

CONFIDENTIAL

5-5-89

RESEARCH DEVELOPMENT COSTS
FOR
NEW BOLT ACTION RIFLE (N'BARL)

RESEARCH DEVELOPMENT COST ESTIMATE : JAN 89 THRU OCT. 92

1. INITIAL DESIGN	365 M
2. BUILD INITIAL DESIGN PROTO TYPE GUNS (3)	184 M
- PRELIMINARY PROTOTYPE TOOLING - TEMPORARY	80 M
3. DESIGN REVIEW TEAM ANALYSIS	35 M
4. TEST PHASE I PROTOTYPES	74 M
5. RE-DESIGN AFTER PHASE - I TEST	155 M
6. BUILD PHASE II DESIGN SAMPLES (15)	159 M
- PROTO TYPE TOOLING	160 M
- PLANT ASSISTANCE	35 M
7. TEST PHASE II SAMPLES	90 M
8. REDESIGN AFTER PHASE II TESTING	141 M
9. BUILD DESIGN ACCEPTANCE GUNS (30)	242 M
- PROTOTYPE / PERMANENT TOOLING	105 M
- PLANT ASSISTANCE	45 M
10. TEST DESIGN ACCEPTANCE GUNS	72 M
11. MINOR RE-DESIGN & TRANSITION TO PRODUCTION	13 M
12. DRAFT MANUAL	25 M
13. TEST AMMUNITION COST (55,000 RPS (5000 RPS 1990X.254) (50,000 RPS 1991X.254)	14 M
TOTAL DEVELOPMENT COST (1989 DOLLARS) =	1,974 M

RESEARCH MANPOWER ESTIMATE : MAY 89 THRU OCT. 92

1. RESEARCH ENGINEER	4.94 MAN YEARS
2. EDC ENGINEER	1.03 " "
3. CAD DESIGNER	1.90 " "
4. CAD DETAILER	1.74 " "
5. DRAFTSMAN	.25 " "
6. MODEL SHOP PERSONNEL	4.18 " "
7. N/C PROGRAMMER	2.08 " "
8. TEST LAB PERSONNEL	2.50 " "

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RESEARCH DEVELOPMENT COST ESTIMATE : JAN 89 THRU OCT. 92

1. INITIAL DESIGN	M
2. BUILD INITIAL DESIGN PROTO TYPE GUNS (3) - PRELIMINARY PROTOTYPE TOOLING - TEMPORARY	M M
3. DESIGN REVIEW TEAM ANALYSIS	M
4. TEST PHASE I PROTOTYPES	M
5. RE-DESIGN AFTER PHASE - I TEST	M
6. BUILD PHASE II DESIGN SAMPLES (15) - PROTO TYPE TOOLING. - PLANT ASSISTANCE	M M M
7. TEST PHASE II SAMPLES	M
8. REDESIGN AFTER PHASE II TESTING	M
9. BUILD DESIGN ACCEPTANCE GUNS (30) - PROTO TYPE / PERMANENT TOOLING. - PLANT ASSISTANCE	LM M M
10. TEST DESIGN ACCEPTANCE GUNS	M
11. MINOR RE-DESIGN & TRANSMITTAL TO PRODUCTION	M
12. DRAFT MANUAL	M
13. TEST AMMUNITION COST (55,000 RDS 5000 RDS 1990X.25F) (50,000 RDS 1991X.25F)	M M
TOTAL DEVELOPMENT COST (1989 DOLLARS) =	7 M

RESEARCH MANPOWER ESTIMATE : MAY 89 THRU OCT. 92

1. RESEARCH ENGINEER	MAN YEARS
2. EDC ENGINEER	" "
3. CAD DESIGNER	" "
4. CAD DETAILER	" "
5. DRAFTSMAN	" "
6. MODEL SHOP PERSONNEL	" "
7. N/C PROGRAMMER	" "
8. TEST LAB PERSONNEL	" "

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