IDIMS Newsletter

TRW

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VAX/SEIS Introduced to Geophysicists

In Atlanta

ESL participated in the Society of Exploration Geophysicist's 54th Annual International Meeting and Exposition, held December 2–6 at the Georgia World Congress Center in Atlanta. At the show, ESL introduced VAX/SEIS, the newest member of the geophysical data management and image processing systems family produced by ESL. (See story, page 2.)

VAX/SEIS, a seismic exploration interpretation system, was demonstrated on a VAX 11/780 CPU/ workstation configuration. The IDIMS and SIDEVIEW packages were also featured. Said Robert Hall, Imagery Data Systems marketing manager, "We were very encouraged by the response to our systems at the conference. Hundreds of people visited our booth and expressed an interest in learning more about VAX/SEIS."

TRW, ESL's parent company, assisted in the production of the booth, and both ESL President Don Jacobs and a representative from TRW corporate headquarters attended the show. Dynamic Graphics Inc. (DGI) of Berkeley, California, participated in the exhibit with ESL. DGI produces a graphics software package, which can provide the surface analysis and presentation products from image and seismic interpretation, such as full color maps and graphs. Said George Hodder, ESL corporate marketing, "Of all the vendors whose demonstrations we observed, ESL was the only one talking about conclusions and end-to-end solutions.'



VAX/SEIS, our new seismic exploration interpretation system, was introduced at the Society of Exploration Geophysicist's International Meeting and Exposition in December in Atlanta.

1985 Users Group Meeting Scheduled

The Eighth Annual IDIMS Users' Group (IUG) Meeting has been scheduled for April 9–11. Given the success of last year's meeting—with its record attendance at Beaver Run convention facility in Breckinridge, Colorado—the 1985 meeting will be held at nearby Keystone Resort and Conference Center. Special rates for Keystone Lodge and condominium accommodations have been negotiated for IUG members.

Said Andy Failla, IUG secretary—treasurer and one of the organizers of the conference, "We hope that all IDIMS users take an active part in the meeting. Presentations, poster sessions, workshops and seminars are all candidates for the agenda."

The theme "Imaging IDIMS" has been selected for the meeting. Said Dave Freeman, IUG Chairman, "We want to encourage presentations on the devices, techniques, and software involved in the production of images and other outputs from IDIMS. However, papers on a wide range of topics will be welcomed." A call for papers has been issued, and all participants should contact one of the IUG officers by March 1.

If you have any questions or comments, please call Andy Failla at ESL, in Sunnyvale, 408.743. 6152, or Dave Freeman at Sun Exploration in Dallas, 214.739. 9618. ●

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Seismic Exploration Interpretation System Is Now Available

ESL recently introduced VAX/SEIS (Seismic Exploration Interpretation System), a fully integrated, menudriven 2–D and 3–D seismic workstation. A natural extension of ESL's work with IDIMS, VAX/SEIS provides the seismic community, as well as other geophysical users, with an interactive interpretation system that takes advantage of the performance of new computer graphics technology and the speed and flexibility of ESL's multiworkstation configuration.

VAX/SEIS is the product of a research and development effort over the past two years, designed to be used by energy explorationists in searching for valuable mineral deposits beneath the earth's surface. Seismic data is processed to provide a view of the complex structural and stratigraphic features of a particular site, which can then be analysed to provide an accurate map of the location and continuity of an oil, gas, coal or other mineral field.

VAX/SEIS is based on a Digital Equipment Corporation VAX host with high-performance imagery workstations dedicated to each interpreter for fast interactive response. This design allows up to 24 interpretation workstations to be served by an individual host. The host provides an ideal environment for data entry, database management, mapping and hardcopy product generation, and eliminates the need for replicating expensive peripherals at each workstation. At the same time, the interactive interpretation functions and seismic databases are off-loaded to the workstations to maximize response time.

VAX/SEIS provides interpretation on all formats of seismic data including time slices, cross-lines, arbitrary lines, and cubes. A comprehensive interpretation database stores both 2-D and 3-D interpretations and attributes with the ability to incorporate additional exploration data, such as well logs and formation tops.

Other advanced features of the system include the integration of a high-quality mapping package with interactive mapping, gridding and volumetric data analysis facilities. Powerful statistical analysis capabilities support the stratigraphic anal-

lysis of seismic attributes, and the user-friendly man-machine interface provides easy-to-use seismic interpretation menus.

Said Robert Hall, marketing manager, "We offer a cost-effective package for all applications, including comprehensive program management training and system support." ESL can arrange a demo on a client's own data using VAX/SEIS. For more information, please call Robert Hall at 408.743.6156.

VAX/SEIS

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SEG is the world's largest oil energy and mineral exposition, with over 1,100 exhibit booths this year. The objectives of SEG are to promote the science of geophysics by providing an international professional forum, informal discussion, and exhibits of new equipment and technology. The 1984 show and meeting featured educational short courses, multimedia cultural presentations, lectures and addresses, workshops, an extensive technical program containing a broad spectrum of geophysical papers, and a research symposium on geophysical methods in production. •

