CALIBRATION TECHNICIAN PROCESS HANDBOOK

Standard Operating Procedure 3.0

Abstract
This document contains the guidance and instructions for performing technical tasks on the AFEC PMEL Services contract. This document is a controlled document on MIDS and only the most current version must be used.

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1. **Technologist: Essential Duties and Tasks**

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<thead>
<tr>
<th>Frequency</th>
<th>Tasks</th>
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<tbody>
<tr>
<td>Daily</td>
<td>Run/Review/Distribute Workload Reports</td>
</tr>
<tr>
<td>Morning</td>
<td>Review Environmental Monitors/Report Out-of-Tolerances</td>
</tr>
<tr>
<td></td>
<td>Direct the Prioritization of Work</td>
</tr>
<tr>
<td>Anytime</td>
<td>RTO Process</td>
</tr>
<tr>
<td>Weekly</td>
<td>Review items in deferred status</td>
</tr>
<tr>
<td>Monday</td>
<td>Ensure AFCAV Updates are Current</td>
</tr>
<tr>
<td>First Week</td>
<td>Run AFCAV Standard Reports and act on changes.</td>
</tr>
<tr>
<td>Monthly</td>
<td>Coordinate/Assign Off-base Calibration/Maintenance</td>
</tr>
<tr>
<td>Quarterly/Annually/Biennially</td>
<td>Review and Update Training Records</td>
</tr>
<tr>
<td>At least annually</td>
<td>Process/Expedite/Monitor Emergency or Mission Essential Priority Maintenance</td>
</tr>
<tr>
<td>Periodic/As Required</td>
<td>Perform/Direct Proficiency Testing and Measurement Assurance Program (PT/MAP) Activities</td>
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<td></td>
<td>Process/Direct Exchange Standard Verification Activities</td>
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<td>Process Lateral Support Requests</td>
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## 2. Technicians: Essential Duties and Tasks

<table>
<thead>
<tr>
<th>Time</th>
<th>Tasks</th>
</tr>
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<tbody>
<tr>
<td><strong>Daily</strong></td>
<td></td>
</tr>
<tr>
<td>Morning</td>
<td>Turn on standards/TMDE as necessary.</td>
</tr>
<tr>
<td></td>
<td>Review Workload Reports</td>
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<td></td>
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| Close of Business | Put away standards, test fixtures, technical orders, tools, etc. |[
|            | Perform Daily Clean Up (As Assigned)                                |
|            |                                                                      |
| Anytime    | Comply with PMEL Calibration Checklist Requirements                 |
|            | Fuse Verification Procedures                                        |
|            | Determine/Identify TMDE Part Number                                 |
|            | Use proper calibration authority precedence.                         |
|            | Verify Technical Order/Commercial Data Currency                     |
|            | Verify Task Qualification/Maintain Training Records                 |
|            | Review Environmental Monitors/Report Out-of-Tolerances              |
|            | Observe/Document AFTO Form 57 Information                            |
|            | Calibration Processes and Documentation                             |
|            | On-site Calibration Processes and Documentation                     |
|            | Obtain/Document Approval for Calibration Limitation                  |
|            | Document Maintenance Data Collection (MDC) in PAMS                 |
|            | Document Calibration Forms/Labels                                   |
### Specific Duties (base specific)

3. **Run/Review/Distribute Workload Reports**

Run and review workload reports. Distribute as required.

4. **Process PMEL TMDE for Calibration/Maintenance**

Scheduling will provide hand receipts for lab equipment. Tag appropriate equipment. Notify technicians in that section of equipment coming due. Equipment can remain in their respective areas with the hand receipts.

Shippers will be processed out for shipment and taken to the scheduling area. Any N64 items will be taken to the CSC in charge of shipping and will not be processed in PAMS.

5. **Environmental Monitors/Report Out-of-Tolerances**

Ensure environmental monitors are operational. If an environmental monitor is due calibration within the next seven days, take steps to ensure uninterrupted monitoring of the environment. Coordinate this action with the QAT(s) as required.

