



STANFORD  
MEDICAL  
CENTER

# Computing Newsletter

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1. Index to the ACME PUBLIC Programs:

An index to the PUBLIC programs has been prepared. It lists all the PUBLIC programs on ACME, describes them briefly, categorizes them, and gives an ACME Note reference for further information. The index is presented in two orders: 1) alphabetical by program name, and 2) alphabetical by subject area. See ACME Note EPUBDIR.

A copy of EPUBDIR is attached to this Newsletter. It should be of use to users who want to see what ACME has to offer in a particular area. For example, suppose you wish to do text editing. Consulting EPUBDIR under area code "T" (text) would yield information for ACME PUBLIC programs in this area.

F. Germano

2. New PUBLIC Program IBMTAPE: Enters Requests to Dump/Restore Users' ACME Files to/from Tape

It is now possible to enter a tape dump/restore request from a terminal using PUBLIC program IBMTAPE. The paper request form will **no** longer used. Program IBMTAPE creates a request in a manner similar to LISTAKER. The use of this program is described in ACME Note EIBMTP. All user requests for tape dump/restore operations must be entered by the user himself using program IBMTAPE. For this reason, all users who do dump/restore work should obtain a copy of this Note from the ACME Office, TC101, or the ACME Machine Room.

Give tapes to be processed to the ACME operator who will log that the tapes have been received. After the jobs have been completed, pick up the tapes from the operator who will log that the tapes have been returned.

F. Germano

3. Recycle!

Remember that you can recycle your computer paper and cards by bringing them to the ACME Machine Room, S101. The operator will be happy to show you where the recycling boxes are located.

R. Cover

4. ACME Holiday Schedule:

ACME will follow normal operations schedule except for Christmas Eve Day, Christmas Day, and New Year's Eve Day. On these days ACME will run operator-attended from 7 a.m. to 3 p.m. After 3 p.m. ACME will be up without operator attendance. If you wish to be "plugged in" after 3 p.m. on these days, please inform the ACME operator, x5903, this week (Dec. 18).

C. Class

#### 5. Radioimmunoassay Users

ACME is in the process of implementing a version of the RIA package from the NIH. If you are interested in these programs or in RIA, please contact Charles Breverman, x6120.

C. Breverman

#### 6. New PUBLIC Program ARITHDAT: Arithmetic Date Routines

The procedure ARITHDAT and associated procedures EXDATE, CHARDAY, and WEDABE allow a user to manipulate dates as consecutive numbers within the computer. The principal advantage of these routines occurs in situations where the elapsed time between two dates is important. The computation becomes a simple subtraction with this method. Other benefits of using this method include the capability to determine what weekday a particular date is and the ability to calculate the number of weekdays (Monday through Friday) between two dates.

See ACME Note EARITH. Several sample programs using the date routines can be found in this Note. These examples are: calculation of the "age-to-date" for a patient, generation of a weekly calendar for 80 weeks, beginning with Monday, 26NOV72, and calculation of the number of weekdays between two dates.

F. Germano

#### 7. New PUBLIC Programs BSORT and BRANK:

A new version of BSORT has been added to the PUBLIC file. It is a sub-program to be used as an internal procedure by an ACME run. This routine uses an improved bubble sort algorithm to sort an array into ascending order. See ACME Note EBN.

BRANK is based on the same algorithm as BSORT. It sorts an array into ascending order while keeping a parallel array in the same order. See ACME Note EBNC. Note that line 2.06 in this ACME Note should read:

```
2.06 DCL x(*), y(*) char, tempy char(20);
```

F. Germano

#### 8. SORTEXT Users

The PUBLIC program SORTEXT, which sorts text or data files starting with any character position on a line, has been modified to accept a variable length compare field up to and including 20 characters. Prior to this change, a fixed length of 20 characters was assumed.

In addition, a second sort method has been added to SORTEXT. The two methods now present in SORTEXT are the quick sort and the improved bubble sort. The quick sort should normally be used because of its much greater efficiency. However, using quick sort does not keep the output in the same order as the input in cases of a tie on the sort key. Bubble sort does not have this disadvantage.

