



DEPARTMENT OF THE NAVY
COMMANDER NAVY RESERVE FORCES COMMAND
1915 FORRESTAL DRIVE
NORFOLK VA 23551-4615

COMNAVRESFORCOMINST 3574.1

N3

7 Jan 2019

COMNAVRESFORCOM INSTRUCTION 3574.1

From: Commander, Navy Reserve Forces Command

Subj: NAVY RESERVE FIRE ARMS TRAINING SYSTEM

Ref: (a) OPNAVINST 3500.39C
(b) OPNAVINST 3591.1F
(c) NAVSEAINST 8370.2D
(d) OPNAVINST 5530.14E
(e) SECNAVINST 5500.29C
(f) FATS L7/M7 Operation and Maintenance Manual
(g) Beretta M9 Semiautomatic Pistol Simulator System - Controlled Operation and Maintenance Manual
(h) Fire Arms Training Systems System Controlled Remington, Model 870, 12 Gauge, Shotgun, FATS P/N 1010193 Operation and Maintenance Manual, Hunter
(i) M4 Carbine System-Controlled Operation and Maintenance Manual
(j) NAVSUP P-723
(k) NAVSUP P-485
(l) SECNAVINST 7320.10A
(m) COMNAVRESFORCOMINST 4000.1D
(n) COMNAVRESFORINST 5350.1A

Encl: (1) Fire Arms Training Simulator Inspection Checklist
(2) Fire Arms Training Simulator Operator Job Qualification Requirement
(3) Planned Maintenance System Schedule

1. Purpose. To follow maintenance and reporting requirements for the Fire Arms Training System (FATS), controlled by Commander, Navy Reserve Forces Command (COMNAVRESFORCOM) per references (a) through (n).

2. Scope and Applicability. The purpose of FATS at Navy Reserve Activities is to train and qualify Reserve personnel on weapons systems. This instruction is not intended to be all-inclusive, but to emphasize COMNAVRESFORCOM's accountability and storage requirements.

3. Background. The FATS is designed to be an integral part of the Small Arms Training Program and will be used for assessing, developing, and sustaining marksmanship skills, precluding the need for live-fire training requirements in accordance with references (b) and (d). The procurement of FATS supports weapons qualification, training sustainment and judgment-based scenario training requirements, allowing Sailors to train on the same scenarios that they will face while assigned to units conducting real-world operations.

4. General

a. The FATS is a laser-based marksmanship training system, which trains personnel in weapon operation and proficiency. This system exposes personnel to realistic training situations. It also provides advanced diagnostic feedback. The training system consists of six primary subsystems:

- (1) Power Distribution
- (2) Computer Processing
- (3) Data Storage
- (4) Image Distribution
- (5) Audio Distribution
- (6) Simulated Weapons

b. Operational Risk Management principles relating to the use of FATS must be addressed prior to and during training evolutions, per reference (a). Additional information regarding laser and pressurized gas safety concerns is found in reference (f).

c. All training evolutions require the presence of a qualified FATS operator.

d. Courses of fire specified in reference (b) require a small arms instructor.

5. Duties and Responsibilities

a. COMNAVRESFORCOM (N3) will evaluate and review operating procedures, material condition and inventory process of Reserve commands assigned FATS during Command Assessments and Armed Watchstander Maintenance and Material Management inspections.

b. COMNAVRESFORCOM (N3) will monitor the use, accountability and effectiveness of training through training records and spot checks.

c. Navy Reserve Activity (NRA) will:

- (1) Designate FATS custodian(s) in writing.

- (2) Ensure FATS custodian(s) follow the provisions and references of this instruction to maintain and safely operate FATS.

d. FATS custodian(s) will:

(1) Ensure proper security measures exist to prevent theft or unnecessary damage to equipment.

(2) Coordinate all usage to include off-site transport.

(3) Ensure the proper upkeep, operation, and security of assigned FATS and related equipment.

(4) Ensure proper receipt and inventory of FATS equipment. Sign the accountability forms and return to respective N4 point of contact. Retain copies of the accountability form and inventory per reference (j). FATS requires retention of appropriate records for controlled equipment.