Report any out of tolerance conditions in temperature or humidity to the Site Manager as soon as possible as well as any alarming trends, such as a sudden drop or increase in temperature or humidity.

6. **Direct the Prioritization of Work**

It is your job to manage the workflow of equipment in order to meet customer’s required date. Normally they will be worked in the following order; Emergency/Mission Essential priorities, selected PMEL standards, then customer items.

7. **Review/Manage TMDE in Deferred Status**

The key to successful deferred management is low numbers. Run appropriate reports and select AWP, DTO, and DMR to review deferred workload. Verify the current comments in PAMS to ensure that they are still appropriate. Update comments as changes occur.
8. **Ensure Local AFCAV Updates are Current (site specific)**

The Technologist or designated person, works with the TODO to ensure local AFCAV is updated and technicians are notified when updates occur.

9. **Run AFCAV Standard Reports and Act on Changes**

The Technologist or designated person will run reports as necessary and analyze all of the critical interval changes, part number changes, etc. Take the necessary action to ensure corrections are made and units recalled as necessary. Example: NCR items that now require calibration; ICO items that now require periodic calibration.

10. **Coordinate/Assign Off-base Calibration/Maintenance**

Periodic on-base and/or off-base calibrations are performed at various locations. These trips require coordination and planning. Ensure to coordinate with the customer as to when they will be available for the PMEL to perform the calibration of their TMDE. Items may be placed in DMR status until the Customer coordinated date. Coordinate with the CSCs to ensure a vehicle will be available. If required contact transportation to arrange pickup and delivery of PMEL standards being used for the calibration of the customer’s TMDE.

Have the items scheduled in and notify QAT if any were selected for QR.

11. **Process/Expedite/Monitor Emergency or Mission Essential Priority Maintenance**

Manage priorities to satisfy OWC need date. Monitor the progress of priority maintenance/calibration. If the technician has any difficulties, assist as necessary. Keep management and the OWC informed. It is very important that the times entered in PAMS accurately reflect hours worked.

Make certain the priority letter is current and complete upon acceptance.

If the item is already scheduled in, change its Priority in PAMS accordingly and have the CSCs shake coins on the item. Should it get selected for a QR notify a QAT immediately.

The item must be ACP in time or a new due date and time must be coordinated with the OWC.
12. **Perform/Direct PT/MAP Activities**

Proficiency Testing is the completion of inter-comparison data sheets for Exchange Standards found in 33K-2-11, or testing performed on a unique measurement artifact.

Perform (or have someone perform) the Proficiency Testing. All PTs are selected for a Process Review, so notify a QAT when the item is ready to be run. The QAT or alternate will verify testing results on all PT/MAP results prior to submitting.

**13. Process/Direct Exchange Standard Verification Activities**

When an Exchange Standard is received from AFPSL, check T.O. 33K-2-11 to see if any acceptance tests are required before we send the old one back.

Perform (or have someone perform) these tests as needed. It is important that these items are turned around as soon as possible so that the old standard can return to AFPSL, calibrated, and given to another lab.

File the calibration certificate on the Technician Sharepoint page.

**14. Evaluate/Confirm TMDE ‘Can Not Duplicate’ Conditions**

All CND actions will be verified by another qualified technician if the discrepancy identified by the OWC cannot be duplicated. Once verified the technician will complete a Patrick AFB PMEL Form T-03, Can-Not-Duplicate Letter or document actions on the AFTO Form 350 tag if provided. The Form T-03/AFTO Form 350 tag will be returned to the customer with the item.


Item from ACP Status: Authorized person will change item status to AWM. Then the technician places item in-work and once completed takes the Action Taken code “Y”.

Item from AWM Status: Technician places item in-work and once completed takes the Action Taken code appropriate to the work accomplished (i.e. “J”, “K”).

