12/01	19:36:42	631	3283	59.98	60.02	-63.00	0
5/12/01	19:36:43	131	3283	59.98	60.02	-53.00	0
5/12/01	19:36:43	632	3283	59.98	60.02	-53.00	0
5/12/01	19:36:44	133	3283	59.98	60.02	-44.00	0
5/12/01	19:36:44	644	3283	59.98	60.01	-44.00	0
5/12/01	19:36:45	144	3283	59.98	60.01	-36.00	0
5/12/01	19:36:45	645	3283	59.98	60.01	-36.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Degrees)	Close Breaker (Open/Close)
5/12/01	19:36:46	146	3283	59.98	60.01	-29.00	0
5/12/01	19:36:46	646	3283	60.00	60.00	-29.00	0
5/12/01	19:36:47	147	3283	60.00	60.00	-22.00	0
5/12/01	19:36:47	648	3283	60.00	60.02	-22.00	0
5/12/01	19:36:48	149	3283	60.00	60.02	-13.00	0
5/12/01	19:36:48	649	3283	60.00	60.01	-13.00	0
5/12/01	19:36:49	150	3283	60.00	60.01	-5.00	0
5/12/01	19:36:49	651	3283	60.00	60.02	-5.00	0
5/12/01	19:36:50	151	3283	60.00	60.02	1.00	1
5/12/01	19:36:50	652	3283	60.00	60.03	1.00	1
5/12/01	19:36:51	153	3283	60.00	60.03	7.00	1
5/12/01	19:36:51	654	3283	60.01	60.03	7.00	1
5/12/01	19:36:52	154	3283	60.01	60.03	13.00	0
5/12/01	19:36:52	655	3283	60.01	60.02	13.00	0
5/12/01	19:36:53	156	3283	60.01	60.02	18.00	0
5/12/01	19:36:53	657	3283	60.01	60.03	18.00	0
5/12/01	19:36:54	157	0	60.01	60.03	0.00	0
5/12/01	19:36:54	658	0	60.01	60.01	0.00	0
5/12/01	19:36:55	159	0	60.01	60.01	0.00	0
5/12/01	19:36:55	659	0	60.01	60.01	0.00	0
5/12/01	19:36:56	160	0	60.01	60.01	0.00	0
5/12/01	19:36:56	661	0	60.00	60.02	0.00	0
5/12/01	19:36:57	162	0	60.00	60.02	0.00	0
5/12/01	19:36:57	662	0	60.00	54.76	0.00	0
5/12/01	19:36:58	163	0	60.00	54.76	0.00	0
5/12/01	19:36:58	664	0	60.00	47.15	0.00	0
5/12/01	19:36:59	164	0	60.00	47.15	0.00	0
5/12/01	19:36:59	665	0	60.00	40.21	0.00	0
5/12/01	19:37:00	166	0	60.00	40.21	0.00	0
5/12/01	19:37:00	667	0	60.00	0.00	0.00	0
5/12/01	19:37:01	167	0	60.00	0.00	0.00	0
5/12/01	19:37:01	668	0	60.02	0.00	0.00	0
5/12/01	19:37:02	169	0	60.02	0.00	0.00	0
5/12/01	19:37:02	669	0	60.02	0.00	0.00	0
5/12/01	19:37:03	170	0	60.02	0.00	0.00	0
5/12/01	19:37:03	671	0	60.02	0.00	0.00	0
5/12/01	19:37:04	172	0	60.02	0.00	0.00	0
5/12/01	19:37:04	672	0	60.02	0.00	0.00	0
5/12/01	19:37:05	173	0	60.02	0.00	0.00	0
5/12/01	19:37:05	674	0	60.02	0.00	0.00	0
5/12/01	19:37:06	175	0	60.02	0.00	0.00	0
5/12/01	19:37:06	675	0	60.02	0.00	0.00	0
5/12/01	19:37:07	176	359	59.99	0.00	0.00	0
5/12/01	19:37:07	677	1261	59.99	0.00	0.00	0
5/12/01	19:37:08	177	2054	59.99	0.00	0.00	0
5/12/01	19:37:08	678	2663	59.99	0.00	0.00	0
5/12/01	19:37:09	179	2978	59.99	0.00	0.00	0
5/12/01	19:37:09	680	3120	59.99	0.00	0.00	0
5/12/01	19:37:10	180	3120	59.99	0.00	0.00	0
5/12/01	19:37:10	681	3120	59.99	0.00	0.00	0
5/12/01	19:37:11	182	3120	59.99	0.00	0.00	0
5/12/01	19:37:11	682	3120	59.99	0.00	0.00	0
5/12/01	19:37:12	183	3120	59.99	0.00	0.00	0
5/12/01	19:37:12	684	3120	59.99	0.00	0.00	0
5/12/01	19:37:13	185	3120	59.99	0.00	0.00	0
5/12/01	19:37:13	685	3120	59.99	0.00	0.00	0
5/12/01	19:37:14	196	3120	59.99	0.00	0.00	0
5/12/01	19:37:14	687	3120	59.99	0.00	0.00	0
5/12/01	19:37:15	187	3120	59.99	45.72	0.00	0
5/12/01	19:37:15	688	3120	59.99	45.72	0.00	0
5/12/01	19:37:16	189	3120	59.99	53.02	0.00	0
5/12/01	19:37:16	690	3120	59.99	53.02	0.00	0
5/12/01	19:37:17	190	3120	59.98	57.31	0.00	0
5/12/01	19:37:17	691	3120	59.98	57.31	0.00	0
5/12/01	19:37:18	192	3185	59.98	57.27	0.00	0
5/12/01	19:37:18	693	3185	59.98	57.27	0.00	0
5/12/01	19:37:19	193	3217	59.98	57.27	0.00	0
5/12/01	19:37:19	694	3217	59.98	57.27	0.00	0
5/12/01	19:37:20	195	3217	59.98	57.28	0.00	0
5/12/01	19:37:20	695	3217	59.98	57.28	0.00	0
5/12/01	19:37:21	196	3217	59.98	57.29	0.00	0
5/12/01	19:37:21	697	3217	59.98	57.29	0.00	0
5/12/01	19:37:22	198	3217	59.99	58.93	0.00	0
5/12/01	19:37:22	698	3239	59.99	58.93	0.00	0
5/12/01	19:37:23	199	3293	59.99	58.93	0.00	0
5/12/01	19:37:23	700	3293	59.99	58.93	42.00	0
5/12/01	19:37:24	200	3293	59.99	58.93	42.00	0
5/12/01	19:37:24	701	3293	59.99	58.93	116.00	0
5/12/01	19:37:25	202	3272	59.99	58.93	116.00	0
5/12/01	19:37:25	703	3250	59.99	58.93	179.00	0
5/12/01	19:37:26	203	3250	59.99	60.19	179.00	0
5/12/01	19:37:26	704	3250	59.99	60.19	0.00	0
5/12/01	19:37:27	205	3250	59.98	60.19	0.00	0
5/12/01	19:37:27	705	3250	59.98	60.19	0.00	0
5/12/01	19:37:28	206	3261	59.98	59.47	0.00	0
5/12/01	19:37:28	707	3261	59.98	59.47	0.00	0
5/12/01	19:37:29	208	3272	59.98	59.41	0.00	0
5/12/01	19:37:29	708	3272	59.98	59.41	-136.00	0
5/12/01	19:37:30	209	3272	59.98	59.39	-136.00	0
5/12/01	19:37:30	710	3272	59.98	59.39	-170.00	0
5/12/01	19:37:31	211	3272	59.98	59.63	-170.00	0
5/12/01	19:37:31	711	3272	59.98	59.63	163.00	0
5/12/01	19:37:32	212	3272	59.98	59.91	163.00	0
5/12/01	19:37:32	713	3272	59.98	59.91	139.00	0
5/12/01	19:37:33	213	3304	59.98	59.93	139.00	0
5/12/01	19:37:33	714	3304	59.98	59.93	0.00	0
5/12/01	19:37:34	215	3304	59.98	59.92	0.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Degrees)	Close Breaker (Open/Close)
5/12/01	19:37:34	716	3304	59.98	59.92	0.00	0
5/12/01	19:37:35	216	3283	59.98	59.91	0.00	0
5/12/01	19:37:35	717	3283	59.98	59.91	52.00	0
5/12/01	19:37:36	218	3283	59.98	60.30	52.00	0
5/12/01	19:37:36	718	3283	59.98	60.30	65.00	0
5/12/01	19:37:37	219	3283	60.00	60.41	65.00	0
5/12/01	19:37:37	720	3283	60.00	60.41	69.00	0
5/12/01	19:37:38	221	3283	60.00	60.41	69.00	0
5/12/01	19:37:38	721	3283	60.00	60.03	71.00	0
5/12/01	19:37:39	222	3283	60.00	60.03	71.00	0
5/12/01	19:37:39	723	3283	60.00	60.01	74.00	0
5/12/01	19:37:40	223	3283	60.00	60.01	74.00	0
5/12/01	19:37:40	724	3283	60.00	60.00	78.00	0
5/12/01	19:37:41	225	3283	60.00	60.00	78.00	0
5/12/01	19:37:41	726	3285	60.00	59.99	78.00	0
5/12/01	19:37:42	226	3285	60.00	59.99	83.00	0
5/12/01	19:37:42	727	3285	60.00	60.00	83.00	0
5/12/01	19:37:43	228	3285	60.00	60.00	87.00	0
5/12/01	19:37:43	729	3285	60.00	60.00	87.00	0
5/12/01	19:37:44	229	3284	60.00	60.00	93.00	0
5/12/01	19:37:44	730	3283	60.00	59.99	93.00	0
5/12/01	19:37:45	231	3283	60.00	59.99	98.00	0
5/12/01	19:37:45	731	3283	60.00	60.00	98.00	0
5/12/01	19:37:46	232	3282	60.00	60.00	105.00	0
5/12/01	19:37:46	733	3282	60.00	60.01	105.00	0
5/12/01	19:37:47	234	3282	60.00	60.01	113.00	0
5/12/01	19:37:47	734	3282	60.01	60.02	113.00	0
5/12/01	19:37:48	235	3281	60.01	60.02	119.00	0
5/12/01	19:37:48	736	3281	60.01	59.99	119.00	0
5/12/01	19:37:49	236	3281	60.01	59.99	119.00	0
5/12/01	19:37:49	737	3281	60.01	59.99	117.00	0
5/12/01	19:37:50	238	3281	60.01	59.99	117.00	0
5/12/01	19:37:50	739	3281	60.01	59.99	111.00	0
5/12/01	19:37:51	239	3281	60.01	59.99	111.00	0
5/12/01	19:37:51	740	3281	60.01	59.97	109.00	0
5/12/01	19:37:52	241	3280	60.01	59.97	109.00	0
5/12/01	19:37:52	741	3280	60.00	59.97	103.00	0
5/12/01	19:37:53	242	3280	60.00	59.97	103.00	0
5/12/01	19:37:53	743	3280	60.00	59.97	94.00	0
5/12/01	19:37:54	244	3280	60.00	59.97	94.00	0
5/12/01	19:37:54	744	3280	60.00	59.97	79.00	0
5/12/01	19:37:55	245	3280	60.00	59.97	79.00	0
5/12/01	19:37:55	746	3280	60.00	59.95	64.00	0
5/12/01	19:37:56	247	3281	60.00	59.95	64.00	0
5/12/01	19:37:56	747	3281	60.00	59.95	51.00	0
5/12/01	19:37:57	248	3281	60.00	59.95	51.00	0
5/12/01	19:37:57	749	3281	59.99	59.93	35.00	0
5/12/01	19:37:58	249	3281	59.99	59.93	35.00	0
5/12/01	19:37:58	750	3281	59.99	59.93	23.00	0
5/12/01	19:37:59	251	3281	59.99	59.94	23.00	0
5/12/01	19:37:59	752	3282	59.99	59.94	14.00	0
5/12/01	19:38:00	252	3282	59.99	59.95	14.00	0
5/12/01	19:38:00	753	3282	59.99	59.95	28.00	0
5/12/01	19:38:01	254	3282	59.99	59.97	28.00	0
5/12/01	19:38:01	754	3282	59.99	59.97	50.00	0
5/12/01	19:38:02	255	3282	59.99	59.96	50.00	0
5/12/01	19:38:02	756	3281	59.99	59.96	76.00	0
5/12/01	19:38:03	257	3281	59.99	60.04	76.00	0
5/12/01	19:38:03	757	3281	59.99	60.04	96.00	0
5/12/01	19:38:04	258	3281	59.99	60.05	96.00	0
5/12/01	19:38:04	759	3281	59.99	60.05	115.00	0
5/12/01	19:38:05	259	3281	59.99	60.03	115.00	0
5/12/01	19:38:05	760	3281	59.99	60.03	136.00	0
5/12/01	19:38:06	261	3281	59.99	60.04	136.00	0
5/12/01	19:38:06	762	3281	59.99	60.04	156.00	0
5/12/01	19:38:07	262	3281	59.98	60.05	156.00	0
5/12/01	19:38:07	763	3281	59.98	60.05	176.00	0
5/12/01	19:38:08	264	3280	59.98	60.03	176.00	0
5/12/01	19:38:08	765	3280	59.98	60.03	-161.00	0
5/12/01	19:38:09	265	3280	59.98	60.05	-161.00	0
5/12/01	19:38:09	766	3280	59.98	60.05	-160.00	0
5/12/01	19:38:10	267	3280	59.98	60.05	-160.00	0
5/12/01	19:38:10	767	3280	59.98	59.96	-171.00	0
5/12/01	19:38:11	268	3280	59.98	59.96	-171.00	0
5/12/01	19:38:11	769	3280	59.98	59.97	178.00	0
5/12/01	19:38:12	270	3280	59.98	59.97	178.00	0
5/12/01	19:38:12	770	3280	59.97	59.96	178.00	0
5/12/01	19:38:13	271	3280	59.97	59.96	170.00	0
5/12/01	19:38:13	772	3280	59.97	59.96	170.00	0
5/12/01	19:38:14	272	3280	59.97	59.96	160.00	0
5/12/01	19:38:14	773	3280	59.97	59.95	160.00	0
5/12/01	19:38:15	274	3280	59.97	59.95	151.00	0
5/12/01	19:38:15	775	3280	59.97	59.96	151.00	0
5/12/01	19:38:16	275	3280	59.97	59.96	145.00	0
5/12/01	19:38:16	776	3280	59.97	59.96	145.00	0
5/12/01	19:38:17	277	3280	59.97	59.96	134.00	0
5/12/01	19:38:17	777	3280	59.98	59.96	134.00	0
5/12/01	19:38:18	278	3280	59.98	59.96	122.00	0
5/12/01	19:38:18	779	3280	59.98	59.94	122.00	0
5/12/01	19:38:19	280	3280	59.98	59.94	111.00	0
5/12/01	19:38:19	780	3280	59.98	59.95	111.00	0
5/12/01	19:38:20	281	3280	59.98	59.95	98.00	0
5/12/01	19:38:20	782	3280	59.98	59.95	98.00	0
5/12/01	19:38:21	283	3280	59.98	59.95	85.00	0
5/12/01	19:38:21	783	3280	59.98	59.95	85.00	0
5/12/01	19:38:22	284	3280	59.98	59.95	71.00	0
5/12/01	19:38:22	785	3280	59.98	59.93	71.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Degrees)	Close Breaker (Open/Close)
5/12/01	19:38:23	285	3280	59.98	59.93	57.00	0
5/12/01	19:38:23	786	3280	59.98	59.94	57.00	0
5/12/01	19:38:24	287	3280	59.98	59.94	49.00	0
5/12/01	19:38:24	788	3280	59.98	59.94	49.00	0
5/12/01	19:38:25	288	3280	59.98	59.94	40.00	0
5/12/01	19:38:25	789	3280	59.98	59.95	40.00	0
5/12/01	19:38:26	290	3280	59.98	59.95	30.00	0
5/12/01	19:38:26	790	3280	59.98	59.97	30.00	0
5/12/01	19:38:27	291	3280	59.98	59.97	21.00	0
5/12/01	19:38:27	792	3281	59.97	59.95	21.00	0
5/12/01	19:38:28	293	3281	59.97	59.95	13.00	0
5/12/01	19:38:28	793	3281	59.97	59.96	13.00	0
5/12/01	19:38:29	294	3281	59.97	59.96	6.00	0
5/12/01	19:38:29	795	3281	59.97	59.96	6.00	0
5/12/01	19:38:30	295	3281	59.97	59.95	1.00	1
5/12/01	19:38:30	796	3281	59.97	59.95	1.00	1
5/12/01	19:38:31	297	3281	59.97	59.95	-4.00	1
5/12/01	19:38:31	798	3281	59.97	59.95	-4.00	1
5/12/01	19:38:32	298	3281	59.97	59.97	-9.00	0
5/12/01	19:38:32	799	3281	59.97	59.97	-9.00	0
5/12/01	19:38:33	300	2533	60.00	59.98	-9.00	0
5/12/01	19:38:33	801	0	60.00	59.98	-9.00	0
5/12/01	19:38:34	301	0	60.00	59.98	0.00	0
5/12/01	19:38:34	802	0	60.00	59.98	0.00	0
5/12/01	19:38:35	303	0	60.00	59.97	0.00	0
5/12/01	19:38:35	803	0	60.00	59.97	0.00	0
5/12/01	19:38:36	304	0	60.00	59.95	0.00	0
5/12/01	19:38:36	805	0	60.00	59.95	0.00	0
5/12/01	19:38:37	306	0	59.98	54.39	0.00	0
5/12/01	19:38:37	916	0	59.98	54.39	0.00	0
5/12/01	19:38:38	307	0	59.98	48.31	0.00	0
5/12/01	19:38:38	808	0	59.98	48.31	0.00	0
5/12/01	19:38:39	308	0	59.98	40.57	0.00	0
5/12/01	19:38:39	809	0	59.98	40.57	0.00	0
5/12/01	19:38:40	340	0	59.98	0.00	0.00	0
5/12/01	19:38:40	811	0	59.98	0.00	0.00	0
5/12/01	19:38:41	311	0	59.98	0.00	0.00	0
5/12/01	19:38:41	812	0	59.98	0.00	0.00	0
5/12/01	19:38:42	313	0	59.99	0.00	0.00	0
5/12/01	19:38:42	813	0	59.99	0.00	0.00	0
5/12/01	19:38:43	314	0	59.99	0.00	0.00	0
5/12/01	19:38:43	815	0	59.99	0.00	0.00	0
5/12/01	19:38:44	316	0	59.99	0.00	0.00	0
5/12/01	19:38:44	816	0	59.99	0.00	0.00	0
5/12/01	19:38:45	317	0	59.99	0.00	0.00	0
5/12/01	19:38:45	818	0	59.99	0.00	0.00	0
5/12/01	19:38:46	319	0	59.99	0.00	0.00	0
5/12/01	19:38:46	819	0	59.99	0.00	0.00	0
5/12/01	19:38:47	320	0	59.99	0.00	0.00	0
5/12/01	19:38:47	821	0	59.98	0.00	0.00	0
5/12/01	19:38:48	321	0	59.98	0.00	0.00	0
5/12/01	19:38:48	822	0	59.98	0.00	0.00	0
5/12/01	19:38:49	333	370	59.98	0.00	0.00	0
5/12/01	19:38:49	824	870	59.98	0.00	0.00	0
5/12/01	19:38:50	324	1511	59.98	0.00	0.00	0
5/12/01	19:38:50	825	2109	59.98	0.00	0.00	0
5/12/01	19:38:51	326	2543	59.98	0.00	0.00	0
5/12/01	19:38:51	826	2859	59.98	0.00	0.00	0
5/12/01	19:38:52	327	3054	59.98	0.00	0.00	0
5/12/01	19:38:52	828	3054	59.98	0.00	0.00	0
5/12/01	19:38:53	329	3054	59.98	0.00	0.00	0
5/12/01	19:38:53	829	3054	59.97	0.00	0.00	0
5/12/01	19:38:54	330	3054	59.97	0.00	0.00	0
5/12/01	19:38:54	851	3054	59.97	0.00	0.00	0
5/12/01	19:38:55	331	3054	59.97	0.00	0.00	0
5/12/01	19:38:55	832	3054	59.97	0.00	0.00	0
5/12/01	19:38:56	423	3054	59.97	0.00	0.00	0
5/12/01	19:38:56	834	3054	59.97	0.00	0.00	0
5/12/01	19:38:57	334	3054	59.97	0.00	0.00	0
5/12/01	19:38:57	835	3054	60.00	44.12	0.00	0
5/12/01	19:38:58	336	3054	60.00	44.12	0.00	0
5/12/01	19:38:58	837	3054	60.00	51.44	0.00	0
5/12/01	19:38:59	337	3054	60.00	51.44	0.00	0
5/12/01	19:38:59	838	3250	60.00	56.11	0.00	0
5/12/01	19:39:00	339	3250	60.00	56.11	0.00	0
5/12/01	19:39:00	839	3250	60.00	56.06	0.00	0
5/12/01	19:39:01	340	3250	60.00	56.06	0.00	0
5/12/01	19:39:01	841	3250	60.00	56.91	0.00	0
5/12/01	19:39:02	342	3250	60.00	56.91	0.00	0
5/12/01	19:39:02	842	3283	59.98	59.48	0.00	0
5/12/01	19:39:03	343	3283	59.98	59.48	0.00	0
5/12/01	19:39:03	844	3283	59.98	59.45	0.00	0
5/12/01	19:39:04	344	3283	59.98	59.45	-117.00	0
5/12/01	19:39:04	845	3283	59.98	59.45	-117.00	0
5/12/01	19:39:05	346	3283	59.98	59.45	-96.00	0
5/12/01	19:39:05	847	3283	59.98	59.97	-96.00	0
5/12/01	19:39:06	347	3283	59.98	59.97	-77.00	0
5/12/01	19:39:06	848	3283	59.98	60.03	-77.00	0
5/12/01	19:39:07	349	3283	59.98	60.03	-59.00	0
5/12/01	19:39:07	849	3283	59.99	60.04	-59.00	0
5/12/01	19:39:08	350	3283	59.99	60.04	-42.00	0
5/12/01	19:39:08	851	3283	59.99	60.04	-42.00	0
5/12/01	19:39:09	352	3283	59.99	60.04	-20.00	0
5/12/01	19:39:09	852	3283	59.99	60.04	-20.00	0
5/12/01	19:39:10	353	3283	59.99	60.04	3.00	0
5/12/01	19:39:10	854	3283	59.99	60.04	3.00	0
5/12/01	19:39:11	355	3283	59.99	60.05	32.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Degrees)	Close Breaker (Open/Close)
5/12/01	19:39:11	855	3283	59.99	60.05	32.00	0
5/12/01	19:39:12	356	3282	59.99	60.05	62.00	0
5/12/01	19:39:12	857	3281	59.99	60.05	62.00	0
5/12/01	19:39:13	357	3281	59.98	60.05	81.00	0
5/12/01	19:39:13	858	3281	59.98	60.05	81.00	0
5/12/01	19:39:14	359	3281	59.98	60.05	81.00	0
5/12/01	19:39:14	860	3281	59.98	60.05	99.00	0
5/12/01	19:39:15	360	3281	59.98	60.05	99.00	0
5/12/01	19:39:15	861	3281	59.98	60.05	122.00	0
5/12/01	19:39:16	362	3281	59.98	60.04	122.00	0
5/12/01	19:39:16	862	3280	59.98	60.04	140.00	0
5/12/01	19:39:17	363	3280	59.98	60.03	140.00	0
5/12/01	19:39:17	864	3280	59.98	60.03	161.00	0
5/12/01	19:39:18	365	3280	59.99	60.04	161.00	0
5/12/01	19:39:18	865	3280	59.99	60.04	151.00	0
5/12/01	19:39:19	366	3280	59.99	60.04	151.00	0
5/12/01	19:39:19	867	3280	59.99	60.04	139.00	0
5/12/01	19:39:20	367	3280	59.99	59.96	139.00	0
5/12/01	19:39:20	868	3280	59.99	59.96	129.00	0
5/12/01	19:39:21	369	3280	59.99	59.93	129.00	0
5/12/01	19:39:21	870	3280	59.99	59.93	115.00	0
5/12/01	19:39:22	370	3280	59.99	59.95	115.00	0
5/12/01	19:39:22	871	3280	59.99	59.95	101.00	0
5/12/01	19:39:23	372	3280	59.98	59.95	101.00	0
5/12/01	19:39:23	873	3280	59.98	59.95	84.00	0
5/12/01	19:39:24	373	3280	59.98	59.93	84.00	0
5/12/01	19:39:24	874	3280	59.98	59.93	62.00	0
5/12/01	19:39:25	375	3280	59.98	59.93	62.00	0
5/12/01	19:39:25	875	3280	59.98	59.93	46.00	0
5/12/01	19:39:26	376	3280	59.98	59.93	46.00	0
5/12/01	19:39:26	877	3280	59.98	59.93	30.00	0
5/12/01	19:39:27	378	3280	59.98	59.93	30.00	0
5/12/01	19:39:27	878	3280	59.98	59.93	15.00	0
5/12/01	19:39:28	379	3281	59.98	59.93	15.00	0
5/12/01	19:39:28	880	3281	59.99	59.95	0.00	0
5/12/01	19:39:29	380	3281	59.99	59.95	0.00	0
5/12/01	19:39:29	881	3281	59.99	59.95	0.00	0
5/12/01	19:39:30	382	3281	59.99	59.95	-15.00	0
5/12/01	19:39:30	883	3281	59.99	59.96	-15.00	0
5/12/01	19:39:31	383	3281	59.99	59.96	-28.00	0
5/12/01	19:39:31	894	3283	59.99	59.95	-28.00	0
5/12/01	19:39:32	395	3283	59.99	59.95	-40.00	0
5/12/01	19:39:32	896	3283	59.99	59.95	-40.00	0
5/12/01	19:39:33	396	3283	59.99	59.95	-29.00	0
5/12/01	19:39:33	897	3283	60.00	59.96	-29.00	0
5/12/01	19:39:34	398	3283	60.00	59.96	-8.00	0
5/12/01	19:39:34	898	3282	60.00	60.04	-8.00	0
5/12/01	19:39:35	399	3282	60.00	60.04	11.00	0
5/12/01	19:39:35	900	3281	60.00	60.04	11.00	0
5/12/01	19:39:36	401	3281	60.00	60.04	39.00	0
5/12/01	19:39:36	901	3281	60.00	60.05	39.00	0
5/12/01	19:39:37	402	3281	60.00	60.05	57.00	0
5/12/01	19:39:37	903	3281	60.00	60.06	57.00	0
5/12/01	19:39:38	403	3281	60.00	60.06	72.00	0
5/12/01	19:39:38	904	3281	59.98	60.05	72.00	0
5/12/01	19:39:39	405	3281	59.98	60.05	89.00	0
5/12/01	19:39:39	906	3281	59.98	60.03	89.00	0
5/12/01	19:39:40	406	3281	59.98	60.03	106.00	0
5/12/01	19:39:40	907	3281	59.98	60.03	106.00	0
5/12/01	19:39:41	408	3281	59.98	60.03	119.00	0
5/12/01	19:39:41	908	3280	59.98	60.05	119.00	0
5/12/01	19:39:42	409	3280	59.98	60.05	136.00	0
5/12/01	19:39:42	910	3280	59.98	60.04	136.00	0
5/12/01	19:39:43	411	3280	59.98	60.04	155.00	0
5/12/01	19:39:43	911	3280	59.98	60.04	155.00	0
5/12/01	19:39:44	412	3280	59.98	60.04	151.00	0
5/12/01	19:39:44	913	3280	59.98	60.04	151.00	0
5/12/01	19:39:45	414	3280	59.98	60.04	140.00	0
5/12/01	19:39:45	914	3280	59.98	60.04	140.00	0
5/12/01	19:39:46	415	3280	59.98	59.98	130.00	0
5/12/01	19:39:46	916	3280	59.98	59.98	130.00	0
5/12/01	19:39:47	416	3280	59.98	59.96	118.00	0
5/12/01	19:39:47	917	3280	59.98	59.96	118.00	0
5/12/01	19:39:48	418	3280	59.99	59.98	118.00	0
5/12/01	19:39:48	919	3280	59.99	59.98	104.00	0
5/12/01	19:39:49	419	3280	59.99	59.95	104.00	0
5/12/01	19:39:49	920	3280	59.99	59.95	84.00	0
5/12/01	19:39:50	421	3280	59.99	59.96	84.00	0
5/12/01	19:39:50	921	3280	59.99	59.96	66.00	0
5/12/01	19:39:51	422	3282	59.99	59.94	66.00	0
5/12/01	19:39:51	923	3282	59.99	59.94	48.00	0
5/12/01	19:39:52	424	3282	59.99	59.94	48.00	0
5/12/01	19:39:52	924	3282	59.99	59.94	60.00	0
5/12/01	19:39:53	435	3281	59.99	59.94	60.00	0
5/12/01	19:39:53	926	3280	59.99	59.94	73.00	0
5/12/01	19:39:54	426	3280	59.99	60.02	73.00	0
5/12/01	19:39:54	927	3280	59.99	60.02	77.00	0
5/12/01	19:39:55	428	3280	59.99	60.03	77.00	0
5/12/01	19:39:55	929	3280	59.99	60.03	60.00	0
5/12/01	19:39:56	429	3280	59.99	59.96	60.00	0
5/12/01	19:39:56	930	3280	59.99	59.96	42.00	0
5/12/01	19:39:57	431	3280	59.99	59.94	42.00	0
5/12/01	19:39:57	932	3280	59.99	59.94	27.00	0
5/12/01	19:39:58	432	3280	59.99	59.94	27.00	0
5/12/01	19:39:58	933	3280	59.99	59.94	15.00	0
5/12/01	19:39:59	434	3280	59.99	59.94	15.00	0
5/12/01	19:39:59	934	3281	59.99	59.96	0.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Degrees)	Close Breaker (Open/Close)
5/12/01	19:40:00	435	3281	59.99	59.96	0.00	0
5/12/01	19:40:00	936	3281	59.99	59.95	-11.00	0
5/12/01	19:40:01	437	3281	59.99	59.95	-11.00	0
5/12/01	19:40:01	937	3281	59.99	59.98	-24.00	0
5/12/01	19:40:02	438	3282	59.99	59.98	-24.00	0
5/12/01	19:40:02	939	3282	59.99	59.96	-32.00	0
5/12/01	19:40:03	439	3282	59.99	59.96	-32.00	0
5/12/01	19:40:03	940	3282	59.99	59.96	-10.00	0
5/12/01	19:40:04	441	3282	59.99	59.96	-10.00	0
5/12/01	19:40:04	942	3281	59.99	59.97	13.00	0
5/12/01	19:40:05	442	3280	59.99	59.97	13.00	0
5/12/01	19:40:05	943	3280	59.99	60.06	27.00	0
5/12/01	19:40:06	444	3280	59.99	60.06	27.00	0
5/12/01	19:40:06	944	3280	59.99	60.07	14.00	0
5/12/01	19:40:07	445	3280	59.99	60.07	14.00	0
5/12/01	19:40:07	946	3281	59.99	59.99	14.00	0
5/12/01	19:40:08	447	3281	59.99	59.99	0.00	0
5/12/01	19:40:08	947	3281	59.99	59.96	0.00	0
5/12/01	19:40:09	448	3281	59.99	59.96	-10.00	0
5/12/01	19:40:09	949	3281	59.99	59.94	-10.00	0
5/12/01	19:40:10	450	3281	59.99	59.94	-22.00	0
5/12/01	19:40:10	950	3281	59.99	59.96	-22.00	0
5/12/01	19:40:11	451	3280	59.99	59.96	-35.00	0
5/12/01	19:40:11	952	3279	59.99	59.96	-35.00	0
5/12/01	19:40:12	452	3279	59.99	59.96	-50.00	0
5/12/01	19:40:12	953	3279	59.99	59.96	-50.00	0
5/12/01	19:40:13	454	3279	59.99	59.96	-63.00	0
5/12/01	19:40:13	955	3279	59.98	59.97	-63.00	0
5/12/01	19:40:14	455	3279	59.98	59.97	-81.00	0
5/12/01	19:40:14	956	3279	59.98	59.94	-81.00	0
5/12/01	19:40:15	457	3279	59.98	59.94	-100.00	0
5/12/01	19:40:15	957	3280	59.98	59.94	-100.00	0
5/12/01	19:40:16	458	3281	59.98	59.94	-124.00	0
5/12/01	19:40:16	959	3282	59.98	59.95	-124.00	0
5/12/01	19:40:17	460	3282	59.98	59.95	-138.00	0
5/12/01	19:40:17	960	3282	59.98	59.92	-138.00	0
5/12/01	19:40:18	461	3282	59.98	59.92	-120.00	0
5/12/01	19:40:18	962	3282	59.98	59.93	-120.00	0
5/12/01	19:40:19	462	3282	59.98	59.93	-102.00	0
5/12/01	19:40:19	963	3282	59.98	60.04	-102.00	0
5/12/01	19:40:20	464	3282	59.98	60.04	-86.00	0
5/12/01	19:40:20	965	3282	59.98	60.04	-86.00	0
5/12/01	19:40:21	465	3282	59.98	60.04	-69.00	0
5/12/01	19:40:21	966	3282	59.98	60.04	-69.00	0
5/12/01	19:40:22	467	3282	59.98	60.04	-52.00	0
5/12/01	19:40:22	968	3282	59.98	60.04	-52.00	0
5/12/01	19:40:23	468	3282	59.99	60.04	-52.00	0
5/12/01	19:40:23	969	3280	59.99	60.04	-26.00	0
5/12/01	19:40:24	470	3280	59.99	60.04	-26.00	0
5/12/01	19:40:24	970	3280	59.99	60.04	-5.00	0
5/12/01	19:40:25	471	3280	59.99	60.03	-5.00	0
5/12/01	19:40:25	972	3280	59.99	60.03	19.00	0
5/12/01	19:40:26	473	3280	59.99	60.03	19.00	0
5/12/01	19:40:26	973	3280	59.99	60.03	31.00	0
5/12/01	19:40:27	474	3280	59.99	60.05	31.00	0
5/12/01	19:40:27	975	3280	59.99	60.05	17.00	0
5/12/01	19:40:28	475	3280	59.98	59.95	17.00	0
5/12/01	19:40:28	976	3281	59.98	59.95	5.00	0
5/12/01	19:40:29	477	3281	59.98	59.94	5.00	1
5/12/01	19:40:29	978	3281	59.98	59.94	-3.00	1
5/12/01	19:40:30	478	3281	59.98	59.95	-3.00	0
5/12/01	19:40:30	979	3281	59.98	59.95	-12.00	0
5/12/01	19:40:31	480	3281	59.98	59.96	-12.00	0
5/12/01	19:40:31	980	0	59.98	59.96	-21.00	0
5/12/01	19:40:32	481	0	59.98	59.97	-21.00	0
5/12/01	19:40:32	982	0	59.98	59.97	0.00	0
5/12/01	19:40:33	483	0	59.97	59.94	0.00	0
5/12/01	19:40:33	983	0	59.97	59.94	0.00	0
5/12/01	19:40:34	484	0	59.97	59.64	0.00	0
5/12/01	19:40:34	985	0	59.97	59.64	0.00	0
5/12/01	19:40:35	486	0	59.97	53.76	0.00	0
5/12/01	19:40:35	986	0	59.97	53.76	0.00	0
5/12/01	19:40:36	487	0	59.97	46.91	0.00	0
5/12/01	19:40:37	28	0	59.97	46.91	0.00	0
5/12/01	19:40:37	488	0	59.97	0.00	0.00	0
5/12/01	19:40:37	989	0	59.97	0.00	0.00	0
5/12/01	19:40:38	490	0	60.01	0.00	0.00	0
5/12/01	19:40:38	991	0	60.01	0.00	0.00	0
5/12/01	19:40:39	491	0	60.01	0.00	0.00	0
5/12/01	19:40:39	992	0	60.01	0.00	0.00	0
5/12/01	19:40:40	493	0	60.01	0.00	0.00	0
5/12/01	19:40:40	993	0	60.01	0.00	0.00	0
5/12/01	19:40:41	494	0	60.01	0.00	0.00	0
5/12/01	19:40:41	995	0	60.01	0.00	0.00	0
5/12/01	19:40:42	496	0	60.01	0.00	0.00	0
5/12/01	19:40:42	996	0	60.01	0.00	0.00	0
5/12/01	19:40:43	497	0	59.98	0.00	0.00	0
5/12/01	19:40:43	998	0	59.98	0.00	0.00	0
5/12/01	19:40:44	498	0	59.98	0.00	0.00	0
5/12/01	19:40:44	999	0	59.98	0.00	0.00	0
5/12/01	19:40:45	500	0	59.98	0.00	0.00	0
5/12/01	19:40:46	1	0	59.98	0.00	0.00	0
5/12/01	19:40:46	501	0	59.98	0.00	0.00	0
5/12/01	19:40:47	2	0	59.98	0.00	0.00	0
5/12/01	19:40:47	503	0	59.98	0.00	0.00	0
5/12/01	19:40:48	4	0	59.98	0.00	0.00	0
5/12/01	19:40:48	504	239	59.98	0.00	0.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Degrees)	Close Breaker (Open/Close)
5/12/01	19:40:49	15	1380	59.98	0.00	0.00	0
5/12/01	19:40:49	506	2533	59.98	0.00	0.00	0
5/12/01	19:40:50	6	3054	59.98	0.00	0.00	0
5/12/01	19:40:50	507	3054	59.98	0.00	0.00	0
5/12/01	19:40:51	8	3054	59.98	0.00	0.00	0
5/12/01	19:40:51	509	3054	59.98	0.00	0.00	0
5/12/01	19:40:52	9	3054	59.98	0.00	0.00	0
5/12/01	19:40:52	510	3054	59.98	0.00	0.00	0
5/12/01	19:40:53	11	3054	59.98	0.00	0.00	0
5/12/01	19:40:53	511	3054	59.98	0.00	0.00	0
5/12/01	19:40:54	12	3054	60.00	0.00	0.00	0
5/12/01	19:40:54	513	3054	60.00	0.00	0.00	0
5/12/01	19:40:55	14	3054	60.00	0.00	0.00	0
5/12/01	19:40:55	514	3054	60.00	0.00	0.00	0
5/12/01	19:40:56	15	3054	60.00	0.00	0.00	0
5/12/01	19:40:56	516	3054	60.00	0.00	0.00	0
5/12/01	19:40:57	16	3185	60.00	45.54	0.00	0
5/12/01	19:40:57	517	3185	60.00	45.54	0.00	0
5/12/01	19:40:58	18	3185	60.00	52.82	0.00	0
5/12/01	19:40:58	519	3185	60.00	52.82	0.00	0
5/12/01	19:40:59	19	3185	59.98	52.82	0.00	0
5/12/01	19:40:59	520	3185	59.98	52.82	0.00	0
5/12/01	19:41:00	21	3185	59.98	58.24	0.00	0
5/12/01	19:41:00	522	3185	59.98	58.24	0.00	0
5/12/01	19:41:01	22	3185	59.98	58.38	0.00	0
5/12/01	19:41:01	523	3185	59.98	58.38	0.00	0
5/12/01	19:41:02	24	3217	59.98	58.35	0.00	0
5/12/01	19:41:02	524	3304	59.98	58.35	0.00	0
5/12/01	19:41:03	25	3304	59.98	58.34	0.00	0
5/12/01	19:41:03	526	3304	59.98	58.34	0.00	0
5/12/01	19:41:04	27	3304	59.98	58.34	0.00	0
5/12/01	19:41:04	527	3304	59.98	58.34	0.00	0
5/12/01	19:41:05	28	3304	59.98	58.36	0.00	0
5/12/01	19:41:05	529	3304	59.98	58.36	0.00	0
5/12/01	19:41:06	29	3304	59.98	60.39	0.00	0
5/12/01	19:41:06	530	3304	59.98	60.39	0.00	0
5/12/01	19:41:07	31	3272	59.98	60.40	0.00	0
5/12/01	19:41:07	532	3272	59.98	60.40	0.00	0
5/12/01	19:41:08	32	3272	59.98	60.40	-61.00	0
5/12/01	19:41:08	533	3272	59.98	60.40	-61.00	0
5/12/01	19:41:09	34	3272	59.99	60.40	-101.00	0
5/12/01	19:41:09	534	3272	59.99	60.40	-101.00	0
5/12/01	19:41:10	35	3272	59.99	60.41	-159.00	0
5/12/01	19:41:10	536	3272	59.99	60.41	-159.00	0
5/12/01	19:41:11	37	3272	59.99	59.87	158.00	0
5/12/01	19:41:11	537	3272	59.99	59.87	158.00	0
5/12/01	19:41:12	38	3272	59.99	59.84	118.00	0
5/12/01	19:41:12	539	3272	59.99	59.84	118.00	0
5/12/01	19:41:13	40	3272	59.99	59.87	70.00	0
5/12/01	19:41:13	540	3272	59.99	59.87	70.00	0
5/12/01	19:41:14	41	3272	60.00	59.88	23.00	0
5/12/01	19:41:14	542	3272	60.00	59.88	23.00	0
5/12/01	19:41:15	42	3272	60.00	59.87	-9.00	0
5/12/01	19:41:15	543	3293	60.00	59.87	-9.00	0
5/12/01	19:41:16	44	3293	60.00	59.86	-42.00	0
5/12/01	19:41:16	545	3293	60.00	59.86	-42.00	0
5/12/01	19:41:17	45	3293	60.00	59.87	29.00	0
5/12/01	19:41:17	546	3293	60.00	59.87	29.00	0
5/12/01	19:41:18	47	3293	60.00	60.20	107.00	0
5/12/01	19:41:18	547	3293	60.00	60.20	107.00	0
5/12/01	19:41:19	48	3272	59.98	60.22	175.00	0
5/12/01	19:41:19	549	3272	59.98	60.22	175.00	0
5/12/01	19:41:20	50	3272	59.98	60.19	165.00	0
5/12/01	19:41:20	550	3277	59.98	60.19	165.00	0
5/12/01	19:41:21	51	3286	59.98	60.19	165.00	0
5/12/01	19:41:21	552	3286	59.98	60.19	121.00	0
5/12/01	19:41:22	52	3285	59.98	59.90	121.00	0
5/12/01	19:41:22	553	3284	59.98	59.90	163.00	0
5/12/01	19:41:23	54	3282	59.98	59.89	163.00	0
5/12/01	19:41:23	555	3282	59.98	59.89	-165.00	0
5/12/01	19:41:24	55	3282	60.00	60.11	-165.00	0
5/12/01	19:41:24	556	3282	60.00	60.11	-130.00	0
5/12/01	19:41:25	57	3282	60.00	60.10	-130.00	0
5/12/01	19:41:25	558	3282	60.00	60.10	-127.00	0
5/12/01	19:41:26	58	3282	60.00	60.02	-127.00	0
5/12/01	19:41:26	559	3282	60.00	60.02	-124.00	0
5/12/01	19:41:27	60	3282	60.00	60.02	-124.00	0
5/12/01	19:41:27	560	3282	60.00	60.00	-124.00	0
5/12/01	19:41:28	61	3282	60.00	60.00	-124.00	0
5/12/01	19:41:28	562	3282	60.00	60.01	-124.00	0
5/12/01	19:41:29	63	3284	60.00	60.01	-124.00	0
5/12/01	19:41:29	563	3284	59.97	60.00	-125.00	0
5/12/01	19:41:30	64	3284	59.97	60.00	-125.00	0
5/12/01	19:41:30	565	3284	59.97	60.01	-127.00	0
5/12/01	19:41:31	65	3284	59.97	60.01	-127.00	0
5/12/01	19:41:31	566	3284	59.97	59.98	-128.00	0
5/12/01	19:41:32	67	3284	59.97	59.98	-128.00	0
5/12/01	19:41:32	568	3284	59.97	59.99	-131.00	0
5/12/01	19:41:33	68	3284	59.97	59.99	-131.00	0
5/12/01	19:41:33	569	3284	59.97	59.97	-135.00	0
5/12/01	19:41:34	70	3284	59.97	59.97	-135.00	0
5/12/01	19:41:34	570	3284	59.99	59.97	-136.00	0
5/12/01	19:41:35	71	3285	59.99	59.97	-136.00	0
5/12/01	19:41:35	572	3285	59.99	59.99	-136.00	0
5/12/01	19:41:36	73	3285	59.99	59.99	-139.00	0
5/12/01	19:41:36	573	3285	59.99	59.99	-139.00	0
5/12/01	19:41:37	74	3285	59.99	59.99	-142.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Degrees)	Close Breaker (Open/Close)
5/12/01	19:41:37	575	3285	59.99	59.98	-142.00	0
5/12/01	19:41:38	76	3285	59.99	59.98	-145.00	0
5/12/01	19:41:38	576	3285	59.99	59.99	-145.00	0
5/12/01	19:41:39	77	3286	59.99	59.99	-146.00	0
5/12/01	19:41:39	578	3286	59.99	59.99	-146.00	0
5/12/01	19:41:40	78	3287	59.99	59.99	-133.00	0
5/12/01	19:41:40	579	3287	59.99	59.99	-133.00	0
5/12/01	19:41:41	80	3287	59.99	59.99	-97.00	0
5/12/01	19:41:41	581	3286	59.99	59.99	-97.00	0
5/12/01	19:41:42	81	3285	59.99	59.99	-61.00	0
5/12/01	19:41:42	582	3285	59.99	60.09	-61.00	0
5/12/01	19:41:43	83	3283	59.99	60.09	-25.00	0
5/12/01	19:41:43	583	3283	59.99	60.09	-25.00	0
5/12/01	19:41:44	84	3283	59.99	60.09	12.00	0
5/12/01	19:41:44	585	3283	59.99	60.11	12.00	0
5/12/01	19:41:45	86	3283	59.99	60.11	20.00	0
5/12/01	19:41:45	586	3283	59.99	60.11	20.00	0
5/12/01	19:41:46	87	3283	59.99	60.11	32.00	0
5/12/01	19:41:46	588	3281	59.99	60.02	32.00	0
5/12/01	19:41:47	88	3281	59.99	60.02	43.00	0
5/12/01	19:41:47	589	3281	59.99	60.01	43.00	0
5/12/01	19:41:48	90	3281	59.99	60.01	38.00	0
5/12/01	19:41:48	591	3281	59.98	60.03	38.00	0
5/12/01	19:41:49	91	3281	59.98	60.03	31.00	0
5/12/01	19:41:49	592	3281	59.98	60.03	31.00	0
5/12/01	19:41:50	93	3281	59.98	59.96	26.00	0
5/12/01	19:41:50	594	3281	59.98	59.96	26.00	0
5/12/01	19:41:51	94	3281	59.98	59.96	21.00	0
5/12/01	19:41:51	595	3281	59.98	59.96	21.00	0
5/12/01	19:41:52	96	3281	59.98	59.97	16.00	0
5/12/01	19:41:52	596	3281	59.98	59.97	16.00	0
5/12/01	19:41:53	97	3281	59.98	59.98	9.00	0
5/12/01	19:41:53	598	3281	59.98	59.98	9.00	0
5/12/01	19:41:54	99	3282	59.99	59.97	9.00	0
5/12/01	19:41:54	599	3282	59.99	59.97	5.00	0
5/12/01	19:41:55	100	3282	59.99	59.97	5.00	0
5/12/01	19:41:55	601	3282	59.99	59.97	0.00	1
5/12/01	19:41:56	101	3282	59.99	59.98	0.00	1
5/12/01	19:41:56	602	3282	59.99	59.98	-4.00	1
5/12/01	19:41:57	103	3282	59.99	59.97	-4.00	1
5/12/01	19:41:57	604	3282	59.99	59.97	-10.00	0
5/12/01	19:41:58	104	0	59.99	59.98	-10.00	0
5/12/01	19:41:58	605	0	59.99	59.98	0.00	0
5/12/01	19:41:59	106	0	60.00	59.97	0.00	0
5/12/01	19:41:59	606	0	60.00	59.97	0.00	0
5/12/01	19:42:00	107	0	60.00	59.96	0.00	0
5/12/01	19:42:00	608	0	60.00	59.96	0.00	0
5/12/01	19:42:01	109	0	60.00	51.59	0.00	0
5/12/01	19:42:01	609	0	60.00	51.59	0.00	0
5/12/01	19:42:02	110	0	60.00	44.75	0.00	0
5/12/01	19:42:02	611	0	60.00	44.75	0.00	0
5/12/01	19:42:03	112	0	60.00	0.00	0.00	0
5/12/01	19:42:03	612	0	60.00	0.00	0.00	0
5/12/01	19:42:04	113	0	59.98	0.00	0.00	0
5/12/01	19:42:04	614	0	59.98	0.00	0.00	0
5/12/01	19:42:05	124	0	59.98	0.00	0.00	0
5/12/01	19:42:05	615	0	59.98	0.00	0.00	0
5/12/01	19:42:06	116	0	59.98	0.00	0.00	0
5/12/01	19:42:06	617	0	59.98	0.00	0.00	0
5/12/01	19:42:07	117	0	59.98	0.00	0.00	0
5/12/01	19:42:07	618	0	59.98	0.00	0.00	0
5/12/01	19:42:08	119	0	59.98	0.00	0.00	0
5/12/01	19:42:08	619	0	59.98	0.00	0.00	0
5/12/01	19:42:09	120	0	59.99	0.00	0.00	0
5/12/01	19:42:09	621	0	59.99	0.00	0.00	0
5/12/01	19:42:10	122	0	59.99	0.00	0.00	0
5/12/01	19:42:10	632	304	59.99	0.00	0.00	0
5/12/01	19:42:11	123	1457	59.99	0.00	0.00	0
5/12/01	19:42:11	624	2663	59.99	0.00	0.00	0
5/12/01	19:42:12	124	3033	59.99	0.00	0.00	0
5/12/01	19:42:12	625	3033	59.99	0.00	0.00	0
5/12/01	19:42:13	126	3033	59.99	0.00	0.00	0
5/12/01	19:42:13	627	3033	59.99	0.00	0.00	0
5/12/01	19:42:14	127	3033	59.99	0.00	0.00	0
5/12/01	19:42:14	628	3033	59.99	0.00	0.00	0
5/12/01	19:42:15	129	3033	59.99	0.00	0.00	0
5/12/01	19:42:15	630	3033	59.99	0.00	0.00	0
5/12/01	19:42:16	130	3033	59.99	0.00	0.00	0
5/12/01	19:42:16	631	3033	59.99	0.00	0.00	0
5/12/01	19:42:17	132	3033	59.99	0.00	0.00	0
5/12/01	19:42:17	632	3033	59.99	0.00	0.00	0
5/12/01	19:42:18	133	3033	59.99	40.50	0.00	0
5/12/01	19:42:18	634	3033	59.99	40.50	0.00	0
5/12/01	19:42:19	135	3033	60.00	46.56	0.00	0
5/12/01	19:42:19	635	3033	60.00	46.56	0.00	0
5/12/01	19:42:20	136	3033	60.00	53.79	0.00	0
5/12/01	19:42:20	637	3033	60.00	53.79	0.00	0
5/12/01	19:42:21	137	3033	60.00	55.72	0.00	0
5/12/01	19:42:21	638	3033	60.00	55.72	0.00	0
5/12/01	19:42:22	139	3098	60.00	55.66	0.00	0
5/12/01	19:42:22	640	3141	60.00	55.66	0.00	0
5/12/01	19:42:23	140	3141	60.00	55.66	0.00	0
5/12/01	19:42:23	641	3141	60.00	55.66	0.00	0
5/12/01	19:42:24	142	3185	60.00	55.66	0.00	0
5/12/01	19:42:24	642	3283	59.99	55.66	0.00	0
5/12/01	19:42:25	143	3283	59.99	55.66	0.00	0
5/12/01	19:42:25	644	3283	59.99	57.59	-156.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Degrees)	Close Breaker (Open/Close)
5/12/01	19:42:26	145	3315	59.99	57.59	-156.00	0
5/12/01	19:42:26	645	3315	59.99	57.58	0.00	0
5/12/01	19:42:27	146	3359	59.99	57.58	0.00	0
5/12/01	19:42:27	647	3359	59.99	60.02	0.00	0
5/12/01	19:42:28	148	3359	59.99	60.02	0.00	0
5/12/01	19:42:28	648	3348	59.99	60.06	0.00	0
5/12/01	19:42:29	149	3348	59.99	60.06	0.00	0
5/12/01	19:42:29	650	3348	59.99	60.59	0.00	0
5/12/01	19:42:30	150	3348	59.99	60.59	0.00	0
5/12/01	19:42:30	651	3348	59.99	61.37	0.00	0
5/12/01	19:42:31	152	3326	59.99	61.37	0.00	0
5/12/01	19:42:31	653	3326	59.99	61.16	0.00	0
5/12/01	19:42:32	153	3326	59.99	61.16	0.00	0
5/12/01	19:42:32	654	3326	59.99	61.17	0.00	0
5/12/01	19:42:33	155	3283	59.99	61.17	0.00	0
5/12/01	19:42:33	655	3283	59.99	61.16	0.00	0
5/12/01	19:42:34	156	3283	59.99	61.16	147.00	0
5/12/01	19:42:34	657	3283	60.00	60.71	147.00	0
5/12/01	19:42:35	158	3283	60.00	60.71	154.00	0
5/12/01	19:42:35	658	3283	60.00	60.01	154.00	0
5/12/01	19:42:36	159	3283	60.00	60.01	163.00	0
5/12/01	19:42:36	660	3283	60.00	60.01	163.00	0
5/12/01	19:42:37	160	3283	60.00	60.01	172.00	0
5/12/01	19:42:37	661	3283	60.00	60.01	172.00	0
5/12/01	19:42:38	162	3283	60.00	60.01	-178.00	0
5/12/01	19:42:38	663	3283	60.00	60.02	-178.00	0
5/12/01	19:42:39	163	3283	60.00	60.02	-168.00	0
5/12/01	19:42:39	664	3283	60.00	60.01	-168.00	0
5/12/01	19:42:40	165	3283	60.00	60.01	-158.00	0
5/12/01	19:42:40	666	3283	60.00	60.04	-158.00	0
5/12/01	19:42:41	166	3283	60.00	60.04	-151.00	0
5/12/01	19:42:41	667	3283	60.00	60.03	-151.00	0
5/12/01	19:42:42	168	3283	60.00	60.03	-139.00	0
5/12/01	19:42:42	668	3283	60.00	60.02	-139.00	0
5/12/01	19:42:43	169	3283	60.00	60.02	-136.00	0
5/12/01	19:42:43	670	3284	60.00	60.02	-136.00	0
5/12/01	19:42:44	171	3284	60.00	60.02	-129.00	0
5/12/01	19:42:44	671	3284	60.00	60.02	-129.00	0
5/12/01	19:42:45	172	3284	60.00	60.00	-123.00	0
5/12/01	19:42:45	673	3285	60.00	60.00	-123.00	0
5/12/01	19:42:46	173	3285	60.00	60.02	-123.00	0
5/12/01	19:42:46	674	3285	60.00	60.02	-116.00	0
5/12/01	19:42:47	175	3285	60.00	60.02	-113.00	0
5/12/01	19:42:47	676	3285	60.00	60.02	-113.00	0
5/12/01	19:42:48	176	3285	60.00	60.02	-113.00	0
5/12/01	19:42:48	677	3285	60.00	60.02	-112.00	0
5/12/01	19:42:49	178	3285	60.00	60.00	-112.00	0
5/12/01	19:42:49	678	3285	60.00	60.00	-109.00	0
5/12/01	19:42:50	179	3286	59.99	60.00	-109.00	0
5/12/01	19:42:50	680	3287	59.99	60.00	-107.00	0
5/12/01	19:42:51	181	3287	59.99	60.01	-107.00	0
5/12/01	19:42:51	681	3287	59.99	60.01	-92.00	0
5/12/01	19:42:52	182	3287	59.99	60.00	-92.00	0
5/12/01	19:42:52	683	3287	59.99	60.00	-48.00	0
5/12/01	19:42:53	184	3286	59.99	60.09	-48.00	0
5/12/01	19:42:53	684	3284	59.99	60.09	-13.00	0
5/12/01	19:42:54	185	3284	60.02	60.10	-13.00	0
5/12/01	19:42:54	686	3284	60.02	60.10	10.00	0
5/12/01	19:42:55	186	3284	60.02	60.11	10.00	0
5/12/01	19:42:55	687	3284	60.02	60.11	13.00	0
5/12/01	19:42:56	188	3284	60.02	60.01	13.00	0
5/12/01	19:42:56	689	3284	60.02	60.01	17.00	0
5/12/01	19:42:57	189	3284	60.02	60.01	17.00	0
5/12/01	19:42:57	690	3284	60.02	60.01	18.00	0
5/12/01	19:42:58	191	3284	60.02	60.01	18.00	0
5/12/01	19:42:58	691	3284	60.02	60.01	21.00	0
5/12/01	19:42:59	192	3282	59.99	60.00	21.00	0
5/12/01	19:42:59	693	3282	59.99	60.00	23.00	0
5/12/01	19:43:00	194	3282	59.99	60.02	23.00	0
5/12/01	19:43:00	694	3282	59.99	60.02	26.00	0
5/12/01	19:43:01	195	3282	59.99	60.00	26.00	0
5/12/01	19:43:01	696	3282	59.99	60.00	30.00	0
5/12/01	19:43:02	196	3282	59.99	60.00	30.00	0
5/12/01	19:43:02	697	3282	59.99	60.00	32.00	0
5/12/01	19:43:03	198	3282	59.99	60.01	32.00	0
5/12/01	19:43:03	699	3282	59.99	60.01	35.00	0
5/12/01	19:43:04	199	3282	60.01	60.01	35.00	0
5/12/01	19:43:04	700	3282	60.01	60.01	38.00	0
5/12/01	19:43:05	201	3281	60.01	59.99	38.00	0
5/12/01	19:43:05	702	3281	60.01	59.99	42.00	0
5/12/01	19:43:06	202	3281	60.01	60.00	42.00	0
5/12/01	19:43:06	703	3281	60.01	60.00	38.00	0
5/12/01	19:43:07	204	3281	60.01	60.00	38.00	0
5/12/01	19:43:07	704	3281	60.01	59.99	36.00	0
5/12/01	19:43:08	205	3281	60.01	59.99	36.00	0
5/12/01	19:43:08	706	3281	60.01	59.98	30.00	0
5/12/01	19:43:09	207	3281	60.01	59.98	30.00	0
5/12/01	19:43:09	707	3281	59.99	59.97	25.00	0
5/12/01	19:43:10	208	3281	59.99	59.97	25.00	0
5/12/01	19:43:10	709	3281	59.99	59.97	19.00	0
5/12/01	19:43:11	209	3281	59.99	59.97	19.00	0
5/12/01	19:43:11	710	3281	59.99	59.97	13.00	0
5/12/01	19:43:12	211	3281	59.99	59.97	13.00	0
5/12/01	19:43:12	712	3281	59.99	59.97	9.00	0
5/12/01	19:43:13	212	3282	59.99	59.97	9.00	0
5/12/01	19:43:13	713	3282	59.99	59.99	3.00	0
5/12/01	19:43:14	214	3282	59.99	59.99	3.00	1

