



UNITED STATES MARINE CORPS

MARINE CORPS AIR STATION MIRAMAR
P O BOX 452000 SAN DIEGO CA 92145-2001

StaO P3574.2A

G-3T

28 JAN 2003

STATION ORDER P3574.2A

From: Commanding General

To: Distribution List

Subj: STANDING OPERATING PROCEDURES (SOP) FOR THE EAST MIRAMAR
LIVE FIRE RANGES

Ref: (a) MCO P3570.1A
(b) MCO 3574.2J
(c) StaO 3574.1
(d) ABBul 3574
(e) FMFM 0-8
(f) Sustainment Level Rifle Marksmanship
(g) M16A2 SRVC Sustainment Trng
(h) Marine Battle Skills Training Book 2
(i) MCRP 3-01A

Encl: (1) LOCATOR SHEET

1. Purpose. This Manual revises the policies, procedures, and standards for the effective operation of the East Miramar Marksmanship Training Live Fire Ranges aboard Marine Corps Air Station (MCAS), Miramar.

2. Cancellation. StaO P3574.2.

3. Information

a. The references and this Manual provide guidance for the conduct, operation, manning, and functioning of the marksmanship training program. The Assistant Chief of Staff, G-3 (Training) has overall cognizance of this functional area and will ensure all assets of the program are available to commanders.

b. Recipients of this Manual will thoroughly familiarize themselves with the provisions contained herein and will comply with its procedures.

4. Recommendations. Recommendations concerning the contents of this Order and/or changes, will be forwarded to the AC/S G-3 (Training).

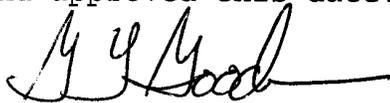
5. Action

a. Commanding Officers. Ensure all marksmanship training is coordinated and conducted in accordance with the guidelines contained herein.

b. Provost Marshals Office (PMO). Conduct a physical check of the perimeters surrounding the Surface Danger Zone (SDZ) to the range area. Report any damages noted during normal working hours to the Training Area Management Office at extension 7-1448, and to the Command Duty Officer at extension 7-1141 after normal working hours.

6. Concurrence. The Commanding General, 3d Marine Aircraft Wing, and the Commanding Officer, Marine Aircraft Group 46 concur with the provisions of this Order.

7. Certification. Reviewed and approved this date.



G. L. GOODMAN
Chief of Staff

DISTRIBUTION: A

StaO P3574.2A
28 JAN 2003

LOCATOR SHEET

Subj: STANDARD OPERATING PROCEDURES (SOP) FOR THE EAST
MIRAMAR LIVE FIRE RANGES

Location: _____
(Indicate locations of copy(ies) of this Manual)

ENCLOSURE (1)

SOP FOR THE EAST MIRAMAR LIVE FIRE RANGES

RECORD OF CHANGES

Log completed change action as indicated.

Change Number	Date of Change	Date Entered	Signature of Person Incorporated-Change

SOP FOR THE EAST MIRAMAR LIVE FIRE RANGES

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CHAPTER 1

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CHAPTER 1

ORGANIZATION, MISSION AND OBJECTIVES

1000. ORGANIZATION. Marksmanship Training Unit (MTU) is a section under the operational control of the AC/S, G-3 Training, (Director, G-3T) Marine Corps Air Station (MCAS) Miramar. G-3 Training is responsible for the Rifle Range and the East Miramar Pistol Range complex which consists of ranges "B" through "D."

1001. MISSION. The MTU is responsible for the management of the range complex facilities and provides personnel to conduct the Sustainment Level Rifle Marksmanship Program (SLRMP) and Entry Level Pistol Marksmanship Training Program (ELPMP), and allows for the training of the MCAS Miramar Rifle and Pistol Teams.

1002. OBJECTIVES. The objectives of the MTU are:

1. To provide quality marksmanship training in the support that every Marine is a basic rifleman. This support encompasses all the phases of sustainment level rifle and entry level pistol marksmanship training.
2. To provide quality support of the various live-fire and training requirements per the references.

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CHAPTER 2

DUTIES AND RESPONSIBILITIES

2000. GENERAL. All personnel engaged in marksmanship and live-fire training at the Rifle Range or the East Miramar Pistol Range Complex fall under the operational control of the Director, G-3T.

2001. RANGE OFFICER. The Range Officer holds the MOS of 9925 and is responsible for all operations aboard the Rifle Range and the East Miramar Pistol Range Pistol Range Complex. The duties include, but are not limited to, ensuring all Marksmanship Training to include live firing is conducted in accordance with published directives. All other duties are as per reference (b).

2002. RANGE CHIEF. The Range Chief holds the MOS 8532 and will be directly responsible to the Range Officer in the execution of all duties. The Range Chief will use their experience and expertise to assist the Range Officer in the conduct of marksmanship training. All other duties are as per reference (b).

2003. RIFLE RANGE LINE STAFF NONCOMMISSIONED OFFICER (SNCO). The Rifle Range Line SNCO holds the MOS of 8531 and assists the Range Officer and Range Chief in the accomplishment of their duties as pertaining to rifle range matters. The Rifle Line SNCO will be thoroughly familiar with the contents of this directive and be prepared to assume the duties of the Range Chief or the Line SNCO for the pistol range in their absence. The Rifle Range Line SNCO's duties are outlined in references (c) and (b).