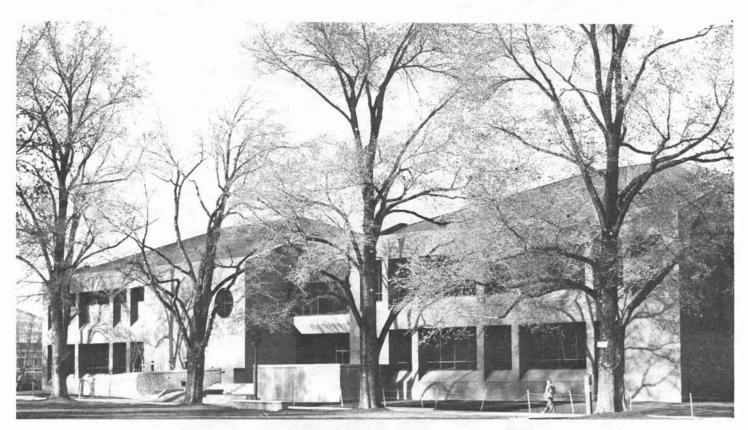
New Software for HP/IDIMS Users

HP/IDIMS Release 4.41 was distributed to software support customers in the last week of January 1985. This release provided approximately 50 bug fixes, enhancements and a new menu to IDIMS software, including documentation. There are over 200 functions in HP/IDIMS, and since its introduction as a standard product, bugs have been reported on less than 20 percent of these. With Release 4.41, all bugs will have been resolved, with the exception of a few display functions.

Although the release emphasizes bug fixes over new features, there are several significant enhancements. The IDENTER function has been modified to allow the analyst to specify the number of images to enter with a single parameter, making it easier to enter large quantities of images from IDTRANS tapes. Also, the warp functions of MAGNIFY, REGIS-TER, ROTATE, and REGCOEFF have been modified for more efficient operation, particularly with larger data sets. Both the HP3000 and ASAP versions of these functions will have improved reliability and faster execution. And, the IDIMS menu has been replaced with a more powerful

version, an important feature for those sites utilizing menu-driven IDIMS.

Originally, Release 4.41 was scheduled to include MPE V, the latest version of the HP operating system. However, the late delivery of the necessary source material set back the distribution schedule to March or April. The next IDIMS software release will be compatible with MPE V and other changes will be kept to a minimum for this release.



Installations

Union Oil

Union Oil Company of California took delivery in December of a VAX 11/780 IDIMS configuration, which has been installed at its research facility in Brea, California. This system will be used to evaluate the applications of image processing to oil and gas exploration. This VAX/IDIMS will incorporate additional new software capabilities as well as a variety of innovative image output devices.

University of Nevada at Reno

The Mackay School of Mines at the University of Nevada at Reno has purchased a VAX-based IDIMS system to be delivered the week of Feb. 25. The system, which uses a standard VAX 11/780 and DeAnza 8500 display, will be used for several ongoing research projects and educational programs.

The Mackay School of Mines, organized more than 100 years ago,

The VAX-based IDIMS soon to be installed at the University of Nevada at Reno will be used for reasearch projects and educational programs.

is internationally recognized as a principal institution for providing a comprehensive education in mineral engineering and the earth science fields. The school recently acquired a new \$6.7 million building and has raised over \$3 million to equip this site with the latest laboratory instrumentation for instruction. The IDIMS system will be located in this state-of-the-art facility, having been purchased partly with a grant from the W.M. Keck Foundation of Los Angeles.

A class on image processing and remote sensing, featuring the IDIMS system, will probably be offered at the university in the fall.

The system will be used primarily by the School of Mines and the computer science and engineering programs. The system will also be available on a timeshare/fee basis to local companies for mineral or energy exploration.

The School of Mines will use the system to do image processing for a number of research projects, including TIMS (Thermal Infrared Multi-

spectral Scanner); the French satellites SPOT-Image I and C; and geological studies for SIR-B (Shuttle Imaging Radar-B) and AIS (Airborne Imaging Spectrometer), both funded through NASA's Jet Propulsion Labs. Working with the dean of the Mackay School of Miles, Dr. James Taranik, and the assistant to the dean, Dr. Tom Lugaski, will be professors and graduate students, including Malcolm Hibbard, Marcus Borengasser, and Sandra Feldman.

Administering the system at the university will be Dr. Lugaski. The ESL program manager is Vern Mastin, and the ESL system manager is Carmen Calderon.

VAX/IDIMS Software Version 10.18 Released This Month

VAX/IDIMS Release Version 10.18 was distributed recently to all IDIMS customers under the software maintenance contract with ESL. Originally scheduled for two weeks earlier, the release was delayed because of hardware problems.

Said Brain Oye, VAX/IDIMS product specialist, "This release represents ESL's continuing effort to improve and stabilize the VAX-based IDIMS." The release contains updates to VAX/VMS, PDP-11/RSX-11M, VAX/IDIMS, the display subsystem software, as well as corrections to the user documentation. The prerequisites of VAX/VMS operating system 3.6 and display subsystem RSX-11M Version 4.1C must be obtained from

DEC by those sites maintaining their own software before installing the release.

The release emphasizes new system, application, and display commands, and major corrections to existing IDIMS array processor application functions, IDIMS 10.18 included major enhancements to GRAB, INIT, DISPLAY, GRAPHICS, READBACK, IMAGE, TR, DSTATE, and PAN; the new system command RESTART; the six new application functions of CANAL, ISH, LOCATE, PICPLOT, RBG and SCATTER; and the new display functions of DFC, MFC, RECALLC, SYMBOL (cursor manipulation functions), MASK, PROFILE, and SCROLL, which includes the ROVE capability;

debugging and testing of ten array processor functions; and resolution of over 50 customer-reported bugs.

The next VAX/IDIMS update, scheduled for distribution in June, will incorporate VAX/VMS Version 4.0.

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Do you have news about your system, site, or application that you would like to share with other IDIMS users? If so, please contact Andy Failla at ESL, 408. 743.6152.

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