National Aeronautics and Space Administration

Logistics Management Newsletter

FROM THE LOGISTICS MANAGEMENT DIVISION

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Welcome. This newsletter is brought to you by the Logistics Management Division (LMD). Its purpose is to keep you abreast of the latest business practices and to share information about ongoing logistics management initiatives and events. It also introduces interim policy letters, which shall be incorporated in forthcoming updates of NASA Procedural Directives and Procedural Requirements.

DISPOSAL MANAGEMENT PROGRAM

Excess Personal Property

As of March 10 of fiscal year (FY) 2016, NASA Centers have disposed of 28,587 disposal cases with a total acquisition cost of $256,647,774 (source: Business Objects, BOBJ). In addition, there are 49,706 disposal cases still pending final disposition. These statistics have remained constant over recent years. Centers must consider multiple venues, utilizing the First-In-First-Out (FIFO) method, to dispose of their excess property in accordance with Federal property laws and regulations and NASA property policies and procedures. According to the FIFO method, goods that are entered into the warehouse inventory first are disposed of first, and newer goods entered into the warehouse inventory are placed at the end of the line for disposition. This means that at the end of a fiscal year, the items that remain on the active inventory list should be those that were introduced into the inventory most recently.

Computers for Learning (CFL)

As of the end of February 2016, NASA Centers transferred to eligible schools in the General Services Administration (GSA) CFL program a total of 75 pieces of computer technology

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with a total acquisition cost of $108,017 (source: GSA Report).

Centers are strongly encouraged to support the CFL program to get a full return of taxpayers' dollars from excessed computers and peripherals and support science, technology, engineering and mathematics (STEM) education outreach. The CFL program evolved as a guide for implementing Executive Order 12999, Educational Technology: Ensuring Opportunity for all Children in the Next Century.

How does CFL work? The CFL Web site enables schools and educational nonprofit organizations to obtain excess computer equipment from Federal agencies. Federal agencies can report their excess computers and related peripheral equipment to GSA through the GSAXcess Web site. Eligible recipients must first register to request the available Federal excess property on the Web site. In order to fulfill registration requirements, recipients must serve some portion of the prekindergarten through grade 12 population and operate primarily for the purpose of education. Schools must provide a valid National Center for Educational Statistics (NCES) number. Educational nonprofits must provide a 501(c) tax identification number. Once registered, eligible recipients can view and request available excess computers and related peripheral equipment. The Federal agency that reported the property can then allocate the property to the school or educational nonprofit organization of its choice. After allocation, the receiving school or nonprofit organization must pick up the property within a certain time period. The school or educational nonprofit organization is responsible for the shipping and handling costs.

GSA Online Auctions Sales

As of the end of February 2016, NASA Centers have netted a total of $654,313.50 in sales proceeds from GSA online auctions of personal property: (a) $134,017.60 net sales proceeds under the exchange/sale authority (source: GSA Report). The sales proceeds under the exchange/sales authority shall be used, in whole or in part, for the acquisition or replacement of property (Federal Management Regulation (FMR) 102-39—Replacement of Personal Property Pursuant to the Exchange/Sale Authority); and (b) $520,295.90 net sales proceeds from the sale of surplus personal property through GSA online auctions. The proceeds from GSA surplus sales can be used to defray NASA expenses related to the sale of the surplus property in accordance with the FMR 102-38.295-300, Disposition of Proceeds, and NASA Procedural Requirement 4300.1C, section 5.5.2, to include:

- Expenses associated with warehouses and storage
- Sales preparation
- Environmental services
- Demilitarization services
- Advertising and appraisals
- Security and transportation of property
- Labor or contract costs related to the sale of the property
- NASA Centers' established overhead rates for these functions

UNICOR Recycling of NASA Excess Federal Electronic Assets (FEA)

The Federal Government has determined that the improper disposal of used electronics may potentially harm human health and the environment. Accordingly, electronic product(s) must be disposed of at the end of their useful life in accordance with all Federal, state, and local laws. NASA and UNICOR entered into an agreement to appropriately dispose of NASA's electronic assets to keep Federal electronics out of landfills. UNICOR is NASA's designated responsible recycler for e-waste at NASA Centers.