F. Germano

## 9. Correspondence Terminal Support Changes

The system character translation tables for "correspondence" terminals have been changed to effect the following benefits:

- a) The keyboard arrangement is now the same as that used by the Campus Facility.
- b) All of the special characters used by the Magnetic Card Selectric Typewriter are supplied.

Users of MCST or 2741 Correspondence code terminals should obtain a copy of ACME Note KU-4.

B. Stainton

## 10. New and Revised Notes Since Newsletter J-46 (October 23, 1972):

### NEW

- AACP-1 ACME Accounting Programs at Campus Facility(E. Baxter) November 15, 1972.
- ACONT-1 The Need and a Method to Obliterate Control Languages (G. Wiederhold) November 22, 1972.
- ADISK-1 ACME Disk Write Times (F. Germano) November 22, 1972.
- APLAN-1 Preliminary Planning Outline for a 370/158 Facility (R. Jamtgaard) November 6, 1972.
- ASQ-1 Square Computers in Round Sieves (G. Wiederhold) November 15, 1972.
- DBS-1 Present and Potential Patient-Related Databanks at the Stanford Medical Center (F. Germano/G. Wiederhold) October 27, 1972.
- DELL-1 Evaluation of General Purpose Graphics Terminal (GPGT 315C) (P. Freret) November 21, 1972.
- DI-1 Drug Interaction Project ACME Programs (L. Crouse/G. Hunn/B. Bassett) November 3, 1972.
- EARITH-1 ACME Program Library ARITHDAT: Arithmetic Data Routines (F. Germano) December 12, 1972.
- EBNC-1 ACME Program Library BRANK and BRANKC: Bubble Sort Ranking (F. Germano) December 14, 1972.
- EIBMTP-1 ACME Program Library IBMTAPE: Dump/Restore User Tapes (F. Germano) December 18, 1972.
- EPUBDIR-1 ACME PUBLIC File Directory (F. Germano) December 12, 1972.
- ETLR-1 ACME Subprogram LACFTSUB: Test for Linearity of Regression (J. Whitner) November 1, 1972.
- HTAPE-1 Choice of Tape Units on 360/370 Equipment(IBM)(Medical Center Computer Facility Planning Note) (G. Wiederhold) December 8, 1972.
- MPXA-1 2701 PDA/Satellite Machine Multiplexor - General Information (R. Frey) December 8, 1972.
- SHARE-1 Trip Report - SHARE Interim Meeting, Dec. 3-6, 1972 (Medical Center Computer Facility Planning Note) (R. Frey) December 20, 1972.
- TCAM-1 An Overview of the TCAM System (R. Stainton) November 17, 1972.
- TIDA-1 TOD Analysis Programs (TOD Implementation Documentation - A) (F. Germano) November 8, 1972.
- TIDB-1 TOD Operational Statistics (TOD Implementation Documentation - B) (F. Germano) December 8, 1972.
- TIDC-1 The TRANSPOSE File (TOD Implementation Documentation - C) (F. Germano) November 30, 1972.

NEW (Con't)

TIDD-1 Program PRE\_PROC (TOD Implementation Documentation - D) (F. Germano) November 17, 1972.  
TODI-1 Introduction to TOD (Time-Oriented Databank) System (F. Germano) October 25, 1972.  
UPRO-1 Procedure for Assembling a Program for the 1800 with the 360 Batch Assembler (L. Hundley) December 15, 1972.  
URECOV-1 Recovery from Realtime Input/Output Failures-User Instructions (R. Frey) October 20, 1972.  
XDS-1 Test of ACME FORTRAN Code on XDS Compiler (R. Jamtgaard) November 9, 1972.  
YDAS-1 DASDI Disk Pack (C. Class) December 20, 1972.  
YPDP-1 Loading the PDP-11 (Y. Lew) November 16, 1972.  
YPRANL-1 Distribution of Print Job Lengths (F. Germano) November 10, 1972.

