Welcome to the second edition of the Equipment Management News. This quarterly newsletter is brought to you by the Logistics Division (LD) and is meant to provide you the latest business practices on equipment management, from acquisition to disposal, and to maintain you informed of current events and initiatives impacting the equipment management program.

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PRE-INVENTORY ACTIVITIES

It is a good business practice that pre-inventory activities - primarily physical location preparation - to be accomplished prior to the initiation of the wall-to-wall physical count of assets in order to increase the efficiency and effectiveness of the count. A physical location preparation typically includes (1) organizing work areas and storage locations, (2) identifying and segregating items, (3) ensuring that all items that meet the NASA "controlled" criteria have an equipment control number (ECN) attached, (4) verifying that items are in the correct location IAW the PP&E system, (5) pre-counting stationary items, and (6) identifying excess/obsolete/damaged items. Other pre-inventory activities include the timing of the inventory, staffing and equipment requirements, review of the inventory procedures/strategies, and the instructions to and/or the training of the counters. These Property Custodian and End User level activities shall start at least 30 days in advance and upon notification of the eventual initiation of the physical inventory campaign.

SEGREGATION OF DUTIES IN THE PHYSICAL INVENTORY PROCESS

Segregation of duties in the physical inventory process, a commonly used and widely accepted internal control and business practice, entails dividing or segregating key duties and responsibilities among different people. When implemented effectively, this type of control reduces risk of error and fraud so that no single individual can adversely affect the accuracy and integrity of the equipment count.

The key areas of segregation are (1) physical custody of assets, (2) processing and recording of transactions, and (3) approval of transactions. Ideally, personnel performing any one of the above functions would not also have responsibilities in either of the other two functions. Thus, where practical, adequate segregation of duties for the physical count process includes using personnel who do not have overlapping responsibilities in (1) custody or access to the inventory items for count, (2) recording transactions resulting from the count, and (3) authority for approving adjustments resulting from the count. In situations where segregation of duties is not practical or cost-effective, other controls should be employed to mitigate the recognized risk. For instance, such mitigating control procedures include increased supervision, and applying dual control by having activities performed by two or more people.

FSC GROUPS NOT COVERED BY THE EXCHANGE/SALE AUTHORITY

A review of the FY-10 Exchange Sale Report revealed that NASA centers are processing restricted FSCs of personal property (highlighted below) through the Exchange Sale program. The processing of restricted FSCs is doable when a deviation is previously requested to and approved by GSA. Centers must not use the Exchange/Sale authority for the FSC groups of personal property listed in the table below, as well as FSC groups for Flight Safety Critical Aircraft Parts (FSCAP), and FSC groups for Critical Safety Items (CSI) unless meeting the provisions of Sec. 102-33.370.

Centers are reminded that processing FSC groups not covered by the Exchange/Sale authority is a topic of interest for the IG and non-adherence may result in recurring findings.
<table>
<thead>
<tr>
<th>FSC</th>
<th>Description</th>
<th>Remarks</th>
</tr>
</thead>
<tbody>
<tr>
<td>10</td>
<td>Weapons</td>
<td>Under no circumstances will deviations be granted for FSC Class 1005, Guns through 30mm. Deviations are not required for Department of Defense (DoD) property in FSC Groups 10 (for classes other than FSC Class 1005), 12 and 14 for which the applicable DoD demilitarization requirements, and any other applicable regulations and statutes are met.</td>
</tr>
<tr>
<td>11</td>
<td>Nuclear ordnance</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>Fire control equipment</td>
<td></td>
</tr>
<tr>
<td>14</td>
<td>Guided missiles</td>
<td></td>
</tr>
<tr>
<td>15</td>
<td>Aircraft and airframe structural components</td>
<td></td>
</tr>
<tr>
<td></td>
<td>(except FSC Class 1560 Airframe Structural</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Components)</td>
<td></td>
</tr>
<tr>
<td>42</td>
<td>Firefighting, rescue, and safety equipment</td>
<td></td>
</tr>
<tr>
<td>44</td>
<td>Nuclear reactors (FSC Class 4470 only)</td>
<td></td>
</tr>
<tr>
<td>51</td>
<td>Hand tools</td>
<td></td>
</tr>
<tr>
<td>54</td>
<td>Prefabricated structure and scaffolding</td>
<td>FSC Class 5410 Prefabricated and Portable Buildings, FSC Class 5411 Rigid Wall Shelters, and FSC Class 5419 Collective Modular Support System only.</td>
</tr>
<tr>
<td>68</td>
<td>Chemicals and chemical products, except medicinal chemicals</td>
<td></td>
</tr>
<tr>
<td>84</td>
<td>Clothing, individual equipment and insignia</td>
<td></td>
</tr>
</tbody>
</table>