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Degrees)	Close Breaker (Open/Close)
5/12/01	19:43:14	714	3282	60.00	59.97	-2.00	1
5/12/01	19:43:15	215	3282	60.00	59.97	-2.00	1
5/12/01	19:43:15	716	3282	60.00	59.97	-5.00	1
5/12/01	19:43:16	217	3282	60.00	59.97	-5.00	0
5/12/01	19:43:16	717	0	60.00	59.99	-12.00	0
5/12/01	19:43:17	218	0	60.00	59.99	-12.00	0
5/12/01	19:43:17	719	0	60.00	59.98	0.00	0
5/12/01	19:43:18	220	0	60.00	59.98	0.00	0
5/12/01	19:43:18	720	0	60.00	59.60	0.00	0
5/12/01	19:43:19	221	0	60.00	59.60	0.00	0
5/12/01	19:43:19	722	0	59.99	52.93	0.00	0
5/12/01	19:43:20	222	0	59.99	52.93	0.00	0
5/12/01	19:43:20	723	0	59.99	46.05	0.00	0
5/12/01	19:43:21	244	0	59.99	46.05	0.00	0
5/12/01	19:43:21	725	0	59.99	0.00	0.00	0
5/12/01	19:43:22	225	0	59.99	0.00	0.00	0
5/12/01	19:43:22	726	0	59.99	0.00	0.00	0
5/12/01	19:43:23	227	0	59.99	0.00	0.00	0
5/12/01	19:43:23	727	0	59.99	0.00	0.00	0
5/12/01	19:43:24	228	0	59.99	0.00	0.00	0
5/12/01	19:43:24	729	0	59.99	0.00	0.00	0
5/12/01	19:43:25	230	0	59.99	0.00	0.00	0
5/12/01	19:43:25	730	0	59.99	0.00	0.00	0
5/12/01	19:43:26	231	0	59.99	0.00	0.00	0
5/12/01	19:43:26	732	0	59.99	0.00	0.00	0
5/12/01	19:43:27	232	0	59.99	0.00	0.00	0
5/12/01	19:43:27	733	0	59.99	0.00	0.00	0
5/12/01	19:43:28	234	0	59.99	0.00	0.00	0
5/12/01	19:43:28	735	0	59.99	0.00	0.00	0
5/12/01	19:43:29	235	0	59.99	0.00	0.00	0
5/12/01	19:43:29	736	0	60.00	0.00	0.00	0
5/12/01	19:43:30	237	0	60.00	0.00	0.00	0
5/12/01	19:43:30	738	0	60.00	0.00	0.00	0
5/12/01	19:43:31	238	0	60.00	0.00	0.00	0
5/12/01	19:43:31	739	0	60.00	0.00	0.00	0
5/12/01	19:43:32	240	0	60.00	0.00	0.00	0
5/12/01	19:43:32	740	0	60.00	0.00	0.00	0
5/12/01	19:43:33	241	0	60.00	0.00	0.00	0
5/12/01	19:43:33	742	446	60.00	0.00	0.00	0
5/12/01	19:43:34	243	2554	60.00	0.00	0.00	0
5/12/01	19:43:34	743	3011	60.00	0.00	0.00	0
5/12/01	19:43:35	244	3011	59.99	0.00	0.00	0
5/12/01	19:43:35	745	3011	59.99	0.00	0.00	0
5/12/01	19:43:36	245	3011	59.99	0.00	0.00	0
5/12/01	19:43:36	746	3011	59.99	0.00	0.00	0
5/12/01	19:43:37	247	3011	59.99	0.00	0.00	0
5/12/01	19:43:37	748	3011	59.99	0.00	0.00	0
5/12/01	19:43:38	248	3011	59.99	0.00	0.00	0
5/12/01	19:43:38	749	3011	59.99	0.00	0.00	0
5/12/01	19:43:39	250	3011	59.99	0.00	0.00	0
5/12/01	19:43:39	750	3011	59.99	0.00	0.00	0
5/12/01	19:43:40	251	3011	59.99	0.00	0.00	0
5/12/01	19:43:40	752	3011	59.99	0.00	0.00	0
5/12/01	19:43:41	253	3011	59.99	0.00	0.00	0
5/12/01	19:43:41	753	3011	59.99	0.00	0.00	0
5/12/01	19:43:42	254	3011	59.99	44.07	0.00	0
5/12/01	19:43:42	755	3011	59.99	44.07	0.00	0
5/12/01	19:43:43	256	3011	59.99	52.12	0.00	0
5/12/01	19:43:43	756	3043	59.99	52.12	0.00	0
5/12/01	19:43:44	257	3141	59.99	52.12	0.00	0
5/12/01	19:43:44	758	3152	59.99	52.12	0.00	0
5/12/01	19:43:45	258	3152	60.00	55.31	0.00	0
5/12/01	19:43:45	759	3152	60.00	55.31	0.00	0
5/12/01	19:43:46	270	3152	60.00	55.30	0.00	0
5/12/01	19:43:46	761	3185	60.00	55.30	0.00	0
5/12/01	19:43:47	261	3217	60.00	56.78	0.00	0
5/12/01	19:43:47	762	3217	60.00	56.78	0.00	0
5/12/01	19:43:48	263	3217	60.00	57.77	0.00	0
5/12/01	19:43:48	763	3217	60.00	57.77	0.00	0
5/12/01	19:43:49	264	3217	60.00	57.85	0.00	0
5/12/01	19:43:49	765	3217	60.00	57.85	0.00	0
5/12/01	19:43:50	266	3217	59.98	58.95	0.00	0
5/12/01	19:43:50	766	3217	59.98	58.95	0.00	0
5/12/01	19:43:51	267	3217	59.98	58.92	0.00	0
5/12/01	19:43:51	778	3217	59.98	58.92	0.00	0
5/12/01	19:43:52	268	3272	59.98	58.92	0.00	0
5/12/01	19:43:52	769	3272	59.98	58.92	0.00	0
5/12/01	19:43:53	270	3272	59.98	58.91	-74.00	0
5/12/01	19:43:53	771	3272	59.98	58.91	-74.00	0
5/12/01	19:43:54	271	3272	59.98	58.92	-107.00	0
5/12/01	19:43:54	772	3272	59.98	58.92	-147.00	0
5/12/01	19:43:55	273	3272	60.01	59.93	-147.00	0
5/12/01	19:43:55	774	3272	60.01	59.93	-147.00	0
5/12/01	19:43:56	274	3293	60.01	59.89	-180.00	0
5/12/01	19:43:56	775	3293	60.01	59.89	-180.00	0
5/12/01	19:43:57	276	3293	60.01	59.90	174.00	0
5/12/01	19:43:57	776	3293	60.01	59.90	174.00	0
5/12/01	19:43:58	277	3293	60.01	60.03	-121.00	0
5/12/01	19:43:58	778	3293	60.01	60.03	-121.00	0
5/12/01	19:43:59	279	3293	60.01	60.20	-47.00	0
5/12/01	19:43:59	779	3293	60.01	60.20	-47.00	0
5/12/01	19:44:00	280	3293	60.00	60.18	20.00	0
5/12/01	19:44:00	781	3293	60.00	60.18	20.00	0
5/12/01	19:44:01	281	3293	60.00	60.16	88.00	0
5/12/01	19:44:01	782	3292	60.00	60.16	88.00	0
5/12/01	19:44:02	283	3291	60.00	60.19	155.00	0
5/12/01	19:44:02	794	3287	60.00	60.19	155.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Degrees)	Close Breaker (Open/Close)
5/12/01	19:44:03	284	3287	60.00	60.17	-131.00	0
5/12/01	19:44:03	785	3285	60.00	60.17	-131.00	0
5/12/01	19:44:04	286	3284	60.00	60.17	-98.00	0
5/12/01	19:44:04	786	3284	60.00	60.17	-98.00	0
5/12/01	19:44:05	287	3282	60.00	60.17	-95.00	0
5/12/01	19:44:05	788	3282	60.00	60.07	-95.00	0
5/12/01	19:44:06	289	3282	60.00	60.07	-94.00	0
5/12/01	19:44:06	789	3282	60.00	60.02	-94.00	0
5/12/01	19:44:07	290	3282	60.00	60.02	-95.00	0
5/12/01	19:44:07	791	3282	60.00	59.98	-95.00	0
5/12/01	19:44:08	292	3282	60.00	59.98	-94.00	0
5/12/01	19:44:08	792	3282	60.00	60.01	-94.00	0
5/12/01	19:44:09	293	3284	60.00	60.01	-93.00	0
5/12/01	19:44:09	794	3286	60.00	59.99	-93.00	0
5/12/01	19:44:10	294	3286	60.00	59.99	-93.00	0
5/12/01	19:44:10	795	3286	60.00	59.99	-93.00	0
5/12/01	19:44:11	296	3286	60.00	59.99	-92.00	0
5/12/01	19:44:11	797	3286	60.00	60.00	-92.00	0
5/12/01	19:44:12	297	3286	60.00	60.00	-61.00	0
5/12/01	19:44:12	798	3286	60.00	59.99	-61.00	0
5/12/01	19:44:13	299	3284	60.00	59.99	-34.00	0
5/12/01	19:44:13	799	3282	60.00	60.06	-34.00	0
5/12/01	19:44:14	300	3282	60.00	60.06	-1.00	0
5/12/01	19:44:14	801	3282	60.00	60.06	-1.00	0
5/12/01	19:44:15	302	3282	60.00	60.06	32.00	0
5/12/01	19:44:15	802	3282	60.00	60.09	32.00	0
5/12/01	19:44:16	303	3282	60.00	60.09	65.00	0
5/12/01	19:44:16	804	3281	60.00	60.08	65.00	0
5/12/01	19:44:17	304	3281	60.00	60.08	81.00	0
5/12/01	19:44:17	805	3281	60.00	60.08	81.00	0
5/12/01	19:44:18	306	3281	60.00	60.08	67.00	0
5/12/01	19:44:18	807	3281	60.00	60.08	67.00	0
5/12/01	19:44:19	307	3281	60.00	60.08	53.00	0
5/12/01	19:44:19	808	3281	60.00	59.98	53.00	0
5/12/01	19:44:20	309	3281	60.00	59.98	45.00	0
5/12/01	19:44:20	810	3281	59.99	59.97	45.00	0
5/12/01	19:44:21	310	3281	59.99	59.97	35.00	0
5/12/01	19:44:21	811	3281	59.99	59.97	35.00	0
5/12/01	19:44:22	312	3281	59.99	59.97	26.00	0
5/12/01	19:44:22	812	3281	59.99	59.98	26.00	0
5/12/01	19:44:23	313	3281	59.99	59.98	16.00	0
5/12/01	19:44:23	814	3281	59.99	59.97	16.00	0
5/12/01	19:44:24	315	3281	59.99	59.97	5.00	0
5/12/01	19:44:24	815	3281	59.99	59.97	5.00	0
5/12/01	19:44:25	316	3282	59.99	59.98	-3.00	1
5/12/01	19:44:25	817	3282	59.99	59.98	-3.00	1
5/12/01	19:44:26	317	3282	60.00	59.97	-11.00	0
5/12/01	19:44:26	818	3282	60.00	59.97	-11.00	0
5/12/01	19:44:27	319	3283	60.00	59.95	-19.00	0
5/12/01	19:44:27	820	3283	60.00	59.95	-19.00	0
5/12/01	19:44:28	320	3283	60.00	59.97	-27.00	0
5/12/01	19:44:28	821	0	60.00	59.97	-27.00	0
5/12/01	19:44:29	322	0	60.00	59.97	0.00	0
5/12/01	19:44:29	822	0	60.00	59.97	0.00	0
5/12/01	19:44:30	323	0	60.00	59.97	0.00	0
5/12/01	19:44:30	824	0	60.00	59.97	0.00	0
5/12/01	19:44:31	325	0	59.98	59.95	0.00	0
5/12/01	19:44:31	825	0	59.98	59.95	0.00	0
5/12/01	19:44:32	326	0	59.98	54.25	0.00	0
5/12/01	19:44:32	957	0	59.98	54.25	0.00	0
5/12/01	19:44:33	328	0	59.98	47.40	0.00	0
5/12/01	19:44:33	828	0	59.98	47.40	0.00	0
5/12/01	19:44:34	329	0	59.98	40.47	0.00	0
5/12/01	19:44:34	830	0	59.98	40.47	0.00	0
5/12/01	19:44:35	330	0	59.98	0.00	0.00	0
5/12/01	19:44:35	831	0	59.98	0.00	0.00	0
5/12/01	19:44:36	332	0	60.00	0.00	0.00	0
5/12/01	19:44:36	833	0	60.00	0.00	0.00	0
5/12/01	19:44:37	333	0	60.00	0.00	0.00	0
5/12/01	19:44:37	834	0	60.00	0.00	0.00	0
5/12/01	19:44:38	335	0	60.00	0.00	0.00	0
5/12/01	19:44:38	835	0	60.00	0.00	0.00	0
5/12/01	19:44:39	336	0	60.00	0.00	0.00	0
5/12/01	19:44:39	837	0	60.00	0.00	0.00	0
5/12/01	19:44:40	338	22	60.00	0.00	0.00	0
5/12/01	19:44:40	848	1446	60.00	0.00	0.00	0
5/12/01	19:44:41	339	2641	60.00	0.00	0.00	0
5/12/01	19:44:41	840	3022	60.00	0.00	0.00	0
5/12/01	19:44:42	350	3022	59.99	0.00	0.00	0
5/12/01	19:44:42	841	3022	59.99	0.00	0.00	0
5/12/01	19:44:43	342	3022	59.99	0.00	0.00	0
5/12/01	19:44:43	843	3022	59.99	0.00	0.00	0
5/12/01	19:44:44	343	3022	59.99	0.00	0.00	0
5/12/01	19:44:44	844	3022	59.99	0.00	0.00	0
5/12/01	19:44:45	345	3022	59.99	0.00	0.00	0
5/12/01	19:44:45	846	3022	59.99	0.00	0.00	0
5/12/01	19:44:46	346	3022	59.99	0.00	0.00	0
5/12/01	19:44:46	847	3022	59.99	0.00	0.00	0
5/12/01	19:44:47	348	3022	60.00	0.00	0.00	0
5/12/01	19:44:47	848	3022	60.00	0.00	0.00	0
5/12/01	19:44:48	349	3022	60.00	44.40	0.00	0
5/12/01	19:44:48	850	3130	60.00	44.40	0.00	0
5/12/01	19:44:49	351	3207	60.00	52.35	0.00	0
5/12/01	19:44:49	851	3207	60.00	52.35	0.00	0
5/12/01	19:44:50	352	3207	60.00	55.57	0.00	0
5/12/01	19:44:50	853	3207	60.00	55.57	0.00	0
5/12/01	19:44:51	353	3207	60.00	58.41	0.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Degrees)	Close Breaker (Open/Close)
5/12/01	19:44:51	854	3207	60.00	58.41	0.00	0
5/12/01	19:44:52	355	3207	60.00	58.80	0.00	0
5/12/01	19:44:52	856	3207	60.00	58.80	0.00	0
5/12/01	19:44:53	356	3293	60.00	58.80	0.00	0
5/12/01	19:44:53	857	3293	60.00	58.79	0.00	0
5/12/01	19:44:54	368	3293	60.00	58.79	76.00	0
5/12/01	19:44:54	858	3293	60.00	58.79	76.00	0
5/12/01	19:44:55	359	3293	60.00	58.79	143.00	0
5/12/01	19:44:55	860	3293	60.00	58.79	143.00	0
5/12/01	19:44:56	361	3293	60.00	58.79	-155.00	0
5/12/01	19:44:56	861	3293	60.00	60.16	-155.00	0
5/12/01	19:44:57	362	3293	60.00	60.16	-155.00	0
5/12/01	19:44:57	863	3293	59.99	60.19	-78.00	0
5/12/01	19:44:58	364	3293	59.99	60.19	-78.00	0
5/12/01	19:44:58	864	3293	59.99	60.17	-7.00	0
5/12/01	19:44:59	375	3291	59.99	60.17	-7.00	0
5/12/01	19:44:59	866	3290	59.99	60.18	77.00	0
5/12/01	19:45:00	366	3288	59.99	60.18	77.00	0
5/12/01	19:45:00	867	3287	59.99	60.20	143.00	0
5/12/01	19:45:01	368	3284	59.99	60.20	143.00	0
5/12/01	19:45:01	869	3284	59.99	60.18	179.00	0
5/12/01	19:45:02	369	3283	59.99	60.18	179.00	0
5/12/01	19:45:02	870	3283	60.01	60.18	-168.00	0
5/12/01	19:45:03	371	3283	60.01	60.18	-168.00	0
5/12/01	19:45:03	871	3283	60.01	60.18	-160.00	0
5/12/01	19:45:04	372	3283	60.01	60.18	-160.00	0
5/12/01	19:45:04	873	3283	60.01	60.03	-157.00	0
5/12/01	19:45:05	374	3283	60.01	60.03	-157.00	0
5/12/01	19:45:05	874	3283	60.01	60.02	-157.00	0
5/12/01	19:45:06	375	3283	60.01	60.02	-157.00	0
5/12/01	19:45:06	876	3283	60.01	60.01	-157.00	0
5/12/01	19:45:07	376	3283	60.01	60.01	-153.00	0
5/12/01	19:45:07	877	3284	59.99	60.01	-153.00	0
5/12/01	19:45:08	378	3284	59.99	60.01	-150.00	0
5/12/01	19:45:08	879	3285	59.99	60.01	-150.00	0
5/12/01	19:45:09	379	3287	59.99	60.01	-144.00	0
5/12/01	19:45:09	880	3287	59.99	60.00	-144.00	0
5/12/01	19:45:10	381	3287	59.99	60.00	-132.00	0
5/12/01	19:45:10	882	3287	59.99	60.00	-132.00	0
5/12/01	19:45:11	382	3287	59.99	60.01	-87.00	0
5/12/01	19:45:11	883	3285	59.99	60.01	-87.00	0
5/12/01	19:45:12	384	3282	59.99	60.01	-45.00	0
5/12/01	19:45:12	884	3282	59.99	60.01	-45.00	0
5/12/01	19:45:13	385	3282	59.99	60.11	-34.00	0
5/12/01	19:45:13	886	3282	59.99	60.11	-34.00	0
5/12/01	19:45:14	387	3282	59.99	60.10	-31.00	0
5/12/01	19:45:14	887	3282	59.99	60.10	-31.00	0
5/12/01	19:45:15	388	3282	59.99	60.03	-23.00	0
5/12/01	19:45:15	889	3282	59.99	60.03	-23.00	0
5/12/01	19:45:16	389	3282	59.99	60.00	-19.00	0
5/12/01	19:45:16	890	3282	59.99	60.00	-19.00	0
5/12/01	19:45:17	391	3282	59.99	60.02	-15.00	0
5/12/01	19:45:17	892	3282	59.99	60.02	-15.00	0
5/12/01	19:45:18	392	3282	60.00	60.01	-9.00	0
5/12/01	19:45:18	893	3282	60.00	60.01	-9.00	0
5/12/01	19:45:19	394	3282	60.00	60.01	-6.00	0
5/12/01	19:45:19	894	3282	60.00	60.01	-6.00	0
5/12/01	19:45:20	395	3280	60.00	60.01	-6.00	1
5/12/01	19:45:20	896	3280	60.00	60.01	-1.00	1
5/12/01	19:45:21	397	3280	60.00	59.99	-1.00	0
5/12/01	19:45:21	897	3280	60.00	59.99	-11.00	0
5/12/01	19:45:22	398	3280	60.00	59.98	-11.00	0
5/12/01	19:45:22	899	3280	60.00	59.98	-23.00	0
5/12/01	19:45:23	400	3281	60.00	60.00	-23.00	0
5/12/01	19:45:23	900	3281	60.00	60.00	-39.00	0
5/12/01	19:45:24	401	3282	60.00	59.95	-39.00	0
5/12/01	19:45:24	902	3282	60.00	59.95	-54.00	0
5/12/01	19:45:25	412	3282	60.00	59.97	-54.00	0
5/12/01	19:45:25	903	3282	60.00	59.97	-40.00	0
5/12/01	19:45:26	404	3282	60.00	59.96	-40.00	0
5/12/01	19:45:26	905	3282	60.00	59.96	-20.00	0
5/12/01	19:45:27	415	3282	60.00	60.04	-20.00	0
5/12/01	19:45:27	906	3281	60.00	60.04	-3.00	0
5/12/01	19:45:28	407	3281	60.00	60.06	-3.00	0
5/12/01	19:45:28	907	3280	60.00	60.06	17.00	0
5/12/01	19:45:29	418	3280	60.00	60.05	17.00	0
5/12/01	19:45:29	909	3280	60.00	60.05	32.00	0
5/12/01	19:45:30	410	3280	60.00	60.05	32.00	0
5/12/01	19:45:30	910	3280	60.00	60.05	14.00	0
5/12/01	19:45:31	411	0	60.00	60.03	14.00	0
5/12/01	19:45:31	912	0	60.00	60.03	0.00	0
5/12/01	19:45:32	412	0	60.00	59.94	0.00	0
5/12/01	19:45:32	913	0	60.00	59.94	0.00	0
5/12/01	19:45:33	414	0	60.00	59.94	0.00	0
5/12/01	19:45:33	915	0	59.99	59.95	0.00	0
5/12/01	19:45:34	415	0	59.99	59.95	0.00	0
5/12/01	19:45:34	916	0	59.99	55.60	0.00	0
5/12/01	19:45:35	417	0	59.99	55.60	0.00	0
5/12/01	19:45:35	918	0	59.99	48.80	0.00	0
5/12/01	19:45:36	418	0	59.99	48.80	0.00	0
5/12/01	19:45:36	919	0	59.99	41.82	0.00	0
5/12/01	19:45:37	420	0	59.99	41.82	0.00	0
5/12/01	19:45:37	920	0	59.99	0.00	0.00	0
5/12/01	19:45:38	421	0	59.99	0.00	0.00	0
5/12/01	19:45:38	922	0	60.00	0.00	0.00	0
5/12/01	19:45:39	423	0	60.00	0.00	0.00	0
5/12/01	19:45:39	923	0	60.00	0.00	0.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Degrees)	Close Breaker (Open/Close)
5/12/01	19:45:40	424	0	60.00	0.00	0.00	0
5/12/01	19:45:40	925	0	60.00	0.00	0.00	0
5/12/01	19:45:41	425	0	60.00	0.00	0.00	0
5/12/01	19:45:41	926	0	60.00	0.00	0.00	0
5/12/01	19:45:42	427	0	60.00	0.00	0.00	0
5/12/01	19:45:42	928	0	60.00	0.00	0.00	0
5/12/01	19:45:43	428	0	60.00	0.00	0.00	0
5/12/01	19:45:43	929	0	60.01	0.00	0.00	0
5/12/01	19:45:44	430	0	60.01	0.00	0.00	0
5/12/01	19:45:44	930	0	60.01	0.00	0.00	0
5/12/01	19:45:45	431	0	60.01	0.00	0.00	0
5/12/01	19:45:45	932	0	60.01	0.00	0.00	0
5/12/01	19:45:46	433	0	60.01	0.00	0.00	0
5/12/01	19:45:46	933	0	60.01	0.00	0.00	0
5/12/01	19:45:47	434	0	60.01	0.00	0.00	0
5/12/01	19:45:47	935	0	60.01	0.00	0.00	0
5/12/01	19:45:48	436	0	60.01	0.00	0.00	0
5/12/01	19:45:48	936	0	59.99	0.00	0.00	0
5/12/01	19:45:49	437	652	59.99	0.00	0.00	0
5/12/01	19:45:49	938	2902	59.99	0.00	0.00	0
5/12/01	19:45:50	438	3076	59.99	0.00	0.00	0
5/12/01	19:45:50	939	3076	59.99	0.00	0.00	0
5/12/01	19:45:51	440	3076	59.99	0.00	0.00	0
5/12/01	19:45:51	941	3076	59.99	0.00	0.00	0
5/12/01	19:45:52	441	3076	59.99	0.00	0.00	0
5/12/01	19:45:52	942	3076	59.99	0.00	0.00	0
5/12/01	19:45:53	443	3076	59.99	0.00	0.00	0
5/12/01	19:45:53	943	3076	59.97	0.00	0.00	0
5/12/01	19:45:54	444	3076	59.97	0.00	0.00	0
5/12/01	19:45:54	945	3076	59.97	0.00	0.00	0
5/12/01	19:45:55	446	3076	59.97	0.00	0.00	0
5/12/01	19:45:55	946	3076	59.97	0.00	0.00	0
5/12/01	19:45:56	447	3076	59.97	0.00	0.00	0
5/12/01	19:45:56	948	3076	59.97	0.00	0.00	0
5/12/01	19:45:57	448	3076	59.97	0.00	0.00	0
5/12/01	19:45:57	949	3076	59.97	50.71	0.00	0
5/12/01	19:45:58	450	3076	59.97	50.71	0.00	0
5/12/01	19:45:58	951	3207	59.98	56.48	0.00	0
5/12/01	19:45:59	451	3250	59.98	56.48	0.00	0
5/12/01	19:45:59	952	3250	59.98	56.51	0.00	0
5/12/01	19:46:00	453	3250	59.98	56.51	0.00	0
5/12/01	19:46:00	954	3250	59.98	56.49	0.00	0
5/12/01	19:46:01	454	3402	59.98	56.49	0.00	0
5/12/01	19:46:01	955	3402	59.98	59.47	0.00	0
5/12/01	19:46:02	456	3315	59.98	59.47	0.00	0
5/12/01	19:46:02	956	3315	59.98	59.45	0.00	0
5/12/01	19:46:03	457	3239	59.98	59.45	0.00	0
5/12/01	19:46:03	958	3239	60.00	61.94	0.00	0
5/12/01	19:46:04	459	3239	60.00	61.94	0.00	0
5/12/01	19:46:04	959	3239	60.00	60.22	0.00	0
5/12/01	19:46:05	460	3239	60.00	60.22	0.00	0
5/12/01	19:46:05	961	3239	60.00	60.22	0.00	0
5/12/01	19:46:06	461	3239	60.00	59.24	0.00	0
5/12/01	19:46:06	962	3239	60.00	59.24	0.00	0
5/12/01	19:46:07	473	3250	60.00	59.26	0.00	0
5/12/01	19:46:07	964	3250	60.00	59.26	0.00	0
5/12/01	19:46:08	464	3261	60.00	59.24	0.00	0
5/12/01	19:46:08	965	3272	60.00	59.24	0.00	0
5/12/01	19:46:09	466	3272	60.00	59.24	0.00	0
5/12/01	19:46:09	966	3272	60.00	59.24	31.00	0
5/12/01	19:46:10	467	3272	60.00	59.56	31.00	0
5/12/01	19:46:10	968	3272	60.00	59.56	5.00	0
5/12/01	19:46:11	469	3272	60.00	59.87	5.00	0
5/12/01	19:46:11	969	3272	60.00	59.87	-29.00	0
5/12/01	19:46:12	470	3272	60.00	59.91	-29.00	0
5/12/01	19:46:12	971	3272	60.00	59.91	-63.00	0
5/12/01	19:46:13	472	3273	59.99	59.91	-63.00	0
5/12/01	19:46:13	972	3275	59.99	59.91	-92.00	0
5/12/01	19:46:14	483	3277	59.99	59.89	-92.00	0
5/12/01	19:46:14	974	3280	59.99	59.89	-92.00	0
5/12/01	19:46:15	484	3281	59.99	59.90	-129.00	0
5/12/01	19:46:15	985	3281	59.99	59.90	-129.00	0
5/12/01	19:46:16	486	3281	59.99	59.88	-138.00	0
5/12/01	19:46:16	987	3281	59.99	59.88	-138.00	0
5/12/01	19:46:17	487	3281	59.99	59.95	-137.00	0
5/12/01	19:46:17	988	3281	59.99	59.95	-137.00	0
5/12/01	19:46:18	499	3281	59.99	59.98	-132.00	0
5/12/01	19:46:18	989	3281	59.99	59.98	-132.00	0
5/12/01	19:46:19	490	3281	59.99	59.99	-130.00	0
5/12/01	19:46:19	991	3283	59.99	59.99	-130.00	0
5/12/01	19:46:20	492	3284	59.99	59.98	-126.00	0
5/12/01	19:46:20	992	3284	59.99	59.98	-126.00	0
5/12/01	19:46:21	493	3284	59.99	60.00	-111.00	0
5/12/01	19:46:21	994	3284	59.99	60.00	-111.00	0
5/12/01	19:46:22	494	3284	59.99	60.03	-95.00	0
5/12/01	19:46:22	995	3284	59.99	60.03	-95.00	0
5/12/01	19:46:23	496	3284	59.98	60.03	-78.00	0
5/12/01	19:46:23	997	3284	59.98	60.03	-78.00	0
5/12/01	19:46:24	497	3284	59.98	60.01	-61.00	0
5/12/01	19:46:24	998	3283	59.98	60.01	-61.00	0
5/12/01	19:46:25	499	3283	59.98	60.01	-40.00	0
5/12/01	19:46:26	0	3281	59.98	60.03	-40.00	0
5/12/01	19:46:26	500	3281	59.98	60.03	-17.00	0
5/12/01	19:46:27	1	3281	59.98	60.03	-17.00	0
5/12/01	19:46:27	502	3281	59.98	60.03	8.00	0
5/12/01	19:46:28	2	3281	59.98	60.04	8.00	0
5/12/01	19:46:28	503	3281	59.98	60.04	31.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Degrees)	Close Breaker (Open/Close)
5/12/01	19:46:29	4	3280	59.99	60.05	31.00	0
5/12/01	19:46:29	505	3280	59.99	60.05	46.00	0
5/12/01	19:46:30	5	3280	59.99	60.04	46.00	0
5/12/01	19:46:30	506	3280	59.99	60.04	30.00	0
5/12/01	19:46:31	7	3280	59.99	60.05	30.00	0
5/12/01	19:46:31	517	3281	59.99	60.05	17.00	0
5/12/01	19:46:32	8	3281	59.99	59.95	17.00	0
5/12/01	19:46:32	509	3281	59.99	59.95	0.00	0
5/12/01	19:46:33	10	3281	59.99	59.94	0.00	0
5/12/01	19:46:33	510	3281	59.99	59.94	-11.00	0
5/12/01	19:46:34	11	3281	59.98	59.95	-11.00	0
5/12/01	19:46:34	512	3281	59.98	59.95	-23.00	0
5/12/01	19:46:35	12	3282	59.98	59.94	-23.00	0
5/12/01	19:46:35	513	3282	59.98	59.94	-28.00	0
5/12/01	19:46:36	14	3282	59.98	59.95	-28.00	0
5/12/01	19:46:36	515	3282	59.98	59.95	-11.00	0
5/12/01	19:46:37	15	3280	59.98	59.95	-11.00	0
5/12/01	19:46:37	516	3280	59.98	59.95	6.00	0
5/12/01	19:46:38	17	3280	59.98	60.02	6.00	0
5/12/01	19:46:38	518	3280	59.98	60.02	23.00	0
5/12/01	19:46:39	18	3280	59.98	60.03	23.00	0
5/12/01	19:46:39	519	3280	59.98	60.03	41.00	0
5/12/01	19:46:40	20	3279	59.98	60.02	41.00	0
5/12/01	19:46:40	520	3279	59.98	60.02	55.00	0
5/12/01	19:46:41	21	3279	59.98	60.01	55.00	0
5/12/01	19:46:41	522	3279	59.98	60.01	43.00	0
5/12/01	19:46:42	23	3279	59.98	60.04	43.00	0
5/12/01	19:46:42	523	3279	59.98	60.04	27.00	0
5/12/01	19:46:43	24	3280	59.98	59.93	27.00	0
5/12/01	19:46:43	525	3281	59.98	59.93	13.00	0
5/12/01	19:46:44	25	3281	59.98	59.96	13.00	0
5/12/01	19:46:44	526	3281	59.98	59.96	1.00	0
5/12/01	19:46:45	27	3281	59.98	59.95	1.00	0
5/12/01	19:46:45	528	3281	59.98	59.95	-8.00	0
5/12/01	19:46:46	28	3281	59.98	59.94	-8.00	0
5/12/01	19:46:46	529	3281	59.98	59.94	-19.00	0
5/12/01	19:46:47	30	3282	59.98	59.95	-19.00	0
5/12/01	19:46:47	530	3282	59.98	59.95	-30.00	0
5/12/01	19:46:48	31	3282	59.98	59.95	-30.00	0
5/12/01	19:46:48	532	3282	59.98	59.95	-30.00	0
5/12/01	19:46:49	33	3281	59.99	59.95	-4.00	0
5/12/01	19:46:49	533	3281	59.99	59.96	-4.00	0
5/12/01	19:46:50	34	3280	59.99	60.03	15.00	0
5/12/01	19:46:50	535	3280	59.99	60.03	15.00	0
5/12/01	19:46:51	36	3280	59.99	60.05	39.00	0
5/12/01	19:46:51	536	3280	59.99	60.05	39.00	0
5/12/01	19:46:52	37	3280	59.99	60.05	28.00	0
5/12/01	19:46:52	538	3280	59.99	60.04	28.00	0
5/12/01	19:46:53	38	3281	59.99	60.04	14.00	0
5/12/01	19:46:53	539	3281	59.99	59.95	14.00	0
5/12/01	19:46:54	40	3282	59.99	59.95	3.00	1
5/12/01	19:46:54	541	3282	59.99	59.95	3.00	1
5/12/01	19:46:55	41	3282	59.99	59.95	5.00	0
5/12/01	19:46:55	542	3282	59.99	59.95	5.00	0
5/12/01	19:46:56	43	0	59.99	59.95	26.00	0
5/12/01	19:46:56	543	0	59.99	60.03	26.00	0
5/12/01	19:46:57	44	0	59.99	60.03	0.00	0
5/12/01	19:46:57	545	0	59.99	60.04	0.00	0
5/12/01	19:46:58	46	0	59.99	60.04	0.00	0
5/12/01	19:46:58	546	0	59.99	59.82	0.00	0
5/12/01	19:46:59	47	0	59.99	59.82	0.00	0
5/12/01	19:46:59	548	0	59.99	53.21	0.00	0
5/12/01	19:47:00	48	0	59.99	53.21	0.00	0
5/12/01	19:47:00	549	0	59.99	46.38	0.00	0
5/12/01	19:47:01	50	0	59.99	46.38	0.00	0
5/12/01	19:47:01	551	0	59.99	0.00	0.00	0
5/12/01	19:47:02	51	0	59.99	0.00	0.00	0
5/12/01	19:47:02	552	0	59.99	0.00	0.00	0
5/12/01	19:47:03	53	0	59.99	0.00	0.00	0
5/12/01	19:47:03	554	0	59.99	0.00	0.00	0
5/12/01	19:47:04	54	0	59.99	0.00	0.00	0
5/12/01	19:47:04	555	0	60.00	0.00	0.00	0
5/12/01	19:47:05	56	0	60.00	0.00	0.00	0
5/12/01	19:47:05	556	0	60.00	0.00	0.00	0
5/12/01	19:47:06	57	0	60.00	0.00	0.00	0
5/12/01	19:47:06	558	0	60.00	0.00	0.00	0
5/12/01	19:47:07	59	0	60.00	0.00	0.00	0
5/12/01	19:47:07	569	0	60.00	0.00	0.00	0
5/12/01	19:47:08	60	0	60.00	0.00	0.00	0
5/12/01	19:47:08	561	0	60.00	0.00	0.00	0
5/12/01	19:47:09	61	0	60.00	0.00	0.00	0
5/12/01	19:47:09	562	0	59.96	0.00	0.00	0
5/12/01	19:47:10	63	0	59.96	0.00	0.00	0
5/12/01	19:47:10	564	0	59.96	0.00	0.00	0
5/12/01	19:47:11	64	0	59.96	0.00	0.00	0
5/12/01	19:47:11	565	0	59.96	0.00	0.00	0
5/12/01	19:47:12	66	0	59.96	0.00	0.00	0
5/12/01	19:47:12	566	0	59.96	0.00	0.00	0
5/12/01	19:47:13	67	0	59.96	0.00	0.00	0
5/12/01	19:47:13	568	0	59.96	0.00	0.00	0
5/12/01	19:47:14	69	0	59.96	0.00	0.00	0
5/12/01	19:47:14	569	0	59.97	0.00	0.00	0
5/12/01	19:47:15	70	1043	59.97	0.00	0.00	0
5/12/01	19:47:15	571	2804	59.97	0.00	0.00	0
5/12/01	19:47:16	72	3054	59.97	0.00	0.00	0
5/12/01	19:47:16	572	3054	59.97	0.00	0.00	0
5/12/01	19:47:17	73	3054	59.97	0.00	0.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Degrees)	Close Breaker (Open/Close)
5/12/01	19:47:17	574	3054	59.97	0.00	0.00	0
5/12/01	19:47:18	74	3054	59.97	0.00	0.00	0
5/12/01	19:47:18	575	3054	59.97	0.00	0.00	0
5/12/01	19:47:19	76	3054	59.97	0.00	0.00	0
5/12/01	19:47:19	577	3054	59.97	0.00	0.00	0
5/12/01	19:47:20	77	3054	59.97	0.00	0.00	0
5/12/01	19:47:20	578	3054	59.97	0.00	0.00	0
5/12/01	19:47:21	79	3054	59.97	0.00	0.00	0
5/12/01	19:47:21	579	3054	59.97	0.00	0.00	0
5/12/01	19:47:22	80	3054	59.97	0.00	0.00	0
5/12/01	19:47:22	581	3054	59.97	0.00	0.00	0
5/12/01	19:47:23	92	3076	59.97	0.00	0.00	0
5/12/01	19:47:23	582	3130	59.97	43.16	0.00	0
5/12/01	19:47:24	83	3130	59.97	43.16	0.00	0
5/12/01	19:47:24	584	3130	59.97	50.53	0.00	0
5/12/01	19:47:25	84	3152	59.97	50.53	0.00	0
5/12/01	19:47:25	585	3185	59.97	56.63	0.00	0
5/12/01	19:47:26	86	3185	59.97	56.63	0.00	0
5/12/01	19:47:26	587	3185	59.97	57.38	0.00	0
5/12/01	19:47:27	87	3228	59.97	57.38	0.00	0
5/12/01	19:47:27	588	3228	59.97	57.39	0.00	0
5/12/01	19:47:28	89	3228	59.97	57.39	0.00	0
5/12/01	19:47:28	590	3228	59.97	58.38	0.00	0
5/12/01	19:47:29	100	3228	59.97	58.38	0.00	0
5/12/01	19:47:29	591	3228	59.97	58.36	0.00	0
5/12/01	19:47:30	92	3228	59.97	58.36	0.00	0
5/12/01	19:47:30	602	3228	59.97	59.12	0.00	0
5/12/01	19:47:31	93	3228	59.97	59.12	0.00	0
5/12/01	19:47:31	594	3228	59.97	59.11	0.00	0
5/12/01	19:47:32	95	3228	59.97	59.11	0.00	0
5/12/01	19:47:32	595	3228	59.97	59.11	0.00	0
5/12/01	19:47:33	96	3250	59.97	59.11	0.00	0
5/12/01	19:47:33	597	3250	59.97	59.11	0.00	0
5/12/01	19:47:34	97	3250	59.97	59.13	0.00	0
5/12/01	19:47:34	598	3250	59.97	59.13	0.00	0
5/12/01	19:47:35	99	3250	59.97	59.12	0.00	0
5/12/01	19:47:35	600	3250	59.97	59.12	0.00	0
5/12/01	19:47:36	110	3283	59.97	59.27	0.00	0
5/12/01	19:47:36	601	3283	59.97	59.27	0.00	0
5/12/01	19:47:37	102	3283	59.97	59.45	-74.00	0
5/12/01	19:47:37	602	3283	59.97	59.45	-74.00	0
5/12/01	19:47:38	103	3283	59.97	59.41	-56.00	0
5/12/01	19:47:38	604	3283	59.97	59.41	-56.00	0
5/12/01	19:47:39	105	3283	59.97	59.89	-46.00	0
5/12/01	19:47:39	605	3283	59.97	59.89	-46.00	0
5/12/01	19:47:40	106	3283	59.99	60.01	-35.00	0
5/12/01	19:47:40	607	3283	59.99	60.01	-35.00	0
5/12/01	19:47:41	108	3283	59.99	60.01	-23.00	0
5/12/01	19:47:41	608	3283	59.99	60.01	-23.00	0
5/12/01	19:47:42	109	3283	59.99	60.01	-23.00	0
5/12/01	19:47:42	610	3283	59.99	60.01	-9.00	0
5/12/01	19:47:43	110	3282	59.99	60.00	-9.00	0
5/12/01	19:47:43	611	3282	59.99	60.00	3.00	0
5/12/01	19:47:44	112	3282	59.99	60.02	3.00	0
5/12/01	19:47:44	613	3282	59.99	60.02	15.00	0
5/12/01	19:47:45	113	3282	59.98	60.01	29.00	0
5/12/01	19:47:45	614	3281	59.98	60.01	29.00	0
5/12/01	19:47:46	115	3281	59.98	60.02	29.00	0
5/12/01	19:47:46	615	3279	59.98	60.02	36.00	0
5/12/01	19:47:47	116	3279	59.98	60.02	36.00	0
5/12/01	19:47:47	617	3279	59.98	60.02	30.00	0
5/12/01	19:47:48	118	3279	59.98	60.01	30.00	0
5/12/01	19:47:48	618	3279	59.98	60.01	20.00	0
5/12/01	19:47:49	119	3280	59.98	59.95	20.00	0
5/12/01	19:47:49	620	3280	59.98	59.95	8.00	0
5/12/01	19:47:50	120	3280	59.97	59.94	8.00	0
5/12/01	19:47:50	621	3280	59.97	59.94	-2.00	0
5/12/01	19:47:51	122	3280	59.97	59.95	-2.00	0
5/12/01	19:47:51	623	3280	59.97	59.95	-14.00	0
5/12/01	19:47:52	123	3281	59.97	59.95	-14.00	0
5/12/01	19:47:52	624	3281	59.97	59.95	-25.00	0
5/12/01	19:47:53	125	3281	59.97	59.95	-25.00	0
5/12/01	19:47:53	626	3281	59.97	59.95	-38.00	0
5/12/01	19:47:54	126	3281	59.97	59.95	-38.00	0
5/12/01	19:47:54	627	3281	59.97	59.94	-49.00	0
5/12/01	19:47:55	128	3281	59.97	59.94	-49.00	0
5/12/01	19:47:55	628	3282	59.99	59.95	-60.00	0
5/12/01	19:47:56	129	3282	59.99	59.95	-60.00	0
5/12/01	19:47:56	630	3282	59.99	59.95	-54.00	0
5/12/01	19:47:57	131	3282	59.99	59.95	-54.00	0
5/12/01	19:47:57	631	3282	59.99	59.95	-37.00	0
5/12/01	19:47:58	132	3282	59.99	59.95	-37.00	0
5/12/01	19:47:58	633	3282	59.99	59.96	-11.00	0
5/12/01	19:47:59	133	3281	59.99	59.96	-11.00	0
5/12/01	19:47:59	634	3281	59.98	60.03	14.00	0
5/12/01	19:48:00	135	3280	59.98	60.03	14.00	0
5/12/01	19:48:00	636	3280	59.98	60.04	38.00	0
5/12/01	19:48:01	136	3280	59.98	60.04	38.00	0
5/12/01	19:48:01	637	3280	59.98	60.05	60.00	0
5/12/01	19:48:02	138	3278	59.98	60.05	60.00	0
5/12/01	19:48:02	638	3278	59.98	60.05	48.00	0
5/12/01	19:48:03	139	3278	59.98	60.05	48.00	0
5/12/01	19:48:03	640	3278	59.98	60.04	33.00	0
5/12/01	19:48:04	141	3278	59.98	60.04	33.00	0
5/12/01	19:48:04	641	3278	59.99	59.95	13.00	0
5/12/01	19:48:05	142	3279	59.99	59.95	13.00	0
5/12/01	19:48:05	643	3280	59.99	59.94	-2.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Degrees)	Close Breaker (Open/Close)
5/12/01	19:48:06	144	3280	59.99	59.94	-2.00	0
5/12/01	19:48:06	644	3280	59.99	59.93	-2.00	0
5/12/01	19:48:07	145	3280	59.99	59.93	-18.00	0
5/12/01	19:48:07	646	3280	59.99	59.93	-18.00	0
5/12/01	19:48:08	146	3280	59.99	59.93	-34.00	0
5/12/01	19:48:08	647	3280	59.99	59.93	-34.00	0
5/12/01	19:48:09	148	3279	59.99	59.93	-51.00	0
5/12/01	19:48:09	649	3279	59.99	59.93	-51.00	0
5/12/01	19:48:10	149	3279	59.98	59.95	-72.00	0
5/12/01	19:48:10	650	3277	59.98	59.95	-72.00	0
5/12/01	19:48:11	151	3277	59.98	59.91	-93.00	0
5/12/01	19:48:11	651	3277	59.98	59.91	-93.00	0
5/12/01	19:48:12	152	3278	59.98	59.94	-127.00	0
5/12/01	19:48:12	653	3279	59.98	59.94	-127.00	0
5/12/01	19:48:13	154	3280	59.98	59.93	-161.00	0
5/12/01	19:48:13	664	3282	59.98	59.93	-161.00	0
5/12/01	19:48:14	155	3282	59.98	59.90	-166.00	0
5/12/01	19:48:14	656	3282	59.98	59.90	-166.00	0
5/12/01	19:48:15	156	3282	59.97	59.89	-147.00	0
5/12/01	19:48:15	657	3282	59.97	59.89	-147.00	0
5/12/01	19:48:16	158	3282	59.97	59.99	-125.00	0
5/12/01	19:48:16	659	3280	59.97	59.99	-125.00	0
5/12/01	19:48:17	159	3280	59.97	60.04	-106.00	0
5/12/01	19:48:17	660	3280	59.97	60.04	-106.00	0
5/12/01	19:48:18	161	3280	59.97	60.04	-106.00	0
5/12/01	19:48:18	662	3280	59.97	60.04	-85.00	0
5/12/01	19:48:19	162	3280	59.97	60.01	-85.00	0
5/12/01	19:48:19	663	3280	59.97	60.01	-68.00	0
5/12/01	19:48:20	164	3280	59.96	60.03	-68.00	0
5/12/01	19:48:20	664	3280	59.96	60.03	-55.00	0
5/12/01	19:48:21	165	3280	59.96	60.02	-55.00	0
5/12/01	19:48:21	666	3280	59.96	60.02	-64.00	0
5/12/01	19:48:22	167	3280	59.96	60.04	-64.00	0
5/12/01	19:48:22	667	3280	59.96	60.04	-72.00	0
5/12/01	19:48:23	168	3280	59.96	59.96	-72.00	0
5/12/01	19:48:23	679	3281	59.96	59.96	-79.00	0
5/12/01	19:48:24	169	3281	59.96	59.95	-79.00	0
5/12/01	19:48:24	670	3281	59.96	59.95	-91.00	0
5/12/01	19:48:25	171	3283	59.97	59.95	-91.00	0
5/12/01	19:48:25	672	3283	59.97	59.95	-101.00	0
5/12/01	19:48:26	172	3283	59.97	59.93	-101.00	0
5/12/01	19:48:26	673	3283	59.97	59.93	-82.00	0
5/12/01	19:48:27	174	3283	59.97	59.93	-82.00	0
5/12/01	19:48:27	674	3283	59.97	59.95	-63.00	0
5/12/01	19:48:28	175	3283	59.97	59.95	-63.00	0
5/12/01	19:48:28	676	3283	59.97	60.02	-44.00	0
5/12/01	19:48:29	177	3282	59.97	60.02	-44.00	0
5/12/01	19:48:29	677	3282	59.97	60.02	-19.00	0
5/12/01	19:48:30	178	3281	59.97	60.02	-19.00	0
5/12/01	19:48:30	679	3280	59.98	60.05	10.00	0
5/12/01	19:48:31	180	3280	59.98	60.05	10.00	0
5/12/01	19:48:31	680	3280	59.98	60.03	32.00	0
5/12/01	19:48:32	181	3280	59.98	60.03	32.00	0
5/12/01	19:48:32	682	3280	59.98	60.05	39.00	0
5/12/01	19:48:33	182	3278	59.98	60.05	39.00	0
5/12/01	19:48:33	683	3278	59.98	60.04	25.00	0
5/12/01	19:48:34	184	3278	59.98	60.04	25.00	0
5/12/01	19:48:34	685	3278	59.98	59.95	2.00	0
5/12/01	19:48:35	185	3279	59.98	59.95	2.00	0
5/12/01	19:48:35	686	3279	59.98	59.94	-15.00	0
5/12/01	19:48:36	187	3280	59.98	59.94	-15.00	0
5/12/01	19:48:36	687	3280	59.98	59.92	-33.00	0
5/12/01	19:48:37	188	3280	59.98	59.92	-33.00	0
5/12/01	19:48:37	689	3280	59.98	59.92	-50.00	0
5/12/01	19:48:38	190	3280	59.98	59.92	-50.00	0
5/12/01	19:48:38	690	3280	59.98	59.94	-50.00	0
5/12/01	19:48:39	191	3280	59.98	59.94	-67.00	0
5/12/01	19:48:39	692	3280	59.97	59.92	-67.00	0
5/12/01	19:48:40	192	3281	59.97	59.92	-89.00	0
5/12/01	19:48:40	693	3281	59.97	59.92	-89.00	0
5/12/01	19:48:41	194	3281	59.97	59.92	-110.00	0
5/12/01	19:48:41	695	3281	59.97	59.93	-110.00	0
5/12/01	19:48:42	195	3281	59.97	59.93	-127.00	0
5/12/01	19:48:42	696	3281	59.97	59.91	-127.00	0
5/12/01	19:48:43	197	3281	59.97	59.91	-120.00	0
5/12/01	19:48:43	698	3281	59.97	59.98	-120.00	0
5/12/01	19:48:44	198	3281	59.97	59.98	-112.00	0
5/12/01	19:48:44	699	3281	59.99	59.99	-112.00	0
5/12/01	19:48:45	200	3281	59.99	59.99	-105.00	0
5/12/01	19:48:45	700	3281	59.99	60.00	-105.00	0
5/12/01	19:48:46	201	3281	59.99	60.00	-99.00	0
5/12/01	19:48:46	702	3281	59.99	60.00	-99.00	0
5/12/01	19:48:47	203	3281	59.99	60.00	-94.00	0
5/12/01	19:48:47	703	3281	59.99	59.98	-94.00	0
5/12/01	19:48:48	204	3281	59.99	59.98	-87.00	0
5/12/01	19:48:48	705	3281	59.99	59.99	-87.00	0
5/12/01	19:48:49	205	3281	59.99	59.99	-81.00	0
5/12/01	19:48:49	706	3281	59.97	59.99	-81.00	0
5/12/01	19:48:50	207	3281	59.97	59.99	-73.00	0
5/12/01	19:48:50	708	3281	59.97	59.99	-73.00	0
5/12/01	19:48:51	208	3281	59.97	59.99	-66.00	0
5/12/01	19:48:51	709	3281	59.97	60.00	-66.00	0
5/12/01	19:48:52	210	3281	59.97	60.00	-57.00	0
5/12/01	19:48:52	710	3281	59.97	59.99	-57.00	0
5/12/01	19:48:53	211	3281	59.97	59.99	-46.00	0
5/12/01	19:48:53	712	3281	59.97	60.00	-46.00	0
5/12/01	19:48:54	213	3281	59.97	60.00	-37.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Degrees)	Close Breaker (Open/Close)
5/12/01	19:48:54	713	3281	59.99	60.00	-37.00	0
5/12/01	19:48:55	214	3281	59.99	60.00	-27.00	0
5/12/01	19:48:55	715	3281	59.99	60.00	-27.00	0
5/12/01	19:48:56	216	3281	59.99	60.00	-17.00	0
5/12/01	19:48:56	716	3281	59.99	60.01	-17.00	0
5/12/01	19:48:57	217	3281	59.99	60.01	-17.00	0
5/12/01	19:48:57	718	3280	59.99	60.01	-7.00	0
5/12/01	19:48:58	218	3280	59.99	60.01	-7.00	0
5/12/01	19:48:58	719	3280	59.99	60.02	2.00	1
5/12/01	19:48:59	220	3280	59.99	60.02	2.00	1
5/12/01	19:48:59	721	3280	59.99	60.02	10.00	0
5/12/01	19:49:00	221	3280	59.99	60.00	10.00	0
5/12/01	19:49:00	722	0	59.99	60.00	20.00	0
5/12/01	19:49:01	223	0	59.99	60.01	20.00	0
5/12/01	19:49:01	723	0	59.99	60.01	0.00	0
5/12/01	19:49:02	224	0	59.99	60.01	0.00	0
5/12/01	19:49:02	725	0	59.99	60.01	0.00	0
5/12/01	19:49:03	226	0	59.99	59.24	0.00	0
5/12/01	19:49:03	726	0	59.99	59.24	0.00	0
5/12/01	19:49:04	227	0	59.99	52.46	0.00	0
5/12/01	19:49:04	728	0	59.99	52.46	0.00	0
5/12/01	19:49:05	228	0	59.96	45.56	0.00	0
5/12/01	19:49:05	759	0	59.96	45.56	0.00	0
5/12/01	19:49:06	230	0	59.96	0.00	0.00	0
5/12/01	19:49:06	731	0	59.96	0.00	0.00	0
5/12/01	19:49:07	231	0	59.96	0.00	0.00	0
5/12/01	19:49:07	732	0	59.96	0.00	0.00	0
5/12/01	19:49:08	233	0	59.96	0.00	0.00	0
5/12/01	19:49:08	734	0	59.96	0.00	0.00	0
5/12/01	19:49:09	234	0	59.96	0.00	0.00	0
5/12/01	19:49:09	745	0	59.96	0.00	0.00	0
5/12/01	19:49:10	236	0	59.98	0.00	0.00	0
5/12/01	19:49:10	736	0	59.98	0.00	0.00	0
5/12/01	19:49:11	237	0	59.98	0.00	0.00	0
5/12/01	19:49:11	738	0	59.98	0.00	0.00	0
5/12/01	19:49:12	239	0	59.98	0.00	0.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Degrees)	Close Breaker (Open/Close)
5/12/01	19:13:11	962	0	60.00	0.00	0.00	0
5/12/01	19:13:12	463	0	60.00	0.00	0.00	0
5/12/01	19:13:12	964	0	60.00	0.00	0.00	0
5/12/01	19:13:13	464	3000	60.00	0.00	0.00	0
5/12/01	19:13:13	965	3000	60.00	0.00	0.00	0
5/12/01	19:13:14	466	3000	60.00	0.00	0.00	0
5/12/01	19:13:14	967	3000	60.00	0.00	0.00	0
5/12/01	19:13:15	467	3000	60.00	0.00	0.00	0
5/12/01	19:13:15	968	3000	60.00	0.00	0.00	0
5/12/01	19:13:16	469	3000	60.00	0.00	0.00	0
5/12/01	19:13:16	969	3000	60.00	0.00	0.00	0
5/12/01	19:13:17	470	3000	60.00	0.00	0.00	0
5/12/01	19:13:17	971	3000	60.00	0.00	0.00	0
5/12/01	19:13:18	472	3000	60.00	0.00	0.00	0
5/12/01	19:13:18	972	2677	60.00	0.00	0.00	0
5/12/01	19:13:19	473	3172	60.00	0.00	0.00	0
5/12/01	19:13:19	974	3403	60.00	0.00	0.00	0
5/12/01	19:13:20	474	3566	60.00	40.80	0.00	0
5/12/01	19:13:20	975	3649	60.00	40.80	0.00	0
5/12/01	19:13:21	476	3615	60.01	46.84	0.00	0
5/12/01	19:13:21	977	3549	60.01	46.84	0.00	0
5/12/01	19:13:22	477	4095	60.01	54.01	0.00	0
5/12/01	19:13:22	978	4095	60.01	54.01	0.00	0
5/12/01	19:13:23	479	4095	60.01	60.15	0.00	0
5/12/01	19:13:23	990	4095	60.01	60.15	0.00	0
5/12/01	19:13:24	480	4095	60.01	64.70	0.00	0
5/12/01	19:13:24	981	4095	60.01	64.70	0.00	0
5/12/01	19:13:25	482	4095	60.01	68.83	0.00	0
5/12/01	19:13:25	982	4095	60.01	68.83	0.00	0
5/12/01	19:13:26	483	4095	59.98	69.09	0.00	0
5/12/01	19:13:26	984	4095	59.98	69.09	0.00	0
5/12/01	19:13:27	485	4095	59.98	69.09	0.00	0
5/12/01	19:13:27	985	4095	59.98	69.16	0.00	0
5/12/01	19:13:28	486	4095	59.98	69.16	0.00	0
5/12/01	19:13:28	987	4095	59.98	69.17	0.00	0
5/12/01	19:13:29	487	3000	59.98	69.17	0.00	0
5/12/01	19:13:29	988	3000	59.98	69.18	0.00	0
5/12/01	19:13:30	489	3000	59.98	69.18	0.00	0
5/12/01	19:13:30	990	3000	59.98	69.21	0.00	0
5/12/01	19:13:31	490	3000	59.98	69.21	0.00	0
5/12/01	19:13:31	991	3000	59.99	69.21	0.00	0
5/12/01	19:13:32	492	3000	59.99	69.21	0.00	0
5/12/01	19:13:32	992	3000	59.99	68.29	0.00	0
5/12/01	19:13:33	493	3000	59.99	68.29	0.00	0
5/12/01	19:13:33	994	3028	59.99	62.65	0.00	0
5/12/01	19:13:34	495	3130	59.99	62.65	0.00	0
5/12/01	19:13:34	995	3186	59.99	56.64	0.00	0
5/12/01	19:13:35	496	3227	59.99	56.64	0.00	0
5/12/01	19:13:35	997	3249	59.99	55.07	0.00	0
5/12/01	19:13:36	498	3263	59.99	55.07	0.00	0
5/12/01	19:13:36	998	3268	59.99	57.56	0.00	0
5/12/01	19:13:37	499	3271	59.99	57.56	0.00	0
5/12/01	19:13:38	10	3274	59.99	59.06	-169.00	0
5/12/01	19:13:38	500	3276	59.99	59.06	-169.00	0
5/12/01	19:13:39	1	3282	59.99	59.65	173.00	0
5/12/01	19:13:39	502	3266	59.99	59.65	173.00	0
5/12/01	19:13:40	3	3264	59.99	59.87	135.00	0
5/12/01	19:13:40	503	3286	59.99	59.87	135.00	0
5/12/01	19:13:41	4	3286	59.99	59.87	101.00	0
5/12/01	19:13:41	505	3284	59.99	59.95	101.00	0
5/12/01	19:13:42	5	3283	59.99	59.95	129.00	0
5/12/01	19:13:42	506	3274	59.99	59.76	129.00	0
5/12/01	19:13:43	7	3271	59.99	59.76	143.00	0
5/12/01	19:13:43	508	3273	59.99	60.10	143.00	0
5/12/01	19:13:44	8	3271	59.99	60.10	106.00	0
5/12/01	19:13:44	509	3262	59.99	60.05	106.00	0
5/12/01	19:13:45	10	3278	59.99	60.05	36.00	0
5/12/01	19:13:45	510	3270	59.99	60.05	36.00	0
5/12/01	19:13:46	11	3273	59.99	60.05	36.00	0
5/12/01	19:13:46	512	3274	59.99	59.85	0.00	0
5/12/01	19:13:47	13	3276	59.99	59.85	0.00	0
5/12/01	19:13:47	513	3279	59.99	59.79	-18.00	0
5/12/01	19:13:48	14	3281	59.99	59.79	-18.00	0
5/12/01	19:13:48	515	3282	59.99	60.00	-24.00	0
5/12/01	19:13:49	16	3281	59.99	60.00	-24.00	0
5/12/01	19:13:49	516	3285	59.99	59.92	-14.00	0
5/12/01	19:13:50	17	3282	59.99	59.92	-14.00	0
5/12/01	19:13:50	518	3283	59.99	60.07	-8.00	0
5/12/01	19:13:51	18	3281	59.99	60.07	-8.00	0
5/12/01	19:13:51	519	3281	60.01	60.07	2.00	1
5/12/01	19:13:52	20	3281	60.01	60.07	2.00	1
5/12/01	19:13:52	521	0	60.01	60.07	5.00	0
5/12/01	19:13:53	21	0	60.01	59.95	5.00	0
5/12/01	19:13:53	522	0	60.01	59.95	0.00	0
5/12/01	19:13:54	23	0	60.01	60.02	0.00	0
5/12/01	19:13:54	523	0	60.01	60.02	0.00	0
5/12/01	19:13:55	24	0	60.01	54.68	0.00	0
5/12/01	19:13:55	525	0	60.01	54.68	0.00	0
5/12/01	19:13:56	26	0	60.01	48.58	0.00	0
5/12/01	19:13:56	526	0	60.01	48.58	0.00	0
5/12/01	19:13:57	27	0	59.99	40.83	0.00	0
5/12/01	19:13:57	528	0	59.99	40.83	0.00	0
5/12/01	19:13:58	28	0	59.99	0.00	0.00	0
5/12/01	19:13:58	529	0	59.99	0.00	0.00	0
5/12/01	19:13:59	30	0	59.99	0.00	0.00	0
5/12/01	19:13:59	531	0	59.99	0.00	0.00	0
5/12/01	19:14:00	31	0	59.99	0.00	0.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Degrees)	Close Breaker (Open/Close)
5/12/01	19:14:00	542	0	59.99	0.00	0.00	0
5/12/01	19:14:01	33	0	59.99	0.00	0.00	0
5/12/01	19:14:01	534	0	59.99	0.00	0.00	0
5/12/01	19:14:02	34	0	60.00	0.00	0.00	0
5/12/01	19:14:02	535	0	60.00	0.00	0.00	0
5/12/01	19:14:03	36	0	60.00	0.00	0.00	0
5/12/01	19:14:03	536	0	60.00	0.00	0.00	0
5/12/01	19:14:04	37	0	60.00	0.00	0.00	0
5/12/01	19:14:04	538	0	60.00	0.00	0.00	0
5/12/01	19:14:05	39	0	60.00	0.00	0.00	0
5/12/01	19:14:05	539	0	60.00	0.00	0.00	0
5/12/01	19:14:06	40	0	60.00	0.00	0.00	0
5/12/01	19:14:06	541	0	60.00	0.00	0.00	0
5/12/01	19:14:07	41	0	59.99	0.00	0.00	0
5/12/01	19:14:07	542	0	59.99	0.00	0.00	0
5/12/01	19:14:08	43	0	59.99	0.00	0.00	0
5/12/01	19:14:08	544	0	59.99	0.00	0.00	0
5/12/01	19:14:09	44	0	59.99	0.00	0.00	0
5/12/01	19:14:09	545	0	59.99	0.00	0.00	0
5/12/01	19:14:10	46	0	59.99	0.00	0.00	0
5/12/01	19:14:10	546	0	59.99	0.00	0.00	0
5/12/01	19:14:11	47	0	59.99	0.00	0.00	0
5/12/01	19:14:11	548	0	59.99	0.00	0.00	0
5/12/01	19:14:12	49	0	59.99	0.00	0.00	0
5/12/01	19:14:12	549	0	59.99	0.00	0.00	0
5/12/01	19:14:13	50	0	59.99	0.00	0.00	0
5/12/01	19:14:13	551	0	59.99	0.00	0.00	0
5/12/01	19:14:14	52	0	59.99	0.00	0.00	0
5/12/01	19:14:14	552	0	59.99	0.00	0.00	0
5/12/01	19:14:15	53	0	59.99	0.00	0.00	0
5/12/01	19:14:15	554	0	59.99	0.00	0.00	0
5/12/01	19:14:16	54	0	59.99	0.00	0.00	0
5/12/01	19:14:16	555	0	59.99	0.00	0.00	0
5/12/01	19:14:17	56	3000	59.95	0.00	0.00	0
5/12/01	19:14:17	557	3000	59.95	0.00	0.00	0
5/12/01	19:14:18	57	3000	59.95	0.00	0.00	0
5/12/01	19:14:18	558	3000	59.95	0.00	0.00	0
5/12/01	19:14:19	59	3000	59.95	0.00	0.00	0
5/12/01	19:14:19	559	3001	59.95	0.00	0.00	0
5/12/01	19:14:20	60	3001	59.95	0.00	0.00	0
5/12/01	19:14:20	561	3001	59.95	0.00	0.00	0
5/12/01	19:14:21	62	3001	59.95	0.00	0.00	0
5/12/01	19:14:21	562	3001	59.95	0.00	0.00	0
5/12/01	19:14:22	63	3002	60.00	0.00	0.00	0
5/12/01	19:14:22	564	3002	60.00	0.00	0.00	0
5/12/01	19:14:23	64	3546	60.00	0.00	0.00	0
5/12/01	19:14:23	565	3842	60.00	0.00	0.00	0
5/12/01	19:14:24	66	4062	60.00	0.00	0.00	0
5/12/01	19:14:24	577	4095	60.00	0.00	0.00	0
5/12/01	19:14:25	67	4086	60.00	43.91	0.00	0
5/12/01	19:14:25	568	4088	60.00	43.91	0.00	0
5/12/01	19:14:26	69	4009	59.98	51.87	0.00	0
5/12/01	19:14:26	570	4095	59.98	51.87	0.00	0
5/12/01	19:14:27	70	4095	59.98	58.22	0.00	0
5/12/01	19:14:27	571	4095	59.98	58.22	0.00	0
5/12/01	19:14:28	72	4095	59.98	63.90	0.00	0
5/12/01	19:14:28	572	4095	59.98	63.90	0.00	0
5/12/01	19:14:29	73	4095	59.98	69.04	0.00	0
5/12/01	19:14:29	574	3000	59.98	69.04	0.00	0
5/12/01	19:14:30	75	3000	59.98	69.29	0.00	0
5/12/01	19:14:30	575	3000	59.98	69.29	0.00	0
5/12/01	19:14:31	76	3000	59.98	69.32	0.00	0
5/12/01	19:14:31	577	3000	59.98	69.32	0.00	0
5/12/01	19:14:32	87	3000	59.97	69.32	0.00	0
5/12/01	19:14:32	578	3000	59.97	69.34	0.00	0
5/12/01	19:14:33	79	3000	59.97	69.34	0.00	0
5/12/01	19:14:33	580	3000	59.97	65.75	0.00	0
5/12/01	19:14:34	80	3095	59.97	65.75	0.00	0
5/12/01	19:14:34	581	3170	59.97	59.68	0.00	0
5/12/01	19:14:35	82	3222	59.97	59.68	0.00	0
5/12/01	19:14:35	582	3239	59.97	55.07	0.00	0
5/12/01	19:14:36	83	3254	59.97	55.07	0.00	0
5/12/01	19:14:36	584	3260	59.97	57.49	0.00	0
5/12/01	19:14:37	85	3270	59.97	57.49	0.00	0
5/12/01	19:14:37	585	3272	60.00	58.95	-5.00	0
5/12/01	19:14:38	86	3274	60.00	58.95	-5.00	0
5/12/01	19:14:38	587	3276	60.00	59.57	-38.00	0
5/12/01	19:14:39	88	3280	60.00	59.57	-38.00	0
5/12/01	19:14:39	588	3280	60.00	59.80	-46.00	0
5/12/01	19:14:40	89	3283	60.00	59.80	-46.00	0
5/12/01	19:14:40	590	3284	60.00	59.93	-30.00	0
5/12/01	19:14:41	100	3284	60.00	59.93	-30.00	0
5/12/01	19:14:41	591	3278	60.00	60.02	-13.00	0
5/12/01	19:14:42	92	3275	60.00	60.02	-13.00	0
5/12/01	19:14:42	593	3281	59.96	60.05	0.00	0
5/12/01	19:14:43	93	3283	59.96	60.05	0.00	0
5/12/01	19:14:43	594	3280	59.96	60.03	7.00	0
5/12/01	19:14:44	95	3284	59.96	60.03	7.00	0
5/12/01	19:14:44	595	3278	59.96	60.00	7.00	0
5/12/01	19:14:45	96	3288	59.96	60.00	12.00	0
5/12/01	19:14:45	597	3277	59.96	60.05	9.00	0
5/12/01	19:14:46	98	3287	59.96	60.05	9.00	0
5/12/01	19:14:46	598	3277	59.96	59.93	5.00	0
5/12/01	19:14:47	99	3284	59.96	59.93	5.00	0
5/12/01	19:14:47	600	3279	59.99	59.94	5.00	1
5/12/01	19:14:48	100	3281	59.99	59.94	1.00	0
5/12/01	19:14:48	601	3278	59.99	60.02	1.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Degrees)	Close Breaker (Open/Close)
5/12/01	19:14:49	102	3279	59.99	60.02	0.00	0
5/12/01	19:14:49	603	3280	59.99	60.03	0.00	1
5/12/01	19:14:50	103	3278	59.99	60.03	-1.00	1
5/12/01	19:14:50	614	0	59.99	59.96	-1.00	1
5/12/01	19:14:51	105	0	59.99	59.96	4.00	1
5/12/01	19:14:51	606	0	59.99	60.01	4.00	0
5/12/01	19:14:52	106	0	59.99	60.01	0.00	0
5/12/01	19:14:52	607	0	59.98	60.01	0.00	0
5/12/01	19:14:53	108	0	59.98	60.01	0.00	0
5/12/01	19:14:53	608	0	59.98	54.59	0.00	0
5/12/01	19:14:54	109	0	59.98	54.59	0.00	0
5/12/01	19:14:54	610	0	59.98	47.67	0.00	0
5/12/01	19:14:55	111	0	59.98	47.67	0.00	0
5/12/01	19:14:55	611	0	59.98	0.00	0.00	0
5/12/01	19:14:56	112	0	59.98	0.00	0.00	0
5/12/01	19:14:56	613	0	60.01	0.00	0.00	0
5/12/01	19:14:57	113	0	60.01	0.00	0.00	0
5/12/01	19:14:57	614	0	60.01	0.00	0.00	0
5/12/01	19:14:58	115	0	60.01	0.00	0.00	0
5/12/01	19:14:58	616	0	60.01	0.00	0.00	0
5/12/01	19:14:59	116	0	60.01	0.00	0.00	0
5/12/01	19:14:59	617	0	60.01	0.00	0.00	0
5/12/01	19:15:00	118	0	60.01	0.00	0.00	0
5/12/01	19:15:00	618	0	60.01	0.00	0.00	0
5/12/01	19:15:01	119	0	60.01	0.00	0.00	0
5/12/01	19:15:01	620	0	60.01	0.00	0.00	0
5/12/01	19:15:02	121	0	60.00	0.00	0.00	0
5/12/01	19:15:02	621	0	60.00	0.00	0.00	0
5/12/01	19:15:03	122	0	60.00	0.00	0.00	0
5/12/01	19:15:03	623	0	60.00	0.00	0.00	0
5/12/01	19:15:04	124	0	60.00	0.00	0.00	0
5/12/01	19:15:04	624	0	60.00	0.00	0.00	0
5/12/01	19:15:05	125	0	60.00	0.00	0.00	0
5/12/01	19:15:05	626	0	60.00	0.00	0.00	0
5/12/01	19:15:06	126	0	60.00	0.00	0.00	0
5/12/01	19:15:06	627	0	60.00	0.00	0.00	0
5/12/01	19:15:07	128	0	59.98	0.00	0.00	0
5/12/01	19:15:07	629	3000	59.98	0.00	0.00	0
5/12/01	19:15:08	129	3000	59.98	0.00	0.00	0
5/12/01	19:15:08	640	3001	59.98	0.00	0.00	0
5/12/01	19:15:09	131	3001	59.98	0.00	0.00	0
5/12/01	19:15:09	631	3001	59.98	0.00	0.00	0
5/12/01	19:15:10	132	3001	59.98	0.00	0.00	0
5/12/01	19:15:10	633	3001	59.98	0.00	0.00	0
5/12/01	19:15:11	134	3001	59.98	0.00	0.00	0
5/12/01	19:15:11	634	3002	59.98	0.00	0.00	0
5/12/01	19:15:12	135	3002	59.99	0.00	0.00	0
5/12/01	19:15:12	636	3003	59.99	0.00	0.00	0
5/12/01	19:15:13	136	3298	59.99	0.00	0.00	0
5/12/01	19:15:13	637	3595	59.99	0.00	0.00	0
5/12/01	19:15:14	138	3857	59.99	0.00	0.00	0
5/12/01	19:15:14	639	4062	59.99	0.00	0.00	0
5/12/01	19:15:15	139	4084	59.99	0.00	0.00	0
5/12/01	19:15:15	650	4095	59.99	0.00	-44.00	0
5/12/01	19:15:16	141	4042	59.99	47.90	-44.00	0
5/12/01	19:15:16	652	4095	59.99	47.90	0.00	0
5/12/01	19:15:17	142	4095	59.99	55.07	0.00	0
5/12/01	19:15:17	643	4095	59.99	55.07	0.00	0
5/12/01	19:15:18	144	4095	59.99	61.15	0.00	0
5/12/01	19:15:18	644	4095	59.99	61.15	0.00	0
5/12/01	19:15:19	145	3000	59.99	68.62	0.00	0
5/12/01	19:15:19	646	3000	59.99	68.62	0.00	0
5/12/01	19:15:20	147	3000	59.99	69.27	0.00	0
5/12/01	19:15:20	647	3000	59.99	69.27	0.00	0
5/12/01	19:15:21	148	3000	59.99	69.36	0.00	0
5/12/01	19:15:21	659	3000	59.99	69.36	0.00	0
5/12/01	19:15:22	149	3000	59.98	69.36	0.00	0
5/12/01	19:15:22	650	3090	59.98	69.36	0.00	0
5/12/01	19:15:23	151	3167	59.98	63.52	0.00	0
5/12/01	19:15:23	652	3214	59.98	63.52	0.00	0
5/12/01	19:15:24	152	3233	59.98	57.45	0.00	0
5/12/01	19:15:24	653	3260	59.98	57.45	0.00	0
5/12/01	19:15:25	154	3266	59.98	55.03	0.00	0
5/12/01	19:15:25	654	3272	59.98	55.03	0.00	0
5/12/01	19:15:26	155	3275	59.98	57.89	150.00	0
5/12/01	19:15:26	656	3277	59.98	57.89	150.00	0
5/12/01	19:15:27	157	3279	59.99	59.14	120.00	0
5/12/01	19:15:27	657	3278	59.99	59.14	120.00	0
5/12/01	19:15:28	158	3272	59.99	59.92	109.00	0
5/12/01	19:15:28	659	3265	59.99	59.92	109.00	0
5/12/01	19:15:29	160	3274	59.99	59.93	81.00	0
5/12/01	19:15:29	660	3267	59.99	59.93	81.00	0
5/12/01	19:15:30	161	3277	59.99	59.99	30.00	0
5/12/01	19:15:30	662	3272	59.99	59.99	30.00	0
5/12/01	19:15:31	162	3273	59.99	59.84	5.00	0
5/12/01	19:15:31	663	3274	59.99	59.84	5.00	0
5/12/01	19:15:32	164	3275	59.99	59.87	-6.00	0
5/12/01	19:15:32	665	3280	59.99	59.87	-6.00	0
5/12/01	19:15:33	165	3279	59.99	59.96	-16.00	0
5/12/01	19:15:33	666	3279	59.99	59.96	-16.00	0
5/12/01	19:15:34	167	3279	59.99	59.96	-12.00	0
5/12/01	19:15:34	667	3279	59.99	59.95	-12.00	0
5/12/01	19:15:35	168	3281	59.99	59.95	-9.00	0
5/12/01	19:15:35	669	3280	59.99	59.98	-9.00	0
5/12/01	19:15:36	170	3281	59.99	59.98	-5.00	0
5/12/01	19:15:36	670	3283	59.99	60.03	-5.00	0
5/12/01	19:15:37	171	3281	59.99	60.03	-1.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Degrees)	Close Breaker (Open/Close)
5/12/01	19:15:37	672	3280	60.01	60.02	-1.00	0
5/12/01	19:15:38	172	3281	60.01	60.02	1.00	0
5/12/01	19:15:38	673	3278	60.01	59.95	1.00	1
5/12/01	19:15:39	174	3283	60.01	59.95	1.00	1
5/12/01	19:15:39	675	3278	60.01	59.94	1.00	1
5/12/01	19:15:40	175	0	60.01	59.94	5.00	1
5/12/01	19:15:40	676	0	60.01	60.00	5.00	0
5/12/01	19:15:41	177	0	60.01	60.00	0.00	0
5/12/01	19:15:41	678	0	60.01	60.03	0.00	0
5/12/01	19:15:42	178	0	60.01	60.03	0.00	0
5/12/01	19:15:42	679	0	59.99	60.08	0.00	0
5/12/01	19:15:43	180	0	59.99	60.08	0.00	0
5/12/01	19:15:43	680	0	59.99	57.46	0.00	0
5/12/01	19:15:44	181	0	59.99	57.46	0.00	0
5/12/01	19:15:44	682	0	59.99	50.61	0.00	0
5/12/01	19:15:45	183	0	59.99	50.61	0.00	0
5/12/01	19:15:45	683	0	59.99	43.60	0.00	0
5/12/01	19:15:46	184	0	59.99	43.60	0.00	0
5/12/01	19:15:46	685	0	59.99	0.00	0.00	0
5/12/01	19:15:47	185	0	59.99	0.00	0.00	0
5/12/01	19:15:47	686	0	59.99	0.00	0.00	0
5/12/01	19:15:48	187	0	59.99	0.00	0.00	0
5/12/01	19:15:48	688	0	59.99	0.00	0.00	0
5/12/01	19:15:49	188	0	59.99	0.00	0.00	0
5/12/01	19:15:49	689	0	59.99	0.00	0.00	0
5/12/01	19:15:50	190	0	59.99	0.00	0.00	0
5/12/01	19:15:50	690	0	59.99	0.00	0.00	0
5/12/01	19:15:51	191	0	59.99	0.00	0.00	0
5/12/01	19:15:51	692	0	59.99	0.00	0.00	0
5/12/01	19:15:52	193	0	59.99	0.00	0.00	0
5/12/01	19:15:52	693	0	60.00	0.00	0.00	0
5/12/01	19:15:53	194	0	60.00	0.00	0.00	0
5/12/01	19:15:53	695	0	60.00	0.00	0.00	0
5/12/01	19:15:54	196	0	60.00	0.00	0.00	0
5/12/01	19:15:54	696	3000	60.00	0.00	0.00	0
5/12/01	19:15:55	197	3000	60.00	0.00	0.00	0
5/12/01	19:15:55	698	3000	60.00	0.00	0.00	0
5/12/01	19:15:56	198	3000	60.00	0.00	0.00	0
5/12/01	19:15:56	699	3001	60.00	0.00	0.00	0
5/12/01	19:15:57	200	3000	60.00	0.00	0.00	0
5/12/01	19:15:57	711	3000	60.02	0.00	0.00	0
5/12/01	19:15:58	201	3000	60.02	0.00	0.00	0
5/12/01	19:15:58	702	2999	60.02	0.00	0.00	0
5/12/01	19:15:59	203	2999	60.02	0.00	0.00	0
5/12/01	19:15:59	703	2999	60.02	0.00	0.00	0
5/12/01	19:16:00	204	2999	60.02	0.00	0.00	0
5/12/01	19:16:00	705	3697	60.02	0.00	0.00	0
5/12/01	19:16:01	206	3964	60.02	0.00	0.00	0
5/12/01	19:16:01	706	4095	60.02	0.00	0.00	0
5/12/01	19:16:02	207	4077	60.02	0.00	0.00	0
5/12/01	19:16:02	708	4094	60.02	0.00	0.00	0
5/12/01	19:16:03	208	4034	60.00	0.00	0.00	0
5/12/01	19:16:03	709	4095	60.00	0.00	0.00	0
5/12/01	19:16:04	210	4095	60.00	48.08	0.00	0
5/12/01	19:16:04	711	4095	60.00	48.08	0.00	0
5/12/01	19:16:05	211	4095	60.00	61.28	0.00	0
5/12/01	19:16:05	712	3000	60.00	61.28	0.00	0
5/12/01	19:16:06	213	3000	60.00	66.35	0.00	0
5/12/01	19:16:06	714	3000	60.00	66.35	0.00	0
5/12/01	19:16:07	214	3000	60.00	68.76	0.00	0
5/12/01	19:16:07	715	3000	60.00	68.76	0.00	0
5/12/01	19:16:08	216	3000	60.00	69.39	0.00	0
5/12/01	19:16:08	716	3000	60.00	69.39	0.00	0
5/12/01	19:16:09	217	3000	60.00	69.36	0.00	0
5/12/01	19:16:09	718	3127	60.00	69.36	0.00	0
5/12/01	19:16:10	219	3178	60.00	58.81	0.00	0
5/12/01	19:16:10	719	3211	60.00	58.81	0.00	0
5/12/01	19:16:11	220	3239	60.00	55.01	0.00	0
5/12/01	19:16:11	721	3257	60.00	55.01	0.00	0
5/12/01	19:16:12	221	3267	60.00	56.70	0.00	0
5/12/01	19:16:12	722	3270	60.00	56.70	0.00	0
5/12/01	19:16:13	223	3272	60.01	58.68	21.00	0
5/12/01	19:16:13	724	3274	60.01	58.68	21.00	0
5/12/01	19:16:14	224	3276	60.01	59.40	-10.00	0
5/12/01	19:16:14	725	3269	60.01	59.40	-10.00	0
5/12/01	19:16:15	226	3273	60.01	59.80	-45.00	0
5/12/01	19:16:15	726	3283	60.01	59.80	-45.00	0
5/12/01	19:16:16	227	3286	60.01	59.93	-65.00	0
5/12/01	19:16:16	728	3285	60.01	59.93	-65.00	0
5/12/01	19:16:17	229	3284	60.01	59.83	-50.00	0
5/12/01	19:16:17	729	3288	60.01	59.83	-50.00	0
5/12/01	19:16:18	230	3287	60.02	59.97	-19.00	0
5/12/01	19:16:18	731	3286	60.02	59.97	-19.00	0
5/12/01	19:16:19	232	3282	60.02	60.00	-3.00	0
5/12/01	19:16:19	732	3285	60.02	60.00	-3.00	1
5/12/01	19:16:20	233	3285	60.02	60.08	1.00	1
5/12/01	19:16:20	734	3284	60.02	60.08	1.00	1
5/12/01	19:16:21	234	3283	60.02	60.05	8.00	1
5/12/01	19:16:21	735	0	60.02	60.05	8.00	0
5/12/01	19:16:22	236	0	60.02	60.03	0.00	0
5/12/01	19:16:22	737	0	60.02	60.03	0.00	0
5/12/01	19:16:23	237	0	60.02	60.02	0.00	0
5/12/01	19:16:23	738	0	60.02	60.02	0.00	0
5/12/01	19:16:24	259	0	60.02	59.70	0.00	0
5/12/01	19:16:24	739	0	60.02	59.70	0.00	0
5/12/01	19:16:25	240	0	60.02	53.82	0.00	0
5/12/01	19:16:25	741	0	60.02	53.82	0.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Degrees)	Close Breaker (Open/Close)
5/12/01	19:16:26	242	0	60.02	46.94	0.00	0
5/12/01	19:16:26	742	0	60.02	46.94	0.00	0
5/12/01	19:16:27	243	0	60.02	0.00	0.00	0
5/12/01	19:16:27	744	0	60.02	0.00	0.00	0
5/12/01	19:16:28	244	0	60.02	0.00	0.00	0
5/12/01	19:16:28	745	0	60.02	0.00	0.00	0
5/12/01	19:16:29	246	0	60.02	0.00	0.00	0
5/12/01	19:16:29	747	0	60.02	0.00	0.00	0
5/12/01	19:16:30	247	0	60.02	0.00	0.00	0
5/12/01	19:16:30	748	0	60.02	0.00	0.00	0
5/12/01	19:16:31	249	0	60.02	0.00	0.00	0
5/12/01	19:16:31	750	0	60.02	0.00	0.00	0
5/12/01	19:16:32	250	0	60.02	0.00	0.00	0
5/12/01	19:16:32	751	0	60.02	0.00	0.00	0
5/12/01	19:16:33	252	0	60.01	0.00	0.00	0
5/12/01	19:16:33	752	0	60.01	0.00	0.00	0
5/12/01	19:16:34	253	0	60.01	0.00	0.00	0
5/12/01	19:16:34	754	0	60.01	0.00	0.00	0
5/12/01	19:16:35	255	0	60.01	0.00	0.00	0
5/12/01	19:16:35	755	0	60.01	0.00	0.00	0
5/12/01	19:16:36	256	0	60.01	0.00	0.00	0
5/12/01	19:16:36	757	0	60.01	0.00	0.00	0
5/12/01	19:16:37	257	0	60.01	0.00	0.00	0
5/12/01	19:16:37	758	0	60.01	0.00	0.00	0
5/12/01	19:16:38	259	0	60.01	0.00	0.00	0
5/12/01	19:16:38	760	0	60.01	0.00	0.00	0
5/12/01	19:16:39	260	0	60.01	0.00	0.00	0
5/12/01	19:16:39	761	3000	60.01	0.00	0.00	0
5/12/01	19:16:40	272	3000	60.01	0.00	0.00	0
5/12/01	19:16:40	762	3000	60.01	0.00	0.00	0
5/12/01	19:16:41	263	2999	60.01	0.00	0.00	0
5/12/01	19:16:41	764	2999	60.01	0.00	0.00	0
5/12/01	19:16:42	265	2999	60.01	0.00	0.00	0
5/12/01	19:16:42	765	2998	60.01	0.00	0.00	0
5/12/01	19:16:43	266	2998	60.01	0.00	0.00	0
5/12/01	19:16:43	767	2997	60.01	0.00	0.00	0
5/12/01	19:16:44	268	2997	60.01	0.00	0.00	0
5/12/01	19:16:44	768	2997	60.01	0.00	0.00	0
5/12/01	19:16:45	269	3293	60.01	0.00	0.00	0
5/12/01	19:16:45	770	3633	60.01	0.00	0.00	0
5/12/01	19:16:46	270	3860	60.01	0.00	0.00	0
5/12/01	19:16:46	771	4095	60.01	0.00	0.00	0
5/12/01	19:16:47	272	4067	60.01	0.00	0.00	0
5/12/01	19:16:47	773	4055	60.01	40.33	0.00	0
5/12/01	19:16:48	273	4036	60.01	40.33	0.00	0
5/12/01	19:16:48	774	4095	60.01	47.83	0.00	0
5/12/01	19:16:49	275	4095	60.01	47.83	0.00	0
5/12/01	19:16:49	775	4095	60.01	54.94	0.00	0
5/12/01	19:16:50	276	4095	60.01	54.94	0.00	0
5/12/01	19:16:50	777	4095	60.01	66.23	0.00	0
5/12/01	19:16:51	278	4095	60.01	66.23	0.00	0
5/12/01	19:16:51	778	4095	60.01	68.81	0.00	0
5/12/01	19:16:52	289	3000	60.01	68.81	0.00	0
5/12/01	19:16:52	780	3000	60.00	69.40	0.00	0
5/12/01	19:16:53	280	3000	60.00	69.40	0.00	0
5/12/01	19:16:53	781	3000	60.00	69.52	0.00	0
5/12/01	19:16:54	282	3000	60.00	69.52	0.00	0
5/12/01	19:16:54	783	3000	60.00	69.25	0.00	0
5/12/01	19:16:55	283	3000	60.00	69.25	0.00	0
5/12/01	19:16:55	784	3000	60.00	64.17	0.00	0
5/12/01	19:16:56	285	3000	60.00	64.17	0.00	0
5/12/01	19:16:56	786	3057	60.00	58.07	0.00	0
5/12/01	19:16:57	286	3148	60.00	58.07	0.00	0
5/12/01	19:16:57	787	3212	60.02	55.01	0.00	0
5/12/01	19:16:58	288	3237	60.02	55.01	0.00	0
5/12/01	19:16:58	788	3253	60.02	55.06	0.00	0
5/12/01	19:16:59	289	3261	60.02	55.06	0.00	0
5/12/01	19:16:59	790	3272	60.02	57.02	0.00	0
5/12/01	19:17:00	291	3273	60.02	57.02	-138.00	0
5/12/01	19:17:00	791	3275	60.02	59.49	-138.00	0
5/12/01	19:17:01	292	3276	60.02	59.49	-172.00	0
5/12/01	19:17:01	793	3278	60.02	59.81	-172.00	0
5/12/01	19:17:02	293	3270	60.02	59.81	165.00	0
5/12/01	19:17:02	794	3263	60.02	59.92	165.00	0
5/12/01	19:17:03	295	3263	60.02	59.92	110.00	0
5/12/01	19:17:03	796	3276	60.02	59.92	110.00	0
5/12/01	19:17:04	296	3288	60.02	59.93	35.00	0
5/12/01	19:17:04	797	3271	60.02	59.93	35.00	0
5/12/01	19:17:05	298	3273	60.02	59.84	-1.00	0
5/12/01	19:17:05	798	3276	60.02	59.84	-1.00	0
5/12/01	19:17:06	299	3279	60.02	59.83	-24.00	0
5/12/01	19:17:06	800	3280	60.02	59.83	-24.00	0
5/12/01	19:17:07	301	3282	60.02	59.81	-24.00	0
5/12/01	19:17:07	801	3276	60.02	59.81	-28.00	0
5/12/01	19:17:08	302	3286	60.00	59.97	-28.00	0
5/12/01	19:17:08	803	3280	60.00	59.97	-18.00	0
5/12/01	19:17:09	304	3286	60.00	59.99	-18.00	0
5/12/01	19:17:09	804	3280	60.00	59.99	-13.00	0
5/12/01	19:17:10	305	3281	60.00	60.05	-13.00	0
5/12/01	19:17:10	806	3277	60.00	60.05	0.00	1
5/12/01	19:17:11	306	3283	60.00	60.05	0.00	1
5/12/01	19:17:11	807	3280	60.00	60.05	3.00	0
5/12/01	19:17:12	308	3279	60.00	59.99	3.00	0
5/12/01	19:17:12	809	3277	60.00	59.99	4.00	0
5/12/01	19:17:13	319	3280	60.00	60.00	4.00	0
5/12/01	19:17:13	810	3279	60.00	60.00	1.00	0
5/12/01	19:17:14	311	3279	60.00	60.03	1.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Degrees)	Close Breaker (Open/Close)
5/12/01	19:17:14	811	3280	60.00	60.03	3.00	0
5/12/01	19:17:15	312	3279	60.00	60.06	3.00	0
5/12/01	19:17:15	823	3280	60.00	60.06	0.00	0
5/12/01	19:17:16	314	0	60.00	60.05	0.00	0
5/12/01	19:17:16	824	0	60.00	60.05	0.00	0
5/12/01	19:17:17	315	0	60.00	59.96	0.00	0
5/12/01	19:17:17	816	0	60.00	59.96	0.00	0
5/12/01	19:17:18	316	0	59.99	59.99	0.00	0
5/12/01	19:17:18	817	0	59.99	59.99	0.00	0
5/12/01	19:17:19	318	0	59.99	52.78	0.00	0
5/12/01	19:17:19	819	0	59.99	52.78	0.00	0
5/12/01	19:17:20	319	0	59.99	45.83	0.00	0
5/12/01	19:17:20	820	0	59.99	45.83	0.00	0
5/12/01	19:17:21	331	0	59.99	0.00	0.00	0
5/12/01	19:17:21	822	0	59.99	0.00	0.00	0
5/12/01	19:17:22	322	0	59.99	0.00	0.00	0
5/12/01	19:17:22	833	0	59.99	0.00	0.00	0
5/12/01	19:17:23	324	0	59.99	0.00	0.00	0
5/12/01	19:17:23	824	0	60.00	0.00	0.00	0
5/12/01	19:17:24	325	0	60.00	0.00	0.00	0
5/12/01	19:17:24	826	0	60.00	0.00	0.00	0
5/12/01	19:17:25	327	0	60.00	0.00	0.00	0
5/12/01	19:17:25	827	0	60.00	0.00	0.00	0
5/12/01	19:17:26	328	0	60.00	0.00	0.00	0
5/12/01	19:17:26	829	0	60.00	0.00	0.00	0
5/12/01	19:17:27	329	0	60.00	0.00	0.00	0
5/12/01	19:17:27	830	0	60.00	0.00	0.00	0
5/12/01	19:17:28	331	0	60.00	0.00	0.00	0
5/12/01	19:17:28	832	0	60.00	0.00	0.00	0
5/12/01	19:17:29	332	0	60.00	0.00	0.00	0
5/12/01	19:17:29	833	0	60.00	0.00	0.00	0
5/12/01	19:17:30	334	0	60.00	0.00	0.00	0
5/12/01	19:17:30	834	0	60.00	0.00	0.00	0
5/12/01	19:17:31	335	0	60.00	0.00	0.00	0
5/12/01	19:17:31	836	0	60.00	0.00	0.00	0
5/12/01	19:17:32	337	0	60.00	0.00	0.00	0
5/12/01	19:17:32	837	0	60.00	0.00	0.00	0
5/12/01	19:17:33	338	0	60.00	0.00	0.00	0
5/12/01	19:17:33	839	3000	60.01	0.00	0.00	0
5/12/01	19:17:34	340	3000	60.01	0.00	0.00	0
5/12/01	19:17:34	840	3000	60.01	0.00	0.00	0
5/12/01	19:17:35	341	3000	60.01	0.00	0.00	0
5/12/01	19:17:35	842	2999	60.01	0.00	0.00	0
5/12/01	19:17:36	342	2999	60.01	0.00	0.00	0
5/12/01	19:17:36	843	2999	60.01	0.00	0.00	0
5/12/01	19:17:37	344	2999	60.01	0.00	0.00	0
5/12/01	19:17:37	845	2999	60.01	0.00	0.00	0
5/12/01	19:17:38	345	2999	60.01	0.00	0.00	0
5/12/01	19:17:38	846	2999	60.00	0.00	0.00	0
5/12/01	19:17:39	347	2999	60.00	0.00	0.00	0
5/12/01	19:17:39	847	3679	60.00	0.00	0.00	0
5/12/01	19:17:40	348	3939	60.00	0.00	0.00	0
5/12/01	19:17:40	849	4052	60.00	0.00	0.00	0
5/12/01	19:17:41	350	4079	60.00	0.00	0.00	0
5/12/01	19:17:41	850	4065	60.00	0.00	0.00	0
5/12/01	19:17:42	351	4044	60.00	0.00	0.00	0
5/12/01	19:17:42	852	3989	60.00	52.48	0.00	0
5/12/01	19:17:43	352	4095	60.00	52.48	0.00	0
5/12/01	19:17:43	853	4095	59.98	58.80	0.00	0
5/12/01	19:17:44	354	4095	59.98	58.80	0.00	0
5/12/01	19:17:44	855	4095	59.98	64.48	0.00	0
5/12/01	19:17:45	355	3000	59.98	64.48	0.00	0
5/12/01	19:17:45	856	3000	59.98	68.37	0.00	0
5/12/01	19:17:46	357	3000	59.98	68.37	0.00	0
5/12/01	19:17:46	858	3000	59.98	69.39	0.00	0
5/12/01	19:17:47	358	3000	59.98	69.39	0.00	0
5/12/01	19:17:47	859	3000	59.98	67.72	0.00	0
5/12/01	19:17:48	360	3000	59.98	67.72	0.00	0
5/12/01	19:17:48	860	3000	60.02	61.67	0.00	0
5/12/01	19:17:49	361	3000	60.02	61.67	0.00	0
5/12/01	19:17:49	862	3028	60.02	55.15	0.00	0
5/12/01	19:17:50	363	3085	60.02	55.15	0.00	0
5/12/01	19:17:50	863	3184	60.02	55.15	0.00	0
5/12/01	19:17:51	364	3219	60.02	55.03	0.00	0
5/12/01	19:17:51	865	3240	60.02	55.03	0.00	0
5/12/01	19:17:52	365	3256	60.02	55.07	0.00	0
5/12/01	19:17:52	866	3269	60.02	55.07	0.00	0
5/12/01	19:17:53	367	3273	60.02	56.96	0.00	0
5/12/01	19:17:53	868	3274	60.02	56.96	-50.00	0
5/12/01	19:17:54	368	3277	59.99	58.80	-50.00	0
5/12/01	19:17:54	869	3277	59.99	58.80	-71.00	0
5/12/01	19:17:55	370	3279	59.99	59.80	-71.00	0
5/12/01	19:17:55	870	3282	59.99	59.80	-78.00	0
5/12/01	19:17:56	371	3286	59.99	59.92	-78.00	0
5/12/01	19:17:56	872	3281	59.99	59.92	-59.00	0
5/12/01	19:17:57	373	3277	59.99	59.92	-59.00	0
5/12/01	19:17:57	873	3288	59.99	59.92	-59.00	0
5/12/01	19:17:58	374	3286	59.99	60.03	-28.00	0
5/12/01	19:17:58	875	3285	59.99	60.03	1.00	0
5/12/01	19:17:59	376	3281	59.97	59.99	1.00	0
5/12/01	19:17:59	876	3280	59.97	59.99	1.00	0
5/12/01	19:18:00	377	3279	59.97	60.05	17.00	0
5/12/01	19:18:00	878	3278	59.97	60.05	16.00	0
5/12/01	19:18:01	378	3277	59.97	60.02	16.00	0
5/12/01	19:18:01	879	3278	59.97	60.02	10.00	0
5/12/01	19:18:02	380	3277	59.97	59.94	10.00	0
5/12/01	19:18:02	881	3278	59.97	59.94	2.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Degrees)	Close Breaker (Open/Close)
5/12/01	19:18:03	381	3277	59.97	59.99	2.00	0
5/12/01	19:18:03	882	3284	59.97	59.99	2.00	0
5/12/01	19:18:04	383	3278	59.97	60.01	-2.00	0
5/12/01	19:18:04	883	3280	59.97	60.01	-2.00	1
5/12/01	19:18:05	384	3279	59.97	59.96	-7.00	1
5/12/01	19:18:05	885	3287	59.97	59.96	-7.00	0
5/12/01	19:18:06	386	0	59.97	59.93	-7.00	0
5/12/01	19:18:06	886	0	59.97	59.93	0.00	0
5/12/01	19:18:07	387	0	59.97	59.99	0.00	0
5/12/01	19:18:07	888	0	59.97	59.99	0.00	0
5/12/01	19:18:08	388	0	59.97	60.09	0.00	0
5/12/01	19:18:08	889	0	59.97	60.09	0.00	0
5/12/01	19:18:09	390	0	59.98	55.20	0.00	0
5/12/01	19:18:09	891	0	59.98	55.20	0.00	0
5/12/01	19:18:10	391	0	59.98	48.36	0.00	0
5/12/01	19:18:10	892	0	59.98	48.36	0.00	0
5/12/01	19:18:11	393	0	59.98	41.37	0.00	0
5/12/01	19:18:11	894	0	59.98	41.37	0.00	0
5/12/01	19:18:12	424	0	59.98	0.00	0.00	0
5/12/01	19:18:12	895	0	59.98	0.00	0.00	0
5/12/01	19:18:13	396	0	59.98	0.00	0.00	0
5/12/01	19:18:13	896	0	59.98	0.00	0.00	0
5/12/01	19:18:14	397	0	59.98	0.00	0.00	0
5/12/01	19:18:14	898	0	59.98	0.00	0.00	0
5/12/01	19:18:15	399	0	59.98	0.00	0.00	0
5/12/01	19:18:15	899	0	59.98	0.00	0.00	0
5/12/01	19:18:16	400	0	59.98	0.00	0.00	0
5/12/01	19:18:16	901	0	59.98	0.00	0.00	0
5/12/01	19:18:17	401	0	59.98	0.00	0.00	0
5/12/01	19:18:17	902	0	59.98	0.00	0.00	0
5/12/01	19:18:18	403	0	59.98	0.00	0.00	0
5/12/01	19:18:18	904	0	59.99	0.00	0.00	0
5/12/01	19:18:19	404	0	59.99	0.00	0.00	0
5/12/01	19:18:19	905	3000	59.99	0.00	0.00	0
5/12/01	19:18:20	406	3000	59.99	0.00	0.00	0
5/12/01	19:18:20	906	3000	59.99	0.00	0.00	0
5/12/01	19:18:21	407	3001	59.99	0.00	0.00	0
5/12/01	19:18:21	908	3001	59.99	0.00	0.00	0
5/12/01	19:18:22	409	3001	59.99	0.00	0.00	0
5/12/01	19:18:22	909	3002	59.99	0.00	0.00	0
5/12/01	19:18:23	410	3002	59.99	0.00	0.00	0
5/12/01	19:18:23	911	3002	59.99	0.00	0.00	0
5/12/01	19:18:24	412	3002	59.99	0.00	0.00	0
5/12/01	19:18:24	912	3003	59.99	0.00	0.00	0
5/12/01	19:18:25	413	3463	59.99	0.00	0.00	0
5/12/01	19:18:25	914	3810	59.99	0.00	0.00	0
5/12/01	19:18:26	414	4040	59.99	0.00	0.00	0
5/12/01	19:18:26	915	4095	59.99	0.00	0.00	0
5/12/01	19:18:27	416	4095	59.99	0.00	0.00	0
5/12/01	19:18:27	917	4052	59.99	40.64	0.00	0
5/12/01	19:18:28	417	4049	59.99	40.64	0.00	0
5/12/01	19:18:28	918	4095	60.00	48.20	0.00	0
5/12/01	19:18:29	419	4095	60.00	48.20	0.00	0
5/12/01	19:18:29	919	4095	60.00	55.39	0.00	0
5/12/01	19:18:30	420	4095	60.00	55.39	0.00	0
5/12/01	19:18:30	921	4095	60.00	61.42	0.00	0
5/12/01	19:18:31	422	4095	60.00	61.42	0.00	0
5/12/01	19:18:31	922	3000	60.00	66.56	0.00	0
5/12/01	19:18:32	423	3000	60.00	66.56	0.00	0
5/12/01	19:18:32	924	3000	60.00	68.99	0.00	0
5/12/01	19:18:33	424	3000	60.00	68.99	0.00	0
5/12/01	19:18:33	925	3000	59.99	69.63	0.00	0
5/12/01	19:18:34	426	3000	59.99	69.63	0.00	0
5/12/01	19:18:34	927	3000	59.99	69.42	0.00	0
5/12/01	19:18:35	427	3134	59.99	69.42	0.00	0
5/12/01	19:18:35	928	3177	59.99	64.59	0.00	0
5/12/01	19:18:36	429	3217	59.99	64.59	0.00	0
5/12/01	19:18:36	930	3237	59.99	57.76	0.00	0
5/12/01	19:18:37	430	3262	59.99	57.76	0.00	0
5/12/01	19:18:37	931	3267	59.99	57.45	0.00	0
5/12/01	19:18:38	432	3271	59.99	57.45	0.00	0
5/12/01	19:18:38	932	3274	59.99	58.94	176.00	0
5/12/01	19:18:39	433	3275	59.99	58.94	176.00	0
5/12/01	19:18:39	934	3276	59.99	59.64	150.00	0
5/12/01	19:18:40	435	3271	59.99	59.64	150.00	0
5/12/01	19:18:40	935	3277	59.99	59.84	119.00	0
5/12/01	19:18:41	436	3265	59.99	59.84	119.00	0
5/12/01	19:18:41	937	3264	59.99	59.93	52.00	0
5/12/01	19:18:42	437	3282	59.99	59.93	52.00	0
5/12/01	19:18:42	938	3272	59.99	59.93	2.00	0
5/12/01	19:18:43	439	3281	59.99	59.93	2.00	0
5/12/01	19:18:43	940	3278	60.01	59.85	-19.00	0
5/12/01	19:18:44	440	3281	60.01	59.85	-19.00	0
5/12/01	19:18:44	941	3280	60.01	59.92	-22.00	0
5/12/01	19:18:45	442	3283	60.01	59.92	-22.00	0
5/12/01	19:18:45	942	3280	60.01	59.96	-15.00	0
5/12/01	19:18:46	443	3285	60.01	59.96	-15.00	0
5/12/01	19:18:46	944	3276	60.01	59.96	-8.00	0
5/12/01	19:18:47	445	3282	60.01	60.03	-8.00	0
5/12/01	19:18:47	945	3276	60.01	60.03	-3.00	0
5/12/01	19:18:48	446	3282	60.01	60.02	-3.00	0
5/12/01	19:18:48	947	3274	60.01	60.02	-4.00	0
5/12/01	19:18:49	448	3282	60.00	59.94	-4.00	1
5/12/01	19:18:49	948	3277	60.00	59.94	-2.00	1
5/12/01	19:18:50	449	3282	60.00	59.98	-2.00	1
5/12/01	19:18:50	950	3280	60.00	59.98	0.00	1
5/12/01	19:18:51	450	0	60.00	60.07	0.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Degrees)	Close Breaker (Open/Close)
5/12/01	19:18:51	951	0	60.00	60.07	0.00	0
5/12/01	19:18:52	452	0	60.00	60.08	0.00	0
5/12/01	19:18:52	953	0	60.00	60.08	0.00	0
5/12/01	19:18:53	453	0	60.00	59.97	0.00	0
5/12/01	19:18:53	954	0	60.00	59.97	0.00	0
5/12/01	19:18:54	455	0	59.99	59.56	0.00	0
5/12/01	19:18:54	955	0	59.99	59.56	0.00	0
5/12/01	19:18:55	456	0	59.99	53.70	0.00	0
5/12/01	19:18:55	957	0	59.99	53.70	0.00	0
5/12/01	19:18:56	458	0	59.99	46.79	0.00	0
5/12/01	19:18:56	968	0	59.99	46.79	0.00	0
5/12/01	19:18:57	459	0	59.99	0.00	0.00	0
5/12/01	19:18:57	960	0	59.99	0.00	0.00	0
5/12/01	19:18:58	460	0	59.99	0.00	0.00	0
5/12/01	19:18:58	961	0	59.99	0.00	0.00	0
5/12/01	19:18:59	462	0	59.99	0.00	0.00	0
5/12/01	19:18:59	963	0	59.99	0.00	0.00	0
5/12/01	19:19:00	473	0	59.99	0.00	0.00	0
5/12/01	19:19:00	964	0	59.99	0.00	0.00	0
5/12/01	19:19:01	465	0	59.99	0.00	0.00	0
5/12/01	19:19:01	966	0	59.99	0.00	0.00	0
5/12/01	19:19:02	466	0	59.99	0.00	0.00	0
5/12/01	19:19:02	967	0	59.99	0.00	0.00	0
5/12/01	19:19:03	468	0	59.99	0.00	0.00	0
5/12/01	19:19:03	968	0	59.99	0.00	0.00	0
5/12/01	19:19:04	469	0	59.99	0.00	0.00	0
5/12/01	19:19:04	970	0	59.99	0.00	0.00	0
5/12/01	19:19:05	471	3000	59.99	0.00	0.00	0
5/12/01	19:19:05	971	3000	59.99	0.00	0.00	0
5/12/01	19:19:06	472	3000	59.99	0.00	0.00	0
5/12/01	19:19:06	973	3000	59.99	0.00	0.00	0
5/12/01	19:19:07	473	3000	59.99	0.00	0.00	0
5/12/01	19:19:07	974	3000	59.99	0.00	0.00	0
5/12/01	19:19:08	475	3000	59.99	0.00	0.00	0
5/12/01	19:19:08	976	3001	59.99	0.00	0.00	0
5/12/01	19:19:09	476	3001	59.99	0.00	0.00	0
5/12/01	19:19:09	977	3002	59.99	0.00	0.00	0
5/12/01	19:19:10	478	3002	59.99	0.00	0.00	0
5/12/01	19:19:10	978	3002	59.99	0.00	0.00	0
5/12/01	19:19:11	479	3426	59.99	0.00	0.00	0
5/12/01	19:19:11	980	3912	59.99	0.00	0.00	0
5/12/01	19:19:12	481	4087	59.99	0.00	0.00	0
5/12/01	19:19:12	981	4095	59.99	0.00	0.00	0
5/12/01	19:19:13	482	4083	59.99	0.00	0.00	0
5/12/01	19:19:13	983	4082	59.99	42.64	0.00	0
5/12/01	19:19:14	484	4095	59.99	42.64	0.00	0
5/12/01	19:19:14	984	4095	60.02	50.75	0.00	0
5/12/01	19:19:15	485	4095	60.02	50.75	0.00	0
5/12/01	19:19:15	986	3000	60.02	57.16	0.00	0
5/12/01	19:19:16	486	3000	60.02	57.16	0.00	0
5/12/01	19:19:16	987	3000	60.02	63.06	0.00	0
5/12/01	19:19:17	488	3000	60.02	63.06	0.00	0
5/12/01	19:19:17	989	3000	60.02	67.69	0.00	0
5/12/01	19:19:18	489	3000	60.02	67.69	0.00	0
5/12/01	19:19:18	990	3085	60.02	67.93	0.00	0
5/12/01	19:19:19	491	3151	60.02	67.93	0.00	0
5/12/01	19:19:19	991	3203	59.99	61.87	0.00	0
5/12/01	19:19:20	492	3237	59.99	61.87	0.00	0
5/12/01	19:19:20	993	3252	59.99	55.87	0.00	0
5/12/01	19:19:21	494	3265	59.99	55.87	0.00	0
5/12/01	19:19:21	994	3269	59.99	55.95	0.00	0
5/12/01	19:19:22	495	3273	59.99	55.95	0.00	0
5/12/01	19:19:22	996	3277	59.99	58.46	-52.00	0
5/12/01	19:19:23	496	3277	59.99	58.46	-52.00	0
5/12/01	19:19:23	997	3277	59.99	59.30	-77.00	0
5/12/01	19:19:24	498	3283	59.99	59.30	-77.00	0
5/12/01	19:19:24	999	3282	59.99	59.93	-82.00	0
5/12/01	19:19:25	499	3286	59.99	59.93	-82.00	0
5/12/01	19:19:26	0	3268	59.99	59.94	-67.00	0
5/12/01	19:19:26	501	3289	59.99	59.94	-67.00	0
5/12/01	19:19:27	2	3283	59.99	60.03	-27.00	0
5/12/01	19:19:27	502	3280	59.99	60.03	-27.00	0
5/12/01	19:19:28	13	3276	59.99	60.02	-4.00	0
5/12/01	19:19:28	504	3284	59.99	60.02	-4.00	0
5/12/01	19:19:29	4	3281	59.99	60.11	10.00	0
5/12/01	19:19:29	505	3284	59.99	60.11	10.00	0
5/12/01	19:19:30	16	3278	59.99	60.06	9.00	0
5/12/01	19:19:30	507	3283	59.99	60.06	9.00	0
5/12/01	19:19:31	7	3278	59.99	60.04	10.00	0
5/12/01	19:19:31	508	3280	59.99	60.04	10.00	0
5/12/01	19:19:32	9	3278	59.99	60.00	1.00	0
5/12/01	19:19:32	509	3286	59.99	60.00	1.00	0
5/12/01	19:19:33	10	3271	59.99	60.00	-3.00	0
5/12/01	19:19:33	511	3280	59.99	60.00	-3.00	1
5/12/01	19:19:34	12	3280	59.99	60.00	-7.00	1
5/12/01	19:19:34	512	3278	60.00	59.92	-7.00	0
5/12/01	19:19:35	13	3278	60.00	59.92	-2.00	0
5/12/01	19:19:35	514	0	60.00	60.03	-2.00	1
5/12/01	19:19:36	14	0	60.00	60.03	-2.00	1
5/12/01	19:19:36	515	0	60.00	60.05	-2.00	0
5/12/01	19:19:37	16	0	60.00	60.05	0.00	0
5/12/01	19:19:37	517	0	60.00	59.94	0.00	0
5/12/01	19:19:38	17	0	60.00	59.94	0.00	0
5/12/01	19:19:38	518	0	60.00	59.99	0.00	0
5/12/01	19:19:39	19	0	60.00	59.99	0.00	0
5/12/01	19:19:39	520	0	60.00	55.46	0.00	0
5/12/01	19:19:40	20	0	60.00	55.46	0.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Degrees)	Close Breaker (Open/Close)
5/12/01	19:19:40	521	0	59.98	48.57	0.00	0
5/12/01	19:19:41	22	0	59.98	48.57	0.00	0
5/12/01	19:19:41	522	0	59.98	40.86	0.00	0
5/12/01	19:19:42	23	0	59.98	40.86	0.00	0
5/12/01	19:19:42	524	0	59.98	0.00	0.00	0
5/12/01	19:19:43	25	0	59.98	0.00	0.00	0
5/12/01	19:19:43	525	0	59.98	0.00	0.00	0
5/12/01	19:19:44	26	0	59.98	0.00	0.00	0
5/12/01	19:19:44	527	0	59.99	0.00	0.00	0
5/12/01	19:19:45	27	0	59.99	0.00	0.00	0
5/12/01	19:19:45	528	0	59.99	0.00	0.00	0
5/12/01	19:19:46	29	0	59.99	0.00	0.00	0
5/12/01	19:19:46	530	0	59.99	0.00	0.00	0
5/12/01	19:19:47	30	0	59.99	0.00	0.00	0
5/12/01	19:19:47	531	0	59.99	0.00	0.00	0
5/12/01	19:19:48	32	0	59.99	0.00	0.00	0
5/12/01	19:19:48	532	0	59.99	0.00	0.00	0
5/12/01	19:19:49	33	0	59.99	0.00	0.00	0
5/12/01	19:19:49	534	0	59.98	0.00	0.00	0
5/12/01	19:19:50	35	0	59.98	0.00	0.00	0
5/12/01	19:19:50	535	3000	59.98	0.00	0.00	0
5/12/01	19:19:51	36	3000	59.98	0.00	0.00	0
5/12/01	19:19:51	537	3000	59.98	0.00	0.00	0
5/12/01	19:19:52	38	3000	59.98	0.00	0.00	0
5/12/01	19:19:52	538	3001	59.98	0.00	0.00	0
5/12/01	19:19:53	39	3001	59.98	0.00	0.00	0
5/12/01	19:19:53	540	3002	59.98	0.00	0.00	0
5/12/01	19:19:54	40	3002	59.98	0.00	0.00	0
5/12/01	19:19:54	541	3002	59.99	0.00	0.00	0
5/12/01	19:19:55	42	3002	59.99	0.00	0.00	0
5/12/01	19:19:55	543	3002	59.99	0.00	0.00	0
5/12/01	19:19:56	43	3746	59.99	0.00	0.00	0
5/12/01	19:19:56	544	3648	59.99	0.00	0.00	0
5/12/01	19:19:57	45	3921	59.99	0.00	0.00	0
5/12/01	19:19:57	545	4095	59.99	0.00	0.00	0
5/12/01	19:19:58	46	4090	59.99	0.00	0.00	0
5/12/01	19:19:58	547	4095	59.99	0.00	0.00	0
5/12/01	19:19:59	48	4041	59.99	0.00	0.00	0
5/12/01	19:19:59	548	4003	59.99	52.31	0.00	0
5/12/01	19:20:00	49	4095	59.99	52.31	0.00	0
5/12/01	19:20:00	550	4095	59.99	58.60	0.00	0
5/12/01	19:20:01	50	3000	59.99	58.60	0.00	0
5/12/01	19:20:01	551	3000	59.99	58.60	0.00	0
5/12/01	19:20:02	52	3000	59.99	64.28	0.00	0
5/12/01	19:20:02	553	3000	59.99	64.28	0.00	0
5/12/01	19:20:03	53	3000	59.99	68.07	0.00	0
5/12/01	19:20:03	554	3000	59.99	68.07	0.00	0
5/12/01	19:20:04	55	3000	59.99	69.44	0.00	0
5/12/01	19:20:04	566	3086	59.99	69.44	0.00	0
5/12/01	19:20:05	56	3143	59.98	62.30	0.00	0
5/12/01	19:20:05	557	3195	59.98	62.30	0.00	0
5/12/01	19:20:06	58	3233	59.98	56.23	0.00	0
5/12/01	19:20:06	558	3258	59.98	56.23	0.00	0
5/12/01	19:20:07	59	3265	59.98	55.24	0.00	0
5/12/01	19:20:07	560	3270	59.98	55.24	0.00	0
5/12/01	19:20:08	61	3274	59.98	58.17	48.00	0
5/12/01	19:20:08	561	3276	59.98	58.17	48.00	0
5/12/01	19:20:09	62	3278	59.98	59.23	13.00	0
5/12/01	19:20:09	563	3278	59.98	59.23	13.00	0
5/12/01	19:20:10	63	3278	59.99	59.73	-1.00	1
5/12/01	19:20:10	564	3278	59.99	59.73	-1.00	1
5/12/01	19:20:11	65	3278	59.99	59.92	-1.00	1
5/12/01	19:20:11	566	3278	59.99	59.92	-1.00	1
5/12/01	19:20:12	66	3278	59.99	60.00	0.00	1
5/12/01	19:20:12	567	3278	59.99	60.00	0.00	1
5/12/01	19:20:13	68	0	59.99	59.99	0.00	1
5/12/01	19:20:13	568	0	59.99	59.99	0.00	0
5/12/01	19:20:14	69	0	59.99	59.99	0.00	0
5/12/01	19:20:14	570	0	59.99	59.99	0.00	0
5/12/01	19:20:15	71	0	59.98	60.00	0.00	0
5/12/01	19:20:15	571	0	59.98	60.00	0.00	0
5/12/01	19:20:16	72	0	59.98	52.05	0.00	0
5/12/01	19:20:16	573	0	59.98	52.05	0.00	0
5/12/01	19:20:17	74	0	59.98	45.13	0.00	0
5/12/01	19:20:17	574	0	59.98	45.13	0.00	0
5/12/01	19:20:18	75	0	59.98	45.13	0.00	0
5/12/01	19:20:18	576	0	59.98	45.13	0.00	0
5/12/01	19:20:19	76	0	59.98	0.00	0.00	0
5/12/01	19:20:19	577	0	59.98	0.00	0.00	0
5/12/01	19:20:20	78	0	60.00	0.00	0.00	0
5/12/01	19:20:20	579	0	60.00	0.00	0.00	0
5/12/01	19:20:21	79	0	60.00	0.00	0.00	0
5/12/01	19:20:21	580	0	60.00	0.00	0.00	0
5/12/01	19:20:22	81	0	60.00	0.00	0.00	0
5/12/01	19:20:22	581	0	60.00	0.00	0.00	0
5/12/01	19:20:23	82	0	60.00	0.00	0.00	0
5/12/01	19:20:23	583	0	60.00	0.00	0.00	0
5/12/01	19:20:24	84	0	60.00	0.00	0.00	0
5/12/01	19:20:24	584	0	60.00	0.00	0.00	0
5/12/01	19:20:25	85	0	60.03	0.00	0.00	0
5/12/01	19:20:25	586	0	60.03	0.00	0.00	0
5/12/01	19:20:26	86	0	60.03	0.00	0.00	0
5/12/01	19:20:26	587	0	60.03	0.00	0.00	0
5/12/01	19:20:27	88	0	60.03	0.00	0.00	0
5/12/01	19:20:27	589	0	60.03	0.00	0.00	0
5/12/01	19:20:28	89	0	60.03	0.00	0.00	0
5/12/01	19:20:28	590	0	60.03	0.00	0.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Degrees)	Close Breaker (Open/Close)
5/12/01	19:20:29	91	0	60.03	0.00	0.00	0
5/12/01	19:20:29	592	0	60.03	0.00	0.00	0
5/12/01	19:20:30	92	0	60.00	0.00	0.00	0
5/12/01	19:20:30	593	0	60.00	0.00	0.00	0
5/12/01	19:20:31	94	3000	60.00	0.00	0.00	0
5/12/01	19:20:31	594	3000	60.00	0.00	0.00	0
5/12/01	19:20:32	95	3000	60.00	0.00	0.00	0
5/12/01	19:20:32	596	3000	60.00	0.00	0.00	0
5/12/01	19:20:33	97	3001	60.00	0.00	0.00	0
5/12/01	19:20:33	597	3001	60.00	0.00	0.00	0
5/12/01	19:20:34	98	3001	60.00	0.00	0.00	0
5/12/01	19:20:34	599	3002	60.00	0.00	0.00	0
5/12/01	19:20:35	99	3001	59.99	0.00	0.00	0
5/12/01	19:20:35	600	3002	59.99	0.00	0.00	0
5/12/01	19:20:36	101	3002	59.99	0.00	0.00	0
5/12/01	19:20:36	602	3001	59.99	0.00	0.00	0
5/12/01	19:20:37	102	3600	59.99	0.00	0.00	0
5/12/01	19:20:37	603	3865	59.99	0.00	0.00	0
5/12/01	19:20:38	104	4049	59.99	0.00	0.00	0
5/12/01	19:20:38	604	4095	59.99	0.00	0.00	0
5/12/01	19:20:39	105	4056	59.99	44.05	0.00	0
5/12/01	19:20:39	606	4022	59.99	44.05	0.00	0
5/12/01	19:20:40	107	4095	59.99	52.10	0.00	0
5/12/01	19:20:40	607	4095	59.99	52.10	0.00	0
5/12/01	19:20:41	108	4095	59.99	58.32	0.00	0
5/12/01	19:20:41	609	4095	59.99	58.32	0.00	0
5/12/01	19:20:42	110	3000	59.99	68.29	0.00	0
5/12/01	19:20:42	610	3000	59.99	68.29	0.00	0
5/12/01	19:20:43	111	3000	59.99	69.45	0.00	0
5/12/01	19:20:43	612	3000	59.99	69.45	0.00	0
5/12/01	19:20:44	112	3000	59.99	69.66	0.00	0
5/12/01	19:20:44	613	3000	59.99	69.66	0.00	0
5/12/01	19:20:45	114	3000	59.99	66.29	0.00	0
5/12/01	19:20:45	615	3100	59.99	66.29	0.00	0
5/12/01	19:20:46	115	3180	59.99	60.15	0.00	0
5/12/01	19:20:46	616	3227	59.99	60.15	0.00	0
5/12/01	19:20:47	117	3246	59.99	56.63	0.00	0
5/12/01	19:20:47	617	3262	59.99	56.63	0.00	0
5/12/01	19:20:48	118	3269	59.99	58.79	0.00	0
5/12/01	19:20:48	619	3273	59.99	58.79	138.00	0
5/12/01	19:20:49	120	3274	59.99	58.79	138.00	0
5/12/01	19:20:49	620	3277	59.99	58.79	95.00	0
5/12/01	19:20:50	121	3279	59.99	58.79	95.00	0
5/12/01	19:20:50	622	3277	60.00	59.50	66.00	0
5/12/01	19:20:51	122	3274	60.00	59.50	66.00	0
5/12/01	19:20:51	623	3271	60.00	59.79	58.00	0
5/12/01	19:20:52	124	3278	60.00	59.79	58.00	0
5/12/01	19:20:52	625	3272	60.00	59.96	28.00	0
5/12/01	19:20:53	125	3277	60.00	59.96	28.00	0
5/12/01	19:20:53	626	3273	60.00	60.00	12.00	0
5/12/01	19:20:54	127	3273	60.00	60.00	12.00	0
5/12/01	19:20:54	628	3275	59.98	59.95	0.00	0
5/12/01	19:20:55	128	3275	59.98	59.95	0.00	0
5/12/01	19:20:55	629	3279	59.98	59.96	-9.00	0
5/12/01	19:20:56	130	3278	59.98	59.96	-9.00	0
5/12/01	19:20:56	630	3281	59.98	59.95	-23.00	0
5/12/01	19:20:57	131	3277	59.98	59.95	-23.00	0
5/12/01	19:20:57	632	3283	59.98	59.93	-20.00	0
5/12/01	19:20:58	133	3282	59.98	59.93	-20.00	0
5/12/01	19:20:58	633	3279	59.98	60.03	-8.00	0
5/12/01	19:20:59	134	3280	59.98	60.03	-8.00	0
5/12/01	19:20:59	635	3286	60.00	60.09	-5.00	0
5/12/01	19:21:00	135	3280	60.00	60.09	-5.00	0
5/12/01	19:21:00	636	3281	60.00	60.05	-5.00	0
5/12/01	19:21:01	137	3281	60.00	60.05	0.00	0
5/12/01	19:21:01	638	3283	60.00	59.99	0.00	0
5/12/01	19:21:02	138	3280	60.00	59.99	0.00	0
5/12/01	19:21:02	639	3283	60.00	59.97	0.00	0
5/12/01	19:21:03	140	3279	60.00	59.97	2.00	0
5/12/01	19:21:03	640	3279	60.00	60.07	2.00	0
5/12/01	19:21:04	141	3280	60.00	60.07	2.00	0
5/12/01	19:21:04	642	3283	59.99	60.03	2.00	1
5/12/01	19:21:05	143	3278	59.99	60.03	0.00	1
5/12/01	19:21:05	643	3279	59.99	59.95	0.00	1
5/12/01	19:21:06	144	0	59.99	59.95	-2.00	1
5/12/01	19:21:06	645	0	59.99	59.93	-2.00	0
5/12/01	19:21:07	146	0	59.99	59.93	0.00	0
5/12/01	19:21:07	646	0	59.99	59.96	0.00	0
5/12/01	19:21:08	147	0	59.99	59.96	0.00	0
5/12/01	19:21:08	658	0	59.99	56.58	0.00	0
5/12/01	19:21:09	148	0	59.99	56.58	0.00	0
5/12/01	19:21:09	789	0	60.02	50.45	0.00	0
5/12/01	19:21:10	150	0	60.02	50.45	0.00	0
5/12/01	19:21:10	651	0	60.02	50.45	0.00	0
5/12/01	19:21:11	151	0	60.02	43.57	0.00	0
5/12/01	19:21:11	652	0	60.02	43.57	0.00	0
5/12/01	19:21:12	153	0	60.02	0.00	0.00	0
5/12/01	19:21:12	653	0	60.02	0.00	0.00	0
5/12/01	19:21:13	154	0	60.02	0.00	0.00	0
5/12/01	19:21:13	655	0	60.02	0.00	0.00	0
5/12/01	19:21:14	156	0	60.02	0.00	0.00	0
5/12/01	19:21:14	656	0	60.02	0.00	0.00	0
5/12/01	19:21:15	157	0	59.99	0.00	0.00	0
5/12/01	19:21:15	658	0	59.99	0.00	0.00	0
5/12/01	19:21:16	158	0	59.99	0.00	0.00	0
5/12/01	19:21:16	659	0	59.99	0.00	0.00	0
5/12/01	19:21:17	160	0	59.99	0.00	0.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Degrees)	Close Breaker (Open/Close)
5/12/01	19:21:17	661	0	59.99	0.00	0.00	0
5/12/01	19:21:18	161	0	59.99	0.00	0.00	0
5/12/01	19:21:18	662	0	59.99	0.00	0.00	0
5/12/01	19:21:19	163	0	59.99	0.00	0.00	0
5/12/01	19:21:19	664	0	59.99	0.00	0.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match	Close Breaker (Open/Close)
5/12/01	17:59:23	284	0	59.98	0.00	0.00	0
5/12/01	17:59:23	785	0	59.98	0.00	0.00	0
5/12/01	17:59:24	286	0	59.98	0.00	0.00	0
5/12/01	17:59:24	786	100	59.98	0.00	0.00	0
5/12/01	17:59:25	287	300	59.98	0.00	0.00	0
5/12/01	17:59:25	788	500	59.98	0.00	0.00	0
5/12/01	17:59:26	288	700	59.98	0.00	0.00	0
5/12/01	17:59:26	789	1000	59.98	0.00	0.00	0
5/12/01	17:59:27	290	1200	59.97	0.00	0.00	0
5/12/01	17:59:27	791	1400	59.97	0.00	0.00	0
5/12/01	17:59:28	291	1600	59.97	0.00	0.00	0
5/12/01	17:59:28	792	1800	59.97	0.00	0.00	0
5/12/01	17:59:29	293	2100	59.97	0.00	0.00	0
5/12/01	17:59:29	793	2300	59.97	0.00	0.00	0
5/12/01	17:59:30	294	2500	59.97	0.00	0.00	0
5/12/01	17:59:30	795	2780	59.97	0.00	0.00	0
5/12/01	17:59:31	296	2902	59.97	0.00	0.00	0
5/12/01	17:59:31	806	2990	59.97	0.00	0.00	0
5/12/01	17:59:32	297	3056	59.99	0.00	0.00	0
5/12/01	17:59:32	798	3094	59.99	0.00	0.00	0
5/12/01	17:59:33	299	3120	59.99	41.61	0.00	0
5/12/01	17:59:33	799	3153	59.99	41.61	0.00	0
5/12/01	17:59:34	300	3171	59.99	55.44	0.00	0
5/12/01	17:59:34	801	3186	59.99	55.44	0.00	0
5/12/01	17:59:35	301	3199	59.99	57.13	0.00	0
5/12/01	17:59:35	802	3215	59.99	57.13	0.00	0
5/12/01	17:59:36	303	3225	59.99	57.78	0.00	0
5/12/01	17:59:36	804	3233	59.99	57.78	0.00	0
5/12/01	17:59:37	304	3240	59.97	58.36	0.00	0
5/12/01	17:59:37	805	3252	59.97	58.36	0.00	0
5/12/01	17:59:38	306	3256	59.97	59.02	0.00	0
5/12/01	17:59:38	806	3260	59.97	59.02	0.00	0
5/12/01	17:59:39	307	3262	59.97	59.27	0.00	0
5/12/01	17:59:39	808	3265	59.97	59.27	0.00	0
5/12/01	17:59:40	309	3267	59.97	59.42	0.00	0
5/12/01	17:59:40	809	3273	59.97	59.42	0.00	0
5/12/01	17:59:41	310	3277	59.97	59.68	0.00	0
5/12/01	17:59:41	811	3281	59.97	59.68	-54.00	0
5/12/01	17:59:42	311	3283	60.01	59.76	-54.00	0
5/12/01	17:59:42	812	3285	60.01	59.76	-78.00	0
5/12/01	17:59:43	313	3287	60.01	59.89	-78.00	0
5/12/01	17:59:43	814	3290	60.01	59.89	-74.00	0
5/12/01	17:59:44	314	3292	60.01	59.89	-74.00	0
5/12/01	17:59:44	815	3289	60.01	59.96	-43.00	0
5/12/01	17:59:45	316	3282	60.01	59.96	-43.00	0
5/12/01	17:59:45	817	3282	60.01	60.04	12.00	0
5/12/01	17:59:46	317	3281	60.01	60.04	12.00	0
5/12/01	17:59:46	818	3281	60.01	60.15	13.00	0
5/12/01	17:59:47	319	3282	60.01	60.15	13.00	0
5/12/01	17:59:47	819	3282	60.00	60.09	4.00	0
5/12/01	17:59:48	320	3284	60.00	60.09	4.00	1
5/12/01	17:59:48	821	3285	60.00	60.01	-6.00	1
5/12/01	17:59:49	322	3286	60.00	60.01	-6.00	0
5/12/01	17:59:49	822	3285	60.00	59.97	-15.00	0
5/12/01	17:59:50	323	3285	60.00	59.97	-15.00	0
5/12/01	17:59:50	824	3283	60.00	59.99	2.00	0
5/12/01	17:59:51	324	3283	60.00	59.99	2.00	0
5/12/01	17:59:51	825	3279	60.00	60.00	22.00	0
5/12/01	17:59:52	326	3278	60.00	60.00	22.00	0
5/12/01	17:59:52	827	3280	60.00	60.06	17.00	0
5/12/01	17:59:53	327	3286	60.00	60.06	17.00	0
5/12/01	17:59:53	828	0	60.00	60.05	-8.00	0
5/12/01	17:59:54	329	0	60.00	60.05	-8.00	0
5/12/01	17:59:54	829	0	60.00	59.94	0.00	0
5/12/01	17:59:55	330	0	60.00	59.94	0.00	0
5/12/01	17:59:55	831	0	60.00	59.95	0.00	0
5/12/01	17:59:56	332	0	60.00	59.95	0.00	0
5/12/01	17:59:56	832	0	60.00	53.55	0.00	0
5/12/01	17:59:57	333	0	60.00	53.55	0.00	0
5/12/01	17:59:57	834	0	59.99	46.61	0.00	0
5/12/01	17:59:58	335	0	59.99	46.61	0.00	0
5/12/01	17:59:58	835	0	59.99	0.00	0.00	0
5/12/01	17:59:59	336	0	59.99	0.00	0.00	0
5/12/01	17:59:59	837	0	59.99	0.00	0.00	0
5/12/01	18:00:00	337	0	59.99	0.00	0.00	0
5/12/01	18:00:00	838	0	59.99	0.00	0.00	0
5/12/01	18:00:01	339	0	59.99	0.00	0.00	0
5/12/01	18:00:01	840	0	59.99	0.00	0.00	0
5/12/01	18:00:02	340	0	59.99	0.00	0.00	0
5/12/01	18:00:02	841	0	60.01	0.00	0.00	0
5/12/01	18:00:03	342	0	60.01	0.00	0.00	0
5/12/01	18:00:03	842	0	60.01	0.00	0.00	0
5/12/01	18:00:04	343	0	60.01	0.00	0.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match	Close Breaker (Open/Close)
5/12/01	18:00:04	844	0	60.01	0.00	0.00	0
5/12/01	18:00:05	345	0	60.01	0.00	0.00	0
5/12/01	18:00:05	845	0	60.01	0.00	0.00	0
5/12/01	18:00:06	346	0	60.01	0.00	0.00	0
5/12/01	18:00:06	847	0	60.01	0.00	0.00	0
5/12/01	18:00:07	347	0	60.01	0.00	0.00	0
5/12/01	18:00:07	848	0	60.02	0.00	0.00	0
5/12/01	18:00:08	349	0	60.02	0.00	0.00	0
5/12/01	18:00:08	850	0	60.02	0.00	0.00	0
5/12/01	18:00:09	350	0	60.02	0.00	0.00	0
5/12/01	18:00:09	851	0	60.02	0.00	0.00	0
5/12/01	18:00:10	352	0	60.02	0.00	0.00	0
5/12/01	18:00:10	853	0	60.02	0.00	0.00	0
5/12/01	18:00:11	353	0	60.02	0.00	0.00	0
5/12/01	18:00:11	854	0	60.02	0.00	0.00	0
5/12/01	18:00:12	355	0	60.02	0.00	0.00	0
5/12/01	18:00:12	855	0	60.02	0.00	0.00	0
5/12/01	18:00:13	356	0	60.02	0.00	0.00	0
5/12/01	18:00:13	857	0	60.02	0.00	0.00	0
5/12/01	18:00:14	358	0	60.02	0.00	0.00	0
5/12/01	18:00:14	858	0	60.02	0.00	0.00	0
5/12/01	18:00:15	359	0	60.02	0.00	0.00	0
5/12/01	18:00:15	860	0	60.02	0.00	0.00	0
5/12/01	18:00:16	360	0	60.02	0.00	0.00	0
5/12/01	18:00:16	861	0	60.02	0.00	0.00	0
5/12/01	18:00:17	362	0	60.02	0.00	0.00	0
5/12/01	18:00:17	863	100	60.02	0.00	0.00	0
5/12/01	18:00:18	363	300	60.00	0.00	0.00	0
5/12/01	18:00:18	864	700	60.00	0.00	0.00	0
5/12/01	18:00:19	365	900	60.00	0.00	0.00	0
5/12/01	18:00:19	865	1100	60.00	0.00	0.00	0
5/12/01	18:00:20	366	1300	60.00	0.00	0.00	0
5/12/01	18:00:20	867	1600	60.00	0.00	0.00	0
5/12/01	18:00:21	368	1800	60.00	0.00	0.00	0
5/12/01	18:00:21	868	2000	60.00	0.00	0.00	0
5/12/01	18:00:22	369	2200	60.00	0.00	0.00	0
5/12/01	18:00:22	870	2500	60.00	0.00	0.00	0
5/12/01	18:00:23	371	2698	60.01	0.00	0.00	0
5/12/01	18:00:23	871	2847	60.01	0.00	0.00	0
5/12/01	18:00:24	372	2950	60.01	0.00	0.00	0
5/12/01	18:00:24	873	3050	60.01	0.00	0.00	0
5/12/01	18:00:25	373	3089	60.01	42.23	0.00	0
5/12/01	18:00:25	874	3116	60.01	42.23	0.00	0
5/12/01	18:00:26	375	3139	60.01	49.66	0.00	0
5/12/01	18:00:26	876	3168	60.01	49.66	0.00	0
5/12/01	18:00:27	376	3184	60.01	55.88	0.00	0
5/12/01	18:00:27	877	3197	60.01	55.88	0.00	0
5/12/01	18:00:28	378	3209	60.01	57.80	0.00	0
5/12/01	18:00:28	878	3224	60.01	57.80	0.00	0
5/12/01	18:00:29	379	3232	60.01	58.34	0.00	0
5/12/01	18:00:29	880	3240	60.01	58.34	0.00	0
5/12/01	18:00:30	381	3246	60.01	58.76	0.00	0
5/12/01	18:00:30	881	3254	60.01	58.76	0.00	0
5/12/01	18:00:31	382	3258	60.01	59.06	0.00	0
5/12/01	18:00:31	883	3262	60.01	59.06	0.00	0
5/12/01	18:00:32	383	3264	60.01	59.29	0.00	0
5/12/01	18:00:32	884	3267	60.01	59.29	0.00	0
5/12/01	18:00:33	385	3268	60.01	59.63	122.00	0
5/12/01	18:00:33	886	3268	60.01	59.63	122.00	0
5/12/01	18:00:34	386	3268	60.01	59.70	32.00	0
5/12/01	18:00:34	887	3272	60.01	59.70	32.00	0
5/12/01	18:00:35	398	3274	60.01	59.77	32.00	0
5/12/01	18:00:35	889	3276	60.01	59.77	-27.00	0
5/12/01	18:00:36	389	3278	60.01	59.80	-27.00	0
5/12/01	18:00:36	890	3281	60.01	59.80	-69.00	0
5/12/01	18:00:37	391	3283	60.01	59.92	-69.00	0
5/12/01	18:00:37	891	3285	60.01	59.92	-84.00	0
5/12/01	18:00:38	392	3287	60.01	59.93	-84.00	0
5/12/01	18:00:38	893	3290	60.01	59.93	-73.00	0
5/12/01	18:00:39	394	3291	60.01	60.01	-73.00	0
5/12/01	18:00:39	894	3289	60.01	60.01	-39.00	0
5/12/01	18:00:40	395	3285	60.01	60.05	-39.00	0
5/12/01	18:00:40	896	3284	60.01	60.05	15.00	0
5/12/01	18:00:41	396	3284	60.01	60.17	15.00	0
5/12/01	18:00:41	897	3282	60.01	60.17	24.00	0
5/12/01	18:00:42	398	3280	60.01	60.05	24.00	0
5/12/01	18:00:42	899	3278	60.01	60.05	25.00	0
5/12/01	18:00:43	399	3281	60.01	60.05	25.00	0
5/12/01	18:00:43	900	3281	60.01	60.05	-3.00	0
5/12/01	18:00:44	401	3286	60.01	60.05	-3.00	0
5/12/01	18:00:44	901	3287	60.01	59.94	-15.00	0
5/12/01	18:00:45	402	3283	60.01	59.94	-15.00	0
5/12/01	18:00:45	903	3281	60.01	59.93	27.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match	Close Breaker (Open/Close)
5/12/01	18:00:46	404	3279	60.01	59.93	27.00	0
5/12/01	18:00:46	904	3277	60.01	60.06	23.00	0
5/12/01	18:00:47	405	3280	60.01	60.06	23.00	0
5/12/01	18:00:47	906	3280	60.02	60.14	-4.00	0
5/12/01	18:00:48	407	3282	60.02	60.14	-4.00	0
5/12/01	18:00:48	907	3282	60.02	59.92	-10.00	0
5/12/01	18:00:49	408	3281	60.02	59.92	-10.00	0
5/12/01	18:00:49	909	3280	60.02	59.96	-2.00	0
5/12/01	18:00:50	409	3280	60.02	59.96	-2.00	1
5/12/01	18:00:50	910	3279	60.02	60.03	2.00	1
5/12/01	18:00:51	411	3278	60.02	60.03	2.00	0
5/12/01	18:00:51	912	3278	60.02	60.02	5.00	0
5/12/01	18:00:52	412	3281	60.02	60.02	5.00	0
5/12/01	18:00:52	913	3283	59.97	60.02	-16.00	0
5/12/01	18:00:53	414	3283	59.97	60.02	-16.00	0
5/12/01	18:00:53	914	3282	59.97	59.93	-16.00	0
5/12/01	18:00:54	415	0	59.97	59.93	-6.00	0
5/12/01	18:00:54	916	0	59.97	60.00	0.00	0
5/12/01	18:00:55	417	0	59.97	60.00	0.00	0
5/12/01	18:00:55	917	0	59.97	60.07	0.00	0
5/12/01	18:00:56	418	0	59.97	60.07	0.00	0
5/12/01	18:00:56	919	0	59.97	60.06	0.00	0
5/12/01	18:00:57	419	0	59.97	60.06	0.00	0
5/12/01	18:00:57	920	0	60.01	55.29	0.00	0
5/12/01	18:00:58	421	0	60.01	55.29	0.00	0
5/12/01	18:00:58	922	0	60.01	48.39	0.00	0
5/12/01	18:00:59	422	0	60.01	48.39	0.00	0
5/12/01	18:00:59	923	0	60.01	41.36	0.00	0
5/12/01	18:01:00	424	0	60.01	41.36	0.00	0
5/12/01	18:01:00	925	0	60.01	0.00	0.00	0
5/12/01	18:01:01	425	0	60.01	0.00	0.00	0
5/12/01	18:01:01	926	0	60.01	0.00	0.00	0
5/12/01	18:01:02	427	0	60.01	0.00	0.00	0
5/12/01	18:01:02	927	0	60.01	0.00	0.00	0
5/12/01	18:01:03	428	0	60.01	0.00	0.00	0
5/12/01	18:01:03	929	0	60.01	0.00	0.00	0
5/12/01	18:01:04	430	0	60.01	0.00	0.00	0
5/12/01	18:01:04	930	0	60.01	0.00	0.00	0
5/12/01	18:01:05	431	0	60.01	0.00	0.00	0
5/12/01	18:01:05	932	0	60.01	0.00	0.00	0
5/12/01	18:01:06	432	0	60.01	0.00	0.00	0
5/12/01	18:01:06	933	0	60.01	0.00	0.00	0
5/12/01	18:01:07	434	0	60.01	0.00	0.00	0
5/12/01	18:01:07	935	0	60.01	0.00	0.00	0
5/12/01	18:01:08	435	0	60.01	0.00	0.00	0
5/12/01	18:01:08	936	0	60.01	0.00	0.00	0
5/12/01	18:01:09	437	0	60.01	0.00	0.00	0
5/12/01	18:01:09	937	0	60.01	0.00	0.00	0
5/12/01	18:01:10	438	0	60.01	0.00	0.00	0
5/12/01	18:01:10	939	0	60.01	0.00	0.00	0
5/12/01	18:01:11	440	0	60.01	0.00	0.00	0
5/12/01	18:01:11	940	0	60.01	0.00	0.00	0
5/12/01	18:01:12	441	0	60.01	0.00	0.00	0
5/12/01	18:01:12	942	0	60.01	0.00	0.00	0
5/12/01	18:01:13	443	0	60.01	0.00	0.00	0
5/12/01	18:01:13	943	0	60.01	0.00	0.00	0
5/12/01	18:01:14	444	0	60.01	0.00	0.00	0
5/12/01	18:01:14	945	0	60.01	0.00	0.00	0
5/12/01	18:01:15	445	0	60.01	0.00	0.00	0
5/12/01	18:01:15	946	0	60.01	0.00	0.00	0
5/12/01	18:01:16	447	0	60.01	0.00	0.00	0
5/12/01	18:01:16	948	0	60.01	0.00	0.00	0
5/12/01	18:01:17	448	0	60.01	0.00	0.00	0
5/12/01	18:01:17	949	0	60.01	0.00	0.00	0
5/12/01	18:01:18	450	0	60.02	0.00	0.00	0
5/12/01	18:01:18	950	300	60.02	0.00	0.00	0
5/12/01	18:01:19	451	500	60.02	0.00	0.00	0
5/12/01	18:01:19	952	700	60.02	0.00	0.00	0
5/12/01	18:01:20	453	900	60.02	0.00	0.00	0
5/12/01	18:01:20	953	1200	60.02	0.00	0.00	0
5/12/01	18:01:21	454	1400	60.02	0.00	0.00	0
5/12/01	18:01:21	955	1600	60.02	0.00	0.00	0
5/12/01	18:01:22	455	1800	60.02	0.00	0.00	0
5/12/01	18:01:22	956	2100	60.02	0.00	0.00	0
5/12/01	18:01:23	457	2300	60.01	0.00	0.00	0
5/12/01	18:01:23	958	2500	60.01	0.00	0.00	0
5/12/01	18:01:24	458	2697	60.01	0.00	0.00	0
5/12/01	18:01:24	959	2907	60.01	0.00	0.00	0
5/12/01	18:01:25	460	3000	60.01	0.00	0.00	0
5/12/01	18:01:25	961	3065	60.01	0.00	0.00	0
5/12/01	18:01:26	461	3112	60.01	0.00	0.00	0
5/12/01	18:01:26	962	3147	60.01	0.00	0.00	0
5/12/01	18:01:27	463	3174	60.01	46.99	0.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match	Close Breaker (Open/Close)
5/12/01	18:01:27	963	3189	60.01	46.99	0.00	0
5/12/01	18:01:28	464	3202	60.01	53.45	0.00	0
5/12/01	18:01:28	965	3219	60.01	53.45	0.00	0
5/12/01	18:01:29	466	3228	60.01	57.09	0.00	0
5/12/01	18:01:29	966	3236	60.01	57.09	0.00	0
5/12/01	18:01:30	467	3242	60.01	58.44	0.00	0
5/12/01	18:01:30	968	3251	60.01	58.44	0.00	0
5/12/01	18:01:31	468	3255	60.01	58.76	0.00	0
5/12/01	18:01:31	969	3259	60.01	58.76	0.00	0
5/12/01	18:01:32	470	3261	60.01	59.08	0.00	0
5/12/01	18:01:32	971	3264	60.01	59.08	0.00	0
5/12/01	18:01:33	471	3266	60.01	59.46	0.00	0
5/12/01	18:01:33	972	3269	60.01	59.46	0.00	0
5/12/01	18:01:34	473	3272	60.01	59.64	-90.00	0
5/12/01	18:01:34	973	3276	60.01	59.64	-90.00	0
5/12/01	18:01:35	474	3278	60.01	59.69	-153.00	0
5/12/01	18:01:35	975	3280	60.01	59.69	-153.00	0
5/12/01	18:01:36	476	3278	60.01	59.76	176.00	0
5/12/01	18:01:36	976	3276	60.01	59.76	176.00	0
5/12/01	18:01:37	477	3273	60.01	59.91	161.00	0
5/12/01	18:01:37	978	3271	60.01	59.91	161.00	0
5/12/01	18:01:38	479	3269	60.01	59.98	144.00	0
5/12/01	18:01:38	979	3269	60.01	59.98	144.00	0
5/12/01	18:01:39	480	3269	60.01	59.99	82.00	0
5/12/01	18:01:39	981	3270	60.01	59.99	82.00	0
5/12/01	18:01:40	481	3275	60.01	59.80	-3.00	0
5/12/01	18:01:40	982	3279	60.01	59.80	-3.00	0
5/12/01	18:01:41	483	3281	60.01	59.79	-55.00	0
5/12/01	18:01:41	984	3283	60.01	59.79	-55.00	0
5/12/01	18:01:42	484	3285	60.01	59.78	-60.00	0
5/12/01	18:01:42	985	3288	60.01	59.78	-60.00	0
5/12/01	18:01:43	486	3290	60.01	59.95	-38.00	0
5/12/01	18:01:43	986	3289	60.01	59.95	-38.00	0
5/12/01	18:01:44	487	3287	60.01	60.05	9.00	0
5/12/01	18:01:44	988	3284	60.01	60.05	9.00	0
5/12/01	18:01:45	489	3282	60.01	60.05	46.00	0
5/12/01	18:01:45	989	3280	60.01	60.12	46.00	0
5/12/01	18:01:46	490	3278	60.01	60.12	50.00	0
5/12/01	18:01:46	991	3275	60.01	60.19	50.00	0
5/12/01	18:01:47	491	3274	60.01	60.19	18.00	0
5/12/01	18:01:47	992	3274	60.01	60.07	18.00	0
5/12/01	18:01:48	493	3277	60.01	60.07	-22.00	0
5/12/01	18:01:48	994	3280	59.99	60.03	-22.00	0
5/12/01	18:01:49	494	3282	59.99	60.03	-53.00	0
5/12/01	18:01:49	995	3284	59.99	59.91	-53.00	0
5/12/01	18:01:50	496	3286	59.99	59.91	-47.00	0
5/12/01	18:01:50	997	3288	59.99	59.90	-47.00	0
5/12/01	18:01:51	497	3288	59.99	59.90	-18.00	0
5/12/01	18:01:51	998	3285	59.99	59.91	-18.00	0
5/12/01	18:01:52	499	3284	59.99	59.91	25.00	0
5/12/01	18:01:52	999	3281	59.99	60.06	25.00	0
5/12/01	18:01:53	500	3279	59.99	60.06	35.00	0
5/12/01	18:01:54	1	3278	60.01	60.13	35.00	0
5/12/01	18:01:54	502	3278	60.01	60.13	22.00	0
5/12/01	18:01:55	2	3281	60.01	60.09	22.00	0
5/12/01	18:01:55	503	3281	60.01	60.09	-2.00	0
5/12/01	18:01:56	4	3282	60.01	59.97	-2.00	0
5/12/01	18:01:56	504	3282	60.01	59.97	-14.00	0
5/12/01	18:01:57	5	3278	60.01	59.93	-14.00	0
5/12/01	18:01:57	506	3278	60.01	59.93	0.00	0
5/12/01	18:01:58	7	3281	60.01	59.94	0.00	0
5/12/01	18:01:58	507	3285	60.01	59.94	-23.00	0
5/12/01	18:01:59	8	3287	60.01	60.05	-23.00	0
5/12/01	18:01:59	509	3282	60.01	60.05	3.00	0
5/12/01	18:02:00	9	3279	60.01	59.92	3.00	0
5/12/01	18:02:00	510	3279	60.01	59.92	12.00	0
5/12/01	18:02:01	11	3279	60.01	60.06	12.00	0
5/12/01	18:02:01	512	3281	60.01	60.06	-2.00	0
5/12/01	18:02:02	12	3282	60.01	60.10	-2.00	1
5/12/01	18:02:02	513	3283	60.01	60.10	-14.00	1
5/12/01	18:02:03	14	3283	59.99	59.98	-14.00	0
5/12/01	18:02:03	515	3281	59.99	59.98	-14.00	0
5/12/01	18:02:04	15	3280	59.99	59.96	-4.00	0
5/12/01	18:02:04	516	3278	59.99	59.96	-4.00	0
5/12/01	18:02:05	17	3278	59.99	59.97	8.00	0
5/12/01	18:02:05	517	3278	59.99	59.97	8.00	0
5/12/01	18:02:06	18	0	59.99	59.97	-16.00	0
5/12/01	18:02:06	519	0	59.99	60.07	-16.00	0
5/12/01	18:02:07	20	0	59.99	60.07	0.00	0
5/12/01	18:02:07	520	0	59.99	59.92	0.00	0
5/12/01	18:02:08	21	0	59.99	59.92	0.00	0
5/12/01	18:02:08	522	0	60.00	59.94	0.00	0
5/12/01	18:02:09	22	0	60.00	59.94	0.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match	Close Breaker (Open/Close)
5/12/01	18:02:09	523	0	60.00	54.76	0.00	0
5/12/01	18:02:10	24	0	60.00	54.76	0.00	0
5/12/01	18:02:10	525	0	60.00	47.88	0.00	0
5/12/01	18:02:11	25	0	60.00	47.88	0.00	0
5/12/01	18:02:11	526	0	60.00	40.92	0.00	0
5/12/01	18:02:12	27	0	60.00	40.92	0.00	0
5/12/01	18:02:12	527	0	60.00	0.00	0.00	0
5/12/01	18:02:13	28	0	60.00	0.00	0.00	0
5/12/01	18:02:13	529	0	60.00	0.00	0.00	0
5/12/01	18:02:14	30	0	60.00	0.00	0.00	0
5/12/01	18:02:14	530	0	60.00	0.00	0.00	0
5/12/01	18:02:15	31	0	60.00	0.00	0.00	0
5/12/01	18:02:15	532	0	60.00	0.00	0.00	0
5/12/01	18:02:16	33	0	60.00	0.00	0.00	0
5/12/01	18:02:16	533	0	60.00	0.00	0.00	0
5/12/01	18:02:17	34	0	60.00	0.00	0.00	0
5/12/01	18:02:17	535	0	60.00	0.00	0.00	0
5/12/01	18:02:18	35	0	60.00	0.00	0.00	0
5/12/01	18:02:18	536	0	60.01	0.00	0.00	0
5/12/01	18:02:19	37	0	60.01	0.00	0.00	0
5/12/01	18:02:19	538	0	60.01	0.00	0.00	0
5/12/01	18:02:20	38	0	60.01	0.00	0.00	0
5/12/01	18:02:20	539	0	60.01	0.00	0.00	0
5/12/01	18:02:21	40	0	60.01	0.00	0.00	0
5/12/01	18:02:21	540	0	60.01	0.00	0.00	0
5/12/01	18:02:22	41	0	60.01	0.00	0.00	0
5/12/01	18:02:22	542	0	60.01	0.00	0.00	0
5/12/01	18:02:23	43	0	60.01	0.00	0.00	0
5/12/01	18:02:23	543	0	60.01	0.00	0.00	0
5/12/01	18:02:24	44	0	60.01	0.00	0.00	0
5/12/01	18:02:24	545	0	60.01	0.00	0.00	0
5/12/01	18:02:25	45	0	60.01	0.00	0.00	0
5/12/01	18:02:25	546	0	60.01	0.00	0.00	0
5/12/01	18:02:26	47	0	60.01	0.00	0.00	0
5/12/01	18:02:26	548	100	60.01	0.00	0.00	0
5/12/01	18:02:27	48	300	60.01	0.00	0.00	0
5/12/01	18:02:27	549	600	60.01	0.00	0.00	0
5/12/01	18:02:28	50	800	60.01	0.00	0.00	0
5/12/01	18:02:28	551	1000	59.99	0.00	0.00	0
5/12/01	18:02:29	51	1300	59.99	0.00	0.00	0
5/12/01	18:02:29	552	1500	59.99	0.00	0.00	0
5/12/01	18:02:30	53	1700	59.99	0.00	0.00	0
5/12/01	18:02:30	553	1900	59.99	0.00	0.00	0
5/12/01	18:02:31	54	2200	59.99	0.00	0.00	0
5/12/01	18:02:31	555	2400	59.99	0.00	0.00	0
5/12/01	18:02:32	56	2600	59.99	0.00	0.00	0
5/12/01	18:02:32	556	2790	59.99	0.00	0.00	0
5/12/01	18:02:33	57	2968	59.99	0.00	0.00	0
5/12/01	18:02:33	558	3044	60.00	0.00	0.00	0
5/12/01	18:02:34	58	3093	60.00	0.00	0.00	0
5/12/01	18:02:34	559	3129	60.00	0.00	0.00	0
5/12/01	18:02:35	60	3161	60.00	0.00	0.00	0
5/12/01	18:02:35	561	3178	60.00	49.85	0.00	0
5/12/01	18:02:36	61	3192	60.00	49.85	0.00	0
5/12/01	18:02:36	562	3204	60.00	55.55	0.00	0
5/12/01	18:02:37	63	3219	60.00	55.55	0.00	0
5/12/01	18:02:37	563	3227	60.00	57.59	0.00	0
5/12/01	18:02:38	64	3235	60.00	57.59	0.00	0
5/12/01	18:02:38	565	3241	59.99	58.20	0.00	0
5/12/01	18:02:39	66	3250	59.99	58.20	0.00	0
5/12/01	18:02:39	566	3254	59.99	58.92	0.00	0
5/12/01	18:02:40	67	3258	59.99	58.92	0.00	0
5/12/01	18:02:40	568	3261	59.99	59.16	0.00	0
5/12/01	18:02:41	69	3264	59.99	59.16	0.00	0
5/12/01	18:02:41	569	3266	59.99	59.33	0.00	0
5/12/01	18:02:42	70	3267	59.99	59.33	0.00	0
5/12/01	18:02:42	571	3273	59.99	59.65	-25.00	0
5/12/01	18:02:43	71	3276	59.99	59.65	-25.00	0
5/12/01	18:02:43	572	3278	59.98	59.72	-61.00	0
5/12/01	18:02:44	73	3280	59.98	59.72	-61.00	0
5/12/01	18:02:44	574	3282	59.98	59.78	-71.00	0
5/12/01	18:02:45	74	3285	59.98	59.78	-71.00	0
5/12/01	18:02:45	575	3287	59.98	59.91	-54.00	0
5/12/01	18:02:46	76	3289	59.98	59.91	-54.00	0
5/12/01	18:02:46	576	3290	59.98	59.99	-16.00	0
5/12/01	18:02:47	77	3287	59.98	59.99	-16.00	0
5/12/01	18:02:47	578	3282	59.98	60.05	48.00	0
5/12/01	18:02:48	79	3280	59.98	60.05	48.00	0
5/12/01	18:02:48	579	3278	59.99	60.12	48.00	0
5/12/01	18:02:49	80	3275	59.99	60.12	57.00	0
5/12/01	18:02:49	581	3273	59.99	60.17	57.00	0
5/12/01	18:02:50	81	3274	59.99	60.17	27.00	0
5/12/01	18:02:50	582	3277	59.99	60.03	27.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match	Close Breaker (Open/Close)
5/12/01	18:02:51	83	3282	59.99	60.03	-2.00	0
5/12/01	18:02:51	584	3282	59.99	59.89	-2.00	0
5/12/01	18:02:52	84	3281	59.99	59.89	-12.00	0
5/12/01	18:02:52	585	3281	59.99	59.90	-12.00	0
5/12/01	18:02:53	86	3279	59.99	59.90	5.00	0
5/12/01	18:02:53	587	3278	60.00	59.99	5.00	0
5/12/01	18:02:54	87	3279	60.00	59.99	17.00	0
5/12/01	18:02:54	588	3282	60.00	60.04	17.00	0
5/12/01	18:02:55	89	3282	60.00	60.04	-1.00	0
5/12/01	18:02:55	589	3282	60.00	60.03	-1.00	0
5/12/01	18:02:56	100	3282	60.00	60.03	18.00	0
5/12/01	18:02:56	591	3280	60.00	59.92	18.00	0
5/12/01	18:02:57	92	3277	60.00	59.92	39.00	0
5/12/01	18:02:57	592	3276	60.00	60.04	39.00	0
5/12/01	18:02:58	93	3277	60.00	60.04	22.00	0
5/12/01	18:02:58	594	3279	60.00	60.05	22.00	0
5/12/01	18:02:59	94	3281	60.00	60.05	-2.00	0
5/12/01	18:02:59	595	3283	60.00	60.05	-2.00	0
5/12/01	18:03:00	96	3282	60.00	59.91	-12.00	0
5/12/01	18:03:00	597	3282	60.00	59.91	-12.00	0
5/12/01	18:03:01	97	3280	60.00	59.93	10.00	0
5/12/01	18:03:01	598	3278	60.00	59.93	10.00	0
5/12/01	18:03:02	99	3277	60.00	60.02	21.00	0
5/12/01	18:03:02	599	3279	60.00	60.02	21.00	0
5/12/01	18:03:03	100	3283	60.00	60.06	-8.00	0
5/12/01	18:03:03	601	3281	60.00	60.06	-8.00	0
5/12/01	18:03:04	102	3281	59.99	60.05	10.00	0
5/12/01	18:03:04	602	3278	59.99	60.05	10.00	0
5/12/01	18:03:05	103	3278	59.99	59.92	19.00	0
5/12/01	18:03:05	604	3280	59.99	59.92	19.00	0
5/12/01	18:03:06	105	3283	59.99	60.06	-1.00	0
5/12/01	18:03:06	605	3283	59.99	60.06	-1.00	0
5/12/01	18:03:07	106	3281	59.99	59.99	24.00	0
5/12/01	18:03:07	607	3277	59.99	59.99	24.00	0
5/12/01	18:03:08	107	3275	59.99	60.03	28.00	0
5/12/01	18:03:08	608	3273	59.99	60.03	28.00	0
5/12/01	18:03:09	109	3277	59.98	60.06	28.00	0
5/12/01	18:03:09	610	3279	59.98	60.06	0.00	0
5/12/01	18:03:10	110	3279	59.98	59.99	0.00	0
5/12/01	18:03:10	611	3280	59.98	59.99	-25.00	0
5/12/01	18:03:11	112	3283	59.98	59.91	-25.00	0
5/12/01	18:03:11	612	3285	59.98	59.91	-35.00	0
5/12/01	18:03:12	113	3284	59.98	59.91	-35.00	0
5/12/01	18:03:12	614	3284	59.98	59.91	-3.00	0
5/12/01	18:03:13	115	3282	59.98	60.00	-3.00	0
5/12/01	18:03:13	615	3279	59.98	60.00	28.00	0
5/12/01	18:03:14	116	3277	59.98	60.07	28.00	0
5/12/01	18:03:14	617	3275	59.98	60.07	35.00	0
5/12/01	18:03:15	117	3273	59.98	60.07	35.00	0
5/12/01	18:03:15	618	3279	59.98	60.07	8.00	0
5/12/01	18:03:16	119	3279	59.98	59.94	8.00	0
5/12/01	18:03:16	620	3283	59.98	59.94	-20.00	0
5/12/01	18:03:17	120	3285	59.98	59.90	-20.00	0
5/12/01	18:03:17	621	3281	59.98	59.90	-17.00	0
5/12/01	18:03:18	122	3281	59.98	59.91	-17.00	0
5/12/01	18:03:18	623	3278	59.98	59.91	14.00	0
5/12/01	18:03:19	123	3279	60.00	60.06	14.00	0
5/12/01	18:03:19	624	3279	60.00	60.06	2.00	0
5/12/01	18:03:20	125	3283	60.00	60.07	2.00	0
5/12/01	18:03:20	625	3285	60.00	60.07	-16.00	0
5/12/01	18:03:21	126	3283	60.00	59.95	-16.00	0
5/12/01	18:03:21	627	3278	60.00	59.95	11.00	0
5/12/01	18:03:22	128	3278	60.00	60.00	11.00	0
5/12/01	18:03:22	628	3278	60.00	60.00	14.00	0
5/12/01	18:03:23	129	3280	60.00	60.09	14.00	0
5/12/01	18:03:23	630	3280	60.00	60.09	-1.00	0
5/12/01	18:03:24	130	3282	60.00	60.09	-1.00	0
5/12/01	18:03:24	631	3283	59.99	59.97	-14.00	0
5/12/01	18:03:25	132	3278	59.99	59.97	-14.00	0
5/12/01	18:03:25	633	3275	59.99	59.93	9.00	0
5/12/01	18:03:26	133	3276	59.99	59.93	9.00	0
5/12/01	18:03:26	634	3276	59.99	59.94	-10.00	0
5/12/01	18:03:27	135	3277	59.99	59.94	-10.00	0
5/12/01	18:03:27	635	3280	59.99	60.07	-34.00	0
5/12/01	18:03:28	136	3282	59.99	60.07	-34.00	0
5/12/01	18:03:28	637	3284	59.99	59.91	-36.00	0
5/12/01	18:03:29	138	3285	59.99	59.91	-36.00	0
5/12/01	18:03:29	638	3283	59.98	59.89	-12.00	0
5/12/01	18:03:30	139	3281	59.98	59.89	-12.00	0
5/12/01	18:03:30	640	3280	59.98	60.02	24.00	0
5/12/01	18:03:31	141	3277	59.98	60.02	24.00	0
5/12/01	18:03:31	641	3275	59.98	60.07	25.00	0
5/12/01	18:03:32	142	3276	59.98	60.07	25.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match	Close Breaker (Open/Close)
5/12/01	18:03:32	643	3278	59.98	59.98	2.00	0
5/12/01	18:03:33	143	3278	59.98	59.98	2.00	0
5/12/01	18:03:33	644	3280	59.98	59.93	-17.00	0
5/12/01	18:03:34	145	3283	59.98	59.93	-17.00	0
5/12/01	18:03:34	646	3281	59.98	59.91	-12.00	0
5/12/01	18:03:35	146	3277	59.98	59.91	-12.00	0
5/12/01	18:03:35	647	3275	59.98	59.92	5.00	0
5/12/01	18:03:36	148	3278	59.98	59.92	5.00	0
5/12/01	18:03:36	648	3282	59.98	59.94	-14.00	0
5/12/01	18:03:37	149	3284	59.98	59.94	-14.00	0
5/12/01	18:03:37	650	3284	59.98	59.96	2.00	0
5/12/01	18:03:38	151	3281	59.98	59.96	2.00	0
5/12/01	18:03:38	651	3279	59.98	59.94	29.00	0
5/12/01	18:03:39	152	3277	59.98	59.94	29.00	0
5/12/01	18:03:39	653	3276	59.98	60.05	17.00	0
5/12/01	18:03:40	153	3278	59.98	60.05	17.00	0
5/12/01	18:03:40	654	3278	59.98	60.06	-2.00	0
5/12/01	18:03:41	155	3280	59.98	60.06	-2.00	0
5/12/01	18:03:41	656	3282	59.98	59.91	-24.00	0
5/12/01	18:03:42	156	3283	59.98	59.91	-24.00	0
5/12/01	18:03:42	657	3281	59.98	59.91	-1.00	0
5/12/01	18:03:43	158	3278	59.98	59.91	-1.00	0
5/12/01	18:03:43	659	3277	59.98	59.91	14.00	0
5/12/01	18:03:44	159	3279	59.98	59.91	14.00	0
5/12/01	18:03:44	660	3279	59.98	60.07	-4.00	0
5/12/01	18:03:45	161	3279	59.98	60.07	-4.00	1
5/12/01	18:03:45	661	3278	59.98	59.96	5.00	1
5/12/01	18:03:46	162	3277	59.98	59.96	5.00	0
5/12/01	18:03:46	663	3276	59.98	59.91	8.00	0
5/12/01	18:03:47	164	3277	59.98	59.91	8.00	0
5/12/01	18:03:47	664	3279	59.98	60.00	-13.00	0
5/12/01	18:03:48	165	0	59.98	60.00	-13.00	0
5/12/01	18:03:48	666	0	59.98	59.93	0.00	0
5/12/01	18:03:49	166	0	59.98	59.93	0.00	0
5/12/01	18:03:49	667	0	59.98	59.92	0.00	0
5/12/01	18:03:50	168	0	59.98	59.92	0.00	0
5/12/01	18:03:50	669	0	59.98	59.99	0.00	0
5/12/01	18:03:51	169	0	59.98	59.99	0.00	0
5/12/01	18:03:51	670	0	59.98	55.06	0.00	0
5/12/01	18:03:52	171	0	59.98	55.06	0.00	0
5/12/01	18:03:52	671	0	59.98	48.19	0.00	0
5/12/01	18:03:53	172	0	59.98	48.19	0.00	0
5/12/01	18:03:53	673	0	59.98	40.51	0.00	0
5/12/01	18:03:54	174	0	59.98	40.51	0.00	0
5/12/01	18:03:54	674	0	59.97	0.00	0.00	0
5/12/01	18:03:55	175	0	59.97	0.00	0.00	0
5/12/01	18:03:55	676	0	59.97	0.00	0.00	0
5/12/01	18:03:56	177	0	59.97	0.00	0.00	0
5/12/01	18:03:56	677	0	59.97	0.00	0.00	0
5/12/01	18:03:57	178	0	59.97	0.00	0.00	0
5/12/01	18:03:57	679	0	59.97	0.00	0.00	0
5/12/01	18:03:58	179	0	59.97	0.00	0.00	0
5/12/01	18:03:58	680	0	59.97	0.00	0.00	0
5/12/01	18:03:59	181	0	59.97	0.00	0.00	0
5/12/01	18:03:59	682	0	59.98	0.00	0.00	0
5/12/01	18:04:00	182	0	59.98	0.00	0.00	0
5/12/01	18:04:00	683	0	59.98	0.00	0.00	0
5/12/01	18:04:01	184	0	59.98	0.00	0.00	0
5/12/01	18:04:01	684	0	59.98	0.00	0.00	0
5/12/01	18:04:02	185	0	59.98	0.00	0.00	0
5/12/01	18:04:02	686	0	59.98	0.00	0.00	0
5/12/01	18:04:03	187	0	59.98	0.00	0.00	0
5/12/01	18:04:03	687	0	59.99	0.00	0.00	0
5/12/01	18:04:04	188	0	59.99	0.00	0.00	0
5/12/01	18:04:04	689	0	59.99	0.00	0.00	0
5/12/01	18:04:05	189	0	59.99	0.00	0.00	0
5/12/01	18:04:05	690	0	59.99	0.00	0.00	0
5/12/01	18:04:06	191	0	59.99	0.00	0.00	0
5/12/01	18:04:06	692	0	59.99	0.00	0.00	0
5/12/01	18:04:07	192	0	59.99	0.00	0.00	0
5/12/01	18:04:07	693	0	59.99	0.00	0.00	0
5/12/01	18:04:08	194	0	59.99	0.00	0.00	0
5/12/01	18:04:08	695	0	59.98	0.00	0.00	0
5/12/01	18:04:09	195	0	59.98	0.00	0.00	0
5/12/01	18:04:09	696	0	59.98	0.00	0.00	0
5/12/01	18:04:10	197	0	59.98	0.00	0.00	0
5/12/01	18:04:10	697	0	59.98	0.00	0.00	0
5/12/01	18:04:11	198	0	59.98	0.00	0.00	0
5/12/01	18:04:11	699	0	59.98	0.00	0.00	0
5/12/01	18:04:12	200	300	59.98	0.00	0.00	0
5/12/01	18:04:12	700	500	59.98	0.00	0.00	0
5/12/01	18:04:13	201	700	59.98	0.00	0.00	0
5/12/01	18:04:13	702	900	59.97	0.00	0.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match	Close Breaker (Open/Close)
5/12/01	18:04:14	202	1200	59.97	0.00	0.00	0
5/12/01	18:04:14	703	1400	59.97	0.00	0.00	0
5/12/01	18:04:15	204	1600	59.97	0.00	0.00	0
5/12/01	18:04:15	705	1800	59.97	0.00	0.00	0
5/12/01	18:04:16	205	2100	59.97	0.00	0.00	0
5/12/01	18:04:16	706	2300	59.97	0.00	0.00	0
5/12/01	18:04:17	207	2500	59.97	0.00	0.00	0
5/12/01	18:04:17	707	2700	59.97	0.00	0.00	0
5/12/01	18:04:18	208	2910	59.97	0.00	0.00	0
5/12/01	18:04:18	709	2998	59.97	0.00	0.00	0
5/12/01	18:04:19	210	3063	59.97	0.00	0.00	0
5/12/01	18:04:19	710	3100	59.97	0.00	0.00	0
5/12/01	18:04:20	211	3139	59.97	0.00	0.00	0
5/12/01	18:04:20	712	3160	59.97	51.27	0.00	0
5/12/01	18:04:21	213	3177	59.97	51.27	0.00	0
5/12/01	18:04:21	713	3191	59.97	56.65	0.00	0
5/12/01	18:04:22	214	3203	59.97	56.65	0.00	0
5/12/01	18:04:22	715	3219	59.97	57.56	0.00	0
5/12/01	18:04:23	215	3227	59.97	57.56	0.00	0
5/12/01	18:04:23	716	3234	59.97	58.21	0.00	0
5/12/01	18:04:24	217	3243	59.97	58.21	0.00	0
5/12/01	18:04:24	718	3248	59.97	58.93	0.00	0
5/12/01	18:04:25	218	3252	59.97	58.93	0.00	0
5/12/01	18:04:25	719	3256	59.97	59.16	0.00	0
5/12/01	18:04:26	220	3260	59.97	59.16	0.00	0
5/12/01	18:04:26	720	3262	59.97	59.34	0.00	0
5/12/01	18:04:27	221	3264	59.97	59.34	0.00	0
5/12/01	18:04:27	722	3266	59.97	59.46	0.00	0
5/12/01	18:04:28	223	3273	59.97	59.46	-134.00	0
5/12/01	18:04:28	723	3274	59.98	59.71	-134.00	0
5/12/01	18:04:29	224	3272	59.98	59.71	171.00	0
5/12/01	18:04:29	725	3270	59.98	59.76	171.00	0
5/12/01	18:04:30	225	3269	59.98	59.76	141.00	0
5/12/01	18:04:30	726	3269	59.98	59.87	141.00	0
5/12/01	18:04:31	227	3269	59.98	59.87	82.00	0
5/12/01	18:04:31	728	3269	59.98	59.87	82.00	0
5/12/01	18:04:32	228	3275	59.98	59.81	3.00	0
5/12/01	18:04:32	729	3278	59.98	59.81	3.00	0
5/12/01	18:04:33	230	3281	59.98	59.79	-23.00	0
5/12/01	18:04:33	731	3282	59.98	59.79	-23.00	0
5/12/01	18:04:34	231	3279	59.96	59.79	-14.00	0
5/12/01	18:04:34	732	3279	59.96	59.79	-14.00	0
5/12/01	18:04:35	233	3279	59.96	59.99	4.00	0
5/12/01	18:04:35	733	3279	59.96	59.99	4.00	1
5/12/01	18:04:36	234	3279	59.96	60.06	0.00	1
5/12/01	18:04:36	735	3280	59.96	60.06	0.00	1
5/12/01	18:04:37	236	3280	59.96	59.97	-6.00	1
5/12/01	18:04:37	736	3282	59.96	59.97	-6.00	0
5/12/01	18:04:38	237	3283	59.96	59.97	-12.00	0
5/12/01	18:04:38	738	3283	59.96	59.97	-12.00	0
5/12/01	18:04:39	238	0	59.97	59.96	15.00	0
5/12/01	18:04:39	739	0	59.97	59.96	15.00	0
5/12/01	18:04:40	240	0	59.97	60.04	0.00	0
5/12/01	18:04:40	741	0	59.97	60.04	0.00	0
5/12/01	18:04:41	241	0	59.97	60.06	0.00	0
5/12/01	18:04:41	742	0	59.97	60.06	0.00	0
5/12/01	18:04:42	243	0	59.97	56.15	0.00	0
5/12/01	18:04:42	743	0	59.97	56.15	0.00	0
5/12/01	18:04:43	244	0	59.97	49.34	0.00	0
5/12/01	18:04:43	745	0	59.97	49.34	0.00	0
5/12/01	18:04:44	246	0	59.98	42.36	0.00	0
5/12/01	18:04:44	746	0	59.98	42.36	0.00	0
5/12/01	18:04:45	247	0	59.98	0.00	0.00	0
5/12/01	18:04:45	748	0	59.98	0.00	0.00	0
5/12/01	18:04:46	249	0	59.98	0.00	0.00	0
5/12/01	18:04:46	749	0	59.98	0.00	0.00	0
5/12/01	18:04:47	250	0	59.98	0.00	0.00	0
5/12/01	18:04:47	751	0	59.98	0.00	0.00	0
5/12/01	18:04:48	251	0	59.98	0.00	0.00	0
5/12/01	18:04:48	752	0	59.98	0.00	0.00	0
5/12/01	18:04:49	253	0	59.97	0.00	0.00	0
5/12/01	18:04:49	754	0	59.97	0.00	0.00	0
5/12/01	18:04:50	254	0	59.97	0.00	0.00	0
5/12/01	18:04:50	755	0	59.97	0.00	0.00	0
5/12/01	18:04:51	256	0	59.97	0.00	0.00	0
5/12/01	18:04:51	756	0	59.97	0.00	0.00	0
5/12/01	18:04:52	257	0	59.97	0.00	0.00	0
5/12/01	18:04:52	758	0	59.97	0.00	0.00	0
5/12/01	18:04:53	259	0	59.97	0.00	0.00	0
5/12/01	18:04:53	759	0	59.97	0.00	0.00	0
5/12/01	18:04:54	260	0	59.98	0.00	0.00	0
5/12/01	18:04:54	761	0	59.98	0.00	0.00	0
5/12/01	18:04:55	261	0	59.98	0.00	0.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match	Close Breaker (Open/Close)
5/12/01	18:04:55	762	0	59.98	0.00	0.00	0
5/12/01	18:04:56	263	0	59.98	0.00	0.00	0
5/12/01	18:04:56	764	0	59.98	0.00	0.00	0
5/12/01	18:04:57	264	0	59.98	0.00	0.00	0
5/12/01	18:04:57	765	0	59.98	0.00	0.00	0
5/12/01	18:04:58	266	200	59.98	0.00	0.00	0
5/12/01	18:04:58	767	400	59.98	0.00	0.00	0
5/12/01	18:04:59	267	600	59.98	0.00	0.00	0
5/12/01	18:04:59	768	900	59.98	0.00	0.00	0
5/12/01	18:05:00	269	1200	59.98	0.00	0.00	0
5/12/01	18:05:00	769	1400	59.98	0.00	0.00	0
5/12/01	18:05:01	270	1600	59.98	0.00	0.00	0
5/12/01	18:05:01	771	1700	59.98	0.00	0.00	0
5/12/01	18:05:02	272	2100	59.98	0.00	0.00	0
5/12/01	18:05:02	772	2300	59.98	0.00	0.00	0
5/12/01	18:05:03	273	2500	59.98	0.00	0.00	0
5/12/01	18:05:03	774	2700	59.98	0.00	0.00	0
5/12/01	18:05:04	274	2910	59.98	0.00	0.00	0
5/12/01	18:05:04	775	2995	59.98	0.00	0.00	0
5/12/01	18:05:05	276	3028	59.98	0.00	0.00	0
5/12/01	18:05:05	777	3082	59.98	0.00	0.00	0
5/12/01	18:05:06	277	3128	59.98	43.95	0.00	0
5/12/01	18:05:06	778	3149	59.98	43.95	0.00	0
5/12/01	18:05:07	279	3175	59.98	51.31	0.00	0
5/12/01	18:05:07	779	3190	59.98	51.31	0.00	0
5/12/01	18:05:08	280	3208	59.98	56.40	0.00	0
5/12/01	18:05:08	781	3218	59.98	56.40	0.00	0
5/12/01	18:05:09	282	3227	59.99	58.13	0.00	0
5/12/01	18:05:09	792	3235	59.99	58.13	0.00	0
5/12/01	18:05:10	283	3244	59.99	58.55	0.00	0
5/12/01	18:05:10	784	3250	59.99	58.55	0.00	0
5/12/01	18:05:11	285	3254	59.99	59.13	0.00	0
5/12/01	18:05:11	785	3258	59.99	59.13	0.00	0
5/12/01	18:05:12	286	3261	59.99	59.30	0.00	0
5/12/01	18:05:12	787	3264	59.99	59.30	0.00	0
5/12/01	18:05:13	287	3266	59.99	59.30	0.00	0
5/12/01	18:05:13	788	3269	59.99	59.46	-4.00	0
5/12/01	18:05:14	289	3274	59.99	59.46	-4.00	0
5/12/01	18:05:14	790	3276	60.00	59.63	-63.00	0
5/12/01	18:05:15	290	3280	60.00	59.63	-63.00	0
5/12/01	18:05:15	791	3282	60.00	59.78	-89.00	0
5/12/01	18:05:16	292	3285	60.00	59.78	-89.00	0
5/12/01	18:05:16	792	3287	60.00	59.92	-80.00	0
5/12/01	18:05:17	293	3289	60.00	59.92	-80.00	0
5/12/01	18:05:17	794	3291	60.00	59.95	-52.00	0
5/12/01	18:05:18	295	3289	60.00	59.95	-52.00	0
5/12/01	18:05:18	795	3282	60.00	60.08	20.00	0
5/12/01	18:05:19	296	3279	60.00	60.08	20.00	0
5/12/01	18:05:19	797	3277	59.98	60.16	30.00	0
5/12/01	18:05:20	297	3276	59.98	60.16	30.00	0
5/12/01	18:05:20	798	3280	59.98	60.18	-2.00	0
5/12/01	18:05:21	299	3282	59.98	60.18	-2.00	0
5/12/01	18:05:21	800	3282	59.98	59.97	-7.00	0
5/12/01	18:05:22	300	3280	59.98	59.97	-7.00	0
5/12/01	18:05:22	801	3278	59.98	59.91	11.00	0
5/12/01	18:05:23	302	3280	59.98	59.91	11.00	0
5/12/01	18:05:23	803	3283	59.98	60.05	11.00	0
5/12/01	18:05:24	303	3281	59.98	60.05	-3.00	0
5/12/01	18:05:24	804	3281	60.01	60.05	-3.00	0
5/12/01	18:05:25	305	3279	60.01	60.05	20.00	0
5/12/01	18:05:25	805	3277	60.01	60.06	20.00	0
5/12/01	18:05:26	306	3276	60.01	60.06	23.00	0
5/12/01	18:05:26	807	3280	60.01	60.07	23.00	0
5/12/01	18:05:27	318	3280	60.01	60.07	-6.00	0
5/12/01	18:05:27	808	3281	60.01	59.95	-6.00	0
5/12/01	18:05:28	309	3281	60.01	59.95	-16.00	0
5/12/01	18:05:28	810	3281	60.00	59.92	-16.00	0
5/12/01	18:05:29	310	3281	60.00	59.92	-13.00	0
5/12/01	18:05:29	811	3281	60.00	60.00	-13.00	0
5/12/01	18:05:30	312	3281	60.00	60.00	-10.00	0
5/12/01	18:05:30	813	3281	60.00	59.99	-10.00	0
5/12/01	18:05:31	313	3281	60.00	59.99	-8.00	0
5/12/01	18:05:31	814	3281	60.00	60.00	-8.00	0
5/12/01	18:05:32	315	3280	60.00	60.00	-2.00	0
5/12/01	18:05:32	815	3280	60.00	60.00	-2.00	1
5/12/01	18:05:33	316	3278	60.00	60.00	2.00	1
5/12/01	18:05:33	817	3277	60.00	60.00	2.00	1
5/12/01	18:05:34	318	3279	60.00	60.01	7.00	1
5/12/01	18:05:34	818	3279	60.00	60.01	7.00	0
5/12/01	18:05:35	319	3279	60.00	60.01	-20.00	0
5/12/01	18:05:35	820	0	60.00	60.01	-20.00	0
5/12/01	18:05:36	321	0	60.00	60.01	0.00	0
5/12/01	18:05:36	821	0	60.00	60.01	0.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match	Close Breaker (Open/Close)
5/12/01	18:05:37	322	0	60.00	59.92	0.00	0
5/12/01	18:05:37	823	0	60.00	59.92	0.00	0
5/12/01	18:05:38	323	0	60.00	59.52	0.00	0
5/12/01	18:05:38	824	0	60.00	59.52	0.00	0
5/12/01	18:05:39	325	0	59.99	52.82	0.00	0
5/12/01	18:05:39	826	0	59.99	52.82	0.00	0
5/12/01	18:05:40	326	0	59.99	45.89	0.00	0
5/12/01	18:05:40	827	0	59.99	45.89	0.00	0
5/12/01	18:05:41	328	0	59.99	0.00	0.00	0
5/12/01	18:05:41	828	0	59.99	0.00	0.00	0
5/12/01	18:05:42	329	0	59.99	0.00	0.00	0
5/12/01	18:05:42	830	0	59.99	0.00	0.00	0
5/12/01	18:05:43	331	0	59.99	0.00	0.00	0
5/12/01	18:05:43	831	0	59.99	0.00	0.00	0
5/12/01	18:05:44	332	0	60.01	0.00	0.00	0
5/12/01	18:05:44	833	0	60.01	0.00	0.00	0
5/12/01	18:05:45	333	0	60.01	0.00	0.00	0
5/12/01	18:05:45	834	0	60.01	0.00	0.00	0
5/12/01	18:05:46	335	0	60.01	0.00	0.00	0
5/12/01	18:05:46	836	0	60.01	0.00	0.00	0
5/12/01	18:05:47	336	0	60.01	0.00	0.00	0
5/12/01	18:05:47	837	0	60.01	0.00	0.00	0
5/12/01	18:05:48	338	0	60.01	0.00	0.00	0
5/12/01	18:05:48	839	0	60.01	0.00	0.00	0
5/12/01	18:05:49	339	0	60.00	0.00	0.00	0
5/12/01	18:05:49	840	0	60.00	0.00	0.00	0
5/12/01	18:05:50	341	0	60.00	0.00	0.00	0
5/12/01	18:05:50	841	0	60.00	0.00	0.00	0
5/12/01	18:05:51	342	0	60.00	0.00	0.00	0
5/12/01	18:05:51	843	0	60.00	0.00	0.00	0
5/12/01	18:05:52	344	0	60.00	0.00	0.00	0
5/12/01	18:05:52	844	0	60.00	0.00	0.00	0
5/12/01	18:05:53	345	0	60.00	0.00	0.00	0
5/12/01	18:05:53	846	0	60.00	0.00	0.00	0
5/12/01	18:05:54	346	0	59.99	0.00	0.00	0
5/12/01	18:05:54	847	0	59.99	0.00	0.00	0
5/12/01	18:05:55	348	0	59.99	0.00	0.00	0
5/12/01	18:05:55	849	0	59.99	0.00	0.00	0
5/12/01	18:05:56	349	0	59.99	0.00	0.00	0
5/12/01	18:05:56	850	0	59.99	0.00	0.00	0
5/12/01	18:05:57	351	0	59.99	0.00	0.00	0
5/12/01	18:05:57	851	0	59.99	0.00	0.00	0
5/12/01	18:05:58	352	0	59.99	0.00	0.00	0
5/12/01	18:05:58	853	0	59.99	0.00	0.00	0
5/12/01	18:05:59	354	0	59.98	0.00	0.00	0
5/12/01	18:05:59	854	0	59.98	0.00	0.00	0
5/12/01	18:06:00	355	0	59.98	0.00	0.00	0
5/12/01	18:06:00	856	0	59.98	0.00	0.00	0
5/12/01	18:06:01	357	0	59.98	0.00	0.00	0
5/12/01	18:06:01	857	0	59.98	0.00	0.00	0
5/12/01	18:06:02	358	100	59.98	0.00	0.00	0
5/12/01	18:06:02	859	400	59.98	0.00	0.00	0
5/12/01	18:06:03	359	600	59.98	0.00	0.00	0
5/12/01	18:06:03	860	800	59.98	0.00	0.00	0
5/12/01	18:06:04	361	1100	60.01	0.00	0.00	0
5/12/01	18:06:04	862	1300	60.01	0.00	0.00	0
5/12/01	18:06:05	362	1500	60.01	0.00	0.00	0
5/12/01	18:06:05	863	1700	60.01	0.00	0.00	0
5/12/01	18:06:06	364	2000	60.01	0.00	0.00	0
5/12/01	18:06:06	864	2200	60.01	0.00	0.00	0
5/12/01	18:06:07	365	2400	60.01	0.00	0.00	0
5/12/01	18:06:07	866	2600	60.01	0.00	0.00	0
5/12/01	18:06:08	367	2852	60.01	0.00	0.00	0
5/12/01	18:06:08	867	2954	60.01	0.00	0.00	0
5/12/01	18:06:09	368	3030	59.98	0.00	0.00	0
5/12/01	18:06:09	869	3081	59.98	0.00	0.00	0
5/12/01	18:06:10	369	3122	59.98	43.14	0.00	0
5/12/01	18:06:10	870	3144	59.98	43.14	0.00	0
5/12/01	18:06:11	371	3164	59.98	50.58	0.00	0
5/12/01	18:06:11	872	3181	59.98	50.58	0.00	0
5/12/01	18:06:12	372	3201	59.98	57.29	0.00	0
5/12/01	18:06:12	873	3212	59.98	57.29	0.00	0
5/12/01	18:06:13	374	3222	59.98	57.98	0.00	0
5/12/01	18:06:13	875	3230	59.98	57.98	0.00	0
5/12/01	18:06:14	385	3241	60.01	58.47	0.00	0
5/12/01	18:06:14	876	3247	60.01	58.47	0.00	0
5/12/01	18:06:15	377	3253	60.01	58.47	0.00	0
5/12/01	18:06:15	877	3257	60.01	59.08	0.00	0
5/12/01	18:06:16	378	3261	60.01	59.08	0.00	0
5/12/01	18:06:16	879	3263	60.01	59.30	0.00	0
5/12/01	18:06:17	380	3265	60.01	59.30	-117.00	0
5/12/01	18:06:17	880	3269	60.01	59.52	-117.00	0
5/12/01	18:06:18	381	3273	60.01	59.52	169.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match	Close Breaker (Open/Close)
5/12/01	18:06:18	882	3271	60.01	59.64	169.00	0
5/12/01	18:06:19	382	3269	60.01	59.64	136.00	0
5/12/01	18:06:19	883	3269	59.97	59.78	136.00	0
5/12/01	18:06:20	384	3269	59.97	59.78	76.00	0
5/12/01	18:06:20	885	3269	59.97	59.90	76.00	0
5/12/01	18:06:21	385	3273	59.97	59.90	1.00	0
5/12/01	18:06:21	886	3278	59.97	59.79	1.00	0
5/12/01	18:06:22	387	3281	59.97	59.79	-33.00	0
5/12/01	18:06:22	887	3283	59.97	59.78	-33.00	0
5/12/01	18:06:23	388	3284	59.97	59.78	-31.00	0
5/12/01	18:06:23	889	3283	59.97	59.93	-31.00	0
5/12/01	18:06:24	390	3280	59.97	59.93	3.00	0
5/12/01	18:06:24	890	3276	59.96	59.98	3.00	0
5/12/01	18:06:25	391	3277	59.96	59.98	3.00	0
5/12/01	18:06:25	892	3281	59.96	60.06	-3.00	0
5/12/01	18:06:26	393	3283	59.96	60.06	-3.00	0
5/12/01	18:06:26	893	3283	59.96	59.90	-9.00	0
5/12/01	18:06:27	394	3281	59.96	59.90	-9.00	0
5/12/01	18:06:27	895	3281	59.96	59.99	22.00	0
5/12/01	18:06:28	395	3277	59.96	59.99	22.00	0
5/12/01	18:06:28	896	3276	59.96	60.05	40.00	0
5/12/01	18:06:29	397	3274	59.96	60.05	40.00	0
5/12/01	18:06:29	898	3278	59.97	59.98	17.00	0
5/12/01	18:06:30	398	3281	59.97	59.98	17.00	0
5/12/01	18:06:30	899	3281	59.97	59.91	-14.00	0
5/12/01	18:06:31	400	3281	59.97	59.91	-14.00	0
5/12/01	18:06:31	900	3280	59.97	59.89	-14.00	0
5/12/01	18:06:32	401	3279	59.97	59.89	-14.00	0
5/12/01	18:06:32	902	3278	59.97	59.98	-2.00	0
5/12/01	18:06:33	403	3277	59.97	59.98	-2.00	0
5/12/01	18:06:33	903	3277	59.97	60.00	5.00	0
5/12/01	18:06:34	404	3281	59.97	60.00	5.00	0
5/12/01	18:06:34	905	3281	59.98	60.00	-21.00	0
5/12/01	18:06:35	405	3281	59.98	60.00	-21.00	0
5/12/01	18:06:35	906	3281	59.98	59.91	-19.00	0
5/12/01	18:06:36	407	3281	59.98	59.91	-19.00	0
5/12/01	18:06:36	908	3279	59.98	59.99	-6.00	0
5/12/01	18:06:37	408	3277	59.98	59.99	-6.00	0
5/12/01	18:06:37	909	3276	59.98	60.02	8.00	0
5/12/01	18:06:38	410	3280	59.98	60.02	8.00	0
5/12/01	18:06:38	911	3284	59.98	60.02	-11.00	0
5/12/01	18:06:39	411	3280	59.98	60.02	-11.00	0
5/12/01	18:06:39	912	3280	59.98	59.92	5.00	0
5/12/01	18:06:40	413	3280	59.98	59.92	5.00	0
5/12/01	18:06:40	913	3276	59.98	60.06	31.00	0
5/12/01	18:06:41	414	3274	59.98	60.06	31.00	0
5/12/01	18:06:41	915	3277	59.98	60.06	15.00	0
5/12/01	18:06:42	416	3280	59.98	60.05	15.00	0
5/12/01	18:06:42	916	3282	59.98	60.05	-11.00	0
5/12/01	18:06:43	417	3280	59.98	59.93	-11.00	0
5/12/01	18:06:43	918	3280	59.98	59.93	5.00	0
5/12/01	18:06:44	418	3280	59.98	59.91	5.00	0
5/12/01	18:06:44	919	3277	59.98	59.91	33.00	0
5/12/01	18:06:45	420	3274	59.97	60.06	33.00	0
5/12/01	18:06:45	921	3274	59.97	60.06	16.00	0
5/12/01	18:06:46	421	3274	59.97	60.05	16.00	0
5/12/01	18:06:46	922	3274	59.97	60.05	-8.00	0
5/12/01	18:06:47	423	3274	59.97	60.00	-8.00	0
5/12/01	18:06:47	923	3276	59.97	60.00	-38.00	0
5/12/01	18:06:48	424	3278	59.97	59.90	-38.00	0
5/12/01	18:06:48	925	3280	59.97	59.90	-66.00	0
5/12/01	18:06:49	426	3283	59.97	59.90	-66.00	0
5/12/01	18:06:49	926	3285	59.97	59.90	-66.00	0
5/12/01	18:06:50	427	3287	59.97	59.96	-58.00	0
5/12/01	18:06:50	928	3289	59.97	59.96	-58.00	0
5/12/01	18:06:51	429	3284	59.97	60.05	-21.00	0
5/12/01	18:06:51	929	3280	59.97	60.05	-21.00	0
5/12/01	18:06:52	430	3278	59.97	60.08	23.00	0
5/12/01	18:06:52	931	3276	59.97	60.08	23.00	0
5/12/01	18:06:53	431	3278	59.97	60.14	15.00	0
5/12/01	18:06:53	932	3280	59.97	60.14	15.00	0
5/12/01	18:06:54	433	3282	59.97	60.00	-11.00	0
5/12/01	18:06:54	934	3282	59.97	60.00	-11.00	0
5/12/01	18:06:55	434	3280	59.98	59.89	-2.00	0
5/12/01	18:06:55	935	3278	59.98	59.89	-2.00	0
5/12/01	18:06:56	436	3278	59.98	60.01	18.00	0
5/12/01	18:06:56	936	3279	59.98	60.01	18.00	0
5/12/01	18:06:57	437	3282	59.98	60.06	3.00	0
5/12/01	18:06:57	938	3284	59.98	60.06	3.00	0
5/12/01	18:06:58	439	3284	59.98	59.94	-2.00	0
5/12/01	18:06:58	939	3282	59.98	59.94	-2.00	0
5/12/01	18:06:59	440	3281	59.98	60.00	26.00	0
5/12/01	18:06:59	941	3278	59.98	60.00	26.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match	Close Breaker (Open/Close)
5/12/01	18:07:00	441	3276	59.97	60.06	47.00	0
5/12/01	18:07:00	942	3275	59.97	60.06	47.00	0
5/12/01	18:07:01	443	3273	59.97	60.06	24.00	0
5/12/01	18:07:01	944	3274	59.97	60.06	24.00	0
5/12/01	18:07:02	444	3277	59.97	59.89	-5.00	0
5/12/01	18:07:02	945	3281	59.97	59.89	-5.00	0
5/12/01	18:07:03	446	3283	59.97	59.91	-30.00	0
5/12/01	18:07:03	947	3285	59.97	59.91	-30.00	0
5/12/01	18:07:04	447	3287	59.97	59.91	-23.00	0
5/12/01	18:07:04	948	3284	59.97	59.91	-23.00	0
5/12/01	18:07:05	449	3278	59.99	59.97	13.00	0
5/12/01	18:07:05	949	3275	59.99	59.97	13.00	0
5/12/01	18:07:06	450	3278	59.99	60.11	23.00	0
5/12/01	18:07:06	961	3280	59.99	60.11	23.00	0
5/12/01	18:07:07	452	3284	59.99	59.97	-2.00	0
5/12/01	18:07:07	952	3284	59.99	59.97	-2.00	0
5/12/01	18:07:08	453	3280	59.99	59.90	6.00	0
5/12/01	18:07:08	954	3279	59.99	59.90	6.00	0
5/12/01	18:07:09	454	3276	59.99	59.91	29.00	0
5/12/01	18:07:09	955	3275	59.99	59.91	29.00	0
5/12/01	18:07:10	456	3279	59.98	59.91	10.00	0
5/12/01	18:07:10	957	3281	59.98	60.05	10.00	0
5/12/01	18:07:11	457	3281	59.98	59.91	-8.00	0
5/12/01	18:07:11	958	3281	59.98	59.91	-8.00	0
5/12/01	18:07:12	459	3281	59.98	59.91	0.00	1
5/12/01	18:07:12	959	3279	59.98	59.91	0.00	1
5/12/01	18:07:13	470	3279	59.98	60.00	10.00	0
5/12/01	18:07:13	961	3278	59.98	60.00	10.00	0
5/12/01	18:07:14	462	3276	59.98	60.02	22.00	0
5/12/01	18:07:14	962	3276	59.98	60.02	22.00	0
5/12/01	18:07:15	463	3278	59.98	60.02	2.00	0
5/12/01	18:07:15	964	0	59.98	60.00	2.00	0
5/12/01	18:07:16	465	0	59.98	60.00	0.00	0
5/12/01	18:07:16	965	0	59.98	59.93	0.00	0
5/12/01	18:07:17	476	0	59.98	59.93	0.00	0
5/12/01	18:07:17	967	0	59.98	59.91	0.00	0
5/12/01	18:07:18	467	0	59.98	59.91	0.00	0
5/12/01	18:07:18	968	0	59.98	57.27	0.00	0
5/12/01	18:07:19	469	0	59.98	57.27	0.00	0
5/12/01	18:07:19	970	0	59.98	50.39	0.00	0
5/12/01	18:07:20	470	0	59.98	50.39	0.00	0
5/12/01	18:07:20	971	0	60.02	42.73	0.00	0
5/12/01	18:07:21	472	0	60.02	42.73	0.00	0
5/12/01	18:07:21	972	0	60.02	0.00	0.00	0
5/12/01	18:07:22	473	0	60.02	0.00	0.00	0
5/12/01	18:07:22	974	0	60.02	0.00	0.00	0
5/12/01	18:07:23	475	0	60.02	0.00	0.00	0
5/12/01	18:07:23	975	0	60.02	0.00	0.00	0
5/12/01	18:07:24	476	0	60.02	0.00	0.00	0
5/12/01	18:07:24	977	0	60.02	0.00	0.00	0
5/12/01	18:07:25	477	0	60.02	0.00	0.00	0
5/12/01	18:07:25	978	0	59.98	0.00	0.00	0
5/12/01	18:07:26	479	0	59.98	0.00	0.00	0
5/12/01	18:07:26	980	0	59.98	0.00	0.00	0
5/12/01	18:07:27	480	0	59.98	0.00	0.00	0
5/12/01	18:07:27	981	0	59.98	0.00	0.00	0
5/12/01	18:07:28	482	0	59.98	0.00	0.00	0
5/12/01	18:07:28	983	0	59.98	0.00	0.00	0
5/12/01	18:07:29	483	0	59.98	0.00	0.00	0
5/12/01	18:07:29	984	0	59.98	0.00	0.00	0
5/12/01	18:07:30	485	0	59.98	0.00	0.00	0
5/12/01	18:07:30	985	0	59.99	0.00	0.00	0
5/12/01	18:07:31	486	0	59.99	0.00	0.00	0
5/12/01	18:07:31	987	0	59.99	0.00	0.00	0
5/12/01	18:07:32	488	0	59.99	0.00	0.00	0
5/12/01	18:07:32	988	0	59.99	0.00	0.00	0
5/12/01	18:07:33	489	0	59.99	0.00	0.00	0
5/12/01	18:07:33	990	0	59.99	0.00	0.00	0
5/12/01	18:07:34	490	0	59.99	0.00	0.00	0
5/12/01	18:07:34	991	0	59.99	0.00	0.00	0
5/12/01	18:07:35	502	0	59.99	0.00	0.00	0
5/12/01	18:07:35	993	0	59.98	0.00	0.00	0
5/12/01	18:07:36	493	0	59.98	0.00	0.00	0
5/12/01	18:07:36	994	0	59.98	0.00	0.00	0
5/12/01	18:07:37	495	0	59.98	0.00	0.00	0
5/12/01	18:07:37	995	0	59.98	0.00	0.00	0
5/12/01	18:07:38	496	0	59.98	0.00	0.00	0
5/12/01	18:07:38	997	0	59.98	0.00	0.00	0
5/12/01	18:07:39	498	0	59.98	0.00	0.00	0
5/12/01	18:07:39	998	0	59.98	0.00	0.00	0
5/12/01	18:07:40	499	0	59.98	0.00	0.00	0
5/12/01	18:07:41	0	200	59.98	0.00	0.00	0
5/12/01	18:07:41	501	400	59.98	0.00	0.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match	Close Breaker (Open/Close)
5/12/01	18:07:42	1	600	59.98	0.00	0.00	0
5/12/01	18:07:42	502	800	59.98	0.00	0.00	0
5/12/01	18:07:43	3	1000	59.98	0.00	0.00	0
5/12/01	18:07:43	503	1300	59.98	0.00	0.00	0
5/12/01	18:07:44	4	1500	59.98	0.00	0.00	0
5/12/01	18:07:44	505	1800	59.98	0.00	0.00	0
5/12/01	18:07:45	6	2000	59.98	0.00	0.00	0
5/12/01	18:07:45	506	2200	59.98	0.00	0.00	0
5/12/01	18:07:46	7	2500	59.98	0.00	0.00	0
5/12/01	18:07:46	508	2698	59.98	0.00	0.00	0
5/12/01	18:07:47	8	2852	59.98	0.00	0.00	0
5/12/01	18:07:47	509	2956	59.98	0.00	0.00	0
5/12/01	18:07:48	10	3034	59.98	0.00	0.00	0
5/12/01	18:07:48	511	3084	59.98	0.00	0.00	0
5/12/01	18:07:49	11	3112	59.98	50.40	0.00	0
5/12/01	18:07:49	512	3145	59.98	50.40	0.00	0
5/12/01	18:07:50	13	3164	59.99	55.95	0.00	0
5/12/01	18:07:50	513	3181	59.99	55.95	0.00	0
5/12/01	18:07:51	14	3201	59.99	57.29	0.00	0
5/12/01	18:07:51	515	3212	59.99	57.29	0.00	0
5/12/01	18:07:52	16	3220	59.99	57.91	0.00	0
5/12/01	18:07:52	516	3228	59.99	57.91	0.00	0
5/12/01	18:07:53	17	3238	59.99	58.44	0.00	0
5/12/01	18:07:53	518	3247	59.99	58.44	0.00	0
5/12/01	18:07:54	19	3252	59.99	59.09	0.00	0
5/12/01	18:07:54	519	3256	59.99	59.09	0.00	0
5/12/01	18:07:55	20	3260	59.98	59.26	0.00	0
5/12/01	18:07:55	521	3263	59.98	59.26	0.00	0
5/12/01	18:07:56	31	3265	59.98	59.41	0.00	0
5/12/01	18:07:56	522	3267	59.98	59.41	0.00	0
5/12/01	18:07:57	23	3271	59.98	59.61	-139.00	0
5/12/01	18:07:57	524	3272	59.98	59.61	-139.00	0
5/12/01	18:07:58	24	3270	59.98	59.61	165.00	0
5/12/01	18:07:58	525	3268	59.98	59.73	165.00	0
5/12/01	18:07:59	26	3268	59.98	59.73	121.00	0
5/12/01	18:07:59	526	3268	59.98	59.85	121.00	0
5/12/01	18:08:00	27	3269	59.98	59.85	50.00	0
5/12/01	18:08:00	528	3271	59.98	59.92	50.00	0
5/12/01	18:08:01	29	3275	59.98	59.92	-33.00	0
5/12/01	18:08:01	529	3277	59.98	59.78	-33.00	0
5/12/01	18:08:02	40	3279	59.98	59.78	-57.00	0
5/12/01	18:08:02	531	3281	59.98	59.77	-57.00	0
5/12/01	18:08:03	31	3284	59.98	59.77	-67.00	0
5/12/01	18:08:03	532	3286	59.98	59.92	-67.00	0
5/12/01	18:08:04	33	3288	59.98	59.92	-52.00	0
5/12/01	18:08:04	534	3289	59.98	59.93	-52.00	0
5/12/01	18:08:05	34	3286	59.98	59.93	-11.00	0
5/12/01	18:08:05	535	3281	59.99	60.06	-11.00	0
5/12/01	18:08:06	36	3277	59.99	60.06	24.00	0
5/12/01	18:08:06	537	3277	59.99	60.12	24.00	0
5/12/01	18:08:07	37	3282	59.99	60.12	5.00	0
5/12/01	18:08:07	538	3285	59.99	60.11	5.00	0
5/12/01	18:08:08	39	3283	59.99	60.11	4.00	0
5/12/01	18:08:08	539	3281	59.99	59.94	4.00	0
5/12/01	18:08:09	40	3280	59.99	59.94	33.00	0
5/12/01	18:08:09	541	3277	59.99	60.04	33.00	0
5/12/01	18:08:10	42	3276	59.99	60.04	37.00	0
5/12/01	18:08:10	542	3275	59.99	60.05	37.00	0
5/12/01	18:08:11	43	3277	59.99	60.05	8.00	0
5/12/01	18:08:11	544	3279	59.99	60.05	8.00	0
5/12/01	18:08:12	44	3281	59.99	60.05	-26.00	0
5/12/01	18:08:12	545	3283	59.99	59.90	-26.00	0
5/12/01	18:08:13	46	3281	59.99	59.90	-19.00	0
5/12/01	18:08:13	547	3281	59.99	59.91	-19.00	0
5/12/01	18:08:14	47	3279	59.99	59.91	9.00	0
5/12/01	18:08:14	548	3279	59.99	60.00	9.00	0
5/12/01	18:08:15	49	3281	59.99	60.00	3.00	0
5/12/01	18:08:15	549	3281	59.99	60.04	3.00	0
5/12/01	18:08:16	50	3282	59.99	60.04	-7.00	0
5/12/01	18:08:16	551	3283	59.99	59.95	-7.00	0
5/12/01	18:08:17	52	3283	59.99	59.95	-3.00	0
5/12/01	18:08:17	552	3283	59.99	59.98	-3.00	0
5/12/01	18:08:18	53	3281	59.99	59.98	19.00	0
5/12/01	18:08:18	554	3277	59.99	59.97	19.00	0
5/12/01	18:08:19	65	3276	59.99	59.97	19.00	0
5/12/01	18:08:19	555	3277	59.99	60.06	21.00	0
5/12/01	18:08:20	56	3277	59.99	60.06	21.00	0
5/12/01	18:08:20	557	3279	59.99	59.95	-10.00	0
5/12/01	18:08:21	57	3282	59.99	59.95	-10.00	0
5/12/01	18:08:21	558	3282	59.99	59.90	-22.00	0
5/12/01	18:08:22	59	3282	59.99	59.90	-22.00	0
5/12/01	18:08:22	560	3280	59.99	60.03	-2.00	0
5/12/01	18:08:23	60	3278	59.99	60.03	-2.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match	Close Breaker (Open/Close)
5/12/01	18:08:23	561	3279	59.99	60.03	10.00	0
5/12/01	18:08:24	62	3281	59.99	60.06	10.00	0
5/12/01	18:08:24	562	3285	59.99	60.06	-8.00	0
5/12/01	18:08:25	63	3284	59.99	60.06	-8.00	0
5/12/01	18:08:25	564	3284	59.99	60.06	-3.00	0
5/12/01	18:08:26	65	3282	60.01	59.95	-3.00	0
5/12/01	18:08:26	565	3282	60.01	59.95	22.00	0
5/12/01	18:08:27	66	3280	60.01	59.93	22.00	0
5/12/01	18:08:27	567	3277	60.01	59.93	39.00	0
5/12/01	18:08:28	67	3276	60.01	60.06	39.00	0
5/12/01	18:08:28	578	3278	60.01	60.06	18.00	0
5/12/01	18:08:29	79	3278	60.01	60.06	18.00	0
5/12/01	18:08:29	580	3280	60.01	60.06	-10.00	0
5/12/01	18:08:30	80	3282	60.01	59.95	-10.00	0
5/12/01	18:08:30	591	3283	60.01	59.95	-25.00	0
5/12/01	18:08:31	82	3282	59.99	59.91	-25.00	0
5/12/01	18:08:31	583	3278	59.99	59.91	-5.00	0
5/12/01	18:08:32	83	3277	59.99	59.99	-5.00	0
5/12/01	18:08:32	584	3277	59.99	59.99	-6.00	0
5/12/01	18:08:33	85	3279	59.99	60.05	-6.00	0
5/12/01	18:08:33	585	3283	59.99	60.05	-38.00	0
5/12/01	18:08:34	86	3285	59.99	59.92	-38.00	0
5/12/01	18:08:34	587	3287	59.99	59.92	-30.00	0
5/12/01	18:08:35	88	3286	59.99	59.91	-30.00	0
5/12/01	18:08:35	588	3284	59.99	59.91	6.00	0
5/12/01	18:08:36	89	3279	59.99	60.05	6.00	0
5/12/01	18:08:36	590	3277	59.99	60.05	40.00	0
5/12/01	18:08:37	90	3275	59.99	60.08	40.00	0
5/12/01	18:08:37	591	3277	59.99	60.08	14.00	0
5/12/01	18:08:38	92	3280	59.99	60.01	14.00	0
5/12/01	18:08:38	593	3280	59.99	60.01	-22.00	0
5/12/01	18:08:39	93	3280	59.99	59.90	-22.00	0
5/12/01	18:08:39	594	3281	59.99	59.90	-21.00	0
5/12/01	18:08:40	95	3281	59.99	59.88	-21.00	0
5/12/01	18:08:40	595	3281	59.99	59.88	-18.00	0
5/12/01	18:08:41	96	3281	60.00	60.00	-18.00	0
5/12/01	18:08:41	597	3281	60.00	60.00	-16.00	0
5/12/01	18:08:42	98	3281	60.00	60.00	-16.00	0
5/12/01	18:08:42	598	3281	60.00	60.00	-12.00	0
5/12/01	18:08:43	99	3281	60.00	60.01	-12.00	0
5/12/01	18:08:43	600	3281	60.00	60.01	-8.00	0
5/12/01	18:08:44	101	3281	60.00	60.00	-8.00	0
5/12/01	18:08:44	601	3281	60.00	60.00	-5.00	0
5/12/01	18:08:45	102	3281	60.00	60.01	-5.00	0
5/12/01	18:08:45	603	3281	60.00	60.01	-5.00	0
5/12/01	18:08:46	103	3281	60.01	60.01	-4.00	0
5/12/01	18:08:46	604	3281	60.01	60.01	-4.00	1
5/12/01	18:08:47	105	3281	60.01	60.00	-3.00	1
5/12/01	18:08:47	606	3281	60.01	60.00	-3.00	1
5/12/01	18:08:48	106	3280	60.01	59.99	0.00	1
5/12/01	18:08:48	607	3279	60.01	59.99	0.00	0
5/12/01	18:08:49	108	3278	60.01	59.99	6.00	0
5/12/01	18:08:49	608	0	60.01	59.99	6.00	0
5/12/01	18:08:50	109	0	60.01	60.01	0.00	0
5/12/01	18:08:50	610	0	60.01	60.01	0.00	0
5/12/01	18:08:51	111	0	60.01	60.01	0.00	0
5/12/01	18:08:51	611	0	59.99	60.01	0.00	0
5/12/01	18:08:52	112	0	59.99	60.01	0.00	0
5/12/01	18:08:52	613	0	59.99	59.04	0.00	0
5/12/01	18:08:53	113	0	59.99	59.04	0.00	0
5/12/01	18:08:53	614	0	59.99	53.02	0.00	0
5/12/01	18:08:54	115	0	59.99	53.02	0.00	0
5/12/01	18:08:54	616	0	59.99	45.37	0.00	0
5/12/01	18:08:55	116	0	59.99	45.37	0.00	0
5/12/01	18:08:55	617	0	59.99	0.00	0.00	0
5/12/01	18:08:56	118	0	59.99	0.00	0.00	0
5/12/01	18:08:56	619	0	59.98	0.00	0.00	0
5/12/01	18:08:57	119	0	59.98	0.00	0.00	0
5/12/01	18:08:57	620	0	59.98	0.00	0.00	0
5/12/01	18:08:58	121	0	59.98	0.00	0.00	0
5/12/01	18:08:58	621	0	59.98	0.00	0.00	0
5/12/01	18:08:59	122	0	59.98	0.00	0.00	0
5/12/01	18:08:59	623	0	59.98	0.00	0.00	0
5/12/01	18:09:00	124	0	59.98	0.00	0.00	0
5/12/01	18:09:00	624	0	59.98	0.00	0.00	0
5/12/01	18:09:01	125	0	59.98	0.00	0.00	0
5/12/01	18:09:01	626	0	59.99	0.00	0.00	0
5/12/01	18:09:02	126	0	59.99	0.00	0.00	0
5/12/01	18:09:02	627	0	59.99	0.00	0.00	0
5/12/01	18:09:03	128	0	59.99	0.00	0.00	0
5/12/01	18:09:03	649	0	59.99	0.00	0.00	0
5/12/01	18:09:04	129	0	59.99	0.00	0.00	0
5/12/01	18:09:04	630	0	59.99	0.00	0.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match	Close Breaker (Open/Close)
5/12/01	18:09:05	131	0	59.99	0.00	0.00	0
5/12/01	18:09:05	631	0	59.99	0.00	0.00	0
5/12/01	18:09:06	132	0	59.99	0.00	0.00	0
5/12/01	18:09:06	633	0	60.00	0.00	0.00	0
5/12/01	18:09:07	134	0	60.00	0.00	0.00	0
5/12/01	18:09:07	634	0	60.00	0.00	0.00	0
5/12/01	18:09:08	135	0	60.00	0.00	0.00	0
5/12/01	18:09:08	636	0	60.00	0.00	0.00	0
5/12/01	18:09:09	137	0	60.00	0.00	0.00	0
5/12/01	18:09:09	637	0	60.00	0.00	0.00	0
5/12/01	18:09:10	138	0	60.00	0.00	0.00	0
5/12/01	18:09:10	639	0	60.00	0.00	0.00	0
5/12/01	18:09:11	139	0	60.00	0.00	0.00	0
5/12/01	18:09:11	640	0	60.02	0.00	0.00	0
5/12/01	18:09:12	141	0	60.02	0.00	0.00	0
5/12/01	18:09:12	642	0	60.02	0.00	0.00	0
5/12/01	18:09:13	142	0	60.02	0.00	0.00	0
5/12/01	18:09:13	643	0	60.02	0.00	0.00	0
5/12/01	18:09:14	144	100	60.02	0.00	0.00	0
5/12/01	18:09:14	644	300	60.02	0.00	0.00	0
5/12/01	18:09:15	145	600	60.02	0.00	0.00	0
5/12/01	18:09:15	646	800	59.99	0.00	0.00	0
5/12/01	18:09:16	147	1000	59.99	0.00	0.00	0
5/12/01	18:09:16	647	1300	59.99	0.00	0.00	0
5/12/01	18:09:17	148	1500	59.99	0.00	0.00	0
5/12/01	18:09:17	649	1700	59.99	0.00	0.00	0
5/12/01	18:09:18	149	1900	59.99	0.00	0.00	0
5/12/01	18:09:18	650	2200	59.99	0.00	0.00	0
5/12/01	18:09:19	151	2400	59.99	0.00	0.00	0
5/12/01	18:09:19	652	2600	59.99	0.00	0.00	0
5/12/01	18:09:20	152	2784	59.99	0.00	0.00	0
5/12/01	18:09:20	653	2910	60.00	0.00	0.00	0
5/12/01	18:09:21	154	3029	60.00	0.00	0.00	0
5/12/01	18:09:21	655	3077	60.00	0.00	0.00	0
5/12/01	18:09:22	155	3107	60.00	0.00	0.00	0
5/12/01	18:09:22	666	3143	60.00	44.74	0.00	0
5/12/01	18:09:23	157	3162	60.00	44.74	0.00	0
5/12/01	18:09:23	667	3179	60.00	51.33	0.00	0
5/12/01	18:09:24	158	3193	60.00	51.33	0.00	0
5/12/01	18:09:24	659	3205	60.00	51.33	0.00	0
5/12/01	18:09:25	160	3220	60.00	57.42	0.00	0
5/12/01	18:09:25	660	3228	60.00	57.42	0.00	0
5/12/01	18:09:26	161	3236	60.00	58.06	0.00	0
5/12/01	18:09:26	662	3242	60.00	58.06	0.00	0
5/12/01	18:09:27	162	3251	60.00	58.48	0.00	0
5/12/01	18:09:27	663	3255	60.00	58.48	0.00	0
5/12/01	18:09:28	164	3259	60.00	59.10	0.00	0
5/12/01	18:09:28	665	3261	60.00	59.10	0.00	0
5/12/01	18:09:29	165	3263	60.00	59.32	0.00	0
5/12/01	18:09:29	666	3266	60.00	59.32	0.00	0
5/12/01	18:09:30	167	3266	60.00	59.45	0.00	0
5/12/01	18:09:30	667	3266	60.00	59.45	110.00	0
5/12/01	18:09:31	168	3266	59.98	59.64	110.00	0
5/12/01	18:09:31	669	3269	59.98	59.64	42.00	0
5/12/01	18:09:32	170	3271	59.98	59.77	42.00	0
5/12/01	18:09:32	680	3275	59.98	59.77	-23.00	0
5/12/01	18:09:33	171	3278	59.98	59.78	-23.00	0
5/12/01	18:09:33	672	3280	59.98	59.78	-65.00	0
5/12/01	18:09:34	173	3283	59.98	59.79	-65.00	0
5/12/01	18:09:34	673	3285	59.98	59.79	-76.00	0
5/12/01	18:09:35	174	3287	59.98	59.91	-76.00	0
5/12/01	18:09:35	675	3289	59.98	59.91	-58.00	0
5/12/01	18:09:36	175	3291	59.99	59.96	-58.00	0
5/12/01	18:09:36	676	3281	59.99	59.96	-2.00	0
5/12/01	18:09:37	177	3279	59.99	60.03	-2.00	0
5/12/01	18:09:37	678	3278	59.99	60.03	25.00	0
5/12/01	18:09:38	178	3277	59.99	60.09	25.00	0
5/12/01	18:09:38	679	3278	59.99	60.09	8.00	0
5/12/01	18:09:39	180	3278	59.99	59.98	8.00	0
5/12/01	18:09:39	680	3281	59.99	59.98	-26.00	0
5/12/01	18:09:40	181	3284	59.99	59.92	-26.00	0
5/12/01	18:09:40	682	3285	59.99	59.92	-31.00	0
5/12/01	18:09:41	183	3284	59.98	59.91	-31.00	0
5/12/01	18:09:41	683	3282	59.98	59.91	-7.00	0
5/12/01	18:09:42	184	3279	59.98	59.91	-7.00	0
5/12/01	18:09:42	685	3279	59.98	59.91	14.00	0
5/12/01	18:09:43	185	3281	59.98	60.07	14.00	0
5/12/01	18:09:43	686	3281	59.98	60.07	8.00	0
5/12/01	18:09:44	187	3282	59.98	60.04	8.00	0
5/12/01	18:09:44	688	3279	59.98	60.04	7.00	0
5/12/01	18:09:45	188	3277	59.98	59.96	7.00	0
5/12/01	18:09:45	699	3278	59.98	59.96	15.00	0
5/12/01	18:09:46	190	3283	59.98	60.06	15.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match	Close Breaker (Open/Close)
5/12/01	18:09:46	691	3285	59.98	60.06	-3.00	0
5/12/01	18:09:47	191	3283	59.98	60.00	-3.00	0
5/12/01	18:09:47	692	3281	59.98	60.00	18.00	0
5/12/01	18:09:48	193	3279	59.98	59.90	18.00	0
5/12/01	18:09:48	693	3277	59.98	59.90	40.00	0
5/12/01	18:09:49	194	3275	59.98	60.06	40.00	0
5/12/01	18:09:49	695	3278	59.98	60.06	8.00	0
5/12/01	18:09:50	196	3284	59.98	60.03	8.00	0
5/12/01	18:09:50	696	3283	59.98	60.03	-6.00	0
5/12/01	18:09:51	197	3279	60.00	59.91	-6.00	0
5/12/01	18:09:51	698	3275	60.00	59.91	12.00	0
5/12/01	18:09:52	198	3277	60.00	60.04	12.00	0
5/12/01	18:09:52	699	3279	60.00	60.04	-15.00	0
5/12/01	18:09:53	200	3281	60.00	60.04	-15.00	0
5/12/01	18:09:53	701	3282	60.00	60.04	-29.00	0
5/12/01	18:09:54	201	3284	60.00	60.04	-29.00	0
5/12/01	18:09:54	702	3283	60.00	59.91	-10.00	0
5/12/01	18:09:55	203	3279	60.00	59.91	-10.00	0
5/12/01	18:09:55	703	3275	60.00	59.93	9.00	0
5/12/01	18:09:56	204	3275	60.00	59.93	9.00	0
5/12/01	18:09:56	705	3275	59.99	60.06	-26.00	0
5/12/01	18:09:57	206	3277	59.99	60.06	-26.00	0
5/12/01	18:09:57	706	3281	59.99	60.06	-26.00	0
5/12/01	18:09:58	207	3282	59.99	60.06	-60.00	0
5/12/01	18:09:58	708	3286	59.99	59.90	-60.00	0
5/12/01	18:09:59	209	3288	59.99	59.90	-61.00	0
5/12/01	18:09:59	709	3289	59.99	59.89	-61.00	0
5/12/01	18:10:00	210	3288	59.99	59.89	-24.00	0
5/12/01	18:10:00	711	3283	59.99	60.04	-24.00	0
5/12/01	18:10:01	211	3281	59.99	60.04	21.00	0
5/12/01	18:10:01	712	3279	59.99	60.07	21.00	0
5/12/01	18:10:02	213	3277	59.99	60.07	33.00	0
5/12/01	18:10:02	714	3276	59.99	60.14	33.00	0
5/12/01	18:10:03	214	3278	59.99	60.14	12.00	0
5/12/01	18:10:03	715	3278	59.99	59.98	12.00	0
5/12/01	18:10:04	216	3280	59.99	59.98	-23.00	0
5/12/01	18:10:04	716	3282	59.99	59.91	-23.00	0
5/12/01	18:10:05	217	3285	59.99	59.91	-39.00	0
5/12/01	18:10:05	718	3285	59.99	59.91	-39.00	0
5/12/01	18:10:06	219	3282	59.99	59.91	-19.00	0
5/12/01	18:10:06	719	3279	59.99	59.91	-19.00	0
5/12/01	18:10:07	230	3279	59.99	59.91	4.00	0
5/12/01	18:10:07	721	3280	59.99	60.08	4.00	0
5/12/01	18:10:08	221	3281	59.99	60.08	-8.00	0
5/12/01	18:10:08	722	3282	59.99	60.07	-8.00	0
5/12/01	18:10:09	223	3282	59.99	60.07	-19.00	0
5/12/01	18:10:09	724	3281	59.99	59.96	-19.00	0
5/12/01	18:10:10	224	3278	59.99	59.96	2.00	0
5/12/01	18:10:10	725	3279	59.99	59.98	2.00	0
5/12/01	18:10:11	226	3285	59.99	59.98	-10.00	0
5/12/01	18:10:11	727	3286	59.99	60.06	-10.00	0
5/12/01	18:10:12	227	3284	59.99	60.06	4.00	0
5/12/01	18:10:12	728	3281	59.99	59.97	4.00	0
5/12/01	18:10:13	229	3276	59.99	59.97	22.00	0
5/12/01	18:10:13	729	3278	59.99	60.08	22.00	0
5/12/01	18:10:14	230	3278	59.99	60.08	-11.00	0
5/12/01	18:10:14	731	3280	59.99	60.03	-11.00	0
5/12/01	18:10:15	232	3283	59.99	60.03	-39.00	0
5/12/01	18:10:15	732	3286	59.99	59.90	-39.00	0
5/12/01	18:10:16	233	3287	59.99	59.90	-23.00	0
5/12/01	18:10:16	734	3287	60.00	59.98	-23.00	0
5/12/01	18:10:17	234	3282	60.00	59.98	10.00	0
5/12/01	18:10:17	735	3278	60.00	60.06	10.00	0
5/12/01	18:10:18	236	3279	60.00	60.06	15.00	0
5/12/01	18:10:18	737	3281	60.00	60.09	15.00	0
5/12/01	18:10:19	237	3283	60.00	60.09	-7.00	0
5/12/01	18:10:19	738	3283	60.00	60.03	-7.00	0
5/12/01	18:10:20	239	3279	60.00	60.03	9.00	0
5/12/01	18:10:20	739	3279	60.00	60.03	9.00	0
5/12/01	18:10:21	240	3279	60.00	59.98	9.00	0
5/12/01	18:10:21	741	3280	60.00	59.98	12.00	0
5/12/01	18:10:22	242	3281	60.00	60.05	12.00	0
5/12/01	18:10:22	742	3282	60.00	60.05	1.00	0
5/12/01	18:10:23	243	3282	60.00	59.97	1.00	0
5/12/01	18:10:23	744	3282	60.00	59.97	-11.00	0
5/12/01	18:10:24	245	3282	60.00	59.97	-11.00	0
5/12/01	18:10:24	745	3277	60.00	59.97	4.00	0
5/12/01	18:10:25	246	3277	60.00	59.97	4.00	0
5/12/01	18:10:25	747	3278	60.00	59.97	4.00	0
5/12/01	18:10:26	247	3280	60.00	60.04	4.00	0
5/12/01	18:10:26	748	3280	60.00	60.04	-21.00	0
5/12/01	18:10:27	249	3280	59.99	59.91	-21.00	0
5/12/01	18:10:27	750	3282	59.99	59.91	-23.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match	Close Breaker (Open/Close)
5/12/01	18:10:28	250	3284	59.99	59.97	-23.00	0
5/12/01	18:10:28	751	3284	59.99	59.97	-21.00	0
5/12/01	18:10:29	252	3281	59.99	60.00	-21.00	0
5/12/01	18:10:29	752	3279	59.99	60.00	5.00	0
5/12/01	18:10:30	253	3278	59.99	59.99	5.00	0
5/12/01	18:10:30	754	3278	59.99	59.99	17.00	0
5/12/01	18:10:31	255	3280	59.99	60.05	17.00	0
5/12/01	18:10:31	755	3281	59.99	60.05	0.00	0
5/12/01	18:10:32	256	3283	60.01	59.98	0.00	0
5/12/01	18:10:32	757	3285	60.01	59.98	-17.00	0
5/12/01	18:10:33	257	3283	60.01	59.95	-17.00	0
5/12/01	18:10:33	758	3281	60.01	59.95	1.00	0
5/12/01	18:10:34	259	3279	60.01	59.95	1.00	0
5/12/01	18:10:34	760	3280	60.01	59.95	8.00	0
5/12/01	18:10:35	260	3280	60.01	60.06	8.00	0
5/12/01	18:10:35	761	3281	60.01	60.06	-1.00	1
5/12/01	18:10:36	262	3283	60.01	59.98	-1.00	1
5/12/01	18:10:36	763	3284	60.01	59.98	-18.00	0
5/12/01	18:10:37	263	3284	59.99	59.96	-18.00	0
5/12/01	18:10:37	764	3278	59.99	59.96	2.00	0
5/12/01	18:10:38	265	3277	59.99	59.94	2.00	0
5/12/01	18:10:38	765	3278	59.99	59.94	9.00	0
5/12/01	18:10:39	266	3278	59.99	60.06	9.00	0
5/12/01	18:10:39	767	0	59.99	60.06	-26.00	0
5/12/01	18:10:40	268	0	59.99	59.96	-26.00	0
5/12/01	18:10:40	768	0	59.99	59.96	0.00	0
5/12/01	18:10:41	269	0	59.99	59.92	0.00	0
5/12/01	18:10:41	770	0	59.99	59.92	0.00	0
5/12/01	18:10:42	270	0	60.00	59.91	0.00	0
5/12/01	18:10:42	771	0	60.00	59.91	0.00	0
5/12/01	18:10:43	272	0	60.00	54.64	0.00	0
5/12/01	18:10:43	773	0	60.00	54.64	0.00	0
5/12/01	18:10:44	273	0	60.00	47.75	0.00	0
5/12/01	18:10:44	774	0	60.00	47.75	0.00	0
5/12/01	18:10:45	275	0	60.00	40.78	0.00	0
5/12/01	18:10:45	775	0	60.00	40.78	0.00	0
5/12/01	18:10:46	276	0	60.00	0.00	0.00	0
5/12/01	18:10:46	777	0	60.00	0.00	0.00	0
5/12/01	18:10:47	278	0	59.99	0.00	0.00	0
5/12/01	18:10:47	778	0	59.99	0.00	0.00	0
5/12/01	18:10:48	279	0	59.99	0.00	0.00	0
5/12/01	18:10:48	780	0	59.99	0.00	0.00	0
5/12/01	18:10:49	281	0	59.99	0.00	0.00	0
5/12/01	18:10:49	781	0	59.99	0.00	0.00	0
5/12/01	18:10:50	282	0	59.99	0.00	0.00	0
5/12/01	18:10:50	783	0	59.99	0.00	0.00	0
5/12/01	18:10:51	283	0	59.99	0.00	0.00	0
5/12/01	18:10:51	784	0	59.99	0.00	0.00	0
5/12/01	18:10:52	285	0	59.99	0.00	0.00	0
5/12/01	18:10:52	786	0	59.99	0.00	0.00	0
5/12/01	18:10:53	286	0	59.99	0.00	0.00	0
5/12/01	18:10:53	787	0	59.99	0.00	0.00	0
5/12/01	18:10:54	288	0	59.99	0.00	0.00	0
5/12/01	18:10:54	788	0	59.99	0.00	0.00	0
5/12/01	18:10:55	289	0	59.99	0.00	0.00	0
5/12/01	18:10:55	790	0	59.99	0.00	0.00	0
5/12/01	18:10:56	291	0	59.99	0.00	0.00	0
5/12/01	18:10:56	791	0	59.99	0.00	0.00	0
5/12/01	18:10:57	292	0	59.99	0.00	0.00	0
5/12/01	18:10:57	793	0	60.00	0.00	0.00	0
5/12/01	18:10:58	293	0	60.00	0.00	0.00	0
5/12/01	18:10:58	794	0	60.00	0.00	0.00	0
5/12/01	18:10:59	295	0	60.00	0.00	0.00	0
5/12/01	18:10:59	796	0	60.00	0.00	0.00	0
5/12/01	18:11:00	296	0	60.00	0.00	0.00	0
5/12/01	18:11:00	797	0	60.00	0.00	0.00	0
5/12/01	18:11:01	298	0	60.00	0.00	0.00	0
5/12/01	18:11:01	799	0	60.00	0.00	0.00	0
5/12/01	18:11:02	299	0	60.00	0.00	0.00	0
5/12/01	18:11:02	800	0	59.99	0.00	0.00	0
5/12/01	18:11:03	301	0	59.99	0.00	0.00	0
5/12/01	18:11:03	801	200	59.99	0.00	0.00	0
5/12/01	18:11:04	302	500	59.99	0.00	0.00	0
5/12/01	18:11:04	803	700	59.99	0.00	0.00	0
5/12/01	18:11:05	304	900	59.99	0.00	0.00	0
5/12/01	18:11:05	804	1100	59.99	0.00	0.00	0
5/12/01	18:11:06	305	1400	59.99	0.00	0.00	0
5/12/01	18:11:06	806	1600	59.99	0.00	0.00	0
5/12/01	18:11:07	306	1800	59.99	0.00	0.00	0
5/12/01	18:11:07	807	2000	60.02	0.00	0.00	0
5/12/01	18:11:08	308	2200	60.02	0.00	0.00	0
5/12/01	18:11:08	809	2500	60.02	0.00	0.00	0
5/12/01	18:11:09	309	2700	60.02	0.00	0.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match	Close Breaker (Open/Close)
5/12/01	18:11:09	810	2855	60.02	0.00	0.00	0
5/12/01	18:11:10	311	3005	60.02	0.00	0.00	0
5/12/01	18:11:10	811	3097	60.02	0.00	0.00	0
5/12/01	18:11:11	312	3125	60.02	0.00	0.00	0
5/12/01	18:11:11	813	3146	60.02	0.00	0.00	0
5/12/01	18:11:12	314	3165	60.02	0.00	0.00	0
5/12/01	18:11:12	814	3182	60.00	53.54	0.00	0
5/12/01	18:11:13	315	3201	60.00	53.54	0.00	0
5/12/01	18:11:13	816	3212	60.00	57.19	0.00	0
5/12/01	18:11:14	317	3221	60.00	57.19	0.00	0
5/12/01	18:11:14	817	3229	60.00	57.93	0.00	0
5/12/01	18:11:15	318	3237	60.00	57.93	0.00	0
5/12/01	18:11:15	819	3246	60.00	58.46	0.00	0
5/12/01	18:11:16	319	3251	60.00	58.46	0.00	0
5/12/01	18:11:16	820	3255	60.00	59.06	0.00	0
5/12/01	18:11:17	321	3259	60.00	59.06	0.00	0
5/12/01	18:11:17	822	3263	60.00	59.29	0.00	0
5/12/01	18:11:18	322	3265	60.00	59.29	0.00	0
5/12/01	18:11:18	823	3267	60.00	59.42	0.00	0
5/12/01	18:11:19	324	3267	60.00	59.42	66.00	0
5/12/01	18:11:19	824	3267	60.00	59.69	66.00	0
5/12/01	18:11:20	325	3269	60.00	59.69	-4.00	0
5/12/01	18:11:20	826	3273	60.00	59.77	-4.00	0
5/12/01	18:11:21	327	3276	60.00	59.77	-68.00	0
5/12/01	18:11:21	827	3278	60.00	59.81	-68.00	0
5/12/01	18:11:22	328	3281	60.00	59.81	-96.00	0
5/12/01	18:11:22	829	3283	59.99	59.78	-96.00	0
5/12/01	18:11:23	329	3285	59.99	59.78	-113.00	0
5/12/01	18:11:23	830	3287	59.99	59.91	-113.00	0
5/12/01	18:11:24	331	3289	59.99	59.91	-100.00	0
5/12/01	18:11:24	832	3291	59.99	59.99	-100.00	0
5/12/01	18:11:25	332	3291	59.99	59.99	-52.00	0
5/12/01	18:11:25	833	3289	59.99	60.04	-52.00	0
5/12/01	18:11:26	334	3284	59.99	60.04	6.00	0
5/12/01	18:11:26	835	3281	59.99	60.11	6.00	0
5/12/01	18:11:27	335	3278	59.99	60.11	39.00	0
5/12/01	18:11:27	836	3276	59.99	60.11	39.00	0
5/12/01	18:11:28	337	3277	59.99	60.20	17.00	0
5/12/01	18:11:28	837	3280	59.99	60.20	17.00	0
5/12/01	18:11:29	338	3282	59.99	59.99	-6.00	0
5/12/01	18:11:29	839	3282	59.99	59.99	-6.00	0
5/12/01	18:11:30	340	3280	59.99	59.94	1.00	1
5/12/01	18:11:30	840	3278	59.99	59.94	1.00	1
5/12/01	18:11:31	341	3278	59.99	59.98	1.00	0
5/12/01	18:11:31	842	3278	59.99	59.98	1.00	0
5/12/01	18:11:32	342	3281	59.99	60.05	1.00	0
5/12/01	18:11:32	843	3283	59.99	60.05	-26.00	0
5/12/01	18:11:33	344	3285	60.00	59.98	-26.00	0
5/12/01	18:11:33	845	3284	60.00	59.98	-19.00	0
5/12/01	18:11:34	345	3281	60.00	59.99	-19.00	0
5/12/01	18:11:34	846	3277	60.00	59.99	3.00	0
5/12/01	18:11:35	347	3277	60.00	60.06	3.00	0
5/12/01	18:11:35	847	0	60.00	60.06	-6.00	0
5/12/01	18:11:36	348	0	60.00	60.06	-6.00	0
5/12/01	18:11:36	849	0	60.00	60.06	0.00	0
5/12/01	18:11:37	350	0	60.00	59.96	0.00	0
5/12/01	18:11:37	850	0	60.00	59.96	0.00	0
5/12/01	18:11:38	351	0	59.98	59.87	0.00	0
5/12/01	18:11:38	852	0	59.98	59.87	0.00	0
5/12/01	18:11:39	353	0	59.98	54.34	0.00	0
5/12/01	18:11:39	853	0	59.98	54.34	0.00	0
5/12/01	18:11:40	354	0	59.98	47.42	0.00	0
5/12/01	18:11:40	855	0	59.98	47.42	0.00	0
5/12/01	18:11:41	355	0	59.98	0.00	0.00	0
5/12/01	18:11:41	856	0	59.98	0.00	0.00	0
5/12/01	18:11:42	357	0	59.98	0.00	0.00	0
5/12/01	18:11:42	858	0	59.98	0.00	0.00	0
5/12/01	18:11:43	358	0	60.00	0.00	0.00	0
5/12/01	18:11:43	859	0	60.00	0.00	0.00	0
5/12/01	18:11:44	360	0	60.00	0.00	0.00	0
5/12/01	18:11:44	860	0	60.00	0.00	0.00	0
5/12/01	18:11:45	361	0	60.00	0.00	0.00	0
5/12/01	18:11:45	862	0	60.00	0.00	0.00	0
5/12/01	18:11:46	363	0	60.00	0.00	0.00	0
5/12/01	18:11:46	863	0	60.00	0.00	0.00	0
5/12/01	18:11:47	364	0	60.00	0.00	0.00	0
5/12/01	18:11:47	925	0	60.00	0.00	0.00	0
5/12/01	18:11:48	365	0	60.00	0.00	0.00	0
5/12/01	18:11:48	866	0	60.00	0.00	0.00	0
5/12/01	18:11:49	367	0	60.00	0.00	0.00	0
5/12/01	18:11:49	868	0	60.00	0.00	0.00	0
5/12/01	18:11:50	368	0	60.00	0.00	0.00	0
5/12/01	18:11:50	869	0	60.00	0.00	0.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match	Close Breaker (Open/Close)
5/12/01	18:11:51	370	0	60.00	0.00	0.00	0
5/12/01	18:11:51	871	0	60.00	0.00	0.00	0
5/12/01	18:11:52	371	0	60.00	0.00	0.00	0
5/12/01	18:11:52	872	0	60.00	0.00	0.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match	Close Breaker (Open/Close)
5/12/01	18:29:18	836	0	59.99	0.00	0.00	0
5/12/01	18:29:19	337	0	59.99	0.00	0.00	0
5/12/01	18:29:19	837	0	59.99	0.00	0.00	0
5/12/01	18:29:20	338	200	59.99	0.00	0.00	0
5/12/01	18:29:20	839	400	59.99	0.00	0.00	0
5/12/01	18:29:21	340	700	59.99	0.00	0.00	0
5/12/01	18:29:21	840	900	59.99	0.00	0.00	0
5/12/01	18:29:22	341	1100	59.99	0.00	0.00	0
5/12/01	18:29:22	842	1300	59.99	0.00	0.00	0
5/12/01	18:29:23	342	1500	59.99	0.00	0.00	0
5/12/01	18:29:23	843	1800	59.99	0.00	0.00	0
5/12/01	18:29:24	344	2000	59.99	0.00	0.00	0
5/12/01	18:29:24	845	2200	59.99	0.00	0.00	0
5/12/01	18:29:25	345	2500	59.99	0.00	0.00	0
5/12/01	18:29:25	846	2700	59.99	0.00	0.00	0
5/12/01	18:29:26	347	2900	59.99	0.00	0.00	0
5/12/01	18:29:26	848	3100	59.99	0.00	0.00	0
5/12/01	18:29:27	348	3367	59.99	0.00	0.00	0
5/12/01	18:29:27	859	3491	59.99	0.00	0.00	0
5/12/01	18:29:28	350	3579	59.99	0.00	0.00	0
5/12/01	18:29:28	850	3645	59.99	0.00	0.00	0
5/12/01	18:29:29	351	3712	59.99	40.35	0.00	0
5/12/01	18:29:29	852	3742	59.99	40.35	0.00	0
5/12/01	18:29:30	353	3768	59.99	46.56	0.00	0
5/12/01	18:29:30	853	3791	59.99	46.56	0.00	0
5/12/01	18:29:31	354	3821	59.99	52.72	0.00	0
5/12/01	18:29:31	855	3836	59.99	52.72	0.00	0
5/12/01	18:29:32	355	3850	59.99	57.07	0.00	0
5/12/01	18:29:32	856	3863	59.99	57.07	0.00	0
5/12/01	18:29:33	357	3879	59.99	58.00	0.00	0
5/12/01	18:29:33	858	3889	59.99	58.00	0.00	0
5/12/01	18:29:34	358	3897	59.99	58.35	0.00	0
5/12/01	18:29:34	859	3904	59.99	58.35	0.00	0
5/12/01	18:29:35	360	3911	59.98	58.68	0.00	0
5/12/01	18:29:35	860	3914	59.98	58.68	0.00	0
5/12/01	18:29:36	361	3918	59.98	58.98	-124.00	0
5/12/01	18:29:36	862	3916	59.98	58.98	-124.00	0
5/12/01	18:29:37	363	3918	59.98	59.61	0.00	0
5/12/01	18:29:37	863	3918	59.98	59.61	0.00	0
5/12/01	18:29:38	364	3919	59.98	59.75	0.00	0
5/12/01	18:29:38	865	3920	59.98	59.75	0.00	0
5/12/01	18:29:39	366	3927	59.98	59.75	-8.00	0
5/12/01	18:29:39	866	3929	60.00	59.77	-8.00	0
5/12/01	18:29:40	367	3931	60.00	59.77	-47.00	0
5/12/01	18:29:40	868	3933	60.00	59.73	-47.00	0
5/12/01	18:29:41	368	3936	60.00	59.73	-58.00	0
5/12/01	18:29:41	869	3938	60.00	59.74	-58.00	0
5/12/01	18:29:42	370	3939	60.00	59.74	-42.00	0
5/12/01	18:29:42	871	3939	60.00	59.93	-42.00	0
5/12/01	18:29:43	371	3933	60.00	59.93	-7.00	0
5/12/01	18:29:43	872	3933	60.00	60.01	-7.00	0
5/12/01	18:29:44	373	3932	60.00	60.01	18.00	0
5/12/01	18:29:44	873	3931	59.94	60.04	18.00	0
5/12/01	18:29:45	374	3931	59.94	60.04	21.00	0
5/12/01	18:29:45	875	3931	59.94	60.08	21.00	0
5/12/01	18:29:46	376	3931	59.94	60.08	17.00	0
5/12/01	18:29:46	876	3931	59.94	60.01	17.00	0
5/12/01	18:29:47	377	3932	59.94	60.01	11.00	0
5/12/01	18:29:47	878	3932	59.94	59.99	11.00	0
5/12/01	18:29:48	378	3932	59.94	59.99	8.00	0
5/12/01	18:29:48	879	3932	59.94	60.09	8.00	0
5/12/01	18:29:49	380	3932	59.94	60.09	5.00	0
5/12/01	18:29:49	881	3932	59.99	59.98	5.00	0
5/12/01	18:29:50	381	3932	59.99	59.98	3.00	1
5/12/01	18:29:50	882	3932	59.99	60.01	3.00	1
5/12/01	18:29:51	383	3932	59.99	60.01	1.00	1
5/12/01	18:29:51	884	3932	59.99	59.98	1.00	1
5/12/01	18:29:52	384	3932	59.99	59.98	0.00	1
5/12/01	18:29:52	885	3933	59.99	59.99	0.00	1
5/12/01	18:29:53	386	3933	59.99	59.99	2.00	1
5/12/01	18:29:53	886	3933	59.99	59.96	2.00	1
5/12/01	18:29:54	387	3933	59.99	59.96	5.00	0
5/12/01	18:29:54	888	3932	60.03	60.05	5.00	0
5/12/01	18:29:55	389	3931	60.03	60.05	13.00	0
5/12/01	18:29:55	889	3931	60.03	60.04	13.00	0
5/12/01	18:29:56	390	3931	60.03	60.04	8.00	0
5/12/01	18:29:56	891	3931	60.03	60.02	8.00	0
5/12/01	18:29:57	391	3931	60.03	60.02	5.00	0
5/12/01	18:29:57	892	3931	60.03	60.02	5.00	0
5/12/01	18:29:58	393	3931	60.03	59.96	1.00	1
5/12/01	18:29:58	894	3931	60.03	59.96	1.00	1
5/12/01	18:29:59	394	3932	60.03	59.99	-2.00	1