2004. PISTOL RANGE LINE STAFF NONCOMMISSIONED OFFICER (SNCO). The Pistol Range Line SNCO holds the MOS of 8531 and assists the Range Officer and Range Chief in the accomplishment of their duties as pertaining to pistol range matters. The Pistol Range Line SNCO will be thoroughly familiar with the contents of this directive and be prepared to assume the duties of the Range Chief or the Rifle Range Line SNCO in their absence. The Pistol Range Line SNCO's duties are outlined in references (c) and (b).

2005. TOWER NONCOMMISSIONED (NCO). The Tower NCO is responsible to the Range Officer for the safe, efficient operation of the firing line. The Tower NCO is the line public address (PA) system operator and gives all commands during firing. Each firing range will have a Tower NCO. All other duties are as per reference (b).

2006. BLOCK NCO'S. The Block NCO is an immediate supervisor responsible to the Range Officer for the conduct of training and enforcement of regulations within their assigned block of targets. The Block NCO will be thoroughly familiar with the contents of this directive and their duties are outlined in references (c) and (b).

2007. COACHES. Range Coaches are responsible to the Range Officer for the conduct of training and enforcement of regulations within their assigned area of targets. The coaches duties are specified in references (b), (c), and (d). Range Coaches hold the MOS 8530. Units may send "safety supervisors" to the range to assist their shooters, but unless they hold the MOS' 8530 or 8531, they will not be referred to as a coach. All other duties are as per reference (b).

2008. AMMUNITION NCO. The Ammunition NCO is responsible to the Range Officer for the requisition, handling, transportation, security, issuing and recovery of all ammunition used on the ranges. They will be guided in the performance of their duties by this Order, the Class V (W) SOP and all other orders regarding ammunition used aboard the ranges.

2009. ARMORER. The Range Armorer will assist the Range Officer in the execution of their duties by providing the necessary tools and spare parts to effect normal maintenance of weapons. The Range Armorer will a permanent billet and assigned to the range.

2010. CORPSMAN. One Corpsman will be physically present on each small arms range to assist the Range Officer in the execution of their duties by providing medical support and first aid as needed. The duties of the Range Corpsman are specified in reference (d).

2011. RANGE AIR SAFETY OBSERVER (RASO). The RASO will be positioned in a place where he is outside the SDZ and able to observe the airspace over Range 100. The RASO will be equipped with a radio and maintain positive communication with the RSO and Tower NCO. The RASO will assist the RSO in the execution of his duties by ensuring the rifle range goes into a "check-fire" status whenever an aircraft is flying over the range. Once the aircraft is out of the danger zone, the RASO will ensure the Rifle Range Line SNCO receives the word that the range can resume firing. In addition the RASO will meet the following requirements:

1. Be familiar with the verticle danger zone as it pertains to Range 100.
2. Be familiar with the SDZ for Range 100.
3. Maintain positive communication with the tower NCO by giving a radio check every half hour.

2012. TYPES OF WEAPONS AUTHORIZED. The weapons authorized for use at the East Miramar Pistol Range Complex are as follows:

1. Weapons authorized for use on Bravo range are handguns up to and including .45 caliber and rifles not exceeding .22 caliber.
2. Weapons authorized for use on Charlie range are bows of all types.
3. Weapons authorized for use on Delta range are shotguns not exceeding 12 gauge.
4. The weapon authorized for use at Range 100 is the M16A2 service rifle.

Note: More detailed guidelines and restrictions are provided in appendicies B, C, D, and H.

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CHAPTER 3

RANGE SAFETY REGULATIONS

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CHAPTER 3

RANGE SAFETY REGULATIONS

3000. GENERAL SAFETY REGULATIONS AND RESPONSIBILITIES. The firing of small arms will be governed by the provisions of references (a) through (e) and the following:

1. Firing will be conducted only when authorized by the Director, G-3T, Range Officer or as outlined in the ABBul 3574 series.
2. Personnel assigned duties involving live-fire training or range operations will receive training at the Coaches Course and will be thoroughly familiar with the provisions of this Order prior to assignment.
3. A Range Safety Officer (RSO) will act as the Range Officer, specifically during recreational firing as supervised by Marine Corps Community Services (MCCS).
4. The RSO will be the Range Chief or Rifle/Pistol Range Line SNCO and will be physically present on the appropriate firing range during live firing. The RSO will supervise operations at all times and is further responsible for:
 - a. The conduct of all range personnel.
 - b. Range discipline of all individuals undergoing instruction.
 - c. Ensuring that a Corpsmen is present prior to the commencement of fire.
 - d. Strict enforcement of the regulations prescribed by the references and this order.
 - e. Ensuring the range safety flags are raised and barricades are in place prior to the commencement of live firing.
 - f. The safety of any aircraft that enter the vertical danger zone airspace.
5. A Corpsmen will be present on the range when live fire is in progress.