(5) Ensure one Full Time Support (FTS) personnel is qualified as a FATS operator through the FATS Simulator Operator 3-day training course or enclosure (2). Additional Selected Reserve and FTS personnel are authorized to qualify as FATS operators.

(6) Provide the names and rates of qualified operators who have completed the FATS Simulator Operator 3-day training course to COMNAVRESFORCOM (N3).

(7) Place FATS equipment in a locked, climate-controlled storage area with limited access, per reference (f).

(8) Identify all personnel prior to entering the FATS storage area.

(9) Maintain a log to record all training events and record the date and time of FATS access, closures, and inventory of the weapons. The log will also include any pertinent information, such as power outages, computer problems, weapon simulator problems, or any other situations that may arise during the course of training.

(10) Conduct semi-annual inventory by serial number and periodic spot checks of FATS, and document per reference (m).

(11) Retain a copy of the semi-annual inventory onboard for 2 years and provide to the Reserve Component Command or Immediate Superior in Charge (ISIC) and COMNAVRESFORCOM (N3) upon request.

(12) Document and track material deficiencies with equipment.

(13) Conduct inventory and inspection on all FATS equipment as part of commanding officer turnover.

(14) Ensure FATS weapons are secured in their appropriate storage racks with low security locks installed.

(15) Ensure all storage racks reside inside an appropriately secured room.

(16) Lock in place using security cables for all weapons stored on firing line.

(17) Resolve conflicts in trainer scheduling between outside activities.

(18) Coordinate equipment repair through COMNAVRESFORCOM (N3).

(19) Designate a FATS key custodian in writing.

(20) Execute basic maintenance schedule per reference (f) and enclosure (3).

e. FATS operator will:

(1) Enforce proper FATS safety practices by all personnel using the simulator.

(2) Inventory all FATS weapons prior to use and following training.

(3) Fill out enclosure (1) prior to and following completion of FATS use.

f. FATS key custodian will:

(1) Maintain an accurate log of all keys to FATS spaces.

(2) In the event of misplaced or suspected theft of FATS trainer keys, conduct an inventory of the FATS trainer weapons and associated equipment and provide a report to COMNAVRESFORCOM (N3) via the ISIC, to ensure proper accounting of all FATS weapons and equipment.

(3) Retain and store FATS keys at the end of each use.

6. Records Management. Records created as a result of this instruction (or notice, as applicable), regardless of media and format, must be managed per Secretary of the Navy Manual 5210.1 of January 2012.

7. Review and Effective Date. Per OPNAVINST 5215.17A, COMNAVRESFORCOM will review this instruction annually around the anniversary of its issuance date to ensure applicability, currency, and consistency with Federal, Department of Defense, Secretary of the Navy, and Navy policy and statutory authority using OPNAV 5215/40 Review of Instruction. This instruction will be in effect for 10 years, unless revised or cancelled in the interim, and will be reissued by the 10-year anniversary date if it is still required, unless it meets one of the exceptions in OPNAVINST 5215.17A, paragraph 9. Otherwise, if the instruction is no longer required, it will be processed for cancellation as soon as the need for cancellation is known following the guidance in OPNAV Manual 5215.1 of May 2016.

8. Information Management Control. The information collection requirements listed in this instruction are available for use via sharepoint, <https://www.mynrh.navy.mil>


T. W. LUSCHER

Releasability and distribution:

This instruction is cleared for public release and is available electronically only via COMNAVRESFORCOM Web site, <https://www.mynrh.navy.mil>

FIRE ARMS TRAINING SIMULATOR INSPECTION CHECKLIST

INITIAL

1	Ensure no live ammunition or live firearms are present prior to any training evolution.	
2	Conduct a walk-through of the FATS room prior to any training evolutions for safety discrepancies, ensure equipment is functioning correctly with no unauthorized modifications.	
3	Accomplish required maintenance per reference (f) and enclosure (3). Record all maintenance in the FATS log book to include equipment, serial number, maintenance person, and date accomplished.	
4	Inventory all equipment and conduct system start-up procedures in accordance with the FATS L7/M7 OM Manual.	
5	Enter into the FATS log book (i.e., enclosure 3): date, start-up time, beginning time of training, personnel trained, and operator conducting training, equipment inventory SAT/UNSAT, and any discrepancies or system failures.	
6	Provide LASER safety, live ammunition safety, and range safety brief per OPNAVINST 3591.1F	
7	Upon completion of training, shut down equipment in accordance with the FATS L7/M7 Manual.	
8	Log the time of completion of training, accumulated hours of equipment use, equipment inventory SAT/UNSAT, and any discrepancies noted during training.	
9	Return all equipment to its designated stowage area and secure room.	

