



UNITED STATES MARINE CORPS
Marine Corps Base
Camp Lejeune, North Carolina 28542-5001

BO P11102.1K
RCTL/kae
11 Oct 1985

BASE ORDER P11102.1K

From: Commanding General
To: Distribution List

Subj: Standing Operating Procedures for Range Control Operations (Short Title:
Range Control SOP)

Ref: (a) MCO P3570.1A

Encl: (1) LOCATOR SHEET

1. Purpose. To promulgate regulations for the assignment, control, safe use, and maintenance of ranges at Camp Lejeune to include live field firing ranges, maneuver areas and field training facilities under the control of the Commanding General, Marine Corps Base. To provide information and instructions regarding training services available to units training at Camp Lejeune.

2. Cancellation. BO P11102.1J.

3. Action

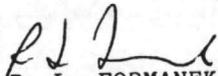
a. This Manual is effective 0001, 1 November 1985. This allows coordination, dissemination of new procedures, and recomputation of safety data.

b. A copy of this Manual will be published in standard size and will serve as the base range control safety regulations. All personnel involved in the utilization of live firing ranges, maneuver areas, helicopter landing/drop zones and air operations will be thoroughly familiar with these safety regulations and each Officer in Charge of Firing, Range Safety Officer or Forward Air Controller will possess a copy of these regulations at all times when such training exercises are in progress.

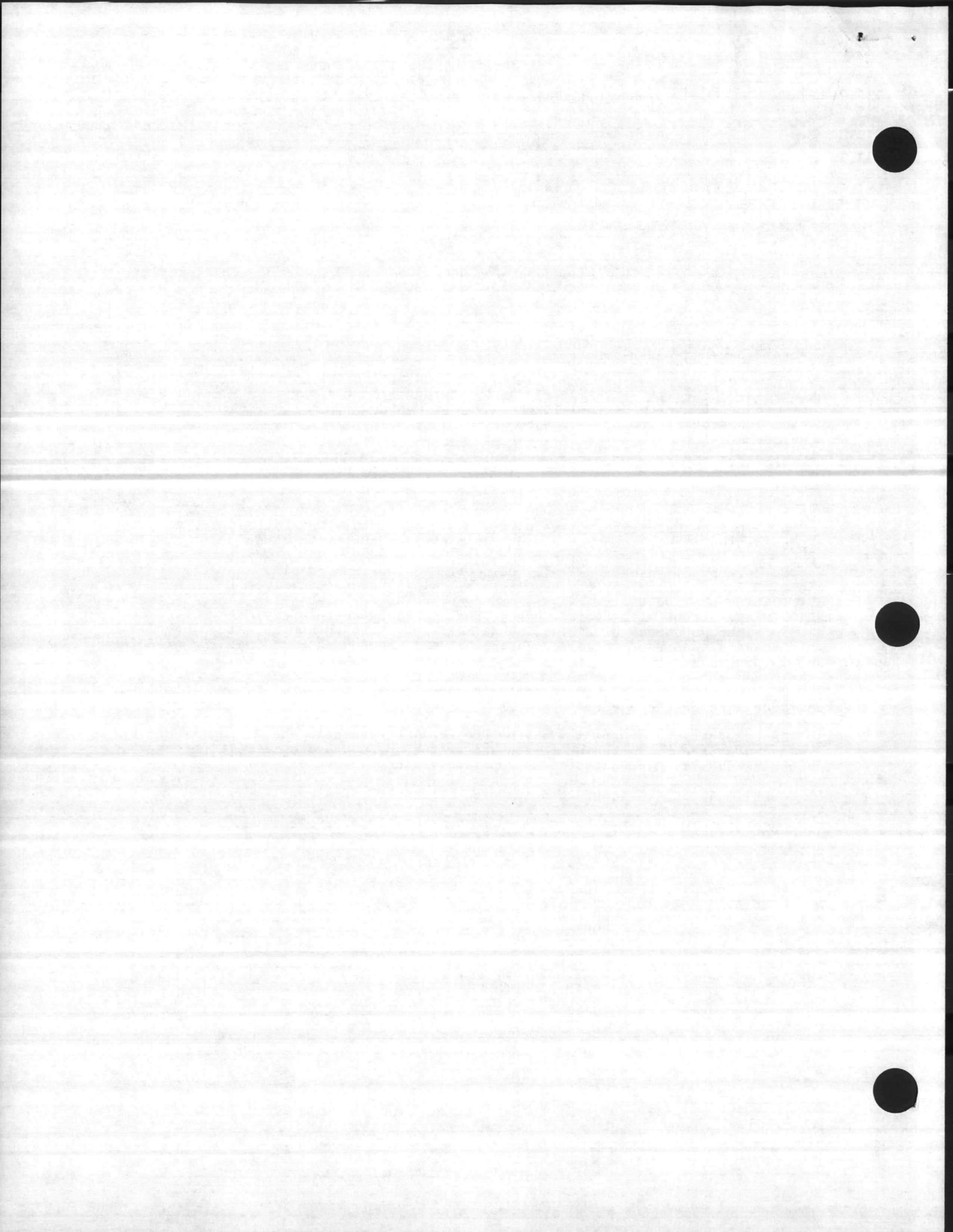
4. Summary of Revisions. This revision contains a substantial number of changes and should be completely reviewed.

