



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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distribution is unlimited.**

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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.

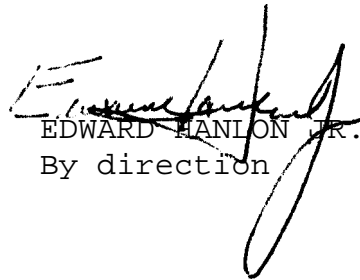
b. Requests for deviation from any of the provisions of this Order must be submitted to CG, MCCDC (C465), 3300 Russell Road, Quantico, Virginia 22134-5001 per reference (a) and this Order.

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

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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___

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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

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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.

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