ISD NEWS AND VIEWS

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DEPARTMENT OF ADMINISTRATION
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PLEASE RETURN
DATA COMMUNICATIONS

Data communication is probably the fastest growing segment of ISD's business. Communications is a very complex business due to the number of components and vendors involved. We at ISD are constantly striving to maintain or improve our record of service.

We really need the cooperation of the user community to continue our high level of service. This cooperation with our users is particularly important for new equipment installations and changes to existing equipment.

Hooking up new equipment can take as long as 48 working days (2 1/2 calendar months), or can be as short as one week, so it is critical that ISD be cognizant of your plans as early as possible in the purchasing/ordering cycle. This gives us the opportunity to order phone lines, modems, etc. or make necessary software changes. As the network expands, please try to keep us informed as early as possible.

If you have any questions regarding data communications, or would like any help with data communication additions, please contact Dennis Sheeline at the Telecommunications Bureau (444-2860).

INFORMATION CENTER PHONE NUMBER

The Information Center Bureau has a new central phone number (444-2973). Call this number for information on spreadsheets, microcomputers, word processors, end-user computing support, other application packages, and training.

Call the HELP Desk (444-2860) for production problems such as lost output or tape problems.

Call Network Control (444-2595) for problems or questions concerning online, remote job entry, or general communications problems.

If you are not sure where to call, call the HELP Desk (444-2860).

PERSONNEL CHANGES

Randy Holm from Data Base Management and Sheila Morasko from User Services have joined the Information Center staff.

Frances Greene from Network Control has moved into Production Services. She will be working on DMS (Disk Management System) and the online dataset authorization system. If you have a questions on the new system, please call her (444-2860).
ONLINE DATASET AUTHORIZATION INFORMATION AVAILABLE ON ISDINFO

ISDINFO has been updated to reflect the addition of the online dataset authorization system.

- From the State of Montana Map:
  - Type ISDINFO and press the enter key
- From the Topic Selection Menu:
  - Select option 3 - major service subysytems
- From the Major Subsysytems Menu
  - Select Option 12 - DMS (Disk Management System)
- From this menu, select the option of the information you need.

SDSF

Q will soon be replaced with SDSF (Spool Display & Search Facility). The target date for this change is August 4, 1984. Watch broadcast messages for the exact date.

SDSF works within SPF and allows you to split the screen. It allows you to display output using the PF keys and commands of SPF.

Perhaps the easiest way to get used to SDSF is to look at the most useful Q functions and explain how SDSF handles them.

The following are grouped according to their usefulness to a typical user:

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Function Discussions

DA

Since everybody always wants everything yesterday, we use the display of active tasks to know the moment a job is done. While the commands are identical under Q and SDSF, the operation is quite different and reflects a fundamental difference in approach between the two (See note 1).

STATUS

The Q status command comes closest to acting like an SDSF command in that it displays only those jobs starting with the user's logonid. Oddly enough, SDSF has no functional equivalent—that is, something to show status information of all jobs the user has in the system. SDSF forces you to choose among active, input, output or held displays. Use the TSO status command if you're at the TSO READY. From SPF or SDSF, you have to make an educated guess as to which display will tell you what you need to know.

DI

Display input. "I" command in SDSF. Same function as Q. See notes 1 and 2.

DO

Display output. "O" command in SDSF. Same function as Q. See notes 1 and 2.

HO

Display held output. "H" command in SDSF. Same function as Q. This is one case where a default prefix restriction is really a good idea. Who cares that there are 978,246 lines of held output when only 127 lines are yours?

CAN,PURGE,DEL

CANCel (with purge of output) jobs which are executing or in the input queue.

PURge jobs on the output queue.

DELeete held output.

These functions become considerably easier under SDSF. When displaying active, input, output, or held jobs, simply put a "C" for cancel or "P" for purge in the "NP" column in front of the job and it will go away after pressing enter. (For input or active tasks you must use 'C' to cancel the job and 'P' to purge the output cre-
ated by cancelling it. Compare this to having to specify the JOBNAME(JOBNUMBER) in a command string for each job.

