



DEPARTMENT OF THE NAVY  
HEADQUARTERS UNITED STATES MARINE CORPS  
2 NAVY ANNEX  
WASHINGTON, DC 20380-1775

MCO 3550.9  
C465  
28 Jun 2004

MARINE CORPS ORDER 3550.9

From: Commandant of the Marine Corps  
To: Distribution List

Subj: MARINE CORPS GROUND RANGE CERTIFICATION AND  
RECERTIFICATION PROGRAM

Ref: (a) MCO 3570.1B, Range Safety  
(b) MCO 5100.29, Marine Corps Safety Program  
(c) MCO P8020.10A, Marine Corps Ammunition and Explosives  
Safety Policy Manual  
(d) NAVSEAINST 8020.14B, Shore Station Explosives Safety  
Program  
(e) MCO 5104.1B, Navy Laser Hazards Control Program  
(f) MIL-HDBK 828A, Laser Range Safety  
(g) MCO 3500.27A, Operational Risk Management  
(h) MIL-HDBK 1027/3B, Range Facilities and Miscellaneous  
Training Facilities Other Than Buildings  
(i) MCO P5090.2A, Environmental Compliance and Protection  
Manual

Encl: (1) Outdoor Ground Range Certification Checklist  
(2) Outdoor Ground Known Distance Range Certification  
Checklist  
(3) Indoor Range Certification Checklist  
(4) Explosive Training Range Certification Checklist  
(5) Range Control Operations Checklist

1. Purpose. As directed by references (a), (b), and (c), this Order establishes responsibilities and prescribes policies and procedures for the certification and recertification of Marine Corps ground ranges and associated training facilities. This Order will:

a. Identify the requirements for the Ground Range Certification and Recertification Program.

b. Provide specific guidance to meet the responsibilities outlined in reference (c) for range certification.

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c. Identify range certification criteria that fulfill the requirements and ensure compliance with Program 9 of the Explosives Safety Inspection (ESI) Program as outlined in reference (d).

2. Background. Per reference (a), the CMC assigned the CG, MCCDC (C465) responsibility for the Marine Corps Ground Range Safety Program. CG, MCCDC (C465) serves as the single point of contact for ground range operations involving operational use of Class V (W) ammunition within the Marine Corps. Responsibilities include, the Range Certification and Recertification Program, and technical assistance visits (TAVs). Range certification is the function by which the Marine Corps will enhance safety and ensure environmental compliance, while more effectively and efficiently using its ranges and training areas to meet training requirements and standards.

3. Information. The Ground Range Certification and Recertification Program is an integral part of overall ground range safety. This program ensures safety while enhancing combat effectiveness and readiness. Combat readiness is of the utmost importance to the Marine Corps. To achieve high levels of operational readiness, Marine Corps organizations must maintain rigorous and realistic training programs based on approved training standards. Adequate training resources must be dedicated to this effort to enhance safe, realistic, live-fire training, enabling Marine units to train as they fight.

#### 4. Policy

a. Commanding generals and/or installation commanders of bases, stations, and recruit depots are responsible for the certification and recertification of ground ranges under their responsibility. The installation operations and training officer (O&T/G-3/S-3) or range control officer (RCO) will be assigned in writing and responsible to the commander for the certification and recertification of the installation ranges. Copies of the RCO's assignment letter, ground range certifications, and recertifications will be forwarded to CG, MCCDC (C465), 3300 Russell Road, Quantico, Virginia 22134-5001.

b. Organizations that do not have a trained and qualified RCO assigned can formally request assistance from CG, MCCDC (C465) at no cost to the unit. The RCO, at a minimum, must complete the Interservice Range Safety Course (Intermediate) prior to certifying and recertifying ranges. The education and training of responsible range management personnel in the range certification process is the responsibility of CG, MCCDC (C465).

c. All ground ranges located on Marine Corps property (to include explosive ordnance training ranges and test firing facilities at depot maintenance activities for small arms) will be certified in compliance with this Order. Steel target ranges, shooting houses, military operations in urban terrain (MOUT) facilities, breaching facilities, etc., will also be certified. CG, MCCDC (C465) will assist installation commanders through TAVs as required in the initial range certification of all new ranges prior to government acceptance. Surface danger zone (SDZ) criteria for live-fire ranges that are not outlined in reference (a) or a Training and Education Command (TECOM) Safety of Use Memorandum (SOUM) will require CG, MCCDC (C465) approval for use and certification. CG, MCCDC (C465) will be involved in the planning, construction, and certification of all new range initiatives to provide institutional oversight.

d. Ground ranges will be recertified in the event of re-designation or modification from the parameters of the previous certification. Modifications may include design changes (including the addition or removal of targets), changes in weapons/weapons stations, modifications of the type of ammunition, and/or changes to the ammunition properties. Additionally, all ranges must be recertified at least once every three years, regardless of modifications or re-designation. A copy of the recertification package will be forwarded to CG, MCCDC (C465).

e. All ground range certifications and recertifications will be current and on file at the installation until the range is officially closed, transferred, or put to an incompatible use.

f. Commanders must submit a request for deviation from the requirement(s) outlined in reference (a) for ground ranges not meeting the requirements of this Order and reference (a).

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Commander, Marine Forces Atlantic (COMMARFORLANT), Commander, Marine Forces Pacific (COMMARFORPAC), Commander, Marine Forces Reserve (COMMARFORRES), and commanding generals of all supporting establishment commands have deviation authority, and may delegate that authority to installation or depot commanders of general officer grade only. This authority will not be further delegated. Installation commanders who are not general officers must forward the deviation recommendation to the first general officer within the chain of command with deviation authority. Ranges not in compliance with reference (a) and this Order will cease operations until safety requirements are in compliance and approved. Ranges that operate under a deviation from certification policy will be thoroughly reviewed annually by the deviation authority.

g. Reference (a) establishes range safety policy for both the U.S. Army and the Marine Corps using like weapon systems and ammunition. Marine Corps-unique special weapons and ammunition not covered in reference (a), will be addressed by TECOM SOUMs. TECOM SOUMs are complementary to reference (a), for establishing safety criteria for Marine Corps-unique weapons and ammunition. MARADMIN 612/02 addresses SOUMs and their purpose.

h. Ranges that have current certifications may be modified to meet operational/training requirements. The installation RCO will be responsible for the planning of such events and will comply with all range safety requirements, to include explosives site considerations, contained in references (a), (c), (g), and this Order. Safety considerations must complement the training standards identified in MCO P1510.34A and the MCO 1510 series. No activity in peacetime is so important that it is conducted at the expense of safety, regardless of established operational procedures.

i. Ranges that use Class 3b, 4, or military exempt lasers require laser range certification every three years or after each range modification per references (e) and (f). Range modifications include new targets, backdrops, or new laser systems used on the range.

j. Shotgun (skeet/trap) and archery ranges aboard Marine Corps installations will follow all safety requirements set

forth by the National Skeet and Trap Association, National Archery Association, and the installation range and safety regulations. All installation SOPs will be in compliance with reference (a), and the Army Corps of Engineers Drawings (Planning and Design of Indoor and Outdoor Sports Facilities) File Number 750-90-01.