Item from ACS Status: The item will be scheduled into the PMEL as a Special Inspection. If the item is less than half of the calibration cycle the technician will place the item in-work and once completed take the Action Taken code “Y”. If the item is more than half of the calibration cycle the technician will take the Action Taken code appropriate to the work accomplished (i.e. “J”, “K”).
16. Review/Process AFTO Form 22s (site specific)

AFTO 22s are submitted to METWEB using the following procedure:

1. Technician completes AFTO 22 on the Technician Sharepoint page and notifies the QAT.
2. QAT reviews the submission, when complete submit it in ETIMS and notify the TODO.
3. The TODO must then go into ETIMS and submit the AFTO 22 for AFMETCAL review.
4. All AFTO 22’s will be tracked through ETIMS.

AFTO 22s for non-METWEB T.O.s will be submitted using local wing QA processes.

17. Processing a Lateral Support Request

- Submit all items requiring lateral support to the Site Manager for submission in the Lateral Support Request application on METWEB.

18. Documentation Process for Lateral Support

Items returned from Lateral Support:

1. Complete a physical inspection to ensure unit wasn’t damaged in shipment.
2. Take a W Action for items calibrated by an Air Force Calibration Facility.
3. Take a V Action for items calibrated by a Non-Air Force Calibration Facility.
4. Document time to process. Take a 1 for Completed action.
5. Complete the Discrepancy and Corrective Action blocks entering appropriate remarks; cite that inspection was performed and findings.
6. Verify PAMS information for unit is correct.
7. Double check certification.
8. For PMEL owned items, ensure all limitations are signed prior to delivery to the Quality Section.
9. Deliver to the Quality Section with Calibration Certificate.

Processing shippers to Lateral Support

1. Process unit in PAMS as necessary to show unit being shipped to Lateral support using a “D” action and “5” Complete Action (Shipping).
2. Document in PAMS Discrepancy block that the pre-shipping inspection was performed with any comments needed as well as where the item is going for
calibration.

3. Document in PAMS Corrective action block where the unit is being shipped for lateral support with any comments needed.

4. Deliver unit to the CSC responsible for shipping.

**Processing Exchange Standards to AFPSL**

1. Process unit in PAMS as necessary to show unit being shipped to Lateral support using a “S” action and “5” Complete Action (Shipping)
2. Document in the Discrepancy block in PAMS that the pre-shipping inspection was performed with any comments needed
3. Document in the Corrective action block that Exchange being sent to AFPSL with any comments needed
4. Write “delete” in RED on hand receipt (This will ensure when unit is received by AFPSL the item will be deleted as appropriate)
5. Pull AFPSL Certificate from appropriate Section Reports Binders and discard. Notify QAT to discard the original from the Master library.
6. Deliver unit to CSC responsible for shipping.

**Processing Exchange Standards when received at AFPSL (needed to close out JCN in PAMS)**

1. Process unit in PAMS as necessary to show item was received at AFPSL using a “M” action and “1” Complete Action
2. Document in the Discrepancy block that the unit was received at AFPSL with any comments needed
3. Document in the corrective action block comments as necessary to show is being processed for deletion with any comments needed
19. Technician Review of PAMS K-Area Workload Reports

The contract turnaround time (TAT) requirement is 14 calendar days. Work lists are generated to help assist in the management of this equipment. A work list may be placed in each section of the lab as well as a master work list placed at the front of the lab.

These lists are sorted by age (oldest to youngest) and “K” section. In the absence of any instructions from Management/Supervision you are to work the oldest item in AWM or AFD status in your area that you are qualified to work on and is capable of being worked. The exception to this would be any priority 1 or priority 2 items assigned to you.

If your area is caught up (i.e. your area has little or no work, or everything in your area is in early stages of TAT) you should look to see if you can help out in other areas and in those cases the same guidelines apply.

When calibrating like items you may work low TAT items that match up with older items (i.e. you have a day 13 attenuator and there are 4 more in day 3 and day 7 – you may work them all together) Just make sure the oldest item is worked first. Like items belonging to the same OWC may (IAW PWS paragraph 7.5.2) have their Date Due adjusted to separate their calibration dates.