In accordance with a report NASA received from UNICOR, in the first quarter of FY16, NASA provided UNICOR a total of

469,756 pounds of e-waste, and UNICOR returned $30,748.71.00 to NASA from its recycling program. At the time of this publication, NASA Headquarters/Logistics Management Division (LMD) has not received the recycling proceeds summary data from UNICOR for the second quarter of FY16.

NASA Employees Can Recycle their Personally Owned Electronic Assets through a U.S. Postal Service Program

The USPS BlueEarth Federal Recycling Program helps participating Federal agencies and their employees reduce the impact that disposing of personally owned electronic assets have on the environment by properly disposing of those items.

Government-owned property must be disposed of in accordance with NASA policy requirements and Center procedures and not through the BlueEarth program.

What makes the USPS BlueEarth recycling program unique is that NASA employees and contractors can put in a request for the USPS to pick up their personally owned electronics from home, free of charge. For this purpose, participants must use the USPS-authorized Web site to register and print out a shipping label. Additionally, the USPS does not provide shipping boxes—participants are required to provide boxes because packaging materials are not provided as part of this USPS initiative. All NASA employees and contractors can review the list of acceptable recycling items on the USPS Web site. They can find out more about recycling their personally owned electronics by visiting the USPS-Clover Technologies partnership Web site at *http://www.fedrecycling.com*.

Kudos

Congratulations to Kennedy Space Center's Disposal Contractors at the Reutilization, Recycling, and Marketing Facility (RRMF)

Source: The Connections, Volume 1, February 2, 2016, "Spotlighting the KSC RRMF Operations."

The Property Disposal team recently received the NASA Group Achievement Award. NASA Headquarters LMD congratulates this great group of people and extends its gratitude to the hardworking RRMF team. Continue to keep up the excellent work that you do, processing all the property from across the spaceport and surrounding areas! Your efforts in support of Kennedy Space Center are greatly appreciated by NASA Headquarters LMD.

Forklift Operator, Carlos Marrou, and his Spotter, Robert Geeraerts, are caught in action at the RRMF.

The RRMF Property Disposal Team—pictured from left (front row): Tim Imka, Patti Cross, Robert Orr, Kenyan Butler, Patrick Wiley; (back row): Michael Rodenbaugh; Joseph Heggs; Harry Landes, RRMF Supervisor; Donald Maddox; and Steve Stawchansky.

ARTIFACTS IDENTIFICATION AND DISPOSITION

NASA's Last Space Shuttle External Tank to Cross Oceans, Los Angeles Streets for Display

Excerpt from collectspace.com and Space Policy News, March 3, 2016

NASA's last surviving external tank built to launch the Space Shuttle is about to embark on its final mission, but instead of rocketing to orbit, the fuel tank will travel by road and ocean to join a retired orbiter on display.

The California Science Center, which last May announced it was ***receiving NASA's External Tank 94*** (ET-94) to mate with the Space Shuttle Endeavour for a new vertical launch pad–like exhibit to open in 2019, has now set the route and dates for the orange-brown tank's move from New Orleans to Los Angeles.

The journey, which will see the external tank pass through the Panama Canal and navigate the streets of Los Angeles, comes almost 3.5 years after Endeavour arrived atop a NASA jumbo jet and completed a similar road trip to the Science Center.

"It is another really significant move and it is another really ***significant piece of the shuttle***," Jeff Rudolph, the Science Center's president and CEO, said in an exclusive interview with collectSPACE.

"It's an incredibly historic artifact, being the last of its kind."

ET-94, the last of NASA's Space Shuttle external tank flight articles, seen at the Michoud Assembly Facility in Louisiana, will journey to Los Angeles for display. (California Science Center/Dennis Jenkins)

Over the course of the 135-mission, 30-year Space Shuttle program, 136 flight-qualified external tanks were produced at the Michoud Assembly Facility in Louisiana. Just one of those tanks, number 94, was not launched and so still exists today to be put on display.

First, though, ET-94 needs to be transported the more than 5,000 miles (8,000 km) from Louisiana to Los Angeles.

