

## Information Technology Support in the 8000 Directorate

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My summer internship was spent supporting various projects within the Environmental Management Office and Glenn Safety Office. Mentored by Eli Abumeri, I was trained in areas of Information Technology such as: Servers, printers, scanners, CAD systems, Web, Programming, and Database Management, ODIN (networking, computers, and phones).

I worked closely with the Chemical Sampling and Analysis Team (CSAT) to redesign a database to more efficiently manage and maintain data collected for the Drinking Water Program. This Program has been established for over fifteen years here at the Glenn Research Center. It involves the continued testing and retesting of all drinking water dispensers. The quality of the drinking water is of great importance and is determined by comparing the concentration of contaminants in the water with specifications set forth by the Environmental Protection Agency (EPA) in the Safe Drinking Water Act (SDWA) and its 1986 and 1991 amendments.

The Drinking Water Program consists of periodic testing of all drinking water fountains and sinks. Each is tested at least once every 2 years for contaminants and naturally occurring species. The EPA's protocol is to collect an initial and a 5 minute

draw from each dispenser. The 5 minute draw is what is used for the maximum contaminant level. However, the CS&AT has added a 30 second draw since most individuals do not run the water 5 minutes prior to drinking. This data is then entered into a relational Microsoft Access database. The database allows for the quick retrieval of any test(s) done on any dispenser. The data can be queried by building number, date or test type, and test results are documented in an analytical report for employees to read.

To aid with the tracking of recycled materials within the lab, my help was enlisted to create a database that could make this process less cumbersome and more efficient. The date of pickup, type of material, weight received, and unit cost per recyclable. This information could then calculate the dollar amount generated by the recycling of certain materials. This database will ultimately prove useful in determining the amounts of materials consumed by the lab and will help serve as an indicator potential overuse.

Working with the Glenn Safety Office (GSO), I created a database to track all handicap parking permits (temporary and permanent) lab-wide. Information stored in the database can be queried to check for available and expired parking locations.

Two weeks were spent in July archiving over 2000 paper documents to an electronic filing format. Each individual document was filed based on content and can be searched by key words. Also during July, the GSO underwent a modular furniture upgrade which required certain offices to be emptied. In order to maintain the efficiency of employees affected by this upgrade, network connections were rerouted to available offices and conference rooms allowing work to be continued during this time.

I created fact sheets detailing and documenting some key processes that I have been responsible for over the summer. This will allow other employees to continue using

the same practices and procedures taught to me by my mentor well after my internship is complete.

This summer has been a great experience. The staff of the EMO and GSO made sure that I felt like part of the team as my opinion was sought on numerous occasions. I was given the opportunity to work with minimal supervision and my efforts were always greatly appreciated.