REVISED

AA-37 ACME Notes Index (E. Baxter) November 22, 1972.  
AAC-3 ACME User Accounting: Update & Listing/Administrative Aide Instructions (C. Miller/E. Baxter) July 20, 1972.  
AMC-5 How to Use PL/ACME (G. Wiederhold) November 10, 1972.  
AORG-3 ACME Organization Chart (E. Baxter) October 27, 1972.  
AUC-6 360/50 Crash Frequency Chart (C. Class) December 14, 1972.  
CT-19 ACME Terminal Listing (C. Class) November 22, 1972.  
DBD-2 ACME Data Bases for Dr. Eugene Dong and Phillips Caves -- Cardiovascular Surgery Research (S. Weyl) December 15, 1972.  
EAM-5 ACME Program Library LACKFIT: Test for Linearity of Regression (J. Whitner) November 1, 1972.  
EBE-3 ACME Program Library LINREG: Linear Regression (J. Whitner) November 8, 1972.  
EBN-3 ACME Program Library BSORT and BSORTC: Sorting (F. Germano) December 14, 1972.  
FA-9 ACME File System -- Data Sets (R. Frey) December 1, 1972.  
KU-4 Using Correspondence Code 2741 Terminals (B. Stainton) December 8, 1972.  
MA-4 Memory Allocation in ACME (G. Breitbard/G. Wiederhold) December 12, 1972.  
OR-15 Procedure for Writing File Restore Tapes (C. Class) November 29, 1972.  
OSM-3 ACME Modifications to OS/360 (MVT) (R. Frey) December 19, 1972.  
PVM-3 Paging Rates for a Joint Stanford Computing Facility (Medical Center Computer Facility Planning Notes) (G. Wiederhold) December 20, 1972.  
WDL-2 PL/ACME Words and Built-In Subroutines (V. Wiederhold/G. Sanders) December 1, 1972.  
WKT-8 TRMNLIC: Terminal Input/Output (R. Stainton) December 12, 1972.  
WYD-5 ACME Subroutine YIELD to Commutator: Subroutine YSET-set ENTRY2 (R. Frey/C. Granieri) October 24, 1972.  
YBP-7 OS/360 (MVT) Batch Processing Procedure (C. Class/J. Sutter) December 19, 1972.  
YCC-3 1052 Console Commands (C. Class/J. Sutter) December 19, 1972.  
YCLEAN-2 Scratching Temporary Data Sets (C. Class) December 19, 1972.  
YIPL-4 System IPL Procedures for Release 20.6 of OS/360 (MVT) (C. Class/J. Sutter) December 19, 1972.  
YLT-2 Label Tapes (C. Class) December 19, 1972.  
YVTOC-3 List VTOC and Scratch Data Sets (C. Class) December 19, 1972.

This note lists the contents of the ACME PUBLIC File, first in alphabetical order by dataset name and then by groups according to subject area.

## Key to AREA Codes:

C - time series	L - language	S - statistics
D - demonstration programs	N - numerical analysis	T - text editing
C - graphics	Q - sorting	U - user utility
I - internal staff use	R - realtime data processing	X - special purpose programs