UPDATES

1. RFID Technology

NASA continues to investigate the potential application of RFID technology to manage its personal property. The enhanced features of RFID and the demonstrated interest of the NASA Centers to transition into a more technical asset management environment, which may help increase the accuracy of asset accountability and reduce the cost and time to conduct physical inventories, prompted the Logistics Division to engage in this RFID study and make an assessment of its applicability. Staff from the logistics Division contacted various Federal Agencies to gain from their lessons learned and will continue to contact SEMOs and Equipment Managers at various NASA centers engaged in similar objectives.

2. The Equipment Management Program Website

We are pleased to announce that the website for the equipment management program has been developed and is included in the Logistics Division website. Please access the following link:

http://ld.hq.nasa.gov/eqiqmgt.html
You will find a description and/or definitions of the purpose, program objectives, program and individual responsibilities, as well as links to governing NASA policies and other functional links that provide useful guidance and information on training opportunities to the equipment management community.

3. Calculating your Equipment Loss Rate

The formula to calculate loss rates has not changed - the loss rate is the number of lost items divided by the center’s equipment density at the end of the fiscal year (after capturing additions/new acquisitions and deletions/turn-ins). This is the result of the Center’s wall-to-wall physical inventory.

In essence:
The formula for loss rate is number of losses in a fiscal year, divided by the quantity on hand at the end of that fiscal year; expressed as a percentage.

\[
\text{Loss rate} = \frac{\text{Losses/on hand}}{100}
\]

However, we can now also calculate the net loss rate which in the past included all recoveries (losses from present and past fiscal years). It is possible to have more recoveries in a FY than losses since some or all of the recoveries could be for items lost in a previous fiscal year.

The formula for net loss rate is the number of losses in a fiscal year minus those items recovered (reported missing within the same fiscal year), divided by the quantity on hand at the end of that fiscal year; expressed as a percentage. This is the result of the Center’s recoverability efforts.

\[
\text{Net loss rate} = \frac{(\text{Losses-recoveries})/\text{on hand}}{100}
\]

The way the loss rate information is displayed in the bReady report will change. The report will display only one loss rate for the fiscal year (at the end of the fiscal year) - which shall include the number of items that the Center has reestablished accountability for items reported lost during the fiscal year.

4. Requesting ECN Labels (TAGS)

Express Identification Products, based in San Diego, CA, is the primary company providing barcode labels to NASA. The point of contact to reorder, or to request a quote for the acquisition of ECN Tags, is David Smythe, Dave@ExpressCorp.com, (858) 549-9828 x12, or Tiffany Ojeda, tiffany@expresscorp.com, (858) 549-9828 x13.

Contrary to the Agency’s prior requirements to include alphanumeric characters in the labels (i.e., for Loaned and Leased equipment), new software developments dictate that ECN labels shall contain only numeric characters. Mr. Smythe is aware of this requisite and will fill future Agency requirements with labels containing seven numeric characters.

Centers may still use labels containing alpha characters until mid-May 2011 when MMI is instituted. Alpha characters (letters) will not be allowed in the creation of new EMRs once MMI is implemented.
5. Density and Value of NASA-Held Equipment

Below is the status of NASA-held equipment at the end of FY-10:

**NASA-Held Equipment (Density)**

<table>
<thead>
<tr>
<th>Facility</th>
<th>Density (Thousands)</th>
</tr>
</thead>
<tbody>
<tr>
<td>KSC/CAPPS</td>
<td>4.3</td>
</tr>
<tr>
<td>KSC/SPOC</td>
<td>3.7</td>
</tr>
<tr>
<td>KSC</td>
<td>4.7</td>
</tr>
<tr>
<td>JSC/USA</td>
<td>3.5</td>
</tr>
<tr>
<td>JSC/WSTF</td>
<td>34.2</td>
</tr>
<tr>
<td>SSC</td>
<td>8.9</td>
</tr>
<tr>
<td>MSFC/UniTeS</td>
<td>16.8</td>
</tr>
<tr>
<td>MSFC</td>
<td>22.8</td>
</tr>
<tr>
<td>HQ</td>
<td>2.4</td>
</tr>
<tr>
<td>GSFC/Wallops</td>
<td>3.2</td>
</tr>
<tr>
<td>GSFC</td>
<td>36.0</td>
</tr>
<tr>
<td>DFRC</td>
<td>7.7</td>
</tr>
<tr>
<td>LaRC</td>
<td>27.7</td>
</tr>
<tr>
<td>GRC</td>
<td>18.7</td>
</tr>
<tr>
<td>Ames</td>
<td>19.4</td>
</tr>
<tr>
<td>NASA</td>
<td>301</td>
</tr>
</tbody>
</table>