ET-94 will travel by barge through the Panama Canal in April before arriving in Los Angeles in May. (CSC/Dennis Jenkins)

Sea Launch

The 154-foot-long by 32-foot-wide (47 by 10 meter) tank is presently at Michoud, located just outside of New Orleans. It is from that facility, where NASA is now assembling parts for its new heavy lift rocket, the ***Space Launch System***, that ET-94 will be loaded on a barge for the ocean segment of its journey.

"The tank will be loaded onto a flat-deck commercial barge on April 10 or 11 and depart Michoud on April 12, weather permitting," said Dennis Jenkins, a former Shuttle engineer who is now the California Science Center's project director for ***Endeavour's display***.

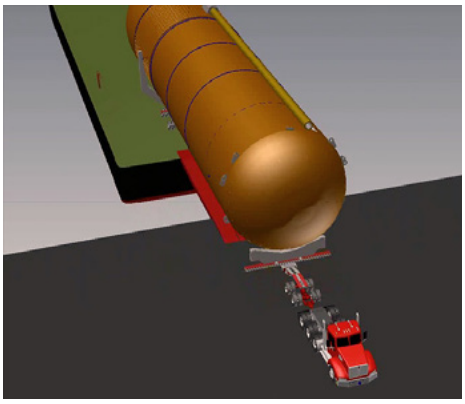
Passing from a river to an ocean tug boat later that same day, the tank will begin its slow tow to the Panama Canal. Traveling at 6 knots, it will take about 2 weeks to reach the passing from the Atlantic to Pacific Ocean.

"Current plans are to go through the canal during the week of April 25, but the exact dates are still being worked out," said Jenkins, who noted that the crossings are for the most part first-come, first-served, and so it can take a few days just to get a slot.

Assuming the canal transit proceeds as planned and the weather cooperates, ET-94 will

arrive in San Diego during the week of May 9. There, it will wait another week prior to leaving for Marina del Rey, where it will be brought ashore on May 19.

Map illustrating the basic path that ET-94 will be barged from the Michoud Assembly Facility outside New Orleans, through the Panama Canal, to Marina del Rey in Los Angeles. (CSC)



Rendering showing how ET-94 will be moved off the barge and through the streets of Los Angeles.

In October 2012, it took ***Endeavour 3 days and 3 nights*** to carefully travel the 12 mile (19 km) distance from Los Angeles International Airport to the California Science Center's Samuel Oschin Display Pavilion. ET-94's road trip will cover 3.5 more miles (5.6 km) but will be done in the course of a day (13 to 18 hours) on Saturday, May 21.

"It is bigger than Endeavour but much easier to move as it does not have wings or a vertical stabilizer," Rudolph said. "The ***wings were really the challenge*** and the desire on our part to save every possible tree. With the external tank, we really do not have that problem because there is nowhere in the route where trees are in the way."

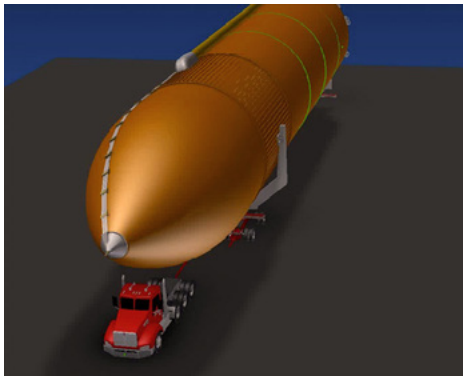
"Those trees and the need to replant so many of them was largely why Endeavour's move cost about $10 million more than the $5 million needed to move ET-94," said Rudolph.

Tank Turnout

Rudolph expects the external tank's move to attract the public from the Los Angeles community at large.

"Were we only moving the tank and this was the first thing we did, it would generate a lot of interest, but it would not generate as much interest as we think it will now," he said. "***After Endeavour's move***, there is a heightened awareness and excitement about everything that we're doing here."

The Science Center has already heard from many of those who were involved in the Shuttle's 2012 move and are now looking forward to taking part in ET-94's move—including the mayor of Los Angeles.