6. Range safety flags will be raised prior to live firing. The red warning flags will, at a minimum, be placed in the following areas:

a. At the entrance to the ranges, i.e., in front of the range house.

b. At each end of the impact berm for each firing range being utilized.

7. All gates will be secured while firing is in progress. Personnel will be instructed to observe warning signs, barricades, and the range safety flags.

8. Any person observing an unsafe condition will immediately call "CEASE FIRE" and report the condition to the RSO. Firing will not resume until the condition has been corrected.

9. No person will fire any weapon until it has been ascertained that they have completed the following:

a. Attended the required preparatory training.

b. Received instruction in the mechanical safety features of the weapon.

c. Passed a weapons handling test.

d. Fully understands all range safety regulations.

e. Weapon to be fired has received a limited technical inspection (LTI) and approval for live firing by a qualified armorer.

10. Appendix F is an overlay of the Rifle and Pistol Range Surface Danger Zones (SDZ's). The Range Officer, RASO's and Line SNCO's will be thoroughly familiar with these zones.

3001. FIRING OF NON SERVICE AND PRIVATELY OWNED WEAPONS. The firing of non-service and privately owned weapons for qualification is strictly prohibited (CGFMFPAC210356Z JUL 87). The firing of non-service and privately owned weapons for recreational purposes may be authorized as outlined below:

1. The weapon will be registered with PMO.
2. A qualified armorer will complete an LTI of the weapon to be fired to ensure the safety of the weapon. A written certificate of inspection, signed by the armorer, will be presented to the Range Officer.
3. A release of liability and indemnity will be signed by the individual requesting recreational firing.
4. Caliber of the weapon will not exceed .45 cal for pistols, shotguns will not exceed 12 gauge, and rifles will not exceed .22 caliber. No Magnum loads will be fired.
5. The firing of such weapons will not interfere with scheduled training. Military training will take priority over any recreational firing.
6. The shooter will provide their own ammunition, which must be declared safe by the Range Officer. The use of government ammunition for privately owned weapons is strictly prohibited.

3002. VEHICLES ON THE RANGE

1. No vehicles will be allowed in the target area or forward of any firing line while firing is in progress.
2. No vehicle will be parked so as to block the path of emergency vehicles.
3. The Range Officer will designate all parking spaces for range personnel and emergency vehicles.
4. No POV's are allowed on any range without permission of the Range Officer.

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CHAPTER 4

RANGE REGULATIONS AND PHYSICAL ARRANGEMENTS

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CHAPTER 4

RANGE REGULATIONS AND PHYSICAL ARRANGEMENTS

4000. RANGE REGULATIONS. All firing will be conducted in accordance with published directives and references (a) through (i).

1. Prior to the commencement of firing, the RSO will ensure that:

- a. Warning flags have been raised.
- b. Barricades have been placed across the access roads.
- c. A corpsman is present and in position to react to an emergency.
- d. Communications have been established between the range and Range Control, as well as Air Traffic Control (ATC), and that a line telephone is in working condition. Ensure that Range Control (Ext. 7-1448) has been called and given the following information:

- (1) Which range is ready to commence firing.
- (2) Time the range is going hot.
- (3) Number of personnel firing.
- (4) Name of person calling in.
- (5) Maximum caliber weapon to be fired.

e. The area in front of the firing line and behind the impact area is clear. A visual check of the impact area is conducted while raising the range flags.

f. An "unload, show clear" command has been conducted prior to live fire.

2. All personnel will receive a daily safety brief on the firing line.

3. Rifles will be in condition 4 in accordance with current

procedures when the individual shooter is not on the firing line. Weapon conditions are listed in reference (g).

4. Personnel on the firing line are required to keep their weapons elevated and pointed down range at all times and be aware of the direction the weapon is pointing when changing positions (muzzle awareness).

5. Weapons will be loaded only on command of the Range Officer, RSO, Line SNCO, or Tower NCO. Weapons will only be loaded on the firing line immediately prior to firing.

6. When the command "CEASE FIRE" is given, all target engagement will stop and all weapons on the firing line will be placed on safe. All shooters will remain on the firing line until instructions are given by the tower to move. No weapons will be moved off of the firing line until unloaded and inspected.

4001. SPECIAL COURSES OF PRACTICE FIRING. Special courses of practice firing may be prescribed by the Range Officer to provide progressive development of marksmanship training. These special courses of fire will include the following:

1. Weak shooters may be re-fired at the discretion of the Range Officer on open targets, provided it does not interfere with the training schedule.

2. If training is stopped due to unforeseen conditions, e.g. weather, the training will resume at the point it was stopped. All shots fired will be counted and recorded for score.

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CHAPTER 5

ADMINISTRATIVE AND LOGISTICAL REQUIREMENTS

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CHAPTER 5

ADMINISTRATIVE AND LOGISTICAL REQUIREMENTS

5000. General

1. In accordance with references (b) and (c), this organization will conduct requalification marksmanship training for units and detachments within the 3d Marine Aircraft Wing on a space available basis. Tenant units stationed at MCAS Miramar will have priority for qualification training.