If you have any difficulty in determining which item to work on you should request assistance from Management/Supervision.

20. Comply with PMEL Calibration Checklist

Use of Checklist for Certifying Calibrations (voluntary unless otherwise directed)
This document is controlled by the QATs and any recommended changes should be forwarded to them for review.

If the use of the checklist is directed:
For Laboratory Standards: When completing calibration of a laboratory standard the technician will print out the Calibration Details Report and review it and the procedure for documentation accuracy and to ensure all standards have been entered in PAMS. When this is done and the checklist is complete the TI will be turned in to the QAT along with the completed checklist, the printed Calibration Details Report and the actual procedure so the QAT can review all three. If the PMEL uses electronic T.O.s to perform calibrations the technician will print out Table II and include with TI when turning in to QAT.
21. Determine/Identify TMDE Part Number

The following guidelines are to help clarify the usage of part numbers and PMEL part numbers. These guidelines cannot be all inclusive, but should establish a thought pattern that will resolve most questions.

- The part number is defined as the number loaded in the K100, CMS, Local K100, etc. (AFCAV). This entry determines calibration interval, calibration authority, specifications, etc.
- The PMEL part number is the number actually on the item and will be loaded as the actual P/N on the hand receipt and PAMS as long as the number is in K100.
  - Example 1: K100 P/N is 8563E and Actual P/N on the unit is 8563ECOPT1, 2, 3 (All options and iterations are non-calibrated options so the PMEL P/N on hand receipt will be 8563ECOPT1, 2, 3 and K100 P/N 8563E).
  - Example 2: K100 P/N is QJ Series and Actual P/N on the unit is QJR217C. All QJ Series wrenches have one accuracy so the actual P/N will be loaded as QJ217C and K100 P/N will be QJ Series.

Note 1: If any options are calibrated options then an AFTO 45 is submitted. (site specific in who submits)

Note 2: AFCAV is updated monthly, so be aware that changes can occur often.

22. Verify Technical Order/Commercial Data Currency (site specific)

All technical data must be verified for currency prior to use. This does not apply to PMELs accessing Technical Orders using E-Tools that are updated daily.

K-procedures and maintenance T.O.s are verified through ETIMS to ensure you are using the current version. Commercial data used for calibration must be verified for currency only when AFCAV Table 1 Specifications are not posted.

For instances where commercial data is used for either maintenance or calibration and the commercial data is obsolete or no longer updated perform the following:

- If the manufacturer or publishing authority no longer exists, or that after extensive research the publication/revision number and/or date of the materials cannot be determined, annotate “Researched – Currency information not available” on the cover of the commercial data and cite the date the research/validation was performed.
23. Verify Task Qualification/Maintain Training Records

The Technologist will work with you to ensure training records are up-to-date. It is, however, your responsibility to keep up with your records as well. You may not certify any item for which you are not documented as task qualified. You should periodically review your entire training record. If/when any changes/updates are required, coordinate with the Technologist to have appropriate changes documented.

A PMI will be established to ensure training records are reviewed at least annually IAW T.O. 00-20-14..


It is your responsibility to monitor the laboratory environment before, during, and after calibration. Laboratory temperature should maintain 73° F ± 6° F, humidity 20-50%. Report any out of tolerance conditions in temperature or humidity, as well as any alarming trends, such as a sudden drop or increase in temperature or humidity, to the Lead Tech, QAT, or Site Manager as soon as possible.

Any environmental out-of-tolerance condition requires precaution. For example, when humidity conditions fall below the 20% minimum, no troubleshooting/repair shall be performed on ESD sensitive solid state equipment to minimize the risk of damage. Anytime the laboratory environment exceeds tolerances, one must ensure standards used and units being certified do not have environmental restrictions that would prevent continuation of work. If required, the Technologist and/or QAT will assist in determining what can and cannot be calibrated or repaired.

