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REMINGTON ARMS COMPANY, INC.

INTER-DEPARTMENTAL CORRESPONDENCE

Remington.

PETERS

"CONFINE YOUR LETTER TO ONE SUBJECT ONLY"_

Ilion, New York Oct. 3, 1974

LIMITED DISTRIBUTION

TO:

W. E. LEEK

FROM:

C. W. STEPHAN

SUBJECT:

TECHNICAL SERVICES STAFF MEETING - OCT. 7, 1974

(Last Meeting Held Sept. 23, 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 15, 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/650 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.

Oct. 3, 1974 Page 2

COMPUTER AIDED DESIGN (Continued)

The 2 million word disc for the 4020 has been ordered, delivery is expected approximately January 1, 1975. 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

Unlapt 2 has been received. Erroneous output has been discovered when using ellipses for drive surfaces. Until a correction is received, Uniapt 1 will be available in the event an error occurs in Uniapt 2. A forrection for Uniapt 2 should be received by Sept. 30, 1974.

MILWAUKEE-MATIC POST-PROCESSOR

It was discovered that when the index table is positioned at 180 degrees, the CCLW modifier is ignored by the Post-Processor -- the table will always be rotated clockwise. Test data has been sent to United Computing. A correction should be received by October 11, 1974. المرابع المراب المرابع المراب

RICHARDSON ROUTER POST-PROCESSOR

-Errors in this Post-Processor are as follows:

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

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

Oct. 3, 1974 Page 3

UNIAPT 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 have been received for proof-reading. They are currently being reviewed by the necessary personnel in PE&C. A meeting is tentatively being scheduled for Oct. 7, 1974 to review the Post-Processor and document all necessary changes. The Post-Processor should be delivered approximately one month after the specifications have been received by United Computing.

POSITOOL POST-PROCESSOR

At present there are no knownerrors 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. 7, 1974 (Last meeting held Sept. 23, 1974)

Oct. 3, 1974 Page 4

SPECIFICATIONS, TECHNICAL INFORMATION & SERVICES

- 1. Alter 3200 Owner's Manual (exploded view and parts list) to latest revisions.
- 2. Prepare art work for extra barrel package labels.
- 3. Prepare supplementary parts/price list for all 870 Military special parts requested by Government Sales. Awaiting prices from Accounting Division.
- 4. Add 223 cal. to 788 parts lists, Standards & owner's Manual.
- 5. 3200 competition grade parts list has been transmitted.
- 6. Compiled quarterly serial no. review and update.

FGH:sse

Technical Services Staff Meeting - Oct. 7, 1974 (Last meeting held Sept. 23, 1974)

Oct. 4, 1974 Page 5

N/C MAINTENANCE

Additional Spares For All N/C Systems:

 $\ensuremath{\mathrm{N/C}}$ machine systems spare parts are being ordered at random with cost savings being primary consideration.

REPORTS ATTACHED

N/C Status Report.

Model Shop Work Load

Numerical Control Work in Progress

WMC:sse Ilion Research Division Attached