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Oct. 17, 1974

TO:

W. E. LEEK

FROM:

c. w. stephan

SUBJECT:

TECHNICAL SERVICES STAFF MEETING - OCT. 21, 1974

(Last Meeting Held Oct. 7, 1974

#### COMPUTER AIDED DESIGN

Peak pressure readings on the high speed range are now in agreement with oscilloscope readings. In the most recent use of the high speed range, a problem was discovered in the fixed-data input program. The problem was that the sweep time was being recalculated every time any of the fixed-data needed changing, resulting in the sweep time being decremented. The necessary modifications have now been made to the fixed-data input program and the high speed range is running with no problems.

The mylar tape punch has been received and was sent to General Electric for interfacing to the 4020. The punch with interface should be installed approximately October 31, 1974.

The gun-motion program is waiting for empirical data from the test lab. (Shoulder-force, pressure-time, and displacement curves for a heavy-shoulder shooter firing M/870 12 Ga. shotgun with a heavy load).

A program has been written for use with 3200 tang deflection measurements. The program plots the tangs unloaded, calculates, scales and plots the tangs loaded.

Programs Tex2 and Stresscall are being converted to Fortran IV for use in M/660 survival gun investigation.

The program that will control and monitor the 1100 dry cycle machine has been written. Further program development will continue upon installation of necessary hardware by test lab personnel.

Technical Services Staff Meeting - Oct. 21, 1974

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Oct. 17, 1974

(Last meeting held Oct. 7, 1974)

Page 2

#### COMPUTER AIDED DESIGN (Continued)

The 2 million word disc for the 4020 has been ordered, delivery is expected approximately Nov. 15, 1974. Work has been started on software modifications necessary for using the new disc. Work will continue as time permits.

## UNIAPT AND POST-PROCESSOR STATUS

## UDS .

United Computing is working on solutions to the system problems we have encountered. These problems include page skipping in the Post-Processors, and automatic program turn-off in the event of a card reader failure.

### UNIAPT

The latest release of Uniapt 2 has been received. Most of the problems associated with Uniapt 2 have been corrected. Upon testing, only one of the previous problems still exist. This problem occurs in the area of 3 axis linear positioning, and occurs only in one case. The test program contains many such moves which Uniapt 2 handles correctly. Uniapt 1 is still available in the event an error should result in Uniapt 2.

## MILWAUKEE-MATIC POST-PROCESSOR

The latest revision to this Post-Processor has been received. At present, there are no known errors.

## RICHARDSON ROUTER POST-PROCESSOR

Errors in this Post-Processor are as follows:

- 1. Will not contour in planes other than X-Y plane.
- 2. K values being output incorrectly.
- 3. Incorrect depth calculations when using cycle/mill.
- 4. Cycle/deep does not function according to specifications.
- 5. Feedrates ignored by Retrct.
- When using Retrct, tool will not remain at retracted position until another 2 move is called for.
- First X-Y departure not being output in same block with cutter compensation right or left code.
- Improper output of circular interpolation data in special cases.

Documentation concerning all of the above errors has been sent to United Computing. Corrections for these errors should be received by Oct. 25, 1974.

Technical Services Staff Meeting - Oct. 21, 1974 (Last meeting held Oct. 7, 1974)

Oct. 17, 1974

Page 3

# UNIAFT AND POST-PROCESSOR STATUS (Continued)

# EX-CELL-O POST-PROCESSOR

At present there are no known errors in this Post-Processor.

#### BOSTOMATIC POST-PROCESSOR

The specifications for this Post-Processor were sent back to United Computing on October 7, 1974 with all known modifications noted. Delivery of a test tape from this Post-Processor should be received by Nov. 8, 1974. Upon approval of the test tape, the Post-Processor will be delivered.

#### POSITOOL POST-PROCESSOR

At present there are no known errors in this Post-Processor.

### ADAPT AND POST-PROCESSOR

# COMPUDYNE POST-PROCESSOR

An error was detected in this Post-Processor in which in certain cases, the points output when contouring are rounded improperly. Since we are beyond the warranty period, Remington will be charged for any work done on this Post-Processor. Apparently, there are two options available for correction. The first option involves approximately 3 man days of work at \$250/day and would be warranted for 90 days. The second option would cost \$200 and would carry no warranty. A purchase order has been issued to have the necessary repairs made via Option 1. Delivery should be approximately Nov. 1, 1974.

BCP:sse

Technical Services Staff Meeting - Oct. 21, 1974 (Last meeting held Oct. 7, 1974)

Oct. 16, 1974 Page 4

# SPECIFICATIONS, TECHNICAL INFORMATION & SERVICES

- Alter 3200 Owner's Manual (exploded view and parts list) to latest revisions.
- 2. Prepare art work for extra barrel package labels.
- Prepare supplementary parts/price list for all 870 Military special parts requested by Government Sales. Awaiting prices from Accounting Division.
- Add 223 cal. to 788 Standards & Owner's Manual. Parts list has been transmitted.
- 5. 3200 competition grade parts list has been transmitted.
- 6. Compiled quarterly serial no. review and update.
- 7. Prepared 3200 32" Spec. Trap art work for package labels.
- 8. Prepare art work for M/700 17 cal. package labels.
- 9. Revise following Owner's Manuals for Nov. reprint:

M/870 M/700 M/700 (L.H.)

10. Redrawing model drawings where necessary to upgrade files and make better microfilm cards for reproduction.

FGH:sse

Technical Services Staff Meeting - Oct. 21, 1974 (Last Meeting Held Oct. 7, 1974)

Oct. 17, 1974 Page 5

## N/C MAINTENANCE

Eb rotary axis repairs complete. Steps have been taken to prevent the condensation that caused failure condition.

Information received at XLO Parker Customer Training is being passed on to E. Saunders as time permits.

LASER investigation complete.

## Additional Spares For All N/C Systems;

N/C machine systems spare parts are being ordered at random with cost savings being primary consideration.

# REPORTS ATTACHED

\_N∕C Statüs Report 

Model Shop Work Load 

Numerical Control Work in Progress

WMC:sse Ilion Research Division Attached