

## **Aerospace Electronic Systems**

4601 North Arden Drive  
El Monte, California 91731

626.575.6161  
626.350.4236 Fax

Re: Calibration Cycle for Honeywell (Chadwick Systems) Equipment

In response to your request about our calibration policy, I hope the following will be of assistance.

### **Calibration Requirement**

Honeywell, Chadwick Systems, recognized the need for instrumentation to be calibrated periodically, based upon your needs and the needs and requirements of your customers and/or regulatory bodies. This calibration can be performed at your facility, if you have the means, or at another facility that is capable. The equipment can also be forwarded to the Honeywell, Chadwick Systems facility, here in California, to have this service accomplished.

### **Recommended Calibration Cycle**

The calibration cycle recommended by Honeywell, Chadwick Systems, is normally once a year (every 12 months). However, this cycle is affected by many variables. The once a year cycle is based upon normal regular usage of the equipment (once a week, several times a month, etc.). More frequent usage of the equipment may warrant a shortened calibration cycle for the equipment. Likewise, less frequent usage (only 2 – 3 times a year, etc.) would justify a longer cycle for the calibration check (for example, once every 18 months to 2 years).

To determine the cycle that best suits your needs, the following should be considered:

1. Frequency of use
2. Environmental conditions during usage
3. Storage conditions of equipment during non-use periods
4. Handling of the equipment

Since the user controls the above variables, to the most extent, they are best suited to determine the calibration cycle for their equipment. We have had customers who have chosen 6 month cycles, due mostly do the amount of usage and the conditions that the equipment is used (constantly transported between facilities, deployed to field locations for extended periods, etc.) Based upon the above variables, the decision on the length of the calibration cycle can be determined by the user.

### **Using the Model 11/11A Calibrator as a Calibration Source**

The Model 11/11A Calibration may be used as a calibration source, and should be found acceptable by reviewing agencies, as long as the following conditions are met:

1. The Model 11/11A Calibration is maintained and routinely calibrated in accordance with the instructions presented in their manuals (9077 for the Model 11 and 9077A for the Model 11A). The cam needs to be measured using instruments traceable to NIST or other recognized national agency.
2. You must be able to verify the frequency of the line voltage at either 50 Hz or 609 Hz. The frequency needs to be measured using instruments traceable to NIST or other recognized national agency. The accuracy of your line frequency will determine the accuracy of the RPM

output of the Model 11/11A Calibration. In the US, the line frequency is usually maintained at better than +/- 1%.

3. The third required element is to have one of the following:

A) A transducer (Velocimeter or Accelerometer) that is calibrated at the factory.

OR

B) An instrument (8500 family, 177M-6A. 8350 family, or 192 family), that is calibrated either at the factory or in accordance with their respective manuals.

Either of the above serves as a reference instrument, that with proper records, would allow calibration of any other instrument. For example: a calibrated Velocimeter, used with a calibrated Model 11 Calibrator, could calibrate an 8350. Which, in turn, could be used to calibrate a 135M-11 and additional velocimeters.

Please let me know if you have any other questions, or I you require further information.

**Brian C. Hatcher**

**Technical Sales Manager**

Honeywell – Aerospace Electronic Systems

El Monte, California

(626) 575-6161 x329

(626) 991-5084 – Mobile

[brian.hatcher@honeywell.com](mailto:brian.hatcher@honeywell.com),