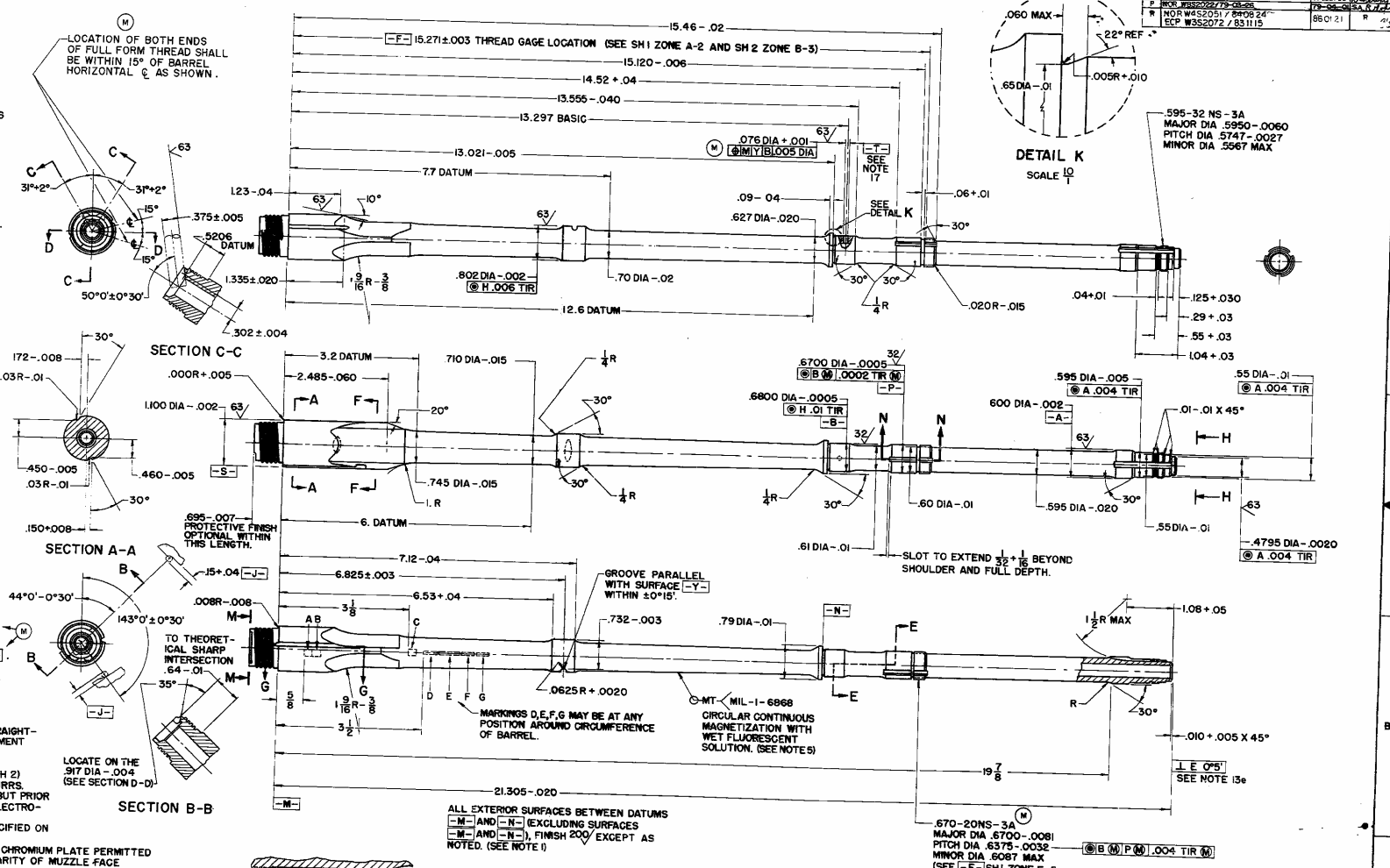
REVISION STATUS OF SHEETS	
SHEET 1	SHEET 2
R	R