PROGRAM	DESCRIPTION	AREA	ACME NOTE
ALPHABET	Alphabetization of Elements of String Records	Q	EDU
ANOVATWO	Two-Way Analysis of Variance (Unequal Cell Frequency)	S	EDK
ARSPEC	Spectral Analysis by Autoregressive Model Technique	C	EARSPE
ASM_ALIGN	Aligning a 360 Assembly Language Text File for Assembly	L	EDZ
AZTEC	Data Reduction for a Sequence of Samples	R	ULA
BALTHREE	Analysis of Variance for a Balanced Three-Way Design	S	EDN
BATNUM	Demonstration Program	D	-
BJBLIO	Interactive Keyword/Entry	Q	EBIB
BIBUP	Interactive Keyword/Entry	Q	EBIB
BLACKJAK	Demonstration Program	D	-
BSORT	Sorting-Bubblesort	Q	EBN
CATALOG	Listing of User's Dataset Sizes and Types	U	J40
CHD_DIAG	Teaches Diagnostic Techniques to Interns	X	-
CHI_2BY2	Chi-Square Statistic with Continuity Correction	S	EBY
CIRARG	Module to GRAPHG	G	-
CIARLG	Module to GRAPHG	G	-
CODE	Encodes and Decodes User's Files	U	EEY
CONCORD	Generates Concordance Files from Text Files	Q	ECONCO
COPIER	Reproduces a Complete or Partial Program Data Set	U	EDP
COVARI	Associated with POWELL	N	EDG
Count serv	Checks Public Programs for 'count' Code	I	-
CRUNCH	Collapsing Program Data Sets	U	EDR
CUADRO	Smoothing Using a Square Window	R	ULC
count	Text File-Public Program Usage	I	ULC
DATACOPY	Reproduces a Complete or Partial Data File	U	EDQ
DATAPROG	Writes a Data File into a Program File	U	EDB
DCOVARE	Associated with DPOWELL	N	EDT
DIRECTOR	Temporarily Changes Realtime Directory Entries	U	URTD
DISCRIM2	Discriminant Analysis for Two Groups	S	EBW
DPOWELL	Fitting Program for Nonlinear Functions	N	EDT
D_EMPTY	Deletes Empty Files	U	EDPD
disease	Associated with CHD_DIAG	X	-
dis Cou	Removes 'count' Program Head From All Public Programs	I	-
EDITOR	Converts a Program to a Standard Format	T	EDL
EZALIGN	Aligns a Text File to a Desired Line Width	T	EEB
FATAL	Demonstration Program	D	-
FFT	Fast Fourier Transforms	R	EFFT
FNUMBG	Module to GRAPHG	G	-
FORTALGN	Aligns a FORTRAN Text File for Compilation	L	EDY
GFNCORR	Correlation Coefficients (Missing Data)	S	EAP
GFNSORT	Sorting	Q	ESORT
GTSMG	Module to GRAPHG	G	-
GOLF	Demonstration Program	D	-
GOMOKU	Demonstration Program	D	-
GOODFIT	Test for Goodness of Fit	S	EBV
GRAPHG	OPS Graphics Package	G	-
GRAPHH	Creates Display and Plotter Output	G	EG
GRIDG	Module to GRAPHG	G	-
HEXARITH	Hexadecimal Integer Arithmetic Routine	U	EDD
IBMTAPE	Dumps/Restores ACME Disk files to/from IBM tape	U	EIBMTP
IN	Associated with CONCORD	Q	ECONCO
IN_1	Associated with CONCORD	Q	ECONCO
IRON	Smoothing by Ironing with an Exponential Decreasing Window	R	UEI
incratio	Associated with CHD_DIAG	X	-
JACKKNIFE	Ratio Jackknife	S	EBG
JOBTAKER	User-Program-Driven Version of LISTAKER	U	J34
JUSTIFY	Text Justification	T	EDE
joestat?	Lists Terminals in Use	I	-