Rendering showing how ET-94 will be positioned on the barge that will transport it from New Orleans to Los Angeles.

"As the world's last surviving flight-qualified Space Shuttle external tank journeys from the coast to its final home, it will inspire a new generation of Angelenos," stated Mayor Eric Garcetti. "We're honored that NASA has entrusted the California Science Center and the City of Los Angeles with this incredible piece of history."

Rudolph acknowledged that ET-94, by itself, is not as iconic as a Space Shuttle orbiter, but he still expects its move to be widely popular.

"Do I think it's going to be as big as Endeavour?" Rudolph said. "No, because first off we are only going to take a day and not 3 days but I think it will still be a big community celebration," he said.

Big Tank, Big Project

Before leaving the dock at Michoud, workers will ensure that all of the tank's openings—where hardware used to be—are sealed to prevent

any saltwater intrusion. The external tank's exposed metal will also be painted to protect it from corrosion. But otherwise, any work needed to prepare ET-94 for display will take place at the Science Center.

"We're going to place ET-94 just to the north of the Samuel Oschin Pavilion, *where Endeavour is now,* and we're going to have a viewing area where people will be able to see it," described Rudolph. "Visitors are not going to be able to go all around it because there is going to be a fair amount of work to be done on it, but we actually think that will be a point of interest."

Jenkins' team at the Science Center will be re-installing all of the feed lines and other hardware removed from ET-94, as well as repairing the insulating foam that gives the tank its orange color.

"There is a fair amount of foam that needs to be repaired," said Jenkins. "North Carolina Foam Industries, the original manufacturer of the foam, is working with us, as is PPG, manufacturer of the primer used on the tank. In addition to repairing the 'acreage' foam, we will need to recreate all of the ice-frost ramps, bipod ramps, PAL ramps, etc. So it's a big project."

Meanwhile, work is expected to get underway this year on the construction of the Samuel Oschin Air and Space Center, where the external tank and orbiter Endeavour, as well as a *pair of twin solid rocket boosters*, will be stacked and put on vertical display.

Architectural concept model of the Samuel Oschin Air and Space Center at the California Science Center slated to open in 2019. (CSC)

"We are still working on the final schedule," said Rudolph. "At this point, we're probably going to be into 2019 when it opens. We have taken our time with the plans to really get it right."

TRANSPORTATION MANAGEMENT PROGRAM

MAXIMO Implementation Reduces NASA Center FAST Reporting Effort

NASA's implementation and use of IBM's "Maximo for Transportation" (MAXIMO) asset management software significantly reduces the level of effort required at each NASA Center to complete their annual Federal Automated Statistical Tool (FAST) report. Since implementation, the level of effort to complete the FAST report has been reduced from "weeks" to a just a few hours.

Background:

In 2013, the NASA Headquarters Logistics Management Division funded a program to transfer contractor-maintained data from each Center into a single system, MAXIMO. MAXIMO provides a single data source for Center-level vehicle data collection that includes inventory, costs, fuel consumption, and maintenance records. The consolidation of disparate contractor data into MAXIMO does not require a contractor to "switch" systems, but allows NASA to collect necessary data to comply with annual reporting obligations to the Office of Management and Budgeting, the Department of Energy, and the General Services Administration, OMB/DOE/GSA.

NASA's implementation of MAXIMO went live in FY15 with the primary goal of electronically transferring data between systems. The purpose of MAXIMO is to eliminate any redundant process or manipulation of data, as data is transferred among data systems. Administrative personnel should

not have to reprocess data once information is entered into a system.

Prior to going live, MAXIMO implementation and development focused on training Center employees on "how to update current vehicle asset identifiers into the MAXIMO database." This phase of the implementation project placed a burden on Center staff; however, the tradeoffs have proven to be well worth the initial training burden.

The major milestone, or return on investment, for the Centers came during the end of FY15 data call to feed the Federal Automotive Statistical Tool (FAST) system. In previous years, it was common for approximately 68 individuals across the Agency to spend 2–3 weeks gathering and manually inputting data into FAST prior to Headquarters review and subsequent submission to OMB/DOE/GSA.