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match	Close Breaker (Open/Close)
5/12/01	18:29:59	895	3932	60.03	59.99	-2.00	1
5/12/01	18:30:00	396	3854	59.96	59.95	0.00	0
5/12/01	18:30:00	896	3779	59.96	59.95	0.00	0
5/12/01	18:30:01	397	3657	59.96	59.96	0.00	0
5/12/01	18:30:01	898	3608	59.96	59.96	0.00	0
5/12/01	18:30:02	399	3563	59.96	59.97	0.00	0
5/12/01	18:30:02	899	3525	59.96	59.97	0.00	0
5/12/01	18:30:03	400	3476	59.96	59.48	0.00	0
5/12/01	18:30:03	901	3447	59.96	59.48	0.00	0
5/12/01	18:30:04	402	3424	59.96	57.07	0.00	0
5/12/01	18:30:04	902	3403	59.96	57.07	0.00	0
5/12/01	18:30:05	403	3375	49.99	55.71	0.00	0
5/12/01	18:30:05	904	3363	49.99	55.71	0.00	0
5/12/01	18:30:06	404	3351	49.99	53.81	0.00	0
5/12/01	18:30:06	905	3341	49.99	53.81	0.00	0
5/12/01	18:30:07	406	3328	49.99	52.81	0.00	0
5/12/01	18:30:07	907	3321	49.99	52.81	0.00	0
5/12/01	18:30:08	407	3315	49.99	52.45	0.00	0
5/12/01	18:30:08	908	3310	49.99	52.45	0.00	0
5/12/01	18:30:09	409	3304	49.99	51.50	0.00	0
5/12/01	18:30:09	909	3300	49.99	51.50	0.00	0
5/12/01	18:30:10	410	3296	49.97	51.10	0.00	0
5/12/01	18:30:10	911	3293	49.97	51.10	0.00	0
5/12/01	18:30:11	412	3292	49.97	50.51	0.00	0
5/12/01	18:30:11	912	3290	49.97	50.51	0.00	0
5/12/01	18:30:12	413	3288	49.97	50.45	0.00	0
5/12/01	18:30:12	914	3286	49.97	50.45	0.00	0
5/12/01	18:30:13	414	3286	49.97	50.28	-140.00	0
5/12/01	18:30:13	915	3286	49.97	50.28	-140.00	0
5/12/01	18:30:14	416	3286	49.97	50.27	-67.00	0
5/12/01	18:30:14	917	3284	49.97	50.27	-67.00	0
5/12/01	18:30:15	417	3278	49.97	50.18	4.00	0
5/12/01	18:30:15	918	3276	49.97	50.18	4.00	0
5/12/01	18:30:16	419	3274	49.97	50.18	48.00	0
5/12/01	18:30:16	920	3272	49.97	50.18	48.00	0
5/12/01	18:30:17	420	3269	49.97	50.14	56.00	0
5/12/01	18:30:17	921	3267	49.97	50.14	56.00	0
5/12/01	18:30:18	422	3268	49.97	50.04	41.00	0
5/12/01	18:30:18	922	3269	49.97	50.04	41.00	0
5/12/01	18:30:19	423	3271	49.97	50.04	8.00	0
5/12/01	18:30:19	924	3273	49.97	49.98	8.00	0
5/12/01	18:30:20	425	3274	49.97	49.98	-5.00	0
5/12/01	18:30:20	925	3274	49.99	49.89	-5.00	0
5/12/01	18:30:21	426	3274	49.99	49.89	-2.00	1
5/12/01	18:30:21	927	3274	49.99	49.96	-2.00	1
5/12/01	18:30:22	427	3274	49.99	49.96	6.00	0
5/12/01	18:30:22	928	3273	49.99	49.98	6.00	0
5/12/01	18:30:23	429	3272	49.99	49.98	12.00	0
5/12/01	18:30:23	930	3272	49.99	50.01	12.00	0
5/12/01	18:30:24	430	3272	49.99	50.01	11.00	0
5/12/01	18:30:24	931	3272	49.99	50.03	11.00	0
5/12/01	18:30:25	432	3272	49.99	50.03	4.00	0
5/12/01	18:30:25	932	3272	50.00	49.99	4.00	0
5/12/01	18:30:26	433	3273	50.00	49.99	-3.00	0
5/12/01	18:30:26	934	3273	50.00	49.99	-3.00	0
5/12/01	18:30:27	435	3274	50.00	49.99	-7.00	0
5/12/01	18:30:27	935	3273	50.00	49.98	-7.00	0
5/12/01	18:30:28	436	3272	50.00	49.98	0.00	1
5/12/01	18:30:28	937	3272	50.00	49.94	0.00	1
5/12/01	18:30:29	438	3272	50.00	49.94	-1.00	1
5/12/01	18:30:29	938	0	50.00	49.91	-1.00	1
5/12/01	18:30:30	439	0	50.00	49.91	0.00	0
5/12/01	18:30:30	940	0	49.97	49.99	0.00	0
5/12/01	18:30:31	440	0	49.97	49.99	0.00	0
5/12/01	18:30:31	941	0	49.97	49.95	0.00	0
5/12/01	18:30:32	442	0	49.97	49.95	0.00	0
5/12/01	18:30:32	943	0	49.97	48.22	0.00	0
5/12/01	18:30:33	443	0	49.97	48.22	0.00	0
5/12/01	18:30:33	944	0	49.97	41.33	0.00	0
5/12/01	18:30:34	445	0	49.97	41.33	0.00	0
5/12/01	18:30:34	945	0	49.97	0.00	0.00	0
5/12/01	18:30:35	446	0	49.97	0.00	0.00	0
5/12/01	18:30:35	947	0	50.01	0.00	0.00	0
5/12/01	18:30:36	448	0	50.01	0.00	0.00	0
5/12/01	18:30:36	948	0	50.01	0.00	0.00	0
5/12/01	18:30:37	449	0	50.01	0.00	0.00	0
5/12/01	18:30:37	950	0	50.01	0.00	0.00	0
5/12/01	18:30:38	450	0	50.01	0.00	0.00	0
5/12/01	18:30:38	951	0	50.01	0.00	0.00	0
5/12/01	18:30:39	452	0	50.01	0.00	0.00	0
5/12/01	18:30:39	953	0	50.01	0.00	0.00	0
5/12/01	18:30:40	453	0	50.01	0.00	0.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match	Close Breaker (Open/Close)
5/12/01	18:30:40	954	0	60.01	0.00	0.00	0
5/12/01	18:30:41	455	0	60.01	0.00	0.00	0
5/12/01	18:30:41	956	0	60.01	0.00	0.00	0
5/12/01	18:30:42	456	0	60.01	0.00	0.00	0
5/12/01	18:30:42	957	0	60.01	0.00	0.00	0
5/12/01	18:30:43	458	300	60.01	0.00	0.00	0
5/12/01	18:30:43	958	500	60.01	0.00	0.00	0
5/12/01	18:30:44	459	700	60.01	0.00	0.00	0
5/12/01	18:30:44	960	900	59.99	0.00	0.00	0
5/12/01	18:30:45	461	1200	59.99	0.00	0.00	0
5/12/01	18:30:45	961	1400	59.99	0.00	0.00	0
5/12/01	18:30:46	462	1600	59.99	0.00	0.00	0
5/12/01	18:30:46	963	1800	59.99	0.00	0.00	0
5/12/01	18:30:47	463	2100	59.99	0.00	0.00	0
5/12/01	18:30:47	964	2300	59.99	0.00	0.00	0
5/12/01	18:30:48	465	2500	59.99	0.00	0.00	0
5/12/01	18:30:48	966	2700	59.99	0.00	0.00	0
5/12/01	18:30:49	466	3000	59.99	0.00	0.00	0
5/12/01	18:30:49	967	3200	59.99	0.00	0.00	0
5/12/01	18:30:50	468	3367	59.99	0.00	0.00	0
5/12/01	18:30:50	968	3486	59.99	0.00	0.00	0
5/12/01	18:30:51	469	3617	59.99	0.00	0.00	0
5/12/01	18:30:51	970	3671	59.99	0.00	0.00	0
5/12/01	18:30:52	471	3711	59.99	41.65	0.00	0
5/12/01	18:30:52	971	3741	59.99	41.65	0.00	0
5/12/01	18:30:53	472	3779	59.99	47.82	0.00	0
5/12/01	18:30:53	973	3800	59.99	47.82	0.00	0
5/12/01	18:30:54	474	3820	59.99	54.00	0.00	0
5/12/01	18:30:54	974	3839	59.99	54.00	0.00	0
5/12/01	18:30:55	475	3857	59.97	56.25	0.00	0
5/12/01	18:30:55	976	3867	59.97	56.25	0.00	0
5/12/01	18:30:56	476	3876	59.97	57.28	0.00	0
5/12/01	18:30:56	977	3884	59.97	57.28	0.00	0
5/12/01	18:30:57	478	3893	59.97	57.85	0.00	0
5/12/01	18:30:57	979	3898	59.97	57.85	0.00	0
5/12/01	18:30:58	479	3902	59.97	58.94	0.00	0
5/12/01	18:30:58	980	3906	59.97	58.94	0.00	0
5/12/01	18:30:59	481	3911	59.97	59.25	0.00	0
5/12/01	18:30:59	981	3913	59.97	59.25	0.00	0
5/12/01	18:31:00	482	3915	59.96	59.48	0.00	0
5/12/01	18:31:00	983	3915	59.96	59.48	-179.00	0
5/12/01	18:31:01	484	3916	59.96	59.61	-179.00	0
5/12/01	18:31:01	984	3916	59.96	59.61	88.00	0
5/12/01	18:31:02	485	3916	59.96	59.69	88.00	0
5/12/01	18:31:02	986	3921	59.96	59.69	-9.00	0
5/12/01	18:31:03	486	3927	59.96	59.70	-9.00	0
5/12/01	18:31:03	987	3929	59.96	59.70	-65.00	0
5/12/01	18:31:04	488	3931	59.96	59.74	-65.00	0
5/12/01	18:31:04	989	3933	59.96	59.74	-81.00	0
5/12/01	18:31:05	489	3936	60.04	59.84	-81.00	0
5/12/01	18:31:05	990	3937	60.04	59.84	-74.00	0
5/12/01	18:31:06	491	3939	60.04	59.95	-74.00	0
5/12/01	18:31:06	992	3940	60.04	59.95	-48.00	0
5/12/01	18:31:07	492	3940	60.04	59.95	-48.00	0
5/12/01	18:31:07	993	3939	60.04	60.02	-6.00	0
5/12/01	18:31:08	494	3934	60.04	60.02	-6.00	0
5/12/01	18:31:08	994	3932	60.04	60.05	35.00	0
5/12/01	18:31:09	495	3929	60.04	60.05	35.00	0
5/12/01	18:31:09	996	3927	60.04	60.10	42.00	0
5/12/01	18:31:10	497	3926	60.04	60.10	42.00	0
5/12/01	18:31:10	997	3927	60.02	60.13	28.00	0
5/12/01	18:31:11	498	3927	60.02	60.13	28.00	0
5/12/01	18:31:11	999	3927	60.02	59.99	-6.00	0
5/12/01	18:31:12	499	3927	60.02	59.99	-6.00	0
5/12/01	18:31:13	0	3930	60.02	59.97	-30.00	0
5/12/01	18:31:13	501	3933	60.02	59.97	-30.00	0
5/12/01	18:31:14	2	3936	60.02	59.94	-38.00	0
5/12/01	18:31:14	502	3937	60.02	59.94	-38.00	0
5/12/01	18:31:15	3	3938	60.02	59.88	-19.00	0
5/12/01	18:31:15	504	3935	60.02	59.88	-19.00	0
5/12/01	18:31:16	4	3932	59.99	59.99	11.00	0
5/12/01	18:31:16	505	3932	59.99	59.99	11.00	0
5/12/01	18:31:17	6	3932	59.99	60.04	11.00	0
5/12/01	18:31:17	507	3932	59.99	60.04	11.00	0
5/12/01	18:31:18	7	3932	59.99	60.05	11.00	0
5/12/01	18:31:18	508	3932	59.99	60.05	11.00	0
5/12/01	18:31:19	9	3932	59.99	59.99	9.00	0
5/12/01	18:31:19	510	3932	59.99	59.99	9.00	0
5/12/01	18:31:20	10	3932	59.99	59.98	8.00	0
5/12/01	18:31:20	511	3932	59.99	59.98	8.00	0
5/12/01	18:31:21	12	3932	59.97	59.97	6.00	0
5/12/01	18:31:21	512	3932	59.97	59.97	6.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match	Close Breaker (Open/Close)
5/12/01	18:31:22	13	3932	59.97	60.01	6.00	0
5/12/01	18:31:22	514	3932	59.97	60.01	3.00	1
5/12/01	18:31:23	15	3932	59.97	60.01	3.00	1
5/12/01	18:31:23	515	3932	59.97	60.01	2.00	1
5/12/01	18:31:24	16	3932	59.97	60.01	2.00	1
5/12/01	18:31:24	517	3932	59.97	59.95	0.00	1
5/12/01	18:31:25	17	3933	59.97	59.95	0.00	1
5/12/01	18:31:25	518	3855	59.97	59.97	0.00	0
5/12/01	18:31:26	19	3779	59.97	59.97	0.00	0
5/12/01	18:31:26	520	3714	59.99	59.97	0.00	0
5/12/01	18:31:27	20	3658	59.99	59.97	0.00	0
5/12/01	18:31:27	521	3586	59.99	60.00	0.00	0
5/12/01	18:31:28	22	3546	59.99	60.00	0.00	0
5/12/01	18:31:28	522	3510	59.99	60.00	0.00	0
5/12/01	18:31:29	23	3479	59.99	60.00	0.00	0
5/12/01	18:31:29	524	3439	59.99	56.68	0.00	0
5/12/01	18:31:30	25	3417	59.99	56.68	0.00	0
5/12/01	18:31:30	525	3396	59.99	54.89	0.00	0
5/12/01	18:31:31	26	3377	59.99	54.89	0.00	0
5/12/01	18:31:31	527	3362	49.95	53.74	0.00	0
5/12/01	18:31:32	28	3350	49.95	53.74	0.00	0
5/12/01	18:31:32	528	3333	49.95	52.89	0.00	0
5/12/01	18:31:33	29	3324	49.95	52.89	0.00	0
5/12/01	18:31:33	530	3317	49.95	52.45	0.00	0
5/12/01	18:31:34	30	3311	49.95	52.45	0.00	0
5/12/01	18:31:34	531	3305	49.95	51.49	0.00	0
5/12/01	18:31:35	32	3301	49.95	51.49	0.00	0
5/12/01	18:31:35	533	3297	49.95	51.07	0.00	0
5/12/01	18:31:36	33	3294	49.95	51.07	0.00	0
5/12/01	18:31:36	534	3293	50.01	50.74	0.00	0
5/12/01	18:31:37	35	3288	50.01	50.74	0.00	0
5/12/01	18:31:37	535	3286	50.01	50.57	0.00	0
5/12/01	18:31:38	36	3282	50.01	50.57	95.00	0
5/12/01	18:31:38	537	3277	50.01	50.39	95.00	0
5/12/01	18:31:39	38	3275	50.01	50.39	144.00	0
5/12/01	18:31:39	538	3273	50.01	50.23	144.00	0
5/12/01	18:31:40	39	3270	50.01	50.23	154.00	0
5/12/01	18:31:40	540	3267	50.01	50.20	154.00	0
5/12/01	18:31:41	40	3265	50.01	50.20	140.00	0
5/12/01	18:31:41	541	3264	50.02	50.04	140.00	0
5/12/01	18:31:42	42	3264	50.02	50.04	103.00	0
5/12/01	18:31:42	543	3264	50.02	49.96	103.00	0
5/12/01	18:31:43	43	3263	50.02	49.96	60.00	0
5/12/01	18:31:43	544	3264	50.02	49.96	60.00	0
5/12/01	18:31:44	45	3266	50.02	49.90	2.00	0
5/12/01	18:31:44	546	3267	50.02	49.90	2.00	0
5/12/01	18:31:45	46	3270	50.02	49.87	-31.00	0
5/12/01	18:31:45	547	3273	50.02	49.87	-31.00	0
5/12/01	18:31:46	48	3275	49.98	49.87	-54.00	0
5/12/01	18:31:46	548	3278	49.98	49.87	-54.00	0
5/12/01	18:31:47	49	3280	49.98	49.79	-42.00	0
5/12/01	18:31:47	550	3280	49.98	49.79	-42.00	0
5/12/01	18:31:48	51	3278	49.98	49.88	-6.00	0
5/12/01	18:31:48	551	3275	49.98	49.88	-6.00	0
5/12/01	18:31:49	52	3274	49.98	49.97	23.00	0
5/12/01	18:31:49	553	3272	49.98	49.97	23.00	0
5/12/01	18:31:50	53	3271	49.98	50.04	28.00	0
5/12/01	18:31:50	554	3270	49.98	50.04	28.00	0
5/12/01	18:31:51	55	3271	49.98	50.08	13.00	0
5/12/01	18:31:51	556	3272	49.98	50.08	13.00	0
5/12/01	18:31:52	56	3273	49.98	50.03	0.00	0
5/12/01	18:31:52	557	3273	49.98	50.03	0.00	1
5/12/01	18:31:53	58	3272	49.98	49.95	0.00	1
5/12/01	18:31:53	558	3273	49.98	49.95	3.00	1
5/12/01	18:31:54	59	3273	49.98	49.95	3.00	1
5/12/01	18:31:54	560	3271	49.98	49.95	1.00	1
5/12/01	18:31:55	61	3271	49.98	49.96	1.00	1
5/12/01	18:31:55	561	0	49.98	49.96	0.00	1
5/12/01	18:31:56	62	0	49.99	49.99	0.00	1
5/12/01	18:31:56	563	0	49.99	49.99	0.00	0
5/12/01	18:31:57	64	0	49.99	50.02	0.00	0
5/12/01	18:31:57	564	0	49.99	50.02	0.00	0
5/12/01	18:31:58	65	0	49.99	50.00	0.00	0
5/12/01	18:31:58	566	0	49.99	50.00	0.00	0
5/12/01	18:31:59	66	0	49.99	46.80	0.00	0
5/12/01	18:31:59	567	0	49.99	46.80	0.00	0
5/12/01	18:32:00	68	0	49.99	0.00	0.00	0
5/12/01	18:32:00	569	0	49.99	0.00	0.00	0
5/12/01	18:32:01	69	0	59.96	0.00	0.00	0
5/12/01	18:32:01	570	0	59.96	0.00	0.00	0
5/12/01	18:32:02	71	0	59.96	0.00	0.00	0
5/12/01	18:32:02	571	0	59.96	0.00	0.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match	Close Breaker (Open/Close)
5/12/01	18:32:03	72	0	59.96	0.00	0.00	0
5/12/01	18:32:03	573	0	59.96	0.00	0.00	0
5/12/01	18:32:04	74	0	59.96	0.00	0.00	0
5/12/01	18:32:04	574	0	59.96	0.00	0.00	0
5/12/01	18:32:05	75	0	59.96	0.00	0.00	0
5/12/01	18:32:05	576	0	59.96	0.00	0.00	0
5/12/01	18:32:06	76	0	59.96	0.00	0.00	0
5/12/01	18:32:06	577	0	59.99	0.00	0.00	0
5/12/01	18:32:07	78	0	59.99	0.00	0.00	0
5/12/01	18:32:07	579	0	59.99	0.00	0.00	0
5/12/01	18:32:08	79	0	59.99	0.00	0.00	0
5/12/01	18:32:08	580	0	59.99	0.00	0.00	0
5/12/01	18:32:09	81	100	59.99	0.00	0.00	0
5/12/01	18:32:09	582	300	59.99	0.00	0.00	0
5/12/01	18:32:10	82	500	59.99	0.00	0.00	0
5/12/01	18:32:10	583	700	59.99	0.00	0.00	0
5/12/01	18:32:11	84	1000	59.99	0.00	0.00	0
5/12/01	18:32:11	584	1300	59.99	0.00	0.00	0
5/12/01	18:32:12	85	1500	59.99	0.00	0.00	0
5/12/01	18:32:12	586	1700	59.99	0.00	0.00	0
5/12/01	18:32:13	87	1900	59.99	0.00	0.00	0
5/12/01	18:32:13	587	2200	59.99	0.00	0.00	0
5/12/01	18:32:14	88	2400	59.99	0.00	0.00	0
5/12/01	18:32:14	589	2600	59.99	0.00	0.00	0
5/12/01	18:32:15	89	2800	59.99	0.00	0.00	0
5/12/01	18:32:15	600	3100	59.99	0.00	0.00	0
5/12/01	18:32:16	91	3292	59.99	0.00	0.00	0
5/12/01	18:32:16	592	3444	60.00	0.00	0.00	0
5/12/01	18:32:17	92	3552	60.00	0.00	0.00	0
5/12/01	18:32:17	593	3664	60.00	0.00	0.00	0
5/12/01	18:32:18	94	3713	60.00	0.00	0.00	0
5/12/01	18:32:18	594	3741	60.00	0.00	0.00	0
5/12/01	18:32:19	95	3767	60.00	0.00	0.00	0
5/12/01	18:32:19	596	3801	60.00	42.05	0.00	0
5/12/01	18:32:20	97	3819	60.00	42.05	0.00	0
5/12/01	18:32:20	597	3835	60.00	54.45	0.00	0
5/12/01	18:32:21	98	3849	60.00	54.45	0.00	0
5/12/01	18:32:21	599	3868	59.99	56.76	0.00	0
5/12/01	18:32:22	100	3879	59.99	56.76	0.00	0
5/12/01	18:32:22	600	3889	59.99	57.69	0.00	0
5/12/01	18:32:23	101	3897	59.99	57.69	0.00	0
5/12/01	18:32:23	602	3907	59.99	58.07	0.00	0
5/12/01	18:32:24	102	3912	59.99	58.07	0.00	0
5/12/01	18:32:24	603	3916	59.99	58.36	0.00	0
5/12/01	18:32:25	104	3918	59.99	58.36	0.00	0
5/12/01	18:32:25	605	3920	59.99	59.06	21.00	0
5/12/01	18:32:26	105	3925	59.99	59.06	21.00	0
5/12/01	18:32:26	606	3927	60.01	59.40	-36.00	0
5/12/01	18:32:27	107	3929	60.01	59.40	-36.00	0
5/12/01	18:32:27	607	3932	60.01	59.68	-64.00	0
5/12/01	18:32:28	108	3934	60.01	59.68	-64.00	0
5/12/01	18:32:28	609	3936	60.01	59.79	-64.00	0
5/12/01	18:32:29	110	3938	60.01	59.79	-64.00	0
5/12/01	18:32:29	610	3940	60.01	59.95	-45.00	0
5/12/01	18:32:30	111	3942	60.01	59.95	-45.00	0
5/12/01	18:32:30	612	3940	60.01	60.07	5.00	0
5/12/01	18:32:31	112	3939	60.01	60.07	5.00	0
5/12/01	18:32:31	613	3935	59.96	60.08	5.00	0
5/12/01	18:32:32	114	3933	59.96	60.08	54.00	0
5/12/01	18:32:32	615	3931	59.96	60.09	54.00	0
5/12/01	18:32:33	115	3929	59.96	60.09	60.00	0
5/12/01	18:32:33	616	3927	59.96	60.10	60.00	0
5/12/01	18:32:34	117	3924	59.96	60.10	50.00	0
5/12/01	18:32:34	618	3924	59.96	60.10	50.00	0
5/12/01	18:32:35	118	3932	59.96	59.97	4.00	0
5/12/01	18:32:35	619	3932	59.96	59.97	4.00	0
5/12/01	18:32:36	120	3932	59.96	59.96	-12.00	0
5/12/01	18:32:36	620	3932	59.96	59.96	-12.00	0
5/12/01	18:32:37	121	3933	59.99	59.88	-16.00	0
5/12/01	18:32:37	622	3934	59.99	59.88	-16.00	0
5/12/01	18:32:38	123	3933	59.99	59.93	-12.00	0
5/12/01	18:32:38	623	3932	59.99	59.93	-12.00	0
5/12/01	18:32:39	124	3933	59.99	59.92	-6.00	0
5/12/01	18:32:39	625	3933	59.99	59.92	-6.00	0
5/12/01	18:32:40	125	3933	59.99	60.00	-4.00	0
5/12/01	18:32:40	626	3933	59.99	60.00	-4.00	0
5/12/01	18:32:41	127	3933	59.99	59.96	-2.00	1
5/12/01	18:32:41	628	3933	59.99	59.96	-2.00	1
5/12/01	18:32:42	128	3933	60.00	60.01	0.00	1
5/12/01	18:32:42	629	3933	60.00	60.01	0.00	1
5/12/01	18:32:43	130	3932	60.00	60.07	0.00	0
5/12/01	18:32:43	630	3856	60.00	60.07	0.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match	Close Breaker (Open/Close)
5/12/01	18:32:44	131	3780	60.00	60.02	0.00	0
5/12/01	18:32:44	632	3687	60.00	60.02	0.00	0
5/12/01	18:32:45	133	3633	60.00	59.95	0.00	0
5/12/01	18:32:45	633	3587	60.00	59.95	0.00	0
5/12/01	18:32:46	134	3545	60.00	59.18	0.00	0
5/12/01	18:32:46	635	3493	60.00	59.18	0.00	0
5/12/01	18:32:47	136	3464	50.04	56.78	0.00	0
5/12/01	18:32:47	636	3439	50.04	56.78	0.00	0
5/12/01	18:32:48	137	3417	50.04	55.68	0.00	0
5/12/01	18:32:48	638	3386	50.04	55.68	0.00	0
5/12/01	18:32:49	138	3369	50.04	53.80	0.00	0
5/12/01	18:32:49	639	3356	50.04	53.80	0.00	0
5/12/01	18:32:50	140	3344	50.04	52.45	0.00	0
5/12/01	18:32:50	641	3330	50.04	52.45	0.00	0
5/12/01	18:32:51	141	3323	50.04	52.45	0.00	0
5/12/01	18:32:51	642	3317	50.04	52.45	0.00	0
5/12/01	18:32:52	143	3311	50.00	51.50	0.00	0
5/12/01	18:32:52	643	3304	50.00	51.50	0.00	0
5/12/01	18:32:53	144	3300	50.00	51.50	0.00	0
5/12/01	18:32:53	645	3296	50.00	51.50	0.00	0
5/12/01	18:32:54	146	3292	50.00	50.82	0.00	0
5/12/01	18:32:54	646	3289	50.00	50.82	0.00	0
5/12/01	18:32:55	147	3287	50.00	50.52	0.00	0
5/12/01	18:32:55	648	3287	50.00	50.52	-119.00	0
5/12/01	18:32:56	148	3287	50.00	50.39	-119.00	0
5/12/01	18:32:56	649	3284	50.00	50.39	-42.00	0
5/12/01	18:32:57	150	3279	49.99	50.29	-42.00	0
5/12/01	18:32:57	651	3276	49.99	50.29	22.00	0
5/12/01	18:32:58	151	3274	49.99	50.24	22.00	0
5/12/01	18:32:58	652	3271	49.99	50.24	48.00	0
5/12/01	18:32:59	153	3269	49.99	50.20	48.00	0
5/12/01	18:32:59	654	3267	49.99	50.20	47.00	0
5/12/01	18:33:00	154	3265	49.99	50.10	47.00	0
5/12/01	18:33:00	655	3270	49.99	50.10	24.00	0
5/12/01	18:33:01	156	3273	49.99	50.07	24.00	0
5/12/01	18:33:01	656	3273	49.99	50.07	-9.00	0
5/12/01	18:33:02	157	3273	49.99	50.07	-9.00	0
5/12/01	18:33:02	658	3273	49.99	49.95	-14.00	0
5/12/01	18:33:03	159	3273	49.99	49.95	-14.00	0
5/12/01	18:33:03	659	3273	49.99	49.92	-8.00	0
5/12/01	18:33:04	160	3274	49.99	49.92	-8.00	0
5/12/01	18:33:04	661	3275	49.99	49.94	-10.00	0
5/12/01	18:33:05	161	3274	49.99	49.94	-10.00	0
5/12/01	18:33:05	662	3274	49.99	50.03	-5.00	1
5/12/01	18:33:06	163	3273	49.99	50.03	-5.00	1
5/12/01	18:33:06	664	3273	50.00	50.03	0.00	1
5/12/01	18:33:07	164	3273	50.00	50.03	0.00	1
5/12/01	18:33:07	675	3272	50.00	49.99	7.00	0
5/12/01	18:33:08	166	3271	50.00	49.99	7.00	0
5/12/01	18:33:08	666	3272	50.00	50.01	4.00	0
5/12/01	18:33:09	167	3272	50.00	50.01	4.00	0
5/12/01	18:33:09	668	3273	50.00	50.01	-6.00	0
5/12/01	18:33:10	169	3273	50.00	50.01	-6.00	0
5/12/01	18:33:10	669	0	50.00	50.00	-4.00	0
5/12/01	18:33:11	170	0	50.00	50.00	-4.00	0
5/12/01	18:33:11	671	0	49.98	49.96	0.00	0
5/12/01	18:33:12	172	0	49.98	49.96	0.00	0
5/12/01	18:33:12	672	0	49.98	49.96	0.00	0
5/12/01	18:33:13	173	0	49.98	49.96	0.00	0
5/12/01	18:33:13	674	0	49.98	49.96	0.00	0
5/12/01	18:33:14	174	0	49.98	49.96	0.00	0
5/12/01	18:33:14	675	0	49.98	45.82	0.00	0
5/12/01	18:33:15	176	0	49.98	45.82	0.00	0
5/12/01	18:33:15	677	0	49.98	0.00	0.00	0
5/12/01	18:33:16	177	0	49.98	0.00	0.00	0
5/12/01	18:33:16	678	0	49.97	0.00	0.00	0
5/12/01	18:33:17	179	0	49.97	0.00	0.00	0
5/12/01	18:33:17	679	0	49.97	0.00	0.00	0
5/12/01	18:33:18	180	0	49.97	0.00	0.00	0
5/12/01	18:33:18	681	0	49.97	0.00	0.00	0
5/12/01	18:33:19	182	0	49.97	0.00	0.00	0
5/12/01	18:33:19	682	0	49.97	0.00	0.00	0
5/12/01	18:33:20	183	0	49.97	0.00	0.00	0
5/12/01	18:33:20	684	0	49.97	0.00	0.00	0
5/12/01	18:33:21	184	0	49.97	0.00	0.00	0
5/12/01	18:33:21	685	0	59.98	0.00	0.00	0
5/12/01	18:33:22	186	0	59.98	0.00	0.00	0
5/12/01	18:33:22	687	0	59.98	0.00	0.00	0
5/12/01	18:33:23	187	0	59.98	0.00	0.00	0
5/12/01	18:33:23	688	0	59.98	0.00	0.00	0
5/12/01	18:33:24	189	0	59.98	0.00	0.00	0
5/12/01	18:33:24	690	0	59.98	0.00	0.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match	Close Breaker (Open/Close)
5/12/01	18:33:25	190	0	59.98	0.00	0.00	0
5/12/01	18:33:25	691	0	59.98	0.00	0.00	0
5/12/01	18:33:26	192	0	59.98	0.00	0.00	0
5/12/01	18:33:26	692	0	59.98	0.00	0.00	0
5/12/01	18:33:27	193	0	59.99	0.00	0.00	0
5/12/01	18:33:27	694	0	59.99	0.00	0.00	0
5/12/01	18:33:28	195	0	59.99	0.00	0.00	0
5/12/01	18:33:28	695	0	59.99	0.00	0.00	0
5/12/01	18:33:29	196	0	59.99	0.00	0.00	0
5/12/01	18:33:29	697	0	59.99	0.00	0.00	0
5/12/01	18:33:30	197	0	59.99	0.00	0.00	0
5/12/01	18:33:30	698	0	59.99	0.00	0.00	0
5/12/01	18:33:31	199	0	59.99	0.00	0.00	0
5/12/01	18:33:31	700	0	59.99	0.00	0.00	0
5/12/01	18:33:32	200	100	59.97	0.00	0.00	0
5/12/01	18:33:32	701	400	59.97	0.00	0.00	0
5/12/01	18:33:33	202	600	59.97	0.00	0.00	0
5/12/01	18:33:33	702	800	59.97	0.00	0.00	0
5/12/01	18:33:34	203	1000	59.97	0.00	0.00	0
5/12/01	18:33:34	704	1300	59.97	0.00	0.00	0
5/12/01	18:33:35	205	1500	59.97	0.00	0.00	0
5/12/01	18:33:35	705	1800	59.97	0.00	0.00	0
5/12/01	18:33:36	206	2000	59.97	0.00	0.00	0
5/12/01	18:33:36	707	2200	59.97	0.00	0.00	0
5/12/01	18:33:37	208	2400	59.99	0.00	0.00	0
5/12/01	18:33:37	708	2700	59.99	0.00	0.00	0
5/12/01	18:33:38	209	2900	59.99	0.00	0.00	0
5/12/01	18:33:38	710	3100	59.99	0.00	0.00	0
5/12/01	18:33:39	210	3283	59.99	0.00	0.00	0
5/12/01	18:33:39	711	3490	59.99	0.00	0.00	0
5/12/01	18:33:40	212	3579	59.99	0.00	0.00	0
5/12/01	18:33:40	713	3644	59.99	0.00	0.00	0
5/12/01	18:33:41	213	3696	59.99	0.00	0.00	0
5/12/01	18:33:41	714	3744	59.99	0.00	0.00	0
5/12/01	18:33:42	215	3769	60.02	43.81	0.00	0
5/12/01	18:33:42	715	3792	60.02	43.81	0.00	0
5/12/01	18:33:43	216	3814	60.02	50.07	0.00	0
5/12/01	18:33:43	717	3837	60.02	50.07	0.00	0
5/12/01	18:33:44	218	3851	60.02	57.05	0.00	0
5/12/01	18:33:44	718	3864	60.02	57.05	0.00	0
5/12/01	18:33:45	219	3875	60.02	57.32	0.00	0
5/12/01	18:33:45	720	3889	60.02	57.32	0.00	0
5/12/01	18:33:46	220	3895	60.02	58.25	0.00	0
5/12/01	18:33:46	721	3901	60.02	58.25	0.00	0
5/12/01	18:33:47	222	3905	59.99	58.57	0.00	0
5/12/01	18:33:47	723	3911	59.99	58.57	0.00	0
5/12/01	18:33:48	223	3913	59.99	59.27	0.00	0
5/12/01	18:33:48	724	3915	59.99	59.27	0.00	0
5/12/01	18:33:49	225	3920	59.99	59.55	0.00	0
5/12/01	18:33:49	726	3923	59.99	59.55	-62.00	0
5/12/01	18:33:50	226	3927	59.99	59.66	-62.00	0
5/12/01	18:33:50	737	3931	59.99	59.66	-62.00	0
5/12/01	18:33:51	228	3932	59.99	59.71	-108.00	0
5/12/01	18:33:51	728	3935	59.99	59.71	-114.00	0
5/12/01	18:33:52	229	3937	59.97	59.97	-114.00	0
5/12/01	18:33:52	730	3939	59.97	59.97	-114.00	0
5/12/01	18:33:53	231	3941	59.97	59.97	-91.00	0
5/12/01	18:33:53	731	3943	59.97	59.97	-91.00	0
5/12/01	18:33:54	232	3941	59.97	60.04	-40.00	0
5/12/01	18:33:54	733	3934	59.97	60.04	-40.00	0
5/12/01	18:33:55	233	3931	59.97	60.11	2.00	0
5/12/01	18:33:55	734	3931	59.97	60.11	2.00	0
5/12/01	18:33:56	235	3931	59.97	60.18	5.00	0
5/12/01	18:33:56	736	3932	59.97	60.18	5.00	0
5/12/01	18:33:57	236	3932	59.99	60.03	0.00	1
5/12/01	18:33:57	737	3932	59.99	60.03	0.00	1
5/12/01	18:33:58	238	3932	59.99	59.98	-2.00	1
5/12/01	18:33:58	738	3932	59.99	59.98	-2.00	1
5/12/01	18:33:59	239	3933	59.99	59.95	-5.00	1
5/12/01	18:33:59	740	3933	59.99	59.95	-5.00	1
5/12/01	18:34:00	241	3932	59.99	59.95	-5.00	1
5/12/01	18:34:00	741	3893	59.99	59.96	-5.00	1
5/12/01	18:34:01	242	3815	59.99	59.96	0.00	0
5/12/01	18:34:01	743	3715	59.99	59.98	0.00	0
5/12/01	18:34:02	244	3655	59.99	59.98	0.00	0
5/12/01	18:34:02	744	3604	60.02	60.02	0.00	0
5/12/01	18:34:03	245	3559	60.02	60.02	0.00	0
5/12/01	18:34:03	746	3504	60.02	59.76	0.00	0
5/12/01	18:34:04	246	3473	60.02	59.76	0.00	0
5/12/01	18:34:04	747	3445	60.02	57.33	0.00	0
5/12/01	18:34:05	248	3422	60.02	57.33	0.00	0
5/12/01	18:34:05	749	3391	60.02	53.99	0.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match	Close Breaker (Open/Close)
5/12/01	18:34:06	249	3369	60.02	53.99	0.00	0
5/12/01	18:34:06	750	3357	60.02	53.99	0.00	0
5/12/01	18:34:07	251	3345	60.02	53.99	0.00	0
5/12/01	18:34:07	751	3331	50.00	52.91	0.00	0
5/12/01	18:34:08	252	3323	50.00	52.91	0.00	0
5/12/01	18:34:08	753	3317	50.00	51.61	0.00	0
5/12/01	18:34:09	254	3311	50.00	51.61	0.00	0
5/12/01	18:34:09	754	3305	50.00	51.21	0.00	0
5/12/01	18:34:10	255	3301	50.00	51.21	0.00	0
5/12/01	18:34:10	756	3297	50.00	50.76	0.00	0
5/12/01	18:34:11	256	3293	50.00	50.76	0.00	0
5/12/01	18:34:11	757	3290	50.00	50.61	0.00	0
5/12/01	18:34:12	258	3287	50.00	50.61	0.00	0
5/12/01	18:34:12	759	3288	50.02	50.41	0.00	0
5/12/01	18:34:13	259	3284	50.02	50.41	136.00	0
5/12/01	18:34:13	760	3280	50.02	50.30	136.00	0
5/12/01	18:34:14	261	3282	50.02	50.30	-167.00	0
5/12/01	18:34:14	762	3284	50.02	50.21	-167.00	0
5/12/01	18:34:15	262	3284	50.02	50.21	-118.00	0
5/12/01	18:34:15	763	3284	50.02	50.15	-118.00	0
5/12/01	18:34:16	264	3284	50.02	50.15	-66.00	0
5/12/01	18:34:16	764	3283	50.02	50.16	-66.00	0
5/12/01	18:34:17	265	3282	50.02	50.16	-8.00	0
5/12/01	18:34:17	766	3278	49.97	50.12	-8.00	0
5/12/01	18:34:18	267	3276	49.97	50.12	45.00	0
5/12/01	18:34:18	767	3274	49.97	50.17	45.00	0
5/12/01	18:34:19	268	3272	49.97	50.17	60.00	0
5/12/01	18:34:19	779	3269	49.97	50.10	60.00	0
5/12/01	18:34:20	269	3267	49.97	50.10	50.00	0
5/12/01	18:34:20	770	3265	49.97	50.04	50.00	0
5/12/01	18:34:21	271	3263	49.97	50.04	15.00	0
5/12/01	18:34:21	772	3270	49.97	50.04	15.00	0
5/12/01	18:34:22	272	3273	49.97	49.97	-23.00	0
5/12/01	18:34:22	773	3275	49.97	49.97	-23.00	0
5/12/01	18:34:23	274	3276	49.99	49.88	-25.00	0
5/12/01	18:34:23	774	3277	49.99	49.88	-25.00	0
5/12/01	18:34:24	275	3275	49.99	49.82	-1.00	0
5/12/01	18:34:24	776	3275	49.99	49.82	-1.00	0
5/12/01	18:34:25	277	3274	49.99	50.05	7.00	0
5/12/01	18:34:25	777	3272	49.99	50.05	7.00	0
5/12/01	18:34:26	278	3273	49.99	50.03	10.00	0
5/12/01	18:34:26	779	3273	49.99	50.03	10.00	0
5/12/01	18:34:27	280	3273	49.99	50.10	7.00	0
5/12/01	18:34:27	780	3272	49.99	50.10	7.00	0
5/12/01	18:34:28	281	3272	49.99	50.03	6.00	0
5/12/01	18:34:28	782	3272	49.99	50.03	6.00	0
5/12/01	18:34:29	282	3273	49.99	49.97	6.00	0
5/12/01	18:34:29	783	3273	49.99	49.97	-1.00	1
5/12/01	18:34:30	284	3273	49.99	49.98	-1.00	1
5/12/01	18:34:30	785	3272	49.99	49.98	2.00	1
5/12/01	18:34:31	285	0	49.99	49.99	2.00	1
5/12/01	18:34:31	786	0	49.99	49.99	0.00	0
5/12/01	18:34:32	287	0	49.99	50.00	0.00	0
5/12/01	18:34:32	787	0	49.99	50.00	0.00	0
5/12/01	18:34:33	288	0	49.98	49.99	0.00	0
5/12/01	18:34:33	789	0	49.98	49.99	0.00	0
5/12/01	18:34:34	290	0	49.98	47.47	0.00	0
5/12/01	18:34:34	790	0	49.98	47.47	0.00	0
5/12/01	18:34:35	291	0	49.98	40.56	0.00	0
5/12/01	18:34:35	792	0	49.98	40.56	0.00	0
5/12/01	18:34:36	292	0	49.98	0.00	0.00	0
5/12/01	18:34:36	793	0	49.98	0.00	0.00	0
5/12/01	18:34:37	294	0	49.98	0.00	0.00	0
5/12/01	18:34:37	795	0	49.98	0.00	0.00	0
5/12/01	18:34:38	295	0	50.01	0.00	0.00	0
5/12/01	18:34:38	796	0	50.01	0.00	0.00	0
5/12/01	18:34:39	297	0	50.01	0.00	0.00	0
5/12/01	18:34:39	798	0	50.01	0.00	0.00	0
5/12/01	18:34:40	298	0	50.01	0.00	0.00	0
5/12/01	18:34:40	799	0	50.01	0.00	0.00	0
5/12/01	18:34:41	300	0	50.01	0.00	0.00	0
5/12/01	18:34:41	800	0	50.01	0.00	0.00	0
5/12/01	18:34:42	301	0	50.01	0.00	0.00	0
5/12/01	18:34:42	802	0	50.01	0.00	0.00	0
5/12/01	18:34:43	303	0	59.98	0.00	0.00	0
5/12/01	18:34:43	803	0	59.98	0.00	0.00	0
5/12/01	18:34:44	304	0	59.98	0.00	0.00	0
5/12/01	18:34:44	805	0	59.98	0.00	0.00	0
5/12/01	18:34:45	305	0	59.98	0.00	0.00	0
5/12/01	18:34:45	806	0	59.98	0.00	0.00	0
5/12/01	18:34:46	307	0	59.98	0.00	0.00	0
5/12/01	18:34:46	808	0	59.98	0.00	0.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match	Close Breaker (Open/Close)
5/12/01	18:34:47	308	0	59.98	0.00	0.00	0
5/12/01	18:34:47	809	200	59.98	0.00	0.00	0
5/12/01	18:34:48	310	400	59.99	0.00	0.00	0
5/12/01	18:34:48	810	600	59.99	0.00	0.00	0
5/12/01	18:34:49	311	800	59.99	0.00	0.00	0
5/12/01	18:34:49	812	1100	59.99	0.00	0.00	0
5/12/01	18:34:50	313	1300	59.99	0.00	0.00	0
5/12/01	18:34:50	813	1500	59.99	0.00	0.00	0
5/12/01	18:34:51	314	1700	59.99	0.00	0.00	0
5/12/01	18:34:51	815	2000	59.99	0.00	0.00	0
5/12/01	18:34:52	316	2200	59.99	0.00	0.00	0
5/12/01	18:34:52	816	2400	59.99	0.00	0.00	0
5/12/01	18:34:53	317	2600	59.99	0.00	0.00	0
5/12/01	18:34:53	818	2900	59.99	0.00	0.00	0
5/12/01	18:34:54	318	3100	59.99	0.00	0.00	0
5/12/01	18:34:54	819	3279	59.99	0.00	0.00	0
5/12/01	18:34:55	320	3412	59.99	0.00	0.00	0
5/12/01	18:34:55	821	3547	59.99	0.00	0.00	0
5/12/01	18:34:56	321	3615	59.99	41.50	0.00	0
5/12/01	18:34:56	822	3664	59.99	41.50	0.00	0
5/12/01	18:34:57	323	3698	59.99	47.74	0.00	0
5/12/01	18:34:57	823	3743	59.99	47.74	0.00	0
5/12/01	18:34:58	324	3769	60.03	53.93	0.00	0
5/12/01	18:34:58	825	3792	60.03	53.93	0.00	0
5/12/01	18:34:59	326	3810	60.03	56.24	0.00	0
5/12/01	18:34:59	826	3836	60.03	56.24	0.00	0
5/12/01	18:35:00	327	3851	60.03	56.68	0.00	0
5/12/01	18:35:00	828	3865	60.03	56.68	0.00	0
5/12/01	18:35:01	328	3877	60.03	57.67	0.00	0
5/12/01	18:35:01	829	3887	60.03	57.67	0.00	0
5/12/01	18:35:02	330	3893	60.03	58.06	0.00	0
5/12/01	18:35:02	831	3898	60.03	58.06	0.00	0
5/12/01	18:35:03	331	3902	60.01	59.21	0.00	0
5/12/01	18:35:03	832	3907	60.01	59.21	0.00	0
5/12/01	18:35:04	333	3909	60.01	59.43	0.00	0
5/12/01	18:35:04	834	3912	60.01	59.43	0.00	0
5/12/01	18:35:05	334	3914	60.01	59.53	0.00	0
5/12/01	18:35:05	835	3919	60.01	59.53	0.00	0
5/12/01	18:35:06	336	3919	60.01	59.62	158.00	0
5/12/01	18:35:06	836	3919	60.01	59.62	158.00	0
5/12/01	18:35:07	337	3923	60.01	59.79	0.00	0
5/12/01	18:35:07	838	3923	60.01	59.79	0.00	0
5/12/01	18:35:08	339	3923	60.00	59.79	41.00	0
5/12/01	18:35:08	839	3923	60.00	59.80	41.00	0
5/12/01	18:35:09	340	3928	60.00	59.80	-17.00	0
5/12/01	18:35:09	841	3931	60.00	59.87	-17.00	0
5/12/01	18:35:10	341	3933	60.00	59.87	-40.00	0
5/12/01	18:35:10	842	3936	60.00	59.87	-40.00	0
5/12/01	18:35:11	343	3937	60.00	59.87	-31.00	0
5/12/01	18:35:11	844	3936	60.00	59.87	-31.00	0
5/12/01	18:35:12	344	3936	60.00	59.87	-6.00	0
5/12/01	18:35:12	845	3930	59.99	60.05	-6.00	0
5/12/01	18:35:13	346	3930	59.99	60.05	5.00	0
5/12/01	18:35:13	846	3930	59.99	60.06	5.00	1
5/12/01	18:35:14	347	3931	59.99	60.06	-2.00	1
5/12/01	18:35:14	848	3932	59.99	60.06	-2.00	1
5/12/01	18:35:15	349	3933	59.99	60.06	-6.00	1
5/12/01	18:35:15	849	3933	59.99	60.01	-6.00	0
5/12/01	18:35:16	350	3933	59.99	60.01	-6.00	0
5/12/01	18:35:16	851	3933	59.99	60.01	-6.00	0
5/12/01	18:35:17	352	3852	59.99	60.01	-6.00	0
5/12/01	18:35:17	852	3774	59.99	60.08	0.00	0
5/12/01	18:35:18	353	3710	59.99	60.08	0.00	0
5/12/01	18:35:18	854	3624	60.04	60.04	0.00	0
5/12/01	18:35:19	354	3578	60.04	60.04	0.00	0
5/12/01	18:35:19	855	3538	60.04	60.04	0.00	0
5/12/01	18:35:20	356	3502	60.04	60.04	0.00	0
5/12/01	18:35:20	857	3460	60.04	58.06	0.00	0
5/12/01	18:35:21	357	3432	60.04	58.06	0.00	0
5/12/01	18:35:21	858	3400	60.04	55.92	0.00	0
5/12/01	18:35:22	359	3382	60.04	55.92	0.00	0
5/12/01	18:35:22	859	3365	60.04	54.58	0.00	0
5/12/01	18:35:23	360	3350	60.04	54.58	0.00	0
5/12/01	18:35:23	861	3335	49.99	53.55	0.00	0
5/12/01	18:35:24	362	3327	49.99	53.55	0.00	0
5/12/01	18:35:24	862	3321	49.99	52.52	0.00	0
5/12/01	18:35:25	363	3315	49.99	52.52	0.00	0
5/12/01	18:35:25	864	3307	49.99	52.11	0.00	0
5/12/01	18:35:26	364	3303	49.99	52.11	0.00	0
5/12/01	18:35:26	865	3299	49.99	51.19	0.00	0
5/12/01	18:35:27	366	3295	49.99	51.19	0.00	0
5/12/01	18:35:27	867	3292	49.99	50.80	0.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match	Close Breaker (Open/Close)
5/12/01	18:35:28	367	3289	49.99	50.80	0.00	0
5/12/01	18:35:28	868	3287	49.98	50.57	-168.00	0
5/12/01	18:35:29	369	3287	49.98	50.57	-168.00	0
5/12/01	18:35:29	870	3286	49.98	50.45	-90.00	0
5/12/01	18:35:30	370	3286	49.98	50.45	-90.00	0
5/12/01	18:35:30	871	3283	49.98	50.36	-16.00	0
5/12/01	18:35:31	372	3281	49.98	50.36	-16.00	0
5/12/01	18:35:31	872	3276	49.98	50.22	41.00	0
5/12/01	18:35:32	373	3273	49.98	50.22	41.00	0
5/12/01	18:35:32	874	3271	49.98	50.16	53.00	0
5/12/01	18:35:33	375	3269	49.98	50.16	53.00	0
5/12/01	18:35:33	875	3266	49.97	50.18	42.00	0
5/12/01	18:35:34	376	3266	49.97	50.18	42.00	0
5/12/01	18:35:34	877	3267	49.97	50.12	4.00	0
5/12/01	18:35:35	377	3267	49.97	50.12	4.00	0
5/12/01	18:35:35	878	3272	49.97	50.01	4.00	0
5/12/01	18:35:36	379	3274	49.97	50.01	-34.00	0
5/12/01	18:35:36	880	3276	49.97	49.92	-34.00	0
5/12/01	18:35:37	380	3277	49.97	49.92	-28.00	0
5/12/01	18:35:37	881	3279	49.97	49.89	-28.00	0
5/12/01	18:35:38	382	3275	49.97	49.89	-11.00	0
5/12/01	18:35:38	882	3273	49.97	49.89	-11.00	0
5/12/01	18:35:39	383	3272	49.98	50.02	7.00	0
5/12/01	18:35:39	884	3272	49.98	50.02	7.00	0
5/12/01	18:35:40	385	3273	49.98	50.04	2.00	1
5/12/01	18:35:40	885	3274	49.98	50.04	2.00	1
5/12/01	18:35:41	386	3274	49.98	50.01	-3.00	1
5/12/01	18:35:41	887	3274	49.98	50.01	-3.00	1
5/12/01	18:35:42	388	3274	49.98	49.96	2.00	1
5/12/01	18:35:42	888	0	49.98	49.96	2.00	1
5/12/01	18:35:43	389	0	50.00	49.98	0.00	0
5/12/01	18:35:43	890	0	50.00	49.98	0.00	0
5/12/01	18:35:44	390	0	50.00	49.99	0.00	0
5/12/01	18:35:44	891	0	50.00	49.99	0.00	0
5/12/01	18:35:45	392	0	50.00	50.00	0.00	0
5/12/01	18:35:45	893	0	50.00	50.00	0.00	0
5/12/01	18:35:46	393	0	50.00	44.98	0.00	0
5/12/01	18:35:46	894	0	50.00	44.98	0.00	0
5/12/01	18:35:47	395	0	50.00	0.00	0.00	0
5/12/01	18:35:47	895	0	50.00	0.00	0.00	0
5/12/01	18:35:48	396	0	49.97	0.00	0.00	0
5/12/01	18:35:48	897	0	49.97	0.00	0.00	0
5/12/01	18:35:49	398	0	49.97	0.00	0.00	0
5/12/01	18:35:49	898	0	49.97	0.00	0.00	0
5/12/01	18:35:50	399	0	49.97	0.00	0.00	0
5/12/01	18:35:50	900	0	49.97	0.00	0.00	0
5/12/01	18:35:51	400	0	49.97	0.00	0.00	0
5/12/01	18:35:51	901	0	49.97	0.00	0.00	0
5/12/01	18:35:52	402	0	49.97	0.00	0.00	0
5/12/01	18:35:52	903	0	49.97	0.00	0.00	0
5/12/01	18:35:53	403	0	59.99	0.00	0.00	0
5/12/01	18:35:53	904	0	59.99	0.00	0.00	0
5/12/01	18:35:54	405	0	59.99	0.00	0.00	0
5/12/01	18:35:54	906	0	59.99	0.00	0.00	0
5/12/01	18:35:55	406	0	59.99	0.00	0.00	0
5/12/01	18:35:55	907	0	59.99	0.00	0.00	0
5/12/01	18:35:56	408	0	59.99	0.00	0.00	0
5/12/01	18:35:56	908	0	59.99	0.00	0.00	0
5/12/01	18:35:57	409	0	59.99	0.00	0.00	0
5/12/01	18:35:57	910	0	59.99	0.00	0.00	0
5/12/01	18:35:58	411	0	59.99	0.00	0.00	0
5/12/01	18:35:58	911	0	59.99	0.00	0.00	0
5/12/01	18:35:59	412	0	59.99	0.00	0.00	0
5/12/01	18:35:59	913	0	59.99	0.00	0.00	0
5/12/01	18:36:00	413	0	59.99	0.00	0.00	0
5/12/01	18:36:00	914	0	59.99	0.00	0.00	0
5/12/01	18:36:01	415	0	59.99	0.00	0.00	0
5/12/01	18:36:01	916	0	59.99	0.00	0.00	0
5/12/01	18:36:02	416	100	59.99	0.00	0.00	0
5/12/01	18:36:02	917	300	59.99	0.00	0.00	0
5/12/01	18:36:03	418	500	60.01	0.00	0.00	0
5/12/01	18:36:03	918	800	60.01	0.00	0.00	0
5/12/01	18:36:04	419	1000	60.01	0.00	0.00	0
5/12/01	18:36:04	920	1200	60.01	0.00	0.00	0
5/12/01	18:36:05	421	1400	60.01	0.00	0.00	0
5/12/01	18:36:05	921	1700	60.01	0.00	0.00	0
5/12/01	18:36:06	422	1900	60.01	0.00	0.00	0
5/12/01	18:36:06	923	2100	60.01	0.00	0.00	0
5/12/01	18:36:07	424	2300	60.01	0.00	0.00	0
5/12/01	18:36:07	924	2600	60.01	0.00	0.00	0
5/12/01	18:36:08	425	2800	59.99	0.00	0.00	0
5/12/01	18:36:08	926	3100	59.99	0.00	0.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match	Close Breaker (Open/Close)
5/12/01	18:36:09	426	3291	59.99	0.00	0.00	0
5/12/01	18:36:09	927	3492	59.99	0.00	0.00	0
5/12/01	18:36:10	428	3585	59.99	0.00	0.00	0
5/12/01	18:36:10	929	3653	59.99	0.00	0.00	0
5/12/01	18:36:11	429	3700	59.99	40.99	0.00	0
5/12/01	18:36:11	930	3745	59.99	40.99	0.00	0
5/12/01	18:36:12	431	3770	59.99	47.80	0.00	0
5/12/01	18:36:12	931	3792	59.99	47.80	0.00	0
5/12/01	18:36:13	432	3812	60.00	53.99	0.00	0
5/12/01	18:36:13	933	3841	60.00	53.99	0.00	0
5/12/01	18:36:14	434	3853	60.00	56.32	0.00	0
5/12/01	18:36:14	934	3864	60.00	56.32	0.00	0
5/12/01	18:36:15	435	3873	60.00	57.38	0.00	0
5/12/01	18:36:15	936	3885	60.00	57.38	0.00	0
5/12/01	18:36:16	436	3891	60.00	57.73	0.00	0
5/12/01	18:36:16	937	3896	60.00	57.73	0.00	0
5/12/01	18:36:17	438	3900	60.00	59.03	0.00	0
5/12/01	18:36:17	939	3906	60.00	59.03	0.00	0
5/12/01	18:36:18	439	3910	60.01	59.27	0.00	0
5/12/01	18:36:18	940	3912	60.01	59.27	0.00	0
5/12/01	18:36:19	441	3914	60.01	59.53	0.00	0
5/12/01	18:36:19	942	3917	60.01	59.53	0.00	0
5/12/01	18:36:20	442	3921	60.01	59.56	0.00	0
5/12/01	18:36:20	943	3925	60.01	59.56	-156.00	0
5/12/01	18:36:21	444	3928	60.01	59.56	-156.00	0
5/12/01	18:36:21	944	3928	60.01	59.67	168.00	0
5/12/01	18:36:22	445	3925	60.01	59.67	168.00	0
5/12/01	18:36:22	946	3923	60.01	59.80	138.00	0
5/12/01	18:36:23	447	3921	60.01	59.80	138.00	0
5/12/01	18:36:23	947	3921	59.98	59.91	90.00	0
5/12/01	18:36:24	448	3921	59.98	59.91	90.00	0
5/12/01	18:36:24	949	3921	59.98	59.93	31.00	0
5/12/01	18:36:25	449	3923	59.98	59.93	31.00	0
5/12/01	18:36:25	960	3925	59.98	59.83	-16.00	0
5/12/01	18:36:26	451	3932	59.98	59.83	-16.00	0
5/12/01	18:36:26	952	3934	59.98	59.83	-38.00	0
5/12/01	18:36:27	452	3936	59.98	59.83	-38.00	0
5/12/01	18:36:27	953	3937	59.98	59.82	-21.00	0
5/12/01	18:36:28	454	3935	59.98	59.82	-21.00	0
5/12/01	18:36:28	954	3935	60.06	60.00	-21.00	0
5/12/01	18:36:29	455	3933	60.06	60.00	7.00	0
5/12/01	18:36:29	956	3932	60.06	60.07	7.00	0
5/12/01	18:36:30	457	3932	60.06	60.07	16.00	0
5/12/01	18:36:30	957	3932	60.06	60.16	16.00	0
5/12/01	18:36:31	458	3932	60.06	60.16	15.00	0
5/12/01	18:36:31	959	3932	60.06	60.03	15.00	0
5/12/01	18:36:32	460	3932	60.06	60.03	11.00	0
5/12/01	18:36:32	960	3932	60.06	59.96	11.00	0
5/12/01	18:36:33	461	3932	60.06	59.96	9.00	0
5/12/01	18:36:33	962	3932	60.00	60.00	9.00	0
5/12/01	18:36:34	462	3932	60.00	60.00	7.00	0
5/12/01	18:36:34	963	3932	60.00	60.00	7.00	0
5/12/01	18:36:35	464	3932	60.00	60.00	5.00	1
5/12/01	18:36:35	965	3932	60.00	60.01	5.00	1
5/12/01	18:36:36	465	3932	60.00	60.01	3.00	1
5/12/01	18:36:36	966	3932	60.00	59.99	3.00	1
5/12/01	18:36:37	467	3932	60.00	59.99	2.00	0
5/12/01	18:36:37	967	3854	60.00	60.00	2.00	0
5/12/01	18:36:38	468	3747	60.00	60.00	0.00	0
5/12/01	18:36:38	969	3686	59.99	60.02	0.00	0
5/12/01	18:36:39	470	3634	59.99	60.02	0.00	0
5/12/01	18:36:39	970	3588	59.99	59.99	0.00	0
5/12/01	18:36:40	471	3547	59.99	59.99	0.00	0
5/12/01	18:36:40	972	3495	59.99	58.79	0.00	0
5/12/01	18:36:41	472	3465	59.99	58.79	0.00	0
5/12/01	18:36:41	973	3440	59.99	56.19	0.00	0
5/12/01	18:36:42	474	3408	59.99	56.19	0.00	0
5/12/01	18:36:42	975	3388	59.99	54.75	0.00	0
5/12/01	18:36:43	475	3369	59.99	54.75	0.00	0
5/12/01	18:36:43	976	3357	49.98	53.72	0.00	0
5/12/01	18:36:44	477	3341	49.98	53.72	0.00	0
5/12/01	18:36:44	978	3332	49.98	52.69	0.00	0
5/12/01	18:36:45	478	3324	49.98	52.69	0.00	0
5/12/01	18:36:45	979	3317	49.98	51.81	0.00	0
5/12/01	18:36:46	480	3309	49.98	51.81	0.00	0
5/12/01	18:36:46	980	3305	49.98	51.29	0.00	0
5/12/01	18:36:47	481	3301	49.98	51.29	0.00	0
5/12/01	18:36:47	982	3297	49.98	50.92	0.00	0
5/12/01	18:36:48	483	3293	49.98	50.92	0.00	0
5/12/01	18:36:48	983	3291	50.03	50.66	0.00	0
5/12/01	18:36:49	484	3289	50.03	50.66	0.00	0
5/12/01	18:36:49	985	3286	50.03	50.43	0.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match	Close Breaker (Open/Close)
5/12/01	18:36:50	485	3284	50.03	50.43	66.00	0
5/12/01	18:36:50	986	3280	50.03	50.37	66.00	0
5/12/01	18:36:51	487	3277	50.03	50.37	133.00	0
5/12/01	18:36:51	988	3275	50.03	50.28	133.00	0
5/12/01	18:36:52	488	3272	50.03	50.28	158.00	0
5/12/01	18:36:52	989	3270	50.03	50.22	158.00	0
5/12/01	18:36:53	490	3268	50.03	50.22	156.00	0
5/12/01	18:36:53	990	3266	50.00	50.11	156.00	0
5/12/01	18:36:54	491	3264	50.00	50.11	131.00	0
5/12/01	18:36:54	992	3263	50.00	50.01	131.00	0
5/12/01	18:36:55	503	3263	50.00	50.01	81.00	0
5/12/01	18:36:55	993	3263	50.00	49.96	81.00	0
5/12/01	18:36:56	494	3266	50.00	49.96	12.00	0
5/12/01	18:36:56	995	3268	50.00	49.96	12.00	0
5/12/01	18:36:57	496	3272	50.00	49.86	-30.00	0
5/12/01	18:36:57	996	3274	50.00	49.86	-30.00	0
5/12/01	18:36:58	497	3277	50.00	49.80	-35.00	0
5/12/01	18:36:58	998	3278	50.00	49.80	-35.00	0
5/12/01	18:36:59	498	3277	50.02	49.81	-15.00	0
5/12/01	18:36:59	999	3277	50.02	49.81	-15.00	0
5/12/01	18:37:00	500	3270	50.02	49.95	8.00	0
5/12/01	18:37:01	1	3269	50.02	49.95	8.00	0
5/12/01	18:37:01	501	3270	50.02	50.02	1.00	0
5/12/01	18:37:02	2	3271	50.02	50.02	1.00	0
5/12/01	18:37:02	503	3272	50.02	50.14	1.00	0
5/12/01	18:37:03	3	3274	50.02	50.14	-11.00	0
5/12/01	18:37:03	504	3274	50.02	50.05	-11.00	0
5/12/01	18:37:04	5	3274	50.02	50.05	-14.00	0
5/12/01	18:37:04	506	3274	49.98	49.92	-14.00	0
5/12/01	18:37:05	6	3273	49.98	49.92	-6.00	0
5/12/01	18:37:05	507	3273	49.98	49.94	-6.00	0
5/12/01	18:37:06	8	3273	49.98	49.94	-1.00	0
5/12/01	18:37:06	508	3273	49.98	49.96	-1.00	1
5/12/01	18:37:07	9	3273	49.98	49.96	3.00	1
5/12/01	18:37:07	510	3272	49.98	50.01	3.00	1
5/12/01	18:37:08	11	0	49.98	50.01	2.00	1
5/12/01	18:37:08	511	0	49.98	49.99	2.00	0
5/12/01	18:37:09	12	0	49.98	49.99	0.00	0
5/12/01	18:37:09	513	0	49.99	50.02	0.00	0
5/12/01	18:37:10	14	0	49.99	50.02	0.00	0
5/12/01	18:37:10	514	0	49.99	49.96	0.00	0
5/12/01	18:37:11	15	0	49.99	49.96	0.00	0
5/12/01	18:37:11	516	0	49.99	47.51	0.00	0
5/12/01	18:37:12	16	0	49.99	47.51	0.00	0
5/12/01	18:37:12	517	0	49.99	41.16	0.00	0
5/12/01	18:37:13	18	0	49.99	41.16	0.00	0
5/12/01	18:37:13	519	0	49.99	41.16	0.00	0
5/12/01	18:37:14	19	0	49.99	0.00	0.00	0
5/12/01	18:37:14	520	0	49.99	0.00	0.00	0
5/12/01	18:37:15	21	0	59.98	0.00	0.00	0
5/12/01	18:37:15	521	0	59.98	0.00	0.00	0
5/12/01	18:37:16	22	0	59.98	0.00	0.00	0
5/12/01	18:37:16	523	0	59.98	0.00	0.00	0
5/12/01	18:37:17	24	0	59.98	0.00	0.00	0
5/12/01	18:37:17	524	0	59.98	0.00	0.00	0
5/12/01	18:37:18	25	0	59.98	0.00	0.00	0
5/12/01	18:37:18	526	0	59.98	0.00	0.00	0
5/12/01	18:37:19	26	0	59.98	0.00	0.00	0
5/12/01	18:37:19	527	0	59.98	0.00	0.00	0
5/12/01	18:37:20	28	0	59.96	0.00	0.00	0
5/12/01	18:37:20	529	0	59.96	0.00	0.00	0
5/12/01	18:37:21	29	0	59.96	0.00	0.00	0
5/12/01	18:37:21	530	0	59.96	0.00	0.00	0
5/12/01	18:37:22	31	0	59.96	0.00	0.00	0
5/12/01	18:37:22	532	0	59.96	0.00	0.00	0
5/12/01	18:37:23	32	0	59.96	0.00	0.00	0
5/12/01	18:37:23	533	0	59.96	0.00	0.00	0
5/12/01	18:37:24	34	0	59.96	0.00	0.00	0
5/12/01	18:37:24	534	0	59.96	0.00	0.00	0
5/12/01	18:37:25	35	0	59.99	0.00	0.00	0
5/12/01	18:37:25	536	0	59.99	0.00	0.00	0
5/12/01	18:37:26	37	0	59.99	0.00	0.00	0
5/12/01	18:37:26	537	0	59.99	0.00	0.00	0
5/12/01	18:37:27	38	0	59.99	0.00	0.00	0
5/12/01	18:37:27	539	0	59.99	0.00	0.00	0
5/12/01	18:37:28	39	200	59.99	0.00	0.00	0
5/12/01	18:37:28	540	500	59.99	0.00	0.00	0
5/12/01	18:37:29	41	700	59.99	0.00	0.00	0
5/12/01	18:37:29	542	900	59.99	0.00	0.00	0
5/12/01	18:37:30	42	1200	59.98	0.00	0.00	0
5/12/01	18:37:30	543	1500	59.98	0.00	0.00	0
5/12/01	18:37:31	44	1700	59.98	0.00	0.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match	Close Breaker (Open/Close)
5/12/01	18:37:31	544	1900	59.98	0.00	0.00	0
5/12/01	18:37:32	45	2100	59.98	0.00	0.00	0
5/12/01	18:37:32	546	2400	59.98	0.00	0.00	0
5/12/01	18:37:33	47	2600	59.98	0.00	0.00	0
5/12/01	18:37:33	547	2800	59.98	0.00	0.00	0
5/12/01	18:37:34	48	3000	59.98	0.00	0.00	0
5/12/01	18:37:34	549	3288	59.98	0.00	0.00	0
5/12/01	18:37:35	50	3430	59.99	0.00	0.00	0
5/12/01	18:37:35	550	3531	59.99	0.00	0.00	0
5/12/01	18:37:36	51	3611	59.99	0.00	0.00	0
5/12/01	18:37:36	552	3688	59.99	0.00	0.00	0
5/12/01	18:37:37	52	3719	59.99	0.00	0.00	0
5/12/01	18:37:37	553	3750	59.99	0.00	0.00	0
5/12/01	18:37:38	54	3773	59.99	43.84	0.00	0
5/12/01	18:37:38	555	3805	59.99	43.84	0.00	0
5/12/01	18:37:39	55	3824	59.99	55.58	0.00	0
5/12/01	18:37:39	556	3838	59.99	55.58	0.00	0
5/12/01	18:37:40	57	3850	60.01	56.74	0.00	0
5/12/01	18:37:40	557	3866	60.01	56.74	0.00	0
5/12/01	18:37:41	58	3875	60.01	57.25	0.00	0
5/12/01	18:37:41	559	3882	60.01	57.25	0.00	0
5/12/01	18:37:42	60	3888	60.01	58.26	0.00	0
5/12/01	18:37:42	560	3897	60.01	58.26	0.00	0
5/12/01	18:37:43	61	3902	60.01	58.65	0.00	0
5/12/01	18:37:43	562	3906	60.01	58.65	0.00	0
5/12/01	18:37:44	62	3910	60.01	58.90	0.00	0
5/12/01	18:37:44	563	3913	60.01	58.90	0.00	0
5/12/01	18:37:45	64	3916	59.96	59.42	0.00	0
5/12/01	18:37:45	565	3918	59.96	59.42	0.00	0
5/12/01	18:37:46	65	3920	59.96	59.60	0.00	0
5/12/01	18:37:46	566	3921	59.96	59.60	0.00	0
5/12/01	18:37:47	67	3920	59.96	59.67	0.00	0
5/12/01	18:37:47	568	3919	59.96	59.67	78.00	0
5/12/01	18:37:48	68	3919	59.96	59.70	78.00	0
5/12/01	18:37:48	569	3921	59.96	59.70	0.00	0
5/12/01	18:37:49	70	3924	59.96	59.81	0.00	0
5/12/01	18:37:49	570	3928	59.96	59.81	-53.00	0
5/12/01	18:37:50	71	3931	59.99	59.86	-53.00	0
5/12/01	18:37:50	572	3934	59.99	59.86	-85.00	0
5/12/01	18:37:51	73	3936	59.99	59.81	-85.00	0
5/12/01	18:37:51	573	3938	59.99	59.81	-80.00	0
5/12/01	18:37:52	74	3940	59.99	59.90	-80.00	0
5/12/01	18:37:52	575	3941	59.99	59.90	-46.00	0
5/12/01	18:37:53	75	3938	59.99	59.99	-46.00	0
5/12/01	18:37:53	576	3932	59.99	59.99	10.00	0
5/12/01	18:37:54	77	3931	59.99	60.02	10.00	0
5/12/01	18:37:54	578	3931	59.99	60.02	14.00	0
5/12/01	18:37:55	78	3931	59.99	60.13	14.00	0
5/12/01	18:37:55	579	3931	59.99	60.13	9.00	0
5/12/01	18:37:56	80	3931	59.99	59.98	9.00	0
5/12/01	18:37:56	580	3931	59.99	59.98	3.00	0
5/12/01	18:37:57	81	3931	59.99	59.98	3.00	1
5/12/01	18:37:57	582	3931	59.99	60.00	0.00	1
5/12/01	18:37:58	83	3931	59.99	60.00	0.00	1
5/12/01	18:37:58	583	3932	59.99	59.97	-5.00	1
5/12/01	18:37:59	84	3854	59.99	59.97	-5.00	0
5/12/01	18:37:59	595	3779	60.04	60.04	0.00	0
5/12/01	18:38:00	86	3715	60.04	60.04	0.00	0
5/12/01	18:38:00	586	3659	60.04	59.97	0.00	0
5/12/01	18:38:01	87	3587	60.04	59.97	0.00	0
5/12/01	18:38:01	588	3547	60.04	59.91	0.00	0
5/12/01	18:38:02	88	3511	60.04	59.91	0.00	0
5/12/01	18:38:02	589	3466	60.04	57.60	0.00	0
5/12/01	18:38:03	90	3441	60.04	57.60	0.00	0
5/12/01	18:38:03	591	3419	60.04	55.78	0.00	0
5/12/01	18:38:04	91	3399	60.04	55.78	0.00	0
5/12/01	18:38:04	592	3370	50.01	53.94	0.00	0
5/12/01	18:38:05	93	3358	50.01	53.94	0.00	0
5/12/01	18:38:05	593	3347	50.01	52.93	0.00	0
5/12/01	18:38:06	94	3337	50.01	52.93	0.00	0
5/12/01	18:38:06	595	3324	50.01	52.59	0.00	0
5/12/01	18:38:07	96	3318	50.01	52.59	0.00	0
5/12/01	18:38:07	596	3312	50.01	51.52	0.00	0
5/12/01	18:38:08	97	3306	50.01	51.52	0.00	0
5/12/01	18:38:08	598	3300	50.01	51.16	0.00	0
5/12/01	18:38:09	98	3296	50.01	51.16	0.00	0
5/12/01	18:38:09	599	3294	49.98	50.84	0.00	0
5/12/01	18:38:10	100	3292	49.98	50.84	0.00	0
5/12/01	18:38:10	601	3289	49.98	50.58	0.00	0
5/12/01	18:38:11	101	3287	49.98	50.58	0.00	0
5/12/01	18:38:11	602	3283	49.98	50.47	0.00	0
5/12/01	18:38:12	103	3277	49.98	50.47	155.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match	Close Breaker (Open/Close)
5/12/01	18:38:12	604	3276	49.98	50.34	155.00	0
5/12/01	18:38:13	104	3277	49.98	50.34	-175.00	0
5/12/01	18:38:13	605	3280	49.98	50.27	-175.00	0
5/12/01	18:38:14	106	3282	49.98	50.27	-157.00	0
5/12/01	18:38:14	606	3283	49.98	50.14	-157.00	0
5/12/01	18:38:15	107	3284	49.98	50.14	-112.00	0
5/12/01	18:38:15	608	3284	49.98	50.02	-112.00	0
5/12/01	18:38:16	109	3284	49.98	50.02	-55.00	0
5/12/01	18:38:16	609	3282	49.98	50.04	-55.00	0
5/12/01	18:38:17	110	3276	49.98	50.04	0.00	0
5/12/01	18:38:17	611	3276	49.98	50.16	0.00	0
5/12/01	18:38:18	111	3275	49.98	50.16	22.00	0
5/12/01	18:38:18	612	3273	49.98	50.13	22.00	0
5/12/01	18:38:19	113	3271	49.98	50.13	30.00	0
5/12/01	18:38:19	614	3271	49.99	50.14	30.00	0
5/12/01	18:38:20	114	3271	49.99	50.14	17.00	0
5/12/01	18:38:20	615	3272	49.99	50.04	17.00	0
5/12/01	18:38:21	116	3272	49.99	50.04	6.00	0
5/12/01	18:38:21	616	3272	49.99	50.01	6.00	0
5/12/01	18:38:22	117	3274	49.99	50.01	0.00	0
5/12/01	18:38:22	618	3275	49.99	49.96	0.00	1
5/12/01	18:38:23	119	3274	49.99	49.96	6.00	1
5/12/01	18:38:23	619	3274	49.99	49.96	6.00	0
5/12/01	18:38:24	120	3273	49.99	49.96	12.00	0
5/12/01	18:38:24	621	3273	50.00	49.96	12.00	0
5/12/01	18:38:25	122	3271	50.00	49.96	12.00	0
5/12/01	18:38:25	622	3271	50.00	49.96	16.00	0
5/12/01	18:38:26	123	3272	50.00	49.98	16.00	0
5/12/01	18:38:26	624	3273	50.00	49.98	5.00	0
5/12/01	18:38:27	124	3273	50.00	50.00	5.00	0
5/12/01	18:38:27	625	3272	50.00	50.00	3.00	1
5/12/01	18:38:28	126	3272	50.00	50.01	3.00	1
5/12/01	18:38:28	627	3273	50.00	50.01	0.00	1
5/12/01	18:38:29	127	0	50.00	49.99	0.00	1
5/12/01	18:38:29	628	0	50.00	49.99	0.00	0
5/12/01	18:38:30	129	0	49.98	49.93	0.00	0
5/12/01	18:38:30	629	0	49.98	49.93	0.00	0
5/12/01	18:38:31	130	0	49.98	49.93	0.00	0
5/12/01	18:38:31	631	0	49.98	49.93	0.00	0
5/12/01	18:38:32	132	0	49.98	49.95	0.00	0
5/12/01	18:38:32	632	0	49.98	49.95	0.00	0
5/12/01	18:38:33	133	0	49.98	44.16	0.00	0
5/12/01	18:38:33	634	0	49.98	44.16	0.00	0
5/12/01	18:38:34	134	0	49.98	0.00	0.00	0
5/12/01	18:38:34	635	0	49.98	0.00	0.00	0
5/12/01	18:38:35	136	0	60.00	0.00	0.00	0
5/12/01	18:38:35	637	0	60.00	0.00	0.00	0
5/12/01	18:38:36	137	0	60.00	0.00	0.00	0
5/12/01	18:38:36	638	0	60.00	0.00	0.00	0
5/12/01	18:38:37	139	0	60.00	0.00	0.00	0
5/12/01	18:38:37	640	0	60.00	0.00	0.00	0
5/12/01	18:38:38	140	0	60.00	0.00	0.00	0
5/12/01	18:38:38	641	0	60.00	0.00	0.00	0
5/12/01	18:38:39	142	0	60.00	0.00	0.00	0
5/12/01	18:38:39	642	0	60.00	0.00	0.00	0
5/12/01	18:38:40	143	0	59.86	0.00	0.00	0
5/12/01	18:38:40	644	0	59.86	0.00	0.00	0
5/12/01	18:38:41	145	0	59.86	0.00	0.00	0
5/12/01	18:38:41	645	0	59.86	0.00	0.00	0
5/12/01	18:38:42	146	0	59.86	0.00	0.00	0
5/12/01	18:38:42	647	0	59.86	0.00	0.00	0
5/12/01	18:38:43	147	0	59.86	0.00	0.00	0
5/12/01	18:38:43	648	0	59.86	0.00	0.00	0
5/12/01	18:38:44	149	0	59.86	0.00	0.00	0
5/12/01	18:38:44	650	0	59.86	0.00	0.00	0
5/12/01	18:38:45	150	0	59.98	0.00	0.00	0
5/12/01	18:38:45	661	0	59.98	0.00	0.00	0
5/12/01	18:38:46	182	300	59.98	0.00	0.00	0
5/12/01	18:38:46	652	500	59.98	0.00	0.00	0
5/12/01	18:38:47	153	800	59.98	0.00	0.00	0
5/12/01	18:38:47	654	1000	59.98	0.00	0.00	0
5/12/01	18:38:48	155	1200	59.98	0.00	0.00	0
5/12/01	18:38:48	655	1400	59.98	0.00	0.00	0
5/12/01	18:38:49	156	1700	59.98	0.00	0.00	0
5/12/01	18:38:49	657	1900	59.98	0.00	0.00	0
5/12/01	18:38:50	158	2100	59.96	0.00	0.00	0
5/12/01	18:38:50	658	2300	59.96	0.00	0.00	0
5/12/01	18:38:51	159	2600	59.96	0.00	0.00	0
5/12/01	18:38:51	660	2800	59.96	0.00	0.00	0
5/12/01	18:38:52	160	3000	59.96	0.00	0.00	0
5/12/01	18:38:52	661	3200	59.96	0.00	0.00	0
5/12/01	18:38:53	162	3426	59.96	0.00	0.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match	Close Breaker (Open/Close)
5/12/01	18:38:53	663	3532	59.96	0.00	0.00	0
5/12/01	18:38:54	163	3615	59.96	40.22	0.00	0
5/12/01	18:38:54	664	3675	59.96	40.22	0.00	0
5/12/01	18:38:55	165	3711	60.00	46.43	0.00	0
5/12/01	18:38:55	695	3755	60.00	46.43	0.00	0
5/12/01	18:38:56	166	3777	60.00	52.66	0.00	0
5/12/01	18:38:56	667	3798	60.00	52.66	0.00	0
5/12/01	18:38:57	168	3818	60.00	56.23	0.00	0
5/12/01	18:38:57	668	3842	60.00	56.23	0.00	0
5/12/01	18:38:58	169	3854	60.00	57.16	0.00	0
5/12/01	18:38:58	670	3864	60.00	57.16	0.00	0
5/12/01	18:38:59	170	3873	60.00	57.16	0.00	0
5/12/01	18:38:59	671	3884	60.00	57.54	0.00	0
5/12/01	18:39:00	172	3890	60.00	57.54	0.00	0
5/12/01	18:39:00	673	3896	59.97	58.85	0.00	0
5/12/01	18:39:01	173	3900	59.97	58.85	0.00	0
5/12/01	18:39:01	674	3904	59.97	59.18	0.00	0
5/12/01	18:39:02	175	3910	59.97	59.18	0.00	0
5/12/01	18:39:02	676	3913	59.97	59.34	0.00	0
5/12/01	18:39:03	176	3916	59.97	59.34	125.00	0
5/12/01	18:39:03	677	3919	59.97	59.51	125.00	0
5/12/01	18:39:04	178	3919	59.97	59.51	44.00	0
5/12/01	18:39:04	678	3922	59.97	59.74	44.00	0
5/12/01	18:39:05	179	3928	59.97	59.74	-30.00	0
5/12/01	18:39:05	680	3932	60.04	59.81	-30.00	0
5/12/01	18:39:06	181	3935	60.04	59.81	-46.00	0
5/12/01	18:39:06	681	3937	60.04	59.78	-46.00	0
5/12/01	18:39:07	192	3939	60.04	59.78	-26.00	0
5/12/01	18:39:07	683	3937	60.04	59.95	-26.00	0
5/12/01	18:39:08	183	3934	60.04	59.95	7.00	0
5/12/01	18:39:08	684	3932	60.04	60.02	7.00	0
5/12/01	18:39:09	185	3932	60.04	60.02	17.00	0
5/12/01	18:39:09	686	3932	60.04	60.09	17.00	0
5/12/01	18:39:10	186	3932	60.04	60.09	15.00	0
5/12/01	18:39:10	687	3932	60.00	59.98	15.00	0
5/12/01	18:39:11	188	3932	60.00	59.98	13.00	0
5/12/01	18:39:11	688	3932	60.00	59.97	13.00	0
5/12/01	18:39:12	189	3932	60.00	59.97	12.00	0
5/12/01	18:39:12	690	3932	60.00	59.97	12.00	0
5/12/01	18:39:13	201	3932	60.00	59.97	9.00	0
5/12/01	18:39:13	691	3932	60.00	59.97	9.00	0
5/12/01	18:39:14	192	3932	60.00	59.97	7.00	0
5/12/01	18:39:14	693	3932	60.00	60.00	7.00	0
5/12/01	18:39:15	194	3932	60.00	60.00	7.00	0
5/12/01	18:39:15	694	3932	60.01	59.99	5.00	1
5/12/01	18:39:16	195	3932	60.01	59.99	5.00	1
5/12/01	18:39:16	696	3932	60.01	59.97	3.00	1
5/12/01	18:39:17	196	3932	60.01	59.97	3.00	1
5/12/01	18:39:17	767	3932	60.01	60.01	0.00	1
5/12/01	18:39:18	198	3933	60.01	60.01	0.00	1
5/12/01	18:39:18	699	3816	60.01	59.97	0.00	0
5/12/01	18:39:19	199	3748	60.01	59.97	0.00	0
5/12/01	18:39:19	700	3684	60.01	60.00	0.00	0
5/12/01	18:39:20	201	3632	60.01	60.00	0.00	0
5/12/01	18:39:20	701	3586	50.00	57.82	0.00	0
5/12/01	18:39:21	202	3524	50.00	57.82	0.00	0
5/12/01	18:39:21	703	3492	50.00	55.85	0.00	0
5/12/01	18:39:22	204	3462	50.00	55.85	0.00	0
5/12/01	18:39:22	704	3438	50.00	54.93	0.00	0
5/12/01	18:39:23	205	3415	50.00	54.93	0.00	0
5/12/01	18:39:23	706	3386	50.00	53.83	0.00	0
5/12/01	18:39:24	216	3370	50.00	53.83	0.00	0
5/12/01	18:39:24	707	3356	50.00	52.76	0.00	0
5/12/01	18:39:25	208	3344	50.00	52.76	0.00	0
5/12/01	18:39:25	719	3328	49.99	51.82	0.00	0
5/12/01	18:39:26	209	3320	49.99	51.82	0.00	0
5/12/01	18:39:26	710	3309	49.99	51.45	0.00	0
5/12/01	18:39:27	211	3304	49.99	51.45	0.00	0
5/12/01	18:39:27	712	3298	49.99	51.45	0.00	0
5/12/01	18:39:28	212	3296	49.99	51.45	0.00	0
5/12/01	18:39:28	723	3293	49.99	50.62	0.00	0
5/12/01	18:39:29	214	3291	49.99	50.62	0.00	0
5/12/01	18:39:29	714	3285	49.99	50.62	79.00	0
5/12/01	18:39:30	215	3281	49.99	50.44	79.00	0
5/12/01	18:39:30	716	3278	49.99	50.44	163.00	0
5/12/01	18:39:31	217	3280	50.01	50.27	163.00	0
5/12/01	18:39:31	717	3283	50.01	50.27	-156.00	0
5/12/01	18:39:32	218	3283	50.01	50.19	-156.00	0
5/12/01	18:39:32	719	3283	50.01	50.19	-103.00	0
5/12/01	18:39:33	219	3283	50.01	50.05	-103.00	0
5/12/01	18:39:33	720	3283	50.01	50.05	-49.00	0
5/12/01	18:39:34	221	3278	50.01	50.16	-49.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match	Close Breaker (Open/Close)
5/12/01	18:39:34	722	3277	50.01	50.16	2.00	0
5/12/01	18:39:35	222	3276	50.01	50.13	2.00	0
5/12/01	18:39:35	723	3275	50.01	50.13	18.00	0
5/12/01	18:39:36	224	3273	50.01	50.15	18.00	0
5/12/01	18:39:36	724	3271	50.01	50.15	28.00	0
5/12/01	18:39:37	225	3269	50.01	50.03	28.00	0
5/12/01	18:39:37	726	3271	50.01	50.03	17.00	0
5/12/01	18:39:38	227	3271	50.01	50.03	17.00	0
5/12/01	18:39:38	727	3272	50.01	50.03	0.00	0
5/12/01	18:39:39	228	3274	50.01	49.94	0.00	1
5/12/01	18:39:39	729	3273	50.01	49.94	-2.00	1
5/12/01	18:39:40	230	3273	50.00	49.98	-2.00	1
5/12/01	18:39:40	730	0	50.00	49.98	4.00	1
5/12/01	18:39:41	231	0	50.00	49.96	4.00	1
5/12/01	18:39:41	732	0	50.00	49.96	0.00	0
5/12/01	18:39:42	232	0	50.00	50.00	0.00	0
5/12/01	18:39:42	733	0	50.00	50.00	0.00	0
5/12/01	18:39:43	234	0	50.00	49.29	0.00	0
5/12/01	18:39:43	735	0	50.00	49.29	0.00	0
5/12/01	18:39:44	235	0	50.00	49.29	0.00	0
5/12/01	18:39:44	736	0	50.00	49.29	0.00	0
5/12/01	18:39:45	237	0	50.01	42.23	0.00	0
5/12/01	18:39:45	737	0	50.01	42.23	0.00	0
5/12/01	18:39:46	238	0	50.01	0.00	0.00	0
5/12/01	18:39:46	739	0	50.01	0.00	0.00	0
5/12/01	18:39:47	240	0	50.01	0.00	0.00	0
5/12/01	18:39:47	740	0	50.01	0.00	0.00	0
5/12/01	18:39:48	241	0	50.01	0.00	0.00	0
5/12/01	18:39:48	742	0	50.01	0.00	0.00	0
5/12/01	18:39:49	242	0	50.01	0.00	0.00	0
5/12/01	18:39:49	743	0	50.01	0.00	0.00	0
5/12/01	18:39:50	244	0	49.99	0.00	0.00	0
5/12/01	18:39:50	745	0	49.99	0.00	0.00	0
5/12/01	18:39:51	245	0	49.99	0.00	0.00	0
5/12/01	18:39:51	746	0	49.99	0.00	0.00	0
5/12/01	18:39:52	247	0	49.99	0.00	0.00	0
5/12/01	18:39:52	748	0	49.99	0.00	0.00	0
5/12/01	18:39:53	248	0	49.99	0.00	0.00	0
5/12/01	18:39:53	749	0	49.99	0.00	0.00	0
5/12/01	18:39:54	250	0	49.99	0.00	0.00	0
5/12/01	18:39:54	750	0	49.99	0.00	0.00	0
5/12/01	18:39:55	251	0	59.99	0.00	0.00	0
5/12/01	18:39:55	752	0	59.99	0.00	0.00	0
5/12/01	18:39:56	253	0	59.99	0.00	0.00	0
5/12/01	18:39:56	753	0	59.99	0.00	0.00	0
5/12/01	18:39:57	254	0	59.99	0.00	0.00	0
5/12/01	18:39:57	755	0	59.99	0.00	0.00	0
5/12/01	18:39:58	255	0	59.99	0.00	0.00	0
5/12/01	18:39:58	756	0	59.99	0.00	0.00	0
5/12/01	18:39:59	257	0	59.99	0.00	0.00	0
5/12/01	18:39:59	758	0	59.99	0.00	0.00	0
5/12/01	18:40:00	258	200	59.99	0.00	0.00	0
5/12/01	18:40:00	759	400	59.99	0.00	0.00	0
5/12/01	18:40:01	260	600	59.99	0.00	0.00	0
5/12/01	18:40:01	760	1000	59.99	0.00	0.00	0
5/12/01	18:40:02	261	1100	59.99	0.00	0.00	0
5/12/01	18:40:02	762	1400	59.99	0.00	0.00	0
5/12/01	18:40:03	263	1500	59.99	0.00	0.00	0
5/12/01	18:40:03	763	1900	59.99	0.00	0.00	0
5/12/01	18:40:04	264	2100	59.99	0.00	0.00	0
5/12/01	18:40:04	765	2300	59.99	0.00	0.00	0
5/12/01	18:40:05	266	2500	59.99	0.00	0.00	0
5/12/01	18:40:05	766	2700	59.98	0.00	0.00	0
5/12/01	18:40:06	267	3000	59.98	0.00	0.00	0
5/12/01	18:40:06	768	3197	59.98	0.00	0.00	0
5/12/01	18:40:07	268	3358	59.98	0.00	0.00	0
5/12/01	18:40:07	769	3484	59.98	0.00	0.00	0
5/12/01	18:40:08	270	3616	59.98	0.00	0.00	0
5/12/01	18:40:08	771	3674	59.98	0.00	0.00	0
5/12/01	18:40:09	271	3710	59.98	0.00	0.00	0
5/12/01	18:40:09	772	3740	59.98	48.26	0.00	0
5/12/01	18:40:10	273	3779	59.98	48.26	0.00	0
5/12/01	18:40:10	783	3800	60.01	54.42	0.00	0
5/12/01	18:40:11	274	3820	60.01	54.42	0.00	0
5/12/01	18:40:11	775	3839	60.01	56.33	0.00	0
5/12/01	18:40:12	276	3857	60.01	56.33	0.00	0
5/12/01	18:40:12	786	3868	60.01	57.30	0.00	0
5/12/01	18:40:13	277	3877	60.01	57.30	0.00	0
5/12/01	18:40:13	778	3885	60.01	58.34	0.00	0
5/12/01	18:40:14	278	3894	60.01	58.34	0.00	0
5/12/01	18:40:14	779	3899	60.01	58.60	0.00	0
5/12/01	18:40:15	280	3903	60.01	58.60	0.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match	Close Breaker (Open/Close)
5/12/01	18:40:15	781	3909	59.99	59.25	0.00	0
5/12/01	18:40:16	281	3912	59.99	59.25	0.00	0
5/12/01	18:40:16	782	3915	59.99	59.49	-43.00	0
5/12/01	18:40:17	283	3918	59.99	59.49	-43.00	0
5/12/01	18:40:17	784	3922	59.99	59.56	-135.00	0
5/12/01	18:40:18	284	3926	59.99	59.56	-135.00	0
5/12/01	18:40:18	785	3925	59.99	59.73	160.00	0
5/12/01	18:40:19	286	3924	59.99	59.73	160.00	0
5/12/01	18:40:19	786	3924	59.99	59.78	121.00	0
5/12/01	18:40:20	287	3921	59.99	59.78	121.00	0
5/12/01	18:40:20	788	3921	60.01	59.85	63.00	0
5/12/01	18:40:21	289	3921	60.01	59.85	63.00	0
5/12/01	18:40:21	789	3924	60.01	59.80	63.00	0
5/12/01	18:40:22	290	3928	60.01	59.80	-2.00	0
5/12/01	18:40:22	791	3929	60.01	59.85	-2.00	0
5/12/01	18:40:23	291	3932	60.01	59.85	-28.00	0
5/12/01	18:40:23	792	3934	60.01	59.92	-28.00	0
5/12/01	18:40:24	293	3935	60.01	59.92	-32.00	0
5/12/01	18:40:24	794	3936	60.01	59.94	-32.00	0
5/12/01	18:40:25	294	3935	60.01	59.94	-17.00	0
5/12/01	18:40:25	795	3931	60.00	59.99	-17.00	0
5/12/01	18:40:26	296	3931	60.00	59.99	0.00	1
5/12/01	18:40:26	796	3932	60.00	60.05	0.00	1
5/12/01	18:40:27	297	3932	60.00	60.05	-5.00	0
5/12/01	18:40:27	798	3933	60.00	59.92	-5.00	0
5/12/01	18:40:28	299	3894	60.00	59.92	0.00	0
5/12/01	18:40:28	809	3779	60.00	60.00	0.00	0
5/12/01	18:40:29	310	3712	60.00	60.00	0.00	0
5/12/01	18:40:29	811	3654	60.00	60.01	0.00	0
5/12/01	18:40:30	312	3561	60.00	60.01	0.00	0
5/12/01	18:40:30	822	3524	50.00	58.82	0.00	0
5/12/01	18:40:31	313	3491	50.00	58.82	0.00	0
5/12/01	18:40:31	814	3462	50.00	58.82	0.00	0
5/12/01	18:40:32	314	3423	50.00	56.65	0.00	0
5/12/01	18:40:32	815	3402	50.00	56.65	0.00	0
5/12/01	18:40:33	316	3382	50.00	54.73	0.00	0
5/12/01	18:40:33	817	3365	50.00	54.73	0.00	0
5/12/01	18:40:34	317	3348	50.00	53.70	0.00	0
5/12/01	18:40:34	818	3338	50.00	53.70	0.00	0
5/12/01	18:40:35	319	3329	50.00	52.70	0.00	0
5/12/01	18:40:35	819	3321	50.00	52.70	0.00	0
5/12/01	18:40:36	320	3315	49.99	52.33	0.00	0
5/12/01	18:40:36	821	3307	49.99	52.33	0.00	0
5/12/01	18:40:37	322	3303	49.99	51.27	0.00	0
5/12/01	18:40:37	822	3299	49.99	51.27	0.00	0
5/12/01	18:40:38	323	3295	49.99	51.01	0.00	0
5/12/01	18:40:38	824	3293	49.99	51.01	0.00	0
5/12/01	18:40:39	324	3290	49.99	50.63	0.00	0
5/12/01	18:40:39	825	3286	49.99	50.63	0.00	0
5/12/01	18:40:40	326	3282	49.99	50.44	170.00	0
5/12/01	18:40:40	827	3282	49.99	50.44	170.00	0
5/12/01	18:40:41	327	3282	49.99	50.31	-143.00	0
5/12/01	18:40:41	828	3282	49.99	50.31	-143.00	0
5/12/01	18:40:42	329	3283	49.99	50.28	-90.00	0
5/12/01	18:40:42	830	3285	49.99	50.28	-90.00	0
5/12/01	18:40:43	330	3284	49.99	50.17	-34.00	0
5/12/01	18:40:43	831	3276	49.99	50.17	-34.00	0
5/12/01	18:40:44	332	3275	49.99	50.14	19.00	0
5/12/01	18:40:44	832	3273	49.99	50.14	19.00	0
5/12/01	18:40:45	333	3271	49.99	50.16	30.00	0
5/12/01	18:40:45	834	3269	49.99	50.16	30.00	0
5/12/01	18:40:46	335	3271	50.01	50.19	14.00	0
5/12/01	18:40:46	835	3271	50.01	50.19	14.00	0
5/12/01	18:40:47	336	3272	50.01	50.02	1.00	0
5/12/01	18:40:47	837	3274	50.01	50.02	1.00	1
5/12/01	18:40:48	337	3275	50.01	50.02	-6.00	1
5/12/01	18:40:48	838	3274	50.01	50.02	-6.00	0
5/12/01	18:40:49	339	3273	50.01	49.95	2.00	0
5/12/01	18:40:49	840	3272	50.01	49.95	2.00	1
5/12/01	18:40:50	340	3271	50.01	49.96	5.00	1
5/12/01	18:40:50	841	0	50.01	49.96	5.00	1
5/12/01	18:40:51	342	0	49.99	50.02	0.00	1
5/12/01	18:40:51	852	0	49.99	50.02	0.00	0
5/12/01	18:40:52	343	0	49.99	49.95	0.00	0
5/12/01	18:40:52	844	0	49.99	49.95	0.00	0
5/12/01	18:40:53	345	0	49.99	50.00	0.00	0
5/12/01	18:40:53	845	0	49.99	50.00	0.00	0
5/12/01	18:40:54	346	0	49.99	47.23	0.00	0
5/12/01	18:40:54	847	0	49.99	47.23	0.00	0
5/12/01	18:40:55	348	0	49.99	40.37	0.00	0
5/12/01	18:40:55	848	0	49.99	40.37	0.00	0
5/12/01	18:40:56	349	0	49.98	0.00	0.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match	Close Breaker (Open/Close)
5/12/01	18:40:56	850	0	49.98	0.00	0.00	0
5/12/01	18:40:57	350	0	49.98	0.00	0.00	0
5/12/01	18:40:57	851	0	49.98	0.00	0.00	0
5/12/01	18:40:58	352	0	49.98	0.00	0.00	0
5/12/01	18:40:58	853	0	49.98	0.00	0.00	0
5/12/01	18:40:59	353	0	49.98	0.00	0.00	0
5/12/01	18:40:59	854	0	49.98	0.00	0.00	0
5/12/01	18:41:00	355	0	49.98	0.00	0.00	0
5/12/01	18:41:00	855	0	49.98	0.00	0.00	0
5/12/01	18:41:01	356	0	60.00	0.00	0.00	0
5/12/01	18:41:01	857	0	60.00	0.00	0.00	0
5/12/01	18:41:02	358	0	60.00	0.00	0.00	0
5/12/01	18:41:02	858	0	60.00	0.00	0.00	0
5/12/01	18:41:03	359	0	60.00	0.00	0.00	0
5/12/01	18:41:03	860	0	60.00	0.00	0.00	0
5/12/01	18:41:04	360	0	60.00	0.00	0.00	0
5/12/01	18:41:04	861	0	60.00	0.00	0.00	0
5/12/01	18:41:05	362	0	60.00	0.00	0.00	0
5/12/01	18:41:05	863	0	60.00	0.00	0.00	0
5/12/01	18:41:06	363	0	59.98	0.00	0.00	0
5/12/01	18:41:06	864	0	59.98	0.00	0.00	0
5/12/01	18:41:07	365	0	59.98	0.00	0.00	0
5/12/01	18:41:07	866	0	59.98	0.00	0.00	0
5/12/01	18:41:08	366	0	59.98	0.00	0.00	0
5/12/01	18:41:08	867	0	59.98	0.00	0.00	0
5/12/01	18:41:09	368	0	59.98	0.00	0.00	0
5/12/01	18:41:09	868	0	59.98	0.00	0.00	0
5/12/01	18:41:10	369	0	59.98	0.00	0.00	0
5/12/01	18:41:10	870	100	59.98	0.00	0.00	0
5/12/01	18:41:11	371	400	59.82	0.00	0.00	0
5/12/01	18:41:11	871	600	59.82	0.00	0.00	0
5/12/01	18:41:12	372	800	59.82	0.00	0.00	0
5/12/01	18:41:12	873	1000	59.82	0.00	0.00	0
5/12/01	18:41:13	373	1300	59.82	0.00	0.00	0
5/12/01	18:41:13	874	1500	59.82	0.00	0.00	0
5/12/01	18:41:14	375	1700	59.82	0.00	0.00	0
5/12/01	18:41:14	876	1900	59.82	0.00	0.00	0
5/12/01	18:41:15	376	2200	59.82	0.00	0.00	0
5/12/01	18:41:15	877	2400	59.82	0.00	0.00	0
5/12/01	18:41:16	378	2600	59.99	0.00	0.00	0
5/12/01	18:41:16	878	2800	59.99	0.00	0.00	0
5/12/01	18:41:17	379	3100	59.99	0.00	0.00	0
5/12/01	18:41:17	880	3281	59.99	0.00	0.00	0
5/12/01	18:41:18	381	3423	59.99	0.00	0.00	0
5/12/01	18:41:18	881	3520	59.99	0.00	0.00	0
5/12/01	18:41:19	382	3629	59.99	0.00	0.00	0
5/12/01	18:41:19	883	3676	59.99	0.00	0.00	0
5/12/01	18:41:20	384	3709	59.99	0.00	0.00	0
5/12/01	18:41:20	884	3740	59.99	46.09	0.00	0
5/12/01	18:41:21	385	3764	59.99	46.09	0.00	0
5/12/01	18:41:21	886	3810	59.98	52.22	0.00	0
5/12/01	18:41:22	386	3828	59.98	52.22	0.00	0
5/12/01	18:41:22	887	3843	59.98	55.97	0.00	0
5/12/01	18:41:23	388	3856	59.98	55.97	0.00	0
5/12/01	18:41:23	889	3873	59.98	56.95	0.00	0
5/12/01	18:41:24	389	3883	59.98	56.95	0.00	0
5/12/01	18:41:24	890	3891	59.98	57.86	0.00	0
5/12/01	18:41:25	391	3898	59.98	57.86	0.00	0
5/12/01	18:41:25	891	3905	59.98	58.56	0.00	0
5/12/01	18:41:26	392	3909	59.98	58.56	0.00	0
5/12/01	18:41:26	893	3911	59.99	58.98	0.00	0
5/12/01	18:41:27	394	3913	59.99	58.98	0.00	0
5/12/01	18:41:27	894	3914	59.99	59.32	0.00	0
5/12/01	18:41:28	395	3918	59.99	59.32	0.00	0
5/12/01	18:41:28	906	3922	59.99	59.62	0.00	0
5/12/01	18:41:29	396	3924	59.99	59.62	-176.00	0
5/12/01	18:41:29	897	3924	59.99	59.72	-176.00	0
5/12/01	18:41:30	398	3923	59.99	59.72	134.00	0
5/12/01	18:41:30	899	3921	59.99	59.79	134.00	0
5/12/01	18:41:31	399	3920	59.99	59.79	73.00	0
5/12/01	18:41:31	900	3920	60.00	59.80	73.00	0
5/12/01	18:41:32	401	3924	60.00	59.80	7.00	0
5/12/01	18:41:32	902	3930	60.00	59.83	7.00	0
5/12/01	18:41:33	402	3932	60.00	59.83	-37.00	0
5/12/01	18:41:33	903	3934	60.00	59.78	-37.00	0
5/12/01	18:41:34	404	3936	60.00	59.78	-41.00	0
5/12/01	18:41:34	904	3937	60.00	59.86	-41.00	0
5/12/01	18:41:35	405	3938	60.00	59.86	-20.00	0
5/12/01	18:41:35	906	3934	59.98	60.02	-20.00	0
5/12/01	18:41:36	407	3934	59.98	60.02	15.00	0
5/12/01	18:41:36	907	3933	59.98	60.05	15.00	0
5/12/01	18:41:37	418	3931	59.98	60.05	23.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match	Close Breaker (Open/Close)
5/12/01	18:41:37	909	3930	59.98	60.09	23.00	0
5/12/01	18:41:38	409	3930	59.98	60.09	16.00	0
5/12/01	18:41:38	910	3931	59.98	60.03	16.00	0
5/12/01	18:41:39	411	3931	59.98	60.03	8.00	0
5/12/01	18:41:39	912	3931	59.98	59.99	8.00	0
5/12/01	18:41:40	412	3931	59.98	59.99	3.00	1
5/12/01	18:41:40	913	3931	60.00	59.98	3.00	1
5/12/01	18:41:41	414	3931	60.00	59.98	0.00	1
5/12/01	18:41:41	914	3931	60.00	59.95	0.00	1
5/12/01	18:41:42	415	3892	60.00	59.95	0.00	0
5/12/01	18:41:42	916	3814	60.00	60.01	0.00	0
5/12/01	18:41:43	417	3746	60.00	60.01	0.00	0
5/12/01	18:41:43	917	3686	60.00	59.99	0.00	0
5/12/01	18:41:44	418	3607	60.00	59.99	0.00	0
5/12/01	18:41:44	919	3562	60.00	59.93	0.00	0
5/12/01	18:41:45	420	3526	60.00	59.93	0.00	0
5/12/01	18:41:45	920	3490	60.00	59.93	0.00	0
5/12/01	18:41:46	421	3447	50.00	57.66	0.00	0
5/12/01	18:41:46	922	3423	50.00	57.66	0.00	0
5/12/01	18:41:47	422	3392	50.00	54.68	0.00	0
5/12/01	18:41:47	923	3374	50.00	54.68	0.00	0
5/12/01	18:41:48	424	3360	50.00	53.63	0.00	0
5/12/01	18:41:48	925	3343	50.00	53.63	0.00	0
5/12/01	18:41:49	425	3333	50.00	52.56	0.00	0
5/12/01	18:41:49	926	3324	50.00	52.56	0.00	0
5/12/01	18:41:50	427	3317	50.00	51.66	0.00	0
5/12/01	18:41:50	927	3311	50.00	51.66	0.00	0
5/12/01	18:41:51	428	3304	49.98	51.27	0.00	0
5/12/01	18:41:51	939	3300	49.98	51.27	0.00	0
5/12/01	18:41:52	430	3296	49.98	50.89	0.00	0
5/12/01	18:41:52	930	3293	49.98	50.89	0.00	0
5/12/01	18:41:53	431	3290	49.98	50.59	0.00	0
5/12/01	18:41:53	932	3288	49.98	50.59	0.00	0
5/12/01	18:41:54	432	3284	49.98	50.33	0.00	0
5/12/01	18:41:54	933	3280	49.98	50.33	36.00	0
5/12/01	18:41:55	434	3276	49.98	50.27	36.00	0
5/12/01	18:41:55	935	3274	49.98	50.27	83.00	0
5/12/01	18:41:56	435	3272	49.95	50.17	83.00	0
5/12/01	18:41:56	936	3270	49.95	50.17	95.00	0
5/12/01	18:41:57	437	3267	49.95	50.07	95.00	0
5/12/01	18:41:57	938	3265	49.95	50.07	79.00	0
5/12/01	18:41:58	438	3264	49.95	50.02	79.00	0
5/12/01	18:41:58	939	3264	49.95	50.02	38.00	0
5/12/01	18:41:59	440	3268	49.95	50.02	38.00	0
5/12/01	18:41:59	940	3270	49.95	50.02	-11.00	0
5/12/01	18:42:00	441	3272	49.95	49.95	-11.00	0
5/12/01	18:42:00	942	3274	49.95	49.95	-37.00	0
5/12/01	18:42:01	443	3276	50.00	49.89	-37.00	0
5/12/01	18:42:01	943	3278	50.00	49.89	-31.00	0
5/12/01	18:42:02	444	3278	50.00	49.91	-31.00	0
5/12/01	18:42:02	945	3278	50.00	49.91	-5.00	0
5/12/01	18:42:03	445	3275	50.00	50.02	-5.00	0
5/12/01	18:42:03	946	3273	50.00	50.02	18.00	0
5/12/01	18:42:04	447	3273	50.00	50.02	18.00	0
5/12/01	18:42:04	948	3272	50.00	50.02	21.00	0
5/12/01	18:42:05	448	3272	50.00	50.10	21.00	0
5/12/01	18:42:05	949	3272	50.00	50.10	14.00	0
5/12/01	18:42:06	450	3273	49.99	50.00	14.00	0
5/12/01	18:42:06	950	3273	49.99	50.00	4.00	0
5/12/01	18:42:07	451	3272	49.99	49.93	4.00	0
5/12/01	18:42:07	952	3274	49.99	49.93	0.00	1
5/12/01	18:42:08	453	3274	49.99	49.93	0.00	1
5/12/01	18:42:08	953	3273	49.99	49.93	2.00	1
5/12/01	18:42:09	454	0	49.99	49.92	2.00	1
5/12/01	18:42:09	955	0	49.99	49.92	0.00	0
5/12/01	18:42:10	456	0	49.99	49.98	0.00	0
5/12/01	18:42:10	956	0	49.99	49.98	0.00	0
5/12/01	18:42:11	457	0	50.01	50.05	0.00	0
5/12/01	18:42:11	958	0	50.01	50.05	0.00	0
5/12/01	18:42:12	458	0	50.01	50.02	0.00	0
5/12/01	18:42:12	959	0	50.01	50.02	0.00	0
5/12/01	18:42:13	460	0	50.01	43.85	0.00	0
5/12/01	18:42:13	961	0	50.01	43.85	0.00	0
5/12/01	18:42:14	461	0	50.01	0.00	0.00	0
5/12/01	18:42:14	962	0	50.01	0.00	0.00	0
5/12/01	18:42:15	463	0	50.01	0.00	0.00	0
5/12/01	18:42:15	963	0	50.01	0.00	0.00	0
5/12/01	18:42:16	464	0	49.98	0.00	0.00	0
5/12/01	18:42:16	965	0	49.98	0.00	0.00	0
5/12/01	18:42:17	466	0	49.98	0.00	0.00	0
5/12/01	18:42:17	966	0	49.98	0.00	0.00	0
5/12/01	18:42:18	467	0	49.98	0.00	0.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match	Close Breaker (Open/Close)
5/12/01	18:42:18	968	0	49.98	0.00	0.00	0
5/12/01	18:42:19	468	0	49.98	0.00	0.00	0
5/12/01	18:42:19	969	0	49.98	0.00	0.00	0
5/12/01	18:42:20	470	0	49.98	0.00	0.00	0
5/12/01	18:42:20	971	0	49.98	0.00	0.00	0
5/12/01	18:42:21	471	0	59.96	0.00	0.00	0
5/12/01	18:42:21	972	0	59.96	0.00	0.00	0
5/12/01	18:42:22	473	0	59.96	0.00	0.00	0
5/12/01	18:42:22	974	0	59.96	0.00	0.00	0
5/12/01	18:42:23	474	0	59.96	0.00	0.00	0
5/12/01	18:42:23	975	0	59.96	0.00	0.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Degrees)	Close Breaker (Open/Close)
5/12/01	18:23:59	747	0	59.99	0.00	0.00	0
5/12/01	18:24:00	248	0	59.99	0.00	0.00	0
5/12/01	18:24:00	749	0	59.99	0.00	0.00	0
5/12/01	18:24:01	249	0	59.99	0.00	0.00	0
5/12/01	18:24:01	750	3000	59.98	0.00	0.00	0
5/12/01	18:24:02	251	3000	59.98	0.00	0.00	0
5/12/01	18:24:02	751	3000	59.98	0.00	0.00	0
5/12/01	18:24:03	252	3000	59.98	0.00	0.00	0
5/12/01	18:24:03	753	3000	59.98	0.00	0.00	0
5/12/01	18:24:04	254	3000	59.98	0.00	0.00	0
5/12/01	18:24:04	754	3001	59.98	0.00	0.00	0
5/12/01	18:24:05	255	3002	59.98	0.00	0.00	0
5/12/01	18:24:05	756	3004	59.98	0.00	0.00	0
5/12/01	18:24:06	257	3005	59.98	0.00	0.00	0
5/12/01	18:24:06	757	3005	59.94	0.00	0.00	0
5/12/01	18:24:07	258	3005	59.94	0.00	0.00	0
5/12/01	18:24:07	759	3007	59.94	0.00	0.00	0
5/12/01	18:24:08	259	3313	59.94	0.00	0.00	0
5/12/01	18:24:08	760	3685	59.94	0.00	0.00	0
5/12/01	18:24:09	261	4095	59.94	0.00	0.00	0
5/12/01	18:24:09	762	4095	59.94	0.00	0.00	0
5/12/01	18:24:10	262	4095	59.94	0.00	0.00	0
5/12/01	18:24:10	763	4095	59.94	40.02	0.00	0
5/12/01	18:24:11	264	4048	59.94	40.02	0.00	0
5/12/01	18:24:11	764	4032	60.00	46.87	0.00	0
5/12/01	18:24:12	265	3995	60.00	46.87	0.00	0
5/12/01	18:24:12	766	3974	60.00	53.08	0.00	0
5/12/01	18:24:13	267	3949	60.00	53.08	0.00	0
5/12/01	18:24:13	767	3937	60.00	59.77	0.00	0
5/12/01	18:24:14	268	3930	60.00	59.77	0.00	0
5/12/01	18:24:14	769	3924	60.00	61.86	6.00	0
5/12/01	18:24:15	269	3925	60.00	61.86	6.00	0
5/12/01	18:24:15	770	3925	60.00	60.81	-2.00	0
5/12/01	18:24:16	271	3930	60.00	60.81	-2.00	0
5/12/01	18:24:16	772	3931	60.00	60.44	-23.00	0
5/12/01	18:24:17	272	3931	60.00	60.44	-23.00	0
5/12/01	18:24:17	773	3934	60.00	60.09	-23.00	0
5/12/01	18:24:18	274	3934	60.00	60.09	-22.00	0
5/12/01	18:24:18	775	3935	60.00	59.91	-22.00	0
5/12/01	18:24:19	275	3934	60.00	59.91	-12.00	0
5/12/01	18:24:19	776	3930	60.00	59.91	-12.00	0
5/12/01	18:24:20	277	3934	60.00	59.96	-2.00	1
5/12/01	18:24:20	777	3929	60.00	59.96	-2.00	1
5/12/01	18:24:21	278	3932	59.98	60.07	3.00	1
5/12/01	18:24:21	779	3932	59.98	60.07	3.00	1
5/12/01	18:24:22	280	3932	59.98	59.98	4.00	1
5/12/01	18:24:22	780	3932	59.98	59.98	4.00	1
5/12/01	18:24:23	281	3932	59.98	60.04	2.00	1
5/12/01	18:24:23	782	3932	59.98	60.04	2.00	1
5/12/01	18:24:24	282	3932	59.98	60.01	0.00	1
5/12/01	18:24:24	783	3932	59.98	60.01	0.00	1
5/12/01	18:24:25	284	4095	59.98	59.99	0.00	0
5/12/01	18:24:25	785	4095	59.98	59.99	0.00	0
5/12/01	18:24:26	285	4095	60.02	59.99	0.00	0
5/12/01	18:24:26	786	3893	60.02	59.99	0.00	0
5/12/01	18:24:27	287	3894	60.02	60.01	0.00	0
5/12/01	18:24:27	787	3906	60.02	60.01	0.00	0
5/12/01	18:24:28	288	3919	60.02	60.23	0.00	0
5/12/01	18:24:28	789	3927	60.02	60.23	0.00	0
5/12/01	18:24:29	290	3932	60.02	62.25	0.00	0
5/12/01	18:24:29	790	3932	60.02	62.25	0.00	0
5/12/01	18:24:30	291	3933	60.02	60.66	0.00	0
5/12/01	18:24:30	792	3931	60.02	60.66	0.00	0
5/12/01	18:24:31	293	3930	49.99	59.42	0.00	0
5/12/01	18:24:31	793	3934	49.99	59.42	0.00	0
5/12/01	18:24:32	294	3930	49.99	59.79	0.00	0
5/12/01	18:24:32	795	3930	49.99	59.79	0.00	0
5/12/01	18:24:33	295	3930	49.99	59.97	0.00	0
5/12/01	18:24:33	796	3932	49.99	59.97	0.00	0
5/12/01	18:24:34	297	3931	49.99	59.96	0.00	0
5/12/01	18:24:34	798	3931	49.99	59.96	0.00	0
5/12/01	18:24:35	298	3932	49.99	59.98	0.00	0
5/12/01	18:24:35	799	3932	49.99	59.98	0.00	0
5/12/01	18:24:36	300	3934	50.00	60.00	0.00	0
5/12/01	18:24:36	800	3933	50.00	60.00	0.00	0
5/12/01	18:24:37	301	3931	50.00	59.96	0.00	0
5/12/01	18:24:37	802	3933	50.00	59.96	0.00	0
5/12/01	18:24:38	303	3933	50.00	60.01	0.00	0
5/12/01	18:24:38	803	3933	50.00	60.01	0.00	0
5/12/01	18:24:39	304	3933	50.00	60.00	0.00	0
5/12/01	18:24:39	805	3933	50.00	60.00	0.00	0
5/12/01	18:24:40	305	3934	50.00	59.99	0.00	0
5/12/01	18:24:40	806	3933	50.00	59.99	0.00	0
5/12/01	18:24:41	307	3933	49.99	59.99	0.00	0
5/12/01	18:24:41	808	3933	49.99	59.99	0.00	0
5/12/01	18:24:42	308	3930	49.99	59.99	0.00	0
5/12/01	18:24:42	809	3934	49.99	60.01	0.00	0
5/12/01	18:24:43	310	3933	49.99	60.01	0.00	0
5/12/01	18:24:43	811	3934	49.99	60.02	0.00	0
5/12/01	18:24:44	311	3932	49.99	60.02	0.00	0
5/12/01	18:24:44	812	3934	49.99	59.97	0.00	0
5/12/01	18:24:45	313	3932	49.99	59.97	0.00	0
5/12/01	18:24:45	813	3932	49.99	60.02	0.00	0
5/12/01	18:24:46	314	3932	49.99	60.02	0.00	0
5/12/01	18:24:46	815	3932	49.98	60.01	0.00	0
5/12/01	18:24:47	316	3933	49.98	60.01	0.00	0
5/12/01	18:24:47	816	3932	49.98	59.99	0.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Degrees)	Close Breaker (Open/Close)
5/12/01	18:24:48	317	3933	49.98	59.99	0.00	0
5/12/01	18:24:48	818	3932	49.98	59.99	0.00	0
5/12/01	18:24:49	318	3932	49.98	59.99	0.00	0
5/12/01	18:24:49	819	3934	49.98	59.97	0.00	0
5/12/01	18:24:50	320	0	49.98	59.97	0.00	0
5/12/01	18:24:50	821	0	49.98	60.01	0.00	0
5/12/01	18:24:51	321	0	49.98	60.01	0.00	0
5/12/01	18:24:51	822	0	49.97	60.01	0.00	0
5/12/01	18:24:52	323	0	49.97	60.01	0.00	0
5/12/01	18:24:52	823	0	49.97	59.98	0.00	0
5/12/01	18:24:53	324	0	49.97	59.98	0.00	0
5/12/01	18:24:53	825	0	49.97	58.05	0.00	0
5/12/01	18:24:54	326	0	49.97	58.05	0.00	0
5/12/01	18:24:54	826	0	49.97	51.80	0.00	0
5/12/01	18:24:55	327	0	49.97	51.80	0.00	0
5/12/01	18:24:55	828	0	49.97	44.87	0.00	0
5/12/01	18:24:56	329	0	49.97	44.87	0.00	0
5/12/01	18:24:56	829	0	49.99	0.00	0.00	0
5/12/01	18:24:57	330	0	49.99	0.00	0.00	0
5/12/01	18:24:57	831	0	49.99	0.00	0.00	0
5/12/01	18:24:58	331	0	49.99	0.00	0.00	0
5/12/01	18:24:58	832	0	49.99	0.00	0.00	0
5/12/01	18:24:59	333	0	49.99	0.00	0.00	0
5/12/01	18:24:59	834	0	49.99	0.00	0.00	0
5/12/01	18:25:00	334	0	49.99	0.00	0.00	0
5/12/01	18:25:00	835	0	49.99	0.00	0.00	0
5/12/01	18:25:01	336	0	49.99	0.00	0.00	0
5/12/01	18:25:01	836	0	50.01	0.00	0.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Matc	Close Breaker (Open/Close)
6/26/01	11:58:11	921	0	49.98	0.00	0.00	0
6/26/01	11:58:12	422	0	50.00	0.00	0.00	0
6/26/01	11:58:12	923	0	50.00	0.00	0.00	0
6/26/01	11:58:13	423	3271	50.00	0.00	0.00	0
6/26/01	11:58:13	924	3272	50.00	0.00	0.00	0
6/26/01	11:58:14	425	3272	50.00	0.00	0.00	0
6/26/01	11:58:14	925	3273	50.00	0.00	0.00	0
6/26/01	11:58:15	426	3272	50.00	0.00	0.00	0
6/26/01	11:58:15	927	3273	50.00	0.00	0.00	0
6/26/01	11:58:16	428	3273	50.00	0.00	0.00	0
6/26/01	11:58:16	928	3273	50.00	0.00	0.00	0
6/26/01	11:58:17	429	3274	49.99	0.00	0.00	0
6/26/01	11:58:17	930	3274	49.99	0.00	0.00	0
6/26/01	11:58:18	431	3274	49.99	0.00	0.00	0
6/26/01	11:58:18	931	3275	49.99	0.00	0.00	0
6/26/01	11:58:19	432	3276	49.99	0.00	0.00	0
6/26/01	11:58:19	933	3276	49.99	0.00	0.00	0
6/26/01	11:58:20	433	3571	49.99	0.00	0.00	0
6/26/01	11:58:20	934	3627	49.99	0.00	0.00	0
6/26/01	11:58:21	435	3703	49.99	0.00	0.00	0
6/26/01	11:58:21	936	3686	49.99	0.00	0.00	0
6/26/01	11:58:22	436	3541	49.99	40.45	0.00	0
6/26/01	11:58:22	937	3465	49.99	40.45	0.00	0
6/26/01	11:58:23	438	3407	49.99	45.44	0.00	0
6/26/01	11:58:23	938	3356	49.99	45.44	0.00	0
6/26/01	11:58:24	439	3312	49.99	52.79	0.00	0
6/26/01	11:58:24	940	3297	49.99	52.79	0.00	0
6/26/01	11:58:25	441	3286	49.99	52.94	0.00	0
6/26/01	11:58:25	941	3276	49.99	52.94	0.00	0
6/26/01	11:58:26	442	3268	49.99	52.94	0.00	0
6/26/01	11:58:26	943	3272	49.99	50.95	0.00	0
6/26/01	11:58:27	443	3271	49.99	50.95	28.00	0
6/26/01	11:58:27	944	3273	50.01	50.58	28.00	0
6/26/01	11:58:28	445	3266	50.01	50.58	8.00	0
6/26/01	11:58:28	946	3270	50.01	50.14	8.00	0
6/26/01	11:58:29	446	3272	50.01	50.14	-15.00	0
6/26/01	11:58:29	947	3277	50.01	49.96	-15.00	0
6/26/01	11:58:30	448	3275	50.01	49.96	-22.00	0
6/26/01	11:58:30	949	3276	50.01	49.93	-22.00	0
6/26/01	11:58:31	449	3276	50.01	49.93	-16.00	0
6/26/01	11:58:31	950	3276	50.01	49.97	-16.00	0
6/26/01	11:58:32	451	3273	50.01	49.97	-10.00	0
6/26/01	11:58:32	951	3276	50.01	49.97	-10.00	0
6/26/01	11:58:33	462	3276	50.01	49.97	-1.00	0
6/26/01	11:58:33	953	3275	50.01	49.97	-1.00	0
6/26/01	11:58:34	454	3272	50.01	49.97	4.00	0
6/26/01	11:58:34	954	3275	50.01	50.02	4.00	0
6/26/01	11:58:35	455	3274	50.01	50.02	3.00	0
6/26/01	11:58:35	956	3273	50.01	50.02	3.00	0
6/26/01	11:58:36	456	3273	50.01	50.02	7.00	0
6/26/01	11:58:36	957	3273	50.01	49.99	7.00	0
6/26/01	11:58:37	458	3273	50.01	49.99	5.00	0
6/26/01	11:58:37	959	3273	50.00	50.06	5.00	1
6/26/01	11:58:38	459	3277	50.00	50.06	0.00	1
6/26/01	11:58:38	970	3273	50.00	49.99	0.00	1
6/26/01	11:58:39	461	3276	50.00	49.99	-3.00	1
6/26/01	11:58:39	961	0	50.00	50.00	-3.00	0
6/26/01	11:58:40	462	0	50.00	50.00	0.00	0
6/26/01	11:58:40	963	0	50.00	50.00	0.00	0
6/26/01	11:58:41	464	0	50.00	50.00	0.00	0
6/26/01	11:58:41	964	0	50.00	49.92	0.00	0
6/26/01	11:58:42	475	0	50.00	49.92	0.00	0
6/26/01	11:58:42	966	0	49.99	46.08	0.00	0
6/26/01	11:58:43	467	0	49.99	46.08	0.00	0
6/26/01	11:58:43	967	0	49.99	0.00	0.00	0
6/26/01	11:58:44	468	0	49.99	0.00	0.00	0
6/26/01	11:58:44	969	0	49.99	0.00	0.00	0
6/26/01	11:58:45	469	0	49.99	0.00	0.00	0
6/26/01	11:58:45	970	0	49.99	0.00	0.00	0
6/26/01	11:58:46	471	0	49.99	0.00	0.00	0
6/26/01	11:58:46	972	0	49.99	0.00	0.00	0
6/26/01	11:58:47	472	0	49.99	0.00	0.00	0
6/26/01	11:58:47	973	0	50.02	0.00	0.00	0
6/26/01	11:58:48	474	0	50.02	0.00	0.00	0
6/26/01	11:58:48	974	0	50.02	0.00	0.00	0
6/26/01	11:58:49	475	3281	50.02	0.00	0.00	0
6/26/01	11:58:49	976	3282	50.02	0.00	0.00	0
6/26/01	11:58:50	477	3281	50.02	0.00	0.00	0
6/26/01	11:58:50	977	3281	50.02	0.00	0.00	0
6/26/01	11:58:51	478	3280	50.02	0.00	0.00	0
6/26/01	11:58:51	979	3280	50.02	0.00	0.00	0
6/26/01	11:58:52	479	3280	50.02	0.00	0.00	0

