

com. file

Xc: J. J. Bechard
W. M. Curry
P. H. Eccleston
W. R. Googin
D. S. Hardy
A. A. Hugick
F. G. Hart
R. J. Sanzo

REMINGTON ARMS COMPANY, INC.
INTER-DEPARTMENTAL CORRESPONDENCE



"CONFINE YOUR LETTER TO ONE SUBJECT ONLY"

~~LIMITED DISTRIBUTION~~

Ilion, New York
January 24, 1974

TO: W. E. LEEK
FROM: C. B. WORKMAN
SUBJECT: TECHNICAL SERVICES STAFF MEETING - JAN. 28
(Last Meeting Held January 14, 1974)

CURRENT STATUS:

N/C ENGRAVING

Model 3200 "One of a Thousand"

All patterns approved and in production.

COMPUTER AIDED DESIGN

New High Speed Range Programs utilizing the Biomation Model 8100 Transient Analyzer have been written. The fixed Data Program has been written and tested. Off-line full auto testing has been completed. As on-line program has been written and tried. It has been modified to handle two channels of data. High-speed range has passed preliminary proof and is ready to use.

Uniapt has been installed.

1. Uniapt Post-processor
 - A. Tape is received and accepted.
 - B. Tape is received and is ready for machine prove-out and debug.

COMPUTER AIDED DESIGN (Continued)

1. Uniapt Post-processor (Continued)

C. EXUM 01 - Ex-Cell-O 10 B-E Work Center

The origin and trans problems have been solved. Output from this post-processor is now good. Further changes were found to be necessary after installation of the machine. These are: the cancellation of canned cycles and tool offsets at the beginning of each program, turning the coolant off before each tool change, returning to positioning mode before each tool change, and the output of the tool offset group number after each tool change. A new tape, with the above changes and the addition of full 3-axis contouring and 40 tool offsets, has been received and is awaiting debug.

D. Bostomatic Post-processor.

Awaiting quote from United Computing.

A tape duplicating and verifying program has been written to allow faster and better tape processing.

A computer program which will calculate machining costs of various metals has been converted to our system and is available.

A meeting with John Breggar to discuss RAMPS (Resource Allocation Multi-Project Scheduling) was held on Nov. 21. Output from RAMPS has been received.

A program to calculate center of gravity and moments of inertia has been converted and is available for use.

A program to optimally fit a set of data points to a mathematical equation and then plot that equation has been written and developed. A description and user's manual will be written and distributed as time permits.

Gun motion, shooter force, etc. can now be analyzed on our digital computer much the same as any analog computer. If the equations of motion can be written, then a program to print out various displacements, forces, etc. as a function of time can then be developed. This is currently being done for the M/3200 trap.

MEASUREMENT/TEST LAB

M3200 Over and Under Shotgun

1. Shoot two M3200 - 12 Ga. 3" Mag. for endurance
19999 - 8500 Rounds of Test
20163 - 3000 Rounds of test
Test new top tang design.
2. Design has requested clay bird trajectory data.
3. Design has requested internal ballistic of R-W-F 12 Ga.
Target Ammo.

M/742X New Design Autoloading Rifle

No Test activity.

M/1100X New Design autoloading shotgun

No test activity

M/1100 Product Improvement

1. M/1100 LW 20 Ga. test gun revision are in process.
2. Current 20 Ga. R-P target ammo. inventory is 106,000 rounds
RXP scheduled for production start up 1/74.
3. Receiver action bars and jig for load/strain determination.
4. Recommended M/1100- 12 Ga. - 3" Mag. orifice be reduced from
.073 to .060 inch.

Miscellaneous Lab Activity

1. Quality audit finished for M/700 - 22/250, M/700 L.H. 7mm.
2. Quality audit in progress for Var. M/700 - 6mm, 243, and 25-06.
3. Shot pressure/velocity test for S.A.A.M.I. 6 vs. 4 grooves -
waiting for feed back on balance of test.
4. M/1100 - 12 Ga. - 3" QA. in progress - two guns as received are
retired, two guns with 060 gas orifice near retirement.
5. Biomatation not being operational is holding up Meas. Lab work.

Technical Services Staff Meeting
(Last meeting held Jan. 14, 1974)

Jan. 24, 1974
Page 4

MEASUREMENT/TEST LAB (Continued)

Miscellaneous Lab Activity (Continued)

6. M/700 - 264 Win. Mag barrel erosion test continues (temporary at a hold).
7. W. R. Googin out of work since 12-16-73.
8. M/700 extractor dry cycle in progress.
9. Port revision / gun test box revision reviewed 1-22-74.

SPECIFICATIONS, TECHNICAL INFORMATION & SERVICE

1. Package Label Program:
 - a. 870 Ducks Unlimited mechanical completed and at printer.
 - b. 540XR, 540XRUR, 40XR, 40XC mechanicals 1/2 complete.
 - c. 870 "AP" Magnum grades - completed and at printer.
 - d. The following labels have been requested by planning:
 - 870 Police/Folding Stock (3)
 - 870 AP grades (6)
 - 870 Deer Guns (2 grades)
 - 788 with scope (5 cal.)
2. New Owner's Manual for 540XR. Typesetting completed. Mechanicals and exploded view 80% complete.
3. 40XC (NMCR) parts list has been typed but, due to changes, requires revision.
4. M/870 Ducks Unlimited parts list completed and drawing and part numbers assigned.

Technical Services Staff Meeting
(Last meeting held Jan. 14, 1974)

Jan. 24, 1974
Page 6

N/C MAINTENANCE

AUTONUMERICS COMPUDYNE

Machine and control have been shipped week of January 21, 1974.
Should arrive middle of next week.

Eb

Software has been received but has not yet been tested.

REPORTS ATTACHED

Model Shop Work Load
Numerical Control Work in Progress
Plastics Research Lab

C.B. Workman:bd
Illion Research Division
Attached.