REVISIONS			
SYM	DESCRIPTION	DATE	APPROVAL
K		11 APR 61	
L	REDRAWN AND REVISED SEE EO SA28504	11 MAR 63	
M	SEE EO SA 27579	7 DEC 64	
N	SEE EO 82049	11 MAR 68	
P	NOR W3S2022/79-03-26	79-06-01	
R	NOR W4S2051 / 8408 24 ECP W3S2072 / 8311 15	8601 21	R

NOTES:

1. FINISH 125√ EXCEPT AS NOTED.
2. END OF LANDS AND GROOVES TO BE SHARP AND FREE FROM BURRS.
3. -F- THESE DIMENSIONS ARE IDENTICAL.
4. EACH BARREL SHALL WITHSTAND THE FIRING OF ONE GOVERNMENT STANDARD HIGH PRESSURE TEST CARTRIDGE WITHOUT EVIDENCE OF FAILURE.
5. AFTER PROOF FIRING, EACH BARREL SHALL BE MAGNETIC PARTICLE INSPECTED FOR CRACKS, SEAMS, AND OTHER INJURIOUS DEFECTS USING A CURRENT OF 400 TO 600 AMPS.
6. MARKING NOTES:
   A- DEFENSE ACCEPTANCE STAMP (EAGLE IN A SQUARE) (1/8 HIGH).
   B- MAGNETIC PARTICLE TEST MARK "M" (1/8 HIGH).
   C- PROOF MARK LETTER "P" (1/8 HIGH AFTER PROOF FIRING).
   D- MANUFACTURER'S IDENTIFICATION MARK.
   E- PART NUMBER.
   F- MONTH AND YEAR OF MANUFACTURE.
   G- MATERIAL LOT NUMBER.
   ALL LETTERING 1/16 HIGH UNLESS OTHERWISE SPECIFIED. ALL MARKING DIMENSIONS ±1/16 UNLESS OTHERWISE SPECIFIED. ITEMS A, WHEN APPLIED, SHALL BE STAMPED SEPARATELY UNDER GOVERNMENT SURVEILLANCE AFTER FINAL INSPECTION AND ACCEPTANCE OF BARRELS. ITEMS B AND C SHALL BE STAMPED SEPARATELY UNDER GOVERNMENT SURVEILLANCE AFTER RESPECTIVE APPROPRIATE OPERATION. ITEMS D, E, F, AND G SHALL BE STAMPED IN LINE FROM ONE CONTINUOUS ROLL.
7. -G- THESE DIMENSIONS ARE MIN REF AT MIN DIA (FOR CALCULATIONS ONLY).
8. DIMENSIONS SHOWN ON SECTION D-D APPLY AT INTERSECTION OF STRAIGHT LINES.
9. FOR CIRCUMFERENTIAL AREA -U-, ZONE -K- SHALL BE HEATED TO 1550°F MINIMUM LOCALLY AND COOLED IN AIR. ROCKWELL HARDNESS A77 TO 83. HARDENING OF THE LEFT HAND BULLET RAMP AND -L- RUNOUT ZONES IS OPTIONAL. DEPTH OF HARDNESS AT -L- SHALL NOT EXCEED 3/32 AS MEASURED FROM THE BREECH END FACE. DEPTH OF HARDNESS AT THE LEFT HAND BULLET RAMP SHALL NOT EXCEED 3/32 AS MEASURED FROM THE LEFT HAND BULLET RAMP EDGE WHICH INTERSECTS THE .917-.004 DIA. (SEE SECTION D-D AND VIEW M-M).
10. HEAT TREATMENT: BEFORE MACHINING, BARS AND BLANKS SHALL MEET THE HARDNESS AND PHYSICAL REQUIREMENTS SPECIFIED IN SPEC MIL-S-11595 FOR THE QUENCHED AND TEMPERED CONDITION.
11. -H- AXIS ESTABLISHED BY DIA -A- AND -C-.
12. FROM THE BARREL CENTERLINE ESTABLISHED BY A SELF ALIGNING EXPANSION PLUG (3 INCHES LONG WITH A PILOT DIAMETER OF .2993-.0001) THAT FITS AND ALIGNS ITSELF IN THE BORE AT THE MUZZLE END, THE MAXIMUM ALLOWABLE DEVIATION SHALL NOT EXCEED 0°2'23" THROUGHOUT THE LENGTH OF THE BORE. STRAIGHTENING AFTER PLATING TO MEET THIS REQUIREMENT IS PERMISSIBLE.
13. a. DIMENSIONS IN AREAS OF CHROMIUM PLATING APPLY AFTER PLATING. (SEE SECTION D-D SH 2)
    b. AREAS TO BE PLATED SHALL BE FREE OF BURRS.
    c. REMOVAL OF MATERIAL AFTER MACHINING BUT PRIOR TO PLATING SHALL BE ACCOMPLISHED BY ELECTROPOLISHING. (SEE SHEET 2, ZONE A-5)
    d. THICKNESS OF CHROMIUM SHALL BE AS SPECIFIED ON SECTION D-D SHEET 2.
    e. NO MECHANICAL METHODS FOR REMOVAL OF CHROMIUM PLATE PERMITTED EXCEPT FOR QUALIFICATION OF PERPENDICULARITY OF MUZZLE FACE AND/OR INTERIOR CHAMFER AT MUZZLE.
    f. BARREL SHALL NOT BE PROOF FIRED PRIOR TO CHROMIUM PLATING. (SEE NOTE 4)
    g. AFTER PROOF FIRING CHROMIUM PLATE SHALL BE FREE FROM BLISTERS, PITS, FLAKING, PEELING, AND CRACKS.
14. EXCEPT FOR REPAIR PART BARRELS, DIMENSION -R- MAY BE ADJUSTED TO PROVIDE FOR PREFERENTIAL ASSEMBLY OF BARRELS AND RECEIVERS TO MEET HEADSPACE REQUIREMENTS OF RIFLE ASSEMBLY DWG J7267000 WITHOUT MACHINING AFTER ASSEMBLY.
15. ALL EDGES SHALL BE BROKEN .005+.010 UNLESS OTHERWISE SPECIFIED.
16. MATERIAL: STEEL, SPEC MIL-S-11595: CHROME-MOLY-VANADIUM OR 4150 RESULPHURIZED.
17. FINAL PROTECTIVE FINISH: EXTERIOR SURFACES EXCEPT AS NOTED: FINISH NO. 5.3.1.2 OF MIL-STD-171. INTERIOR SURFACES EXCEPT AS NOTED: FINISH NO. 1.2.2 OF MIL-STD-171 (SEE NOTE 13). ORIFICE -T- MAY BE BRIGHT OR FINISHED IN ACCORDANCE WITH 5.3.1.2 OR 1.2.2 OF MIL-STD-171.