6/26/01 11:58:52	980	3281	50.02	0.00	0.00	0
6/26/01 11:58:53	481	3281	50.00	0.00	0.00	0
6/26/01 11:58:53	982	3281	50.00	0.00	0.00	0
6/26/01 11:58:54	482	3281	50.00	0.00	0.00	0
6/26/01 11:58:54	983	3282	50.00	0.00	0.00	0
6/26/01 11:58:55	484	3283	50.00	0.00	0.00	0
6/26/01 11:58:55	985	3283	50.00	0.00	0.00	0
6/26/01 11:58:56	485	3514	50.00	0.00	0.00	0
6/26/01 11:58:56	986	3602	50.00	0.00	0.00	0
6/26/01 11:58:57	487	3660	50.00	0.00	0.00	0
6/26/01 11:58:57	987	3636	50.00	0.00	0.00	0
6/26/01 11:58:58	488	3500	50.00	41.40	0.00	0
6/26/01 11:58:58	989	3426	50.00	41.40	0.00	0
6/26/01 11:58:59	490	3376	50.00	48.22	0.00	0
6/26/01 11:58:59	990	3338	50.00	48.22	0.00	0
6/26/01 11:59:00	491	3311	50.00	54.53	0.00	0
6/26/01 11:59:00	992	3294	50.00	54.53	0.00	0
6/26/01 11:59:01	492	3281	50.00	52.09	0.00	0
6/26/01 11:59:01	993	3268	50.00	52.09	0.00	0
6/26/01 11:59:02	494	3260	50.00	52.09	0.00	0
6/26/01 11:59:02	995	3258	50.00	52.09	0.00	0
6/26/01 11:59:03	495	3259	50.00	50.91	18.00	0
6/26/01 11:59:03	996	3265	50.00	50.91	18.00	0
6/26/01 11:59:04	497	3266	50.00	50.54	-32.00	0
6/26/01 11:59:04	997	3275	50.00	50.54	-32.00	0
6/26/01 11:59:05	498	3277	50.00	50.11	-74.00	0
6/26/01 11:59:05	999	3271	50.00	50.11	-74.00	0
6/26/01 11:59:06	500	3284	50.00	49.78	-76.00	0
6/26/01 11:59:07	0	3285	50.00	49.78	-76.00	0
6/26/01 11:59:07	501	3282	49.99	49.85	-48.00	0
6/26/01 11:59:08	2	3269	49.99	49.85	-48.00	0
6/26/01 11:59:08	503	3278	49.99	49.85	-16.00	0
6/26/01 11:59:09	3	3278	49.99	49.85	-16.00	0
6/26/01 11:59:09	504	3276	49.99	50.13	7.00	0
6/26/01 11:59:10	5	3274	49.99	50.13	7.00	0
6/26/01 11:59:10	505	3273	49.99	50.10	14.00	0
6/26/01 11:59:11	6	3273	49.99	50.10	14.00	0
6/26/01 11:59:11	507	3272	49.99	50.04	14.00	0
6/26/01 11:59:12	8	3272	49.99	50.04	14.00	0
6/26/01 11:59:12	508	3272	50.00	50.03	5.00	0
6/26/01 11:59:13	9	3276	50.00	50.03	5.00	0
6/26/01 11:59:13	510	3275	50.00	50.03	0.00	0
6/26/01 11:59:14	10	3275	50.00	50.03	0.00	1
6/26/01 11:59:14	511	3274	50.00	50.01	-3.00	1
6/26/01 11:59:15	12	3274	50.00	50.01	-3.00	1
6/26/01 11:59:15	523	3274	50.00	50.00	-2.00	1
6/26/01 11:59:16	13	3273	50.00	50.00	-2.00	1
6/26/01 11:59:16	514	3273	50.00	49.97	0.00	1
6/26/01 11:59:17	15	3274	50.00	49.97	0.00	1
6/26/01 11:59:17	515	3274	50.00	50.00	0.00	1
6/26/01 11:59:18	16	0	50.00	50.00	0.00	1
6/26/01 11:59:18	517	0	50.00	50.02	0.00	1
6/26/01 11:59:19	18	0	50.00	50.02	0.00	0
6/26/01 11:59:19	518	0	50.00	49.99	0.00	0
6/26/01 11:59:20	19	0	50.00	49.99	0.00	0
6/26/01 11:59:20	520	0	50.00	49.99	0.00	0
6/26/01 11:59:21	21	0	50.00	50.02	0.00	0
6/26/01 11:59:21	521	0	50.00	50.02	0.00	0
6/26/01 11:59:22	22	0	50.00	50.02	0.00	0
6/26/01 11:59:22	523	0	50.00	50.02	0.00	0
6/26/01 11:59:23	23	0	50.01	45.29	0.00	0
6/26/01 11:59:23	524	0	50.01	45.29	0.00	0
6/26/01 11:59:24	25	0	50.01	0.00	0.00	0
6/26/01 11:59:24	526	0	50.01	0.00	0.00	0
6/26/01 11:59:25	26	0	50.01	0.00	0.00	0
6/26/01 11:59:25	527	0	50.01	0.00	0.00	0
6/26/01 11:59:26	28	0	50.01	0.00	0.00	0
6/26/01 11:59:26	528	0	50.01	0.00	0.00	0
6/26/01 11:59:27	29	0	50.01	0.00	0.00	0
6/26/01 11:59:27	530	3266	50.01	0.00	0.00	0
6/26/01 11:59:28	31	3266	49.99	0.00	0.00	0
6/26/01 11:59:28	531	3267	49.99	0.00	0.00	0
6/26/01 11:59:29	32	3267	49.99	0.00	0.00	0
6/26/01 11:59:29	533	3267	49.99	0.00	0.00	0
6/26/01 11:59:30	33	3267	49.99	0.00	0.00	0
6/26/01 11:59:30	534	3267	49.99	0.00	0.00	0
6/26/01 11:59:31	35	3267	49.99	0.00	0.00	0
6/26/01 11:59:31	536	3267	49.99	0.00	0.00	0
6/26/01 11:59:32	36	3268	49.99	0.00	0.00	0
6/26/01 11:59:32	537	3269	49.99	0.00	0.00	0
6/26/01 11:59:33	38	3269	49.97	0.00	0.00	0
6/26/01 11:59:33	539	3269	49.97	0.00	0.00	0
6/26/01 11:59:34	39	3270	49.97	0.00	0.00	0

