

## **Work Element 400**

**December 2002**

### **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.

## **Work Element 410**

**December 2002**

### **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.
- Recommended revised Operations Metrics.
- Reestablished SSDOO internal courier service.
- Reported monthly PBC Metrics for November and semi-annual metrics for Jun '02 – Nov '02.

## **Work Element 421**

**December 2002**

### **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 9 deliveries with a total of 346 files. All were ingested in a timely manner.
- Continued to receive and archive data on physical media, a total of 83 GB on 94 CDs and 8 magneto-optical disks from Advanced Composition Experiment, Cluster 2, Galileo Orbiter, Geotail, IMAGE, IMP-J, Polar, SAMPEX and Ulysses missions.
- 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 Ulysses/URAP, Skylab, OSO-8 and Mariner 10.

## **Work Element 422**

**December 2002**

### **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 15 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.
- 2 boxes of tapes were recalled from 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**

**December 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 - 10; telephone - 13; faxes - 2; scientific assistance - 4; user support e-mail - 69; data services - 37; special projects - 17.
- A total of 37 shipments were made including 2 Federal Express shipments.
- We've been out of envelopes since October, therefore there were not any posters shipped in December.
- There were 21 MW posters and 1 COBE poster returned in December. The posters are returned for various reasons, mostly due to the recipient moving and not leaving a forwarding address.
- We received 4 hardcopy survey cards. Two were "good", one was "excellent", and one was "acceptable". Not sure what these are at this time because JRAND is down. Will add that information next week when the database is back up.
- We have a request from Belarus that we have been waiting for approval on since 12/02/02. Barbara Pope called Marie Stubbs and she said the person who need to approve it, hasn't yet.
- 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**

**December 2002**

### **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 92 updates to them.
- No problem reports about the databases were received this period.
- No FILEX report was required this period.
- No SATX report was required this period.
- Prepared and issued SPACEWARN report in a timely manner.

## **Work Element 440**

**December 2002**

### **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 December 2002 was 99.53%.
- Continued to integrate new hardware and system-level software into existing systems to achieve upgraded capabilities and state-of-the-art facilities.
- Maintained security of the systems to minimize security breaches. No security breaches were detected in this reporting period.
- Continued to administer specialized software such as data base and disk management systems.
- Continued to provide users with the necessary documentation, training, and assistance so that resources are fully utilized.