COMPUTING FACILITY MONTHLY ACTIVITIES REPORT

October 1976

Class

A beginning FORTRAN class taught by A. McEwen began 4 October.

Documentation

Chapter 2 of the Operating Systems Notes was released in October.

Presentations

G.S. Patterson, Jr. gave a talk on the Cray-1 computer to the UCAR Board of Trustees 11 October.

He gave a talk on the Cray-1 computer and the Ampex mass storage system to the Denver Branch of the American Meteorological Society 19 October.

Remote Job Entry

Three new sites have joined the NCAR RJE network:

    SUNY, Albany, New York
    Tentime, Broomfield, CO
    Desert Research Institute, Reno Nevada

Seminars and Travel

L. Besen attended a Manuals Orientation and Development Seminar and Workshop given by the Manuals Corporation of America in Estes Park, Colorado, 17-21 October.

J. Adams, B. Biro and A. Robertson attended a telecommunications seminar sponsored by Computer World in Denver 19-20 October.

A. Robertson attended a Modem Seminar sponsored by International Communications Corporation in Miami, Florida, 5-8 October.

M. Trembour attended the annual conference of the American Society for Information Science in San Francisco 2-9 October.

F. Walden visited CETEC Corporation, Vought Camera Division, to review plans for a camera the division is building for NCAR.

D. Kitts attended an ICASE seminar at Langley Research Center, Hampton, VA, 20-22 October.

B. Domenico made a site visit to the South Dakota School of Mines and Technology, Rapid City, on 19 October.

P. Swarztrauber attended a SIAM meeting in Atlanta, GA, 18-20 October.

R. Jenne traveled to Baltimore, MD, 25-29 October, to speak with individuals at NESS and NASA regarding satellite data.

Systems

The Ampex MSD was placed on line for a few periods during October. These included:

Oct.	19	07:20 - 15:00	45 vols. descended
	21	07:27 - 11:52	106 vols. /4 ascended
	26	07:00 - 09:00	24 approx.

On 19 October the system was set to automatically descend only those volumes which were staged out by users at the end of their jobs. On the 21st we set the system to descend volumes that were staged in as well as out. This resulted in increased traffic. A few of these volumes were successfully brought back from the MSD. At the present time we have no mechanism to log volumes that were revised during periods when the mass store is off-line for software development or maintenance. This will be added during November. It will allow us to correct the master file after these off-line periods and allow us to build a significant information base on the MSD even though it is not in continuous operation. During the rest of the month all activity centered around hardware/software debugging and development.

A TMS-4 review meeting was held at NCAR on 22 October. Most of the day was spent gathering information about the master file directory so that a reasonable backup can be planned. Pete Butler of SDC gave an informal presentation on the data management system. Two major software items remain a) the master file directory recovery, and b) the dispersal of data from the log tape to a production tape.

The Cray to CDC 7600 interface protocol has been worked on extensively. The interface level protocol is about 90% complete. The necessary modifications to the 7600 operating software that will be needed to drive the interface have been roughed out and will be developed fully in November. This protocol has been studied and revised so that it will also be usable between the switching computer and the CDC 7600 and the CRAY-1.

The Switching Computer has undergone a name change to the Network Control Computer. The statement of work for our request for proposal document has been revised several times during October and is nearing completion. A benchmark program for this RFP is being designed.

Work is proceeding on the testing and implementation of the following items:

a) the system editor described in the MSD document
b) the revised system with unified I/O and PLIB implemented on the MSD
c) the *VOLUME,*OPEN control cards described in the MSD document
d) the FORTRAN compiler's data statement modified to FORTRAN IV specs.
    and the FORTREV versions of IMPLICIT,PARAMETER,DO and character string.

Visitors

Visitors to the Computing Facility during October included the following:

Messrs. Ingram and McCoy of the Controlled Thermonuclear Reaction (CTR) Project Office of ERDA, 1 October.

Messrs. Bruijnes, Fuss, Fitzgerald, McCardle, and Layton of the CTR Computer Center at Lawrence Livermore Laboratory, 1 October.

Messrs. Hassan, El Sawy, and Khalil of the Egyptian Meteorological Authority, Cairo, 5 October.

Messrs. Barkan, Peleg, and Wolsson of the Israeli Defense Forces, Tel Aviv, 8 October.

Mr. Baswell of the Ballistic Missile Defense Program, Mr. Pessoney of Analyst International Corp., Messrs. Wunderman and Christiansen of Teledyne, and Mr. Parker of McDonald-Douglas, 28 October.

APPLICATIONS RECEIVED IN OCTOBER 1976

Scientist	Title	CRU Requested
Wilford G. Zdunkowski University of Utah	Radiative transfer in radiation fog	15,000
Masato Murakami Florida State University	Investigation of deep convective activity associated with large-scale disturbances	15,000
W. R. Peltier University of Toronto	Post glacial sea levels	24,000
Tsutomu Takahashi University of Hawaii	Warm rain electricity in axi-symmetric cloud	27,000
Frederick G. Fernald University of Denver	Stratospheric aerosol monitoring	6,200
A. I. Stewart LASP/University of Colorado	Horizontal transport of thermospheric nitric oxide	6,000
Th..as Opar University of Colorado	Hydrodynamic dynamo models	200[1]
Gary L. Aschtemeier University of Illinois	Variational initialization of atmospheric fields	10,000
Randolph H. Levine Harvard College Observatory	Harmonic analysis of the solar magnetic field	15,000
R. C. Srivastava University of Chicago	Radar hail detection	20,000[1]
Harry T. Ochs/Peter H. Hildebrand Illinois State Water Survey	Evaporation of rain	5,000

[1]Extension to previously approved project.

COMPUTER RESOURCES GRANTED DURING OCTOBER

Scientist	*Title*	*CRU Approved*
Masato Murakami Florida State University	Investigation of deep convective activity associated with large-scale disturbances	10,000
A. I. Stewart LASP/University of Colorado	Horizontal transport of thermospheric nitric oxide	6,000
Thomas Opar University of Colorado	Hydrodynamic dynamo models	200[1]
Robert E. Stencel University of Michigan	Synthetic spectra of stellar HK calcium wing emission lines	7,500
John J. De Luisi NOAA/ERL	Inversion of UV skylight spectral intensity for ozone profiles and trends	9,000
Paul A. Bernhardt Stanford University	Digital filtering of electron content data	9,000
Lance W. Jayne M.I.T.	Stratified flow past a cylinder	20,000

[1]*Extension to previously approved project.*