6/26/01 11:59:34	540	3487	49.97	0.00	0.00	0
6/26/01 11:59:35	41	3630	49.97	0.00	0.00	0
6/26/01 11:59:35	541	3657	49.97	0.00	0.00	0
6/26/01 11:59:36	42	3625	49.97	0.00	0.00	0
6/26/01 11:59:36	543	3550	49.97	0.00	0.00	0
6/26/01 11:59:37	44	3458	49.97	0.00	0.00	0
6/26/01 11:59:37	544	3373	49.97	0.00	0.00	0
6/26/01 11:59:38	45	3340	50.00	42.98	0.00	0
6/26/01 11:59:38	546	3309	50.00	42.98	0.00	0
6/26/01 11:59:39	46	3300	50.00	50.50	0.00	0
6/26/01 11:59:39	547	3289	50.00	50.50	0.00	0
6/26/01 11:59:40	48	3283	50.00	54.42	129.00	0
6/26/01 11:59:40	549	3281	50.00	54.42	129.00	0
6/26/01 11:59:41	49	3281	50.00	51.63	179.00	0
6/26/01 11:59:41	550	3280	50.00	51.63	179.00	0
6/26/01 11:59:42	51	3277	50.00	50.54	-152.00	0
6/26/01 11:59:42	551	3286	50.00	50.54	-152.00	0
6/26/01 11:59:43	52	3287	50.02	50.12	-127.00	0
6/26/01 11:59:43	553	3288	50.02	50.12	-127.00	0
6/26/01 11:59:44	54	3270	50.02	50.09	-70.00	0
6/26/01 11:59:44	554	3288	50.02	50.09	-70.00	0
6/26/01 11:59:45	55	3283	50.02	49.99	-15.00	0
6/26/01 11:59:45	556	3276	50.02	49.99	-15.00	0
6/26/01 11:59:46	57	3275	50.02	50.13	23.00	0
6/26/01 11:59:46	557	3274	50.02	50.13	23.00	0
6/26/01 11:59:47	58	3271	50.02	50.13	28.00	0
6/26/01 11:59:47	559	3274	50.02	50.10	28.00	0
6/26/01 11:59:48	59	3271	50.02	50.10	18.00	0
6/26/01 11:59:48	560	3278	50.00	50.07	18.00	0
6/26/01 11:59:49	61	3273	50.00	50.07	8.00	0
6/26/01 11:59:49	562	3272	50.00	49.99	8.00	0
6/26/01 11:59:50	62	3272	50.00	49.99	0.00	0
6/26/01 11:59:50	563	3274	50.00	49.89	0.00	0
6/26/01 11:59:51	64	3273	50.00	49.89	-3.00	0
6/26/01 11:59:51	564	3274	50.00	49.95	-3.00	0
6/26/01 11:59:52	65	3274	50.00	49.95	-3.00	0
6/26/01 11:59:52	566	3274	50.00	49.99	-3.00	0
6/26/01 11:59:53	67	3274	50.00	49.99	-2.00	1
6/26/01 11:59:53	567	3278	49.99	49.98	-2.00	1
6/26/01 11:59:54	68	3274	49.99	49.98	-1.00	1
6/26/01 11:59:54	569	3274	49.99	50.03	-1.00	1
6/26/01 11:59:55	69	3274	49.99	50.03	0.00	1
6/26/01 11:59:55	570	0	49.99	50.01	0.00	1
6/26/01 11:59:56	71	0	49.99	50.01	0.00	0
6/26/01 11:59:56	572	0	49.99	49.99	0.00	0
6/26/01 11:59:57	72	0	49.99	49.99	0.00	0
6/26/01 11:59:57	573	0	49.99	49.99	0.00	0
6/26/01 11:59:58	74	0	49.99	49.99	0.00	0
6/26/01 11:59:58	575	0	50.00	50.02	0.00	0
6/26/01 11:59:59	75	0	50.00	50.02	0.00	0
6/26/01 11:59:59	576	0	50.00	45.61	0.00	0
6/26/01 12:00:00	77	0	50.00	45.61	0.00	0
6/26/01 12:00:00	577	0	50.00	0.00	0.00	0
6/26/01 12:00:01	78	0	50.00	0.00	0.00	0
6/26/01 12:00:01	579	0	50.00	0.00	0.00	0
6/26/01 12:00:02	80	0	50.00	0.00	0.00	0
6/26/01 12:00:02	580	0	50.00	0.00	0.00	0
6/26/01 12:00:03	81	0	50.00	0.00	0.00	0
6/26/01 12:00:03	582	0	50.00	0.00	0.00	0
6/26/01 12:00:04	82	0	50.00	0.00	0.00	0
6/26/01 12:00:04	583	3255	50.00	0.00	0.00	0
6/26/01 12:00:05	84	3255	50.00	0.00	0.00	0
6/26/01 12:00:05	585	3255	50.00	0.00	0.00	0
6/26/01 12:00:06	85	3255	50.00	0.00	0.00	0
6/26/01 12:00:06	586	3253	50.00	0.00	0.00	0
6/26/01 12:00:07	87	3252	50.00	0.00	0.00	0
6/26/01 12:00:07	587	3252	50.00	0.00	0.00	0
6/26/01 12:00:08	88	3252	50.00	0.00	0.00	0
6/26/01 12:00:08	589	3251	50.00	0.00	0.00	0
6/26/01 12:00:09	90	3251	50.00	0.00	0.00	0
6/26/01 12:00:09	590	3251	50.00	0.00	0.00	0
6/26/01 12:00:10	91	3251	50.00	0.00	0.00	0
6/26/01 12:00:10	592	3251	50.00	0.00	0.00	0
6/26/01 12:00:11	93	3251	50.00	0.00	0.00	0
6/26/01 12:00:11	593	3471	50.00	0.00	0.00	0
6/26/01 12:00:12	94	3566	50.00	0.00	0.00	0
6/26/01 12:00:12	595	3565	50.00	0.00	0.00	0
6/26/01 12:00:13	95	3560	50.00	0.00	0.00	0
6/26/01 12:00:13	596	3429	49.99	40.28	0.00	0
6/26/01 12:00:14	97	3376	49.99	40.28	0.00	0
6/26/01 12:00:14	598	3338	49.99	47.06	0.00	0
6/26/01 12:00:15	98	3304	49.99	47.06	0.00	0
6/26/01 12:00:15	599	3290	49.99	53.89	0.00	0

