Project #: 241095 Éngineer: J.R.SNEDEKER Test Objective: TLW0010AL - Dynamic Sand & Dust Test: This test evaluates the effects of blowing sand and dust on firearm performance, but the test conducted after the firearm is removed from the sand and dust environment. Use the same sand mixture used in the Sand and Dust Test, (See Table No. 1.) TABLE No. 1. COMPOSITION OF SAND AND DUST MIXTURE (by percent particles, by weight, retained in sieves) Sieve Size (US gage sieve no.) Percent of verifield ver	Jate Submi	tted: 10 March, 2000	Tracking #:	TLW 0010AL	
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Test Description

Method:

- Clean and lubricate one test firearm and close the muzzle with tape.
- Close the bolt. Set the safety in the SAFE position. Load the firearm using one primed case.
- Expose the firearm as follows:
- Place the firearm in the center of the box, and fasten the box lid.
- After 1 minute, stop the blowing air, remove the lid, and turn the firearm upside down in the box. Replace the lid and repeat the sand and dust blast for another minute.
- Remove the gun from the box after first attempting to wipe clean the firearm with gloved

- hands. Clean parts as much as possible by blowing the rifle with compressed or shaking the firearm. Carefully remove the tape from the muzzle. REMEMBER THAT THE RIFLE HAS A PRIMED CASE IN THE CHAMBER.
- Take the rifle to a test jack in the short range. (Note: if not shooting from the test box, remove the spent primed case from the chamber and replace with a live round.) Load the magazine with live rounds and fire a full magazine from the firearm while in the test jack.
- If firing is still unsatisfactory, attempt to fire with a clean magazine loaded with clean ammunition. If repeated malfunctions make it impossible to fire all of the ammunition, field strip and clean the firearm in accordance with the applicable operator's manual. Then attempt to fire the remaining ammunition. If repeated malfunctions make it impractical to fire the remaining ammunition, stop the test. Cycle the safety from fire to safe every 5 rounds.
- At every 5 round interval verify the firearm is not loaded.
- Close the firearm as if to fire it and put the safety to the SAFE position
- Pull the trigger firmly (10 lb. maximum) firearm must not fire.
- With the finger off the trigger, move the safety to the FIRE position firearm m fire.
- Disassemble the firearm over a large white paper and weigh the amount of debris present in the main mechanism

Data Required:

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- Record malfunctions. Non «
- Record number of rounds fired.
- Record weight of debris found in the gun 164 4 Outros GNAINS
- Record any firing of the firearm without the trigger being pulled. Non 4
- Record any misfires.

Resource Usage: Manpower Requirements -

Test Results Required: Formal Report: Data Only: X

Facility Requirements -

Required Materials/Parts/Equipment (include quantities):

Test Parts Availability Date:

Start Date: 4 - 27 - 00 Completion Date: 4 - 27 - 00 **REQUESTED** Completion Date:

Test Assigned To: JESSE ARNOLD &

BOB LEE 16 MARCH 2000

GUN A-12 XC1127

PHASE (1)



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MALFUNCTIONS - NONE ROUNDS FIRED - FIVE WEIGHT OF DEBRIS FOUND IN GUN - 164.4 GRAINS FIRING OF THE FIREARM WITHOUT TRIGGER BEING PULLED - NONE MISFIRES - NONE