MOVING NOTICE !!!

The entire staff of CUC will move on September 16 to the Ringwood Country Club. No more complaints about space -- at least for a day -- and the air conditioning will be perfect. The mighty will mingle with the meek -- the beautiful with the strong -- the beef with the buns -- in a memorable display of genius relaxed. There will be boating, swimming, tennis, golf, push-ups and several other interesting activities available. For those in pain -- or tired -- or just plain thirsty -- there will be the loving cup that cheers. T'will be a grand day -- so come one -- come all -- and remember:

"Tis the only day the world may see everyone "down" at CUC".

Contributors to this issue:

- J. Duffy
- J. Kelly
- S. Lehman
- B. Lesser
- A. Opler
- J. Rothstein
- W. Sutcliffe

WHO

There have been several recent additions to the growing CUC staff. Jacqueline ("Jackie") Bash has joined the Washington Office as a technical writer. Jackie's present assignment is to produce and coordinate documentation. Patricia ("Pat") Gordon and Dennis McKenna have joined CTS. Pat, as posting clerk, will keep records of CTS' ever growing list of accounts. Dennis has come from the Service Bureau Corporation as a technician. The New York Office has added John Horowitz, a programmer, and Martha Wilensky, an analyst. John has been programming the IBM 705 for New York Life. Martha has had extensive experience with utility and input-output for Sperry-Rand's SS 80 and SS 90.

WHAT

THE PROOF OF THE PUDDING

A recent appraisal of the sources of contracts awarded to CUC has revealed that the percent of our business which is repeat - a second contract from a satisfied client - is closer to the 75% than the 50% mark. This is a unique and gratifying record in our type of business. What is especially significant is the rising rate of repeat business concomitant with the growth of the number of firms offering a similar service. We should all feel a sense of pride and accomplishment in our past efforts and a determination to continue to uphold and enhance the reputation we share.

THE SPOKEN AND PRINTED WORD

CUC's vitality is shown, in part, by the contributions to the literature germane to the many fields encompassed in its work made by individual staff members. A further indication is found in the address made to groups in related areas by CUC members. A small sample of recent activities showed:

Besides writing a guest editorial for the January issue of Datamation, Ascher Opler has talked before Honeywell and IBM Users Groups, the American Association for the Advancement of Science, the National Industrial Conference Board and the Western Joint Computer Conference.

Both George Trimble and Ascher gave lectures before a group of college instructors taking computer training at Rutgers.

Warner King gave a paper (joint with Myra Gray and Ascher) before an ACM compiler conference. The title was "Diagnostic System of the Honeywell Algebraic Compiler."

Myra Gray and Ascher prepared a paper for the National ACM Conference titled "Design of a Multiprogrammed Algebraic Compiler".

Joyce Hoffman is presenting a paper (joint with A. O.) at an ACM Conference on Information Retrieval Languages titled "Use of MOBL in Preparing Retrieval Programs".

Liston Tatum gave a talk to the San Diego chapter of the ACM on "Yardsticks of Performance in Computing".

Harold Shulman's paper "The Pole Spotting Problem" has been accepted for publication in the SIAM REVIEW.

ANOTHER CUC PRODUCED ASSEMBLY PROGRAM

CUC has developed an assembly program for the H-800 that requires no tapes; the program known as CARD ARGUS or SCAP uses punch card input and output. With very minor modifications to the ARGUS language, CARD ARGUS accomplishes in three Passes, two sorts and a 407 listing, most of what Tape ARGUS accomplishes in fourteen phases. This includes the processing of macro routines and subroutines.

The final output of CARD ARGUS is both a relocatable binary and octal deck: absolute and relocatable loaders have also been provided for these decks.

The CARD ARGUS system also includes a program test system* known as CPTS. This program is a modification of Honeywell's PTS and can be used to dump on punched cards or the on-line printer. CPTS can handle up to 10 intermediary derails and emergency derails for either special registers and/or high speed memory.

Both of the above programs have proved very successful and very useful. The need for these programs seems to indicate that old reliable punched cards are still in demand.

Barbara Lesser prepared Pass Zero, the macro skeleton routine; Susan Weiss wrote Pass One of the assembly process; Irving Schechtman wrote Pass Two of the assembly process and Jean Rothstein wrote all loaders and the program test system.

* The program test system is a debugging aid which allows for dumping special registers and/or high speed memory during or immediately following program execution. Dumps are required through derail cards which contain the derail location and the dump parameters; the special register group number for a special register dump; the "from" and "to" memory locations for a high speed memory dump. Prior to the program execution the program test system using the information on the derail card places a derail instruction at the derail location point. This instruction when executed well transfers control to the program test system. During program executions, each time the program reaches the derail instruction and control is switched to the program test system, the dump is processed, the original instruction at the derail location is executed and control is returned to the program.

LIBRARY NOTES:

A new 1401 Manual, A 24-1403-3, has been received. It constitutes a minor revision of a 1403-2. On page 29 of the latter, the following sentence should be added to the paragraph on Zero and Add: Blanks in the A-field are stored as blanks in the B-field.

A major revision has been made of the IBM COBOL Manual. The latest information on this language is contained in: F 28-8053-1.

Extensive improvements in 709-90 FORTRAN have necessitated revision of the Operation Manual. THIS OBSOLETES ALL OTHER MANUALS ON 709-90 FORTRAN OPERATIONS. The form number is C 28-6066-3.