2. All personnel re-qualifying with the service rifle or pistol will qualify for a score utilizing the M16A2 service rifle or the M9 service pistol. The courses of fire for qualification firing are outlined in reference (c).

a. Reference (b) no longer recognizes Proficiency Enhancement Training (PET) as a course of fire. Shooters are now exempt from firing the rifle or pistol for one year upon qualifying as Expert two consecutive years with the respective weapon type.

b. All Marines who are required by T/O, grade, or duty assignment to carry or use the M9 service pistol must complete qualification training/firing, lessons ELP.1 through ELP.11, per reference (b) prior to being armed.

3. Marines not required to requalify annually with the service rifle or the service pistol are listed in reference (b).

5001. ADMINISTRATIVE INSTRUCTIONS. All requirements for requalification with the M16A2 service rifle or the M9 service pistol are listed in references (c) and (d).

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CHAPTER 6

SERVICE RIFLE REQUIREMENTS

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CHAPTER 6

SERVICE RIFLE REQUIREMENTS

6000. PERSONNEL REQUIREMENTS FOR THE OPERATION OF RANGES. In accordance with reference (b), the following personnel requirements are set forth as guidance for safe range operations. The Range Officer will report shortages of manpower to the Director, G-3 Training.

1. Range Officer. A Chief Warrant Officer MOS 9925 will be assigned to fill the billet as Officer in Charge, MTU, COMCABWEST.
2. Range Chief. This billet will be filled by a Master Sergeant or Gunnery Sergeant holding the secondary MOS 8532.
3. Line SNCO. This billet will be filled by a Staff Sergeant or above with the secondary MOS 8531. The Line SNCO will be present on the firing line during all firing unless otherwise directed by the Range Officer or the Range Chief.
4. Tower NCO. A trained operator, familiar with all range regulations and the sequence of commands, will be present in the control booth to control the firing personnel on the rifle range.
5. Block NCO. During live fire training, one Block NCO (MOS 8530) should be assigned a block of not more than ten (10). During evaluation, there should be a minimum of one Block NCO per 5 targets.
6. Coaches. One coach (MOS 8530) will be assigned no more than four (4) targets unless otherwise directed by the Range Officer.
7. Range Air Safety Observer. One Marine will be assigned to this duty.
8. Safety Supervisors. Although not a requirement on the automated rifle range, it is still recommended that units send Safety Supervisors to the rifle range. One Safety Supervisor per two targets should be the maximum. These supervisors should be from the individual units S-3, MTU, or unit and hold the minimum of expert qualification with the service rifle.

6001. RIFLE "KD" COURSE. The Sustainment Level rifle qualification course is outlined in references (b) and (c). The Field Firing Individual Training Standards (ITSS), as listed in references (b) and (c) must also be completed by each shooter.

6002. SPECIAL COURSES OF PRACTICE FIRING. Special courses of practice firing may be prescribed by the Range Officer to provide progressive development of marksmanship training.

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CHAPTER 7

SERVICE PISTOL REQUIREMENTS

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CHAPTER 7

SERVICE PISTOL REQUIREMENTS

7000. PERSONNEL REQUIREMENTS FOR THE OPERATING OF RANGES. The following personnel requirements are set forth as guidance for safe range operations. The Range Officer will report shortages of manpower to the Director, G-3 Training.

1. Range Officer. A Chief Warrant Officer MOS 9925 will be assigned to fill the billet as Officer in Charge, MTU, COMCABWEST.

2. Range Chief. This billet will be filled by a MSgt or GySgt holding the secondary MOS 8532.

3. Line SNCO. This billet will be filled by a Staff Sergeant or above with the secondary MOS 8531. The Line SNCO will be present on the firing line during all firing unless otherwise directed by the Range Officer or the Range Chief.

4. Tower NCO. A trained operator, familiar with all range regulations and the sequence of commands, will be present on the firing line of each firing range.

5. Block NCO. During live fire training, one Block NCO (MOS 8530) should be assigned a block of not more than ten (10). During evaluation, there should be a minimum of one Block NCO per 5 targets. Block NCO's will act as verifiers on record day.

6. Coaches. One coach (MOS 8530) will be assigned no more than two (2) targets unless otherwise directed by the Range Officer.

7001. COURSE "KD" PISTOL. The Entry Level pistol qualification course is detailed in references (b) and (c).

7002. SPECIAL COURSES OF PRACTICE FIRING. Special courses of practice firing may be prescribed by the Range Officer to provide progressive development of marksmanship training.

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CHAPTER 8

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CHAPTER 8

DUTIES OF THE RANGE SAFETY OFFICER

8000. DUTIES AND SPECIAL ORDERS FOR THE RANGE SAFETY OFFICER. The Range Safety Officer's duties include, but are not limited to the following:

1. Ensure that all Marines and weapons are accounted for upon arrival and departure.
2. Ensure that marksmanship training is being conducted in accordance with established directives.
3. Ensure that all safety rules are adhered to.
4. Ensure that an "Unload, show clear" command is conducted upon arrival prior to marksmanship instruction.
5. Ensure the appropriate safety measures are taken and the surface danger zone is clear of personnel:
 - a. All range flags are in place.
 - b. Road barricade placed on the side of the road.
6. Ensure that Range Control has been notified before and upon completion of firing at ext. #7-1448/1446.
7. Ensure that a Corpsman with safety vehicle and Armorer are present.
8. Ensure that proper hearing protection is being utilized.
9. Ensure that weapons are in the possession of shooter at all times.
10. Ensure that all weapons remain in condition 4 when transporting.
11. Ensure that magazines are filled at the firing line only.
12. Order an immediate cease fire or check fire when any unsafe condition is observed.