KLYSORT	Does Keyword Search on ACME Note Index	H	-
KWTEST	Non-Parametric Analysis of Variance (One-Way)	S	EBP
LACITEST	Test for Linearity of Regression	S	ETLR
LACKFIT	Test for Linearity of Regression	S	EAM
LINREG	Module to GRAPHG	G	-
LINREG	Linear Regression	S	EBE
LINSYS	Solution of Simultaneous Equations	N	EDJ
LISTAKER	Listing/Punching Service	U	EFE
LISTER	Formatted Terminal Listing	T	EDH
MAPIT	Mapping Bacterial Chromosomes	X	EDA
MERGE	Associated with CONCORD	Q	ECONCO
MERGE 1	Associated with CONCORD	Q	ECONCO
MLTPLG	Module to GRAPHG	G	-
MODESG	Module to GRAPHG	G	-
MULT	Multiple Regression	S	EAN
make cal	Writes Project Catalog to a Datafile	I	-
matrix	Associated with CHD DIAG	X	-
NEWS	Printing of News Items on Terminal	U	EEN
newstext	Associated with NEW-Text File	I	EED
new_Cou_	Apply 'count' Prog to Head of All Public Programs	I	-
OBJEGG	Module to GRAPHG	G	-
ONCALI	Scheduling Program for Residents On Call	X	EBH
OUT	Associated with CONCORD	Q	ECONCO
OVERNIGH	Instructions to Use C_CLASS Account to Run Overnight Jobs	I	-
opsdata	Module to GRAPHG	G	-
PCPLOT	Frequency Plot	G	EBI
PEEL	Exponential Curve Fitting	N	EBO
PLA_PL1	Converting a PL/ACME Program into an Equivalent PL/1 Program	L	BER
PLA_PL2	Associated with PLA_PL1	L	BER
PLOT	Scatter Plotting	G	EBQ
PLOTPRN	Plots Graphs and Prints on Line Printer or Terminal	G	EPP
POLY	Polynomial Regression	N	EBK
POWELL	Fitting Program for Nonlinear Functions	N	EDG
PREPOW	Associated with POWELL	N	EDG
PUB_LIST	Produces PUBLIC File Index	I	-
primes	Data File of Prime Numbers-First 1000 in an Array	U	-
put_Cou	Analysis of PUBLIC File Usage	I	-
QRANK	Sorting-Quicksort Ranking	Q	ESORT
QSORT	Sorting Quicksort	Q	ESORT
QURIC	Demonstration Program	D	-
quik cou	Analysis of PUBLIC File Usage	I	-
RECOMPUS	Recomposes PL/ACME Programs from Card Decks	U	ERECOM
RI(ORDHX	Analyzes Content of Text Lines	T	J20
RUNGA6	Runge-Kutta Integration	N	EBS
RUNGK 1	RK Solution of 1st Order Ordinary Diff.Equa.	N	EBL
RUNGK 2	RK Solution of 2nd Order Ordinary Diff. Equa.	N	EDF
referenc	Associated with CHD DIAG	X	-
rew_Cou_	Analysis of PUBLIC File Usage	I	-
re cou_	Restores Destroyed 'count' File	I	-
runover	Prints Message: 'RUN C.CLASS_.ACME.runover'	I	-
SCHUSTER	Schuster Periodogram	C	EBR
SCRATCH	Deletes Datasets from User's File	U	EEZ
SFTUPG	Module to GRAPHG	G	-
SORTTEXT	Sorts Text Files	Q	ESORT
STEPREG	Stepwise Multiple Linear Regression	S	EEA
St table	Student's T-Table	S	-
SURJEG	Module to GRAPHG	G	-
SURVIVE	Life Table Construction	S	ESURV
see_Cou	Analyzes PUBLIC File Usage	I	-
see cou	Analyzes PUBLIC File Usage-Variant of see_Cou	I	-
se_Cou_	Analyzes PUBLIC File Usage-Variant of see_Cou_	I	-
staklist	Associated with LISTAKER-Order Queue	U	EFE
stak off	Associated with LISTAKER-Determines Contents of 'staklist'	U	EFE
sympTom	Associated with CHD DIAG	X	-
TARIT	Composes Programs with Tabular Output	T	EDV
TEACHER	Teaches PL/ACME Language	L	ETEAU
TIMESER	Spectral Analysis	C	EBU
TITLFG	Module to GRAPHG	G	-
TRANSLAT	Translates FORTRAN Programs to PL/AMCE	L	EFD
TSQUARE	Hotelling's T-Square	S	EBX
TYPEWRIT	Printing a Text File with Page Breaks	T	EEC
UNCRUNCH	Restores CRUNCHED Programs	U	EDS
UNEKEVAR	Unique Variables Creation for FORTRAN to PL/ACME Translation	L	EFC
UPDATENP	Updates the NEWS File	I	EED
VECSG	Module to GRAPHG	G	-
VERIFY	Corrects an October 1970 System Error	U	-
WEIGHTREG	Weighted Linear Regression	S	EBD
ZEROFIT	Least Squares Line Through Origin	S	EBM