Present Status:

This year, using the functions and features built into MAXIMO, the time commitment required of Center vehicle managers was reduced to between 45 minutes and 2 hours. Data was exported, formatted, and then imported into FAST using pre-developed reports. These pre-developed reports proved to be extremely useful for identifying inaccurate data fields and errors when data was input into MAXIMO, enabling immediate corrections. For example, errors were found when diesel fuel was reported as consumed by a gasoline-powered vehicle. The level of effort to export the data and import into FAST, including correcting errors, took less than a day and a half.

Moving Forward:

Planned software upgrades in 2016 include enabling MAXIMO to support efforts to collect and record transfers from bulk fuel tanks to individual vehicle records. The IT support team at KSC has successfully developed paths for retrieving data from the bulk fuel software programs, and an implementation plan is being developed to replicate the process at all NASA locations. Additionally, Headquarters plans to support the development of MAXIMO software to address other functions, such as including Agency-owned vehicle cost data related to NASA contractor maintenance records and Agency-owned mileage records.

Should these functions be fully developed and integrated with the same level of success that was achieved in FY15, NASA Centers can expect to eliminate the need for Centers to conduct any manual input of FAST data call fields in FY16.

EQUIPMENT MANAGEMENT PROGRAM

NASA Equipment Management Forms Update

There has been significant progress in updating equipment management forms to reflect process changes and standardizing some forms across the Agency. The following is an update of the activity in this area. Additionally, conversations with Center logistics personnel indicates that some Centers are not aware of the Adobe LiveCycle® application, which enables users to track progress on forms supporting equipment management transactions they have initiated. This update provides an introduction to LiveCycle.

NF893, Loan of NASA Equipment

The FY15 September issue of the LMD newsletter outlined the detailed changes to the equipment loan and form completion process. The form is now in production and can be accessed either through the NASA Electronic Forms system or through Adobe LiveCycle.

https://forms.nasa.gov/lc/apps/nasaws/index.html#/startprocess/NF_AgencyForms

NF893 also allows users to attach associated digital forms and documents, such as Space Act Agreements, international agreements, grant authorizations, and exhibit loan requests, among others.

NF598, Property Survey Report

The Property Survey Report form is being updated to reflect changes to the property survey process (Chapter 5, NPR 4200.1, Equipment Management), which have been discussed, via e-mail and teleconferences, with Center logistics personnel. The form will be enabled with Public Key Infrastructure (PKI), an application that allows electronic signing of the document; it will also be 'workflow' enabled, automatically forwarding the document, via e-mail, to the next reviewing authority. The form is in the final requirements incorporation phase and should be in production in April 2016. The form details and 'workflow' will be provided when the form and process are finalized.

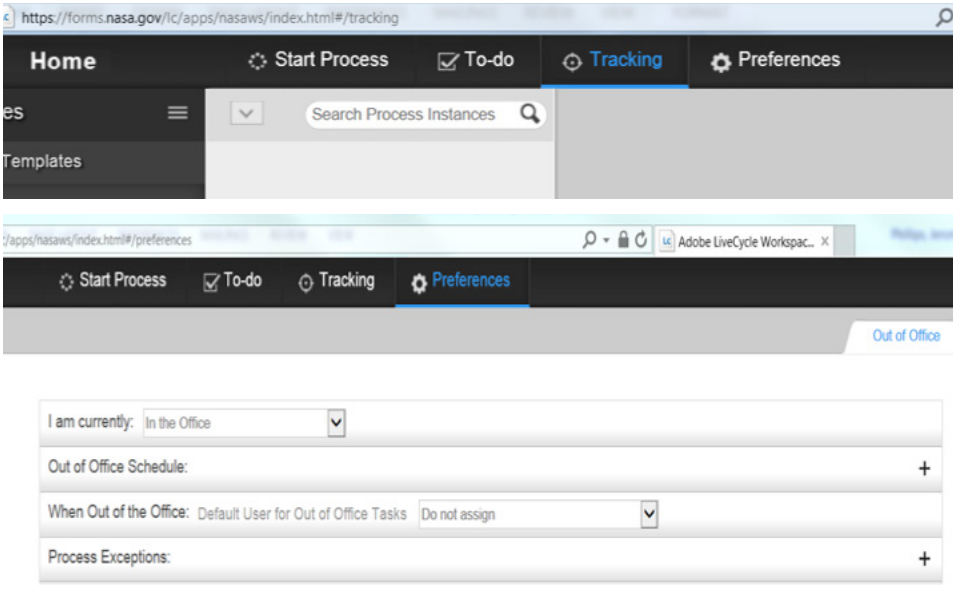
NF894, Property Shipping and Transfer Form