13. Ensure that all verifiers are briefed prior to assuming duties.
14. Remain on the firing line while firing is in progress.
15. Prior to their departure from the range ensure that "unload, show clear" command is completed and the following declaration is given by all Marines:

"I have no live rounds or brass in my possession at this time."

16. Tower NCO will issue the following warning: "Marines, it is unlawful to remove any brass or live rounds from this range. However, if from the time I release you to before the time you step foot in that POV or GOV, you come across any brass or live rounds, simply turn it in to range personnel and state a new declaration."

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APPENDIX A

RECREATIONAL FIRING AT EAST MIRAMAR PISTOL RANGE COMPLEX

1. Purpose. To promulgate policies, standards, and procedures for the conduct of Recreational Firing aboard the East Miramar Pistol Range Complex; specifically conducted by M CCS personnel.

2. Information. Recreational firing conducted at the East miramar Pistol Range Complex is designed to allow personnel a practical, common area which maximizes safety and firing opportunities with handguns. The ranges will be available for use for recreational firing during weekends and after normal working hours as long as military training does not require the use of the facilities. For recreational firing between Monday and Friday proper coordination with the Range Officer or Range Chief is required to ensure no conflict of training exists.

a. Recreational use of the East Miramar Pistol Range Complex will be conducted by M CCS personnel in accordance with references (a) through (i) and will:

(1) Not conflict with scheduled military training.

(2) Be supervised by a Range Safety Officer (RSO) who has:

(a) National Rifle Association (NRA) Range Master Qualification.

(b) Has held the MOS 9925 Range Officer or is a Graduate of the Small Arms Weapons Instructor Course and received the MOS 8532

(c) Has a Police Officers Standard of Training (POST) Firearms Instructor Course Certification.

(3) One Range Safety Supervisor per range being utilized, i.e., one Range Safety Supervisor to supervise the firing conducted on "B" range and one to supervise the firing on "D" range (a total of two personnel). If "C" range is also used the requirement for Range Safety Supervisors will be three.

(4) Maintain and enforce the safe use of firearms.

SOP FOR THE EAST MIRAMAR LIVE FIRE RANGES

b. The RSO provided by MCCA will be responsible for but not limited to perform the following duties:

(1) Ensure that all personnel and weapons are accounted for upon arrival and departure.

(2) Ensure that marksmanship training is being conducted in accordance with established directives.

(3) Ensure that all safety rules are adhered to.

(4) Ensure that all safety measures are taken and the surface danger zone is clear of personnel and vehicle traffic.

(5) All range flags are in place.

(6) Ensure all aircraft entering the area maintain an altitude above 600 feet above ground level (AGL) while in the surface danger zone, and sound a "cease fire" if a violation occurs.

(7) Ensure that Range Control has been notified before and after completion of firing at ext. 7-1448/1446.

(8) Ensure that hearing protection is being utilized.

(9) Ensure that weapons are in the possession of shooter at all times and not left unattended.

(10) Ensure that all weapons remain in condition 4 when being transported and no weapons are in the heads.

(11) Ensure that weapons are loaded at the firing line only.

(12) Order an immediate cease fire or check fire when any unsafe condition is observed.

(13) Ensure that a safety supervisor remains on the firing line of each range while firing is in progress upon that range.

(14) Prior to their departure from the range ensure that all weapons are unloaded and stowed in accordance with local laws.

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(15) Ensure that all restrictions on firearms and ammunition used are adhered to;

(a) Weapon is registered with PMO.

(b) Has received a limited technical inspection (LTI).

(c) The shooter has signed a "Release from Liability and Indemnity Form" as approved by Station Legal.

Note: see paragraph 3001.

(16) Ensure that all common areas used by the recreational shooters, are properly cleaned, policed and secured prior to departing from the range complex. This includes the heads, the firing lines, the ammunition distribution point, and anywhere else aboard the ranges that recreational shooters may have had access to.

(17) Ensure that no firearms or ammunition are left unsecured.

(18) Maintain a range log book to record date and time range began firing, ceased firing, and the total number of shooters.

c. The Range Safety Supervisor provided by MCCS will be familiar with references (a) through (i) and will assist the RSO in the safe conduct of their duties. The Range Safety Supervisor will, at a minimum, be Range Coach qualified (MOS 8530) and should be familiar with many different types of firearms. The duties of the Range Safety Supervisor will include, but not be limited to, those of the Tower NCO, Block NCO, and Line SNCO.

