In February 2005, TSA formed an electronics stewardship team that included employees from the Environmental Management Program, the Information Technology Division (ITD), and the Property Management Office (PMO). This partnership was formed to ensure that TSA managed the life cycle of its electronics in the best possible way. The team used the Federal Electronics Challenge (FEC) as their guide to develop their program and worked to improve the practices used in the acquisition and procurement, operations and maintenance, and the disposition of electronics. TSA chose to participate as a Gold-level partner in the FEC in 2007.

Acquisition and Procurement

TSA was created on November 19, 2001 as mandated by the Aviation and Transportation Security Act. Given the nature of its development, TSA had to procure a large number of electronics quickly, many of which were used. In 2006, TSA developed a plan for an agency-wide computer refreshment project since TSA was still using nearly all of the same computers acquired during its initial procurement. Every computer, monitor, and laptop would be replaced at TSA headquarters, the TSA operations center, five mission support centers, and 450 airport operations. The change-out of computers began in September 2006 and was completed in March 2007.

TSA's contract language was modified to ensure that all computers, monitors, and laptops procured were EPEAT-registered. TSA procured Dell-manufactured computers, monitors, and laptops. The models included the 1707FPt desktop monitor; the Latitude D420, D620, and D820 notebooks; and the Optiplex GX620 desktop computer. Each of these products had achieved the EPEAT Silver rating.

In addition to environmentally preferable computers, TSA also procured environmentally preferable printers, copiers, and fax machines. The printers purchased in 2007 were the Hewlett Packard 3800, 4250, and the 4700, all of which are *ENERGY STAR*®-qualified. The copiers TSA leased in 2007 included the Ricoh MP2510, MP3500, MP4500, and MP5500, all of which are EcoLogo compliant (a North American eco-label). The fax machine model purchased in 2007 was the Brother FAX-2920, which is certified by TCO'99 (a Swedish eco-label).

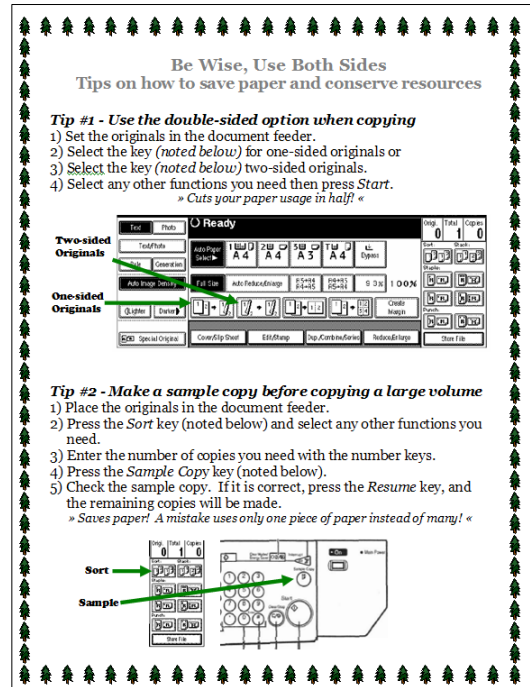## Operations and Maintenance

ITD employs measures to enforce the proper maintenance of TSA's computers. All computers are set to default to "Sleep" mode and users cannot change this setting. ITD also continuously provides the computer network with system upgrades.

In 2007, TSA pushed to improve the operations and maintenance of the computers, monitors, and laptops that were procured in the computer refresh project. To show employees how to best manage their computers and peripherals, TSA developed a bulletin, *Guidance for Electronics Best Management Practices*. The best management practices detailed in the bulletin included encouraging employees to log off their computers when they are not in use and instructing employees in how to use paper-saving options when printing or copying documents. The bulletin also detailed other aspects of TSA's electronics management

processes, including the procurement and disposition of electronics.

TSA's Environmental Management System (EMS) also addresses electronics stewardship. In the past, TSA's Environmental Program had addressed electronics stewardship under the EMS program areas of Recycling and Green Procurement. Because of the growth of the Electronics Stewardship Program, the EMS was modified to include electronics in its own program. An Environmental Management Program (EMP) was written that addresses all aspects and impacts of the use of electronics.