<u>PROGRAM</u>	<u>DESCRIPTION</u>	<u>AREA</u>	<u>NOTE</u>
SCHUSTER	Schuster Periodogram	C	ERR
TIME SER	Spectral Analysis	C	ERU
ARSPFC	Spectral Analysis by Autoregressive Model Technique	C	EARSPF
QUBIC	Demonstration Program	D	-
GOMOKU	Demonstration Program	D	-
GOLF	Demonstration Program	D	-
FATAL	Demonstration Program	D	-
BLACKJAK	Demonstration Program	D	-
BATNDM	Demonstration Program	D	-
opsdata	Module to GRAPHG	G	-
ORJECG	Module to GRAPHG	G	-
MODESG	Module to GRAPHG	G	-
TITLEG	Module to GRAPHG	G	-
FNUMBS	Module to GRAPHG	G	-
SETUPG	Module to GRAPHG	G	-
MLTPLG	Module to GRAPHG	G	-
LINESG	Module to GRAPHG	G	-
GETSMG	Module to GRAPHG	G	-
GRAPHG	OPS Graphics Package	G	-
GRAPHI	Creates Display and Plotter Output	G	EG
GRIDG	Module to GRAPHG	G	-
CLABELG	Module to GRAPHG	G	-
SUBJEG	Module to GRAPHG	G	-
PCPLOI	Frequency Plot	G	EBI
PLOT	Scatter Plotting	G	EBQ
CIRARG	Module to GRAPHG	G	-
VFCG	Module to GRAPHG	G	-
PLOTPRN	Plots Graphs and Prints on Line Printer or Terminal	G	EPP
news.txt	Associated with NEW-Text File	I	EED
count	Text File-Public Program Usage	I	ULC
put Cou	Analysis of PUBLIC File Usage	I	-
new Cou	Apply 'count' Prog to Head of All Public Programs	I	-
jobstat?	Lists Terminals in Use	I	-
se Cou	Analyzes PUBLIC File Usage-Variant of see_Cou_	I	-
new Cou	Analysis of PUBLIC File Usage	I	-
Cou verb	Checks Public Programs for 'count' Code	I	-
see Cou	Analyzes PUBLIC File Usage	I	-
PUB LIST	Produces PUBLIC File Index	I	-
OVERNIGH	Instructions to Use C CLASS Account to Run Overnight Jobs	I	-
see cou	Analyzes PUBLIC File Usage-Variant of see_Cou_	I	-
make cal	Writes Project Catalog to a Datafile	I	-
dis Cou	Removes 'count' Program Head From All Public Programs	I	-
runover	Prints Message: 'RUN C.CLASS .ACME.runover'	I	-
re cou	Restores Destroyed 'count' File	I	-
quik cou	Analysis of PUBLIC File Usage	I	-
UPDATENP	Updates the NEWS File	I	EED
PLA PL2	Associated with PLA_PL1	L	BER
TEACHER	Teaches PL/ACME Language	L	ETEAU
PLA PL1	Converting a PL/ACME Program into an Equivalent PL/1 Program	L	BER
FORTALGN	Aligns a FORTRAN Text File for Compilation	L	EDY
TRANSLAT	Translates FORTRAN Programs to PL/ACME	L	EFD
ASM ALGN	Aligning a 360 Assembly Language Text File for Assembly	L	EDZ
UNI PLVAR	Unique Variables Creation for FORTRAN to PL/ACME Translation	L	EFC
RUNGA6	Runge-Kutta Integration	N	EBS
PREPOW	Associated with POWELL	N	EDG
RUNGE_1	RK Solution of 1st Order Ordinary Diff. Equa.	N	EBL
COVARI	Associated with POWELL	N	EDG
POWELL	Fitting Program for Nonlinear Functions	N	EDG
POLY	Polynomial Regression	N	EBK
DPOWELL	Fitting Program for Nonlinear Functions	N	EDT
LINSYS	Solution of Simultaneous Equations	N	EDJ
RUNGE_2	RK Solution of 2nd Order Ordinary Diff. Equa.	N	EDF
DCOVARI	Associated with DPOWELL	N	EDT
PEEL	Exponential Curve Fitting	N	EBO
BIKID	Interactive Keyword/Entry	Q	EBIB
CONCORD	Generates Concordance Files from Text Files	Q	ECONCO
BIKUP	Interactive Keyword/Entry	Q	EBIB
ALPHABET	Alphabetization of Elements of String Records	Q	EDU
MERGE_1	Associated with CONCORD	Q	ECONCO
OUT	Associated with CONCORD	Q	ECONCO
IN_1	Associated with CONCORD	Q	ECONCO
QSORT	Sorting Quicksort	Q	ESORT
MERGE	Associated with CONCORD	Q	ECONCO
BSORT	Sorting-Bubblesort	Q	EBN
QRANK	Sorting-Quicksort Ranking	Q	ESORT
IN	Associated with CONCORD	Q	ECONCO
SORTEXT	Sorts Text Files	Q	ESORT
GENSORT	Sorting	Q	ESORT