5. Recommendations. Recommendations for the improvement of base ranges and training/maneuver areas, including the enhancement of safe usage of live fire ranges, should be submitted through the appropriate chain of command.

6. Certification. Reviewed and approved this date.


R. L. FORMANEK
Chief of Staff

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6. Prohibited Areas

a. High Explosive Impact Areas.

(1) EOD Range G-4A, G-10 Impact Area, K-2 Impact Area, EOD Range K-326, and N-1 Impact Area (Browns Island Target and Bombing Area, BT-3) can be entered by EOD personnel with the permission of the RCO. Entry by other personnel upon approval of AC/S, Training and Operations and normally with EOD escort.

(2) Impact Areas are shown on the Camp Lejeune special map and defined as follows (this order takes precedence over the map overprinted data):

(a) G-10 Impact Areas. That area bounded by GC 89473719 to 92733685 to 95123695 to 95003360 to 93503372 to 90103250 to 89923433 to 88743645 to starting point.

(b) N-1 Impact Areas. That area from Onslow North Tower at the beach line to GC 94253149 to 97163405 to 97793377 the south along Bear Creek to Bear Creek Inlet and southwest along the Base boundary on the beach line to starting point at Onslow North Tower.

(c) BT-3 (Bombing and Target Range). That area bounded by GC 98283362 to 99283362 to 99203251 to 00523391 to 06542409 to 93251771 to Onslow North Tower to starting point. Aircraft delivered ordnance into N-1/BT-3 will impact on Brown's Island only.

(d) K-2 Impact Area. That area bounded by GC 78703552 to 81703552 to 82113490 then south and west along the New River shoreline to 77503341 to starting point.

(3) Dud Hazard Ranges are listed in Appendix B and the "What Can I Shoot Where?" matrix, Appendix I. No personnel or training are allowed on the down range area of these ranges unless approved by RCO and escorted by EOD personnel. Surface danger zones and impact areas are depicted on the Camp Lejeune special map, Appendix K.

b. Live Minefield Site: GC 936310 to 838306 to 943309 to 943313 can only be entered with RCO's approval and EOD escort. See current edition of BO 8092.1B for additional information and requirements.

7. Surface Danger Zones (SDZ)

a. The SDZ (safety fan) is that segment of a range area endangered by a particular type of weapon firing and consists of those areas depicted in Figure 2-1 and 2-2. Entry into these areas is prohibited during firing. The SDZ as depicted on the Camp Lejeune special map (Appendix K) and described in Appendix B to this order, along with special instructions, are the minimum requirements. They are adequate only when employed with properly functioning safety equipment and devices, and when trained and competent personnel follow firing procedures.