FIREARMS TRAINING SIMULATOR OPERATOR JOB QUALIFICATION
REQUIREMENT

NAME: _____ RATE/RANK: _____

This page is used as a record of satisfactory completion for this Job Qualification Requirement (JQR). Only designated MEGGITT Firearms Training Simulator Operators may signify completion of applicable sections/numbers, either by written and/or oral examination, or by observation of performance. Personnel qualified to sign off any portions of this JQR must be designated in writing. A complete list, which properly identifies all designated qualifiers, should be maintained current, retained on file, and attached to this JQR for use by the trainee.

This qualification section is to be maintained by the trainee and updated to ensure awareness of remaining tasks.

The trainee has completed all JQR requirements for this watchstation. Recommend designation as a qualified MEGGITT Firearms Training Simulator Operator.

RECOMMENDED _____ DATE _____
(Supervisor Signature)

RECOMMENDED _____ DATE _____
(Division Officer Signature)

RECOMMENDED _____ DATE _____
(Department Head Signature)

QUALIFIED _____ DATE _____
(Commanding Officer/Designated Representative Signature)

SERVICE RECORD ENTRY: _____ DATE: _____

FIREARMS TRAINING SIMULATOR OPERATOR JOB QUALIFICATION
REQUIREMENT

NAME: _____ RATE/RANK: _____

Estimated Completion Time: 24 Hours of Instruction/Training (Minimum)

PREREQUISITES

For optimum training effectiveness, the following prerequisites should be completed prior to starting your assigned tasks, but must all be completed prior to qualification:

1.1 SCHOOLS: NONE

1.2 OTHER QUALIFICATIONS: NONE

1.3 PQS QUALIFICATIONS:

- a. Security Force Weapons M-16 Service Rifle Operator
(NAVEDTRA43466-D)
- b. Security Force Weapons M500 Shotgun Operator
(NAVEDTRA 43466-D)
- c. Security Force Weapons M9 Service Pistol Operator
(NAVEDTRA 43466-D)

1.4 WATCHSTATIONS FROM THIS PQS: NONE

1.5 FUNDAMENTALS FROM THIS PQS:

101 Review all references listed on page 6 of this JQR

Completed _____
(Signature and Date)

102 Weapons handling and range safety

Completed _____
(Signature and Date)

FIREARMS TRAINING SIMULATOR OPERATOR JOB QUALIFICATION
REQUIREMENT

NAME: _____ RATE/RANK: _____

103 MEGGITT setup and operation

Completed _____
(Signature and Date)

104 Examinations

Completed _____
(Signature and Date)

101 TASKS

101.1 Review references for weapons safety, operations, and handling.

(Signature and Date)

.2 Review references for range operations and safety.

(Signature and Date)

.3 Review the reference for the MEGGITT Training System.

(Signature and Date)

102 TASKS

102.1 State the most prevalent factor in accidents involving firearms.

(Signature and Date)

.2 State the general weapon condition codes and associated actions of the person being supervised.

(Signature and Date)

FIREARMS TRAINING SIMULATOR OPERATOR JOB QUALIFICATION
REQUIREMENT

NAME: _____

RATE/RANK: _____

.3 State the following range safety rules.

- a. General
- b. Pistol
- c. Rifle
- d. Shotgun

(Signature and Date)

.4 State the standard weapon handling commands and associated actions of the person being supervised.

(Signature and Date)

.5 State who must deliver the training instruction.

(Signature and Date)

.6 State who is responsible for safe range operations.

(Signature and Date)

.7 State who gives firing commands.

(Signature and Date)

.8 State the Sailors actions if they do not understand commands during all phases of instruction.

(Signature and Date)

.9 State when the Sailor shall be removed for safety violations and for what violations.