6/26/01 12:00:16	100	3284	49.99	53.89	0.00	0
6/26/01 12:00:16	610	3282	49.99	51.65	0.00	0
6/26/01 12:00:17	101	3279	49.99	51.65	179.00	0
6/26/01 12:00:17	602	3277	49.99	50.49	179.00	0
6/26/01 12:00:18	103	3279	49.99	50.49	-150.00	0
6/26/01 12:00:18	603	3283	50.00	50.06	-150.00	0
6/26/01 12:00:19	104	3279	50.00	50.06	-122.00	0
6/26/01 12:00:19	605	3278	50.00	50.06	-122.00	0
6/26/01 12:00:20	105	3263	50.00	50.06	-62.00	0
6/26/01 12:00:20	606	3288	50.00	50.03	-62.00	0
6/26/01 12:00:21	107	3281	50.00	50.03	-7.00	0
6/26/01 12:00:21	608	3278	50.00	50.09	-7.00	0
6/26/01 12:00:22	108	3276	50.00	50.09	20.00	0
6/26/01 12:00:22	609	3273	50.00	50.13	20.00	0
6/26/01 12:00:23	110	3272	50.00	50.13	26.00	0
6/26/01 12:00:23	611	3271	49.99	50.13	26.00	0
6/26/01 12:00:24	111	3276	49.99	50.13	19.00	0
6/26/01 12:00:24	612	3273	49.99	50.13	19.00	0
6/26/01 12:00:25	113	3273	49.99	50.01	7.00	0
6/26/01 12:00:25	613	3271	49.99	50.01	7.00	0
6/26/01 12:00:26	114	3272	49.99	49.98	0.00	0
6/26/01 12:00:26	615	3275	49.99	49.98	0.00	0
6/26/01 12:00:27	116	3273	49.99	49.96	-3.00	0
6/26/01 12:00:27	616	3274	49.99	49.96	-3.00	0
6/26/01 12:00:28	117	3274	50.00	50.04	-5.00	0
6/26/01 12:00:28	618	3273	50.00	50.04	-5.00	0
6/26/01 12:00:29	118	3274	50.00	49.98	-3.00	0
6/26/01 12:00:29	619	3274	50.00	49.98	-3.00	0
6/26/01 12:00:30	120	3272	50.00	49.97	-1.00	1
6/26/01 12:00:30	621	3275	50.00	49.97	-1.00	1
6/26/01 12:00:31	121	3274	50.00	50.00	0.00	1
6/26/01 12:00:31	622	3274	50.00	50.00	0.00	1
6/26/01 12:00:32	123	3274	50.00	50.03	2.00	1
6/26/01 12:00:32	623	0	50.00	50.03	2.00	1
6/26/01 12:00:33	124	0	49.95	49.94	0.00	0
6/26/01 12:00:33	625	0	49.95	49.94	0.00	0
6/26/01 12:00:34	126	0	49.95	50.00	0.00	0
6/26/01 12:00:34	626	0	49.95	50.00	0.00	0
6/26/01 12:00:35	127	0	49.95	49.98	0.00	0
6/26/01 12:00:35	628	0	49.95	49.98	0.00	0
6/26/01 12:00:36	129	0	49.95	44.35	0.00	0
6/26/01 12:00:36	629	0	49.95	44.35	0.00	0
6/26/01 12:00:37	130	0	49.95	0.00	0.00	0
6/26/01 12:00:37	631	0	49.95	0.00	0.00	0
6/26/01 12:00:38	131	0	50.01	0.00	0.00	0
6/26/01 12:00:38	632	0	50.01	0.00	0.00	0
6/26/01 12:00:39	133	0	50.01	0.00	0.00	0
6/26/01 12:00:39	634	0	50.01	0.00	0.00	0
6/26/01 12:00:40	134	0	50.01	0.00	0.00	0
6/26/01 12:00:40	635	0	50.01	0.00	0.00	0
6/26/01 12:00:41	136	0	50.01	0.00	0.00	0
6/26/01 12:00:41	636	0	50.01	0.00	0.00	0
6/26/01 12:00:42	137	0	50.01	0.00	0.00	0
6/26/01 12:00:42	638	3258	50.01	0.00	0.00	0
6/26/01 12:00:43	139	3258	50.02	0.00	0.00	0
6/26/01 12:00:43	639	3258	50.02	0.00	0.00	0
6/26/01 12:00:44	140	3258	50.02	0.00	0.00	0
6/26/01 12:00:44	641	3260	50.02	0.00	0.00	0
6/26/01 12:00:45	141	3261	50.02	0.00	0.00	0
6/26/01 12:00:45	642	3261	50.02	0.00	0.00	0
6/26/01 12:00:46	153	3261	50.02	0.00	0.00	0
6/26/01 12:00:46	644	3261	50.02	0.00	0.00	0
6/26/01 12:00:47	144	3261	50.02	0.00	0.00	0
6/26/01 12:00:47	645	3262	50.02	0.00	0.00	0
6/26/01 12:00:48	156	3262	50.02	0.00	0.00	0
6/26/01 12:00:48	647	3263	49.98	0.00	0.00	0
6/26/01 12:00:49	147	3434	49.98	0.00	0.00	0
6/26/01 12:00:49	648	3578	49.98	0.00	0.00	0
6/26/01 12:00:50	149	3654	49.98	0.00	0.00	0
6/26/01 12:00:50	649	3624	49.98	0.00	0.00	0
6/26/01 12:00:51	150	3578	49.98	0.00	0.00	0
6/26/01 12:00:51	651	3495	49.98	0.00	0.00	0
6/26/01 12:00:52	152	3410	49.98	0.00	0.00	0
6/26/01 12:00:52	652	3346	49.98	46.36	0.00	0
6/26/01 12:00:53	153	3324	49.98	46.36	0.00	0
6/26/01 12:00:53	654	3302	49.99	53.20	0.00	0
6/26/01 12:00:54	154	3289	49.99	53.20	0.00	0
6/26/01 12:00:54	655	3268	49.99	52.64	0.00	0
6/26/01 12:00:55	156	3262	49.99	52.64	0.00	0
6/26/01 12:00:55	657	3262	49.99	50.97	-54.00	0
6/26/01 12:00:56	157	3262	49.99	50.97	-54.00	0
6/26/01 12:00:56	658	3266	49.99	50.61	-56.00	0
6/26/01 12:00:57	159	3268	49.99	50.61	-56.00	0

6/26/01 12:00:57	659	3274	49.99	50.61	-101.00	0
6/26/01 12:00:58	160	3274	49.99	50.61	-101.00	0
6/26/01 12:00:58	661	3277	49.99	50.21	-87.00	0
6/26/01 12:00:59	162	3267	49.99	50.21	-87.00	0
6/26/01 12:00:59	662	3272	49.99	49.80	-50.00	0
6/26/01 12:01:00	163	3283	49.99	49.80	-50.00	0
6/26/01 12:01:00	664	3279	49.99	49.92	-7.00	0
6/26/01 12:01:01	165	3276	49.99	49.92	-7.00	0
6/26/01 12:01:01	665	3276	49.99	50.10	9.00	0
6/26/01 12:01:02	166	3275	49.99	50.10	9.00	0
6/26/01 12:01:02	667	3273	49.99	50.10	15.00	0
6/26/01 12:01:03	167	3275	49.99	50.10	15.00	0
6/26/01 12:01:03	668	3273	49.98	50.03	11.00	0
6/26/01 12:01:04	169	3272	49.98	50.03	11.00	0
6/26/01 12:01:04	670	3274	49.98	49.98	6.00	0
6/26/01 12:01:05	170	3272	49.98	49.98	6.00	0
6/26/01 12:01:05	671	3273	49.98	49.97	1.00	0
6/26/01 12:01:06	172	3271	49.98	49.97	1.00	0
6/26/01 12:01:06	672	3273	49.98	50.01	1.00	1
6/26/01 12:01:07	173	3273	49.98	50.01	-1.00	1
6/26/01 12:01:07	674	3274	49.98	49.98	-1.00	1
6/26/01 12:01:08	175	3273	49.98	49.98	-3.00	1
6/26/01 12:01:08	675	3278	50.00	49.98	-3.00	1
6/26/01 12:01:09	176	3274	50.00	49.98	-5.00	1
6/26/01 12:01:09	677	3274	50.00	49.95	-5.00	1
6/26/01 12:01:10	177	3274	50.00	49.95	-2.00	1
6/26/01 12:01:10	678	3274	50.00	49.97	-2.00	1
6/26/01 12:01:11	179	0	50.00	49.97	2.00	1
6/26/01 12:01:11	680	0	50.00	50.00	2.00	1
6/26/01 12:01:12	180	0	50.00	50.00	0.00	0
6/26/01 12:01:12	681	0	50.00	50.04	0.00	0
6/26/01 12:01:13	182	0	50.00	50.04	0.00	0
6/26/01 12:01:13	683	0	50.00	49.84	0.00	0
6/26/01 12:01:14	183	0	50.00	49.84	0.00	0
6/26/01 12:01:14	684	0	50.00	49.84	0.00	0
6/26/01 12:01:15	185	0	50.00	42.86	0.00	0
6/26/01 12:01:15	685	0	50.00	42.86	0.00	0
6/26/01 12:01:16	186	0	50.00	42.86	0.00	0
6/26/01 12:01:16	687	0	50.00	42.86	0.00	0
6/26/01 12:01:17	188	0	50.00	0.00	0.00	0
6/26/01 12:01:17	688	0	50.00	0.00	0.00	0
6/26/01 12:01:18	189	0	50.00	0.00	0.00	0
6/26/01 12:01:18	690	0	50.00	0.00	0.00	0
6/26/01 12:01:19	190	0	49.98	0.00	0.00	0
6/26/01 12:01:19	691	0	49.98	0.00	0.00	0
6/26/01 12:01:20	192	0	49.98	0.00	0.00	0
6/26/01 12:01:20	693	0	49.98	0.00	0.00	0
6/26/01 12:01:21	193	0	49.98	0.00	0.00	0
6/26/01 12:01:21	694	0	49.98	0.00	0.00	0
6/26/01 12:01:22	195	3257	49.98	0.00	0.00	0
6/26/01 12:01:22	695	3257	49.98	0.00	0.00	0
6/26/01 12:01:23	206	3257	49.98	0.00	0.00	0
6/26/01 12:01:23	697	3258	49.98	0.00	0.00	0
6/26/01 12:01:24	198	3258	49.99	0.00	0.00	0
6/26/01 12:01:24	698	3258	49.99	0.00	0.00	0
6/26/01 12:01:25	199	3259	49.99	0.00	0.00	0
6/26/01 12:01:25	700	3260	49.99	0.00	0.00	0
6/26/01 12:01:26	201	3259	49.99	0.00	0.00	0
6/26/01 12:01:26	701	3259	49.99	0.00	0.00	0
6/26/01 12:01:27	202	3260	49.99	0.00	0.00	0
6/26/01 12:01:27	703	3260	49.99	0.00	0.00	0
6/26/01 12:01:28	203	3262	49.99	0.00	0.00	0
6/26/01 12:01:28	704	3604	49.99	0.00	0.00	0
6/26/01 12:01:29	205	3512	49.96	0.00	0.00	0
6/26/01 12:01:29	706	3618	49.96	0.00	0.00	0
6/26/01 12:01:30	206	3629	49.96	0.00	173.00	0
6/26/01 12:01:30	707	3549	49.96	0.00	173.00	0
6/26/01 12:01:31	208	3476	49.96	0.00	0.00	0
6/26/01 12:01:31	708	3398	49.96	0.00	0.00	0
6/26/01 12:01:32	209	3338	49.96	45.42	0.00	0
6/26/01 12:01:32	710	3318	49.96	45.42	0.00	0
6/26/01 12:01:33	211	3302	49.96	52.81	0.00	0
6/26/01 12:01:33	711	3288	49.96	52.81	0.00	0
6/26/01 12:01:34	212	3279	49.99	52.59	0.00	0
6/26/01 12:01:34	713	3276	49.99	52.59	0.00	0
6/26/01 12:01:35	213	3275	49.99	50.82	-118.00	0
6/26/01 12:01:35	714	3276	49.99	50.82	-118.00	0
6/26/01 12:01:36	215	3276	49.99	50.50	-110.00	0
6/26/01 12:01:36	716	3278	49.99	50.50	-110.00	0
6/26/01 12:01:37	216	3285	49.99	50.07	-97.00	0
6/26/01 12:01:37	717	3273	49.99	50.07	-97.00	0
6/26/01 12:01:38	218	3271	49.99	50.07	-59.00	0
6/26/01 12:01:38	719	3277	49.99	50.07	-59.00	0

6/26/01 12:01:39	219	3281	49.99	50.06	-13.00	0
6/26/01 12:01:39	720	3280	49.99	50.06	-13.00	0
6/26/01 12:01:40	221	3269	49.99	50.08	8.00	0
6/26/01 12:01:40	721	3275	49.99	50.08	8.00	0
6/26/01 12:01:41	222	3274	49.99	50.12	18.00	0
6/26/01 12:01:41	723	3273	49.99	50.12	18.00	0
6/26/01 12:01:42	224	3272	49.99	50.16	14.00	0
6/26/01 12:01:42	724	3272	49.99	50.16	14.00	0
6/26/01 12:01:43	225	3272	49.99	49.97	14.00	0
6/26/01 12:01:43	726	3276	49.99	49.97	5.00	0
6/26/01 12:01:44	226	3273	50.00	50.03	5.00	0
6/26/01 12:01:44	727	3273	50.00	50.03	2.00	1
6/26/01 12:01:45	228	3273	50.00	50.02	2.00	1
6/26/01 12:01:45	729	3273	50.00	50.02	0.00	1
6/26/01 12:01:46	229	3273	50.00	49.99	0.00	1
6/26/01 12:01:46	730	3271	50.00	49.99	-1.00	1
6/26/01 12:01:47	231	3274	50.00	49.99	-1.00	1
6/26/01 12:01:47	731	3274	50.00	50.00	-3.00	1
6/26/01 12:01:48	232	3274	50.00	50.00	-3.00	1
6/26/01 12:01:48	733	3272	50.00	50.00	-1.00	1
6/26/01 12:01:49	234	0	50.00	50.00	-1.00	1
6/26/01 12:01:49	734	0	49.99	50.00	0.00	0
6/26/01 12:01:50	235	0	49.99	50.00	0.00	0
6/26/01 12:01:50	736	0	49.99	49.97	0.00	0
6/26/01 12:01:51	237	0	49.99	49.97	0.00	0
6/26/01 12:01:51	737	0	49.99	50.04	0.00	0
6/26/01 12:01:52	238	0	49.99	50.04	0.00	0
6/26/01 12:01:52	739	0	49.99	50.04	0.00	0
6/26/01 12:01:53	239	0	49.99	50.04	0.00	0
6/26/01 12:01:53	740	0	49.99	44.46	0.00	0
6/26/01 12:01:54	241	0	49.99	44.46	0.00	0
6/26/01 12:01:54	742	0	49.97	0.00	0.00	0
6/26/01 12:01:55	242	0	49.97	0.00	0.00	0
6/26/01 12:01:55	743	0	49.97	0.00	0.00	0
6/26/01 12:01:56	244	0	49.97	0.00	0.00	0
6/26/01 12:01:56	744	0	49.97	0.00	0.00	0
6/26/01 12:01:57	245	0	49.97	0.00	0.00	0
6/26/01 12:01:57	746	0	49.97	0.00	0.00	0
6/26/01 12:01:58	247	0	49.97	0.00	0.00	0
6/26/01 12:01:58	747	0	49.97	0.00	0.00	0
6/26/01 12:01:59	248	0	49.97	0.00	0.00	0
6/26/01 12:01:59	749	0	49.99	0.00	0.00	0
6/26/01 12:02:00	249	0	49.99	0.00	0.00	0
6/26/01 12:02:00	750	3264	49.99	0.00	0.00	0
6/26/01 12:02:01	251	3264	49.99	0.00	0.00	0
6/26/01 12:02:01	752	3263	49.99	0.00	0.00	0
6/26/01 12:02:02	252	3264	49.99	0.00	0.00	0
6/26/01 12:02:02	753	3264	49.99	0.00	0.00	0
6/26/01 12:02:03	254	3266	49.99	0.00	0.00	0
6/26/01 12:02:03	755	3267	49.99	0.00	0.00	0
6/26/01 12:02:04	255	3268	49.99	0.00	0.00	0
6/26/01 12:02:04	756	3269	49.94	0.00	0.00	0
6/26/01 12:02:05	257	3268	49.94	0.00	0.00	0
6/26/01 12:02:05	757	3268	49.94	0.00	0.00	0
6/26/01 12:02:06	258	3268	49.94	0.00	0.00	0
6/26/01 12:02:06	759	3268	49.94	0.00	0.00	0
6/26/01 12:02:07	260	3418	49.94	0.00	0.00	0
6/26/01 12:02:07	760	3597	49.94	0.00	0.00	0
6/26/01 12:02:08	261	3663	49.94	0.00	0.00	0
6/26/01 12:02:08	762	3658	50.00	0.00	0.00	0
6/26/01 12:02:09	262	3577	50.00	0.00	0.00	0
6/26/01 12:02:09	763	3474	50.00	0.00	0.00	0
6/26/01 12:02:10	264	3401	50.00	0.00	0.00	0
6/26/01 12:02:10	765	3336	50.00	43.41	0.00	0
6/26/01 12:02:11	265	3317	50.00	43.41	0.00	0
6/26/01 12:02:11	766	3301	50.00	50.83	0.00	0
6/26/01 12:02:12	267	3280	50.00	50.83	0.00	0
6/26/01 12:02:12	767	3276	50.00	53.74	0.00	0
6/26/01 12:02:13	268	3274	50.00	53.74	-180.00	0
6/26/01 12:02:13	769	3273	50.00	53.74	-180.00	0
6/26/01 12:02:14	270	3274	49.97	51.16	-179.00	0
6/26/01 12:02:14	770	3282	49.97	51.16	-179.00	0
6/26/01 12:02:15	271	3289	49.97	50.84	-179.00	0
6/26/01 12:02:15	772	3292	49.97	50.84	-159.00	0
6/26/01 12:02:16	283	3266	49.97	50.02	-159.00	0
6/26/01 12:02:16	773	3292	49.97	50.02	-83.00	0
6/26/01 12:02:17	274	3263	49.97	49.98	-83.00	0
6/26/01 12:02:17	775	3264	49.97	49.98	-20.00	0
6/26/01 12:02:18	275	3275	49.97	50.11	-20.00	0
6/26/01 12:02:18	776	3274	49.97	50.11	23.00	0
6/26/01 12:02:19	277	3274	50.03	50.19	23.00	0
6/26/01 12:02:19	778	3272	50.03	50.19	30.00	0
6/26/01 12:02:20	278	3271	50.03	50.21	30.00	0

6/26/01 12:02:20	779	3271	50.03	50.21	20.00	0
6/26/01 12:02:21	280	3272	50.03	49.99	20.00	0
6/26/01 12:02:21	780	3271	50.03	49.99	9.00	0
6/26/01 12:02:22	281	3274	50.03	49.93	9.00	0
6/26/01 12:02:22	782	3272	50.03	49.93	0.00	0
6/26/01 12:02:23	283	3276	50.03	49.98	0.00	0
6/26/01 12:02:23	783	3273	50.03	49.98	-4.00	1
6/26/01 12:02:24	284	3274	50.02	50.00	-4.00	1
6/26/01 12:02:24	785	3274	50.02	50.00	-2.00	1
6/26/01 12:02:25	285	3274	50.02	49.98	-2.00	1
6/26/01 12:02:25	796	3276	50.02	49.98	-3.00	1
6/26/01 12:02:26	287	3271	50.02	50.02	-3.00	1
6/26/01 12:02:26	788	3274	50.02	50.02	-2.00	1
6/26/01 12:02:27	288	3274	50.02	49.99	-2.00	1
6/26/01 12:02:27	789	3274	50.02	49.99	0.00	1
6/26/01 12:02:28	290	3274	50.02	50.01	0.00	1
6/26/01 12:02:28	791	3274	50.02	50.01	2.00	1
6/26/01 12:02:29	291	0	50.01	50.02	2.00	1
6/26/01 12:02:29	792	0	50.01	50.02	0.00	0
6/26/01 12:02:30	293	0	50.01	49.98	0.00	0
6/26/01 12:02:30	793	0	50.01	49.98	0.00	0
6/26/01 12:02:31	294	0	50.01	49.98	0.00	0
6/26/01 12:02:31	795	0	50.01	49.98	0.00	0
6/26/01 12:02:32	296	0	50.01	50.00	0.00	0
6/26/01 12:02:32	796	0	50.01	50.00	0.00	0
6/26/01 12:02:33	297	0	50.01	44.12	0.00	0
6/26/01 12:02:33	798	0	50.01	44.12	0.00	0
6/26/01 12:02:34	298	0	49.98	0.00	0.00	0
6/26/01 12:02:34	799	0	49.98	0.00	0.00	0
6/26/01 12:02:35	300	0	49.98	0.00	0.00	0
6/26/01 12:02:35	801	0	49.98	0.00	0.00	0
6/26/01 12:02:36	301	0	49.98	0.00	0.00	0
6/26/01 12:02:36	802	0	49.98	0.00	0.00	0
6/26/01 12:02:37	303	0	49.98	0.00	0.00	0
6/26/01 12:02:37	803	0	49.98	0.00	0.00	0
6/26/01 12:02:38	304	0	49.98	0.00	0.00	0
6/26/01 12:02:38	805	0	49.98	0.00	0.00	0
6/26/01 12:02:39	306	0	49.98	0.00	0.00	0
6/26/01 12:02:39	806	0	49.98	0.00	0.00	0
6/26/01 12:02:40	307	3256	49.98	0.00	0.00	0
6/26/01 12:02:40	808	3256	49.98	0.00	0.00	0
6/26/01 12:02:41	309	3257	49.98	0.00	0.00	0
6/26/01 12:02:41	809	3257	49.98	0.00	0.00	0
6/26/01 12:02:42	310	3257	49.98	0.00	0.00	0
6/26/01 12:02:42	811	3257	49.98	0.00	0.00	0
6/26/01 12:02:43	311	3257	49.98	0.00	0.00	0
6/26/01 12:02:43	812	3257	49.98	0.00	0.00	0
6/26/01 12:02:44	313	3257	50.01	0.00	0.00	0
6/26/01 12:02:44	814	3257	50.01	0.00	0.00	0
6/26/01 12:02:45	314	3257	50.01	0.00	0.00	0
6/26/01 12:02:45	815	3257	50.01	0.00	0.00	0
6/26/01 12:02:46	316	3257	50.01	0.00	0.00	0
6/26/01 12:02:46	816	3257	50.01	0.00	0.00	0
6/26/01 12:02:47	317	3522	50.01	0.00	0.00	0
6/26/01 12:02:47	818	3587	50.01	0.00	0.00	0
6/26/01 12:02:48	319	3568	50.01	0.00	0.00	0
6/26/01 12:02:48	819	3548	50.01	0.00	0.00	0
6/26/01 12:02:49	320	3445	49.98	0.00	0.00	0
6/26/01 12:02:49	821	3367	49.98	0.00	0.00	0
6/26/01 12:02:50	321	3340	49.98	44.67	0.00	0
6/26/01 12:02:50	822	3312	49.98	44.67	0.00	0
6/26/01 12:02:51	323	3292	49.98	51.43	0.00	0
6/26/01 12:02:51	834	3283	49.98	51.43	0.00	0
6/26/01 12:02:52	324	3280	49.98	52.36	18.00	0
6/26/01 12:02:52	825	3278	49.98	52.36	18.00	0
6/26/01 12:02:53	326	3279	49.98	51.17	57.00	0
6/26/01 12:02:53	827	3273	49.98	51.17	57.00	0
6/26/01 12:02:54	327	3275	50.00	50.17	73.00	0
6/26/01 12:02:54	828	3271	50.00	50.17	73.00	0
6/26/01 12:02:55	329	3265	50.00	50.08	59.00	0
6/26/01 12:02:55	829	3267	50.00	50.08	59.00	0
6/26/01 12:02:56	330	3267	50.00	50.08	27.00	0
6/26/01 12:02:56	831	3268	50.00	50.08	27.00	0
6/26/01 12:02:57	332	3271	50.00	49.98	0.00	0
6/26/01 12:02:57	832	3275	50.00	49.98	0.00	0
6/26/01 12:02:58	333	3273	50.00	49.95	-11.00	0
6/26/01 12:02:58	834	3274	50.00	49.95	-11.00	0
6/26/01 12:02:59	334	3275	50.00	49.95	-12.00	0
6/26/01 12:02:59	835	3275	49.99	49.84	-12.00	0
6/26/01 12:03:00	336	3273	49.99	49.84	-7.00	0
6/26/01 12:03:00	837	3274	49.99	49.93	-7.00	0
6/26/01 12:03:01	337	3277	49.99	49.93	-6.00	0
6/26/01 12:03:01	838	3275	49.99	49.96	-6.00	0

6/26/01 12:03:02	339	3275	49.99	49.96	-2.00	1
6/26/01 12:03:02	839	3274	49.99	49.98	-2.00	1
6/26/01 12:03:03	340	3274	49.99	49.98	2.00	1
6/26/01 12:03:03	841	3273	49.99	50.01	2.00	1
6/26/01 12:03:04	342	3273	49.99	50.01	3.00	1
6/26/01 12:03:04	842	3273	49.98	49.99	3.00	1
6/26/01 12:03:05	343	3275	49.98	49.99	3.00	1
6/26/01 12:03:05	844	3273	49.98	50.01	3.00	1
6/26/01 12:03:06	345	3273	49.98	50.01	0.00	1
6/26/01 12:03:06	845	0	49.98	49.99	0.00	1
6/26/01 12:03:07	346	0	49.98	49.99	0.00	1
6/26/01 12:03:07	847	0	49.98	50.02	0.00	0
6/26/01 12:03:08	347	0	49.98	50.02	0.00	0
6/26/01 12:03:08	848	0	49.98	49.98	0.00	0
6/26/01 12:03:09	349	0	49.98	49.98	0.00	0
6/26/01 12:03:09	850	0	50.00	50.00	0.00	0
6/26/01 12:03:10	350	0	50.00	50.00	0.00	0
6/26/01 12:03:10	851	0	50.00	43.31	0.00	0
6/26/01 12:03:11	362	0	50.00	43.31	0.00	0
6/26/01 12:03:11	852	0	50.00	0.00	0.00	0
6/26/01 12:03:12	353	0	50.00	0.00	0.00	0
6/26/01 12:03:12	854	0	50.00	0.00	0.00	0
6/26/01 12:03:13	355	0	50.00	0.00	0.00	0
6/26/01 12:03:13	855	0	50.00	0.00	0.00	0
6/26/01 12:03:14	356	0	50.00	0.00	0.00	0
6/26/01 12:03:14	857	0	49.97	0.00	0.00	0
6/26/01 12:03:15	357	0	49.97	0.00	0.00	0
6/26/01 12:03:15	858	0	49.97	0.00	0.00	0
6/26/01 12:03:16	359	0	49.97	0.00	0.00	0
6/26/01 12:03:16	860	0	49.97	0.00	0.00	0
6/26/01 12:03:17	360	0	49.97	0.00	0.00	0
6/26/01 12:03:17	861	0	49.97	0.00	0.00	0
6/26/01 12:03:18	362	3297	49.97	0.00	0.00	0
6/26/01 12:03:18	863	3298	49.97	0.00	0.00	0
6/26/01 12:03:19	363	3298	49.97	0.00	0.00	0
6/26/01 12:03:19	864	3298	49.97	0.00	0.00	0
6/26/01 12:03:20	365	3299	49.99	0.00	0.00	0
6/26/01 12:03:20	865	3299	49.99	0.00	0.00	0
6/26/01 12:03:21	366	3300	49.99	0.00	0.00	0
6/26/01 12:03:21	867	3300	49.99	0.00	0.00	0
6/26/01 12:03:22	368	3300	49.99	0.00	0.00	0
6/26/01 12:03:22	868	3300	49.99	0.00	0.00	0
6/26/01 12:03:23	369	3300	49.99	0.00	0.00	0
6/26/01 12:03:23	870	3301	49.99	0.00	0.00	0
6/26/01 12:03:24	370	3301	49.99	0.00	0.00	0
6/26/01 12:03:24	871	3302	49.99	0.00	0.00	0
6/26/01 12:03:25	372	3539	49.99	0.00	0.00	0
6/26/01 12:03:25	873	3647	49.99	0.00	0.00	0
6/26/01 12:03:26	373	3679	49.99	0.00	0.00	0
6/26/01 12:03:26	874	3665	49.99	0.00	0.00	0
6/26/01 12:03:27	375	3569	49.99	0.00	0.00	0
6/26/01 12:03:27	875	3459	49.99	0.00	0.00	0
6/26/01 12:03:28	376	3379	49.99	43.08	0.00	0
6/26/01 12:03:28	877	3335	49.99	43.08	0.00	0
6/26/01 12:03:29	378	3319	49.99	50.58	0.00	0
6/26/01 12:03:29	878	3300	49.99	50.58	0.00	0
6/26/01 12:03:30	379	3292	49.97	54.12	0.00	0
6/26/01 12:03:30	880	3276	49.97	54.12	0.00	0
6/26/01 12:03:31	381	3273	49.97	51.96	0.00	0
6/26/01 12:03:31	881	3272	49.97	51.96	-2.00	0
6/26/01 12:03:32	382	3273	49.97	50.76	-2.00	0
6/26/01 12:03:32	883	3273	49.97	50.76	-15.00	0
6/26/01 12:03:33	393	3270	49.97	50.76	-15.00	0
6/26/01 12:03:33	884	3273	49.97	50.76	-22.00	0
6/26/01 12:03:34	385	3270	49.97	50.34	-22.00	0
6/26/01 12:03:34	886	3275	49.97	50.34	-20.00	0
6/26/01 12:03:35	386	3275	49.95	49.91	-20.00	0
6/26/01 12:03:35	887	3276	49.95	49.91	-13.00	0
6/26/01 12:03:36	388	3274	49.95	49.96	-13.00	0
6/26/01 12:03:36	888	3276	49.95	49.96	-13.00	0
6/26/01 12:03:37	389	3276	49.95	49.99	-7.00	0
6/26/01 12:03:37	890	3275	49.95	49.99	-7.00	0
6/26/01 12:03:38	391	3275	49.95	49.98	0.00	0
6/26/01 12:03:38	891	3274	49.95	49.98	0.00	0
6/26/01 12:03:39	392	3273	49.95	50.05	6.00	0
6/26/01 12:03:39	893	3273	49.95	50.05	6.00	0
6/26/01 12:03:40	393	3274	49.99	49.99	7.00	0
6/26/01 12:03:40	894	3275	49.99	49.99	7.00	0
6/26/01 12:03:41	395	3273	49.99	50.06	0.00	1
6/26/01 12:03:41	896	3273	49.99	50.06	0.00	1
6/26/01 12:03:42	396	3273	49.99	49.97	0.00	1
6/26/01 12:03:42	897	3274	49.99	49.97	0.00	1
6/26/01 12:03:43	398	3274	49.99	49.98	-2.00	1

6/26/01 12:03:43	899	3273	49.99	49.98	-2.00	1
6/26/01 12:03:44	399	0	49.99	49.98	0.00	1
6/26/01 12:03:44	900	0	49.99	50.03	0.00	1
6/26/01 12:03:45	401	0	49.99	50.03	0.00	0
6/26/01 12:03:45	901	0	49.99	49.98	0.00	0
6/26/01 12:03:46	402	0	49.99	49.98	0.00	0
6/26/01 12:03:46	903	0	49.99	49.97	0.00	0
6/26/01 12:03:47	404	0	49.99	49.97	0.00	0
6/26/01 12:03:47	904	0	49.99	48.23	0.00	0
6/26/01 12:03:48	405	0	49.99	48.23	0.00	0
6/26/01 12:03:48	906	0	49.99	48.23	0.00	0
6/26/01 12:03:49	406	0	49.99	48.23	0.00	0
6/26/01 12:03:49	907	0	49.99	41.32	0.00	0
6/26/01 12:03:50	408	0	49.99	41.32	0.00	0
6/26/01 12:03:50	909	0	49.99	0.00	0.00	0
6/26/01 12:03:51	409	0	49.99	0.00	0.00	0
6/26/01 12:03:51	910	0	49.99	0.00	0.00	0
6/26/01 12:03:52	411	0	49.99	0.00	0.00	0
6/26/01 12:03:52	911	0	49.99	0.00	0.00	0
6/26/01 12:03:53	412	0	49.99	0.00	0.00	0
6/26/01 12:03:53	913	0	49.99	0.00	0.00	0
6/26/01 12:03:54	414	0	49.99	0.00	0.00	0
6/26/01 12:03:54	914	0	49.99	0.00	0.00	0
6/26/01 12:03:55	415	0	49.99	0.00	0.00	0
6/26/01 12:03:55	916	3281	49.98	0.00	0.00	0
6/26/01 12:03:56	417	3281	49.98	0.00	0.00	0
6/26/01 12:03:56	917	3281	49.98	0.00	0.00	0
6/26/01 12:03:57	418	3282	49.98	0.00	0.00	0
6/26/01 12:03:57	919	3282	49.98	0.00	0.00	0
6/26/01 12:03:58	419	3283	49.98	0.00	0.00	0
6/26/01 12:03:58	920	3284	49.98	0.00	0.00	0
6/26/01 12:03:59	421	3285	49.98	0.00	0.00	0
6/26/01 12:03:59	922	3285	49.98	0.00	0.00	0
6/26/01 12:04:00	422	3286	49.98	0.00	0.00	0
6/26/01 12:04:00	923	3286	49.99	0.00	0.00	0
6/26/01 12:04:01	424	3286	49.99	0.00	0.00	0
6/26/01 12:04:01	924	3286	49.99	0.00	0.00	0
6/26/01 12:04:02	425	3647	49.99	0.00	0.00	0
6/26/01 12:04:02	926	3587	49.99	0.00	0.00	0
6/26/01 12:04:03	427	3687	49.99	0.00	0.00	0
6/26/01 12:04:03	927	3694	49.99	0.00	0.00	0
6/26/01 12:04:04	428	3643	49.99	0.00	0.00	0
6/26/01 12:04:04	929	3543	49.99	0.00	0.00	0
6/26/01 12:04:05	429	3496	49.99	0.00	0.00	0
6/26/01 12:04:05	930	3406	50.00	0.00	0.00	0
6/26/01 12:04:06	431	3338	50.00	0.00	0.00	0
6/26/01 12:04:06	932	3322	50.00	46.72	0.00	0
6/26/01 12:04:07	432	3303	50.00	46.72	0.00	0
6/26/01 12:04:07	933	3281	50.00	54.13	0.00	0
6/26/01 12:04:08	434	3274	50.00	54.13	0.00	0
6/26/01 12:04:08	935	3270	50.00	53.28	0.00	0
6/26/01 12:04:09	435	3267	50.00	53.28	179.00	0
6/26/01 12:04:09	936	3269	50.00	50.99	179.00	0
6/26/01 12:04:10	437	3272	50.00	50.99	158.00	0
6/26/01 12:04:10	937	3275	50.01	50.63	158.00	0
6/26/01 12:04:11	438	3271	50.01	50.63	142.00	0
6/26/01 12:04:11	939	3278	50.01	50.18	142.00	0
6/26/01 12:04:12	440	3256	50.01	50.18	87.00	0
6/26/01 12:04:12	940	3271	50.01	49.90	87.00	0
6/26/01 12:04:13	441	3280	50.01	49.90	29.00	0
6/26/01 12:04:13	942	3265	50.01	49.96	29.00	0
6/26/01 12:04:14	442	3276	50.01	49.96	-14.00	0
6/26/01 12:04:14	943	3272	50.01	49.96	-14.00	0
6/26/01 12:04:15	444	3274	50.02	49.83	-14.00	0
6/26/01 12:04:15	945	3276	50.02	49.83	-25.00	0
6/26/01 12:04:16	445	3276	50.02	49.86	-25.00	0
6/26/01 12:04:16	946	3273	50.02	49.86	-20.00	0
6/26/01 12:04:17	447	3277	50.02	49.90	-20.00	0
6/26/01 12:04:17	947	3273	50.02	49.90	-12.00	0
6/26/01 12:04:18	448	3276	50.02	50.02	-12.00	0
6/26/01 12:04:18	949	3274	50.02	50.02	-3.00	0
6/26/01 12:04:19	450	3275	50.02	50.02	-3.00	0
6/26/01 12:04:19	950	3274	50.02	50.02	3.00	0
6/26/01 12:04:20	451	3274	50.01	50.03	3.00	0
6/26/01 12:04:20	952	3273	50.01	50.03	7.00	0
6/26/01 12:04:21	453	3275	50.01	50.00	7.00	0
6/26/01 12:04:21	953	3273	50.01	50.00	4.00	0
6/26/01 12:04:22	454	3272	50.01	50.01	4.00	0
6/26/01 12:04:22	955	3273	50.01	50.01	5.00	0
6/26/01 12:04:23	455	3275	50.01	49.98	5.00	0
6/26/01 12:04:23	956	3275	50.01	49.98	0.00	0
6/26/01 12:04:24	457	3276	50.01	49.98	0.00	0
6/26/01 12:04:24	958	3270	50.01	49.98	-5.00	0

6/26/01 12:04:25	458	3276	50.01	49.95	-5.00	0
6/26/01 12:04:25	959	3274	50.01	49.95	-2.00	1
6/26/01 12:04:26	460	3274	50.01	49.95	-2.00	1
6/26/01 12:04:26	970	3274	50.01	49.95	0.00	1
6/26/01 12:04:27	461	3272	50.01	49.92	0.00	1
6/26/01 12:04:27	962	3273	50.01	49.92	2.00	1
6/26/01 12:04:28	463	3272	50.01	50.00	2.00	1
6/26/01 12:04:28	963	3274	50.01	50.00	0.00	1
6/26/01 12:04:29	464	3272	50.01	50.06	0.00	1
6/26/01 12:04:29	965	3273	50.01	50.06	2.00	1
6/26/01 12:04:30	465	3273	49.99	50.00	2.00	1

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Close Breaker (Open/Close)
5/12/01	19:22:13	711	0	60.00	0.00	0.00
5/12/01	19:22:14	212	0	60.00	0.00	0.00
5/12/01	19:22:14	713	0	60.00	0.00	0.00
5/12/01	19:22:15	213	0	60.00	0.00	0.00
5/12/01	19:22:15	714	3000	60.00	0.00	0.00
5/12/01	19:22:16	215	3000	60.00	0.00	0.00
5/12/01	19:22:16	716	3000	60.00	0.00	0.00
5/12/01	19:22:17	216	3000	60.00	0.00	0.00
5/12/01	19:22:17	717	3000	60.00	0.00	0.00
5/12/01	19:22:18	218	3000	60.00	0.00	0.00
5/12/01	19:22:18	718	3000	60.00	0.00	0.00
5/12/01	19:22:19	219	3000	60.00	0.00	0.00
5/12/01	19:22:19	720	3000	60.00	0.00	0.00
5/12/01	19:22:20	221	3000	60.00	0.00	0.00
5/12/01	19:22:20	721	3000	60.02	0.00	0.00
5/12/01	19:22:21	222	3000	60.02	0.00	0.00
5/12/01	19:22:21	723	3000	60.02	0.00	0.00
5/12/01	19:22:22	223	3000	60.02	0.00	0.00
5/12/01	19:22:22	724	3000	60.02	0.00	0.00
5/12/01	19:22:23	225	3000	60.02	0.00	0.00
5/12/01	19:22:23	726	3000	60.02	0.00	0.00
5/12/01	19:22:24	226	3000	60.02	0.00	0.00
5/12/01	19:22:24	727	3000	60.02	42.69	0.00
5/12/01	19:22:25	228	3028	60.02	42.69	0.00
5/12/01	19:22:25	729	3103	60.02	50.85	0.00
5/12/01	19:22:26	229	3191	60.02	50.85	0.00
5/12/01	19:22:26	740	3230	60.02	55.19	0.00
5/12/01	19:22:27	231	3249	60.02	55.19	0.00
5/12/01	19:22:27	731	3260	60.02	55.13	0.00
5/12/01	19:22:28	232	3269	60.02	55.13	0.00
5/12/01	19:22:28	733	3274	60.02	57.80	117.00
5/12/01	19:22:29	234	3277	60.02	57.80	117.00
5/12/01	19:22:29	734	3278	60.02	59.14	78.00
5/12/01	19:22:30	235	3279	60.02	59.14	78.00
5/12/01	19:22:30	736	3279	60.00	59.88	57.00
5/12/01	19:22:31	236	3275	60.00	59.88	57.00
5/12/01	19:22:31	737	3275	60.00	59.88	38.00
5/12/01	19:22:32	238	3275	60.00	59.88	38.00
5/12/01	19:22:32	739	3280	60.00	59.90	17.00
5/12/01	19:22:33	239	3278	60.00	59.90	17.00
5/12/01	19:22:33	740	3277	60.00	59.97	3.00
5/12/01	19:22:34	241	3280	60.00	59.97	3.00
5/12/01	19:22:34	741	3284	60.00	59.98	-6.00
5/12/01	19:22:35	242	3298	60.00	59.98	-6.00
5/12/01	19:22:35	743	3295	60.01	59.93	-75.00
5/12/01	19:22:36	244	3294	60.01	59.93	-75.00
5/12/01	19:22:36	744	3292	60.01	59.58	-46.00
5/12/01	19:22:37	245	3289	60.01	59.58	-46.00
5/12/01	19:22:37	746	3290	60.01	59.58	-18.00
5/12/01	19:22:38	247	3289	60.01	59.58	-18.00
5/12/01	19:22:38	747	3288	60.01	60.06	-4.00
5/12/01	19:22:39	248	3289	60.01	60.06	-4.00
5/12/01	19:22:39	749	3287	60.01	60.01	2.00
5/12/01	19:22:40	249	3288	60.01	60.01	2.00
5/12/01	19:22:40	750	3278	60.01	60.07	9.00
5/12/01	19:22:41	251	3288	60.01	60.07	9.00
5/12/01	19:22:41	752	3280	60.01	60.06	11.00
5/12/01	19:22:42	252	3286	60.01	60.06	11.00
5/12/01	19:22:42	753	3276	60.01	59.94	11.00
5/12/01	19:22:43	254	3287	60.01	59.94	8.00
5/12/01	19:22:43	754	3284	60.01	60.06	8.00
5/12/01	19:22:44	255	3287	60.01	60.06	7.00
5/12/01	19:22:44	756	3285	60.01	60.06	7.00
5/12/01	19:22:45	257	3288	60.01	60.06	0.00
5/12/01	19:22:45	757	0	59.97	60.02	0.00
5/12/01	19:22:46	258	0	59.97	60.02	-3.00
5/12/01	19:22:46	759	0	59.97	59.98	-3.00
5/12/01	19:22:47	259	0	59.97	59.98	0.00
5/12/01	19:22:47	760	0	59.97	59.88	0.00
5/12/01	19:22:48	261	0	59.97	59.88	0.00
5/12/01	19:22:48	762	0	59.97	59.88	0.00
5/12/01	19:22:49	262	0	59.97	59.88	0.00
5/12/01	19:22:49	763	0	59.97	53.53	0.00
5/12/01	19:22:50	264	0	59.97	53.53	0.00
5/12/01	19:22:50	765	0	59.99	47.41	0.00
5/12/01	19:22:51	265	0	59.99	47.41	0.00
5/12/01	19:22:51	766	0	59.99	0.00	0.00
5/12/01	19:22:52	267	0	59.99	0.00	0.00
5/12/01	19:22:52	767	0	59.99	0.00	0.00
5/12/01	19:22:53	268	0	59.99	0.00	0.00
5/12/01	19:22:53	769	0	59.99	0.00	0.00
5/12/01	19:22:54	270	0	59.99	0.00	0.00
5/12/01	19:22:54	770	0	59.99	0.00	0.00
5/12/01	19:22:55	271	0	59.99	0.00	0.00
5/12/01	19:22:55	772	0	59.99	0.00	0.00
5/12/01	19:22:56	272	0	59.99	0.00	0.00

