IDIMS newsletter
INTERACTIVE DIGITAL IMAGE MANIPULATION SYSTEM
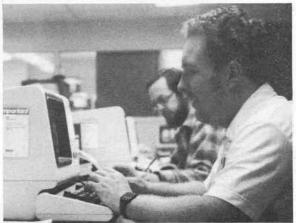
RESOURCE EXPANSION

Imagery Data Systems resources at ESL are being expanded, as our business steadily increases. We increased facility space last year and are focusing on capital equipment and personnel this year.

Available IDIMS computer facility space has been increased over 50 percent. We have a new software development facility for IDIMS R&D. Last year, we also finished a separate test and integration lab where complete IDIMS staging can be performed prior to delivery. And, the field engineering lab dedicated to IDIMS hardware support was expanded.

Two major pieces of capital equipment are being acquired this spring. A VAX 11/780 is joining the three existing HP 3000s in the new software development facility. At the same time, a DeAnza IP 8500 is being installed. A next-generation display, the DeAnza IP 8500 has a multiple-user, interactive work station.

A reorganization set in motion in late 1981 has separated Program Operations and Development into two organizations. An increase in Program Development personnel is planned.

More computer facility space, more capital equipment, and more personnel describe the resource expansion, which is almost complete.

32-bit IDIMS Is Operational

The development of IDIMS based on a 32-bit computer, which began in early 1981, reached an interim operational stage in December. Now undergoing testing at ESL, the 32-bit-based system's IDIMS software conversion and display integration is targeted for first customer delivery by mid-year.

This is the first tier in a hierarchy of advanced spatial data processing systems and transportable image processing software, which was announced by ESL last year.

The VAX 11/780, manufactured by Digital Equipment Corporation, is the computer used for the development.

The first IDIMS-VAX is planned to be installed at its customer destination in the second quarter of 1982. A total of seven IDIMS-VAX systems, some complete and some add-ons to customer-owned VAXs, are under contract for 1982 delivery. Both CSPI and FPS array processors will be delivered on IDIMS-VAX this year.

GEOMIPS UPDATE

A demonstration project in October verified that the Geographic Data Management and Image Processing System is all it was intended to be. Our new product, GEOMIPS, is one of the most powerful data fusion tools to date.

The in-house demonstration brought into common geographic registration multi-source data of the Patrick Draw, Wyoming area. Disparate Landsat, airborne thematic mapper simulator, SAR, and digitized U-2 data were successfully integrated as an exploration data base created by GEOMIPS. Ten days after the project was begun, the resulting database tape was viewed by a GEOSAT group meeting at Sun Exploration Company.

At this point in its development, GEOMIPS' configuration is IDIMS, ERIS, GES, and Data Catalog. Any system composed of IDIMS, ERIS, and GES has the same basic processing capability for multi-source data integration demonstrated in the Patrick Draw project.

Ramsey-Palmer's and Sun Exploration's systems include portions of GEOMIPS. The first complete GEOMIPS will be delivered on a VAX this fall.

Map Fusion

Ramsey-Palmer in Boerne, Texas began using its system in August to encode source maps related to geologic exploration. Managed by Brian Fine, Ramsey-Palmer's system is composed of GES operating software and a complete digitizing and plotter output station based on an HP Series 30.

First in the Field

Sun Exploration Company's IDIMS, which was installed in September, is the first in the field to have the new DeAnza IP 8500 display. The system includes IDIMS, GES, and ERIS software, an ESL ASAP subsystem, a high-speed Telex tape drive, complete digitizing hardware, and an electrostatic dot matrix printer/plotter. Harry Stewart is the system manager for Sun Exploration, which is located in Dallas.

Video Digitizing

The Compact IDIMS HP Series 30 to be delivered to Tenneco Oil and Petroleum Exploration (formerly Houston Oil and Minerals) in Houston this spring introduces a video camera digitizing capability to IDIMS. The system also will have a DeAnza IP 8500 display. Robert Barton is the system manager.

Linked to IBM

Joining Tenneco's IDIMS in Houston this summer will be an image processing subsystem at the Johnson Space Center. JSC's Earth Observation Data Laboratory is adding an ESL/DeAnza IP 8500 with two video display monitors to its IBM-based systems. The system manager is Mike Heidt.

Explorers

Chevron and Mobil have contracted for VAX-based IDIMS. Both oil and gas exploration systems have GIS.

Installation of Chevron's system in La Habra, California is scheduled for July. Dr. Floyd Sabins is the system manager.

Mobil's system is scheduled for a December installation. Managed by Bob Belcher, the system will be located in Dallas.

Sun Exploration Hosted Workshop

The first of several IDIMS user workshops to be offered this year was held in late February in Dallas. The new workshop program is part of the broader scope of support instituted in 1982. And, it is included in ESL's support program at no additional cost.