(Signature and Date)

FIREARMS TRAINING SIMULATOR OPERATOR JOB QUALIFICATION
REQUIREMENT

NAME: _____ RATE/RANK: _____

103 TASKS

103.1 State the purpose of the FATS trainer.

(Signature and Date)

.2 Discuss hazards associated with the FATS trainer and other laser training systems.

(Signature and Date)

.3 Discuss the setup procedures for the FATS trainer.

(Signature and Date)

.4 Discuss the operation of the FATS trainer.

(Signature and Date)

.5 Discuss the courses of fire for the FATS trainer.

(Signature and Date)

.6 Discuss the number of lanes and personnel authorized in the FATS trainer during training.

(Signature and Date)

.7 Setup the recharging station for the simulated magazines.

(Signature and Date)

.8 Discuss some of the different types of malfunctions that could be encountered with FATS and its weapons along with remedial actions.

(Signature and Date)

FIREARMS TRAINING SIMULATOR OPERATOR JOB QUALIFICATION
REQUIREMENT

NAME: _____ RATE/RANK: _____

-
- .9 Setup the FATS trainer for operation.

(Signature and Date)
- .10 Perform power up procedures.

(Signature and Date)
- .11 Perform system calibration.

(Signature and Date)
- .12 Charge the magazines for the M9 at the charging station.

(Signature and Date)
- .13 Perform zeroing for the M9.

(Signature and Date)
- .14 Perform operation for Navy Handgun Qualification Course course of fire.

(Signature and Date)
- .15 Charge the magazines for the M16 at the charging station.

(Signature and Date)
- .16 Perform weapons change to the M16.

(Signature and Date)
- .17 Perform zeroing for the M16.

(Signature and Date)

FIREARMS TRAINING SIMULATOR OPERATOR JOB QUALIFICATION
REQUIREMENT

NAME: _____ RATE/RANK: _____

- .18 Perform operation for Rifle Qualification Course course of fire.

(Signature and Date)

- .19 Discharge the air from the magazines.

(Signature and Date)

- .20 Perform shutdown of the FATS trainer.

(Signature and Date)

- .21 Perform disassembly of the FATS trainer.

(Signature and Date)

- .22 Store equipment in the designated locations.

(Signature and Date)

104 EXAMINATIONS

- 104.1 Pass an oral examination.

(Signature and Date)

- .2 Pass a performance examination.

(Signature and Date)

FIREARMS TRAINING SIMULATOR OPERATOR JOB QUALIFICATION
REQUIREMENT

LIST OF REFERENCES USED IN THIS JQR:

NTRP 3-07.2.2, Force Protection Weapons Handling Standard Procedures and Guidelines
OPNAVINST 3591.1 Small Arms Training and Qualification

NAVSEAINST 8370.2 Small Arms Management

MCRP 3-01B, Marine Corps Pistol Marksmanship Manual

MCRP 3-01A, Marine Corps Rifle Marksmanship Manual

FM 3-22.9, Rifle Marksmanship, M16A1, M16A2/3, M16A4, and M4 Carbine

FM 3-23.35, Combat Training with Pistols, M9 and M11

MEGGITT Systems Manual

PLANNED MAINTENANCE SYSTEM SCHEDULE

Item	DORT	Basic Planned Maintenance		
		Visual Inspection	Dust and Clean	Lubricate
PC	D	D/A	M	N/R
Keyboard	D	D/A	M	N/R
Monitor	D	D/A	M	N/R
Mouse	D	D/A	M	N/R
Printer	D	D/A	M	N/R
Projector	D	D/A	M	N/R
Projector Lens	D	D/A	M	N/R
Hit Detection Camera	D	D/A	M	N/R
Hit Detection Camera Lens	D	D/A	M	N/R
Screen Surface	N/A	D/A	M	N/R
Speakers	D	D/A	M	N/R
Magazines	N/A	D/A	M	N/R
Simulated Weapons	N/A	D/A	M	Per Simulated Weapon Manual
Gas Supply - Bottles	N/A	D/A	M	M
Gas Supply Lines and Electrical Cables	N/A	D/A	M	M
Weapon Calibration (Online)	N/A	D/A	N/A	N/A
System Alignment	D	W	N/A	N/A
System Calibration	D	W	N/A	N/A