- **REQ**

To requeue output from one class to another in SDSF, type "0" in the "NP" column and the new class in the "C" column and press enter.

- **JCL, JLOG, JMSG, LIST, DD**

These Q functions are grouped together because there is no clear equivalent in SDSF. The JCL, JLOG, and JMSG datasets are included in the output displays of SDSF but may not be individually addressed directly.

You must first use the "H" command of SDSF to list your held output. Then type an "S" in the "NP" column next to the job for which you wish to display the JCL, JLOG, or JMSG dataset. When enter is pressed, the three will be displayed in a body. You may use PF8 to scroll through them a page at a time, or use "NEXT" to skip to the start of the second or successive datasets in the series. SPF functions such as "FIND", "TOP", "BOTTOM" are also active to shorten search time.

Note that typing the "S" in the "NP" column is the equivalent of the "LIST" command of Q except that you may not select a specific dataset ID first. This listing function (typing "S") is valid on all SDSF modes except LOG, which is already a listing.

The lack of a DD command in SDSF is perhaps the major drawback as far as scanning your data is concerned. You must either know something unique in your datasets to search for or advance through everything to get there.

Some things that may make this easier to do:

- Code "NEXT" and "PREV" on unused PF keys to avoid keying these commands.

- Use "FIND" and the repeat find key to look for specific information such as condition codes.

**Notes**

**Note 1.**

In Q, the assumption is made that you want to see everything that is going on. The default for most Q commands is to display everybody's jobs when a command is issued. SDSF assumes you are primarily interested in the status of your own jobs but does allow you to look at all jobs by using its "PREFIX" command (note 2).
Note 2.

The default for SDSF commands is to show you information pertaining only to those jobs which start with your TSO logonid. To look at anything else, you must issue the "PREFIX" command. PREFIX by itself actually removes the prefix restriction and displays all jobs. "PREFIX logonid" resets to the default. A handy use of the prefix is to give a short prefix such as the first four characters of a system or series of jobs you have submitted.

One point to remember in using PREFIX is to press ENTER twice after typing the desired prefix.

Note 3.

JCL on your output is divided into 3 parts. From the beginning of the JCL, you'll have to enter "NEXT 3" to get to the first DD statement.

If you have problems with SDSF, call the Information Center (444-2973).

CICS AND ATMS HOURS

Production DAY CICS is active from 6:00 a.m. to 5:30 p.m. Monday through Friday. Production NIGHT CICS is active from 5:30 p.m. to 5:00 a.m. Monday through Friday. On weekends, Production NIGHT CICS is active from 5:30 p.m. on Friday to 5:00 a.m. on Monday morning. Form 74's must be used for adding files to Production NIGHT CICS. These are available from the HELP Desk.

TESTCICS is active from 6:00 a.m. to 6:00 p.m. Monday through Friday. Form 74's are required to add or delete TESTCICS files and to request weekend operation or extend hours during the week.

ATMS (Advanced Text Management System) is active from 6:00 a.m. to 10:00 p.m. Monday through Friday and all weekend.

SAS UPDATE

ISD has recently installed SAS (Statistical Analysis System) on the computer system. Our aim is to provide full support for a product which can be used for many of the data processing needs of the people who are not data processing professionals. The following excerpt from the SAS manual explains more of what SAS is and can do.
SAS is a computer software system for data analysis. Since its beginning in 1966, the goal of SAS has been to provide data analysts one system to meet all their computing needs. When your computing needs are met, you are free to concentrate on results rather than on the mechanics of getting them. Instead of learning programming languages, several statistical packages, and utility programs, you only need to learn SAS.