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APPENDIX B

UTILIZATION OF "B" RANGE

1. The "B" range location is the northernmost of the three ranges that make up the East Miramar Pistol Range Complex. Identifying characteristics include three wood baffles and a wood bullet stop.
2. Weapons authorized to be fired upon "B" range are:
 - a. All types of handguns up to and including .45 caliber. No magnum load ammunition is authorized as these types of ammunition will negate or bypass the safety provided by the wood baffles.
 - b. .22 cal and air-rifles (BB or pellet) may be fired, however only from the firing points underneath the 25 yard line overhang. The firing positions must be standing or bench-rest. Firing from the kneeling, sitting or prone position with any of these rifles is prohibited as these positions will negate or bypass the safety provided by the wood baffles.
 - c. No automatic weapons are allowed.
 - d. No shotguns will be fired on "B" range.
3. Targets may be placed in the target carriages at the 25 yard distance or in some type of wood frame at the 50 yard distance. No targets are to be fastened to any existing structure (the support columns for the baffles or bullet stop).

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APPENDIX C

UTILIZATION OF "C" RANGE

1. The "C" range is the center range of the three ranges that make up the East Miramar Pistol Range Complex. Identifying characteristics include two wood bleachers and a platform.
2. The "C" range is intended to be used as an archery range for recreational purposes, or for "snapping in" with hand guns. No live fire of firearms is authorized on "C" range.
3. If, at any time, an arrow goes into the impact area it will be considered lost. At no time will anyone go into the impact area.
4. Targets acquired by MCCS may be placed at any distance desired up to 50 yards. Firing will be conducted in the same direction as to have one common impact area with "B" and "D" ranges. Targets will not be fastened to any existing structure, i.e., the bleachers.

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APPENDIX D

UTILIZATION OF "D" RANGE

1. The "D" range location is the Southernmost of the three ranges that make up the East Miramar Pistol Range Complex. Identifying characteristics include metal target carriages which is the only authorized location to place targets.
2. The "D" range is intended to be used as a shotgun range.
3. Targets are to be secured to the existing metal carriages and fired upon at distances up to 50 yards. No targets are to be fastened to any existing support structure, i.e. the support columns for the overhead.
4. No firing will be allowed from under the overhang as the pellets will eventually destroy the existing structure.
5. When an aircraft is overhead the Range Safety Supervisor will ensure that no firing is conducted.

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APPENDIX E

MEDICAL EVACUATION (MEDEVAC) PROCEDURES

1. Purpose. To provide guidance and instruction for implementing this contingency plan in response to an accident or injury that occurs aboard the Rifle Range or the Brown Range Pistol Range Complex during live fire training or recreational firing.

2. Information. This order directs procedures that shall take place during an accident or injury aboard the Rifle Range or the Brown Range Pistol Range Complex during live fire training or recreational firing.

3. Action. When an accident or injury occurs that requires immediate medical attention the first person to be aware of the accident or injury will call for a "cease fire" on the range that the incident occurs on and call for the Corpsmen.

a. Range Officer. Ensure that the following is accomplished:

(1) Miramar Range Control (ext 7-1448/1446) is notified that there has been an injury at the Rifle Range or the East Miramar Pistol Range Complex.

(2) The Miramar Emergency Communications Center (ext 99-911) is notified in the event that Emergency Care is required and transportation of the injured is necessary.

(3) All weapons are cleared and shooters removed from the area.

(a) At the Rifle Range the shooters will be moved off the firing line and down to the range office.

(b) At the East Miramar Pistol Range Complex the shooters will be moved to the bleachers located on "C" range.

(4) One range vehicle will be sent to the entrance of the range to direct emergency vehicles and to keep the entrance clear of traffic.

(5) Director, G-3 Training Officer (ext 7-4717) is notified of the injury and that medical personnel have been notified. The following information will be provided to the Director, G-3T OIC:

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(a) Name/Rank/SSN of injured party.

(b) Time of incident.

(c) Unit involved.

(d) Brief description of the incident (as complete as known facts will permit).

(6) The Range Armorer will take custody and immediately establish a chain of custody for the weapon of the injured party. The weapon shall be evacuated to the parent units armory where the weapon will undergo an LTI if it is determined that a safety feature of the weapon may have failed. The LTI, if conducted, will become an enclosure to any investigation.

Note: Not applicable for recreational firing.

(7) At least two personnel will be identified to keep the incident site clear of personnel to avoid disturbing evidence. These personnel will remain posted until relieved by Military investigators, the Range Officer, or the Range Chief.

(8) The Tower NCO will direct, and all supervisory personnel will assist, in ensuring that all weapons are in condition 4 and that all ammunition has been turned in to range personnel.

(9) All witnesses are separated from non-witnesses, directed not to talk about the incident, and provide their name, SSN, rank, and unit to Military investigators, the Range Officer or the Range Chief.

(10) A chronological log of events is maintained by the Range Officer or the Range Chief to assist the Investigating Officer, PMO, and after-action report.

b. Range Chief

(1) Will assume the duties of the Range Officer in his or her absence.

(2) Will assist the Range Officer as directed.

c. Range Corpsmen

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- (1) Reports to the scene of the accident.
- (2) Administers appropriate first aid.

d. Line SNCO

- (1) Will assist the Range Officer as needed.
- (2) Supervises the placing of all weapons in condition 4 and the turn in of all ammunition to the Range Ammunition Technician.

e. Tower NCO. Will issue orders as directed by the Range Officer or Range Chief.

f. Block Officials

- (1) Will assist the Range Officer or Range Chief as directed.
- (2) Will assist and supervise the ammunition turn in and movement of personnel to the bleachers.

g. Range Admin Clerk

- (1) Assist the Range Officer or Range Chief as directed.
- (2) Supply administrative supplies to witnesses, i.e. pens, paper, and clipboards.
- (3) Will ensure that the telephone line remains free for emergency related matters.

h. Director, G-3 Training. Will be responsible for reporting the incident and all facts relayed by the Range Officer or Range Chief to the Chief of Staff via the Chain of Command.