LEGEND			
D - PRIOR TO USE		N/R - NOT REQUIRED	
W - WEEKLY		N/A - NOT APPLICABLE	
M - MONTHLY		D/A - DAILY AS NEEDED	

PLANNED MAINTENANCE SYSTEM MATERIALS	
Name	Quantity
Soft cloth, cleaning	2 packages (200 pieces)
Soft tissue, optical lens	1 package (500 pieces)
Cleaner, non-abrasive household	1 bottle
Monitor screen cleaner, anti-static	1 bottle
Lubricant, light weight machine oil	1 can
Gun oil, light weight, exterior	1 can
Light pen with batteries, for alignment test	1 each (supplied)

7 Jan 2019

PLANNED MAINTENANCE SYSTEM SCHEDULE

Daily Inspection	
System Component	Items to Check
Simulation Unit	Check that all connections are secure. Check for visible signs of damage. Check that all switches are set properly for operation.
Liquid Crystal Display Projector	Check for visible signs of damage. Check all connectors for proper connection. Verify that all switches are set properly. Verify that the projector has not been moved.
Hit Detection Camera	Check for visible signs of damage. Check all connectors for proper connection. Verify the hit detection camera has not been moved.
Hit Detection Camera Lens	Inspect the hit detection camera lens to verify it is clean and unobstructed.
Simulated Weapons	Verify the inventory of simulated weapons is present. Inspect the actions to see if they are operational and not obstructed. Inspect the slides (if applicable) to see if they are smooth and operational. Verify the O-rings are in good condition (not damaged or missing) on weapons that operate at 100 pounds per square inch.
Magazines	Check for visible signs of damage and verify that they may be inserted in the correct simulated weapon.
Carbon dioxide (CO2) Bottles	Check for visible signs of damage or movement (If moved unintentionally, the bottles may have to be secured better or relocated).
CO2 Regulators	Check for visible signs of damage. Inspect the CO2 regulators to see if they are properly working. (They should indicate the proper pressure.) Inspect the fittings for leaks or improper connections.
CO2 Lines	Inspect the CO2 lines for signs of crimps, bends, fraying, or improper connection.
CO2 Connectors	Inspect all CO2 line connectors for leaks or improper connections.
CO2 Sign	Post "Carbon dioxide in use" signs near the entrance to the training system area.
CO2 Exposure	All personnel should be made aware of the symptoms of CO2 exposure.
Laser Safety	Ensure all personnel are briefed on the laser hazard.
Electrical Safety	Ensure everyone is briefed on the electrical hazard.

PLANNED MAINTENANCE SYSTEM SCHEDULE

WEEKLY PMS PROCEDURES	
System Component	Items to Check
Printer	Check the paper supply. Check the paper feed for alignment (see originating equipment manufacturer).
CO2 Bottles/Regulators	Ensure bottles are tightly secured. Check CO2 fill levels. Check regulator pressures.
Simulated Weapons	Clean as described in the weapon operations and maintenance manuals. WARNING Do not clean or inspect a weapon that is still connected to the gas supply or Primary Simulator Course.

PLANNED MAINTENANCE SYSTEM SCHEDULE

MONTHLY PMS PROCEDURES

WARNING

Power down the system before cleaning components. A severe risk of electrical shock is possible from electrical connections.

CAUTION

Do not spray detergent directly onto or into any electrical component housing, its assemblies, or sub-assemblies. Do not use detergents or solvents on any of the electrical assemblies or sub-assemblies.

System Component	Items to Check
Instructor-Controlled Laptop	Wipe the monitor screen free of dust. Using a dry, soft bristle brush (paintbrush or shaving brush type); dust off all connections and cables, as well as the keyboard.
System Unit	Spray a small amount of non-abrasive household detergent liquid onto a clean, dust-free cloth. Wipe clean the exterior of the system unit. Using a dry, soft bristle brush (paintbrush or shaving brush type); dust off all connections and cables.
Projector	Clean the outside of the projector with a soft, dry cloth. Blow the dust off the lens and then wipe it with lens cleaning paper.
Projector Dust Filter	Clean after every 100 hours of projector operation (see Section 7.5.2).