## 5. Action

a. Initial Ground Range Certification. There are several steps in the ground range certification approval process. CG, MCCDC (C465) will be involved in planning, construction, and the final approval process of all new ranges and range modernization projects requiring ground range certification. Commanders must comply with the following ground range certification procedures:

(1) Explosives Safety Site Approval. When permanent ammunition storage facilities are present on the range, a copy of the Department of Defense (DoD) Explosives Safety Board Site Approval is required. Terms and conditions of the site approval must be met at all times and should be referenced as part of the RCO's checklist.

### (2) Site Map

(a) The installation RCO will maintain a detailed map of the site displaying the entire range or training area depicting SDZs, installation boundaries, roads, buildings, and other pertinent information. The site map is to be assembled using both the Geographic Information System (GIS) and Global Positioning System (GPS) data to ensure accuracy. In order to maintain the highest quality and map fidelity, GPS data should be sub-meter accurate and the margin of error clearly depicted on the map.

(b) The GIS layers must comply with the Spatial Data Standards for Facilities Infrastructure and Environment and data content standards that are applicable to all DoD offices that have a facilities/installation management role or an environmental program. An approved GIS SDZ tool is available at <https://rtam.tecom.usmc.mil> for weapons. The provided SDZ tools will be used for range certification in conjunction with the most current installation GIS data layers. All GIS data shall

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be formatted in North American Datum of 1983, or World Geodetic System of 1984, projected appropriately for installation use. Accuracy is essential in ground range certification; therefore, all associated metadata will be included with the range certification package.

(3) Environmental Compliance Evaluation (ECE). Commanders will comply with Federal, state, and local requirements as applicable. Copies of the appropriate completed ECE for the range must be available for certification. The guidelines for determining the appropriate environmental compliance are outlined in reference (i).

(4) Standard Operating Procedures. Current SOPs signed by the installation commander are required before ranges can be certified for live-fire. The SOPs must be comprehensive and address all aspects of range safety and operations. The range SOP must reinforce the policies and procedures of references (a), (b), (g), DOD directives 4715.11 and 4715.12, and this Order. The SOP will be reviewed annually and revised at least once every three years.

(5) Spectrum Management. Communication frequencies must be approved and assigned to the installation for range communication equipment and target control systems. The Joint Frequency Management Office, Joint Forces Command, Norfolk, Virginia, manages the frequencies for the United States military.

(6) Ground Range Certification Checklist(s). The pertinent checklist(s), enclosures (1) thru (5), will be completed and included in the range certification package. All questions answered "no" on the checklists require an explanation or risk assessment to mitigate risk and ensure compliance with reference (a) and this Order.

b. Ground Range Recertification. Ground range recertification is also a multiple-step process. CG, MCCDC (C465) will provide assistance and recommendations to commanders for ground range recertification on request. Commanders must comply with the same procedures for recertification as for initial certification as set forth above. Documents required must be carefully reviewed for applicability and currency before being used for recertification.

(1) Spectrum Management. Any new communication frequencies that have been approved and assigned by the Joint Frequency Management Office to the installation for range communication equipment and target control systems must be included for range recertification.

(2) Ground Range Certification Checklist(s). The pertinent checklist(s), enclosures (1) thru (5), must be completed prior to range recertification. All questions answered "no" on the checklist(s) require a risk assessment to mitigate risk and ensure compliance with reference (a), and this Order. Enclosure (5) will be completed by CG, MCCDC (C465) representatives prior to range recertification.

c. Deviation from Certification/Recertification Policy. In some instances, the policies and procedures of reference (a), and this Order cannot fully support mission requirements. In such situations, a deviation from policy may be an option to continue range operations safely. The risk management procedures outlined in reference (g) always apply, and reference (a) outlines the procedures for requesting a deviation from policy.

(1) Deviations from policy may be authorized by COMMARFORPAC, COMMARFORLANT, COMMARFORRES, and commanding generals of all supporting establishment commands.

(2) COMMARFORPAC, COMMARFORLANT, and COMMARFORRES may sub-delegate, in writing, deviation authority to general officers in command positions, but not lower than installation commanding generals. This authority shall not be further sub-delegated.

(3) Deviations are limited to:

(a) Reducing SDZ dimensions when terrain, artificial barriers, or other compensating factors make a smaller SDZ safe.

(b) Modifying prescribed firing procedures appropriate for the stated purpose of training participating Marines to increase training realism (e.g., accepting increased risk when these risks have been incorporated into an approved SDZ).

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(c) Allowing personnel who are not directly participating in the actual conduct of training within the SDZ.

(4) Guidelines for preparing a range safety deviation recommendation are contained in reference (a).

(5) Deviations shall not be applied to other federal agency directives/regulations such as airspace or water traffic requirements.

(6) Approved deviations will be effective for one year or less. The respective approval authority may review and recertify deviations one year at a time provided conditions cited in the original deviation have not changed.

(7) Any accident or incident occurring under an approved deviation will cause automatic termination of the approval until an investigation is completed and the deviation revalidated by the respective approving authority.

(8) Conflicts regarding level of risk determination will be resolved by the commander holding the deviation authority for the highest level of risk deemed in conflict.

(9) Live-fire training operations conducted under an approved deviation by nonresident units training at a host installation, must be approved by the host installation commander.

6. Coordinating Instructions. Submit all recommendations concerning this Order to CG, MCCDC (C465) via the appropriate chain of command.