The letters SAS are an acronym for Statistical Analysis System, and SAS was originally developed for statistical needs. It grew into an all-purpose data analysis system in response to the changing needs of its user community. The basic SAS system provides tools for:

- Information Storage and Retrieval
- Data Modification and Programming
- Report Writing
- Statistical Analysis
- File Handling
- Information Storage and Retrieval

SAS reads data values in virtually any form from cards, disk, or tape and then organizes the values into a SAS data set. The data set can be combined with other SAS data sets using the file-handling operations described below; it may be analyzed statistically; and reports on its contents may be produced. SAS data sets are automatically self-documenting, since they contain both the data values and their descriptions. The special structure of a SAS data library minimizes maintenance.

- Data modification and programming

A complete set of SAS statements and functions is available for modifying data. Some program statements perform standard operations such as creating new variables, accumulating totals, and checking for statements. The data-handling features of SAS are so valuable that SAS is used by many as a data base management system.

- Report Writing

Just as SAS reads data in almost any form, it can write data in almost any form. In addition to the preformatted reports that SAS procedures produce, SAS users can design and produce printed reports in any form, as well as punched cards and output files.

- Statistical Analysis

The statistical procedures in SAS are among the finest available. They range from simple descriptive statistics to complex multivariate techniques. Their designs are based on the belief that you should never need to tell SAS anything; it can figure out by itself. Statistical integrity is thus accomplished by ease of use. Two
especially noteworthy statistical features are the linear model procedures, of which GLM (General Linear Models) is the flagship, and the matrix procedure, which gives users the ability to handle any problem that can be expressed in traditional matrix notation.

o File Handling

Combining values and observations from several data sets is often necessary for data analysis. SAS has tools for editing, subsetting, concatenating, merging, and updating the data sets. Multiple input files can be processed simultaneously, and several reports can be produced in one pass of the data.

Computer work usually involves related chores: data sets must be copied, tape contents investigated, program libraries moved. To help users cope with these needs, SAS includes a group of utility procedures.

Note: Not all the features mentioned in this excerpt are installed at ISD.

ISD will be offering SAS classes in September. See the "Class Schedule" on page 9. We also have a video course available. Contact the Information Center (444-2973) for details.

IBM 4381 COMPUTER

An IBM 4381 Computer System arrived the last week in July. The computer hardware and software will be tested for at least two months.

Two primary uses of this machine will be:

o Network control for the Department of Justice
o Additional CPU (Central Processing Unit) to alleviate the overload of the central computer system

ALTER, TESTCICS, TESTIDMS are scheduled to run on the new computer system.

BUSINESS MAIL PREPARATION GUIDELINES

The United States Postal Service (USPS) has prepared a booklet to assist business mailers in making their letter size mail compatible with new automated USPS postal processing system. The new system makes use of high speed Optical Character Readers (OCRs) and small Bar Code Sorters (BCSs) to make mail processing more efficient and consistent. Postal customers are encouraged to take advantage of the benefits of the new equipment so that USPS can keep rates as low as possible. Data processing systems that produce output to be mailed should incorporate the
recommendations to make most effective use of the new USPS equipment. The name of the booklet is *A Business Guide to Mail Preparation*. The publication number is 25, dated March, 1984. It can be obtained by writing the Helena Post Office.
INTRODUCTION TO LOTUS 1-2-3 (OA12): presented by Ron Heilman of the Information Center

LECTURE: August 21, 1984
TIME: 8:30 a.m. to noon
PLACE: ISD Education Center, Room 14, Mitchell Building

LABS: August 21 and August 22
TIME: August 21 from 1:00 p.m. to 5:00 p.m. August 22 from 8:00 a.m. to noon or 1:00 p.m. to 5:00 p.m.
PLACE: ISD Education Center, Room 14, Mitchell Building

COST: $50.00
LIMIT: 12
PREREQUISITE: None
CANCELLATION DATE: August 8, 1984

This lecture will be followed with three half-day labs with four persons per lab. Labs will be given on August 21 from 1:00 p.m. to 5:00 p.m. and on August 22 from 8:00 a.m. to noon or 1:00 p.m. to 5:00 p.m.