This first workshop, Advanced IDIMS System Management Techniques, was attended by representatives from nine sites. The three-day session was hosted by Sun Exploration Company, a new member of the IDIMS community. Its system, which was used in the "hands-on" seminar, was installed in August 1981.

Aimed at experienced IDIMS systems managers, it was conducted by ESL personnel using an approach tailored to individual site requirements and "how-to" questions. Topics covered were general system information, MPE operating system details, HP 3000 system management and operation, general IDIMS operation, and IDIMS management utilities.

Tradition Continues

John Vincer, IDIMS field service manager, was awarded custody of a framed superman tie for one year in December. John is the sixth person to receive the traveling tie for being named Imagery Data Systems Superperson of the Year. The 1981 Superperson is quite a traveler himself. Responsible for installations, maintenance, and trouble calls, John has been to all IDIMS sites except two.

A MILESTONE

Those who have put in 15 years with ESL are worthy of note, considering ESL is only 18 years old itself. Two IDIMS managers — familiar to most users — reached 15-year tenure during the last few months. Andy Failla, IDIMS product support manager, joined ESL in 1966, back when postage stamps were five cents and LBJ was president. About three months behind Andy came his boss, IDIMS Operations Manager Pat Hu.

Software Support Program Reorganized

When you received the *December Software Status Report*, perhaps you noticed it was more comprehensive than before. The difference in the report reflects changes in the management and procedures of the software support program, which were instituted last fall.

All open software status reports in our files were examined, and a determination of disposition or resolution of each suggested enhancement or reported problem was made.

With the new procedures, single-point management and additional personnel have been introduced into the software support program. Overall responsibility for the program — software changes and control — has been assigned to a senior IDIMS software engineer, who directs four software engineers. The entire IDIMS software collection has been divided into four functional groups and a software engineer has been assigned to each.

Please Fill Us In

Do you have news about your system, your site, or your applications that you would like to share with other IDIMS users? If so, please contact Andy Failla, MS 101, ESL Inc., 495 Java Drive, P.O. Box 510, Sunnyvale, CA 94086, (408) 743-6152. We welcome your input.

. . . Scripps last year

Among two dozen users representing 14 companies and government agencies at last year's IDIMS Users Group Meeting were Dean Newkirk (front) and Jerry Teter (back) of Water and Power Resources Service. The May 1981 meeting was held at Scripps Institution of Oceanography in oceanside La Jolla, California. Jerry was one of the users who came not only to hear about IDIMS and vendor developments, but also to speak about his IDIMS applications.

Bringing up an oceanographic image for onlooking fellow users was Scripps' Mike Guberek, who was the 1981 Users Group chairman. He and his University of California, San Diego colleagues closed the meeting with a demonstration of Scripps' satellite downlink IDIMS facility.

The Annual IDIMS Users Group Meeting . . .

. . . Goddard this year

NASA Goddard Space Flight Center near Washington, D.C., is the site of this year's IDIMS users group meeting. To be held March 31, April 1, and April 2, the meeting coincides with Washington's Cherry Blossom Festival.

It will be chaired and hosted by Bill Alford of the Eastern Regional Remote Sensing Applications Center at Goddard in Greenbelt, Maryland.

On the agenda are users sharing their applications; ESL personnel speaking about new IDIMS products and demonstrating software developments on Goddard's IDIMS; and vendors presenting new developments applicable to image processing.

The three-day program includes a tour of the space flight center, its satellite control centers, and Landsat-D image processing facilities.

This is the fifth annual IDIMS Users Group Meeting — a forum for information exchange between users, ESL personnel, and vendors. It was first hosted in 1979 by ESL in San Jose, California. In the years since, we've convened at NASA Ames Research Center near San Francisco, EG&G Aerial Measurements in Las Vegas, and Scripps Institution of Oceanography near San Diego.

Shuttle Opens Another Window

While proving itself the first reusable spacecraft, the space shuttle Columbia returned November 14 from its second test flight with its maiden payload.

The cargo bay held an $11.8-million package of five experiments. Their overriding purpose was to evaluate the shuttle's use as a steady platform for Earth-viewing instruments.

Columbia brought back remotely-sensed environmental, land resource, oceanographic, and meterological information, though not as much data as planned. The five-day mission was cropped to two days plus because of faulty fuel-cell generators.

One of the five experiments, Measurement of Air Pollution from Satellites (MAPS), was developed by TRW, ESL's parent company, for Langley Research Center. The other experiments were the Ocean Color Experiment, managed by Goddard Research Center; the Shuttle Imaging Radar-A and the Shuttle Multispectral Infrared Radiometer, managed by the Jet Propulsion Laboratory; and a Feature Identification and Location Experiment, managed by Langley.

Besides MAPS, TRW's involvement in the Space Transportation System includes the S-band communications system, which links most of the signals from the shuttle to ground tracking stations, and a range of software projects, primarily navigation and hazard analysis.

At press time, Columbia is again orbiting the Earth in its third of four test flights.

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