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Close Breaker (Open/Close)
5/12/01	19:22:56	773	0	59.99	0.00	0.00
5/12/01	19:22:57	274	0	59.99	0.00	0.00
5/12/01	19:22:57	775	0	59.99	0.00	0.00
5/12/01	19:22:58	275	0	59.99	0.00	0.00
5/12/01	19:22:58	776	0	59.99	0.00	0.00
5/12/01	19:22:59	277	0	59.99	0.00	0.00
5/12/01	19:22:59	777	0	59.99	0.00	0.00
5/12/01	19:23:00	278	0	59.99	0.00	0.00
5/12/01	19:23:00	779	0	59.99	0.00	0.00
5/12/01	19:23:01	280	0	60.00	0.00	0.00
5/12/01	19:23:01	780	0	60.00	0.00	0.00
5/12/01	19:23:02	281	0	60.00	0.00	0.00
5/12/01	19:23:02	782	0	60.00	0.00	0.00
5/12/01	19:23:03	283	3000	60.00	0.00	0.00
5/12/01	19:23:03	783	3000	60.00	0.00	0.00
5/12/01	19:23:04	284	3000	60.00	0.00	0.00
5/12/01	19:23:04	785	3000	60.00	0.00	0.00
5/12/01	19:23:05	285	3000	60.00	0.00	0.00
5/12/01	19:23:05	786	3000	60.00	0.00	0.00
5/12/01	19:23:06	287	3000	59.99	0.00	0.00
5/12/01	19:23:06	788	3000	59.99	0.00	0.00
5/12/01	19:23:07	288	3000	59.99	0.00	0.00
5/12/01	19:23:07	789	3000	59.99	0.00	0.00
5/12/01	19:23:08	290	3000	59.99	0.00	0.00
5/12/01	19:23:08	790	3000	59.99	0.00	0.00
5/12/01	19:23:09	291	3000	59.99	0.00	0.00
5/12/01	19:23:09	792	3000	59.99	0.00	0.00
5/12/01	19:23:10	293	3000	59.99	0.00	0.00
5/12/01	19:23:10	793	3000	59.99	0.00	0.00
5/12/01	19:23:11	294	3057	59.98	44.89	0.00
5/12/01	19:23:11	795	3145	59.98	44.89	0.00
5/12/01	19:23:12	295	3197	59.98	52.16	0.00
5/12/01	19:23:12	796	3229	59.98	52.16	0.00
5/12/01	19:23:13	297	3254	59.98	55.17	0.00
5/12/01	19:23:13	798	3262	59.98	55.17	0.00
5/12/01	19:23:14	298	3268	59.98	56.57	0.00
5/12/01	19:23:14	799	3273	59.98	56.57	-123.00
5/12/01	19:23:15	300	3276	59.98	59.47	-123.00
5/12/01	19:23:15	801	3277	59.98	59.47	-150.00
5/12/01	19:23:16	301	3280	59.99	59.78	-150.00
5/12/01	19:23:16	802	3285	59.99	59.78	-163.00
5/12/01	19:23:17	303	3299	59.99	59.92	-163.00
5/12/01	19:23:17	803	3297	59.99	59.92	-102.00
5/12/01	19:23:18	304	3298	59.99	59.94	-102.00
5/12/01	19:23:18	805	3293	59.99	59.94	-31.00
5/12/01	19:23:19	306	3290	59.99	60.12	-31.00
5/12/01	19:23:19	806	3288	59.99	60.12	13.00
5/12/01	19:23:20	307	3283	59.99	60.16	13.00
5/12/01	19:23:20	808	3268	59.99	60.16	0.00
5/12/01	19:23:21	308	3280	60.01	60.11	0.00
5/12/01	19:23:21	809	3285	60.01	60.11	-176.00
5/12/01	19:23:22	320	3284	60.01	59.61	-176.00
5/12/01	19:23:22	811	3285	60.01	59.61	171.00
5/12/01	19:23:23	311	3285	60.01	59.68	171.00
5/12/01	19:23:23	812	3275	60.01	59.68	171.00
5/12/01	19:23:24	313	3269	60.01	59.94	172.00
5/12/01	19:23:24	813	3265	60.01	59.94	172.00
5/12/01	19:23:25	314	3300	60.01	59.88	112.00
5/12/01	19:23:25	815	3281	60.01	59.88	112.00
5/12/01	19:23:26	316	3274	59.99	59.83	36.00
5/12/01	19:23:26	816	3284	59.99	59.83	36.00
5/12/01	19:23:27	317	3282	59.99	59.85	-13.00
5/12/01	19:23:27	818	3285	59.99	59.85	-13.00
5/12/01	19:23:28	319	3287	59.99	59.85	-30.00
5/12/01	19:23:28	819	3291	59.99	59.86	-30.00
5/12/01	19:23:29	320	3290	59.99	59.86	-25.00
5/12/01	19:23:29	821	3285	59.99	59.90	-25.00
5/12/01	19:23:30	321	3290	59.99	59.90	-11.00
5/12/01	19:23:30	822	3289	59.99	59.94	-11.00
5/12/01	19:23:31	323	3288	59.99	59.94	0.00
5/12/01	19:23:31	824	3286	59.98	59.98	0.00
5/12/01	19:23:32	324	3285	59.98	59.98	8.00
5/12/01	19:23:32	825	3292	59.98	60.06	8.00
5/12/01	19:23:33	326	3285	59.98	60.06	4.00
5/12/01	19:23:33	826	3287	59.98	60.02	4.00
5/12/01	19:23:34	327	3287	59.98	60.02	-2.00
5/12/01	19:23:34	838	3285	59.98	59.93	-2.00
5/12/01	19:23:35	329	0	59.98	59.93	3.00
5/12/01	19:23:35	829	0	59.99	59.99	3.00
5/12/01	19:23:36	330	0	59.99	59.99	0.00
5/12/01	19:23:36	831	0	59.99	60.03	0.00
5/12/01	19:23:37	331	0	59.99	60.03	0.00
5/12/01	19:23:37	832	0	59.99	59.95	0.00
5/12/01	19:23:38	333	0	59.99	59.95	0.00
5/12/01	19:23:38	834	0	59.99	56.64	0.00
5/12/01	19:23:39	334	0	59.99	56.64	0.00

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Close Breaker (Open/Close)
5/12/01	19:23:39	835	0	59.99	56.64	0.00
5/12/01	19:23:40	336	0	59.99	42.07	0.00
5/12/01	19:23:40	837	0	59.99	42.07	0.00
5/12/01	19:23:41	337	0	60.00	0.00	0.00
5/12/01	19:23:41	838	0	60.00	0.00	0.00
5/12/01	19:23:42	339	0	60.00	0.00	0.00
5/12/01	19:23:42	839	0	60.00	0.00	0.00
5/12/01	19:23:43	340	0	60.00	0.00	0.00
5/12/01	19:23:43	841	0	60.00	0.00	0.00
5/12/01	19:23:44	342	0	60.00	0.00	0.00
5/12/01	19:23:44	842	0	60.00	0.00	0.00
5/12/01	19:23:45	343	0	60.00	0.00	0.00
5/12/01	19:23:45	844	0	60.00	0.00	0.00
5/12/01	19:23:46	344	0	59.99	0.00	0.00
5/12/01	19:23:46	845	0	59.99	0.00	0.00
5/12/01	19:23:47	346	0	59.99	0.00	0.00
5/12/01	19:23:47	847	0	59.99	0.00	0.00
5/12/01	19:23:48	347	0	59.99	0.00	0.00
5/12/01	19:23:48	848	0	59.99	0.00	0.00
5/12/01	19:23:49	349	0	59.99	0.00	0.00
5/12/01	19:23:49	849	0	59.99	0.00	0.00
5/12/01	19:23:50	350	0	59.99	0.00	0.00
5/12/01	19:23:50	851	3000	59.99	0.00	0.00
5/12/01	19:23:51	352	3000	59.99	0.00	0.00
5/12/01	19:23:51	852	3000	59.99	0.00	0.00
5/12/01	19:23:52	353	3000	59.99	0.00	0.00
5/12/01	19:23:52	854	3000	59.99	0.00	0.00
5/12/01	19:23:53	355	3000	59.99	0.00	0.00
5/12/01	19:23:53	855	3000	59.99	0.00	0.00
5/12/01	19:23:54	356	3000	59.99	0.00	0.00
5/12/01	19:23:54	857	3000	59.99	0.00	0.00
5/12/01	19:23:55	357	3000	59.99	0.00	0.00
5/12/01	19:23:55	858	3000	59.99	0.00	0.00
5/12/01	19:23:56	359	3000	60.01	0.00	0.00
5/12/01	19:23:56	860	3000	60.01	0.00	0.00
5/12/01	19:23:57	360	3000	60.01	0.00	0.00
5/12/01	19:23:57	861	3000	60.01	0.00	0.00
5/12/01	19:23:58	362	3000	60.01	0.00	0.00
5/12/01	19:23:58	862	3000	60.01	0.00	0.00
5/12/01	19:23:59	363	3000	60.01	43.80	0.00
5/12/01	19:23:59	864	3000	60.01	43.80	0.00
5/12/01	19:24:00	365	3028	60.01	51.14	0.00
5/12/01	19:24:00	865	3108	60.01	51.14	0.00
5/12/01	19:24:01	366	3205	59.99	55.17	0.00
5/12/01	19:24:01	867	3232	59.99	55.17	0.00
5/12/01	19:24:02	367	3246	59.99	55.17	0.00
5/12/01	19:24:02	868	3260	59.99	55.12	0.00
5/12/01	19:24:03	369	3270	59.99	55.12	0.00
5/12/01	19:24:03	870	3271	59.99	58.09	18.00
5/12/01	19:24:04	370	3273	59.99	58.09	18.00
5/12/01	19:24:04	871	3275	59.99	59.22	-11.00
5/12/01	19:24:05	372	3274	59.99	59.22	-11.00
5/12/01	19:24:05	873	3285	59.99	59.71	-32.00
5/12/01	19:24:06	373	3277	59.99	59.71	-32.00
5/12/01	19:24:06	874	3282	59.99	59.90	-49.00
5/12/01	19:24:07	375	3284	59.99	59.90	-49.00
5/12/01	19:24:07	875	3285	59.99	59.93	-39.00
5/12/01	19:24:08	376	3288	59.99	59.93	-39.00
5/12/01	19:24:08	877	3292	59.99	59.93	-108.00
5/12/01	19:24:09	378	3291	59.99	59.93	-108.00
5/12/01	19:24:09	878	3290	59.99	60.00	-117.00
5/12/01	19:24:10	379	3288	59.99	60.00	-117.00
5/12/01	19:24:10	880	3292	59.99	59.72	-88.00
5/12/01	19:24:11	380	3296	59.99	59.72	-88.00
5/12/01	19:24:11	881	3280	59.98	59.98	-54.00
5/12/01	19:24:12	382	3285	59.98	59.98	-54.00
5/12/01	19:24:12	883	3290	59.98	60.07	-19.00
5/12/01	19:24:13	383	3290	59.98	60.07	-19.00
5/12/01	19:24:13	884	3291	59.98	60.02	-19.00
5/12/01	19:24:14	385	3287	59.98	60.02	6.00
5/12/01	19:24:14	885	3288	59.98	60.09	6.00
5/12/01	19:24:15	386	3285	59.98	60.09	15.00
5/12/01	19:24:15	887	3287	59.98	60.02	15.00
5/12/01	19:24:16	388	3284	59.98	60.02	11.00
5/12/01	19:24:16	888	3292	59.96	59.97	11.00
5/12/01	19:24:17	389	3287	59.96	59.97	4.00
5/12/01	19:24:17	890	3290	59.96	59.97	4.00
5/12/01	19:24:18	391	3283	59.96	59.97	-3.00
5/12/01	19:24:18	891	3287	59.96	60.03	-3.00
5/12/01	19:24:19	392	3281	59.96	60.03	-3.00
5/12/01	19:24:19	893	3287	59.96	59.93	-3.00
5/12/01	19:24:20	393	3288	59.96	59.93	-5.00
5/12/01	19:24:20	894	0	59.96	59.93	-5.00
5/12/01	19:24:21	395	0	59.96	59.93	0.00
5/12/01	19:24:21	896	0	59.98	59.97	0.00
5/12/01	19:24:22	396	0	59.98	59.97	0.00

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Close Breaker (Open/Close)
5/12/01	19:24:22	897	0	59.98	60.05	0.00
5/12/01	19:24:23	398	0	59.98	60.05	0.00
5/12/01	19:24:23	898	0	59.98	56.51	0.00
5/12/01	19:24:24	399	0	59.98	56.51	0.00
5/12/01	19:24:24	900	0	59.98	49.63	0.00
5/12/01	19:24:25	401	0	59.98	49.63	0.00
5/12/01	19:24:25	901	0	59.98	42.69	0.00
5/12/01	19:24:26	402	0	59.98	42.69	0.00
5/12/01	19:24:26	903	0	59.97	0.00	0.00
5/12/01	19:24:27	403	0	59.97	0.00	0.00
5/12/01	19:24:27	904	0	59.97	0.00	0.00
5/12/01	19:24:28	405	0	59.97	0.00	0.00
5/12/01	19:24:28	906	0	59.97	0.00	0.00
5/12/01	19:24:29	406	0	59.97	0.00	0.00
5/12/01	19:24:29	907	0	59.97	0.00	0.00
5/12/01	19:24:30	408	0	59.97	0.00	0.00
5/12/01	19:24:30	909	0	59.97	0.00	0.00
5/12/01	19:24:31	409	0	59.97	0.00	0.00
5/12/01	19:24:31	910	0	59.99	0.00	0.00
5/12/01	19:24:32	411	0	59.99	0.00	0.00
5/12/01	19:24:32	911	0	59.99	0.00	0.00
5/12/01	19:24:33	412	0	59.99	0.00	0.00
5/12/01	19:24:33	913	0	59.99	0.00	0.00
5/12/01	19:24:34	414	0	59.99	0.00	0.00
5/12/01	19:24:34	914	0	59.99	0.00	0.00
5/12/01	19:24:35	415	0	59.99	0.00	0.00
5/12/01	19:24:35	916	0	59.99	0.00	0.00
5/12/01	19:24:36	416	0	59.99	0.00	0.00
5/12/01	19:24:36	917	0	59.99	0.00	0.00
5/12/01	19:24:37	418	0	59.99	0.00	0.00
5/12/01	19:24:37	919	0	59.99	0.00	0.00
5/12/01	19:24:38	419	0	59.99	0.00	0.00
5/12/01	19:24:38	920	0	59.99	0.00	0.00
5/12/01	19:24:39	421	0	59.99	0.00	0.00
5/12/01	19:24:39	921	3000	59.99	0.00	0.00
5/12/01	19:24:40	432	3000	59.99	0.00	0.00
5/12/01	19:24:40	923	3000	59.99	0.00	0.00
5/12/01	19:24:41	424	3000	59.99	0.00	0.00
5/12/01	19:24:41	924	3000	59.99	0.00	0.00
5/12/01	19:24:42	425	3000	59.99	0.00	0.00
5/12/01	19:24:42	926	3000	59.99	0.00	0.00
5/12/01	19:24:43	427	3000	59.99	0.00	0.00
5/12/01	19:24:43	927	3000	59.99	0.00	0.00
5/12/01	19:24:44	428	3000	59.99	0.00	0.00
5/12/01	19:24:44	929	3000	59.99	0.00	0.00
5/12/01	19:24:45	429	3000	59.99	0.00	0.00
5/12/01	19:24:45	930	3000	59.99	0.00	0.00
5/12/01	19:24:46	431	3000	59.99	0.00	0.00
5/12/01	19:24:46	932	3000	59.99	0.00	0.00
5/12/01	19:24:47	432	3000	60.00	40.49	0.00
5/12/01	19:24:47	933	3000	60.00	40.49	0.00
5/12/01	19:24:48	434	3000	60.00	46.58	0.00
5/12/01	19:24:48	934	3055	60.00	46.58	0.00
5/12/01	19:24:49	435	3130	60.00	53.78	0.00
5/12/01	19:24:49	936	3195	60.00	53.78	0.00
5/12/01	19:24:50	437	3236	60.00	55.15	0.00
5/12/01	19:24:50	937	3252	60.00	55.15	0.00
5/12/01	19:24:51	438	3264	59.97	55.14	0.00
5/12/01	19:24:51	939	3269	59.97	55.14	0.00
5/12/01	19:24:52	439	3273	59.97	59.16	-121.00
5/12/01	19:24:52	940	3276	59.97	59.16	-121.00
5/12/01	19:24:53	441	3278	59.97	59.67	-155.00
5/12/01	19:24:53	942	3285	59.97	59.67	-155.00
5/12/01	19:24:54	452	3296	59.97	59.90	-173.00
5/12/01	19:24:54	943	3296	59.97	59.90	-173.00
5/12/01	19:24:55	444	3299	59.97	59.92	-112.00
5/12/01	19:24:55	945	3299	59.97	59.92	-112.00
5/12/01	19:24:56	445	3281	59.99	60.02	-50.00
5/12/01	19:24:56	946	3275	59.99	60.02	-50.00
5/12/01	19:24:57	447	3288	59.99	60.02	5.00
5/12/01	19:24:57	947	3281	59.99	60.14	5.00
5/12/01	19:24:58	448	3281	59.99	60.14	22.00
5/12/01	19:24:58	949	3263	59.99	60.12	22.00
5/12/01	19:24:59	450	3274	59.99	60.12	0.00
5/12/01	19:24:59	950	3279	59.99	60.08	0.00
5/12/01	19:25:00	451	3286	59.99	60.08	175.00
5/12/01	19:25:00	952	3286	59.99	60.06	175.00
5/12/01	19:25:01	452	3285	59.99	60.06	161.00
5/12/01	19:25:01	953	3286	59.99	59.38	161.00
5/12/01	19:25:02	454	3275	59.99	59.38	163.00
5/12/01	19:25:02	955	3280	59.99	59.84	163.00
5/12/01	19:25:03	455	3269	59.99	59.84	127.00
5/12/01	19:25:03	956	3267	59.99	60.01	127.00
5/12/01	19:25:04	457	3273	59.99	60.01	58.00
5/12/01	19:25:04	957	3275	59.99	59.81	58.00
5/12/01	19:25:05	458	3292	59.99	59.81	8.00

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Close Breaker (Open/Close)
5/12/01	19:25:05	959	3291	59.99	59.82	8.00
5/12/01	19:25:06	460	3288	59.99	59.82	-21.00
5/12/01	19:25:06	960	3288	60.00	59.83	-21.00
5/12/01	19:25:07	461	3284	60.00	59.83	-24.00
5/12/01	19:25:07	962	3290	60.00	59.90	-24.00
5/12/01	19:25:08	463	3288	60.00	59.90	-19.00
5/12/01	19:25:08	963	3290	60.00	59.98	-19.00
5/12/01	19:25:09	464	3282	60.00	59.98	-1.00
5/12/01	19:25:09	965	3287	60.00	60.02	-1.00
5/12/01	19:25:10	465	3286	60.00	60.02	7.00
5/12/01	19:25:10	966	3287	60.00	59.99	7.00
5/12/01	19:25:11	467	3285	60.00	59.99	6.00
5/12/01	19:25:11	968	3285	60.00	59.99	6.00
5/12/01	19:25:12	468	3283	59.98	59.98	6.00
5/12/01	19:25:12	969	3286	59.98	59.98	6.00
5/12/01	19:25:13	470	3284	59.98	59.99	6.00
5/12/01	19:25:13	970	3285	59.98	59.99	2.00
5/12/01	19:25:14	471	3284	59.98	60.05	-1.00
5/12/01	19:25:14	972	3286	59.98	60.05	-1.00
5/12/01	19:25:15	473	0	59.98	59.95	-1.00
5/12/01	19:25:15	973	0	59.98	59.95	-7.00
5/12/01	19:25:16	484	0	59.98	59.95	0.00
5/12/01	19:25:16	975	0	59.98	59.95	0.00
5/12/01	19:25:17	475	0	59.99	59.97	0.00
5/12/01	19:25:17	976	0	59.99	59.97	0.00
5/12/01	19:25:18	477	0	59.99	59.34	0.00
5/12/01	19:25:18	978	0	59.99	59.34	0.00
5/12/01	19:25:19	478	0	59.99	52.68	0.00
5/12/01	19:25:19	979	0	59.99	52.68	0.00
5/12/01	19:25:20	480	0	59.99	45.92	0.00
5/12/01	19:25:20	981	0	59.99	45.92	0.00
5/12/01	19:25:21	481	0	59.99	0.00	0.00
5/12/01	19:25:21	982	0	59.99	0.00	0.00
5/12/01	19:25:22	493	0	59.99	0.00	0.00
5/12/01	19:25:22	983	0	59.99	0.00	0.00
5/12/01	19:25:23	484	0	59.99	0.00	0.00
5/12/01	19:25:23	985	0	59.99	0.00	0.00
5/12/01	19:25:24	486	0	59.99	0.00	0.00
5/12/01	19:25:24	986	0	59.99	0.00	0.00
5/12/01	19:25:25	487	0	59.99	0.00	0.00
5/12/01	19:25:25	988	0	59.99	0.00	0.00
5/12/01	19:25:26	488	0	59.99	0.00	0.00
5/12/01	19:25:26	989	0	59.99	0.00	0.00
5/12/01	19:25:27	490	0	60.00	0.00	0.00
5/12/01	19:25:27	991	0	60.00	0.00	0.00
5/12/01	19:25:28	491	0	60.00	0.00	0.00
5/12/01	19:25:28	992	0	60.00	0.00	0.00
5/12/01	19:25:29	493	0	60.00	0.00	0.00
5/12/01	19:25:29	993	0	60.00	0.00	0.00
5/12/01	19:25:30	494	0	60.00	0.00	0.00
5/12/01	19:25:30	995	0	60.00	0.00	0.00
5/12/01	19:25:31	496	0	60.00	0.00	0.00
5/12/01	19:25:31	996	0	60.00	0.00	0.00
5/12/01	19:25:32	497	0	60.00	0.00	0.00
5/12/01	19:25:32	998	0	60.00	0.00	0.00
5/12/01	19:25:33	499	3000	60.00	0.00	0.00
5/12/01	19:25:33	999	3000	60.00	0.00	0.00
5/12/01	19:25:34	500	3000	60.00	0.00	0.00
5/12/01	19:25:35	1	3000	60.00	0.00	0.00
5/12/01	19:25:35	501	3000	60.00	0.00	0.00
5/12/01	19:25:36	2	3000	60.00	0.00	0.00
5/12/01	19:25:36	503	3000	60.00	0.00	0.00
5/12/01	19:25:37	4	3000	60.00	0.00	0.00
5/12/01	19:25:37	504	3000	59.99	0.00	0.00
5/12/01	19:25:38	5	3000	59.99	0.00	0.00
5/12/01	19:25:38	506	3000	59.99	0.00	0.00
5/12/01	19:25:39	16	3000	59.99	0.00	0.00
5/12/01	19:25:39	507	3000	59.99	0.00	0.00
5/12/01	19:25:40	8	3000	59.99	0.00	0.00
5/12/01	19:25:40	509	3000	59.99	0.00	0.00
5/12/01	19:25:41	9	3000	59.99	0.00	0.00
5/12/01	19:25:41	510	3086	59.99	43.67	0.00
5/12/01	19:25:42	11	3165	59.99	43.67	0.00
5/12/01	19:25:42	511	3210	59.98	49.54	0.00
5/12/01	19:25:43	12	3236	59.98	49.54	0.00
5/12/01	19:25:43	513	3258	59.98	56.88	0.00
5/12/01	19:25:44	14	3263	59.98	56.88	0.00
5/12/01	19:25:44	514	3269	59.98	58.71	0.00
5/12/01	19:25:45	15	3272	59.98	58.71	-113.00
5/12/01	19:25:45	516	3277	59.98	59.46	-113.00
5/12/01	19:25:46	17	3279	59.98	59.46	-145.00
5/12/01	19:25:46	517	3278	59.98	59.46	-145.00
5/12/01	19:25:47	18	3286	59.98	59.79	-152.00
5/12/01	19:25:47	519	3280	59.98	59.79	-152.00
5/12/01	19:25:48	19	3281	59.99	59.90	-108.00
5/12/01	19:25:48	520	3284	59.99	59.90	-108.00

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Close Breaker (Open/Close)
5/12/01	19:25:49	21	3278	59.99	59.95	-50.00
5/12/01	19:25:49	522	3291	59.99	59.95	-50.00
5/12/01	19:25:50	22	3266	59.99	60.06	-50.00
5/12/01	19:25:50	523	3281	59.99	60.06	-66.00
5/12/01	19:25:51	24	3281	59.99	60.07	-66.00
5/12/01	19:25:51	524	3285	59.99	60.07	-148.00
5/12/01	19:25:52	25	3286	59.99	59.75	-148.00
5/12/01	19:25:52	526	3287	59.99	59.75	-162.00
5/12/01	19:25:53	27	3293	59.99	59.70	-162.00
5/12/01	19:25:53	527	3301	59.99	59.70	-152.00
5/12/01	19:25:54	28	3304	59.99	59.92	-152.00
5/12/01	19:25:54	529	3306	59.99	59.92	-85.00
5/12/01	19:25:55	29	3278	59.99	60.04	-85.00
5/12/01	19:25:55	530	3300	59.99	60.04	-30.00
5/12/01	19:25:56	31	3297	59.99	60.16	-30.00
5/12/01	19:25:56	532	3292	59.99	60.16	12.00
5/12/01	19:25:57	32	3289	59.98	60.13	12.00
5/12/01	19:25:57	533	3288	59.98	60.13	26.00
5/12/01	19:25:58	34	3287	59.98	60.13	26.00
5/12/01	19:25:58	535	3284	59.98	60.13	26.00
5/12/01	19:25:59	35	3286	59.98	60.07	26.00
5/12/01	19:25:59	536	3285	59.98	60.07	18.00
5/12/01	19:26:00	37	3284	59.98	60.03	18.00
5/12/01	19:26:00	537	3284	59.98	60.03	7.00
5/12/01	19:26:01	38	3285	59.98	59.98	7.00
5/12/01	19:26:01	539	3287	59.98	59.98	7.00
5/12/01	19:26:02	40	3283	59.98	59.91	-2.00
5/12/01	19:26:02	540	3287	59.98	59.91	-4.00
5/12/01	19:26:03	41	3285	59.98	59.95	-4.00
5/12/01	19:26:03	542	3289	59.98	59.95	-7.00
5/12/01	19:26:04	42	3283	59.98	60.04	-7.00
5/12/01	19:26:04	543	3287	59.98	60.04	-7.00
5/12/01	19:26:05	54	3286	59.98	60.04	-1.00
5/12/01	19:26:05	545	3287	59.98	59.97	-1.00
5/12/01	19:26:06	45	3286	59.98	59.97	-3.00
5/12/01	19:26:06	546	0	59.98	59.97	-3.00
5/12/01	19:26:07	47	0	59.98	59.97	0.00
5/12/01	19:26:07	547	0	59.98	59.94	0.00
5/12/01	19:26:08	48	0	59.98	59.94	0.00
5/12/01	19:26:08	549	0	59.98	60.00	0.00
5/12/01	19:26:09	50	0	59.98	60.00	0.00
5/12/01	19:26:09	550	0	59.98	55.23	0.00
5/12/01	19:26:10	51	0	59.98	55.23	0.00
5/12/01	19:26:10	552	0	59.98	49.09	0.00
5/12/01	19:26:11	83	0	59.98	49.09	0.00
5/12/01	19:26:11	553	0	59.98	41.44	0.00
5/12/01	19:26:12	54	0	59.98	41.44	0.00
5/12/01	19:26:12	555	0	59.98	0.00	0.00
5/12/01	19:26:13	55	0	59.98	0.00	0.00
5/12/01	19:26:13	556	0	59.98	0.00	0.00
5/12/01	19:26:14	57	0	59.98	0.00	0.00
5/12/01	19:26:14	558	0	59.98	0.00	0.00
5/12/01	19:26:15	58	0	59.98	0.00	0.00
5/12/01	19:26:15	559	0	59.98	0.00	0.00
5/12/01	19:26:16	60	0	59.98	0.00	0.00
5/12/01	19:26:16	560	0	59.98	0.00	0.00
5/12/01	19:26:17	61	0	59.98	0.00	0.00
5/12/01	19:26:17	562	0	59.98	0.00	0.00
5/12/01	19:26:18	63	0	59.98	0.00	0.00
5/12/01	19:26:18	563	0	59.98	0.00	0.00
5/12/01	19:26:19	64	0	59.98	0.00	0.00
5/12/01	19:26:19	565	0	59.98	0.00	0.00
5/12/01	19:26:20	65	0	59.98	0.00	0.00
5/12/01	19:26:20	566	0	59.98	0.00	0.00
5/12/01	19:26:21	67	0	59.98	0.00	0.00
5/12/01	19:26:21	568	0	59.98	0.00	0.00
5/12/01	19:26:22	68	0	59.98	0.00	0.00
5/12/01	19:26:22	569	0	59.95	0.00	0.00
5/12/01	19:26:23	70	0	59.95	0.00	0.00
5/12/01	19:26:23	571	3000	59.95	0.00	0.00
5/12/01	19:26:24	71	3000	59.95	0.00	0.00
5/12/01	19:26:24	572	3000	59.95	0.00	0.00
5/12/01	19:26:25	83	3000	59.95	0.00	0.00
5/12/01	19:26:25	573	3000	59.95	0.00	0.00
5/12/01	19:26:26	74	3000	59.95	0.00	0.00
5/12/01	19:26:26	575	3000	59.95	0.00	0.00
5/12/01	19:26:27	76	3000	59.95	0.00	0.00
5/12/01	19:26:27	576	3000	59.97	0.00	0.00
5/12/01	19:26:28	77	3000	59.97	0.00	0.00
5/12/01	19:26:28	578	3000	59.97	0.00	0.00
5/12/01	19:26:29	78	3000	59.97	0.00	0.00
5/12/01	19:26:29	579	3000	59.97	0.00	0.00
5/12/01	19:26:30	80	3000	59.97	0.00	0.00
5/12/01	19:26:30	581	3000	59.97	42.14	0.00
5/12/01	19:26:31	81	3000	59.97	42.14	0.00
5/12/01	19:26:31	582	3000	59.97	48.19	0.00

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Close Breaker (Open/Close)
5/12/01	19:26:32	83	3031	59.97	48.19	0.00
5/12/01	19:26:32	593	3128	60.00	54.69	0.00
5/12/01	19:26:33	84	3173	60.00	54.69	0.00
5/12/01	19:26:33	585	3222	60.00	54.69	0.00
5/12/01	19:26:34	86	3245	60.00	55.15	0.00
5/12/01	19:26:34	586	3258	60.00	55.15	0.00
5/12/01	19:26:35	87	3268	60.00	56.15	0.00
5/12/01	19:26:35	588	3272	60.00	56.15	0.00
5/12/01	19:26:36	89	3274	60.00	59.41	-15.00
5/12/01	19:26:36	589	3277	60.00	59.41	-15.00
5/12/01	19:26:37	90	3279	60.00	59.77	-43.00
5/12/01	19:26:37	591	3278	60.00	59.77	-43.00
5/12/01	19:26:38	91	3278	59.98	59.90	-64.00
5/12/01	19:26:38	592	3285	59.98	59.90	-64.00
5/12/01	19:26:39	93	3288	59.98	59.94	-67.00
5/12/01	19:26:39	594	3278	59.98	59.94	-67.00
5/12/01	19:26:40	94	3279	59.98	59.90	-38.00
5/12/01	19:26:40	595	3283	59.98	59.90	-38.00
5/12/01	19:26:41	96	3289	59.98	60.05	0.00
5/12/01	19:26:41	606	3290	59.98	60.05	0.00
5/12/01	19:26:42	97	3291	59.99	59.65	-129.00
5/12/01	19:26:42	598	3289	59.99	59.65	-129.00
5/12/01	19:26:43	99	3288	59.99	59.82	-104.00
5/12/01	19:26:43	599	3289	59.99	59.82	-104.00
5/12/01	19:26:44	100	3297	59.99	60.04	-92.00
5/12/01	19:26:44	601	3294	59.99	60.04	-92.00
5/12/01	19:26:45	101	3297	59.99	60.06	-62.00
5/12/01	19:26:45	602	3296	59.99	60.06	-62.00
5/12/01	19:26:46	103	3294	59.99	60.01	-23.00
5/12/01	19:26:46	604	3293	59.99	60.01	-23.00
5/12/01	19:26:47	104	3290	59.99	60.07	0.00
5/12/01	19:26:47	605	3289	59.99	60.07	0.00
5/12/01	19:26:48	106	3288	59.99	60.08	16.00
5/12/01	19:26:48	607	3287	59.99	60.08	16.00
5/12/01	19:26:49	107	3292	59.99	60.03	15.00
5/12/01	19:26:49	608	3286	59.99	60.03	15.00
5/12/01	19:26:50	109	3286	59.99	59.95	11.00
5/12/01	19:26:50	609	3279	59.99	59.95	11.00
5/12/01	19:26:51	110	3292	59.99	59.94	5.00
5/12/01	19:26:51	611	3287	59.99	59.94	5.00
5/12/01	19:26:52	112	3285	59.99	59.94	6.00
5/12/01	19:26:52	612	3287	59.99	60.01	6.00
5/12/01	19:26:53	113	3285	59.99	60.01	3.00
5/12/01	19:26:53	614	3292	59.99	60.04	3.00
5/12/01	19:26:54	114	3283	59.99	60.04	-8.00
5/12/01	19:26:54	615	3287	59.99	59.96	-8.00
5/12/01	19:26:55	116	3287	59.99	59.96	-1.00
5/12/01	19:26:55	617	3287	59.99	59.93	-1.00
5/12/01	19:26:56	117	3287	59.99	59.93	-2.00
5/12/01	19:26:56	618	0	59.99	60.03	-2.00
5/12/01	19:26:57	119	0	59.99	60.03	0.00
5/12/01	19:26:57	619	0	59.99	60.02	0.00
5/12/01	19:26:58	120	0	59.99	60.02	0.00
5/12/01	19:26:58	621	0	59.99	60.02	0.00
5/12/01	19:26:59	122	0	59.99	60.02	0.00
5/12/01	19:26:59	622	0	59.99	58.92	0.00
5/12/01	19:27:00	123	0	59.99	58.92	0.00
5/12/01	19:27:00	624	0	59.99	52.27	0.00
5/12/01	19:27:01	125	0	59.99	52.27	0.00
5/12/01	19:27:01	625	0	59.99	45.27	0.00
5/12/01	19:27:02	126	0	59.99	45.27	0.00
5/12/01	19:27:02	627	0	59.98	0.00	0.00
5/12/01	19:27:03	127	0	59.98	0.00	0.00
5/12/01	19:27:03	628	0	59.98	0.00	0.00
5/12/01	19:27:04	129	0	59.98	0.00	0.00
5/12/01	19:27:04	630	0	59.98	0.00	0.00
5/12/01	19:27:05	130	0	59.98	0.00	0.00
5/12/01	19:27:05	631	0	59.98	0.00	0.00
5/12/01	19:27:06	132	0	59.98	0.00	0.00
5/12/01	19:27:06	632	0	59.98	0.00	0.00
5/12/01	19:27:07	133	0	59.98	0.00	0.00
5/12/01	19:27:07	634	0	59.99	0.00	0.00
5/12/01	19:27:08	135	0	59.99	0.00	0.00
5/12/01	19:27:08	635	0	59.99	0.00	0.00
5/12/01	19:27:09	136	0	59.99	0.00	0.00
5/12/01	19:27:09	637	0	59.99	0.00	0.00
5/12/01	19:27:10	137	0	59.99	0.00	0.00
5/12/01	19:27:10	638	0	59.99	0.00	0.00
5/12/01	19:27:11	139	0	59.99	0.00	0.00
5/12/01	19:27:11	640	0	59.99	0.00	0.00
5/12/01	19:27:12	140	0	59.99	0.00	0.00
5/12/01	19:27:12	641	0	59.99	0.00	0.00
5/12/01	19:27:13	142	0	59.99	0.00	0.00
5/12/01	19:27:13	643	0	59.99	0.00	0.00
5/12/01	19:27:14	143	0	59.99	0.00	0.00
5/12/01	19:27:14	644	0	59.99	0.00	0.00

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Close Breaker (Open/Close)
5/12/01	19:27:15	145	0	59.99	0.00	0.00
5/12/01	19:27:15	645	0	59.99	0.00	0.00
5/12/01	19:27:16	146	0	59.99	0.00	0.00
5/12/01	19:27:16	647	0	59.99	0.00	0.00
5/12/01	19:27:17	158	0	59.99	0.00	0.00
5/12/01	19:27:17	648	3000	60.00	0.00	0.00
5/12/01	19:27:18	149	3000	60.00	0.00	0.00
5/12/01	19:27:18	650	3000	60.00	0.00	0.00
5/12/01	19:27:19	150	3000	60.00	0.00	0.00
5/12/01	19:27:19	651	3000	60.00	0.00	0.00
5/12/01	19:27:20	152	3000	60.00	0.00	0.00
5/12/01	19:27:20	653	3000	60.00	0.00	0.00
5/12/01	19:27:21	153	3000	60.00	0.00	0.00
5/12/01	19:27:21	654	3000	60.00	0.00	0.00
5/12/01	19:27:22	155	3000	60.00	0.00	0.00
5/12/01	19:27:22	655	3000	60.01	0.00	0.00
5/12/01	19:27:23	156	3000	60.01	0.00	0.00
5/12/01	19:27:23	657	3000	60.01	0.00	0.00
5/12/01	19:27:24	158	3000	60.01	0.00	0.00
5/12/01	19:27:24	658	3000	60.01	0.00	0.00
5/12/01	19:27:25	159	3000	60.01	0.00	0.00
5/12/01	19:27:25	660	3000	60.01	0.00	0.00
5/12/01	19:27:26	161	3096	60.01	0.00	0.00
5/12/01	19:27:26	671	3172	60.01	47.05	0.00
5/12/01	19:27:27	162	3201	60.01	47.05	0.00
5/12/01	19:27:27	683	3235	60.00	54.22	0.00
5/12/01	19:27:28	163	3257	60.00	54.22	0.00
5/12/01	19:27:28	664	3265	60.00	54.22	0.00
5/12/01	19:27:29	165	3273	60.00	55.14	118.00
5/12/01	19:27:29	666	3274	60.00	55.14	118.00
5/12/01	19:27:30	166	3278	60.00	57.74	79.00
5/12/01	19:27:30	667	3279	60.00	57.74	79.00
5/12/01	19:27:31	168	3276	60.00	59.63	50.00
5/12/01	19:27:31	668	3274	60.00	59.63	50.00
5/12/01	19:27:32	169	3286	60.00	59.91	31.00
5/12/01	19:27:32	670	3276	60.00	59.91	31.00
5/12/01	19:27:33	171	3276	60.01	59.91	7.00
5/12/01	19:27:33	671	3291	60.01	59.91	7.00
5/12/01	19:27:34	172	3296	60.01	59.95	-78.00
5/12/01	19:27:34	673	3293	60.01	59.95	-78.00
5/12/01	19:27:35	173	3292	60.01	59.93	-59.00
5/12/01	19:27:35	674	3290	60.01	59.93	-59.00
5/12/01	19:27:36	175	3288	60.01	59.66	-35.00
5/12/01	19:27:36	676	3294	60.01	59.66	-35.00
5/12/01	19:27:37	176	3293	60.01	60.05	-35.00
5/12/01	19:27:37	677	3292	60.01	60.05	-17.00
5/12/01	19:27:38	178	3290	60.02	60.06	-17.00
5/12/01	19:27:38	679	3290	60.02	60.06	2.00
5/12/01	19:27:39	179	3288	60.02	60.04	2.00
5/12/01	19:27:39	680	3291	60.02	60.04	13.00
5/12/01	19:27:40	181	3287	60.02	60.08	13.00
5/12/01	19:27:40	681	3285	60.02	60.08	16.00
5/12/01	19:27:41	182	3288	60.02	60.06	16.00
5/12/01	19:27:41	683	3286	60.02	60.06	5.00
5/12/01	19:27:42	184	3287	60.02	60.00	5.00
5/12/01	19:27:42	684	3286	60.02	60.00	4.00
5/12/01	19:27:43	185	3284	60.02	59.91	4.00
5/12/01	19:27:43	686	3289	60.02	59.91	0.00
5/12/01	19:27:44	186	3288	60.02	60.01	0.00
5/12/01	19:27:44	687	3287	60.02	60.01	1.00
5/12/01	19:27:45	188	3289	60.02	60.04	1.00
5/12/01	19:27:45	689	3284	60.02	60.04	-2.00
5/12/01	19:27:46	189	0	60.02	60.03	-2.00
5/12/01	19:27:46	690	0	60.02	60.03	0.00
5/12/01	19:27:47	191	0	60.02	59.95	0.00
5/12/01	19:27:47	691	0	60.02	59.95	0.00
5/12/01	19:27:48	192	0	60.01	59.97	0.00
5/12/01	19:27:48	693	0	60.01	59.97	0.00
5/12/01	19:27:49	204	0	60.01	56.70	0.00
5/12/01	19:27:49	825	0	60.01	56.70	0.00
5/12/01	19:27:50	195	0	60.01	49.88	0.00
5/12/01	19:27:50	696	0	60.01	49.88	0.00
5/12/01	19:27:51	197	0	60.01	42.85	0.00
5/12/01	19:27:51	697	0	60.01	42.85	0.00
5/12/01	19:27:52	208	0	60.01	0.00	0.00
5/12/01	19:27:52	699	0	60.01	0.00	0.00
5/12/01	19:27:53	199	0	60.01	0.00	0.00
5/12/01	19:27:53	700	0	60.02	0.00	0.00
5/12/01	19:27:54	201	0	60.02	0.00	0.00
5/12/01	19:27:54	702	0	60.02	0.00	0.00
5/12/01	19:27:55	202	0	60.02	0.00	0.00
5/12/01	19:27:55	703	0	60.02	0.00	0.00
5/12/01	19:27:56	204	0	60.02	0.00	0.00
5/12/01	19:27:56	704	0	60.02	0.00	0.00
5/12/01	19:27:57	205	0	60.02	0.00	0.00
5/12/01	19:27:57	706	0	60.02	0.00	0.00

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Close Breaker (Open/Close)
5/12/01	19:27:58	207	0	60.02	0.00	0.00
5/12/01	19:27:58	707	0	60.02	0.00	0.00
5/12/01	19:27:59	208	0	60.02	0.00	0.00
5/12/01	19:27:59	719	0	60.02	0.00	0.00
5/12/01	19:28:00	209	0	60.02	0.00	0.00
5/12/01	19:28:00	710	0	60.02	0.00	0.00
5/12/01	19:28:01	211	0	60.02	0.00	0.00
5/12/01	19:28:01	712	0	60.02	0.00	0.00
5/12/01	19:28:02	212	0	60.02	0.00	0.00
5/12/01	19:28:02	713	3000	60.02	0.00	0.00
5/12/01	19:28:03	214	3000	60.02	0.00	0.00
5/12/01	19:28:03	715	3000	60.01	0.00	0.00
5/12/01	19:28:04	215	3000	60.01	0.00	0.00
5/12/01	19:28:04	716	3000	60.01	0.00	0.00
5/12/01	19:28:05	217	3000	60.01	0.00	0.00
5/12/01	19:28:05	717	3000	60.01	0.00	0.00
5/12/01	19:28:06	218	3000	60.01	0.00	0.00
5/12/01	19:28:06	719	3000	60.01	0.00	0.00
5/12/01	19:28:07	220	3000	60.01	0.00	0.00
5/12/01	19:28:07	720	3000	60.01	0.00	0.00
5/12/01	19:28:08	221	3000	60.01	0.00	0.00
5/12/01	19:28:08	722	3000	60.02	0.00	0.00
5/12/01	19:28:09	222	3000	60.02	0.00	0.00
5/12/01	19:28:09	723	3000	60.02	0.00	0.00
5/12/01	19:28:10	224	3000	60.02	0.00	0.00
5/12/01	19:28:10	725	3067	60.02	0.00	0.00
5/12/01	19:28:11	225	3143	60.02	0.00	0.00
5/12/01	19:28:11	736	3206	60.02	52.83	0.00
5/12/01	19:28:12	227	3241	60.02	52.83	0.00
5/12/01	19:28:12	727	3251	60.01	55.14	0.00
5/12/01	19:28:13	228	3264	60.01	55.14	0.00
5/12/01	19:28:13	729	3271	60.01	57.70	0.00
5/12/01	19:28:14	230	3271	60.01	57.70	-110.00
5/12/01	19:28:14	730	3276	60.01	59.11	-110.00
5/12/01	19:28:15	231	3278	60.01	59.11	-152.00
5/12/01	19:28:15	732	3281	60.01	59.62	-152.00
5/12/01	19:28:16	233	3291	60.01	59.62	-170.00
5/12/01	19:28:16	733	3277	60.01	59.88	-170.00
5/12/01	19:28:17	234	3290	60.01	59.88	-128.00
5/12/01	19:28:17	735	3300	60.00	59.97	-128.00
5/12/01	19:28:18	235	3280	60.00	59.97	-128.00
5/12/01	19:28:18	736	3293	60.00	59.97	-50.00
5/12/01	19:28:19	237	3283	60.00	60.16	-50.00
5/12/01	19:28:19	738	3301	60.00	60.16	1.00
5/12/01	19:28:20	238	3293	60.00	60.24	1.00
5/12/01	19:28:20	739	3295	60.00	60.24	-39.00
5/12/01	19:28:21	240	3280	60.00	60.17	-39.00
5/12/01	19:28:21	740	3295	60.00	60.17	0.00
5/12/01	19:28:22	241	3291	60.00	60.07	0.00
5/12/01	19:28:22	742	3285	60.00	60.07	22.00
5/12/01	19:28:23	243	3288	60.02	60.16	22.00
5/12/01	19:28:23	743	3288	60.02	60.16	20.00
5/12/01	19:28:24	244	3286	60.02	60.11	20.00
5/12/01	19:28:24	745	3287	60.02	60.11	8.00
5/12/01	19:28:25	245	3287	60.02	60.06	8.00
5/12/01	19:28:25	746	3288	60.02	60.06	2.00
5/12/01	19:28:26	247	3287	60.02	60.00	2.00
5/12/01	19:28:26	748	3288	60.02	60.00	0.00
5/12/01	19:28:27	248	3285	60.02	59.94	0.00
5/12/01	19:28:27	749	3291	60.02	59.94	2.00
5/12/01	19:28:28	250	3286	60.01	59.96	2.00
5/12/01	19:28:28	751	3288	60.01	59.96	7.00
5/12/01	19:28:29	251	3289	60.01	60.05	7.00
5/12/01	19:28:29	752	3291	60.01	60.05	-5.00
5/12/01	19:28:30	253	3292	60.01	60.05	-5.00
5/12/01	19:28:30	753	3285	60.01	60.05	-10.00
5/12/01	19:28:31	254	3289	60.01	59.94	-10.00
5/12/01	19:28:31	755	3286	60.01	59.94	-2.00
5/12/01	19:28:32	266	3288	60.01	59.99	-2.00
5/12/01	19:28:32	766	3296	60.01	59.99	5.00
5/12/01	19:28:33	257	0	60.01	59.98	5.00
5/12/01	19:28:33	758	0	60.01	59.98	0.00
5/12/01	19:28:34	258	0	60.01	60.03	0.00
5/12/01	19:28:34	759	0	60.01	60.03	0.00
5/12/01	19:28:35	260	0	60.01	60.07	0.00
5/12/01	19:28:35	761	0	60.01	60.07	0.00
5/12/01	19:28:36	261	0	60.01	54.51	0.00
5/12/01	19:28:36	762	0	60.01	54.51	0.00
5/12/01	19:28:37	263	0	60.01	47.64	0.00
5/12/01	19:28:37	763	0	60.01	47.64	0.00
5/12/01	19:28:38	264	0	60.00	40.82	0.00
5/12/01	19:28:38	765	0	60.00	40.82	0.00
5/12/01	19:28:39	266	0	60.00	0.00	0.00
5/12/01	19:28:39	766	0	60.00	0.00	0.00
5/12/01	19:28:40	267	0	60.00	0.00	0.00
5/12/01	19:28:40	768	0	60.00	0.00	0.00

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Close Breaker (Open/Close)
5/12/01	19:28:41	269	0	60.00	0.00	0.00
5/12/01	19:28:41	769	0	60.00	0.00	0.00
5/12/01	19:28:42	270	0	60.00	0.00	0.00
5/12/01	19:28:42	771	0	60.00	0.00	0.00
5/12/01	19:28:43	271	0	60.01	0.00	0.00
5/12/01	19:28:43	772	0	60.01	0.00	0.00
5/12/01	19:28:44	273	0	60.01	0.00	0.00
5/12/01	19:28:44	774	0	60.01	0.00	0.00
5/12/01	19:28:45	274	0	60.01	0.00	0.00
5/12/01	19:28:45	775	0	60.01	0.00	0.00
5/12/01	19:28:46	276	0	60.01	0.00	0.00
5/12/01	19:28:46	776	0	60.01	0.00	0.00
5/12/01	19:28:47	277	0	60.01	0.00	0.00
5/12/01	19:28:47	778	0	60.01	0.00	0.00
5/12/01	19:28:48	279	0	60.01	0.00	0.00
5/12/01	19:28:48	779	0	60.00	0.00	0.00
5/12/01	19:28:49	280	0	60.00	0.00	0.00
5/12/01	19:28:49	781	3000	60.00	0.00	0.00
5/12/01	19:28:50	281	3000	60.00	0.00	0.00
5/12/01	19:28:50	782	3000	60.00	0.00	0.00
5/12/01	19:28:51	283	3000	60.00	0.00	0.00
5/12/01	19:28:51	784	3000	60.00	0.00	0.00
5/12/01	19:28:52	284	3000	60.00	0.00	0.00
5/12/01	19:28:52	785	3000	60.00	0.00	0.00
5/12/01	19:28:53	286	3000	60.00	0.00	0.00
5/12/01	19:28:53	787	3000	60.00	0.00	0.00
5/12/01	19:28:54	287	3000	60.00	0.00	0.00
5/12/01	19:28:54	788	3000	60.00	0.00	0.00
5/12/01	19:28:55	289	3000	60.00	0.00	0.00
5/12/01	19:28:55	789	3000	60.00	0.00	0.00
5/12/01	19:28:56	290	3000	60.00	0.00	0.00
5/12/01	19:28:56	791	3000	60.00	0.00	0.00
5/12/01	19:28:57	292	3104	60.00	0.00	0.00
5/12/01	19:28:57	792	3151	60.00	41.74	0.00
5/12/01	19:28:58	293	3214	60.00	41.74	0.00
5/12/01	19:28:58	794	3242	60.02	55.42	0.00
5/12/01	19:28:59	294	3257	60.02	55.42	0.00
5/12/01	19:28:59	795	3263	60.02	58.19	0.00
5/12/01	19:29:00	306	3274	60.02	58.19	-167.00
5/12/01	19:29:00	797	3276	60.02	59.30	-167.00
5/12/01	19:29:01	297	3278	60.02	59.30	-167.00
5/12/01	19:29:01	798	3279	60.02	59.74	144.00
5/12/01	19:29:02	299	3278	60.02	59.74	144.00
5/12/01	19:29:02	799	3273	60.02	59.88	131.00
5/12/01	19:29:03	300	3278	60.02	59.88	131.00
5/12/01	19:29:03	801	3287	60.02	59.96	89.00
5/12/01	19:29:04	302	3267	60.02	59.96	89.00
5/12/01	19:29:04	802	3273	60.02	59.87	20.00
5/12/01	19:29:05	303	3303	60.02	59.87	20.00
5/12/01	19:29:05	804	3303	60.02	59.87	-56.00
5/12/01	19:29:06	305	3299	60.02	59.87	-56.00
5/12/01	19:29:06	805	3297	60.02	59.81	-32.00
5/12/01	19:29:07	306	3293	60.02	59.81	-32.00
5/12/01	19:29:07	807	3289	60.02	59.57	4.00
5/12/01	19:29:08	307	3287	60.02	59.57	4.00
5/12/01	19:29:08	808	3285	60.01	60.04	18.00
5/12/01	19:29:09	309	3290	60.01	60.04	18.00
5/12/01	19:29:09	810	3284	60.01	60.07	17.00
5/12/01	19:29:10	310	3288	60.01	60.07	17.00
5/12/01	19:29:10	811	3286	60.01	60.06	11.00
5/12/01	19:29:11	312	3288	60.01	60.06	11.00
5/12/01	19:29:11	812	3286	60.01	60.01	5.00
5/12/01	19:29:12	313	3291	60.01	60.01	5.00
5/12/01	19:29:12	814	3285	60.01	60.00	0.00
5/12/01	19:29:13	315	3287	60.01	60.00	0.00
5/12/01	19:29:13	815	3289	60.01	59.95	-5.00
5/12/01	19:29:14	316	3286	60.01	59.95	-5.00
5/12/01	19:29:14	817	3289	60.01	60.05	-4.00
5/12/01	19:29:15	317	3282	60.01	60.05	-4.00
5/12/01	19:29:15	818	0	60.01	60.02	-2.00
5/12/01	19:29:16	319	0	60.01	60.02	-2.00
5/12/01	19:29:16	820	0	60.01	60.02	0.00
5/12/01	19:29:17	320	0	60.01	59.93	0.00
5/12/01	19:29:17	821	0	60.01	59.93	0.00
5/12/01	19:29:18	322	0	60.01	59.99	0.00
5/12/01	19:29:18	823	0	60.01	59.99	0.00
5/12/01	19:29:19	323	0	60.01	56.20	0.00
5/12/01	19:29:19	824	0	60.01	56.20	0.00
5/12/01	19:29:20	325	0	60.01	50.11	0.00
5/12/01	19:29:20	825	0	60.01	50.11	0.00
5/12/01	19:29:21	326	0	60.01	42.45	0.00
5/12/01	19:29:21	827	0	60.01	42.45	0.00
5/12/01	19:29:22	328	0	60.01	0.00	0.00
5/12/01	19:29:22	828	0	60.01	0.00	0.00
5/12/01	19:29:23	329	0	60.01	0.00	0.00
5/12/01	19:29:23	830	0	60.01	0.00	0.00

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Close Breaker (Open/Close)
5/12/01	19:29:24	330	0	60.00	0.00	0.00
5/12/01	19:29:24	831	0	60.00	0.00	0.00
5/12/01	19:29:25	332	0	60.00	0.00	0.00
5/12/01	19:29:25	833	0	60.00	0.00	0.00
5/12/01	19:29:26	333	0	60.00	0.00	0.00
5/12/01	19:29:26	854	0	60.00	0.00	0.00
5/12/01	19:29:27	335	0	60.00	0.00	0.00
5/12/01	19:29:27	835	0	60.00	0.00	0.00
5/12/01	19:29:28	336	0	60.00	0.00	0.00
5/12/01	19:29:28	837	0	60.00	0.00	0.00
5/12/01	19:29:29	338	0	59.99	0.00	0.00
5/12/01	19:29:29	838	0	59.99	0.00	0.00
5/12/01	19:29:30	339	0	59.99	0.00	0.00
5/12/01	19:29:30	840	0	59.99	0.00	0.00
5/12/01	19:29:31	341	0	59.99	0.00	0.00
5/12/01	19:29:31	841	0	59.99	0.00	0.00
5/12/01	19:29:32	342	0	59.99	0.00	0.00
5/12/01	19:29:32	843	0	59.99	0.00	0.00
5/12/01	19:29:33	343	0	60.02	0.00	0.00
5/12/01	19:29:33	844	0	60.02	0.00	0.00
5/12/01	19:29:34	345	0	60.02	0.00	0.00
5/12/01	19:29:34	846	0	60.02	0.00	0.00
5/12/01	19:29:35	346	0	60.02	0.00	0.00
5/12/01	19:29:35	847	0	60.02	0.00	0.00
5/12/01	19:29:36	348	0	60.02	0.00	0.00
5/12/01	19:29:36	848	3000	60.02	0.00	0.00
5/12/01	19:29:37	349	3000	60.02	0.00	0.00
5/12/01	19:29:37	850	3000	60.02	0.00	0.00
5/12/01	19:29:38	351	3000	60.01	0.00	0.00
5/12/01	19:29:38	851	3000	60.01	0.00	0.00
5/12/01	19:29:39	352	3000	60.01	0.00	0.00
5/12/01	19:29:39	853	3000	60.01	0.00	0.00
5/12/01	19:29:40	353	3000	60.01	0.00	0.00
5/12/01	19:29:40	854	3000	60.01	0.00	0.00
5/12/01	19:29:41	355	3000	60.01	0.00	0.00
5/12/01	19:29:41	856	3000	60.01	0.00	0.00
5/12/01	19:29:42	356	3000	60.01	0.00	0.00
5/12/01	19:29:42	857	3000	60.01	0.00	0.00
5/12/01	19:29:43	358	3000	60.01	0.00	0.00
5/12/01	19:29:43	859	3000	60.00	0.00	0.00
5/12/01	19:29:44	359	3000	60.00	0.00	0.00
5/12/01	19:29:44	860	3084	60.00	41.75	0.00
5/12/01	19:29:45	361	3169	60.00	41.75	0.00
5/12/01	19:29:45	871	3211	60.00	48.53	0.00
5/12/01	19:29:46	362	3232	60.00	48.53	0.00
5/12/01	19:29:46	863	3251	60.00	55.13	0.00
5/12/01	19:29:47	364	3267	60.00	55.13	0.00
5/12/01	19:29:47	864	3271	60.00	55.72	-95.00
5/12/01	19:29:48	365	3275	60.00	55.72	-95.00
5/12/01	19:29:48	866	3277	60.00	59.24	-137.00
5/12/01	19:29:49	366	3278	60.00	59.24	-137.00
5/12/01	19:29:49	867	3289	60.00	59.73	-166.00
5/12/01	19:29:50	368	3291	60.00	59.73	-166.00
5/12/01	19:29:50	869	3290	60.00	59.90	-137.00
5/12/01	19:29:51	369	3272	60.00	59.90	-137.00
5/12/01	19:29:51	870	3297	60.00	59.92	-71.00
5/12/01	19:29:52	371	3297	60.00	59.92	-71.00
5/12/01	19:29:52	871	3285	60.00	60.07	-15.00
5/12/01	19:29:53	372	3278	60.00	60.07	-15.00
5/12/01	19:29:53	873	3276	60.00	60.24	20.00
5/12/01	19:29:54	374	3292	60.00	60.24	20.00
5/12/01	19:29:54	874	3274	60.00	60.13	0.00
5/12/01	19:29:55	375	3283	60.00	60.13	0.00
5/12/01	19:29:55	876	3285	60.00	60.12	175.00
5/12/01	19:29:56	377	3284	60.00	60.12	175.00
5/12/01	19:29:56	877	3285	60.00	59.69	157.00
5/12/01	19:29:57	378	3285	60.00	59.69	157.00
5/12/01	19:29:57	879	3279	60.00	59.65	157.00
5/12/01	19:29:58	379	3281	60.00	59.65	157.00
5/12/01	19:29:58	880	3276	60.00	60.00	115.00
5/12/01	19:29:59	381	3284	60.00	60.00	115.00
5/12/01	19:29:59	882	3270	60.00	59.99	43.00
5/12/01	19:30:00	382	3286	60.00	59.99	43.00
5/12/01	19:30:00	883	3281	60.00	59.83	43.00
5/12/01	19:30:01	384	3284	60.00	59.83	-9.00
5/12/01	19:30:01	884	3287	60.00	59.85	-9.00
5/12/01	19:30:02	385	3284	60.00	59.85	-26.00
5/12/01	19:30:02	886	3289	60.00	59.87	-26.00
5/12/01	19:30:03	387	3287	60.00	59.87	-24.00
5/12/01	19:30:03	887	3290	59.99	60.02	-24.00
5/12/01	19:30:04	388	3284	59.99	60.02	-15.00
5/12/01	19:30:04	889	3290	59.99	60.01	-15.00
5/12/01	19:30:05	389	3288	59.99	60.01	-6.00
5/12/01	19:30:05	890	3290	59.99	60.01	-6.00
5/12/01	19:30:06	391	3284	59.99	59.98	0.00
5/12/01	19:30:06	892	3287	59.99	59.98	0.00