A standardized property shipping and transfer form is being developed. NF894 will be required to document the transfer and shipment of property and will have an optional shipment request component. The transfer component of the form will be launched initially, reflecting the latest changes to property transfer, and the shipment and shipment request portions will be subsequently launched. The final process requirements are being incorporated in the form and a demo will be shared upon completion.

Adobe LiveCycle

This application enables access to NASA forms and also allows users to save forms in progress, track forms through their life cycle, and input personal preferences for managing the forms under the user's responsibility.

The link (*https://forms.nasa.gov/lc/apps/nasaws/index.html#*) must be accessed using Internet Explorer because Firefox and Chrome do not have the proper edition of Adobe Acrobat. Users must be behind the NASA firewall to access the link and will need to provide their NDC login user ID and password. There are four activity selections provided to the user: Start Process, To-do, Tracking, and Preferences.



- **Start Process.** Loads and initiates the desired form
- **To-Do.** Saves forms in progress and identifies forms that require user action
- **Tracking.** Allows user to track the progress of the forms (i.e., documenting a transaction) (See illustration at left.)
- **Preferences.** Allows user to announce 'Out of Office' status and/or delegate signature authority (See illustration at left.)

SUPPLY AND MATERIALS MANAGEMENT PROGRAM

Cataloging Update

Inconsistent property identification processes contribute to equipment loss rates and increase vulnerability to property misuse and misplacement. There have also been recent examples where aircraft were inappropriately identified in the Equipment Master Records (EMR) as models; specifically, the aircraft were categorized as Federal Supply Group (FSG) 69 (model) rather than 15 (aircraft). Such misclassifications present potential regulation violations for dispositioning aircraft and potentially compromise the sale proceeds of the aircraft when they are disposed of as surplus property. Headquarters LMD has been reviewing best practices for property identification and classification (cataloging) across the Federal Government for the past 2 years.

Background:

In December 2013, Center Supply and Equipment Management Officers (SEMO) were asked for their opinions on re-establishing centralized logistics cataloging; there was a 'cataloger' assigned to NASA LMD but defunded over 8 years ago. The SEMO solicitation focused on equipment management and did not extend (in depth) to supplies and materials cataloging. There were several advantages to the enhanced property accountability that cataloging would provide, as well as disadvantages associated with potential delays in property recordation and property transfer to the end user. Subsequent benchmarking within NASA and other Federal agencies (e.g., NOAA, USCG, and DLA) resulted in an endorsement of centralized cataloging. Benchmarking also noted that centralized cataloging could encompass attributes beyond equipment management (e.g., supply and material cataloging, life cycle logistics planning and implementation, and design and configuration management). As an introduction to cataloging and the review findings, the FY15 June LMD newsletter explained the development and use of the National Stock Number (NSN), an established basis for catalog policy and process, which may be institutionalized in NASA logistics.

Moving Forward:

Cataloging is not new to NASA logistics. NPR 4100.1, NASA Materials Inventory Management Manual, establishes a NASA cataloging process; however, this process is narrowly focused and does not address equipment management. The document and material management policies and processes, are currently under review and revision by the newly hired Supply and Materials Program Manager, Peral Hill. Investigative Service Requests (SR) were initiated by the NASA Enterprise Applications Competency Center (NEACC) to establish centralized cataloging for equipment management. NPR 4200.1, Equipment Management, will defer the equipment cataloging process to the updated policy and process to be included in the revised NPR 4100.1.

Contact Us

Your involvement, understanding, and feedback are essential to making the Logistics Management Program a success. Please send us your questions or stories to share by calling or e-mailing:

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