Three conditions can occur:

- **Out-of-Tolerance Temperature (<67° F or >79° F)** – All calibration actions taken during these outage periods precautionary measures must be observed to ensure temperature OOT does not affect measurement.
- **Out-of-Tolerance Low Humidity (<20%)** – All repair actions taken during the outage periods technician must ensure precautionary actions are taken to ensure no potential ESD damage will occur.
- **Out-of-Tolerance High Humidity (>50%)** – Technicians need to ensure all precautionary measures are taken to prevent any corrosion as a result of the high humidity conditions, especially within the Physical Dimensional section of the laboratory.

25. Observe/Document AFTO Form 57 Information

The AFTO Form 57 is to be used to annotate additional information to aid in the calibration of the item. The form may be maintained in hard copy and/or electronically.
For example, list substitute items, test fixture locations, alternate procedure information. Update AFTO Form 57 as required.

**26. DEFERRED ITEMS**

When an item cannot be completed for any reason (i.e. lack of technical data, missing accessories, parts required from OWC, standard down, etc.) get with the Lead Tech to determine the best course of action.

1. Complete a Hold Status form and additional data sheets as required (i.e. parts required by owner worksheet).
2. Notify the OWC of the change to deferred status, the reason for the hold, and if they need to act.
3. Put item on miscellaneous hold in PAMS with Action code “C” and Disposition “3” or “4”.
4. Place item in the appropriate location for Hold items.

The Technologist will monitor holds and get with you for follow-ups, such as notifying you when the item is placed back into work, or for completing appropriate letter.

**27. ITEMS AWAITING PARTS (AWP)**

Contact the customer to inform them the item is being deferred for parts. Provide the required information for the Site Manager to order the required parts. Place the TMDE in the appropriate location for AWP items.

**28. ITEMS THAT ARE NRTS**

Fill out the appropriate paperwork and tags. Securely fasten all NRTS documents to the unit, and place on the outgoing shelves.

**29. On-site Calibration Processes and Documentation**

On-site calibrations are pre-selected for QR. Scheduling will annotate on the hand receipt those items which are selected and coordinate with QAT on their calibration.

You are required to monitor the on-site environment where the item is being calibrated. Tolerances are 73.4°C ± 9°C, and relative humidity ≤70%. Special consideration should be made before attempting calibration actions outside these tolerances.

**30. Obtain/Document Approval for Calibration Limitation**

You may not limit a calibration without the expressed approval from the owner/user unless the limitation is directed by an authorized calibration/maintenance procedure or
calibration authority. Calibration limitations shall be approved by the user’s shop chief or designated seven-level/civilian equivalent.

When an item is found to be out of tolerance and/or a limitation is considered that is not T.O. directed, contact the owning work center to determine if the parameter(s) can be limited and still meet mission requirements. Document the name and rank of the person authorizing limitation.

The Technologist and Site Manager have authority to approve PMEL owned equipment limitations. PMEL Managers will notify the SSO of BCL additions. Send info copy to the PMO.

31. Document Maintenance Data Collection (MDC) in PAMS

It is important that you document your time daily. Some customers are charged for labor, and the start and stop time you enter into PAMS determines their charge. Be as exact as you can in documenting your hours. Remember, the time you spend prepping for and cleaning up after a job should be included in your time. With additional duties, training, clean-up, you may not always have 8 hours recorded each day.

It is also important that you are as descriptive as possible when entering information into PAMS. Utilize the space provided as effectively as possible.

32. Document Calibration Forms/Labels

Appendix I provides some examples of how to complete documentation for calibration forms and labels. This appendix may be used or PMELs may maintain their own example book that will be controlled locally and listed on their Document Register.

Calibration Data Sheet (Patrick AFB PMEL Form T-06):

1. When creating a calibration data sheet, technicians will ensure that all data, to include identification data and calibration data, are deleted from the Calibration data sheet before any entries are made to the new Calibration data sheet.

2. Prior to completing and processing the Test Instrument technicians will compare the new Calibration data to the last Calibration data (if it exists) to make sure the information/data was not repeated and it is accurate.