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APPENDIX F

SURFACE DANGER ZONES (SDZs)

1. East Miramar Pistol Range Complex and Range 100

<u>Range</u>	<u>Type</u>	<u>Grid</u>	
Rifle (Range 100)	M16A2	95853997	95303973
"B"	Pistol	90203510	90303530
		90903460	91053485
"C"	Archery	90203510	90303530
		90903460	91053485
"D"	Shotgun	90203510	90303530
		90903460	91053485

2. Criteria used for calculating the Rifle Range SDZ was the 5.56mm M855 Ball ammunition on an open range. SDZ criteria for the East Miramar Pistol Range Complex were calculated using 9mm M822 Ball ammunition on a partially baffled range, i.e. maximum distance of round is divided in half due to baffles on "B" range. SDZ criteria for "D" range was calculated using the 12 gauge shotgun.

Note: For location of SDZs in relation to surrounding area refer to the MCAS Miramar Military Installation Map (MIM). It should also be noted that the SDZ on the MIM was calculated for the 7.62mm Ball ammunition not 5.56mm (thus the actual SDZ for the Rifle Range is smaller than that depicted on the MIM).

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APPENDIX G

RELEASE OF LIABILITY AND ASSUMPTION OF THE RISK FORM

1. As a participant in the Recreation Pistol Shooting Program (RPSP) aboard Marine Corps Air Station (MCAS) Miramar, the UNDERSIGNED acknowledges:

a. That the UNDERSIGNED is fully aware that MCAS Miramar is a United States Military Reservation; and

b. That the UNDERSIGNED will comply with all rules and regulations of the Air Station and the Marine Corps Community Services (MCCS) Pistol Range aboard MCAS Miramar; and

c. That the participation of the UNDERSIGNED in Recreational Pistol Shooting aboard MCAS Miramar involve being in remote areas for an extended period of time, far from communication, transportation and medical facilities; and

d. That participation in the RPSP, and the presence of the UNDERSIGNED at and upon any and all areas of MCAS Miramar, subjects the UNDERSIGNED to extraordinary risk of injury, disablement, and death and subjects the UNDERSIGNED's personal property to damage or destruction by virtue of, but not limited to: the nature of the activity in which the UNDERSIGNED is participating; the unpredictability of any animals involved in the activity; and the presence of numerous man-made and natural hazards which cannot be anticipated, identified, modified, or eliminated.

2. In consideration for permission to enter MCAS Miramar for the purpose of participating in the RPSP, the UNDERSIGNED agrees for the UNDERSIGNED and UNDERSIGNED's heirs, assigns, executors and administrators:

a. To voluntarily, willingly, and knowingly assume the risks in being present aboard MCAS Miramar, including, but not limited to, those risks set forth in paragraph 1 above:

b. To release to the UNITED STATES GOVERNMENT, including all its subdivisions, offices, military personnel, employees and agents, from all liability for any damages to personal property and injuries or death to the UNDERSIGNED while the UNDERSIGNED is aboard MCAS Miramar, including, but not limited to, the UNDERSIGNED's participation in the activities set forth in

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paragraph 1 above, whether caused by the negligent or wrongful act or omission of any employee or agent of the UNITED STATES GOVERNMENT while acting within the scope of his office or employment.

c. To indemnify the UNITED STATES GOVERNMENT for any and all losses it incurs in connection with the UNDERSIGNED's participation in the RPSP.

3. I, the UNDERSIGNED, have carefully read this agreement and fully understand its contents. I am aware that this is a release of liability and indemnification agreement between myself and the UNITED STATES GOVERNMENT and I am signing of my own free will.

Applicant's Signature	Printed Name
Signature of Parent or Guardian of applicant under age 18:	Printed Name
Execution Date	Expiration Date

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APPENDIX H

UTILIZATION OF RIFLE RANGE

1. The Rifle Range is located at the end of the main road on East Miramar. Identifying characteristics include a raised firing berm, four target lines and an impact berm (all are enclosed by a seven foot high fence topped with three strands of barbed-wire).

2. The only weapon authorized to be fired at the Rifle Range is the 5.56 mm or smaller.

Note: Upon receipt of the competition version of the M16A2, by the Responsible Officer of the Rifle Team Equipment (RTE), it will be added to the list of authorized weapons to be fired at the Rifle Range.

3. No automatic weapons are allowed to be fired at the Rifle Range.

4. The Rifle Range utilizes Location Of Miss And Hit (LOMAH) technology, is fully automated, and meets the requirement to conduct all ITSS required for Sustainment Level Rifle Qualification. The location of each shot will be displayed on a Visual Display Unit (VDU) located at each firing point. The shooter will not be required to move from his/her firing point until after all stages of fire for the day have been completed.