7. Administration and Logistics

a. CG, MCCDC (C465) will administer the requirements and ensure the accuracy, modification, and distribution of this Order.

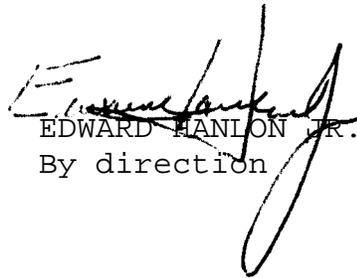
b. Requests for deviation from any of the provisions of this Order must be submitted to CG, MCCDC (C465), 3300 Russell Road, Quantico, Virginia 22134-5001 per reference (a) and this Order.

c. A TAV for range certification issues can be requested from the Range and Training Area Management Division (C465), MCCDC, Quantico, Virginia 22134-5001. A TAV is normally conducted at no cost to the requesting command.

8. Command and Signal

a. Signal. This Order is effective the date signed.

b. Command. This Marine Corps Order is applicable to the Marine Corps Total Force.

  
EDWARD HANLON JR.  
By direction

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OUTDOOR GROUND RANGE CERTIFICATION CHECKLIST

References: a) MCO 3570.1B  
b) MCO P3574.2J  
c) MCO 8025.1D  
d) MCO P8020.10A  
e) MCO P5530.14

LOCATION: (INSTALLATION) \_\_\_\_\_

FACILITY: (RANGE NAME) \_\_\_\_\_

LOCAL DESIGNATION: (TYPE OF RANGE) \_\_\_\_\_

DATE OF INSPECTION: \_\_\_\_\_

INSPECTED BY:

LAST NAME & INITIAL(S)	COMMAND (CODE)	PHONE NO.
_____	_____	_____
_____	_____	_____

1. Is there a current, signed standard operating procedure (SOP) for the range? Yes\_\_\_ No\_\_\_

2. Does the SOP satisfy the requirements outlined in MCO 3570.1B? Yes\_\_\_ No\_\_\_

3. Are emergency procedures outlined in the SOP pertaining to personnel injury, catastrophic malfunctions of weapons, or munitions malfunctions? Yes\_\_\_ No\_\_\_

4. Are there procedures outlined in the SOP for the clearing and inspecting of weapons prior to departing the range? Yes\_\_\_ No\_\_\_

5. Are the allowed weapon systems, for which the surface danger zones (SDZs) were established, identified

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in the SOP? Yes\_\_\_ No\_\_\_

6. Is the range SDZ established on a scaled map and posted on an installation site map in accordance with MCO 3570.1B? Yes\_\_\_ No\_\_\_

7. Is the SDZ on U.S. Government-owned land or under government control during operations? Yes\_\_\_ No\_\_\_

8. Is there a written agreement between using unit and land/range proprietors? Yes\_\_\_ No\_\_\_ N/A\_\_\_

9. Is the SDZ free of roads, navigable waterways, railroads, airports, training or recreational areas? Yes\_\_\_ No\_\_\_

10. Are live-fire signs posted along the perimeter of the SDZ (IAW MCO 3570.1B) to warn personnel against unauthorized entry into the impact area? Yes\_\_\_ No\_\_\_

11. Are all normal ground approaches to the range (roads, gates, trails, and walkways) posted with live-fire danger signs and/or secured by posted guards limiting or controlling access during live-fire operations? Yes\_\_\_ No\_\_\_

12. If applicable, before firing over navigable waters, does the installation commander notify the U.S. Army Corps of Engineers District or Division Engineer and the U.S. Coast Guard District Officer of the type of operations being conducted, the water area involved, and the closed water area required? Yes\_\_\_ No\_\_\_ N/A\_\_\_

13. If other methods to control access to the SDZ are not

Enclosure (1)

effective, is fencing provided to exclude personnel from entering the SDZ while firing is in progress?

Yes\_\_\_ No\_\_\_

14. Is a reliable, effective system of communication in place and working on the range that provides instant communication among range users, adjacent ranges, range medical personnel, fire department, and the range control officer (RCO)?

Yes\_\_\_ No\_\_\_

15. Are adequate secondary communication systems available in the event the primary communication system fails?

Yes\_\_\_ No\_\_\_

16. Is there a public address system or like equipment adequate to control the range?

Yes\_\_\_ No\_\_\_ N/A\_\_\_

17. Are the procedures for the proper handling of ammunition IAW MCO P5530.14 and the local SOP?

Yes\_\_\_ No\_\_\_

18. Are there provisions in the range SOP for suspending the use of ammunition that has malfunctioned and securing such ammunition until qualified personnel have investigated the incident and determined appropriate disposition and/or reports generated IAW MCO 8025.1D?

Yes\_\_\_ No\_\_\_

19. Have all personnel authorized to check out a range or training area received a RSO/OIC class from the installation RCO?

Yes\_\_\_ No\_\_\_

20. Has the RCO maintained records of qualified RSOs/OICs?

Yes\_\_\_ No\_\_\_

21. Are there measures in place to ensure the OIC and/or RSO is qualified/certified and

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knowledgeable of the weapons being fired on the range IAW MCO 3570.1B? Yes\_\_\_ No\_\_\_

22. Are OICs and RSOs appointed in writing by the commanding officer per MCOs 3570.1B and P3574.2J? Yes\_\_\_ No\_\_\_

23. Are signs prominently located and clearly visible on the range to warn personnel of the noise hazard area in the native language and with a picture of the hazard? Yes\_\_\_ No\_\_\_

24. Does the range SOP require a corpsman and safety vehicle present and/or immediate access to medical response at all times during training? Yes\_\_\_ No\_\_\_

25. If the range is operating under a deviation, is that deviation current, and has a copy of the package been forwarded to CG, MCCDC, (C465)? Yes\_\_\_ No\_\_\_ N/A\_\_\_

26. Are personnel engaged in firing activities located away from ammunition storage areas by the distance specified in TM-9-1300-206 and Volume 1, Naval Sea Systems Command Ordnance, Pamphlet 5? Yes\_\_\_ No\_\_\_

27. Is the protective berm or other protective mechanism, device, etc. of sufficient thickness to protect against projectile impact? Yes\_\_\_ No\_\_\_

28. Are there adequate head facilities on the range (male/female)? Yes\_\_\_ No\_\_\_

29. Are range flags/lights visible from 360 degrees? Yes\_\_\_ No\_\_\_

Enclosure (1)

**RANGE CERTIFICATION**

This range (and attendant surface danger zone) has been designated to accommodate the following under a qualified range officer in charge's (OIC's)/range safety officer's (RSO's) supervision per the range SOP:

1. The use of \_\_\_\_\_ caliber weapons or less powerful.
2. The use of \_\_\_\_\_ net explosive weight (NEW) or less.

This letter does not relieve the installation commander of responsibility for the following violations:

1. Unsafe firing procedures on the range.
2. Improper maintenance of the range.
3. Use of larger weapons or NEW than those authorized.
4. Unauthorized training.
5. Range use by any personnel unsupervised by the range OIC/RSO.