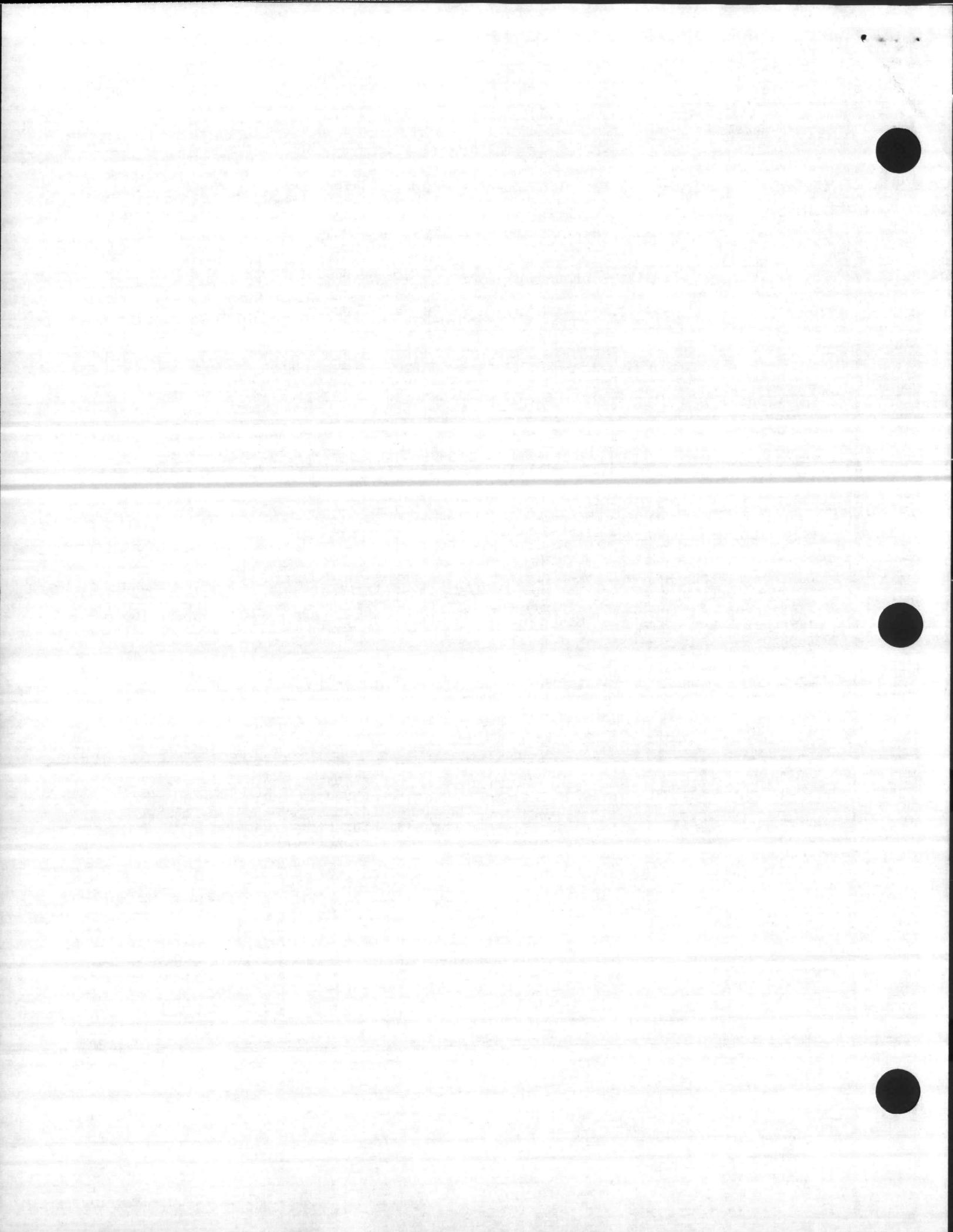
b. Common Impact Areas

(1) The surface danger zone of many ranges overlap, creating a common impact area, such as the F-Range and K-Range complexes.

(2) Care must be exercised, particularly when other ranges sharing common impact areas are being used, to insure that the area is safe before firing or moving down range. (See Appendix B)

2003. ENVIRONMENTAL PRECAUTIONS

1. Waste Water Disposal. The following methods are required for the disposal of waste water:



RANGE CONTROL SOP

Range: G-10 Impact Area

Description: Bombing and Target Range

Location: GS 8936-9535-9433-9032 (See Camp Lejeune Special Map, Appendix K), read chapter 2, this Manual.

Weapons: Fixed Wing Aircraft utilizing the IP's and run in headings contained in this Manual.

- MK 76 and MK 80 series inert bombs
- 2.75 rockets, HE, WP, and practice delivered at 20 degrees or greater dive angle
- 20mm, 25mm, 30mm delivered at 20 degree or greater dive angle
- MK 81 and MK 82 not authorized

Rotary Wing Aircraft

- 2.75 rockets, HE, WP, and practice at 20 degree or greater dive angle
- 7.62 aerial gunnery
- 20mm at 20 degree or greater dive angle

