



STANFORD  
MEDICAL  
CENTER

# Computing Newsletter

Published Irregularly by the ACME Staff

Vol.11, No. 6

February 13, 1973

## CONTENTS

Item	Page
1. New Medical Center Computing Facility.....	1
2. ACME Datafile Compression.....	1
3. Revised ACME Operator Schedule.....	1
4. Comments from ACME Users.....	2
5. SIGBIO Colloquium on Time-Oriented Medical Records.....	2
6. New Seminar Series.....	2
7. Personnel Changes.....	2
8. Changes in PUBLIC Program DATACOPY.....	3
9. Use of LF or INDEX Key.....	3
10. New and Revised Linear Regression Programs on PUBLIC File.....	3
11. Long Print Job Problem.....	3
12. New and Revised Notes Since Newsletter J-48 (Dec. 20, 1972).....	4

1. New Medical Center Computing Facility:

On January 30, 1973, Dr. Clayton Rich, Vice-President for Medical Affairs, decided to form a new computing facility to serve Stanford Medical Center. The existing Hospital Data Processing and ACME facilities will be merged. Current plans call for installation of an IBM 360/65 before mid-August 1973.

The services to be offered on the new facility will include interactive PL/ACME terminal support, batch services for data processing and research support, some small machine communications, and the capacity to provide additional services to the entire Medical Center community. Low data rate realtime data acquisition services could be offered if sufficient demand were expressed by present or future users; these services would probably be based on use of the IBM 1800 processor using the existing software.

The new facility will be located in the space now occupied by Hospital Data Processing. Over the next several months, much work will be done to modify the building and to provide the necessary communications, cabling, and multiplexing between the ACME Machine Room and the new machine room.

Many details remain to be worked out. These include organizational structure, systems software implementation planning, further hardware planning, etc. Additional details will be provided soon in a newsletter to be published by the new facility.

R. Jamtgaard

2. ACME Datafile Compression:

A new option has been added to the ACME file system to compress data files. Zeroes, undefined values, and repeated words are represented by 2 bits instead of 32 bits. Savings of 500% have been achieved in some large files. See ACME Note FILCMP.

F. Germano

3. Revised ACME Operator Schedule:

We plan to reduce the number of hours during which the ACME Machine Room will be manned during the day in order to reduce our current operating costs and provide additional funding to make the new facility possible. Terminal services will continue to be available for the same amount of time as before. In the past, the Machine Room has been manned 24 hours/day during the week plus 16 hours/day on weekends. Effective March 1, 1973, operator coverage will be reduced on swing shift. The swing operator will lock the Machine Room at 8 p.m. Listings can be picked up after 4 a.m. the following morning. Swing shift users will be plugged into the switchboard in S101 prior to the operator's departure.

C. Class

4. Comments from ACME Users:

Over the past month, many of the major ACME users have been interviewed by staff members. The initial purpose of the interviews was to obtain information which would prove helpful if ACME's users were to transfer to the 360/67 rather than to a new Medical Center computing facility. It was especially interesting to note the number of major users who regularly use programs which have no documentation; nor do these users have programmers on their staffs who fully understand the operation of the programs. Many users did not understand the magnitude of effort involved in transferring from PL/ACME to other languages and systems. Therefore, some seminars will be scheduled soon at which recommended documentation levels and potential conversion problems can be discussed. If users have funds available to pay for programming help to analyze existing programs and document them, they can contact Frank Germano, Manager of User Services, at ext. 5758. Those who need such help should contact Frank in the very near term; the number of programmers on ACME's staff will be reduced over the next few months. These programmers have extensive PL/ACME experience and can document your work faster than newly trained personnel could do in the future.

R. Jamtgaard

5. SIGBIO Colloquium on Time-Oriented Medical Records:

The Bay Area SIGBIO chapter of the Association for Computing Machinery (ACM) will have Dr. James Fries, Asst. Prof. of Medicine in the Immunology Division at Stanford, as their speaker Wednesday, February 21, 1973, at 7:30 p.m. The meeting will be held in Room 317 of the Health Sciences East Building at the University of California at San Francisco. A no-host dinner will precede the talk. Those interested in joining the group for dinner should call Dr. R.M. Flashoff at 666-2974. We would like to see more participation by Stanford medical faculty and staff in the SIGBIO activities.

R. Jamtgaard

6. New Seminar Series:

Several users have expressed interest in continuing the Medical Computing Seminar series. Ron Jamtgaard will be organizing a six- or eight-week series to begin around March 1. Each meeting will be announced through the Medical Center Daily Announcements bulletin and via ACME terminals. Suggestions for speakers and topics are encouraged.

R. Jamtgaard

7. Personnel Changes:

During January 1973, three personnel changes in the ACME staff were announced. Chuck Granieri, a systems programmer, and Rich Cower, an operator, have transferred to the SLAC Computing Facility as of February 1. Jane Whitner, the statistical programmer for ACME, was the first of our programmers to be affected by layoff notice, effective March 2, 1973. Given the impending termination of the ACME grant and the fact that the new Medical Center Facility will have fewer people than the combined Hospital and ACME staffs, it is unfortunately necessary that some of our experienced personnel be laid off.