The operation of this range and the assignment of the range officer/range control officer remain the responsibility of the installation commander.

SIGNATURE(S)

Copy to:

Commanding General  
Training and Education Command  
Range and Training Area Management Division  
CG MCCDC (C465)  
3300 Russell Road  
Quantico, VA 22134-5001

Enclosure (1)

OUTDOOR GROUND KNOWN DISTANCE RANGE CERTIFICATION CHECKLIST

References: a) MCO 3570.1B  
b) MCO 3574.2J

LOCATION: (INSTALLATION) \_\_\_\_\_

FACILITY: (RANGE NAME) \_\_\_\_\_

LOCAL DESIGNATION: (TYPE OF RANGE) \_\_\_\_\_

DATE OF INSPECTION: \_\_\_\_\_

INSPECTED BY:

LAST NAME & INITIAL(S)	COMMAND (CODE)	PHONE NO.
_____	_____	_____
_____	_____	_____

NOTE: Enclosure (2) must be completed in addition to this checklist.

1. Are all entrances to the range (tunnels, cuts, or walkways through/over a berm that allow exit onto a range forward of the firing line) equipped with locking gates to prevent access to the range during live firing? Yes\_\_\_\_ No\_\_\_\_
  
2. Are the highly visible scarlet streamers (flags) hoisted on suitable staffs at both ends of a firing line, in the pits, and on each firing line? Yes\_\_\_\_ No\_\_\_\_
  
3. Are the scarlet streamer staffs at each firing line of sufficient height to be seen by personnel approaching the range at right angles (90 degrees) to the direction of fire and to aid the shooter in determining wind direction and velocity? Yes\_\_\_\_ No\_\_\_\_
  
4. Is the protective berm cover material of sufficient thickness to protect against bullet impact? Yes\_\_\_\_ No\_\_\_\_
  
5. Are mechanisms, devices, controls, and wiring for electronic targetry protected from damage (earthen berm, etc.)? Yes\_\_\_\_ No\_\_\_\_
  
6. Is a reliable system of communication in place and working on the range that provides instant communication between the firing lines, pits, range medical personnel, and the range control officer for rapid response in emergency situations? Yes\_\_\_\_ No\_\_\_\_
  
7. Is there a public address system with a sufficient number of speakers to control the range? Yes\_\_\_\_ No\_\_\_\_

8. Are personnel engaged in firing activities located away from ammunition storage areas by the distance specified in TM 9-1300-206 and Volume 1, Naval Sea Systems Command Ordnance, Pamphlet 5? Yes\_\_\_ No\_\_\_
9. Are target design, configuration, and placement correct? Yes\_\_\_ No\_\_\_
10. Is the target pit area properly designed and functional? Yes\_\_\_ No\_\_\_
11. Is the surface of the impact berm facing the firing line at least 3 feet thick? Yes\_\_\_ No\_\_\_
12. Is the impact surface composed of a material or soil that will minimize ricochets? Yes\_\_\_ No\_\_\_
13. Have all range personnel (instructors, coaches, line and pit noncommissioned officers, range officers in charge, and range safety officers) been appropriately trained to carry out their responsibilities for local range procedures and safety requirements? Yes\_\_\_ No\_\_\_
14. Is a qualified armorer readily available on the range during live-fire? Yes\_\_\_ No\_\_\_
15. Are the target frames constructed in such a manner as to prevent ricochets? Yes\_\_\_ No\_\_\_
16. Are all the carriages/mechanisms fully operational? Yes\_\_\_ No\_\_\_
17. Are there any nails or bolts in the targets or uprights exposed above the berm? Yes\_\_\_ No\_\_\_

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18. Does the pit canopy provide between 24 and 30 inches of overhang? Yes\_\_\_ No\_\_\_
19. Is the distance of the red safety line from the base of the carriages correct? Yes\_\_\_ No\_\_\_
20. Is there positive control of personnel to and from the pits (gates that can be locked or guards present)? Yes\_\_\_ No\_\_\_
21. Does the pit area have a communication system established with the firing lines? Yes\_\_\_ No\_\_\_
22. Does the pit have a backup communication system for communication with the firing lines? Yes\_\_\_ No\_\_\_
23. Are there adequate head facilities in the pits (male/female)? Yes\_\_\_ No\_\_\_
24. Are the pit head facilities located behind the red safety line or in the safe area? Yes\_\_\_ No\_\_\_
25. Are all routes to and from the heads and storage areas in a safe zone? Yes\_\_\_ No\_\_\_
26. Are the pit range flags visible from 360 degrees? Yes\_\_\_ No\_\_\_
27. Is the pit control shed on the safe side of the red safety line? Yes\_\_\_ No\_\_\_
28. Does the pit control shed have a clear line of sight with all target carriages? Yes\_\_\_ No\_\_\_

**RANGE CERTIFICATION**

This range (and attendant surface danger zone) has been designated to accommodate the following under a qualified range officer in charge's (OIC's)/range safety officer's (RSO's) supervision per the range SOP:

1. The use of \_\_\_\_\_ caliber weapons or less powerful.
2. The use of \_\_\_\_\_ net explosive weight (NEW) or less.

This letter does not relieve the installation commander of responsibility for the following violations:

1. Unsafe firing procedures on the range.
2. Improper maintenance of the range.
3. Use of larger weapons or NEW than those authorized.
4. Unauthorized training.
5. Range use by any personnel unsupervised by the range OIC/RSO.

The operation of this range and the assignment of the range officer/range control officer remain the responsibility of the installation commander.