The following have been added to the library:

H 290

Programming Manual

H 400

EASY Assembly Language Sorting Manual

H 800

THOR Operating Manual
PTS Operating Manual
Magnetic Tape Operators Manual
Card Reader Operators Manual
Paper Tape Reader and Punch Operators Manual
Printer Operators Manual
ARGUS Test System Manual

RCA 501

COBOL Narrator User's Primer

Burroughs 5000 The B 5000 Concept

NCR 315

Internal Operations
Input, Output, File Operations
NEAT COBOL
Site Preparation Data
Sorting Tables - Magnetic Tapes

IBM 1301 Disk Storage
General Information Manual
Input-Output Control System

IBM 1410

Simulation of IBM 650 on the IBM 1410 Input-Output Specifications

IBM 7030

Reference Manual: Programming Examples

IBM 7070/7074

Reference Manual for MERGE 91 Reference Manual for Report Program Generator Addenda to IOCS

IBM 7080

Preliminary Manual for IOCS

IBM 709-7090

Reference Manual: 709/7090 Input/Output Control System, Form No. C 28-6100-1

THIS IS A MAJOR REVISION AND OBSOLETES THE PREVIOUS EDITION C 28-6100 and Bulletin J 28-6084

Reference Manual: 7090 Data Processing System Form Number A 22-6528-2. This is a minor revision. The principal change is to be found in data trap techniques.

SOS Distribution #5

Bendix G-20

SNAP Assembly Program Manual General Reference Manual

Sylvania

Detailed Description of COBOL
Programming Manual for the MOBIDIC Computer

1401

Pre-Processor for FORTRAN - deck; write-up FARGO (report generator) deck; write-up BULLETIN, J 24-1411-1

A MAJOR REVISION to the Preliminary Specifications for Utility Programs for the 1401 - OBSOLETES J 24-1411-0 and J 29-1411-0

Texts

Automatic Data Processing Systems
by Gregory and Van Horn
The Exploration of Space
by Robert Jastrow
A Technical Writer's Handbook
by Margaret Norgaard
Symbols, Signals and Noise
by J. R. Pierce

HOW

Please retain the following in the appropriate sections of your CUC notebook.

The material on the 1401 is the invaluable, experiential information we wish to collect and disseminate to those who may use for the first time a machine or system already pioneered by some other member of the firm. Since we feel that CUC people are a knowledgeable group, it is their know-how we wish to preserve and utilize. To do this, it is absolutely necessary that we have the cooperation of all members of the firm. Take the few minutes necessary to jot down the important aspects of some new situation and send the information along to the Communique! Jill Kelly, who contributed the Notes, managed in her exacting schedule to impart the salient features of what she has learned about effective use of the 1401. Stephen Lehman contributed the 1401 Intelligence as a vital bit of information to be remembered by those encountering this machine for the first time.

Address all inquiries to: Miss Dorothy A. Walsh, Editor

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STANDARDS MEMO II: COPY FOR TYPING

In order to expedite the production of reports, it is necessary that certain conventions be followed in laying out work for typing:

- 1. All material should be clearly handwritten or printed. If printing is used, standards for keypunching must be observed and care taken to differentiate, by the proper rules, between capital and small letters.
- 2. Capital letters must be indicated by enclosing the word or words in parenthesis and marking the phrase SOLID CAPS.
- 3. Notes to the typist should be in red. All such notes should be brief and clear.
- 4. Words or phrases to be underlined should be so underlined.
- 5. Paragraphs should be indented or marked by the P sign. All indented material will be regarded as a new paragraph.
- 6. Work will be spaced according to the requirements dictated by the finished typewritten copy. Overflow to a new page will be dictated by the type spacing. Therefore, when a new page is to be started the material to go on this page should be clearly marked NEW PAGE.
- 7. Where column headings are used, if it is desired that each page of any continuation be headed, this, too, should be clearly noted.
- 8. Pages should be numbered in order. Final numbering will be dictated by the type spacing.
- 9. Tabulations and all special formats should be clearly and unambiguously laid out.
- 10. Copy should be neat and legible. Spelling should be accurate. Rough drafts will be eliminated so care must be taken in preparation of pages to be copied.
- 11. Material should be complete. Typing will not be undertaken until all parts of a task have been submitted. Changes to finished copy must be kept to a minimum.
- 12. Sufficient time should be allowed between the giving of the work to Mr. Dieli and the desired completion time. The press of work makes RUSH jobs onerous and these should be avoided where possible. A priority system will be maintained to ensure the best possible handling of reports. A prudent estimate of the time required should be made on the basis of the magnitude of the task.
- 13. The finished copy will be proofread for accuracy of typing only. The submitter must check for correctness of content.

COPY THAT DOES NOT MEET THESE REQUIREMENTS WILL BE REJECTED.

1401 Notes

1. Comparing

If the A-field is longer than the B-field, and the two fields are similar up to the high-order position of the B-field, the result of a compare is sometimes 'equal' and sometimes 'unequal'. Moral: the two fields must match in all respects, including matching word marks, if they are to compare 'equal'.

2. Group Mark

In 705, a 12-5-8. In 1401, a 12-7-8. However, the card read-punch can be equipped with switches which cause the 1401 to recognize (and punch) the 705-type of group mark.

3. Reading Tape

New machines insert a group mark following the last character read. Old machines insert a group-mark; word-mark, but are being field-changed to insert group-mark only. Try to program so you can run on either type of machine.

4. Counters

Many people use unsigned 'count' fields - e. g. count of number of records read. Remember that if you subtract from this counter, the result will have a sign. E. g.

from	0027
subtract	1
	+
result	0026

Moral: either do complement addition when you wish to subtract, or make the counter a signed field.

5. Sort 2

Jill Kelly has tested this program. It is presently unsatisfactory.

1401 INTELLIGENCE

Unlike the 709 and 7090, the 1401 alters the tape read-in area in core upon sensing a tape mark. Specifically, it alters the two high order character positions of the read-in area. If the last record was not saved elsewhere and the information must be referenced again, two backspaces followed by a read would be required to reconstruct the last record.