R. Jamtgaard

8. Changes in PUBLIC Program DATACOPY:

PUBLIC program DATACOPY has been modified to more efficiently reproduce data-files with mixed length records. Also new options allow copying FROM and INTO compressed data files, (Compression is explained in ACME Note FILCMP.) and suppressing terminal output of copied record lengths. See ACME Note EDQ-2.

S. Weyl

9. Use of LF or INDEX Key:

The following change has been made for users' convenience when backspacing and over-typing on terminals which have linefeed or index keys; the character produced by these keys is now ignored on input to the computer. This character may be entered by typing \$x . Note that a 2741 terminal can perform the INDEX action on output even though it may not have an INDEX key on the keyboard.

B. Stainton

10. New and Revised Linear Regression Programs on PUBLIC File:

Newly revised versions of LINREG and LACKFIT are available on the PUBLIC file. Also, there is a new PUBLIC external subprogram LACFTSUB which performs the test for linearity of regression formerly done in LACKFIT. LACKFIT now prompts for the necessary input and calls LACFTSUB to do the calculations.

The new version of LINREG now gives the coefficient of correlation between x and y, a scatter plot, a significance test on the correlation coefficient, and confidence intervals for slope and intercept as additional optional output, as well as the previous output.

Both LINREG and LACKFIT can now accept input from files.

The revised version of LINREG is described in ACME Note EBE-3. The new version of LACKFIT is given in ACME Note EAM-5, and LACFTSUB is explained in ACME Note ETLR-1.

J. Whitner

11. Long Print Job Problem:

More and more often, an ACME user will either submit extremely long files to be printed or will submit up to 50 jobs to be printed at one time. Almost always, these are submitted during the day and must be printed during ACME's heaviest usage. Such long listings print slowly during heavy load conditions, often taking three or four hours to print. Please consider the impact this has on turnaround time for shorter jobs submitted by other users.

The best way to alleviate this problem is to print such files on weekends or in the evening. On weekdays the jobs can be submitted at 3 p.m. or later. Call the ACME operator at ext. 5903 and tell him that you have put a long job in the printer queue. He will defer the job for printing during the evening

shift, and you will be able to pick it up the following morning. The large number of ACME users with short print jobs will appreciate such consideration.

M. Prowell

1. New and Revised Notes Since Newsletter J-48 (December 20, 1972):

NEW

ATYNET-1 Tymshare Network Feasibility (B. Stainton) January 22, 1973.  
FILCMP-1 ACME Datafile Compression - User Information (F. Germano)  
February 12, 1973.  
GPROB-1 Statistics Problem Set for the Beginning PL/ACME Course (V. Wiederhold/  
Dr. B. Brown) February 8, 1973.  
H3OCH-1 Telephone Line Communication for Terminals at Speeds of up to 30 Char-  
acters/Second (B. Stainton) January 29, 1973.  
PVMT-1 Remarks on Paging Reference Distribution (T. Rindfleisch/G. Wiederhold)  
January 15, 1973.  
TDOV-1 TOD System Overview (F. Germano) February 13, 1973.  
TDSUB-1 User-Supplied TOD Subprograms for Data Checking and Coding (S. Weyl)  
February 5, 1973.  
TODPDA-1 Operational Overview for TOD Databank (F. Germano) February 12, 1973.  
TODPDB-1 TOD Scatterplot Program (F. Germano) February 12, 1973.  
TODPDC-1 TOD Reviewdx Program (F. Germano) February 12, 1973.  
WNITE-1 Internal Documentation of Overnight TAPE and LISP Jobs (C. Granieri)  
February 13, 1973.  
YIBMTP-1 Operator Procedure: User Disk/Tape Dump/Restore Procedure (F. Germano)  
January 4, 1973.  
YLISP-1 Operator Procedure - Overnight LISP Jobs (C. Granieri/C. Class)  
February 6, 1973.  
YULOG-1 Operator Instructions for Final Preparation of the UNILOG Report  
(R. Cower) January 2, 1973.

REVISED

AA-38 ACME Notes Index (E. Baxter) January 18, 1973.  
APUB-11 Papers Written by ACME Users (E. Baxter) January 10, 1973.  
AV-4 Visitor's Information Sheet (F. Germano) January 15, 1973.  
CAB-3 User Hardware Installations - ACME Connected (C. Class) January 4, 1973.  
CT-20 ACME Terminal Listing (C. Class) January 15, 1973.  
DA-10 ACME Device Addresses (J. Miller/C. Granieri) January 15, 1973.  
EDQ-2 ACME Program Library DATACOPY: Reproducing a Complete or Partial Data  
File (G. Wiederhold/S. Weyl) February 8, 1973.  
FX-5 Current Implementation of the File System (R. Frey) February 12, 1973.  
HTAPE-2 Choice of Tape Units on 360/370 Equipment (IBM) (G. Wiederhold/  
B. Stainton) January 5, 1973.  
KASCII-2 ACME Use of the ASCII Character Set (B. Stainton) January 29, 1973.  
KCT-4 Terminal Conversion Tables (B. Stainton) January 9, 1973.  
KE-7 EBDIC Codes for a Full Character Set (G. Wiederhold) January 12, 1973.  
YCD-2 Clip Deck (Change a Volume Label) (C. Class) January 4, 1973.