SIGNATURE(S)

Copy to:

Commanding General  
Training and Education Command  
Range and Training Area Management Division  
CG MCCDC (C465)  
3300 Russell Road  
Quantico, VA 22134-5001

Enclosure (2)

INDOOR RANGE CERTIFICATION CHECKLIST

References: a) MCO 3570.1B  
b) MCO P3574.2J  
c) MCO 8025.1D  
d) MCO P5090.2A

LOCATION: (INSTALLATION) \_\_\_\_\_

FACILITY: (RANGE NAME) \_\_\_\_\_

LOCAL DESIGNATION: (TYPE OF RANGE) \_\_\_\_\_

DATE OF INSPECTION: \_\_\_\_\_

INSPECTED BY:

LAST NAME & INITIAL(S)	COMMAND (CODE)	PHONE NO.
_____	_____	_____
_____	_____	_____

I. GENERAL SAFETY

1. Was the range constructed after 1980? (If no, contact CG, MCCDC (C465).) Yes\_\_\_ No\_\_\_

2. Is a reliable system of communication in place and working on the range that provides instant communication between the firing lines, range medical personnel, and the range control officer (RCO) for rapid response in emergency situations? Yes\_\_\_ No\_\_\_

3. Is there a public address system or like equipment adequate to control the range? Yes\_\_\_ No\_\_\_

4. Have all personnel authorized to check out a range or training area received a range safety officer (RSO)/officer in charge

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(OIC) class from the RCO? Yes\_\_\_ No\_\_\_

5. Has the RCO maintained records of qualified RSOs/OICs? Yes\_\_\_ No\_\_\_

6. Are there measures in place to ensure the OIC and/or RSO is qualified/certified and knowledgeable of the weapons being fired on the range IAW MCO 3570.1B? Yes\_\_\_ No\_\_\_

7. Are OICs and RSOs designated in writing by the commanding officer per MCOs 3570.1B and P3574.2J? Yes\_\_\_ No\_\_\_

8. Are there first aid kits on all ranges? Yes\_\_\_ No\_\_\_

9. If the range is operating under a deviation, is that deviation current, and has a copy of the package been forwarded to CG MCCDC, (C465)? Yes\_\_\_ No\_\_\_ N/A\_\_\_

10. Is it routine policy to conduct a reading of the range safety rules to detail prior to the first live firing on the range? Yes\_\_\_ No\_\_\_

11. Is the range operated below the maximum allowable airborne lead exposure limits outlined in Table 2-1 of MCO 3570.1B? Yes\_\_\_ No\_\_\_

12. Is there a positive exhaust ventilation system for removal of airborne lead? Yes\_\_\_ No\_\_\_

13. Do air inlets have dampers or other volume control devices that can be adjusted to maintain proper air balance? Yes\_\_\_ No\_\_\_

Enclosure (3)

14. Is there a minimum airflow of 50 feet/minute (15.2 meters/minute) across the firing line? Yes\_\_\_ No\_\_\_
15. Are make-up air inlets behind the firing line? Yes\_\_\_ No\_\_\_
16. Are walls, floors, and roof constructed of bulletproof materials? Yes\_\_\_ No\_\_\_
17. Are the walls constructed of reinforced concrete or core-filled masonry? If not, are they covered with a suitable protective shield? Yes\_\_\_ No\_\_\_
18. If the range forms part of another building, does it have separate heating and ventilation for the range? Yes\_\_\_ No\_\_\_
19. Is the bullet trap constructed using the properly specified type of material for containment of the munitions used? Yes\_\_\_ No\_\_\_
20. Is there a manufacturer's certification letter stating the weapon and caliber rating of the bullet trap/containment system? Yes\_\_\_ No\_\_\_
21. Is cross-contamination of exhaust and intake air minimized? Yes\_\_\_ No\_\_\_
22. Is the exhaust air filtration system designed in accordance with Occupational Safety & Health Administration, Federal, and state requirements? Yes\_\_\_ No\_\_\_
23. Is the disposal of hazardous materials/residue conducted in accordance with Federal, state, and local laws and MCO P5090.2A? Yes\_\_\_ No\_\_\_

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24. Does the installation facilities department have a maintenance contract for the fire alarm and sprinkler system? Yes\_\_\_ No\_\_\_

25. Was a recent air flow test conducted in three locations (one foot above the floor, centered between the floor and ceiling, and one foot down from the ceiling)? Yes\_\_\_ No\_\_\_

26. Are the acceptable averages between 67.5 feet per minute (fpm) and 82.5 fpm with no one reading below 50 fpm? Yes\_\_\_ No\_\_\_

27. Does the system automatically shutdown when positive pressure is introduced into the range? Yes\_\_\_ No\_\_\_

28. Do alarms sound when an entrance door to the range is opened? Yes\_\_\_ No\_\_\_

II. WRITTEN STANDARD OPERATING PROCEDURE (SOP)

1. Is there a current, signed SOP for the indoor range? Yes\_\_\_ No\_\_\_

2. Does the SOP satisfy the requirements outlined in MCO 3570.1B? Yes\_\_\_ No\_\_\_

3. Are emergency procedures outlined in the SOP pertaining to personnel injury, catastrophic malfunctions of weapons, or munitions malfunctions? Yes\_\_\_ No\_\_\_

4. Are there procedures outlined in the SOP for the clearing and inspecting of weapons prior to departing the range? Yes\_\_\_ No\_\_\_

Enclosure (3)

5. Are the allowed weapon systems, for which the range was established, identified in the SOP?

Yes\_\_\_ No\_\_\_

6. Are the procedures for the proper handling of ammunition outlined in the SOP?

Yes\_\_\_ No\_\_\_

7. Are there provisions in the range SOP for suspending the use of ammunition that has malfunctioned and securing such ammunition until qualified personnel have investigated the incident and determined appropriate disposition and/or reports generated IAW MCO 8025.1D?

Yes\_\_\_ No\_\_\_

**RANGE CERTIFICATION**

This range (and attendant surface danger zone) has been designated to accommodate the following under a qualified range officer in charge's (OIC's)/range safety officer's (RSO's) supervision per the range SOP:

1. The use of \_\_\_\_\_ caliber weapons or less powerful.
2. The use of \_\_\_\_\_ net explosive weight (NEW) or less.

This letter does not relieve the installation commander of responsibility for the following violations:

1. Unsafe firing procedures on the range.
2. Improper maintenance of the range.
3. Use of larger weapons or NEW than those authorized.
4. Unauthorized training.
5. Range use by any personnel unsupervised by the range OIC/RSO.