INTRODUCTION TO LOTUS 1-2-3 (OA12): presented by Ron Heilman of the Information Center

LECTURE: September 6, 1984
TIME: 8:30 a.m. to noon
PLACE: ISD Education Center, Room 14, Mitchell Building

LABS: September 6 and September 7
TIME: September 6 from 1:00 p.m. to 5:00 p.m. September 7 from 8:00 a.m. to noon or 1:00 p.m. to 5:00 p.m.
PLACE: ISD Education Center, Room 14, Mitchell Building

COST: $50.00
LIMIT: 12
PREREQUISITE: None
CANCELLATION DATE: August 30, 1984

This lecture will be followed with three half-day labs with four persons per lab. Labs will be given on September 6 from 1:00 p.m. to 5:00 p.m. and on September 7 from 8:00 a.m. to noon or 1:00 p.m. to 5:00 p.m.

This course is designed for anyone with little or no previous 1-2-3 or microcomputing experience.

Introduction to LOTUS 1-2-3 will concentrate on 1-2-3 spreadsheet commands, design and basic what-if analysis. The more advanced features such as macro programming, one and two-way sensitivity analysis tables and database commands will be covered in detail in the advanced course.
LOTUS 1-2-3 Advanced Features (OA21): presented by Ron Heilman of the Information Center

LECTURE: September 25, 1984
TIME: 8:00 a.m. to noon
PLACE: ISD Education Center, Room 14, Mitchell Building

LABS: September 25 and September 26
TIME: September 25 from 1:00 p.m. to 5:00 p.m. September 26 from 8:00 a.m. to noon or 1:00 p.m. to 5:00 p.m.
PLACE: ISD Education Center, Room 14, Mitchell Building

COST: $50.00
LIMIT: 12
PREREQUISITE: Introduction to LOTUS 1-2-3 (OA12) or equivalent
CANCELLATION DATE: September 10, 1984

This lecture will be followed with three half-day labs with four persons per lab. Labs will be given on September 25 from 1:00 p.m. to 5:00 p.m. and on September 26 from 8:00 a.m. to noon or 1:00 p.m. to 5:00 p.m.

This course is designed for anyone who is using 1-2-3 for basic spreadsheet work. The more advanced features such as macro programming, one and two-way sensitivity analysis tables and data base commands will be covered in detail.

BASIC SKILLS (CSD12): presented by Wendy Wheeler of the Information Center

DATE: August 28, 1984
TIME: 8:30 a.m. to 4:00 p.m.
PLACE: ISD Education Center, Room 14, Mitchell Building
COST: $25.00
LIMIT: 8
PREREQUISITE: 3270nd (IIS class on terminal operation)
CANCELLATION DATE: August 21, 1984

Learn the basics of using a computer terminal. Become confident manipulating data using the SPF editor. Learn how to use the more common SPF Utilities. Know how to check your job status and output using SDSF.

This course is a prerequisite for many other ISD classes.

Any agency with 8 people needing the Basic Skills class can have one set up to meet their own schedule. Call Wendy (444-2973) for scheduling and customization.
SAS BASICS FOR USERS (CSD31): presented by Gary Wulf of the Information Center

DATES: September 10 to September 14
TIME: 8:30 a.m. to 4:00 p.m.
PLACE: ISD Education Center, Room 14, Mitchell Building
COST: $300.00
LIMIT: 10
PREREQUISITE: Basic Skills (CSD12) or equivalent terminal proficiency
CANCELLATION DATE: September 4, 1984
INTENDED AUDIENCE: users with no previous SAS experience who need a working knowledge of the basics of SAS.

This class introduces the SAS base product, including:

- Overview of SAS capabilities and uses
- SAS Language
- How SAS handles data
- Writing SAS programs
- Executing SAS programs on our system in batch
- Running SAS interactive sessions under TSO.
- Job Control Language (JCL) necessary to run the basic SAS batch procedure and to make the most needed modifications to the procedure.

