ILION, New York August 26, 1968

TO: W. E. LEEK

from: A. A. Hugick

Work Report for Period of August 12, 1968 through August 23, 1968

### M/1100 & M/870 Light Weight Testing

Four Model 1100 - 28 ga. shotguns have been tested and made ready for shipping. Testing consisted of headspace, indent, trigger pull, bolt velocity, point of impact, 125 round function test, adjustments, 110 round function retest, and finally cleaning and reassembly.

Three M/870 - 28 ga. were checked out per above testing and made ready for shipping. The final function test of seven guns at 110 rounds per gun had one case out off and two stem rights.

# M/788 Testing

Pive M/768 - 308 caliber rifles were selected from thirty gallery guns for pilot line testing. The balance of ten guns will be selected later as more M/788 - 308 caliber rifles are assembled. Results thus far are inconclusive and testing is in process.

One M/788 - 6mm pilot rifle was selected for conducting a reloadibility test measuring bolt operating forces. Bolt lift results are high after the second reload (20+ lbs.) and inoperable after five reloads. A summary report will follow.

Two M/788 - 22/250 deliber rifles were delivered to the Measurement Lab for evaluation of experimental barrels. (Removal of rear B+ threads) Freliminary results show a difference of strength in the chamber area (testing is continuing).

#### M/700 Testing

- 1. A M/700 350 caliber and M/700 6.5 caliber pre-pilot design evaluation test was conducted for M. Walker, Results were satisfactory and a susmary report issued.
- 2. Huzzle velocity of the 350 caliber and 6.5 were compared in the M/600 18-1/2 inch barrel, M/660 20 inch barrel, and M/700 24 inch barrel, per request of R. P. Kelly. Results were tabulated in report form and circulated.

#### N/66

Point of impact shift testing was fired for B. Service with scope mounted on barrel vs. mounted on receiver.

## Photography

- 1. Shooting of a high speed movie showing 223 caliber mush in a geletin block for Bridgeport. This is preliminary for a high speed film series of mush testing assisting Bridgeport. Schedule date is Sept. 4, 1968.
- 2. The photography section is doing 1969 catalog photos. This will be the week of August 26 through August 30, 1968.
- 3. Prize pictures for the J. Fredricks show contest were taken.
- 4. Construction photos of new warehouse showing progress.
- 5. Photos and related work for Board of Directors.
- 6. Miscellaneous photos for Plant, R&D and Bridgeport per request.

### Miscellaneous Lab Functions Performed

- 1. M/588 221 handloading and accuracy testing.
- 2. N/C maintenance during two week plant shutdown and first week following vacation by D. Nightingale.
- 3. Run T.V. cable from Meas./Test Lab to computer for Board of Directors.
- 4. Repair and calibration of plant shooting jack.
- 5. Shooting for pressure and velocity of S.A.A.M.I. pressure barrel and standard pressures for M. Walker's group.
- 5. Bolt velocity measurements of M/514-A 22 R.F. for B. Service.
- 7. Assisted in initial debugging of computer chronograph.

<u>Vacation:</u> Nightingale - August 26 through September 10, 1968.

Hic.