The operation of this range, and the assignment of range control officer and range officer remain the responsibility of the installation commander.

SIGNATURE(S)

Copy to:

Commanding General  
Training and Education Command  
Range and Training Area Management Division  
CG MCCDC (C465)  
3300 Russell Road  
Quantico, VA 22134-5001

Enclosure (3)

EXPLOSIVE TRAINING RANGE CERTIFICATION CHECKLIST

References: a) MCO 3570.1B  
b) MCO P3574.2J  
c) MCO P5530.14  
d) MCO P8020.10A  
e) MCO 8025.1D  
f) NAVSEA OP 5, Vol. 1

LOCATION: (INSTALLATION) \_\_\_\_\_

FACILITY: (NAME) \_\_\_\_\_

LOCAL DESIGNATION: \_\_\_\_\_

DATE OF INSPECTION: \_\_\_\_\_

INSPECTED BY:

LAST NAME & INITIAL(S)	COMMAND (CODE)	PHONE NO.
_____	_____	_____
_____	_____	_____

I. GENERAL SAFETY

1. Is a reliable, effective system of communication in place that provides instant communication between the ranges, medical personnel, fire department personnel, and the range control officer (RCO)? Yes\_\_\_ No\_\_\_

2. Are procedures in place to ensure that range safety officers (RSOs) and officers in charge (OICs) signing for explosive training ranges are qualified and received the appropriate training? Yes\_\_\_ No\_\_\_

3. Does the installation RCO maintain a database of all safety training, qualified RSOs/OICs, and Class V (W) expended? Yes\_\_\_ No\_\_\_

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4. Are there measures in place to ensure the OIC and/or RSO is qualified/certified IAW MCO 3570.1B and knowledgeable of the Class V (W) being fired on the range? Yes\_\_\_ No\_\_\_

5. Do detonating sites conform to MCO P8020.10A, chapter 7, and NAVSEA OP 5, Vol. 1, chapter 13? Yes\_\_\_ No\_\_\_

6. Is it routine policy to conduct a reading of range safety rules in detail prior to any demolition training on the range(s)? Yes\_\_\_ No\_\_\_

7. Is it routine policy to have all participants of demolition training sign a "workers statement" stating they understand all range regulations? Yes\_\_\_ No\_\_\_

8. Does the installation RCO supply the RSO with specific range check-in and check-out procedures for each range? Yes\_\_\_ No\_\_\_

9. Is there compliance with demolition range restrictions? Yes\_\_\_ No\_\_\_

10. Are there procedures in place to ensure RSOs and OICs are briefed on any changes or updates to policies and procedures from when they attended the RSO course? Yes\_\_\_ No\_\_\_

11. Are guards, safety signals, roadblocks, and warning flags used to keep unauthorized personnel away during demolition training? Yes\_\_\_ No\_\_\_

12. Have appropriate surface danger zones been established for each demolition range according to their net explosive weight (NEW)? Yes\_\_\_ No\_\_\_

13. Is the range SDZ established on a scaled map and posted on an

Enclosure (4)

installation site map in accordance with MCO 3570.1B?

Yes\_\_\_ No\_\_\_

14. Is there a written agreement between using unit and land/range proprietors?

Yes\_\_\_ No\_\_\_

15. Is the SDZ free of roads, navigable waterways, railroads, airports, training or recreational areas?

Yes\_\_\_ No\_\_\_ N/A\_\_\_

16. Are live-fire signs posted along the perimeter of the SDZ (IAW MCO 3570.1B) to warn personnel against unauthorized entry into the impact area?

Yes\_\_\_ No\_\_\_

17. Are all normal ground approaches to the range (roads, gates, trails, and walkways) posted with live-fire danger signs and/or secured by posted guards limiting or controlling access during live-fire operations?

Yes\_\_\_ No\_\_\_

18. If applicable, before firing over navigable waters, does the installation commander notify the U.S. Army Corps of Engineers District or Division Engineer and the U.S. Coast Guard District Officer of the type of operations being conducted, the water area involved, and the closed water area required?

Yes\_\_\_ No\_\_\_ N/A\_\_\_

19. If other methods to control access to the SDZ are not effective, is fencing provided to exclude personnel from entering the SDZ while firing is in progress?

Yes\_\_\_ No\_\_\_

20. Does the RCO review all waiver/special event requests that deviate from the current range orders and regulations for all

live-fire activities? Yes\_\_\_ No\_\_\_

21. Are EOD personnel used to escort personnel into and out of the impact areas for target inserts, surveys, range maintenance, etc.?  
Yes\_\_\_ No\_\_\_

22. Are waivers for demolition/emergency destruct training approved and granted by the MCSC PMAM and HQMC (LPE)? (Waivers may not be granted by commanding officers.)  
Yes\_\_\_ No\_\_\_

23. Are explosive training/demolition operations secured during electrical storms?  
Yes\_\_\_ No\_\_\_

II. WRITTEN STANDARD OPERATING PROCEDURE (SOP)

1. Is there a current, signed SOP or order for the explosive range operations?  
Yes\_\_\_ No\_\_\_

2. Does the SOP satisfy the requirements outlined in MCO 3570.1B?  
Yes\_\_\_ No\_\_\_

3. Are emergency procedures outlined in the SOP pertaining to personnel injury, mass casualty medical procedures, and emergency evacuation procedures?  
Yes\_\_\_ No\_\_\_

4. Are there procedures outlined in the SOP for the inspecting of demolition ranges prior to departing?  
Yes\_\_\_ No\_\_\_

5. Are there procedures in place outlining proper explosive handling procedures on and off the ranges?  
Yes\_\_\_ No\_\_\_

6. Are the Class V (W) allowances for which the range was established

identified in the SOP and on the range?

Yes\_\_\_ No\_\_\_

7. Is an annual review conducted of the approved demolition range SOP and pertinent regulations?

Yes\_\_\_ No\_\_\_

8. Are there procedures and/or control measures outlined in the SOP to ensure separation of incompatible Class V (W) items during explosive training operations?