The Environmental Management Program was also successful in encouraging employees to take advantage of the environmentally friendly features of the computers, printers, and copiers to reduce paper waste. A poster detailing how to use the paper-saving options on TSA copy machines was posted in each copy room at TSA headquarters. One set of directions included how to use the double-sided copy function, and another set of directions detailed how to make a test copy of a lengthy document before making multiple copies. TSA also encourages employees to use the double-sided print feature when printing documents.

Be Wise, Use Both Sides
Tips on how to save paper and conserve resources

Tip #1 - Use the double-sided option when copying
1) Set the originals in the document feeder.
2) Select the key *(noted below)* for one-sided originals or
3) Select the key *(noted below)* two-sided originals.
4) Select any other functions you need then press *Start*.
   » *Cuts your paper usage in half!* «

Tip #2 - Make a sample copy before copying a large volume
1) Place the originals in the document feeder.
2) Press the *Sort* key (noted below) and select any other functions you need.
3) Enter the number of copies you need with the number keys.
4) Press the *Sample Copy* key (noted below).
5) Check the sample copy. If it is correct, press the *Resume* key, and the remaining copies will be made.
   » *Saves paper! A mistake uses only one piece of paper instead of many!* «

End-of-Life Management

TSA used two methods to ensure that each and every piece of used electronic equipment was either reused or recycled. During the computer refresh project Dell's Asset Recovery Service (ARS) took back all of TSA's used computers. Dell's ARS refurbished the computers it could and sent them for resale. The remaining computers were recycled.

The computers that reached the end of their first life outside of the computer refresh project went through PMO's disposition process. PMO posts all used electronics for donation on GSAXcess. PMO inputs information about the electronic equipment for donation and the following timeline was given for the interested parties:

1. Days 1-7: Computers for Learning had the first opportunity to make a claim to receive the used electronic equipment.
2. Days 8-21: In addition to Computers for Learning, Federal agencies had the opportunity to make a claim for the donated equipment.
3. Days 22-26: State agencies also had the opportunity to make a request.
4. Days 27-45: GSA put the electronic equipment up for sale to the public.
5. If the computer was not donated or sold, it was sent to UNICOR for recycling in lieu of abandonment.

Each and every hard drive that leaves TSA goes through a very thorough media sanitization process. Most hard drives are wiped seven times using the TSA Standard Approved Wiping Software. The hard drive is wiped at its original location before being transferred to prevent the possibility of data being retrieved in the transfer process. Computers containing a higher level of security sensitive data, such as the computers used by the Federal Air Marshals

Service, undergo a degaussing process. This more rigorous media sanitization method is so thorough that the hard drives cannot be reused, and are therefore recycled.

Outreach

In the past few years the TSA Environmental Management Program has developed a rather extensive outreach program. For events such as Earth Day, America Recycles Day, and Energy Awareness Month, the Environmental Management Program creates display boards, brochures, posters, and articles. Giveaways have included environmentally friendly pens, key chains, note pads, environmental guide wheels, and light bulbs. For Energy Awareness Month in October 2007, electronics stewardship was included as part of the information communicated. A brochure was created that specifically focused on electronics stewardship, and an electronics article was included in an edition of TSA Weekly during the month of October.

To communicate the success story of the TSA computer refresh project, electronics stewardship team members made presentations at multiple environmental and electronics conferences and symposiums. Presentations were given at the Federal Electronics Stewardship Conference, the FOSE Technology Conference, the Federal Environmental Symposium, and the Green Computing Summit.

TSA also mentored fellow Department of Homeland Security components to help improve their electronics stewardship programs. Employees of the Environmental Program helped the Federal Emergency Management Agency create a management directive focused on electronics stewardship. Employees of ITD worked with Immigrations and Customs Enforcement to develop their own computer refreshment project.

Recognition

TSA was recognized for their efforts and received an agency-wide 2007 EPEAT Silver Award. Members of the electronics stewardship committee are pictured below receiving their award at the Federal Environmental Symposium.

Pictured: Andrew Bouie, Karen Nason, Kathryn Jones (TSA); Ed Piñero (OFEE)