33. Verify Calibration Spreadsheets and Templates Prior To Use

The use of computer spreadsheets to calculate extended or difficult formulas can help complete calibrations in a timely manner. Technicians will verify any spreadsheet or template that is used has a Patrick AFB PMEL Form Q-03, Spreadsheet Val/Ver Plan form completed.
If you develop a spreadsheet, you must submit it to the Technologist, or the PMEL Manager, for Verification/Validation prior to using it. These approved spreadsheets are located on the Technician Sharepoint page.

Additional Guidance for validating and verifying Calibration Spreadsheets can be found in Patrick AFB PMEL SOP XXX, PMEL Software/Spreadsheet Validation and Verification.

34. Perform/Document Calibration/Maintenance Using Commercial Data

Commercial data used to certify equipment must be validated for currency prior to initial use and at least annually thereafter. Follow guidance in T.O. 00-20-14 when commercial data is used in any part of a calibration. Ensure documentation in “Special Block” meets T.O. 00-20-14 requirements.

35. Process/Document TMDE Out of Tolerance

35.1 For PMEL Owned Laboratory Standards;

All laboratory standards found to be out-of-tolerance or broke will be analyzed to determine the potential impact on certified TMDE. This does not apply to initial calibration items. If there is a chance the out of tolerance condition could have affected the accuracy of a calibrated item the following steps are followed (they do not need to be performed in the listed order):

1. The QAT shall runs a reverse traceability listing from PAMS
2. They shall review the listing and annotate, for each item, whether recall is required or not required
3. A Patrick AFB PMEL Form T-07, PMEL Owned Out of Tolerance letter, for the standard, with the reverse traceability listing, when applicable, are returned to the QAT.
4. PMEL Manager signs out of tolerance letter notifying him of out of tolerance condition, and if applicable, the recall action; if no recall is required proceed to step 8 after PMEL Manager or designated signatory, signs out of tolerance letter
5. QAT notifies SST to recall item(s) from owning work center if applicable
6. When SST receives item(s), schedules AWM, clearly identifies item as a recalled item, and informs QAT who tracks the recalled item(s)
7. Technician verifies portion of calibration in question and processes item(s)
8. QAT files Out of tolerance letters with Reverse Traceability listing IAW Quality Record Spreadsheet

35.2 For Customer Owned TMDE

Customer TMDE: Patrick AFB PMEL Form T-02, Customer Out of Tolerance Letter, must be completed for any out of tolerance parameter, except when:

1. The item is initially issued from supply or depot, and it should not have been placed in service by the customer.
2. An out of tolerance or non-operational parameter is identified by the customer on an AFTO 350 or equivalent. The parameter has to be the same parameter that the customer identified, or a Form T-02 will still be required.

Include the Form T-02, with the unit for return to the customer and make an additional copy for the Quality section if required. If the unit will remain at the PMEL (AWP or hold status) provide the customer with the OOT letter when the item is deferred.

Note: A calibration details report or a history report from PAMS may be used in lieu of the Form T-02 and T-07. The out-of-tolerance condition must be fully described so owner/user can make a determination on how the nonconforming condition may have affected items tested with this unit.

Document in PAMS the out of tolerance conditions and corrective actions taken. Exact entries will help determine possible bad actor equipment and help future technicians.

Upon discovering an out of tolerance condition for lab standards, immediately notify the Technologist or QAT. Adjustments or repairs should not be performed until all Out of Tolerance data has been captured. There may be cases where a calibration procedure direct an alignment action however the complete calibration must be performed to see if there were any other parameters out of tolerance. In these cases, after the calibration has been completed and OOT data has been captured, begin calibration again and follow alignment steps as stated in the calibration procedure.

### 36. Cannibalization/Parts Re-use Authorization Requirements

1. Cannibalization/re-use of parts for customer owned TMDE: Parts from one item of TMDE cannot be used in the repair of another item of TMDE (cannibalize) without approval of the OWC supervisor/shop chiefs involved.
   a. Any cannibalizations shall be fully documented (customer(s) involved, equipment identification, and dates of coordination at a minimum) with a copy provided to the SSO.