AZTEC	Data Reduction for a Sequence of Samples	R	ULA
CUADRO	Smoothing Using a Square Window	R	ULC
IRON	Smoothing by Ironing with an Exponential Decreasing Window	R	UEI
FFT	Fast Fourier Transforms	R	EFFT
CHI_2BY2	Chi-Square Statistic with Continuity Correction	S	EBY
St_table	Student's T-Table	S	-
WETGTREG	Weighted Linear Regression	S	EBD
ANOVATWO	Two-Way Analysis of Variance (Unequal Cell Frequency)	S	EDK
ZEROFIT	Least Squares Line Through Origin	S	EBM
LINREG	Linear Regression	S	EBE
JACKNIFE	Ratio Jackknife	S	EBG
GOODFIT	Test for Goodness of Fit	S	EBV
STEPREG	Stepwise Multiple Linear Regression	S	EEA
KWTEST	Non-Parametric Analysis of Variance (One-Way)	S	EBP
LACFTSUB	Test for Linearity of Regression	S	ETLR
LACKFIT	Test for Linearity of Regression	S	EAM
SURVIVE	Life Table Construction	S	ESURV
BALTHREE	Analysis of Variance for a Balanced Three-Way Design	S	EDN
GENCORR	Correlation Coefficients (Missing Data)	S	EAP
MULT	Multiple Regression	S	EAN
TSQUARE	Hotelling's T-Square	S	EBX
DISCRIM2	Discriminant Analysis for Two Groups	S	EBW
TYPEWRIT	Printing a Text File with Page Breaks	T	EEC
EDITER	Converts a Program to a Standard Format	T	EDL
EZALIGN	Aligns a Text File to a Desired Line Width	T	EEB
TABRIT	Composes Programs with Tabular Output	T	EDV
JUSTIFY	Text Justification	T	EDE
LISTER	Formatted Terminal Listing	T	EDH
RECORDHX	Analyzes Content of Text Lines	T	J20
stak off	Associated with LISTAKER-Determines Contents of 'staklist'	U	EFE
staklist	Associated with LISTAKER-Order Queue	U	EFE
UNCRUNCH	Restores CRUNCHED Programs	U	EDS
VERIFY	Corrects an October 1970 System Error	U	-
DIRECTOR	Temporarily Changes Realtime Directory Entries	U	URTO
JOBTAKE	User-Program-Driven Version of LISTAKER	U	J34
IBMTAPE	Dumps/Restores ACME Disk files to/from IBM tape	U	ETBMTP
CATALOG	Listing of User's Dataset Sizes and Types	U	J40
D EMPTY	Deletes Empty Files	U	EDPD
DATAPROG	Writes a Data File into a Program File	U	EDB
HEXARITH	Hexadecimal Integer Arithmetic Routine	U	EDD
SCRATCH	Deletes Datasets from User's File	U	EEZ
CRUNCH	Collapsing Program Data Sets	U	EDR
COPIER	Reproduces a Complete or Partial Program Data Set	U	EDP
CODI	Encodes and Decodes User's Files	U	EEY
DATACOPY	Reproduces a Complete or Partial Data File	U	EDQ
KEYSORT	Does Keyword Search on ACME Note Index	U	-
RECOMPOS	Recomposes PL/ACME Programs from Card Decks	U	ERECOM
LISTAKER	Listing/Punching Service	U	EFE
primes	Data File of Prime Numbers-First 1000 in an Array	U	-
NEWS	Printing of News Items on Terminal	U	EEN
referenc	Associated with CHD_DIAG	X	-
ONCALL	Scheduling Program For Residents On Call	X	EBH
CHD_DIAG	Teaches Diagnostic Techniques to Interns	X	-
matrix	Associated with CHD_DIAG	X	-
MAPIT	Mapping Bacterial Chromosomes	X	EDA
disease	Associated with CHD_DIAG	X	-
symptom	Associated with CHD_DIAG	X	-
incratio	Associated with CHD_DIAG	X	-

Dist: Staff/Mod All/All