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match Error (Close Breaker (Open/Close)	
5/12/01	19:30:07	392	3286	59.99	59.98	0.00	0
5/12/01	19:30:07	893	3287	59.99	59.98	0.00	1
5/12/01	19:30:08	394	3288	59.99	59.96	0.00	1
5/12/01	19:30:08	895	3289	59.99	59.96	0.00	1
5/12/01	19:30:09	395	0	60.00	60.01	-6.00	1
5/12/01	19:30:09	896	0	60.00	60.01	-6.00	0
5/12/01	19:30:10	397	0	60.00	59.97	0.00	0
5/12/01	19:30:10	897	0	60.00	59.97	0.00	0
5/12/01	19:30:11	398	0	60.00	60.02	0.00	0
5/12/01	19:30:11	899	0	60.00	60.02	0.00	0
5/12/01	19:30:12	400	0	60.00	56.76	0.00	0
5/12/01	19:30:12	900	0	60.00	56.76	0.00	0
5/12/01	19:30:13	401	0	60.00	49.93	0.00	0
5/12/01	19:30:13	932	0	60.00	49.93	0.00	0
5/12/01	19:30:14	402	0	60.00	43.12	0.00	0
5/12/01	19:30:14	903	0	60.00	43.12	0.00	0
5/12/01	19:30:15	404	0	60.00	0.00	0.00	0
5/12/01	19:30:15	905	0	60.00	0.00	0.00	0
5/12/01	19:30:16	405	0	60.00	0.00	0.00	0
5/12/01	19:30:16	916	0	60.00	0.00	0.00	0
5/12/01	19:30:17	407	0	60.00	0.00	0.00	0
5/12/01	19:30:17	907	0	60.00	0.00	0.00	0
5/12/01	19:30:18	408	0	60.00	0.00	0.00	0
5/12/01	19:30:18	909	0	60.00	0.00	0.00	0
5/12/01	19:30:19	410	0	59.99	0.00	0.00	0
5/12/01	19:30:19	910	0	59.99	0.00	0.00	0
5/12/01	19:30:20	411	0	59.99	0.00	0.00	0
5/12/01	19:30:20	912	0	59.99	0.00	0.00	0
5/12/01	19:30:21	413	0	59.99	0.00	0.00	0
5/12/01	19:30:21	913	0	59.99	0.00	0.00	0
5/12/01	19:30:22	414	0	59.99	0.00	0.00	0
5/12/01	19:30:22	915	0	59.99	0.00	0.00	0
5/12/01	19:30:23	415	0	59.99	0.00	0.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match	Close Breaker (Open/Close)
5/12/01	18:45:12	307	0	59.99	0.00	0.00	0
5/12/01	18:45:12	808	0	59.99	0.00	0.00	0
5/12/01	18:45:13	308	0	59.99	0.00	0.00	0
5/12/01	18:45:13	829	0	59.99	0.00	0.00	0
5/12/01	18:45:14	310	200	59.99	0.00	0.00	0
5/12/01	18:45:14	811	400	59.99	0.00	0.00	0
5/12/01	18:45:15	311	500	59.99	0.00	0.00	0
5/12/01	18:45:15	812	800	59.99	0.00	0.00	0
5/12/01	18:45:16	313	1100	59.99	0.00	0.00	0
5/12/01	18:45:16	813	1300	59.99	0.00	0.00	0
5/12/01	18:45:17	314	1500	59.99	0.00	0.00	0
5/12/01	18:45:17	825	1800	59.99	0.00	0.00	0
5/12/01	18:45:18	316	2000	59.99	0.00	0.00	0
5/12/01	18:45:18	816	2200	59.99	0.00	0.00	0
5/12/01	18:45:19	317	2400	59.99	0.00	0.00	0
5/12/01	18:45:19	818	2600	59.99	0.00	0.00	0
5/12/01	18:45:20	319	2837	59.99	0.00	0.00	0
5/12/01	18:45:20	819	2951	59.99	0.00	0.00	0
5/12/01	18:45:21	320	3026	59.97	0.00	0.00	0
5/12/01	18:45:21	821	3081	59.97	0.00	0.00	0
5/12/01	18:45:22	321	3125	59.97	42.54	0.00	0
5/12/01	18:45:22	822	3147	59.97	42.54	0.00	0
5/12/01	18:45:23	323	3166	59.97	42.54	0.00	0
5/12/01	18:45:23	824	3182	59.97	42.54	0.00	0
5/12/01	18:45:24	324	3201	59.97	54.30	0.00	0
5/12/01	18:45:24	825	3211	59.97	54.30	0.00	0
5/12/01	18:45:25	326	3219	59.97	57.14	0.00	0
5/12/01	18:45:25	826	3227	59.97	57.14	0.00	0
5/12/01	18:45:26	327	3235	59.99	58.42	0.00	0
5/12/01	18:45:26	828	3244	59.99	58.42	0.00	0
5/12/01	18:45:27	329	3250	59.99	58.83	0.00	0
5/12/01	18:45:27	829	3254	59.99	58.83	0.00	0
5/12/01	18:45:28	330	3259	59.99	59.04	0.00	0
5/12/01	18:45:28	831	3261	59.99	59.04	0.00	0
5/12/01	18:45:29	331	3264	59.99	59.19	0.00	0
5/12/01	18:45:29	832	3266	59.99	59.19	0.00	0
5/12/01	18:45:30	333	3270	59.99	59.41	-104.00	0
5/12/01	18:45:30	834	3274	59.99	59.41	-104.00	0
5/12/01	18:45:31	334	3278	60.00	59.68	-147.00	0
5/12/01	18:45:31	835	3280	60.00	59.68	-147.00	0
5/12/01	18:45:32	336	3282	60.00	59.76	-162.00	0
5/12/01	18:45:32	837	3284	60.00	59.76	-162.00	0
5/12/01	18:45:33	337	3287	60.00	59.81	-139.00	0
5/12/01	18:45:33	838	3288	60.00	59.81	-139.00	0
5/12/01	18:45:34	339	3288	60.00	60.00	-139.00	0
5/12/01	18:45:34	839	3288	60.00	60.00	-96.00	0
5/12/01	18:45:35	340	3288	60.00	60.04	-96.00	0
5/12/01	18:45:35	841	3286	60.00	60.04	-35.00	0
5/12/01	18:45:36	342	3281	59.99	60.08	-35.00	0
5/12/01	18:45:36	842	3279	59.99	60.08	15.00	0
5/12/01	18:45:37	343	3285	59.99	60.14	15.00	0
5/12/01	18:45:37	844	3287	59.99	60.14	-55.00	0
5/12/01	18:45:38	344	3289	59.99	60.15	-55.00	0
5/12/01	18:45:38	845	3291	59.99	60.15	-55.00	0
5/12/01	18:45:39	346	3291	59.99	59.63	-55.00	0
5/12/01	18:45:39	847	3290	59.99	59.63	-22.00	0
5/12/01	18:45:40	347	3287	59.99	60.07	-22.00	0
5/12/01	18:45:40	848	3284	59.99	60.07	35.00	0
5/12/01	18:45:41	349	3281	59.99	60.07	35.00	0
5/12/01	18:45:41	849	3281	60.00	60.12	34.00	0
5/12/01	18:45:42	350	3280	60.00	60.12	34.00	0
5/12/01	18:45:42	851	3282	60.00	60.15	8.00	0
5/12/01	18:45:43	352	3287	60.00	60.15	8.00	0
5/12/01	18:45:43	852	3288	60.00	60.01	-14.00	0
5/12/01	18:45:44	353	3284	60.00	60.01	-14.00	0
5/12/01	18:45:44	854	3282	60.00	59.92	6.00	0
5/12/01	18:45:45	355	3283	60.00	59.92	6.00	0
5/12/01	18:45:45	855	3285	60.00	59.97	2.00	0
5/12/01	18:45:46	356	3286	60.00	59.97	2.00	0
5/12/01	18:45:46	857	3286	60.00	59.97	-10.00	0
5/12/01	18:45:47	357	3287	60.00	59.97	-10.00	0
5/12/01	18:45:47	858	3287	60.00	59.98	-17.00	0
5/12/01	18:45:48	359	3287	60.00	59.98	-17.00	0
5/12/01	18:45:48	860	3285	60.00	60.00	0.00	0
5/12/01	18:45:49	360	3283	60.00	60.00	0.00	0
5/12/01	18:45:49	861	3282	60.00	60.04	16.00	0
5/12/01	18:45:50	362	3281	60.00	60.04	16.00	0
5/12/01	18:45:50	862	3283	60.00	60.04	17.00	0
5/12/01	18:45:51	363	3283	60.00	60.04	17.00	0
5/12/01	18:45:51	864	3283	60.00	59.95	-7.00	0
5/12/01	18:45:52	365	3283	60.00	59.95	-7.00	0
5/12/01	18:45:52	865	3283	60.00	59.92	-12.00	0
5/12/01	18:45:53	366	3283	60.00	59.92	-12.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match	Close Breaker (Open/Close)
5/12/01	18:45:53	867	3283	60.00	60.01	-7.00	0
5/12/01	18:45:54	367	3283	60.00	60.01	-7.00	0
5/12/01	18:45:54	868	3283	60.00	60.01	-4.00	1
5/12/01	18:45:55	369	3283	60.00	60.01	-4.00	1
5/12/01	18:45:55	870	3283	60.00	60.01	-1.00	1
5/12/01	18:45:56	370	3283	60.00	60.02	-1.00	1
5/12/01	18:45:56	871	3283	60.00	60.02	1.00	1
5/12/01	18:45:57	372	3281	60.00	60.01	1.00	1
5/12/01	18:45:57	873	3280	60.00	60.01	3.00	1
5/12/01	18:45:58	373	3283	60.00	60.01	3.00	1
5/12/01	18:45:58	874	3287	60.00	60.01	-21.00	0
5/12/01	18:45:59	375	3287	60.00	60.00	-21.00	0
5/12/01	18:45:59	875	3285	60.00	60.00	-2.00	0
5/12/01	18:46:00	376	3285	60.00	59.94	-2.00	0
5/12/01	18:46:00	877	3285	60.00	59.94	16.00	0
5/12/01	18:46:01	378	3282	60.00	60.04	16.00	0
5/12/01	18:46:01	878	3280	60.00	60.04	16.00	0
5/12/01	18:46:02	379	3280	59.99	60.08	29.00	0
5/12/01	18:46:02	880	3279	59.99	60.08	29.00	0
5/12/01	18:46:03	380	0	59.99	60.06	-4.00	0
5/12/01	18:46:03	881	0	59.99	60.06	-4.00	0
5/12/01	18:46:04	382	0	59.99	59.92	0.00	0
5/12/01	18:46:04	883	0	59.99	59.92	0.00	0
5/12/01	18:46:05	383	0	59.99	59.90	0.00	0
5/12/01	18:46:05	884	0	59.99	59.90	0.00	0
5/12/01	18:46:06	385	0	60.01	55.67	0.00	0
5/12/01	18:46:06	885	0	60.01	55.67	0.00	0
5/12/01	18:46:07	386	0	60.01	48.75	0.00	0
5/12/01	18:46:07	887	0	60.01	48.75	0.00	0
5/12/01	18:46:08	388	0	60.01	41.72	0.00	0
5/12/01	18:46:08	888	0	60.01	41.72	0.00	0
5/12/01	18:46:09	389	0	60.01	0.00	0.00	0
5/12/01	18:46:09	890	0	60.01	0.00	0.00	0
5/12/01	18:46:10	391	0	60.01	0.00	0.00	0
5/12/01	18:46:10	891	0	60.01	0.00	0.00	0
5/12/01	18:46:11	392	0	60.00	0.00	0.00	0
5/12/01	18:46:11	893	0	60.00	0.00	0.00	0
5/12/01	18:46:12	393	0	60.00	0.00	0.00	0
5/12/01	18:46:12	894	0	60.00	0.00	0.00	0
5/12/01	18:46:13	395	0	60.00	0.00	0.00	0
5/12/01	18:46:13	896	0	60.00	0.00	0.00	0
5/12/01	18:46:14	396	0	60.00	0.00	0.00	0
5/12/01	18:46:14	897	0	60.00	0.00	0.00	0
5/12/01	18:46:15	398	0	60.00	0.00	0.00	0
5/12/01	18:46:15	898	0	60.00	0.00	0.00	0
5/12/01	18:46:16	399	0	60.00	0.00	0.00	0
5/12/01	18:46:16	900	0	60.01	0.00	0.00	0
5/12/01	18:46:17	401	0	60.01	0.00	0.00	0
5/12/01	18:46:17	901	0	60.01	0.00	0.00	0
5/12/01	18:46:18	402	0	60.01	0.00	0.00	0
5/12/01	18:46:18	903	0	60.01	0.00	0.00	0
5/12/01	18:46:19	403	0	60.01	0.00	0.00	0
5/12/01	18:46:19	904	0	60.01	0.00	0.00	0
5/12/01	18:46:20	405	0	60.01	0.00	0.00	0
5/12/01	18:46:20	906	0	60.01	0.00	0.00	0
5/12/01	18:46:21	406	0	60.01	0.00	0.00	0
5/12/01	18:46:21	907	0	60.00	0.00	0.00	0
5/12/01	18:46:22	408	300	60.00	0.00	0.00	0
5/12/01	18:46:22	909	500	60.00	0.00	0.00	0
5/12/01	18:46:23	409	700	60.00	0.00	0.00	0
5/12/01	18:46:23	910	900	60.00	0.00	0.00	0
5/12/01	18:46:24	411	1200	60.00	0.00	0.00	0
5/12/01	18:46:24	911	1400	60.00	0.00	0.00	0
5/12/01	18:46:25	412	1600	60.00	0.00	0.00	0
5/12/01	18:46:25	913	1800	60.00	0.00	0.00	0
5/12/01	18:46:26	414	2100	60.00	0.00	0.00	0
5/12/01	18:46:26	914	2300	59.99	0.00	0.00	0
5/12/01	18:46:27	415	2500	59.99	0.00	0.00	0
5/12/01	18:46:27	916	2698	59.99	0.00	0.00	0
5/12/01	18:46:28	416	2908	59.99	0.00	0.00	0
5/12/01	18:46:28	917	2997	59.99	0.00	0.00	0
5/12/01	18:46:29	418	3063	59.99	0.00	0.00	0
5/12/01	18:46:29	919	3107	59.99	44.46	0.00	0
5/12/01	18:46:30	419	3142	59.99	44.46	0.00	0
5/12/01	18:46:30	920	3162	59.99	51.80	0.00	0
5/12/01	18:46:31	421	3179	59.99	51.80	0.00	0
5/12/01	18:46:31	921	3193	60.00	56.96	0.00	0
5/12/01	18:46:32	422	3210	60.00	56.96	0.00	0
5/12/01	18:46:32	923	3220	60.00	57.66	0.00	0
5/12/01	18:46:33	424	3228	60.00	57.66	0.00	0
5/12/01	18:46:33	924	3236	60.00	58.31	0.00	0
5/12/01	18:46:34	425	3245	60.00	58.31	0.00	0
5/12/01	18:46:34	926	3250	60.00	58.98	0.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match	Close Breaker (Open/Close)
5/12/01	18:46:35	427	3254	60.00	58.98	0.00	0
5/12/01	18:46:35	927	3258	60.00	59.22	0.00	0
5/12/01	18:46:36	428	3261	60.00	59.22	0.00	0
5/12/01	18:46:36	929	3263	60.00	59.39	0.00	0
5/12/01	18:46:37	429	3265	60.00	59.39	0.00	0
5/12/01	18:46:37	930	3266	60.00	59.67	0.00	0
5/12/01	18:46:38	431	3268	60.00	59.67	27.00	0
5/12/01	18:46:38	932	3269	60.00	59.73	27.00	0
5/12/01	18:46:39	432	3276	60.00	59.73	-34.00	0
5/12/01	18:46:39	933	3278	60.00	59.73	-34.00	0
5/12/01	18:46:40	434	3281	60.00	59.81	-49.00	0
5/12/01	18:46:40	934	3283	60.00	59.81	-49.00	0
5/12/01	18:46:41	435	3285	60.00	59.93	-33.00	0
5/12/01	18:46:41	936	3285	60.00	59.93	-33.00	0
5/12/01	18:46:42	437	3285	59.99	60.01	4.00	0
5/12/01	18:46:42	937	3275	59.99	60.01	4.00	0
5/12/01	18:46:43	438	3274	59.99	60.09	4.00	0
5/12/01	18:46:43	939	3276	59.99	60.09	4.00	0
5/12/01	18:46:44	439	3278	59.99	60.10	-15.00	0
5/12/01	18:46:44	940	3281	59.99	60.10	-15.00	0
5/12/01	18:46:45	441	3283	59.99	59.94	-26.00	0
5/12/01	18:46:45	942	3283	59.99	59.94	-26.00	0
5/12/01	18:46:46	442	3280	59.99	59.94	-26.00	0
5/12/01	18:46:46	943	3275	59.99	59.94	13.00	0
5/12/01	18:46:47	444	3275	60.00	60.00	13.00	0
5/12/01	18:46:47	945	3279	60.00	60.00	7.00	0
5/12/01	18:46:48	445	3282	60.00	60.09	7.00	0
5/12/01	18:46:48	946	3285	60.00	60.09	-92.00	0
5/12/01	18:46:49	447	3288	60.00	59.94	-92.00	0
5/12/01	18:46:49	947	3292	60.00	59.94	-151.00	0
5/12/01	18:46:50	448	3296	60.00	59.88	-151.00	0
5/12/01	18:46:50	949	3298	60.00	59.88	-179.00	0
5/12/01	18:46:51	450	3300	60.00	59.90	-179.00	0
5/12/01	18:46:51	950	3301	60.00	59.90	-148.00	0
5/12/01	18:46:52	451	3301	60.00	60.00	-148.00	0
5/12/01	18:46:52	952	3297	60.00	60.00	0.00	0
5/12/01	18:46:53	452	3294	60.00	60.14	0.00	0
5/12/01	18:46:53	953	3292	60.00	60.14	19.00	0
5/12/01	18:46:54	454	3288	60.00	60.24	19.00	0
5/12/01	18:46:54	955	3285	60.00	60.24	76.00	0
5/12/01	18:46:55	455	3283	60.00	60.13	76.00	0
5/12/01	18:46:55	956	3281	60.00	60.13	82.00	0
5/12/01	18:46:56	457	3280	60.00	60.17	82.00	0
5/12/01	18:46:56	957	3281	60.00	60.17	11.00	0
5/12/01	18:46:57	458	3286	59.99	59.98	11.00	0
5/12/01	18:46:57	959	3286	59.99	59.98	-13.00	0
5/12/01	18:46:58	460	3287	59.99	59.75	-13.00	0
5/12/01	18:46:58	960	3287	59.99	59.75	-14.00	0
5/12/01	18:46:59	461	3287	59.99	59.98	-14.00	0
5/12/01	18:46:59	962	3286	59.99	59.98	-4.00	0
5/12/01	18:47:00	463	3285	59.99	60.00	-4.00	0
5/12/01	18:47:00	963	3284	59.99	60.00	8.00	1
5/12/01	18:47:01	464	3284	59.99	60.02	8.00	1
5/12/01	18:47:01	965	3283	59.99	60.02	16.00	0
5/12/01	18:47:02	465	3282	60.01	60.03	16.00	0
5/12/01	18:47:02	966	3282	60.01	60.03	10.00	0
5/12/01	18:47:03	467	3285	60.01	60.02	10.00	0
5/12/01	18:47:03	968	0	60.01	60.02	0.00	0
5/12/01	18:47:04	468	0	60.01	59.93	0.00	0
5/12/01	18:47:04	969	0	60.01	59.93	0.00	0
5/12/01	18:47:05	470	0	60.01	59.93	0.00	0
5/12/01	18:47:05	970	0	60.01	59.92	0.00	0
5/12/01	18:47:06	471	0	60.01	59.92	0.00	0
5/12/01	18:47:06	972	0	60.01	57.52	0.00	0
5/12/01	18:47:07	473	0	60.01	57.52	0.00	0
5/12/01	18:47:07	973	0	59.98	50.71	0.00	0
5/12/01	18:47:08	474	0	59.98	50.71	0.00	0
5/12/01	18:47:08	975	0	59.98	43.69	0.00	0
5/12/01	18:47:09	475	0	59.98	43.69	0.00	0
5/12/01	18:47:09	976	0	59.98	0.00	0.00	0
5/12/01	18:47:10	477	0	59.98	0.00	0.00	0
5/12/01	18:47:10	978	0	59.98	0.00	0.00	0
5/12/01	18:47:11	478	0	59.98	0.00	0.00	0
5/12/01	18:47:11	979	0	59.98	0.00	0.00	0
5/12/01	18:47:12	480	0	59.98	0.00	0.00	0
5/12/01	18:47:12	981	0	59.99	0.00	0.00	0
5/12/01	18:47:13	481	0	59.99	0.00	0.00	0
5/12/01	18:47:13	982	0	59.99	0.00	0.00	0
5/12/01	18:47:14	483	0	59.99	0.00	0.00	0
5/12/01	18:47:14	983	0	59.99	0.00	0.00	0
5/12/01	18:47:15	484	0	59.99	0.00	0.00	0
5/12/01	18:47:15	985	0	59.99	0.00	0.00	0
5/12/01	18:47:16	486	0	59.99	0.00	0.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match t	Close Breaker (Open/Close)
5/12/01	18:47:16	986	0	59.99	0.00	0.00	0
5/12/01	18:47:17	487	0	59.99	0.00	0.00	0
5/12/01	18:47:17	988	0	59.99	0.00	0.00	0
5/12/01	18:47:18	488	0	59.99	0.00	0.00	0
5/12/01	18:47:18	989	0	59.99	0.00	0.00	0
5/12/01	18:47:19	490	0	59.99	0.00	0.00	0
5/12/01	18:47:19	991	0	59.99	0.00	0.00	0
5/12/01	18:47:20	491	0	59.99	0.00	0.00	0
5/12/01	18:47:20	992	0	59.99	0.00	0.00	0
5/12/01	18:47:21	493	0	59.99	0.00	0.00	0
5/12/01	18:47:21	993	0	59.99	0.00	0.00	0
5/12/01	18:47:22	494	0	59.99	0.00	0.00	0
5/12/01	18:47:22	995	0	59.99	0.00	0.00	0
5/12/01	18:47:23	496	0	59.99	0.00	0.00	0
5/12/01	18:47:23	996	0	59.99	0.00	0.00	0
5/12/01	18:47:24	497	0	59.99	0.00	0.00	0
5/12/01	18:47:24	998	0	59.99	0.00	0.00	0
5/12/01	18:47:25	499	0	59.99	0.00	0.00	0
5/12/01	18:47:25	999	0	59.99	0.00	0.00	0
5/12/01	18:47:26	500	0	59.99	0.00	0.00	0
5/12/01	18:47:27	1	200	59.99	0.00	0.00	0
5/12/01	18:47:27	501	400	59.99	0.00	0.00	0
5/12/01	18:47:28	2	600	60.00	0.00	0.00	0
5/12/01	18:47:28	503	900	60.00	0.00	0.00	0
5/12/01	18:47:29	4	1100	60.00	0.00	0.00	0
5/12/01	18:47:29	504	1300	60.00	0.00	0.00	0
5/12/01	18:47:30	5	1500	60.00	0.00	0.00	0
5/12/01	18:47:30	506	1800	60.00	0.00	0.00	0
5/12/01	18:47:31	6	2000	60.00	0.00	0.00	0
5/12/01	18:47:31	507	2200	60.00	0.00	0.00	0
5/12/01	18:47:32	8	2400	60.00	0.00	0.00	0
5/12/01	18:47:32	509	2700	60.00	0.00	0.00	0
5/12/01	18:47:33	9	2853	60.00	0.00	0.00	0
5/12/01	18:47:33	510	2959	60.00	0.00	0.00	0
5/12/01	18:47:34	11	3039	60.00	0.00	0.00	0
5/12/01	18:47:34	511	3109	60.00	0.00	0.00	0
5/12/01	18:47:35	12	3133	60.00	45.73	0.00	0
5/12/01	18:47:35	513	3154	60.00	45.73	0.00	0
5/12/01	18:47:36	14	3172	60.00	52.27	0.00	0
5/12/01	18:47:36	514	3194	60.00	52.27	0.00	0
5/12/01	18:47:37	15	3205	60.00	56.86	0.00	0
5/12/01	18:47:37	516	3215	60.00	56.86	0.00	0
5/12/01	18:47:38	17	3223	60.00	57.74	0.00	0
5/12/01	18:47:38	517	3235	60.00	57.74	0.00	0
5/12/01	18:47:39	18	3241	60.00	58.78	0.00	0
5/12/01	18:47:39	519	3247	60.00	58.78	0.00	0
5/12/01	18:47:40	19	3252	60.00	59.03	0.00	0
5/12/01	18:47:40	520	3258	60.00	59.03	0.00	0
5/12/01	18:47:41	21	3262	60.00	59.18	0.00	0
5/12/01	18:47:41	522	3264	60.00	59.18	0.00	0
5/12/01	18:47:42	22	3265	60.00	59.57	0.00	0
5/12/01	18:47:42	523	3271	60.00	59.57	12.00	0
5/12/01	18:47:43	24	3275	59.99	59.69	12.00	0
5/12/01	18:47:43	524	3277	59.99	59.69	-40.00	0
5/12/01	18:47:44	25	3279	59.99	59.77	-40.00	0
5/12/01	18:47:44	526	3282	59.99	59.77	-50.00	0
5/12/01	18:47:45	27	3284	59.99	59.89	-50.00	0
5/12/01	18:47:45	527	3285	59.99	59.89	-35.00	0
5/12/01	18:47:46	28	3283	59.99	60.01	-35.00	0
5/12/01	18:47:46	529	3281	59.99	60.01	-5.00	0
5/12/01	18:47:47	29	3281	59.99	60.07	-5.00	0
5/12/01	18:47:47	530	3285	59.99	60.07	18.00	0
5/12/01	18:47:48	31	3287	60.00	60.10	18.00	0
5/12/01	18:47:48	532	3292	60.00	60.10	-49.00	0
5/12/01	18:47:49	32	3295	60.00	60.02	-49.00	0
5/12/01	18:47:49	533	3298	60.00	60.02	-84.00	0
5/12/01	18:47:50	34	3300	60.00	59.85	-84.00	0
5/12/01	18:47:50	535	3302	60.00	59.85	-62.00	0
5/12/01	18:47:51	35	3300	60.00	59.99	-62.00	0
5/12/01	18:47:51	536	3299	60.00	59.99	0.00	0
5/12/01	18:47:52	37	3297	60.01	60.10	0.00	0
5/12/01	18:47:52	537	3293	60.01	60.10	0.00	0
5/12/01	18:47:53	38	3290	60.01	60.17	0.00	0
5/12/01	18:47:53	539	3288	60.01	60.17	173.00	0
5/12/01	18:47:54	40	3290	60.01	60.24	173.00	0
5/12/01	18:47:54	540	3293	60.01	60.24	-157.00	0
5/12/01	18:47:55	41	3295	60.01	60.13	-157.00	0
5/12/01	18:47:55	542	3295	60.01	60.13	-117.00	0
5/12/01	18:47:56	42	3295	60.01	60.05	-117.00	0
5/12/01	18:47:56	543	3295	60.01	60.05	-58.00	0
5/12/01	18:47:57	44	3294	60.01	60.20	-58.00	0
5/12/01	18:47:57	545	3289	60.01	60.20	0.00	0
5/12/01	18:47:58	45	3287	60.01	60.17	0.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match	Close Breaker (Open/Close)
5/12/01	18:47:58	546	3286	60.01	60.17	44.00	0
5/12/01	18:47:59	47	3287	60.01	60.17	44.00	0
5/12/01	18:47:59	547	3286	60.01	60.20	15.00	0
5/12/01	18:48:00	48	3283	60.01	60.20	15.00	0
5/12/01	18:48:00	549	3280	60.01	60.04	46.00	0
5/12/01	18:48:01	50	3279	60.01	60.04	46.00	0
5/12/01	18:48:01	560	3278	60.01	60.09	21.00	0
5/12/01	18:48:02	61	3278	60.01	60.09	21.00	0
5/12/01	18:48:02	572	3284	60.01	59.98	-25.00	0
5/12/01	18:48:03	63	3288	60.01	59.98	-25.00	0
5/12/01	18:48:03	563	3292	60.01	59.91	-84.00	0
5/12/01	18:48:04	64	3295	60.01	59.91	-84.00	0
5/12/01	18:48:04	565	3298	60.01	59.89	-82.00	0
5/12/01	18:48:05	65	3298	60.01	59.89	-82.00	0
5/12/01	18:48:05	566	3297	60.01	59.96	-5.00	0
5/12/01	18:48:06	67	3292	60.01	59.96	-5.00	0
5/12/01	18:48:06	568	3286	60.01	60.16	43.00	0
5/12/01	18:48:07	68	3284	60.01	60.16	43.00	0
5/12/01	18:48:07	569	3282	60.02	60.21	51.00	0
5/12/01	18:48:08	70	3280	60.02	60.21	51.00	0
5/12/01	18:48:08	570	3277	60.02	60.12	32.00	0
5/12/01	18:48:09	71	3278	60.02	60.12	32.00	0
5/12/01	18:48:09	572	3280	60.02	60.00	-19.00	0
5/12/01	18:48:10	73	3282	60.02	60.00	-19.00	0
5/12/01	18:48:10	573	3285	60.02	59.92	-39.00	0
5/12/01	18:48:11	74	3287	60.02	59.92	-39.00	0
5/12/01	18:48:11	575	3289	60.02	59.88	-39.00	0
5/12/01	18:48:12	76	3290	60.02	59.88	-36.00	0
5/12/01	18:48:12	576	3285	60.02	59.88	-5.00	0
5/12/01	18:48:13	77	3284	60.03	59.95	-5.00	0
5/12/01	18:48:13	578	3284	60.03	59.95	-5.00	0
5/12/01	18:48:14	78	3286	60.03	60.07	-6.00	0
5/12/01	18:48:14	579	3287	60.03	60.07	-6.00	0
5/12/01	18:48:15	80	3288	60.03	60.11	-10.00	0
5/12/01	18:48:15	581	3286	60.03	60.11	-10.00	0
5/12/01	18:48:16	81	3284	60.03	59.99	12.00	0
5/12/01	18:48:16	582	3282	60.03	59.99	12.00	0
5/12/01	18:48:17	83	3280	60.03	60.05	28.00	0
5/12/01	18:48:17	583	3279	60.03	60.05	28.00	0
5/12/01	18:48:18	84	3279	60.02	60.09	4.00	0
5/12/01	18:48:18	585	3284	60.02	60.09	4.00	0
5/12/01	18:48:19	86	3285	60.02	60.08	-24.00	0
5/12/01	18:48:19	586	3287	60.02	60.08	-24.00	0
5/12/01	18:48:20	87	3289	60.02	59.95	-22.00	0
5/12/01	18:48:20	588	3288	60.02	59.95	-22.00	0
5/12/01	18:48:21	88	3286	60.02	60.00	3.00	0
5/12/01	18:48:21	589	3283	60.02	60.00	3.00	0
5/12/01	18:48:22	90	3282	60.02	60.04	21.00	0
5/12/01	18:48:22	591	3282	60.02	60.04	21.00	0
5/12/01	18:48:23	91	3283	60.01	60.10	9.00	0
5/12/01	18:48:23	592	3285	60.01	60.10	9.00	0
5/12/01	18:48:24	93	3289	60.01	60.00	-7.00	0
5/12/01	18:48:24	594	3289	60.01	60.00	-7.00	0
5/12/01	18:48:25	94	3285	60.01	59.98	17.00	0
5/12/01	18:48:25	595	3284	60.01	59.98	17.00	0
5/12/01	18:48:26	96	3287	60.01	59.96	-34.00	0
5/12/01	18:48:26	596	3293	60.01	59.96	-34.00	0
5/12/01	18:48:27	97	3296	60.01	60.10	-89.00	0
5/12/01	18:48:27	598	3293	60.01	60.10	-89.00	0
5/12/01	18:48:28	99	3291	60.03	59.80	0.00	0
5/12/01	18:48:28	599	3286	60.03	59.80	0.00	0
5/12/01	18:48:29	100	3284	60.03	59.99	34.00	0
5/12/01	18:48:29	601	3282	60.03	59.99	34.00	0
5/12/01	18:48:30	101	3280	60.03	60.29	34.00	0
5/12/01	18:48:30	602	3279	60.03	60.29	30.00	0
5/12/01	18:48:31	103	3284	60.03	60.06	30.00	0
5/12/01	18:48:31	604	3286	60.03	60.06	5.00	0
5/12/01	18:48:32	104	3286	60.03	59.97	5.00	0
5/12/01	18:48:32	605	3286	60.03	59.97	-9.00	0
5/12/01	18:48:33	106	3285	60.03	59.97	-9.00	0
5/12/01	18:48:33	606	3285	60.00	59.94	-2.00	1
5/12/01	18:48:34	107	3284	60.00	59.94	-2.00	1
5/12/01	18:48:34	608	3281	60.00	60.03	3.00	1
5/12/01	18:48:35	109	3281	60.00	60.03	3.00	1
5/12/01	18:48:35	609	3283	60.00	60.04	2.00	0
5/12/01	18:48:36	110	0	60.00	60.04	2.00	0
5/12/01	18:48:36	611	0	60.00	60.03	0.00	0
5/12/01	18:48:37	112	0	60.00	60.03	0.00	0
5/12/01	18:48:37	612	0	60.00	59.95	0.00	0
5/12/01	18:48:38	113	0	60.00	59.95	0.00	0
5/12/01	18:48:38	614	0	60.02	58.51	0.00	0
5/12/01	18:48:39	114	0	60.02	58.51	0.00	0
5/12/01	18:48:39	615	0	60.02	52.41	0.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match	Close Breaker (Open/Close)
5/12/01	18:48:40	116	0	60.02	52.41	0.00	0
5/12/01	18:48:40	617	0	60.02	45.54	0.00	0
5/12/01	18:48:41	117	0	60.02	45.54	0.00	0
5/12/01	18:48:41	618	0	60.02	0.00	0.00	0
5/12/01	18:48:42	119	0	60.02	0.00	0.00	0
5/12/01	18:48:42	619	0	59.98	0.00	0.00	0
5/12/01	18:48:43	120	0	59.98	0.00	0.00	0
5/12/01	18:48:43	621	0	59.98	0.00	0.00	0
5/12/01	18:48:44	122	0	59.98	0.00	0.00	0
5/12/01	18:48:44	622	0	59.98	0.00	0.00	0
5/12/01	18:48:45	123	0	59.98	0.00	0.00	0
5/12/01	18:48:45	624	0	59.98	0.00	0.00	0
5/12/01	18:48:46	124	0	59.98	0.00	0.00	0
5/12/01	18:48:46	625	0	59.98	0.00	0.00	0
5/12/01	18:48:47	126	0	59.98	0.00	0.00	0
5/12/01	18:48:47	627	0	59.99	0.00	0.00	0
5/12/01	18:48:48	127	0	59.99	0.00	0.00	0
5/12/01	18:48:48	628	0	59.99	0.00	0.00	0
5/12/01	18:48:49	129	0	59.99	0.00	0.00	0
5/12/01	18:48:49	630	0	59.99	0.00	0.00	0
5/12/01	18:48:50	130	0	59.99	0.00	0.00	0
5/12/01	18:48:50	631	0	59.99	0.00	0.00	0
5/12/01	18:48:51	132	0	59.99	0.00	0.00	0
5/12/01	18:48:51	632	0	59.99	0.00	0.00	0
5/12/01	18:48:52	133	0	59.99	0.00	0.00	0
5/12/01	18:48:52	634	0	60.00	0.00	0.00	0
5/12/01	18:48:53	135	0	60.00	0.00	0.00	0
5/12/01	18:48:53	635	0	60.00	0.00	0.00	0
5/12/01	18:48:54	136	0	60.00	0.00	0.00	0
5/12/01	18:48:54	637	0	60.00	0.00	0.00	0
5/12/01	18:48:55	137	0	60.00	0.00	0.00	0
5/12/01	18:48:55	638	0	60.00	0.00	0.00	0
5/12/01	18:48:56	139	0	60.00	0.00	0.00	0
5/12/01	18:48:56	640	0	60.00	0.00	0.00	0
5/12/01	18:48:57	140	0	60.00	0.00	0.00	0
5/12/01	18:48:57	641	0	60.00	0.00	0.00	0
5/12/01	18:48:58	142	0	60.00	0.00	0.00	0
5/12/01	18:48:58	642	0	60.00	0.00	0.00	0
5/12/01	18:48:59	143	0	60.00	0.00	0.00	0
5/12/01	18:48:59	644	0	60.00	0.00	0.00	0
5/12/01	18:49:00	145	0	60.00	0.00	0.00	0
5/12/01	18:49:00	645	200	60.00	0.00	0.00	0
5/12/01	18:49:01	146	400	60.00	0.00	0.00	0
5/12/01	18:49:01	647	800	60.00	0.00	0.00	0
5/12/01	18:49:02	148	1000	60.00	0.00	0.00	0
5/12/01	18:49:02	648	1200	60.00	0.00	0.00	0
5/12/01	18:49:03	149	1400	59.99	0.00	0.00	0
5/12/01	18:49:03	650	1700	59.99	0.00	0.00	0
5/12/01	18:49:04	150	1900	59.99	0.00	0.00	0
5/12/01	18:49:04	651	2100	59.99	0.00	0.00	0
5/12/01	18:49:05	152	2300	59.99	0.00	0.00	0
5/12/01	18:49:05	653	2600	59.99	0.00	0.00	0
5/12/01	18:49:06	153	2774	59.99	0.00	0.00	0
5/12/01	18:49:06	654	2918	59.99	0.00	0.00	0
5/12/01	18:49:07	155	3015	59.99	0.00	0.00	0
5/12/01	18:49:07	655	3106	59.99	0.00	0.00	0
5/12/01	18:49:08	156	3134	60.00	40.60	0.00	0
5/12/01	18:49:08	657	3154	60.00	40.60	0.00	0
5/12/01	18:49:09	158	3172	60.00	47.37	0.00	0
5/12/01	18:49:09	658	3188	60.00	47.37	0.00	0
5/12/01	18:49:10	159	3201	60.00	57.39	0.00	0
5/12/01	18:49:10	660	3217	60.00	57.39	0.00	0
5/12/01	18:49:11	160	3225	60.00	58.04	0.00	0
5/12/01	18:49:11	661	3233	60.00	58.04	0.00	0
5/12/01	18:49:12	162	3239	60.00	58.54	0.00	0
5/12/01	18:49:12	663	3248	60.00	58.54	0.00	0
5/12/01	18:49:13	163	3253	60.01	59.15	0.00	0
5/12/01	18:49:13	664	3257	60.01	59.15	0.00	0
5/12/01	18:49:14	165	3260	60.01	59.32	0.00	0
5/12/01	18:49:14	666	3263	60.01	59.32	0.00	0
5/12/01	18:49:15	166	3265	60.01	59.47	0.00	0
5/12/01	18:49:15	667	3267	60.01	59.47	0.00	0
5/12/01	18:49:16	168	3271	60.01	59.73	-33.00	0
5/12/01	18:49:16	668	3275	60.01	59.73	-33.00	0
5/12/01	18:49:17	169	3277	60.01	59.80	-76.00	0
5/12/01	18:49:17	670	3279	60.01	59.80	-76.00	0
5/12/01	18:49:18	171	3281	59.99	59.90	-98.00	0
5/12/01	18:49:18	671	3284	59.99	59.90	-98.00	0
5/12/01	18:49:19	172	3287	59.99	59.90	-91.00	0
5/12/01	18:49:19	673	3288	59.99	59.90	-91.00	0
5/12/01	18:49:20	173	3289	59.99	59.94	-51.00	0
5/12/01	18:49:20	674	3287	59.99	59.94	-51.00	0
5/12/01	18:49:21	175	3283	59.99	60.06	12.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match	Close Breaker (Open/Close)
5/12/01	18:49:21	676	3280	59.99	60.06	12.00	0
5/12/01	18:49:22	176	3278	59.99	60.12	38.00	0
5/12/01	18:49:22	677	3277	59.99	60.12	38.00	0
5/12/01	18:49:23	178	3277	60.01	60.18	25.00	0
5/12/01	18:49:23	678	3281	60.01	60.18	25.00	0
5/12/01	18:49:24	179	3282	60.01	59.99	-1.00	0
5/12/01	18:49:24	680	3286	60.01	59.99	-1.00	0
5/12/01	18:49:25	181	3288	60.01	59.91	-61.00	0
5/12/01	18:49:25	691	3290	60.01	59.91	-61.00	0
5/12/01	18:49:26	192	3292	60.01	59.94	-53.00	0
5/12/01	18:49:26	693	3295	60.01	59.94	-53.00	0
5/12/01	18:49:27	194	3289	60.01	60.01	-14.00	0
5/12/01	18:49:27	694	3286	60.01	60.01	-14.00	0
5/12/01	18:49:28	195	3284	60.01	60.01	36.00	0
5/12/01	18:49:28	696	3281	60.00	60.12	36.00	0
5/12/01	18:49:29	196	3279	60.00	60.12	28.00	0
5/12/01	18:49:29	697	3282	60.00	60.14	28.00	0
5/12/01	18:49:30	198	3282	60.00	60.14	0.00	0
5/12/01	18:49:30	699	3283	60.00	59.98	0.00	0
5/12/01	18:49:31	199	3285	60.00	59.98	-12.00	0
5/12/01	18:49:31	700	3286	60.00	59.92	-12.00	0
5/12/01	18:49:32	201	3286	60.00	59.92	-17.00	0
5/12/01	18:49:32	701	3286	60.00	59.90	-17.00	0
5/12/01	18:49:33	202	3286	60.00	59.90	-12.00	0
5/12/01	18:49:33	703	3286	59.99	59.99	-12.00	0
5/12/01	18:49:34	204	3286	59.99	59.99	-3.00	0
5/12/01	18:49:34	704	3285	59.99	60.00	-3.00	1
5/12/01	18:49:35	205	3285	59.99	60.00	0.00	1
5/12/01	18:49:35	706	3285	59.99	60.04	0.00	1
5/12/01	18:49:36	206	3285	59.99	60.04	2.00	1
5/12/01	18:49:36	707	3285	59.99	60.03	2.00	1
5/12/01	18:49:37	208	3285	59.99	60.03	3.00	1
5/12/01	18:49:37	709	3283	59.99	60.01	3.00	1
5/12/01	18:49:38	219	3283	59.99	60.01	6.00	1
5/12/01	18:49:38	710	3282	60.01	59.99	6.00	0
5/12/01	18:49:39	211	3281	60.01	59.99	11.00	0
5/12/01	18:49:39	712	0	60.01	60.02	11.00	0
5/12/01	18:49:40	212	0	60.01	60.02	0.00	0
5/12/01	18:49:40	713	0	60.01	60.00	0.00	0
5/12/01	18:49:41	214	0	60.01	60.00	0.00	0
5/12/01	18:49:41	714	0	60.01	59.25	0.00	0
5/12/01	18:49:42	215	0	60.01	59.25	0.00	0
5/12/01	18:49:42	716	0	60.01	53.27	0.00	0
5/12/01	18:49:43	217	0	60.01	53.27	0.00	0
5/12/01	18:49:43	717	0	60.01	46.45	0.00	0
5/12/01	18:49:44	218	0	60.01	46.45	0.00	0
5/12/01	18:49:44	719	0	60.01	0.00	0.00	0
5/12/01	18:49:45	219	0	60.01	0.00	0.00	0
5/12/01	18:49:45	720	0	60.01	0.00	0.00	0
5/12/01	18:49:46	221	0	60.01	0.00	0.00	0
5/12/01	18:49:46	722	0	60.01	0.00	0.00	0
5/12/01	18:49:47	222	0	60.01	0.00	0.00	0
5/12/01	18:49:47	723	0	60.01	0.00	0.00	0
5/12/01	18:49:48	224	0	60.01	0.00	0.00	0
5/12/01	18:49:48	724	0	60.01	0.00	0.00	0
5/12/01	18:49:49	225	0	60.01	0.00	0.00	0
5/12/01	18:49:49	726	0	60.01	0.00	0.00	0
5/12/01	18:49:50	227	0	60.01	0.00	0.00	0
5/12/01	18:49:50	727	0	60.01	0.00	0.00	0
5/12/01	18:49:51	228	0	60.01	0.00	0.00	0
5/12/01	18:49:51	729	0	60.01	0.00	0.00	0
5/12/01	18:49:52	230	0	60.01	0.00	0.00	0
5/12/01	18:49:52	730	0	60.01	0.00	0.00	0
5/12/01	18:49:53	231	0	60.01	0.00	0.00	0
5/12/01	18:49:53	732	0	59.99	0.00	0.00	0
5/12/01	18:49:54	232	0	59.99	0.00	0.00	0
5/12/01	18:49:54	733	0	59.99	0.00	0.00	0
5/12/01	18:49:55	234	0	59.99	0.00	0.00	0
5/12/01	18:49:55	735	0	59.99	0.00	0.00	0
5/12/01	18:49:56	235	0	59.99	0.00	0.00	0
5/12/01	18:49:56	736	0	59.99	0.00	0.00	0
5/12/01	18:49:57	237	0	59.99	0.00	0.00	0
5/12/01	18:49:57	737	0	59.99	0.00	0.00	0
5/12/01	18:49:58	238	0	59.99	0.00	0.00	0
5/12/01	18:49:58	739	0	60.02	0.00	0.00	0
5/12/01	18:49:59	240	0	60.02	0.00	0.00	0
5/12/01	18:49:59	740	0	60.02	0.00	0.00	0
5/12/01	18:50:00	241	0	60.02	0.00	0.00	0
5/12/01	18:50:00	742	0	60.02	0.00	0.00	0
5/12/01	18:50:01	242	0	60.02	0.00	0.00	0
5/12/01	18:50:01	743	0	60.02	0.00	0.00	0
5/12/01	18:50:02	244	0	60.02	0.00	0.00	0
5/12/01	18:50:02	745	200	60.02	0.00	0.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match t	Close Breaker (Open/Close)
5/12/01	18:50:03	245	400	60.02	0.00	0.00	0
5/12/01	18:50:03	746	700	60.02	0.00	0.00	0
5/12/01	18:50:04	247	900	60.02	0.00	0.00	0
5/12/01	18:50:04	748	1100	60.02	0.00	0.00	0
5/12/01	18:50:05	248	1300	60.02	0.00	0.00	0
5/12/01	18:50:05	749	1600	60.02	0.00	0.00	0
5/12/01	18:50:06	250	1800	60.02	0.00	0.00	0
5/12/01	18:50:06	750	2000	60.02	0.00	0.00	0
5/12/01	18:50:07	251	2200	60.02	0.00	0.00	0
5/12/01	18:50:07	752	2500	60.02	0.00	0.00	0
5/12/01	18:50:08	253	2700	60.02	0.00	0.00	0
5/12/01	18:50:08	753	2863	60.02	0.00	0.00	0
5/12/01	18:50:09	254	2971	60.01	0.00	0.00	0
5/12/01	18:50:09	755	3077	60.01	0.00	0.00	0
5/12/01	18:50:10	255	3119	60.01	0.00	0.00	0
5/12/01	18:50:10	756	3143	60.01	0.00	0.00	0
5/12/01	18:50:11	257	3162	60.01	44.69	0.00	0
5/12/01	18:50:11	758	3186	60.01	44.69	0.00	0
5/12/01	18:50:12	258	3199	60.01	51.30	0.00	0
5/12/01	18:50:12	759	3211	60.01	51.30	0.00	0
5/12/01	18:50:13	260	3221	60.01	56.96	0.00	0
5/12/01	18:50:13	760	3233	60.01	56.96	0.00	0
5/12/01	18:50:14	261	3239	60.01	58.36	0.00	0
5/12/01	18:50:14	762	3245	60.01	58.36	0.00	0
5/12/01	18:50:15	263	3250	60.01	58.75	0.00	0
5/12/01	18:50:15	763	3257	60.01	58.75	0.00	0
5/12/01	18:50:16	264	3260	60.01	59.07	0.00	0
5/12/01	18:50:16	765	3262	60.01	59.07	0.00	0
5/12/01	18:50:17	266	3264	60.01	59.41	0.00	0
5/12/01	18:50:17	766	3267	60.01	59.41	0.00	0
5/12/01	18:50:18	267	3267	60.01	59.64	160.00	0
5/12/01	18:50:18	768	3267	60.01	59.64	160.00	0
5/12/01	18:50:19	268	3267	60.01	59.70	94.00	0
5/12/01	18:50:19	769	3267	60.01	59.70	94.00	0
5/12/01	18:50:20	270	3269	60.01	59.75	13.00	0
5/12/01	18:50:20	771	3271	60.01	59.75	13.00	0
5/12/01	18:50:21	271	3275	60.01	59.81	-33.00	0
5/12/01	18:50:21	772	3278	60.01	59.81	-33.00	0
5/12/01	18:50:22	273	3281	60.01	59.81	-60.00	0
5/12/01	18:50:22	773	3282	60.01	59.81	-60.00	0
5/12/01	18:50:23	274	3285	60.00	59.87	-54.00	0
5/12/01	18:50:23	775	3286	60.00	59.87	-54.00	0
5/12/01	18:50:24	276	3287	60.00	59.95	-32.00	0
5/12/01	18:50:24	776	3285	60.00	59.95	-32.00	0
5/12/01	18:50:25	277	3280	60.00	60.10	16.00	0
5/12/01	18:50:25	778	3284	60.00	60.10	16.00	0
5/12/01	18:50:26	278	3288	60.00	60.13	-17.00	0
5/12/01	18:50:26	779	3288	60.00	60.13	-17.00	0
5/12/01	18:50:27	280	3286	60.00	59.96	-14.00	0
5/12/01	18:50:27	781	3284	60.00	59.96	-14.00	0
5/12/01	18:50:28	281	3282	60.01	60.08	12.00	0
5/12/01	18:50:28	782	3282	60.01	60.08	12.00	0
5/12/01	18:50:29	283	3283	60.01	60.08	9.00	0
5/12/01	18:50:29	784	3285	60.01	60.09	9.00	0
5/12/01	18:50:30	284	3285	60.01	60.09	0.00	1
5/12/01	18:50:30	785	3286	60.01	59.99	0.00	1
5/12/01	18:50:31	286	3286	60.01	59.99	-6.00	0
5/12/01	18:50:31	786	3287	60.01	59.98	-6.00	0
5/12/01	18:50:32	287	3287	60.01	59.98	-11.00	0
5/12/01	18:50:32	788	3287	60.01	60.00	-11.00	0
5/12/01	18:50:33	289	3284	60.01	60.00	18.00	0
5/12/01	18:50:33	789	3279	59.99	60.00	18.00	0
5/12/01	18:50:34	290	3278	59.99	60.00	30.00	0
5/12/01	18:50:34	791	3280	59.99	60.07	30.00	0
5/12/01	18:50:35	291	3280	59.99	60.07	-6.00	0
5/12/01	18:50:35	792	3285	59.99	59.93	-6.00	0
5/12/01	18:50:36	293	3287	59.99	59.93	-35.00	0
5/12/01	18:50:36	794	3288	59.99	59.88	-35.00	0
5/12/01	18:50:37	294	3288	59.99	59.88	-23.00	0
5/12/01	18:50:37	795	3283	59.99	59.98	-23.00	0
5/12/01	18:50:38	296	3281	59.99	59.98	8.00	0
5/12/01	18:50:38	796	3282	59.99	60.07	8.00	0
5/12/01	18:50:39	297	3282	59.99	60.07	-2.00	0
5/12/01	18:50:39	798	3284	59.99	60.03	-2.00	0
5/12/01	18:50:40	299	3286	59.99	60.03	-21.00	0
5/12/01	18:50:40	799	3287	59.99	59.94	-21.00	0
5/12/01	18:50:41	300	3286	59.99	59.94	-10.00	0
5/12/01	18:50:41	801	3284	59.99	59.95	-10.00	0
5/12/01	18:50:42	302	3283	59.99	59.95	11.00	0
5/12/01	18:50:42	802	3282	59.99	60.06	11.00	0
5/12/01	18:50:43	303	3279	59.99	60.06	26.00	0
5/12/01	18:50:43	804	3280	59.99	60.04	26.00	0
5/12/01	18:50:44	304	3280	59.99	60.04	-6.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match t	Close Breaker (Open/Close)
5/12/01	18:50:44	805	3282	59.99	60.05	-6.00	0
5/12/01	18:50:45	306	3286	59.99	60.05	-36.00	0
5/12/01	18:50:45	807	3289	59.99	60.05	-36.00	0
5/12/01	18:50:46	307	3289	59.99	59.88	-36.00	0
5/12/01	18:50:46	808	3288	59.99	59.88	-8.00	0
5/12/01	18:50:47	309	3283	59.99	60.00	-8.00	0
5/12/01	18:50:47	809	3281	59.99	60.00	29.00	0
5/12/01	18:50:48	310	3279	59.99	60.06	29.00	0
5/12/01	18:50:48	811	3281	59.99	60.06	15.00	0
5/12/01	18:50:49	312	0	59.98	60.14	15.00	0
5/12/01	18:50:49	812	0	59.98	60.14	0.00	0
5/12/01	18:50:50	313	0	59.98	59.92	0.00	0
5/12/01	18:50:50	814	0	59.98	59.92	0.00	0
5/12/01	18:50:51	314	0	59.98	58.61	0.00	0
5/12/01	18:50:51	815	0	59.98	58.61	0.00	0
5/12/01	18:50:52	316	0	59.98	51.83	0.00	0
5/12/01	18:50:52	817	0	59.98	51.83	0.00	0
5/12/01	18:50:53	317	0	59.98	44.95	0.00	0
5/12/01	18:50:53	818	0	59.98	44.95	0.00	0
5/12/01	18:50:54	319	0	60.01	0.00	0.00	0
5/12/01	18:50:54	820	0	60.01	0.00	0.00	0
5/12/01	18:50:55	320	0	60.01	0.00	0.00	0
5/12/01	18:50:55	821	0	60.01	0.00	0.00	0
5/12/01	18:50:56	322	0	60.01	0.00	0.00	0
5/12/01	18:50:56	822	0	60.01	0.00	0.00	0
5/12/01	18:50:57	323	0	60.01	0.00	0.00	0
5/12/01	18:50:57	824	0	60.01	0.00	0.00	0
5/12/01	18:50:58	325	0	60.01	0.00	0.00	0
5/12/01	18:50:58	825	0	60.01	0.00	0.00	0
5/12/01	18:50:59	326	0	60.01	0.00	0.00	0
5/12/01	18:50:59	827	0	60.01	0.00	0.00	0
5/12/01	18:51:00	327	0	60.01	0.00	0.00	0
5/12/01	18:51:00	828	0	60.01	0.00	0.00	0
5/12/01	18:51:01	329	0	60.01	0.00	0.00	0
5/12/01	18:51:01	830	0	60.01	0.00	0.00	0
5/12/01	18:51:02	330	0	60.01	0.00	0.00	0
5/12/01	18:51:02	831	0	60.01	0.00	0.00	0
5/12/01	18:51:03	332	0	59.98	0.00	0.00	0
5/12/01	18:51:03	832	0	59.98	0.00	0.00	0
5/12/01	18:51:04	333	0	59.98	0.00	0.00	0
5/12/01	18:51:04	834	0	59.98	0.00	0.00	0
5/12/01	18:51:05	335	0	59.98	0.00	0.00	0
5/12/01	18:51:05	835	0	59.98	0.00	0.00	0
5/12/01	18:51:06	336	0	59.98	0.00	0.00	0
5/12/01	18:51:06	837	0	59.98	0.00	0.00	0
5/12/01	18:51:07	338	0	59.98	0.00	0.00	0
5/12/01	18:51:07	838	0	59.98	0.00	0.00	0
5/12/01	18:51:08	339	0	60.00	0.00	0.00	0
5/12/01	18:51:08	840	0	60.00	0.00	0.00	0
5/12/01	18:51:09	340	0	60.00	0.00	0.00	0
5/12/01	18:51:09	841	0	60.00	0.00	0.00	0
5/12/01	18:51:10	342	100	60.00	0.00	0.00	0
5/12/01	18:51:10	843	200	60.00	0.00	0.00	0
5/12/01	18:51:11	343	500	60.00	0.00	0.00	0
5/12/01	18:51:11	844	800	60.00	0.00	0.00	0
5/12/01	18:51:12	345	1000	60.00	0.00	0.00	0
5/12/01	18:51:12	845	1200	60.00	0.00	0.00	0
5/12/01	18:51:13	346	1400	60.00	0.00	0.00	0
5/12/01	18:51:13	847	1700	60.00	0.00	0.00	0
5/12/01	18:51:14	348	1900	60.00	0.00	0.00	0
5/12/01	18:51:14	848	2100	60.00	0.00	0.00	0
5/12/01	18:51:15	349	2300	60.00	0.00	0.00	0
5/12/01	18:51:15	850	2600	60.00	0.00	0.00	0
5/12/01	18:51:16	350	2782	60.00	0.00	0.00	0
5/12/01	18:51:16	851	2903	60.00	0.00	0.00	0
5/12/01	18:51:17	352	2997	60.00	0.00	0.00	0
5/12/01	18:51:17	853	3084	60.00	0.00	0.00	0
5/12/01	18:51:18	353	3113	60.00	42.38	0.00	0
5/12/01	18:51:18	854	3136	60.00	42.38	0.00	0
5/12/01	18:51:19	355	3156	60.00	49.15	0.00	0
5/12/01	18:51:19	856	3181	60.00	49.15	0.00	0
5/12/01	18:51:20	356	3194	60.00	55.58	0.00	0
5/12/01	18:51:20	857	3206	60.00	55.58	0.00	0
5/12/01	18:51:21	358	3216	60.00	57.34	0.00	0
5/12/01	18:51:21	858	3229	60.00	57.34	0.00	0
5/12/01	18:51:22	359	3236	60.00	58.47	0.00	0
5/12/01	18:51:22	860	3242	60.00	58.47	0.00	0
5/12/01	18:51:23	361	3248	59.98	58.81	0.00	0
5/12/01	18:51:23	861	3255	59.98	58.81	0.00	0
5/12/01	18:51:24	362	3259	59.98	59.10	0.00	0
5/12/01	18:51:24	863	3261	59.98	59.10	0.00	0
5/12/01	18:51:25	363	3263	59.98	59.10	0.00	0
5/12/01	18:51:25	864	3265	59.98	59.30	0.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match t	Close Breaker (Open/Close)
5/12/01	18:51:26	365	3267	59.98	59.30	0.00	0
5/12/01	18:51:26	866	3268	59.98	59.46	0.00	0
5/12/01	18:51:27	366	3271	59.98	59.46	0.00	0
5/12/01	18:51:27	867	3274	59.98	59.70	0.00	0
5/12/01	18:51:28	378	3277	59.98	59.70	-44.00	0
5/12/01	18:51:28	868	3279	60.01	59.75	-44.00	0
5/12/01	18:51:29	369	3281	60.01	59.75	-54.00	0
5/12/01	18:51:29	870	3283	60.01	59.80	-54.00	0
5/12/01	18:51:30	371	3286	60.01	59.80	-42.00	0
5/12/01	18:51:30	871	3287	60.01	59.93	-42.00	0
5/12/01	18:51:31	372	3285	60.01	59.93	-44.00	0
5/12/01	18:51:31	873	3289	60.01	60.02	-44.00	0
5/12/01	18:51:32	374	3291	60.01	60.02	-35.00	0
5/12/01	18:51:32	874	3291	60.01	60.08	-35.00	0
5/12/01	18:51:33	375	3290	60.01	60.08	1.00	0
5/12/01	18:51:33	876	3284	60.02	60.09	1.00	0
5/12/01	18:51:34	376	3281	60.02	60.09	31.00	0
5/12/01	18:51:34	877	3280	60.02	60.11	31.00	0
5/12/01	18:51:35	378	3282	60.02	60.11	31.00	0
5/12/01	18:51:35	879	3282	60.02	60.13	3.00	0
5/12/01	18:51:36	379	3284	60.02	60.13	3.00	0
5/12/01	18:51:36	880	3286	60.02	60.01	-22.00	0
5/12/01	18:51:37	381	3288	60.02	60.01	-22.00	0
5/12/01	18:51:37	881	3289	60.02	59.93	-38.00	0
5/12/01	18:51:38	382	3289	60.02	59.93	-38.00	0
5/12/01	18:51:38	883	3287	60.01	59.91	-8.00	0
5/12/01	18:51:39	384	3285	60.01	59.91	-8.00	0
5/12/01	18:51:39	884	3285	60.01	60.06	13.00	0
5/12/01	18:51:40	385	3286	60.01	60.06	13.00	0
5/12/01	18:51:40	886	3286	60.01	60.10	8.00	0
5/12/01	18:51:41	386	3286	60.01	60.10	8.00	0
5/12/01	18:51:41	887	3286	60.01	59.97	3.00	1
5/12/01	18:51:42	388	3286	60.01	59.97	3.00	1
5/12/01	18:51:42	889	3286	60.01	60.00	0.00	1
5/12/01	18:51:43	389	3286	60.01	60.00	0.00	1
5/12/01	18:51:43	890	3286	60.01	60.00	0.00	1
5/12/01	18:51:44	391	3287	60.01	60.00	0.00	1
5/12/01	18:51:44	892	3287	60.01	60.00	-2.00	1
5/12/01	18:51:45	392	3287	60.01	60.00	-2.00	1
5/12/01	18:51:45	893	3287	60.01	60.01	-4.00	1
5/12/01	18:51:46	394	3287	60.01	60.01	-4.00	1
5/12/01	18:51:46	894	3287	60.01	60.00	-6.00	0
5/12/01	18:51:47	395	3288	60.01	60.00	-6.00	0
5/12/01	18:51:47	896	0	60.01	60.00	-4.00	0
5/12/01	18:51:48	397	0	60.01	60.00	-4.00	0
5/12/01	18:51:48	897	0	60.00	60.00	0.00	0
5/12/01	18:51:49	398	0	60.00	60.00	0.00	0
5/12/01	18:51:49	899	0	60.00	60.05	0.00	0
5/12/01	18:51:50	399	0	60.00	60.05	0.00	0
5/12/01	18:51:50	900	0	60.00	54.83	0.00	0
5/12/01	18:51:51	401	0	60.00	54.83	0.00	0
5/12/01	18:51:51	902	0	60.00	48.02	0.00	0
5/12/01	18:51:52	402	0	60.00	48.02	0.00	0
5/12/01	18:51:52	903	0	60.00	41.07	0.00	0
5/12/01	18:51:53	404	0	60.00	41.07	0.00	0
5/12/01	18:51:53	904	0	60.00	0.00	0.00	0
5/12/01	18:51:54	405	0	60.00	0.00	0.00	0
5/12/01	18:51:54	906	0	60.00	0.00	0.00	0
5/12/01	18:51:55	407	0	60.00	0.00	0.00	0
5/12/01	18:51:55	907	0	60.00	0.00	0.00	0
5/12/01	18:51:56	408	0	60.00	0.00	0.00	0
5/12/01	18:51:56	909	0	60.00	0.00	0.00	0
5/12/01	18:51:57	410	0	60.00	0.00	0.00	0
5/12/01	18:51:57	910	0	60.00	0.00	0.00	0
5/12/01	18:51:58	411	0	60.00	0.00	0.00	0
5/12/01	18:51:58	912	0	60.00	0.00	0.00	0
5/12/01	18:51:59	412	0	60.00	0.00	0.00	0
5/12/01	18:51:59	913	0	60.00	0.00	0.00	0
5/12/01	18:52:00	414	0	60.00	0.00	0.00	0
5/12/01	18:52:00	915	0	60.00	0.00	0.00	0
5/12/01	18:52:01	415	0	60.00	0.00	0.00	0
5/12/01	18:52:01	916	0	60.00	0.00	0.00	0
5/12/01	18:52:02	417	0	60.00	0.00	0.00	0
5/12/01	18:52:02	917	0	60.00	0.00	0.00	0
5/12/01	18:52:03	418	0	60.00	0.00	0.00	0
5/12/01	18:52:03	919	0	60.01	0.00	0.00	0
5/12/01	18:52:04	420	0	60.01	0.00	0.00	0
5/12/01	18:52:04	920	0	60.01	0.00	0.00	0
5/12/01	18:52:05	421	0	60.01	0.00	0.00	0
5/12/01	18:52:05	922	0	60.01	0.00	0.00	0
5/12/01	18:52:06	422	0	60.01	0.00	0.00	0
5/12/01	18:52:06	923	0	60.01	0.00	0.00	0
5/12/01	18:52:07	424	0	60.01	0.00	0.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match	Close Breaker (Open/Close)
5/12/01	18:52:07	925	0	60.01	0.00	0.00	0
5/12/01	18:52:08	425	0	60.01	0.00	0.00	0
5/12/01	18:52:08	926	300	60.01	0.00	0.00	0
5/12/01	18:52:09	427	400	60.00	0.00	0.00	0
5/12/01	18:52:09	928	800	60.00	0.00	0.00	0
5/12/01	18:52:10	428	1000	60.00	0.00	0.00	0
5/12/01	18:52:10	929	1200	60.00	0.00	0.00	0
5/12/01	18:52:11	430	1400	60.00	0.00	0.00	0
5/12/01	18:52:11	930	1700	60.00	0.00	0.00	0
5/12/01	18:52:12	431	1900	60.00	0.00	0.00	0
5/12/01	18:52:12	932	2100	60.00	0.00	0.00	0
5/12/01	18:52:13	433	2300	60.00	0.00	0.00	0
5/12/01	18:52:13	933	2600	60.00	0.00	0.00	0
5/12/01	18:52:14	434	2785	60.00	0.00	0.00	0
5/12/01	18:52:14	935	2913	60.00	0.00	0.00	0
5/12/01	18:52:15	435	3001	60.00	0.00	0.00	0
5/12/01	18:52:15	936	3096	60.00	0.00	0.00	0
5/12/01	18:52:16	437	3129	60.00	40.04	0.00	0
5/12/01	18:52:16	938	3152	60.00	40.04	0.00	0
5/12/01	18:52:17	438	3171	60.00	45.38	0.00	0
5/12/01	18:52:17	939	3193	60.00	45.38	0.00	0
5/12/01	18:52:18	440	3205	60.00	52.68	0.00	0
5/12/01	18:52:18	940	3215	60.00	52.68	0.00	0
5/12/01	18:52:19	441	3224	60.00	58.00	0.00	0
5/12/01	18:52:19	942	3235	60.00	58.00	0.00	0
5/12/01	18:52:20	443	3241	60.00	58.46	0.00	0
5/12/01	18:52:20	943	3247	60.00	58.46	0.00	0
5/12/01	18:52:21	444	3252	60.00	58.83	0.00	0
5/12/01	18:52:21	945	3258	60.00	58.83	0.00	0
5/12/01	18:52:22	446	3261	60.00	59.11	0.00	0
5/12/01	18:52:22	946	3263	60.00	59.11	0.00	0
5/12/01	18:52:23	447	3265	60.00	59.45	0.00	0
5/12/01	18:52:23	948	3267	60.00	59.45	18.00	0
5/12/01	18:52:24	448	3275	60.01	59.64	18.00	0
5/12/01	18:52:24	949	3279	60.01	59.64	-39.00	0
5/12/01	18:52:25	450	3281	60.01	59.72	-39.00	0
5/12/01	18:52:25	951	3284	60.01	59.72	-36.00	0
5/12/01	18:52:26	451	3283	60.01	59.77	-36.00	0
5/12/01	18:52:26	952	3281	60.01	59.77	-4.00	0
5/12/01	18:52:27	453	3278	60.01	60.02	-4.00	0
5/12/01	18:52:27	953	3279	60.01	60.02	0.00	0
5/12/01	18:52:28	454	3279	60.01	60.08	0.00	0
5/12/01	18:52:28	955	3280	60.01	60.08	-17.00	0
5/12/01	18:52:29	456	3283	59.99	60.07	-17.00	0
5/12/01	18:52:29	956	3287	59.99	60.07	-81.00	0
5/12/01	18:52:30	457	3289	59.99	59.95	-81.00	0
5/12/01	18:52:30	958	3291	59.99	59.95	-65.00	0
5/12/01	18:52:31	458	3292	59.99	59.68	-65.00	0
5/12/01	18:52:31	959	3290	59.99	59.68	-28.00	0
5/12/01	18:52:32	460	3287	59.99	60.00	-28.00	0
5/12/01	18:52:32	961	3283	59.99	60.00	29.00	0
5/12/01	18:52:33	461	3280	59.99	60.08	29.00	0
5/12/01	18:52:33	962	3277	59.99	60.08	36.00	0
5/12/01	18:52:34	463	3279	60.01	60.21	36.00	0
5/12/01	18:52:34	964	3283	60.01	60.21	-16.00	0
5/12/01	18:52:35	464	3286	60.01	60.00	-16.00	0
5/12/01	18:52:35	965	3287	60.01	60.00	-19.00	0
5/12/01	18:52:36	466	3287	60.01	59.82	-19.00	0
5/12/01	18:52:36	966	3281	60.01	59.82	4.00	0
5/12/01	18:52:37	467	3282	60.01	59.92	4.00	0
5/12/01	18:52:37	968	3285	60.01	59.92	4.00	0
5/12/01	18:52:38	469	3287	60.01	60.08	-8.00	0
5/12/01	18:52:38	969	3287	60.01	60.08	-8.00	0
5/12/01	18:52:39	470	3286	59.99	59.94	-18.00	0
5/12/01	18:52:39	971	3284	59.99	59.94	-18.00	0
5/12/01	18:52:40	471	3282	59.99	59.95	3.00	0
5/12/01	18:52:40	972	3281	59.99	59.95	3.00	0
5/12/01	18:52:41	473	3283	59.99	60.06	11.00	0
5/12/01	18:52:41	974	3285	59.99	60.06	11.00	0
5/12/01	18:52:42	474	3288	59.99	60.05	-13.00	0
5/12/01	18:52:42	975	3287	59.99	60.05	-13.00	0
5/12/01	18:52:43	476	3285	59.99	59.93	3.00	0
5/12/01	18:52:43	976	3283	59.99	59.93	3.00	0
5/12/01	18:52:44	477	3283	59.99	60.09	15.00	0
5/12/01	18:52:44	978	3283	59.99	60.09	15.00	0
5/12/01	18:52:45	479	3285	59.99	60.04	5.00	0
5/12/01	18:52:45	979	3288	59.99	60.04	5.00	0
5/12/01	18:52:46	480	3288	59.99	59.97	5.00	1
5/12/01	18:52:46	981	3286	59.99	59.97	5.00	1
5/12/01	18:52:47	482	3283	59.99	59.97	33.00	0
5/12/01	18:52:47	982	3280	59.99	59.97	33.00	0
5/12/01	18:52:48	493	3280	59.98	60.08	31.00	0
5/12/01	18:52:48	984	3279	59.98	60.08	31.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match	Close Breaker (Open/Close)
5/12/01	18:52:49	484	3282	59.98	60.03	0.00	0
5/12/01	18:52:49	985	3287	59.98	60.03	0.00	0
5/12/01	18:52:50	486	3287	59.98	59.96	-14.00	0
5/12/01	18:52:50	987	3283	59.98	59.96	-14.00	0
5/12/01	18:52:51	487	0	59.98	59.96	12.00	0
5/12/01	18:52:51	988	0	59.98	59.92	12.00	0
5/12/01	18:52:52	489	0	59.98	59.92	0.00	0
5/12/01	18:52:52	989	0	59.98	60.08	0.00	0
5/12/01	18:52:53	490	0	59.98	60.08	0.00	0
5/12/01	18:52:53	991	0	60.00	59.84	0.00	0
5/12/01	18:52:54	492	0	60.00	59.84	0.00	0
5/12/01	18:52:54	992	0	60.00	54.14	0.00	0
5/12/01	18:52:55	493	0	60.00	54.14	0.00	0
5/12/01	18:52:55	994	0	60.00	46.49	0.00	0
5/12/01	18:52:56	494	0	60.00	46.49	0.00	0
5/12/01	18:52:56	995	0	60.00	0.00	0.00	0
5/12/01	18:52:57	496	0	60.00	0.00	0.00	0
5/12/01	18:52:57	997	0	60.00	0.00	0.00	0
5/12/01	18:52:58	497	0	60.00	0.00	0.00	0
5/12/01	18:52:58	998	0	60.03	0.00	0.00	0
5/12/01	18:52:59	499	0	60.03	0.00	0.00	0
5/12/01	18:53:00	0	0	60.03	0.00	0.00	0
5/12/01	18:53:00	500	0	60.03	0.00	0.00	0
5/12/01	18:53:01	1	0	60.03	0.00	0.00	0
5/12/01	18:53:01	502	0	60.03	0.00	0.00	0
5/12/01	18:53:02	2	0	60.03	0.00	0.00	0
5/12/01	18:53:02	503	0	60.03	0.00	0.00	0
5/12/01	18:53:03	4	0	60.03	0.00	0.00	0
5/12/01	18:53:03	505	0	60.03	0.00	0.00	0
5/12/01	18:53:04	5	0	60.00	0.00	0.00	0
5/12/01	18:53:04	506	0	60.00	0.00	0.00	0
5/12/01	18:53:05	7	0	60.00	0.00	0.00	0
5/12/01	18:53:05	507	0	60.00	0.00	0.00	0
5/12/01	18:53:06	8	0	60.00	0.00	0.00	0
5/12/01	18:53:06	509	0	60.00	0.00	0.00	0
5/12/01	18:53:07	10	0	60.00	0.00	0.00	0
5/12/01	18:53:07	510	0	60.00	0.00	0.00	0
5/12/01	18:53:08	11	0	60.00	0.00	0.00	0
5/12/01	18:53:08	512	0	60.00	0.00	0.00	0
5/12/01	18:53:09	12	0	60.01	0.00	0.00	0
5/12/01	18:53:09	513	0	60.01	0.00	0.00	0
5/12/01	18:53:10	14	0	60.01	0.00	0.00	0
5/12/01	18:53:10	515	0	60.01	0.00	0.00	0
5/12/01	18:53:11	15	0	60.01	0.00	0.00	0
5/12/01	18:53:11	516	0	60.01	0.00	0.00	0
5/12/01	18:53:12	17	0	60.01	0.00	0.00	0
5/12/01	18:53:12	518	0	60.01	0.00	0.00	0
5/12/01	18:53:13	18	0	60.01	0.00	0.00	0
5/12/01	18:53:13	519	0	60.01	0.00	0.00	0
5/12/01	18:53:14	20	0	60.01	0.00	0.00	0
5/12/01	18:53:14	520	0	60.01	0.00	0.00	0
5/12/01	18:53:15	21	0	60.01	0.00	0.00	0
5/12/01	18:53:15	532	0	60.01	0.00	0.00	0
5/12/01	18:53:16	23	0	60.01	0.00	0.00	0
5/12/01	18:53:16	523	0	60.01	0.00	0.00	0
5/12/01	18:53:17	24	0	60.01	0.00	0.00	0
5/12/01	18:53:17	525	0	60.01	0.00	0.00	0
5/12/01	18:53:18	25	0	60.01	0.00	0.00	0
5/12/01	18:53:18	526	0	60.01	0.00	0.00	0
5/12/01	18:53:19	27	0	60.01	0.00	0.00	0
5/12/01	18:53:19	528	0	60.01	0.00	0.00	0
5/12/01	18:53:20	28	0	60.01	0.00	0.00	0
5/12/01	18:53:20	529	0	60.01	0.00	0.00	0
5/12/01	18:53:21	30	0	60.01	0.00	0.00	0
5/12/01	18:53:21	530	0	60.01	0.00	0.00	0
5/12/01	18:53:22	31	100	60.01	0.00	0.00	0
5/12/01	18:53:22	532	400	60.01	0.00	0.00	0
5/12/01	18:53:23	33	600	60.01	0.00	0.00	0
5/12/01	18:53:23	533	800	60.01	0.00	0.00	0
5/12/01	18:53:24	34	1000	60.01	0.00	0.00	0
5/12/01	18:53:24	535	1300	60.01	0.00	0.00	0
5/12/01	18:53:25	36	1500	60.01	0.00	0.00	0
5/12/01	18:53:25	536	1700	60.01	0.00	0.00	0
5/12/01	18:53:26	37	1900	60.01	0.00	0.00	0
5/12/01	18:53:26	538	2200	60.01	0.00	0.00	0
5/12/01	18:53:27	38	2400	60.01	0.00	0.00	0
5/12/01	18:53:27	539	2600	60.01	0.00	0.00	0
5/12/01	18:53:28	40	2782	60.01	0.00	0.00	0
5/12/01	18:53:28	541	2963	60.01	0.00	0.00	0
5/12/01	18:53:29	41	3040	60.01	0.00	0.00	0
5/12/01	18:53:29	542	3105	60.01	0.00	0.00	0
5/12/01	18:53:30	43	3168	60.01	0.00	0.00	0
5/12/01	18:53:30	543	3192	60.01	46.87	0.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match	Close Breaker (Open/Close)
5/12/01	18:53:31	44	3204	60.01	46.87	0.00	0
5/12/01	18:53:31	545	3214	60.01	53.40	0.00	0
5/12/01	18:53:32	46	3224	60.01	53.40	0.00	0
5/12/01	18:53:32	546	3236	60.01	58.54	0.00	0
5/12/01	18:53:33	47	3242	60.01	58.54	0.00	0
5/12/01	18:53:33	548	3248	60.01	58.90	0.00	0
5/12/01	18:53:34	48	3253	60.01	58.90	0.00	0
5/12/01	18:53:34	549	3259	60.02	59.18	0.00	0
5/12/01	18:53:35	50	3261	60.02	59.18	0.00	0
5/12/01	18:53:35	551	3263	60.02	59.34	0.00	0
5/12/01	18:53:36	51	3265	60.02	59.34	0.00	0
5/12/01	18:53:36	552	3266	60.02	59.66	159.00	0
5/12/01	18:53:37	53	3266	60.02	59.66	159.00	0
5/12/01	18:53:37	554	3266	60.02	59.72	78.00	0
5/12/01	18:53:38	54	3266	60.02	59.72	78.00	0
5/12/01	18:53:38	555	3271	60.02	59.80	3.00	0
5/12/01	18:53:39	56	3275	60.02	59.80	3.00	0
5/12/01	18:53:39	556	3277	60.02	59.79	-46.00	0
5/12/01	18:53:40	57	3278	60.02	59.79	-46.00	0
5/12/01	18:53:40	558	3282	60.02	59.89	-64.00	0
5/12/01	18:53:41	59	3284	60.02	59.89	-64.00	0
5/12/01	18:53:41	559	3286	60.02	59.95	-63.00	0
5/12/01	18:53:42	60	3288	60.02	59.95	-63.00	0
5/12/01	18:53:42	561	3288	60.02	60.05	-27.00	0
5/12/01	18:53:43	61	3281	60.02	60.05	-27.00	0
5/12/01	18:53:43	562	3284	60.02	60.11	-36.00	0
5/12/01	18:53:44	63	3286	60.02	60.11	-36.00	0
5/12/01	18:53:44	564	3288	60.02	60.16	-60.00	0
5/12/01	18:53:45	64	3291	60.02	60.16	-60.00	0
5/12/01	18:53:45	565	3293	60.02	59.90	-33.00	0
5/12/01	18:53:46	66	3292	60.02	59.90	-33.00	0
5/12/01	18:53:46	566	3288	60.02	60.12	7.00	0
5/12/01	18:53:47	67	3286	60.02	60.12	7.00	0
5/12/01	18:53:47	568	3284	60.02	60.12	41.00	0
5/12/01	18:53:48	69	3282	60.02	60.12	41.00	0
5/12/01	18:53:48	569	3280	60.02	60.12	41.00	0
5/12/01	18:53:49	70	3279	60.02	60.13	32.00	0
5/12/01	18:53:49	571	3283	60.02	60.13	32.00	0
5/12/01	18:53:50	72	3283	60.00	59.94	-2.00	0
5/12/01	18:53:50	572	3284	60.00	59.94	-2.00	0
5/12/01	18:53:51	73	3284	60.00	59.92	-11.00	0
5/12/01	18:53:51	574	3285	60.00	59.92	-11.00	0
5/12/01	18:53:52	74	3285	60.00	59.99	-12.00	0
5/12/01	18:53:52	575	3285	60.00	59.99	-12.00	0
5/12/01	18:53:53	76	3285	60.00	60.00	-12.00	0
5/12/01	18:53:53	577	3285	60.00	60.00	-12.00	0
5/12/01	18:53:54	77	3285	60.00	60.02	-11.00	0
5/12/01	18:53:54	578	3285	60.00	60.02	-11.00	0
5/12/01	18:53:55	79	3285	60.00	60.00	-8.00	0
5/12/01	18:53:55	579	3285	60.00	60.00	-8.00	0
5/12/01	18:53:56	80	3285	60.00	60.00	-5.00	0
5/12/01	18:53:56	581	3285	60.00	60.00	-5.00	0
5/12/01	18:53:57	82	3285	60.00	60.02	-4.00	1
5/12/01	18:53:57	582	3285	60.00	60.02	-4.00	1
5/12/01	18:53:58	83	3285	60.00	60.01	-2.00	1
5/12/01	18:53:58	584	3285	60.00	60.01	-2.00	1
5/12/01	18:53:59	84	3285	60.00	60.02	-2.00	1
5/12/01	18:53:59	585	3285	60.00	60.02	-2.00	1
5/12/01	18:54:00	86	3285	60.01	60.01	-1.00	1
5/12/01	18:54:00	587	3285	60.01	60.01	-1.00	1
5/12/01	18:54:01	87	3285	60.01	60.01	-2.00	1
5/12/01	18:54:01	588	3285	60.01	60.01	-2.00	1
5/12/01	18:54:02	89	0	60.01	60.00	0.00	1
5/12/01	18:54:02	590	0	60.01	60.00	0.00	0
5/12/01	18:54:03	90	0	60.01	60.01	0.00	0
5/12/01	18:54:03	601	0	60.01	60.01	0.00	0
5/12/01	18:54:04	92	0	60.01	59.48	0.00	0
5/12/01	18:54:04	592	0	60.01	59.48	0.00	0
5/12/01	18:54:05	103	0	60.00	52.83	0.00	0
5/12/01	18:54:05	594	0	60.00	52.83	0.00	0
5/12/01	18:54:06	95	0	60.00	46.03	0.00	0
5/12/01	18:54:06	595	0	60.00	46.03	0.00	0
5/12/01	18:54:07	96	0	60.00	46.03	0.00	0
5/12/01	18:54:07	597	0	60.00	0.00	0.00	0
5/12/01	18:54:08	97	0	60.00	0.00	0.00	0
5/12/01	18:54:08	598	0	60.00	0.00	0.00	0
5/12/01	18:54:09	99	0	60.00	0.00	0.00	0
5/12/01	18:54:09	600	0	60.01	0.00	0.00	0
5/12/01	18:54:10	100	0	60.01	0.00	0.00	0
5/12/01	18:54:10	601	0	60.01	0.00	0.00	0
5/12/01	18:54:11	102	0	60.01	0.00	0.00	0
5/12/01	18:54:11	602	0	60.01	0.00	0.00	0
5/12/01	18:54:12	103	0	60.01	0.00	0.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match	Close Breaker (Open/Close)
5/12/01	18:54:12	604	0	60.01	0.00	0.00	0
5/12/01	18:54:13	105	0	60.01	0.00	0.00	0
5/12/01	18:54:13	605	0	60.01	0.00	0.00	0
5/12/01	18:54:14	106	0	60.01	0.00	0.00	0
5/12/01	18:54:14	607	0	60.01	0.00	0.00	0
5/12/01	18:54:15	108	0	60.01	0.00	0.00	0
5/12/01	18:54:15	608	0	60.01	0.00	0.00	0
5/12/01	18:54:16	109	0	60.01	0.00	0.00	0
5/12/01	18:54:16	610	0	60.01	0.00	0.00	0
5/12/01	18:54:17	110	0	60.01	0.00	0.00	0
5/12/01	18:54:17	611	0	60.01	0.00	0.00	0
5/12/01	18:54:18	112	0	60.01	0.00	0.00	0
5/12/01	18:54:18	613	0	60.01	0.00	0.00	0
5/12/01	18:54:19	113	0	60.01	0.00	0.00	0
5/12/01	18:54:19	614	0	60.01	0.00	0.00	0
5/12/01	18:54:20	115	0	60.01	0.00	0.00	0
5/12/01	18:54:20	615	0	60.01	0.00	0.00	0
5/12/01	18:54:21	116	0	60.01	0.00	0.00	0
5/12/01	18:54:21	617	0	60.01	0.00	0.00	0
5/12/01	18:54:22	118	0	60.01	0.00	0.00	0
5/12/01	18:54:22	618	0	60.01	0.00	0.00	0
5/12/01	18:54:23	119	0	60.01	0.00	0.00	0
5/12/01	18:54:23	620	0	60.01	0.00	0.00	0
5/12/01	18:54:24	120	0	60.01	0.00	0.00	0
5/12/01	18:54:24	621	0	60.03	0.00	0.00	0
5/12/01	18:54:25	122	400	60.03	0.00	0.00	0
5/12/01	18:54:25	623	600	60.03	0.00	0.00	0
5/12/01	18:54:26	123	800	60.03	0.00	0.00	0
5/12/01	18:54:26	624	1000	60.03	0.00	0.00	0
5/12/01	18:54:27	125	1300	60.03	0.00	0.00	0
5/12/01	18:54:27	626	1500	60.03	0.00	0.00	0
5/12/01	18:54:28	126	1700	60.03	0.00	0.00	0
5/12/01	18:54:28	627	1900	60.03	0.00	0.00	0
5/12/01	18:54:29	128	2200	60.03	0.00	0.00	0
5/12/01	18:54:29	628	2400	60.00	0.00	0.00	0
5/12/01	18:54:30	129	2600	60.00	0.00	0.00	0
5/12/01	18:54:30	630	2774	60.00	0.00	0.00	0
5/12/01	18:54:31	131	2952	60.00	0.00	0.00	0
5/12/01	18:54:31	631	3032	60.00	0.00	0.00	0
5/12/01	18:54:32	132	3097	60.00	0.00	0.00	0
5/12/01	18:54:32	633	3126	60.00	46.58	0.00	0
5/12/01	18:54:33	133	3158	60.00	46.58	0.00	0
5/12/01	18:54:33	634	3175	60.00	53.08	0.00	0
5/12/01	18:54:34	135	3190	60.00	53.08	0.00	0
5/12/01	18:54:34	636	3202	60.01	57.18	0.00	0
5/12/01	18:54:35	136	3218	60.01	57.18	0.00	0
5/12/01	18:54:35	637	3227	60.01	57.88	0.00	0
5/12/01	18:54:36	138	3235	60.01	57.88	0.00	0
5/12/01	18:54:36	638	3241	60.01	58.79	0.00	0
5/12/01	18:54:37	139	3250	60.01	58.79	0.00	0
5/12/01	18:54:37	640	3254	60.01	59.08	0.00	0
5/12/01	18:54:38	141	3258	60.01	59.08	0.00	0
5/12/01	18:54:38	641	3261	60.01	59.31	0.00	0
5/12/01	18:54:39	142	3264	60.01	59.31	0.00	0
5/12/01	18:54:39	643	3266	60.00	59.46	0.00	0
5/12/01	18:54:40	144	3268	60.00	59.46	0.00	0
5/12/01	18:54:40	644	3272	60.00	59.73	-49.00	0
5/12/01	18:54:41	145	3276	60.00	59.73	-49.00	0
5/12/01	18:54:41	646	3278	60.00	59.80	-97.00	0
5/12/01	18:54:42	146	3280	60.00	59.80	-97.00	0
5/12/01	18:54:42	647	3282	60.00	59.90	-117.00	0
5/12/01	18:54:43	148	3284	60.00	59.90	-117.00	0
5/12/01	18:54:43	649	3287	60.00	59.92	-113.00	0
5/12/01	18:54:44	149	3289	60.00	59.92	-113.00	0
5/12/01	18:54:44	660	3289	60.01	59.92	-81.00	0
5/12/01	18:54:45	151	3290	60.01	60.00	-81.00	0
5/12/01	18:54:45	651	3294	60.01	60.00	-86.00	0
5/12/01	18:54:46	152	3296	60.01	60.13	-86.00	0
5/12/01	18:54:46	653	3297	60.01	60.13	-49.00	0
5/12/01	18:54:47	154	3295	60.01	60.16	-49.00	0
5/12/01	18:54:47	654	3286	60.01	60.16	7.00	0
5/12/01	18:54:48	155	3283	60.01	60.10	7.00	0
5/12/01	18:54:48	656	3283	60.01	60.10	27.00	0
5/12/01	18:54:49	156	3281	60.01	60.18	27.00	0
5/12/01	18:54:49	657	3285	60.01	60.18	7.00	0
5/12/01	18:54:50	158	3285	60.03	60.01	7.00	0
5/12/01	18:54:50	659	3285	60.03	60.01	-8.00	0
5/12/01	18:54:51	159	3285	60.03	59.98	-8.00	0
5/12/01	18:54:51	660	3285	60.03	59.98	-8.00	0
5/12/01	18:54:52	161	3285	60.03	60.02	-8.00	0
5/12/01	18:54:52	662	3285	60.03	60.02	-9.00	0
5/12/01	18:54:53	162	3285	60.03	60.02	-9.00	0
5/12/01	18:54:53	663	3285	60.03	60.02	-9.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match	Close Breaker (Open/Close)
5/12/01	18:54:54	164	3285	60.03	60.02	-9.00	0
5/12/01	18:54:54	664	3285	60.03	60.02	-6.00	0
5/12/01	18:54:55	165	3285	60.02	60.02	-6.00	0
5/12/01	18:54:55	666	3285	60.02	60.02	-4.00	0
5/12/01	18:54:56	167	3285	60.02	60.03	-4.00	0
5/12/01	18:54:56	677	3285	60.02	60.03	-1.00	1
5/12/01	18:54:57	168	3285	60.02	60.02	-1.00	1
5/12/01	18:54:57	669	3285	60.02	60.02	1.00	1
5/12/01	18:54:58	169	3285	60.02	60.02	1.00	1
5/12/01	18:54:58	670	3284	60.02	60.02	1.00	1
5/12/01	18:54:59	171	3284	60.02	60.01	2.00	1
5/12/01	18:54:59	672	3284	60.02	60.01	2.00	1
5/12/01	18:55:00	172	3284	60.01	60.01	3.00	1
5/12/01	18:55:00	673	3283	60.01	60.01	3.00	1
5/12/01	18:55:01	174	3283	60.01	60.00	4.00	1
5/12/01	18:55:01	674	0	60.01	60.00	4.00	1
5/12/01	18:55:02	175	0	60.01	60.01	0.00	1
5/12/01	18:55:02	676	0	60.01	60.01	0.00	0
5/12/01	18:55:03	177	0	60.01	60.00	0.00	0
5/12/01	18:55:03	677	0	60.01	60.00	0.00	0
5/12/01	18:55:04	178	0	60.01	56.02	0.00	0
5/12/01	18:55:04	679	0	60.01	56.02	0.00	0
5/12/01	18:55:05	180	0	60.00	49.15	0.00	0
5/12/01	18:55:05	680	0	60.00	49.15	0.00	0
5/12/01	18:55:06	181	0	60.00	42.24	0.00	0
5/12/01	18:55:06	682	0	60.00	42.24	0.00	0
5/12/01	18:55:07	182	0	60.00	0.00	0.00	0
5/12/01	18:55:07	683	0	60.00	0.00	0.00	0
5/12/01	18:55:08	184	0	60.00	0.00	0.00	0
5/12/01	18:55:08	685	0	60.00	0.00	0.00	0
5/12/01	18:55:09	185	0	60.00	0.00	0.00	0
5/12/01	18:55:09	686	0	60.00	0.00	0.00	0
5/12/01	18:55:10	187	0	60.02	0.00	0.00	0
5/12/01	18:55:10	687	0	60.02	0.00	0.00	0
5/12/01	18:55:11	188	0	60.02	0.00	0.00	0
5/12/01	18:55:11	689	0	60.02	0.00	0.00	0
5/12/01	18:55:12	190	0	60.02	0.00	0.00	0
5/12/01	18:55:12	690	0	60.02	0.00	0.00	0
5/12/01	18:55:13	191	0	60.02	0.00	0.00	0
5/12/01	18:55:13	692	0	60.02	0.00	0.00	0
5/12/01	18:55:14	192	0	60.02	0.00	0.00	0
5/12/01	18:55:14	693	0	60.02	0.00	0.00	0
5/12/01	18:55:15	194	0	60.02	0.00	0.00	0
5/12/01	18:55:15	695	0	60.02	0.00	0.00	0
5/12/01	18:55:16	195	0	60.02	0.00	0.00	0
5/12/01	18:55:16	696	0	60.02	0.00	0.00	0
5/12/01	18:55:17	197	0	60.02	0.00	0.00	0
5/12/01	18:55:17	698	0	60.02	0.00	0.00	0
5/12/01	18:55:18	198	0	60.02	0.00	0.00	0
5/12/01	18:55:18	699	0	60.02	0.00	0.00	0
5/12/01	18:55:19	200	0	60.02	0.00	0.00	0
5/12/01	18:55:19	700	0	60.02	0.00	0.00	0
5/12/01	18:55:20	201	0	60.02	0.00	0.00	0
5/12/01	18:55:20	702	0	59.98	0.00	0.00	0
5/12/01	18:55:21	203	0	59.98	0.00	0.00	0
5/12/01	18:55:21	703	0	59.98	0.00	0.00	0
5/12/01	18:55:22	204	0	59.98	0.00	0.00	0
5/12/01	18:55:22	705	0	59.98	0.00	0.00	0
5/12/01	18:55:23	205	0	59.98	0.00	0.00	0
5/12/01	18:55:23	706	0	59.98	0.00	0.00	0
5/12/01	18:55:24	207	0	59.98	0.00	0.00	0
5/12/01	18:55:24	708	0	59.98	0.00	0.00	0
5/12/01	18:55:25	208	0	59.98	0.00	0.00	0
5/12/01	18:55:25	709	0	60.00	0.00	0.00	0
5/12/01	18:55:26	210	0	60.00	0.00	0.00	0
5/12/01	18:55:26	710	0	60.00	0.00	0.00	0
5/12/01	18:55:27	211	0	60.00	0.00	0.00	0
5/12/01	18:55:27	712	0	60.00	0.00	0.00	0
5/12/01	18:55:28	213	0	60.00	0.00	0.00	0
5/12/01	18:55:28	713	0	60.00	0.00	0.00	0
5/12/01	18:55:29	214	0	60.00	0.00	0.00	0
5/12/01	18:55:29	715	0	60.00	0.00	0.00	0
5/12/01	18:55:30	216	0	60.00	0.00	0.00	0
5/12/01	18:55:30	716	0	60.02	0.00	0.00	0
5/12/01	18:55:31	217	0	60.02	0.00	0.00	0
5/12/01	18:55:31	718	0	60.02	0.00	0.00	0
5/12/01	18:55:32	218	0	60.02	0.00	0.00	0
5/12/01	18:55:32	719	0	60.02	0.00	0.00	0
5/12/01	18:55:33	220	0	60.02	0.00	0.00	0
5/12/01	18:55:33	721	0	60.02	0.00	0.00	0
5/12/01	18:55:34	221	0	60.02	0.00	0.00	0
5/12/01	18:55:34	722	0	60.02	0.00	0.00	0
5/12/01	18:55:35	223	0	60.02	0.00	0.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match	Close Breaker (Open/Close)
5/12/01	18:55:35	723	0	60.00	0.00	0.00	0
5/12/01	18:55:36	224	0	60.00	0.00	0.00	0
5/12/01	18:55:36	725	0	60.00	0.00	0.00	0
5/12/01	18:55:37	226	0	60.00	0.00	0.00	0
5/12/01	18:55:37	726	100	60.00	0.00	0.00	0
5/12/01	18:55:38	227	300	60.00	0.00	0.00	0
5/12/01	18:55:38	728	500	60.00	0.00	0.00	0
5/12/01	18:55:39	228	700	60.00	0.00	0.00	0
5/12/01	18:55:39	729	1000	60.00	0.00	0.00	0
5/12/01	18:55:40	230	1300	60.00	0.00	0.00	0
5/12/01	18:55:40	731	1500	60.01	0.00	0.00	0
5/12/01	18:55:41	231	1700	60.01	0.00	0.00	0
5/12/01	18:55:41	732	2000	60.01	0.00	0.00	0
5/12/01	18:55:42	233	2200	60.01	0.00	0.00	0
5/12/01	18:55:42	734	2400	60.01	0.00	0.00	0
5/12/01	18:55:43	234	2600	60.01	0.00	0.00	0
5/12/01	18:55:43	735	2866	60.01	0.00	0.00	0
5/12/01	18:55:44	236	2974	60.01	0.00	0.00	0
5/12/01	18:55:44	736	3054	60.01	0.00	0.00	0
5/12/01	18:55:45	237	3113	60.01	0.00	0.00	0
5/12/01	18:55:45	738	3173	60.01	0.00	0.00	0
5/12/01	18:55:46	239	3188	60.00	45.61	0.00	0
5/12/01	18:55:46	739	3201	60.00	45.61	0.00	0
5/12/01	18:55:47	240	3212	60.00	52.87	0.00	0
5/12/01	18:55:47	741	3227	60.00	52.87	0.00	0
5/12/01	18:55:48	241	3235	60.00	58.44	0.00	0
5/12/01	18:55:48	742	3241	60.00	58.44	0.00	0
5/12/01	18:55:49	243	3247	60.00	58.79	0.00	0
5/12/01	18:55:49	744	3254	60.00	58.79	0.00	0
5/12/01	18:55:50	244	3258	60.00	58.79	0.00	0
5/12/01	18:55:50	745	3260	60.00	58.79	0.00	0
5/12/01	18:55:51	246	3262	60.00	59.06	0.00	0
5/12/01	18:55:51	746	3264	60.00	59.06	0.00	0
5/12/01	18:55:52	247	3265	60.00	59.47	0.00	0
5/12/01	18:55:52	748	3265	60.00	59.47	58.00	0
5/12/01	18:55:53	249	3266	60.00	59.64	58.00	0
5/12/01	18:55:53	749	3273	60.00	59.64	-29.00	0
5/12/01	18:55:54	250	3276	60.00	59.65	-29.00	0
5/12/01	18:55:54	751	3279	60.00	59.65	-59.00	0
5/12/01	18:55:55	252	3281	60.00	59.76	-59.00	0
5/12/01	18:55:55	752	3283	60.00	59.76	-65.00	0
5/12/01	18:55:56	253	3285	60.00	59.82	-65.00	0
5/12/01	18:55:56	754	3288	60.00	59.82	-46.00	0
5/12/01	18:55:57	254	3287	60.00	59.94	-46.00	0
5/12/01	18:55:57	755	3285	60.00	59.94	9.00	0
5/12/01	18:55:58	256	3285	60.00	60.00	9.00	0
5/12/01	18:55:58	757	3291	60.00	60.00	-32.00	0
5/12/01	18:55:59	257	3292	60.00	60.13	-32.00	0
5/12/01	18:55:59	758	3291	60.00	60.13	2.00	0
5/12/01	18:56:00	259	3284	60.00	60.09	2.00	0
5/12/01	18:56:00	759	3281	60.00	60.09	33.00	0
5/12/01	18:56:01	260	3279	60.00	59.99	33.00	0
5/12/01	18:56:01	761	3278	60.00	59.99	9.00	0
5/12/01	18:56:02	262	3281	60.00	60.12	9.00	0
5/12/01	18:56:02	762	3284	60.00	60.12	-31.00	0
5/12/01	18:56:03	263	3287	60.00	59.95	-31.00	0
5/12/01	18:56:03	764	3289	60.00	59.95	-26.00	0
5/12/01	18:56:04	264	3288	60.00	59.87	-26.00	0
5/12/01	18:56:04	765	3285	60.00	59.87	-26.00	0
5/12/01	18:56:05	266	3280	60.00	59.94	4.00	0
5/12/01	18:56:05	767	3280	60.00	59.94	4.00	0
5/12/01	18:56:06	267	3285	60.01	60.07	-3.00	0
5/12/01	18:56:06	768	3287	60.01	60.07	-3.00	0
5/12/01	18:56:07	269	3287	60.01	60.03	-15.00	0
5/12/01	18:56:07	770	3287	60.01	60.03	-15.00	0
5/12/01	18:56:08	270	3287	60.01	59.92	13.00	0
5/12/01	18:56:08	771	3283	60.01	59.92	13.00	0
5/12/01	18:56:09	272	3281	60.01	59.99	41.00	0
5/12/01	18:56:09	772	3279	60.01	59.99	41.00	0
5/12/01	18:56:10	273	3280	60.00	60.06	31.00	0
5/12/01	18:56:10	774	3285	60.00	60.06	31.00	0
5/12/01	18:56:11	275	3285	60.00	60.04	1.00	0
5/12/01	18:56:11	775	3285	60.00	60.04	1.00	0
5/12/01	18:56:12	276	3285	60.00	59.92	-8.00	0
5/12/01	18:56:12	777	3285	60.00	59.92	-8.00	0
5/12/01	18:56:13	277	3285	60.00	59.88	-6.00	0
5/12/01	18:56:13	778	3285	60.00	59.88	-6.00	1
5/12/01	18:56:14	279	3285	60.00	60.00	-2.00	1
5/12/01	18:56:14	780	3285	60.00	60.00	-2.00	1
5/12/01	18:56:15	280	3285	60.02	60.00	0.00	1
5/12/01	18:56:15	781	3284	60.02	60.00	0.00	1
5/12/01	18:56:16	282	0	60.02	60.02	2.00	1
5/12/01	18:56:16	782	0	60.02	60.02	2.00	0

Date	Time	Millitm	Throttle (A/D Counts)	Reference Frequency (Hertz)	Generator Frequency (Hertz)	Phase Match t	Close Breaker (Open/Close)
5/12/01	18:56:17	283	0	60.02	60.01	0.00	0
5/12/01	18:56:17	784	0	60.02	60.01	0.00	0
5/12/01	18:56:18	285	0	60.02	60.01	0.00	0
5/12/01	18:56:18	785	0	60.02	59.99	0.00	0
5/12/01	18:56:19	286	0	60.02	59.99	0.00	0
5/12/01	18:56:19	787	0	60.02	56.06	0.00	0
5/12/01	18:56:20	288	0	60.02	56.06	0.00	0
5/12/01	18:56:20	788	0	60.00	49.95	0.00	0
5/12/01	18:56:21	289	0	60.00	49.95	0.00	0
5/12/01	18:56:21	790	0	60.00	43.06	0.00	0
5/12/01	18:56:22	290	0	60.00	43.06	0.00	0
5/12/01	18:56:22	791	0	60.00	0.00	0.00	0
5/12/01	18:56:23	292	0	60.00	0.00	0.00	0
5/12/01	18:56:23	793	0	60.00	0.00	0.00	0
5/12/01	18:56:24	293	0	60.00	0.00	0.00	0
5/12/01	18:56:24	794	0	60.00	0.00	0.00	0
5/12/01	18:56:25	295	0	60.00	0.00	0.00	0
5/12/01	18:56:25	795	0	60.00	0.00	0.00	0
5/12/01	18:56:26	296	0	60.00	0.00	0.00	0
5/12/01	18:56:26	797	0	60.00	0.00	0.00	0
5/12/01	18:56:27	298	0	60.00	0.00	0.00	0
5/12/01	18:56:27	798	0	60.00	0.00	0.00	0
5/12/01	18:56:28	299	0	60.00	0.00	0.00	0
5/12/01	18:56:28	800	0	60.00	0.00	0.00	0
5/12/01	18:56:29	300	0	60.00	0.00	0.00	0
5/12/01	18:56:29	801	0	60.00	0.00	0.00	0
5/12/01	18:56:30	302	0	60.00	0.00	0.00	0
5/12/01	18:56:30	803	0	60.01	0.00	0.00	0
5/12/01	18:56:31	313	0	60.01	0.00	0.00	0
5/12/01	18:56:31	804	0	60.01	0.00	0.00	0
5/12/01	18:56:32	305	0	60.01	0.00	0.00	0
5/12/01	18:56:32	806	0	60.01	0.00	0.00	0
5/12/01	18:56:33	306	0	60.01	0.00	0.00	0
5/12/01	18:56:33	807	0	60.01	0.00	0.00	0
5/12/01	18:56:34	308	0	60.01	0.00	0.00	0

ENGINEERING PROJECT REPORT APPROVAL FORM**MASTER OF SCIENCE - ENGINEERING** Milwaukee School of Engineering

This report, for the project titled *Standardizing Generator Synchronization Using Fuzzy Logic*, submitted by the student William H. Martin, has been approved by the following committee:

Faculty Advisor: _____ Date: _____

Faculty Member: _____ Date: _____

Faculty Member: _____ Date: _____