2. Cannibalization/re-use of Parts for GFE: SSO approval is required before re-use of parts to accomplish TMDE repair on GFE. If this situation arises, coordinate with the Technologist before taking any action.

### 37. Process/Document TMDE for Warranty Repair

For equipment identified under warranty:

1. Complete two copies of the Patrick AFB PMEL Form T-08, Warranty Repair Letter, and forward both with the unit.
   a. One copy will be a paper copy and will be returned to the customer with the item.
   b. The second copy may be a hard copy for the laboratory file or an
electronic copy maintained on the local server.

2. Complete an AFTO Form 350 and attach to the unit
3. Place unit on 100% outgoing inspection shelf.

38. Process Product Quality Deficiency Reports

All technicians are responsible for identifying new and serviceable TMDE and components that do not operate properly and may require repair, or TMDE recently repaired through a contract or depot technical repair center which still has continuing problems.

Informational PQDR paperwork will be filled out for customer items. For PMEL items and supply parts ordered by PMEL, a full PQDR will be accomplished and submitted by QAT using the descriptive information from the PQDR template described below.

Fill out the PQDR paperwork using Patrick AFB PMEL Form T-09, Deficiency Reporting Letter. When complete, forward it to the Technologist or QAT for review.

For PMEL TMDE, the PQDR paperwork will be submitted to the Wing DR monitor for investigation, and the unit will remain with PMEL until disposition instructions and condition tags are issued. Ensure a completed DD Form 1575, Suspended Tag - Material, accompanies the unit when processing the item for turn-in to base supply.

<table>
<thead>
<tr>
<th>Date</th>
<th>Description</th>
<th>Revision</th>
</tr>
</thead>
<tbody>
<tr>
<td>10/1/19</td>
<td>Initial Release</td>
<td>Initial</td>
</tr>
</tbody>
</table>

Change History
APPENDIX I: Documentation Calibration Forms and Labels (does not need to be printed if not used or accessed electronically)

Calibration forms and labels shall be completed IAW T.O. 00-20-14 Section 5; the following examples are for reference only:

**SEE INDIVIDUAL COMPONENT LISTING (SICL)** - Designates an end-item of TMDE, such as consoles or testers, or a part number consisting of components which are separately listed by individual part number, support responsibility, cal interval or calibration T.O.

**END ITEM** (when AFCAV shows a calibration interval.):

![Diagram of Calibration Form for End Item]

**END ITEM** (when AFCAV shows no calibration interval (NEC)).: When an End Item is considered non-existent (case, container, or similar housing), this label is not required.

![Diagram of Calibration Form for End Item with NEC]

**COMPONENT ITEM** (When the item has a calibration interval.):

![Diagram of Calibration Form for Component Item]
COMPONENT ITEM (When the item is listed as NHA.) AFTO 99 or 398 must be used:

SEE INDIVIDUAL CALIBRATED WITH (SICW) - The Date Calibrated and Date Due match those of the End Item.

INITIAL CALIBRATION ONLY (ICO) - A record of all ICO items is kept in QA.

CALIBRATE BEFORE USE (CBU) – Items shall be calibrated at least once before being designated as CBU. Previously calibrated TMDE shall not require a recalibration before being designated CBU unless requested by the user. After calibration of a CBU item, an AFTO Form 99 or 398 must be used.
NO PERIODIC CALIBRATION (NPC) – Unit performance is verified, checked, or monitored using other certified TMDE. NPC items will not be used to verify equipment performance factors or make absolute measurements. NPC items can be used for provide estimated or approximate values or indicate non-quantitative relative measurements. An AFTO 99 or AFTO 398 shall be used.

NO CALIBRATION REQUIRED (NCR) - This form will be placed on units identified as NCR in a CMS or AFCAV. The form must have the technician’s K-stamp. If the unit is repairable and designated as PMEL or AFPSL responsibility, it must have the ID# and OWC on it. On non-repairable NCR items too small to affix the label, a small white dot can be used instead.