SAS BASICS FOR PROGRAMMERS (CSD32): presented by Gary Wulf of the Information Center

DATES: September 18 to September 20
TIME: 8:30 a.m. to 4:30 p.m.
PLACE: ISD Education Center, Room 14, Mitchell Building
COST: $250.00
LIMIT: 10
PREREQUISITE: Basic Skills (CSD12) or equivalent terminal proficiency, a programming language or statistical language, Introduction to JCL (CSD41) or equivalent JCL experience, and an understanding of data processing concepts.
CANCELLATION DATE: September 11, 1984
INTENDED AUDIENCE: computer programmers or statisticians already familiar with terminal use, data processing concepts, IBM OS/MVS JCL, and either a programming language or statistical system such as SPSS or BMDP.

This class covers the same subjects as CSD31 in a shorter time because the audience already knows most of the DP related topics.
INTRODUCTION TO JCL (CSD41): presented by Gary Wulf of the Information Center

DATES: August 13 to August 16
TIME: 8:30 a.m. to 3:30 p.m.
PLACE: ISD Education Center, Room 14, Mitchell Building
COST: $150.00
LIMIT: 10
PREREQUISITE: Basic Skills (CSD12). A programming language is helpful but optional.
CANCELLATION DATE: August 6, 1984
AUDIENCE: programmers, I/O controllers, statisticians, or users of report-writing software who submit jobs on ISD’s system.

This course will cover:

- Syntax and coding of IBM JOB CONTROL LANGUAGE (JCL)
- MVS operating system
- How to handle datasets and device assignments
- Some of the IBM utilities
- Troubleshooting and interpreting system messages
- Hands-on experience writing and executing JCL.

INTRODUCTION TO dBASEII (OA13): presented by John Heinrich from OPI (Office of Public Instruction)

DATES: August 27, 29, 31
TIME: 9:00 a.m. to 11:00 a.m.
PLACE: ISD Education Center, Room 14, Mitchell Building
COST: $50.00
LIMIT: 12
PREREQUISITE: Access to equipment running dBASEII is necessary for assignments between classes.
CANCELLATION DATE: August 20, 1984

Learn the basics of dBASEII. Course will cover creating and maintaining data files, information retrieval without programming and use of the report generator.

INTRODUCTION TO MICROCOMPUTERS (OA01): presented by Dave Marshall of the Information Center

DATE: September 25, 1984
TIME: 8:30 a.m. to 4:00 p.m.
PLACE: Room C209, Cogswell Building
COST: $50.00
LIMIT: 50
PREREQUISITE: None
CANCELLATION DATE: September 15, 1984
This course will acquaint managers and professionals with the microcomputer and its use. The course will attempt to provide an overview of the entire microcomputer field with emphasis on the business-scale single user microcomputer systems. Topics to be discussed include: Hardware components and their interaction; operating systems and languages; application software; typical uses, communication capabilities and problems and limitations of microcomputer.

Please call the Wendy or Sheila (444-2973) if you have any questions on the schedule.

To register for classes, please complete the following enrollment form and return it to Information Services.

    FULL CLASS FEE WILL BE BILLED TO THE REGISTRANT UNLESS CANCELLATIONS ARE MADE BY THE DEADLINE LISTED FOR EACH CLASS.
ISD ENROLLMENT APPLICATION
(FOR ALL COURSES)

PLEASE COMPLETE THE FOLLOWING APPLICATION AND RETURN
TO COMPUTER SERVICES DIVISION

COURSE: ______________________________________

DATE: ______________________________________

STUDENT(S): ______________________________________

AGENCY: ______________________________________

PHONE: ______________________________________

ISD BILLING NO: __________________________

SOC SEC NO (FOR P/P/P): __________________________

AUTHORIZED SIGNATURE: __________________________

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