

## **Work Element 400**

**February 2003**

### **Data Systems Development**

***PBC Work Element Manager – David Han***

OBJECTIVE: to define, develop, implement and evolve/enhance the requirements defined by NSSDC government staff relating to data storage, access and performance.

#### SIGNIFICANT EVENTS:

- Continued to support the operations staff with data ingest and archiving as needed.
- Maintained the DIONAS software suite and continued coding on enhancements to it.
- Continued planning of the system and processes to migrate NSSDC data to next generation of media.
- Coordinated with operations group for design and development of enhancements to DIONAS; coordinate software testing in an operational environment.
- Continued to interface with the Database Administrator about operational databases and next generation database designs.
- Continued to interface with NOST and coordinate the development of the next functional version of the NOST-supplied core software for DIONAS.
- Provided representation to the NSSDC Configuration Control Board.
- Completed DIONAS database mod to allow more flexible instructions.

## **Work Element 410**

**February 2003**

### **Data Systems Development**

***PBC Work Element Manager – David Han***

OBJECTIVE: to perform all the necessary, non-personal services required to manage contractor and sub-contractor staff supporting the Operations portion of the Space Science Data Operations Office (SSDOO). The contractor management team will meet with the NSSDC and SSDOO management staff to discuss significant events, updates, issues and concerns from the Operations Group. The Metrics Tracking System will be maintained current.

#### **SIGNIFICANT EVENTS:**

- Held Operations management staff meetings as needed.
- Held meetings with Operations staff as needed.
- Attended Government/Contractor meetings as scheduled.
- Provided representation to the NSSDC Configuration Control Board.
- Reported monthly PBC Metrics for January '03.

## **Work Element 421**

**February 2003**

### **NSSDC Data Ingest**

***PBC Work Element Manager – David Han***

OBJECTIVE: to ingest data into the NSSDC on-line, nearline and offline data archives.

#### **SIGNIFICANT EVENTS:**

- Continued to ingest IMAGE data, received 10 deliveries with a total of 570 files. All were ingested in a timely manner.
- Continued to receive and archive data on physical media, a total of 87 GB on 138 CDs and 3 magneto-optical disks from the FAST, Galileo Orbiter, ISEE 3, ORFEUS-SPAS II, ORFEUS/SPAS, SAMPEX, ASTRO 1 and ASTRO 2.
- Continued to advise the software development team with operational insights for design and development of enhancements to DIONAS; continued to support software testing in an operational environment.
- Continued to support the planning efforts for system and process design to migrate NSSDC data to the next generation of media.
- Continued data processing and ingest for the remaining data from NDADS, including Skylab, OSO-8, IMP-J, and Mariner 10.

## **Work Element 422**

**February 2003**

### **NSSDC Data Ingest**

***PBC Work Element Manager – David Han***

OBJECTIVE: to ensure that the data bundles entrusted to NSSDC are reliably findable, retrievable and usable into the indefinite future.

#### **SIGNIFICANT EVENTS:**

- Environmental monitors were checked each workday. The values recorded were out of compliance on 6 days. The PBC Work Element Manager was duly notified in a timely manner.
- Security was maintained and security procedures followed for the archive storage areas; there were no breaches.
- 5 boxes were shipped out to the off-site facilities at Iron Mountain and the Federal Records Center.
- Continued to advise the software development team with operational insights for design and development of enhancements of JIN; continued to support software.
- Continued to support the planning efforts for system and process design to migrate NSSDC data to the next generation of media.

## **Work Element 423**

**February 2002**

### **Request Coordination and Services**

***PBC Work Element Manager – David Han***

OBJECTIVE: to provide user support and request activities coordination for all data center services.

#### **SIGNIFICANT EVENTS:**

- The following user support was provided: e-mail referrals - 8; telephone - 16; faxes - 2; scientific assistance - 6; support e-mail - 28; data services - 37; special projects - 21.
- A total of 136 shipments were made including 3 Federal Express shipments.
- We've been out of envelopes for posters since October, however, we did receive some tubes and we sent out 100 MW flat posters for February.
- There were 4 MW posters and 1 COBE posters returned in February. The posters are returned for various reasons, mostly due to the recipient moving and not leaving a forwarding address.
- No survey cards were received.
- Staff members continue to inventory all of the NSSDC photo archive data for the eventual creation of an Oracle database of all analog data.

## **Work Element 430**

**February 2003**

### **NSSDC Data Ingest**

***PBC Work Element Manager – David Han***

OBJECTIVE: to provide comprehensive information functionality related to availability of data, to all launched spacecraft and to many spaceborne experiments.

#### **SIGNIFICANT EVENTS:**

- Maintained and updated the NSSDC Master Catalog.
- Maintained and updated JRAND.
- Maintained and updated JEDS and IDA.
- Maintained AIM and TRF and made 440 updates to them.
- No problem reports about the databases were received this period.
- Prepared and issued FILEX report in a timely manner.
- No SATX report was required this period.
- Prepared and issued SPACEWARN report in a timely manner.

## **Work Element 440**

**February 2003**

### **Computing Systems Operations**

***PBC Work Element Manager – David Han***

OBJECTIVE: to provide systems analysis and technical support to the operational computer activities of the NSSDC.

#### SIGNIFICANT EVENTS:

- Continued to maintain existing hardware (servers, Macs, PCs and peripherals) and system-level software – VMS, unix, Mac-OS, Windows, and other operational packages -- to ensure the optimal performance and connectivity. The average availability of systems for February 2003 was 100%.
- Continued to integrate new hardware and system-level software into existing systems to achieve upgraded capabilities and state-of-the-art facilities. Installed new software for disk installation.
- Maintained security of the systems to minimize security breaches. No security breaches were detected in this reporting period. Vulnerabilities detected in routine GISTVST scans were fixed or waived.
- Continued to administer specialized software such as data base and disk management systems. Upgraded Oracle server OS as first step to installation of Oracle 9i.
- Continued to provide users with the necessary documentation, training, and assistance so that resources are fully utilized.