Yes\_\_\_ No\_\_\_

9. Are the proper reporting procedures for expendable Class V (W) outlined in the SOP?

Yes\_\_\_ No\_\_\_

10. Are there provisions in the range SOP for suspending the use of Class V (W) ammunition that has malfunctioned and securing it until qualified personnel have investigated the incident and determined appropriate disposition and/or reports generated IAW MCO 8025.1D?

Yes\_\_\_ No\_\_\_

11. Are procedures outlined in the SOP for civilian personnel who use Marine Corps demolition ranges and training areas?

Yes\_\_\_ No\_\_\_

**RANGE CERTIFICATION**

This range (and attendant surface danger zone) has been designated to accommodate the following under a qualified range officer in charge's (OIC's)/range safety officer's (RSO's) supervision per the range SOP:

1. The use of \_\_\_\_\_ caliber weapons or less powerful.
2. The use of \_\_\_\_\_ net explosive weight (NEW) or less.

This letter does not relieve the installation commander of responsibility for the following violations:

1. Unsafe firing procedures on the ranges.
2. Improper maintenance of the ranges.
3. Use of larger weapons or NEW than those authorized.
4. Unauthorized training.
5. Range use by any personnel unsupervised by the range OIC/RSO.

The operation of this facility, and the assignment of the range control officer and range officer remain the responsibility of the installation commander.

SIGNATURE(S)

Copy to:

Commanding General  
Training and Education Command  
Range and Training Area Management Division  
CG MCCDC (C465)  
3300 Russell Road  
Quantico, VA 22134-5001

RANGE CONTROL OPERATIONS CHECKLIST

References: a) MCO 3570.1B  
b) MCO P3574.2J  
c) MCO P5090.2A  
d) MCO P5530.14  
e) MCO 8025.1D

LOCATION: (INSTALLATION) \_\_\_\_\_

FACILITY: (NAME) \_\_\_\_\_

LOCAL DESIGNATION: \_\_\_\_\_

DATE OF INSPECTION: \_\_\_\_\_

INSPECTED BY:

LAST NAME & INITIAL(S)	COMMAND (CODE)	PHONE NO.
_____	_____	_____
_____	_____	_____

I. RANGE MANAGEMENT

1. Is RFMSS used as the primary range management system? Yes\_\_\_ No\_\_\_

2. Is a reliable, effective system of communication in place that provides instant communication between the ranges, medical personnel, and the installation range control officer (RCO)? Yes\_\_\_ No\_\_\_

3. Have all personnel authorized to check out a range or training area received a range safety officer (RSO)/officer in charge (OIC) class from the RCO? Yes\_\_\_ No\_\_\_

4. Does the RCO maintain records of all qualified RSOs/OICs? Yes\_\_\_ No\_\_\_

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5. Does the RCO maintain a database of all safety training and ammunition expended? Yes\_\_\_ No\_\_\_

6. Are there measures in place to ensure OICs and/or RSOs are qualified/certified and knowledgeable of the weapons being fired on the range IAW MCO 3570.1B? Yes\_\_\_ No\_\_\_

7. Are OICs and RSOs appointed in writing by the commanding officer IAW MCOs 3570.1B and P3574.2J? Yes\_\_\_ No\_\_\_

8. If a range (or ranges) is operating under a deviation, is that deviation current, and has a copy of the package been forwarded to CG, MCCDC, (C465)? Yes\_\_\_ No\_\_\_ N/A\_\_\_

9. Is it routine policy to conduct a reading of range safety rules in detail prior to any live firing on the range(s)? Yes\_\_\_ No\_\_\_

10. Is the removal of hazardous materials and range residue/dunnage conducted in accordance with DOD regulations, and Federal, state, local laws, and MCO P5090.2A? Yes\_\_\_ No\_\_\_

11. Does the RCO supply the RSO with specific range check-in and check-out procedures for each range? Yes\_\_\_ No\_\_\_

12. Are there procedures in place to ensure that impact areas are properly identified and remain clear of personnel? Yes\_\_\_ No\_\_\_

13. Are there procedures in place to ensure RSOs and OICs are briefed on any changes or updates to policies and procedures from when they attended the RSO course? Yes\_\_\_ No\_\_\_

Enclosure (5)

14. Is there a system in place to track ground and aviation facility usage? Yes\_\_\_ No\_\_\_

15. Does the facility have procedures for handling bomb threats and other imminent situations that may require immediate relocation of the range control staff? Yes\_\_\_ No\_\_\_

16. Does the facility have a library of publications applicable to usage and management of special use airspace (SUA)? Yes\_\_\_ No\_\_\_

17. Are all radio frequencies approved, and are all phone lines recorded? Yes\_\_\_ No\_\_\_

18. Are there procedures in place to review communication networks or video in the event an investigation of an incident or accident is required? Yes\_\_\_ No\_\_\_

19. Is there a system or equipment in place within the range control facility to display active live-fire areas to ensure de-confliction of non-participants? Yes\_\_\_ No\_\_\_

20. Are roads and rivers reports disseminated to users during periods of inclement weather? Yes\_\_\_ No\_\_\_

21. Is information adequately disseminated whenever serious weather conditions change and/or develop? Yes\_\_\_ No\_\_\_

22. Does the RCO or his designated representative review and approve indirect fire surface danger zones? Yes\_\_\_ No\_\_\_ N/A\_\_\_

23. Is the range SDZ established on a scaled map and posted on an

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installation site map in accordance  
with MCO 3570.1B?

Yes\_\_\_ No\_\_\_

24. Is there a written agreement  
between using unit and land/range  
proprietors?

Yes\_\_\_ No\_\_\_ N/A\_\_\_

25. Is the SDZ free of roads,  
navigable waterways, railroads,  
airports, training or recreational  
areas?

Yes\_\_\_ No\_\_\_

26. Are live-fire signs posted  
along the perimeter of the SDZ (IAW  
MCO 3570.1B) to warn personnel  
against unauthorized entry into the  
impact area?

Yes\_\_\_ No\_\_\_

27. Are all normal ground  
approaches to the range (roads,  
gates, trails, and walkways) posted  
with live-fire danger signs and/or  
secured by posted guards limiting  
or controlling access during live-  
fire operations?