NOTICE CERTIFICATION VOID WHEN SEAL IS BROKEN - Must have the technician’s K-stamp. Do not use any kind of tape that would defeat the purpose of the label.
CONDITION TAGS

DD Form 1577 is used for the turn-in of condemned end items (normally XB3). Use with NRTS code 9 and the turn-in of DIFM assets with ERRC code XF3. One Red Tag and one AFTO 350 are required. (AFTO 350 tag not required for NRTS 9 items per TO 00-20-3)

Ex: “NRTS 1 IAW T.O. 33A15-254-1, para. 4.3.12.”
Ex: “NRTS 4, P/N 87243, NSN 6625-00-123-4567, A22 Circuit Card Unavailable.”
Ex: “NRTS 8 IAW Item Manager Mike Tech, DSN 945-1111. Ship to FB6685 Account 623.”
DD Form 1574 is used for turn-in of serviceable items. Two yellow tags and one AFTO 350 (used at supply to track item) are required.
AFTO 350 TAGS
All NRTS items, with the exception of NRTS 9, must have a completed AFTO 350 attached. An AFTO 350 is also used to document any discrepancies with an item which does not affect calibration. Incoming equipment may also have an attached AFTO 350, filled out by the owning work center. Upon completion of work, complete the AFTO 350 as applicable and return attached to the item. (See next page for picture and instructions)

Block 1, JCN: Enter the JCN documented on PAMS hand receipt.
Block 2, ID/SERIAL NO.: Enter the PAMS label number.
Block 3, TM: Enter type maintenance code –
   B – unscheduled maintenance
   J – scheduled maintenance
Block 3A, SRD: Enter SRD from PAMS hand receipt.
Block 4, WHEN DISC: Enter when discovered code –
   F – unscheduled maintenance
   T – scheduled calibration
   V – unscheduled calibration
   Y – upon receipt/withdrawal from supply
Block 5, HOW MAL: Enter how mal code entered into PAMS.
Block 7, WUC: Enter work unit code from PAMS hand receipt.
Block 9, QTY: Enter number of like items associated with tag.
Block 10, FSC: Enter the FSC (first four numbers of NSN).
Block 11, PART NUMBER: Enter part number, including dashes and slashes. First preference is part number or complete identification as it appears on data plate.
Block 12, SERIAL NUMBER: Enter serial number of item.
Block 14, DISCREPANCY: Enter brief but specific description of malfunction that caused removal or reason for removal, such as T.O. and T.O. calibration step where item failed, or error during self-test.
Block 15, SHOP USE ONLY: If item was made serviceable, enter brief description of work accomplished. Do not reveal classified information. If item is determined to be NRTS, enter NRTS along with applicable NRTS code.
Block 15B, SHOP ACTION TAKEN: Enter final action taken code when work completed or item declared NRTS or condemned.
Block 17, NOMENCLATURE: Enter item nomenclature.
Block 18, PART NUMBER: Enter information from Block 11.
Block 18A, WUC: Enter information from Block 7.
Block 19, NSN: Enter the NSN of item.
Block 20, ACTION TAKEN: Enter information from Block 15B.
Block 21, QTY: Enter information from Block 9.
Block 23, NSN: Enter information from Block 19.
Block 24, SRAN CODE: For Dyess AFB, enter FB4661.
Block 26, SERVICEABLE: This block will be completed by the activity responsible for returning the item to serviceable status. An entry is not required if a DD Form 1574 (Yellow Tag) is initiated and attached to the item as the time the item is made serviceable and returned to supply. When entry is required, a K-stamp in accordance with T.O. 00-20-3 or a signature and date is acceptable.
Block 27, CONDEMNED: An entry is not required. The item will be tagged with either the DD Form 1577 (Red Tag) in accordance with instructions in T.O. 00-20-3 by the activity responsible for determining condition of item.
Block 29, BASE REPAIR CYCLE DATA, DATE REMOVED: The initiator of the AFTO Form 350 is responsible for entering the date the item was removed for maintenance of NRTS disposition.