5. Transportation to and from the Rifle Range of shooters will be aboard military buses only. There will be no exceptions to this policy.

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APPENDIX I

GO HOT AND COLD CHECKLISTS

1. The ranges (both rifle and pistol) will use the same checklists to go hot (commence firing) and go cold (end of day cease fire).

2. In order to Go Hot, the range personnel will ensure the following have occurred:

- a. Corpsman is present.
- b. Range warning flags have been raised.
- c. Gates to access the range have been checked and secured.

Note: Range personnel will check all gates surrounding Range 100 SDZ via government vehicle prior to 0600 on the days that firing is scheduled.

d. MOS 9925 Range Officer or MOS 8532 Range SNCOIC is present and has given the approval to commence firing.

e. Training Area Management Office (TAMO), at ext 7-1448, has been notified that the range is ready to go hot and is provided the following information:

- (1) Which range is going hot.
- (2) Number of personnel firing.
- (3) Maximum caliber of ammunition.
- (4) Name of senior range person aboard range.
- (5) Name of corpsman.

f. Air Traffic Control (ATC), at ext 7-8562, has been notified that the range is ready to commence firing.

Note: Contacting TAMO and ATC will confirm and verify that the range has positive outside communications capability.

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g. Visual sweep of SDZ for the East Miramar Pistol Range Complex conducted by range personnel prior to any rounds being fired.

h. Safety vehicle is available and has clear exit from the range, i.e. not blocked in by other vehicles.

3. In order to Go Cold, the range personnel will ensure the following have occurred:

a. ATC is called and notified that the range has ceased firing for the day.

b. TAMO is called and notified that the range has ceased firing for the day.

c. Range warning flags have been lowered and put away.

d. Corpsman is secured and notified of report time for the following day.

e. All unused ammunition is accounted for and returned to the ammunition bunker.

f. An "unload show clear" has been conducted of all firing personnel and weapons.

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APPENDIX J

LETTER OF PROCEDURE (DECONFLICT LIVE FIRE AND AIRSPACE)

Subj: AIR TRAFFIC CONTROL (ATC) AND RIFLE RANGE DECONFLICTION PROCEDURES

1. Purpose. To establish guidelines for deconflicting use of Range 100 located aboard East Miramar in order to have no significant impact upon air operations.
2. Scope. The East Miramar Rifle Range lies approximately 21,000 feet east of the approach end of Runway 24. The elevation of the Rifle Range is 690 feet MSL. Based on the Department of the Army Memorandum dated 8 January 1990 titled Surface Danger Zone (SDZ) Dimensions for Direct Fire Weapons, firing at the rifle range creates a vertical hazard of 325 meters/1066 feet AGL for 5.56mm ball rounds impacting into earth. NAVFAC P-80 surfaces are penetrated by this vertical hazard. Furthermore, this hazard penetrates the required protected airspace surfaces for all approaches into MCAS Miramar, except the standard altitude overhead break approach. Therefore, firing at the rifle range cannot be conducted when an aircraft is in the Range Safety Area listed below. Rifle range operations shall not impact aircraft operations on and around MCAS Miramar. This includes both civil and military aviation.
3. Procedures
 - a. Boundaries. The East Miramar Rifle Range Safety Area (RSA) is described as a box surrounding the rifle range SDZ. Starting in the Northeast corner, the geographical coordinates are from 32 54' 12"N 117 1' 00"W to 32 53' 20"N 117 1' 00"W then 32 53' 20"N 117 3' 30"W up to 32 54' 12"N 117 3' 30"W then returning to the start point. The vertical limits are from the surface up to and including 1,800 feet above Mean Sea Level (MSL).
 - b. Range Air Safety Observers (RASO). The RASO is the primary means to ensure the rifle range is not firing when an aircraft is in the RSA. For the purpose of visually observing the RSA, one RASO will be posted at a key location during all hours when the Range is conducting live fire. The RASO will notify rifle range supervisory personnel when they see aircraft that will penetrate the RSA.

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c. ATC/Rifle Range Coordination. During hours when the airfield is open and workload permitting, ATC will notify rifle range supervisory personnel when aircraft are inbound on an approach to Miramar that will penetrate the RSA.

d. Rifle Range Supervisory Personnel Action. Rifle range supervisory personnel will call a check-fire when notified by the RASO or ATC that an aircraft is going to enter the RSA.

e. Weather. Range supervisory personnel will at no time allow a shot to be fired where the trajectory would place the projectile into or through any obscuring phenomenon (cloud formation, smoke, etc.).

f. Equipment/Communication. An automated ATC/Rifle Range Tower notification system is being developed by SPAWAR and will be installed prior to range operations commencing. Rifle range supervisory personnel will establish two-way communication with ATC during all times when the rifle range and airfield are open simultaneously. A daily equipment check of communications equipment shall be performed upon airfield opening. In accordance with the Go Cold checklist the rifle range supervisory personnel will notify ATC when firing has been completed for the day.

4. Deviations. Any inadvertent firing of a weapon during cease-fire will be reported immediately to the Airfield Operations Officer (858) 577-1875 or the Operations Duty Officer (858) 577-4277.