**NASA-Held Equipment (Value)**

<table>
<thead>
<tr>
<th>Facility</th>
<th>Value (Millions)</th>
</tr>
</thead>
<tbody>
<tr>
<td>KSC/CAPPS</td>
<td>308</td>
</tr>
<tr>
<td>KSC/SPOC</td>
<td>561</td>
</tr>
<tr>
<td>KSC</td>
<td>69</td>
</tr>
<tr>
<td>JSC/USA</td>
<td>60</td>
</tr>
<tr>
<td>JSC/WSTF</td>
<td>1,003</td>
</tr>
<tr>
<td>SSC</td>
<td>164</td>
</tr>
<tr>
<td>MSFC/UniTeS</td>
<td>98</td>
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<tr>
<td>MSFC</td>
<td>534</td>
</tr>
<tr>
<td>HQ</td>
<td>12</td>
</tr>
<tr>
<td>GSFC/Wallops</td>
<td>77</td>
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<tr>
<td>GSFC</td>
<td>626</td>
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<tr>
<td>DFRC</td>
<td>578</td>
</tr>
<tr>
<td>LaRC</td>
<td>433</td>
</tr>
<tr>
<td>GRC</td>
<td>411</td>
</tr>
<tr>
<td>Ames</td>
<td>352</td>
</tr>
<tr>
<td>NASA</td>
<td>10,207</td>
</tr>
</tbody>
</table>
6. Requesting Deviations from the CFR and Agency Policy/Procedural Requirements

The Administrator of General Services Administration grants deviations from the requirements of the FMR, and FPMR. The Agency Property Executive (or equivalent) grants waivers from requirements specified in logistics specific NASA Procedural Requirements or NASA Procedural Directives. When requesting deviation authority, the Supply and Equipment Management Officer (SEMO) forwards the request, with supporting documentation, to:

The Logistics Division (LD) for property/logistics matters only.

Further, deviation requests shall contain the following information:

- A statement of the deviation desired, including identification of the specific paragraph number(s) of the FMR, FPMR, NPR, or NPD;
- The reason why the deviation is considered necessary or would be in the best interest of the Government;
- A statement as to whether the deviation has been requested previously and, if so, circumstances of the previous request;
- A description of the intended effect of the deviation;
- A statement of the period of time for which the deviation is needed; and
- Any background information that will contribute to a full understanding of the desired deviation.

Upon receipt, the Director, LD, will determine whether the deviation request should be granted, sign and return the approved document to the requesting Official/Office or disapprove the waiver justifying the denial and, if applicable, request additional information for reconsideration. All granted deviations are to be approved for one cycle (unless indicated otherwise). Extensions of approved deviations must be requested in writing prior to the expiration of the initial approval.

7. Looking Ahead

There are program topics that the equipment management community continues to address. Some are brought up to our attention as policy requiring update, some as inquiries on common business practices that are not cost effective in the daily operations, and some that are non-compliant with governing regulations. I would like to share with stakeholders the equipment management issues that we are/will be revising for the improvement of the program:

- Continue the analysis of the frequency of inventory campaigns (annual opposed to triennial) and the full transition to annual inventory campaigns in FY-13.
- Analysis of the Agency's sensitive items density (i.e., addition at each of the centers and supporting requests to deviate from App C, per Para 3.6.6.2, NPR 4200.1G)
- Compliance with NASA's equipment dollar threshold for inventory management (Chap 3, NPR 4200.1G)
- Consolidation of Personal Property (Equipment Management) Forms
- Policy revision on walk-through inspections (Para 3.6.5, NPR 4200.1G)
- Continue the policy revision on Retention of Inactive Equipment (Sec 3.6.8, NPR 4200.1G)
- Continue the policy revision on Inventory Schedule (Para 4.1.4., NPR 4200.1G)
NPMA Webinar: Actions to Reduce Lost Property

NASA Headquarters is funding a webinar offered by the National Property Management Association (NPMA). The webinar on “Actions to Reduce Lost Property” will be simultaneously broadcasted to all NASA centers on Wednesday, January 12, 2011, from 2:00 to 3:30 PM, ET.

The training covers the action steps for reducing lost property. Other topics covered during the webinar will include:

- Achieving senior management support for policies and procedures.
- Educating management and users on the importance of the accountability of property.
- Implementing reasonable security measures.
- Investigating circumstances of lost property and how to hold individuals liable when negligence contributes to a loss.