Yes\_\_\_ No\_\_\_

28. If applicable, before firing  
over navigable waters, does the  
installation commander notify the  
U.S. Army Corps of Engineers  
District or Division Engineer and  
the U.S. Coast Guard District  
Officer of the type of operations  
being conducted, the water area  
involved, and the closed water area  
required?

Yes\_\_\_ No\_\_\_ N/A\_\_\_

29. If other methods to control  
access to the SDZ are not  
effective, is fencing provided to  
exclude personnel from entering the  
SDZ while firing is in progress?

Yes\_\_\_ No\_\_\_

30. Does the RCO review the concept of operations and scheme of maneuver for all live-fire activities? Yes\_\_\_ No\_\_\_
31. Are all scheduling requests processed through a central scheduling office or facility? Yes\_\_\_ No\_\_\_
32. Is there a process or equipment in place to identify conflict or potential conflict between live-fire ranges or non-fire training areas? Yes\_\_\_ No\_\_\_
33. Are waivers to conduct training not specified in the range regulations submitted and processed through the scheduling office to the RCO? Yes\_\_\_ No\_\_\_ N/A\_\_\_
34. Is a range control supervisor on duty at all times during hours of operations? Yes\_\_\_ No\_\_\_
35. Is a daily operations log maintained by the supervisor on duty? Yes\_\_\_ No\_\_\_
36. Are written logs and records maintained of daily training activities? Yes\_\_\_ No\_\_\_
37. Have pass-down procedures between oncoming and off-going range control personnel been formalized? Yes\_\_\_ No\_\_\_
38. Are procedures established to inform units of adverse weather warnings applicable to the geographic area? Yes\_\_\_ No\_\_\_
39. Is there an indoctrination program for newly assigned range control personnel? Yes\_\_\_ No\_\_\_

40. Are written tests an integral part of the qualification process? Yes\_\_\_ No\_\_\_

II. WRITTEN STANDARD OPERATING PROCEDURE (SOP)

1. Is there a current, signed SOP or order for the installation range control operations? Yes\_\_\_ No\_\_\_

2. Does the SOP satisfy the requirements outlined in MCO 3570.1B? Yes\_\_\_ No\_\_\_

3. Are emergency procedures outlined in the SOP pertaining to personnel injury, catastrophic malfunctions of weapons, or munitions malfunctions? Yes\_\_\_ No\_\_\_

4. Are there procedures outlined in the SOP for the clearing and inspecting of weapons prior to departing the range? Yes\_\_\_ No\_\_\_

5. Are there procedures in place outlining proper ammunition handling procedures on and off the ranges? Yes\_\_\_ No\_\_\_

6. Are the allowed weapon systems for which the range was established identified in the SOP and on the range? Yes\_\_\_ No\_\_\_

7. Is an annual review conducted of the range SOP and pertinent regulations? Yes\_\_\_ No\_\_\_

8. Are there procedures and/or control measures outlined in the SOP to ensure separation of live-fire operations from blank or Special Effects Small Arms Marking Systems range operations? Yes\_\_\_ No\_\_\_

9. Are the procedures for the

proper reporting of expended ammunition IAW MCO P5530.14 and outlined in the local SOP?

Yes\_\_\_ No\_\_\_

10. Are there provisions in the range SOP for suspending the use of ammunition that has malfunctioned, and securing such ammunition until qualified personnel have investigated the incident and determined appropriate disposition and/or reports generated IAW MCO 8025.1D?

Yes\_\_\_ No\_\_\_

11. Are procedures outlined in the SOP for civilian personnel who utilize Marine Corps ranges and training areas?

Yes\_\_\_ No\_\_\_

12. Do the range regulations have a section or chapter that addresses aviation operations specific to the installation?

Yes\_\_\_ No\_\_\_

### III. AIRSPACE MANAGEMENT

1. Is there an airspace manager designated in writing by the installation commanding general?

Yes\_\_\_ No\_\_\_

2. Is there a system in place to document activation and de-activation of SUA?

Yes\_\_\_ No\_\_\_

3. Is an airspace release log maintained, to include dates, times, and altitudes released to the controlling agency?

Yes\_\_\_ No\_\_\_

4. Is there radar and/or communication coverage to ensure adequate management of activities taking place within the SUA?

Yes\_\_\_ No\_\_\_

5. Is a daily recording of SUA usage including a "record of release" maintained?

Yes\_\_\_ No\_\_\_

6. Are there provisions and procedures in place to allow civilian aircraft to transit SUA on a not-to-interfere basis with military activity? Yes\_\_\_ No\_\_\_

7. Under the joint-use concept, is the SUA released to other airspace users whenever the airspace is not required? Yes\_\_\_ No\_\_\_

8. Is there a traffic count system in place to document usage of airspace and facilities contained within the airspace? Yes\_\_\_ No\_\_\_

9. Is annual (fiscal year basis) SUA usage reported by 1 December to the Naval representative with an information copy to the regional area coordinator? Yes\_\_\_ No\_\_\_

10. If applicable, when was the last Federal Aviation Administration SUA Review conducted? Yes\_\_\_ No\_\_\_ N/A\_\_\_

IV. RANGE MAINTENANCE

1. Is RFMSS used as required for range maintenance? Yes\_\_\_ No\_\_\_

2. Are range sweeps and other range maintenance events scheduled and de-conflicted in RFMSS? Yes\_\_\_ No\_\_\_

3. Do range maintenance crews maintain communications with range control when performing duties on ranges? Yes\_\_\_ No\_\_\_

4. Are range maintenance personnel escorted by explosive ordnance disposal personnel when they are required to work in a dedicated impact area? Yes\_\_\_ No\_\_\_

**RANGE CERTIFICATION**

This range (and attendant surface danger zone) has been designated to accommodate the following under a qualified range officer in charge's (OIC's)/range safety officer's (RSO's) supervision per the range SOP:

1. The use of \_\_\_\_\_ caliber weapons or less powerful.
2. The use of \_\_\_\_\_ net explosive weight (NEW) or less.

This letter does not relieve the installation commander of responsibility for the following violations:

1. Unsafe firing procedures on the ranges.
2. Improper maintenance of the ranges.
3. Use of larger weapons or net explosive weight than those authorized.
4. Unauthorized training.
5. Range use by any personnel unsupervised by the range OIC/RSO.

The operation of this facility, and the assignment of the installation range control officer and range officer remain the responsibility of the installation commander.

SIGNATURE(S)