

FIREARMS RESEARCH DIVISION
FIREARMS PROGRAMS

	1900		1901		Incentive	Estimated Completion
	Available Non Years	Estimated Expenditures	Available Non Years	Estimated Expenditures		
NECESSITY						
CP BOLT LOCK IMPROVEMENT	.7	\$ 115M	.5	\$ 75M	Necessary to reduce product liability.	Prototype August 1980 Follow-up in 1981.
CP FIRE CONTROL IMPROVEMENT	1.2	120M	1.5	200M	Necessary to reduce product liability.	Three prototypes June 1980 Dec. 1981
IMPROV. FOR SAFETY	.3	20M	.5	60M	Necessary to reduce product liability.	Six prototypes June 1980 Dec. 1980 Design follow-up - 1981
Sub Total	2.2	\$255M	2.5	\$ 335M		
COMMITMENTS						
107400-7600 DEVELOPMENT	2.0	200M + 4360M	1.5	\$ 150M	\$1.7MM increased 5 year earnings 24% R.O.I.	Dec. 1980. Design follow-up and addition of new cathodes Dec. 1981
KRG-XRG DEVELOPMENT	5.0	390M	9.0	\$ 700M	Sales earnings TBD	Four prototypes Sept. 1980 Design verification testing complete Nov. 1980 Project Dec. 1981
21mm GUN DEVELOPMENT SPECIFIC PROJECT	2.2	210M	.5	\$ 60M	Required to support sales of 8 groups ammunition	August 1980 design follow-up program. December 1980 - 1981
100mm H70 COMPETITION TRUMP GUN	3.2	260M + 62M	.5	\$ 60M	Increase Earnings \$625M Earnings for 5 years	December 1980 1981 for design follow-up program
BOLT ACTION CARTRIDGE STYLING	1.5	125M	1.0	\$ 85M	Increased sales earnings	December 1981
				<u>7.0</u>		

COMMITMENTS - Continued	1980		1981		Incentive	Estimated Completion
	Assignible Man Years	Estimated Expenditures	Assignible Man Years	Estimated Expenditures		
PRODUCT IMPROVEMENT COST REDUCTION - SG	1.5	\$ 220M	1.9	\$ 315M	\$300M Savings have been defined, additional savings TBD	Integral Election - Dec. 1980
PRODUCT IMPROVEMENT COST REDUCTION - CP	1.3	175M	1.5	225M	\$450M savings have been defined, additional savings TBD	Rivettless Extractor - Dec. 1980
PRODUCT IMPROVEMENT COST REDUCTION - RF	.3	55M	.3	60M	Savings not defined. TBD	
MISC. DESIGN EXPLORATION LIMITED EDITION - DU DIRKS UNLIMITED	.6	65M	.5	50M	Increased earnings \$20M, 20% R.O.I. on unlimited earnings TBD	August 1980 April 1981
MODEL 708 BURNET & 5500 DEVELOPMENT		50M			Program curtailed, expenditures over-tolling, etc.	
PROCESS DEVELOPMENT (A) NUMERICAL CONTROL and (B) COMPUTER SUPPORT	2.0	135M	3.0	(A) 200M (B) 300M	Potential savings in labor of \$86M per year can be realized. Also design lead time would be reduced.	Submit project for new W/C machine Aug. 1980 Presentation - Inter-Active Graphic System Sept. 1980, Program Dec. 1982
FOUR SLIDE MACHINE DEVELOPMENT	.4	55M (B) 270M	.5	75M	Potential saving of at least \$400M may be realized after expiration of HEP contract in 1985.	Dec. 1981

1980		1981		Incentive	Estimated Completion	
Anticipable Plan Years	Estimated Expenditures	Anticipable Plan Years	Estimated Expenditures			
PROCESS DEVELOPMENT (Cont Innd)						
(C) AUTOMATIC RECEIVER POLISHING MACHINE	.5	\$ 40M (C) 130M	1.0	\$ 115M (D) 180M	Labor savings of \$70M per year with 27% R.O.I. has been estimated. Additional savings of \$100M per year is estimated for polishing H1400 and 070 receivers.	ASRA Dec. 1980 H1400 & 070 Dec. 1981
(D) PROGRAMMABLE MANIPULATOR						
Sub Total	20.5	\$190M	21.2	\$2095M		
NEW INITIATIVE						
NEW PROCESSES FOR GUN PARTS	.4	\$ 20M	.5	40M	Program provides for investigation only. Major development will be covered under separate programs.	
NEW PROCESS/TRANSFER MACHINE			.5	50M		Dec. 1981
(F) LASER CUTTING - WEAVING & WOOD DEXTRATING	.4	40M	.5	(F) 100M	Potential labor saving of \$30M per year may be realized. Increased sales for wood dextrating TMB.	
DEFORMATION PROCESS INVESTIGATION	.2	10M	.5	65M	Potential labor and material savings estimated to be 1,100/year.	TMB
(G) COMPUTER AID INSTRUMENT APPLICATION	.3	30M	1.5	(G) 100M 50M	Potential yearly labor savings of \$20M. Design testing lead will also be reduced.	Dec. 1982
PRODUCT DEVELOPMENT - FURNACE/HEAT TREATING CONCEPTS	.4	25M	.7	75M	Support Program for Providing Design with data for new concepts.	
Sub Total	1.7	\$ 125M	4.2	\$ 410M		
A.B.C.D.E.F.G Capital Expense \$1,185M Plant Capital Expense 4,422M						

	1900		1901		Incentive	Estimated Completion
	Assignables	Estimated Expenditures	Assignables	Estimated Expenditures		
OTHER ACTIVITIES						
MISC. WORK FOR PLANT & OTHER	3.3	\$ 220H	3.1	\$ 250H		
PLANT ASSISTANCE ON CURRENT REMINGTON GUNS	2.6	\$ 125H	2.5	175H		
PRODUCT PROMOTION	.6	\$ 85H	.6	110H		
a) COMPETITIVE AIDS EVALUATION & WORK FOR SALES						
b) RESEARCH SERVICE - SALES PROMOTION						
TECHNICAL INFORMATION	.8	\$ 75H	1.5	120H		
a) TECHNICAL INFORMATION & SERVICE						
b) GUN ORDER GRAPHICS & LAYOUT						
c) MODEL DRAWING & PARTS LIST MAINTENANCE						
d) PACKAGING						
SERVICE TO SAAMI	.2	\$ 10H	.2	10H		

OTHER ACTIVITIES (continued)	1980		1981		Incentive	Estimated Completion
	Annular Rate	Estimated Expenditure	Annular Rate	Estimated Expenditure		
SPECIAL TESTING	.2	\$ 15M	.2	\$ 20M		
a) TESTING ASSISTANCE -						
b) BRIDGEPORT RESEARCH						
c) SPECIAL TESTING - LOCAL						
d) OTHER						
Sub Total	7.5	\$ 510M	8.1	\$ 605M		
TOTAL	31.9	\$2890M	36.0	\$3,525M		
*10.9 Eng./Designers						
1.0 ESD on loan						
31.9 Man Years						
*includes 3.5 new eng.						
2nd 1/2 of year.						

7/10/80