This is a great opportunity for the equipment management community to participate in this 92 minute webinar which will be broadcasted to one location at each of the NASA centers simultaneously.

We encourage the participation of Property Custodians, Equipment Managers, SEMOs, section/division chiefs, and others you may deem appropriate.

Access and pass codes will be provided to each center as we approach the date of the training.

NPMA Webinar: Managing Electronics Disposal: Where is Your Material Really Going?

The disposal of electronic equipment is complex and carries with it several types of risk. This NPMA webinar provides the participant with the tools to evaluate and select a qualified electronics recycling company.

Other topics covered during the webinar will include auditing recommendations and how to investigate “downstream” vendors, as well as federal regulations in regard to safeguarding personal data and how to ensure your organization is compliant and your material is disposed of safely.

This 80 minute webinar will be broadcasted on Thursday, January 13, from 1:30 to 3:00 PM, ET.

Michael Eaton has already sent a meeting invite to PDOs. Please ensure that a conference room is set aside that is large enough to accommodate PDOs, Equipment Managers, IPOs, and other personnel that you deem appropriate.

Access and pass codes will be provided to each center as we approach the date of the training.

NPMA Webinar: Applying Industry Leading Best Practices

NASA Headquarters is also funding a webinar on “Applying Industry Leading Best Practices,” which will be simultaneously broadcasted to all NASA centers on Wednesday, January 19, 2011, from 1:30 to 3:00 PM, Eastern Time.

This webinar provides real-world examples of how leading organizations are leveraging technology to achieve asset management best practices. The onus is now on asset managers to take proactive steps and seek out, create, validate and implement improved asset management practices.

Please ensure that a conference room is set aside that is large enough to accommodate all interested personnel. We encourage the participation of IPOs, PDOs, SEMOs, Equipment Managers and others you may deem appropriate. Time Length: 96 minutes

The attached link provides a description for all three webinars: [http://www.npma.org/Webinars.aspx](http://www.npma.org/Webinars.aspx)
KUDOS

1. RFID Technology implemented at Langley

Langley has taken a significant step to reduce time and resources required to conduct physical inventory by partially implementing RFID technology to manage NASA-held equipment. The primary results, as I witnessed an RFID demonstration at LaRC, are the remarkable reduction of time committed to conduct the physical inventory, and improved accuracy of the system to identify items as these move from one room to another. Last November, the RFID Journal published an article regarding Langley's initiative:

"EPC RFID Simplifies Inventory for NASA's Langley Research Center"

"The research facility uses passive tags to identify equipment and its location, enabling it to cut the time spent taking stock of its equipment from three weeks to one day."

By Claire Swedberg

"Nov. 23, 2010—Since installing an RFID system for tracking 3,000 pieces of equipment at its data center, offices and laboratory, NASA's Langley Research Center has reduced the time required for inventory counts from three weeks to a single day. The system was installed not only to address the challenge of inventory tracking within the facility, but also to ease the process of recording information about equipment taken out for fieldwork. The solution was provided by systems integrator DataSpan using Enasys software to manage data regarding the location of inventoried devices."

For further information you may access the complete article at the following link:

http://www.rfidjournal.com/article/view/8028/2

2. Closure of Pending GAO Recommendations

Kudos to the Equipment Management Community. Thanks to the Centers' prompt response to our data call enabled the Logistics Division to properly prepare answers for pending GAO recommendations from the GAO-07-432 and GAO-09-187 reports.

Centers provided evidence documentation to support previous responses and to prove that survey reports are accurately/promptly prepared and processed.

The GAO auditors reported on December 30th that all of the open recommendations have been closed.

TIP OF THE QUARTER

Non-Controlled Equipment, or administratively controlled equipment, is equipment having an acquisition cost of less than $5,000 (excluding items which have been designated as sensitive items); including equipment acquired and used under outsourcing initiatives and managed under procedures established by the holding center. Each center shall develop internal procedures for managers, custodians, and users on the "what and how" of handling non-controlled equipment. Such equipment is processed with appropriate documentation after receipt.

(Source: NPR 4200.1G, Para 3.1.3)
ARTICLE OF INTEREST

The Physical Inventory Plan – A Road to Success, By Brandon Kriner, CPPM, NOVA Chapter and Lana El-Eryan, CPPS, NOVA Chapter, The Property Professional.


CONTACT US

Your involvement, understanding, and feedback are essential to make the Equipment Management Program a success. Please send us your questions/comments by calling or emailing:

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