www.milsurps.com

MECHANICAL PROPERTIES			
YP			
TS			
EL 2		F7790191	RIFLE, M14
RA			
BH		NEXT ASSY	USED ON
RH		APPLICATION	
SEE NOTES 9910		DO	APPLY PART NO PER MIL-STD-130 AS SPECIFIED

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES			
TOLERANCES ON	DECIMALS ± .01	FRACTIONS ± 1/16	ANGLES ± 1°
MATERIAL SEE NOTE 16			
HEAT TREATMENT SEE NOTE 10			
FINAL PROTECTIVE FINISH SEE NOTE 17			

ORIGINAL DATE OF DRAWING	10 JUL 58		
DRAFTSMAN	R.L.S	CHECKER	E.F.K
TRACER		CHECKER	
ENGINEER		ENGINEER	
SUBMITTED			
APPROVED			

CURRENT DESIGN ACTIVITY FSCM NO. 19200
U.S. ARMY ARMAMENT RESEARCH AND DEVELOPMENT CENTER
DOVER, NEW JERSEY 07801

ORIGINAL DESIGN ACTIVITY FSCM NO. 19205

Ⓜ PART NO. 7790190

~~DEPT OF THE ARMY~~
~~ROCK ISLAND ARSENAL, ROCK ISLAND, ILL 61201~~

BARREL

CODE IDENT NO.	DWG SIZE	
~~19200~~	F	7790190
SCALE 1/1	UNIT WT	SHEET 1 OF 2