Artillery - All types

Mortars - All types

Ground Weapons - Same as ranges G-3,8, and 9

Ammunition: Artillery - HE, WP, Illum, SMK

Mortars - HE, WP, Illum

Ground - 5.56, 7.62, 40mm, 25mm

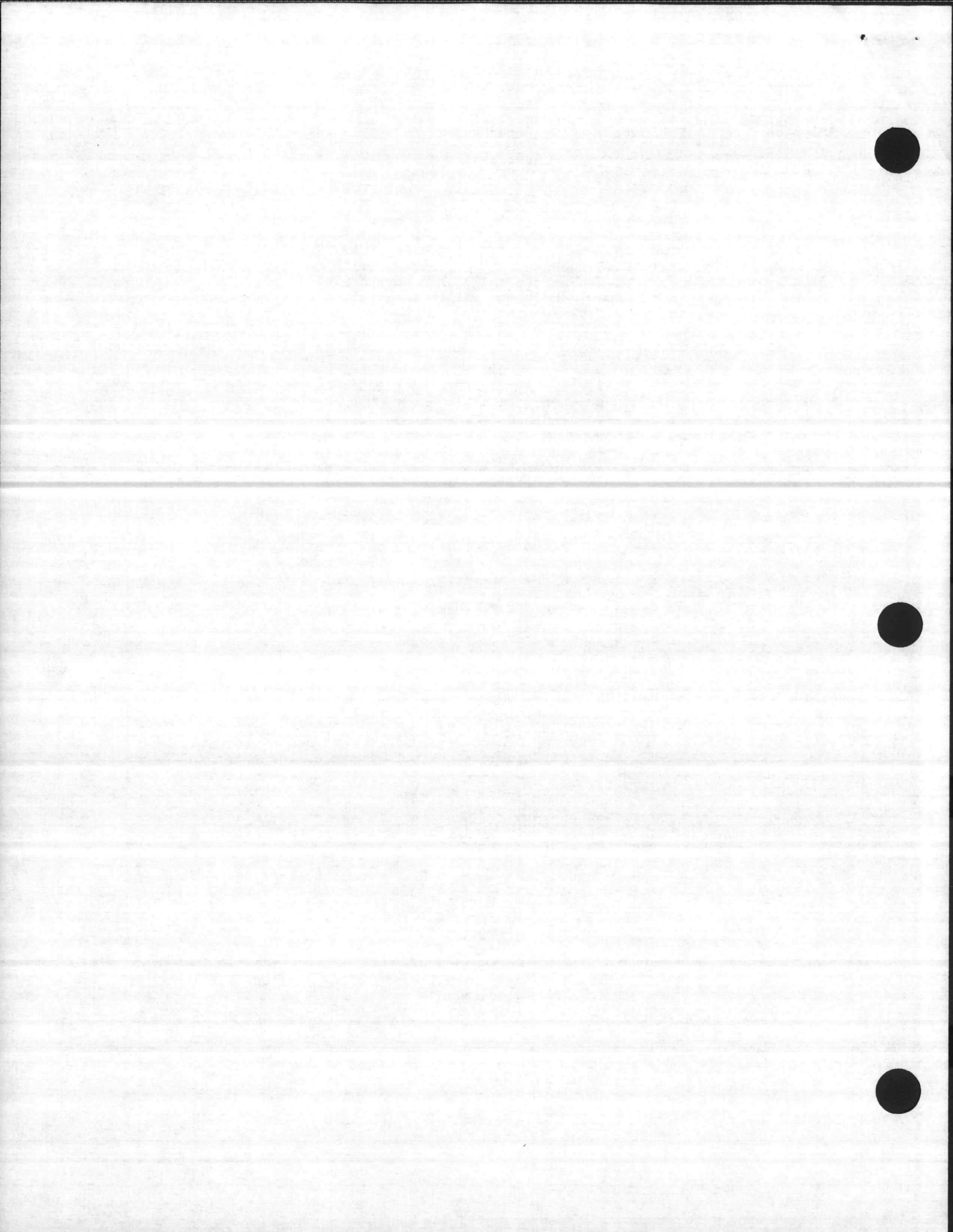
Targets: Improvised targets, vehicle hulls

Communication: Read section 4005, this Manual

Special Instructions: Read chapter 4, this Manual. See the following diagram for special instructions pertaining to artillery/indirect firing into G-10. When firing into G-10, the OIC of firing must post radio equipped air sentries capable of observing the entire gun target line. This capability to observe the entire SDZ also applies to aircraft delivered ordnance. A FAC must inform aircraft performing CAS mission of the location of each gun position firing into G-10 and which of the adjacent ranges/training areas around G-10 are occupied.

When aircraft are using RABFAC the following instruction will be followed:

- Run in heading will comply with those established in Manual (see 4013.3a(9)).
- First pass must be cold
- Mandatory read back by aircrews to FAC of beacon brief
- B/N must monitor the aircraft systems actual altitude during run-in phase.

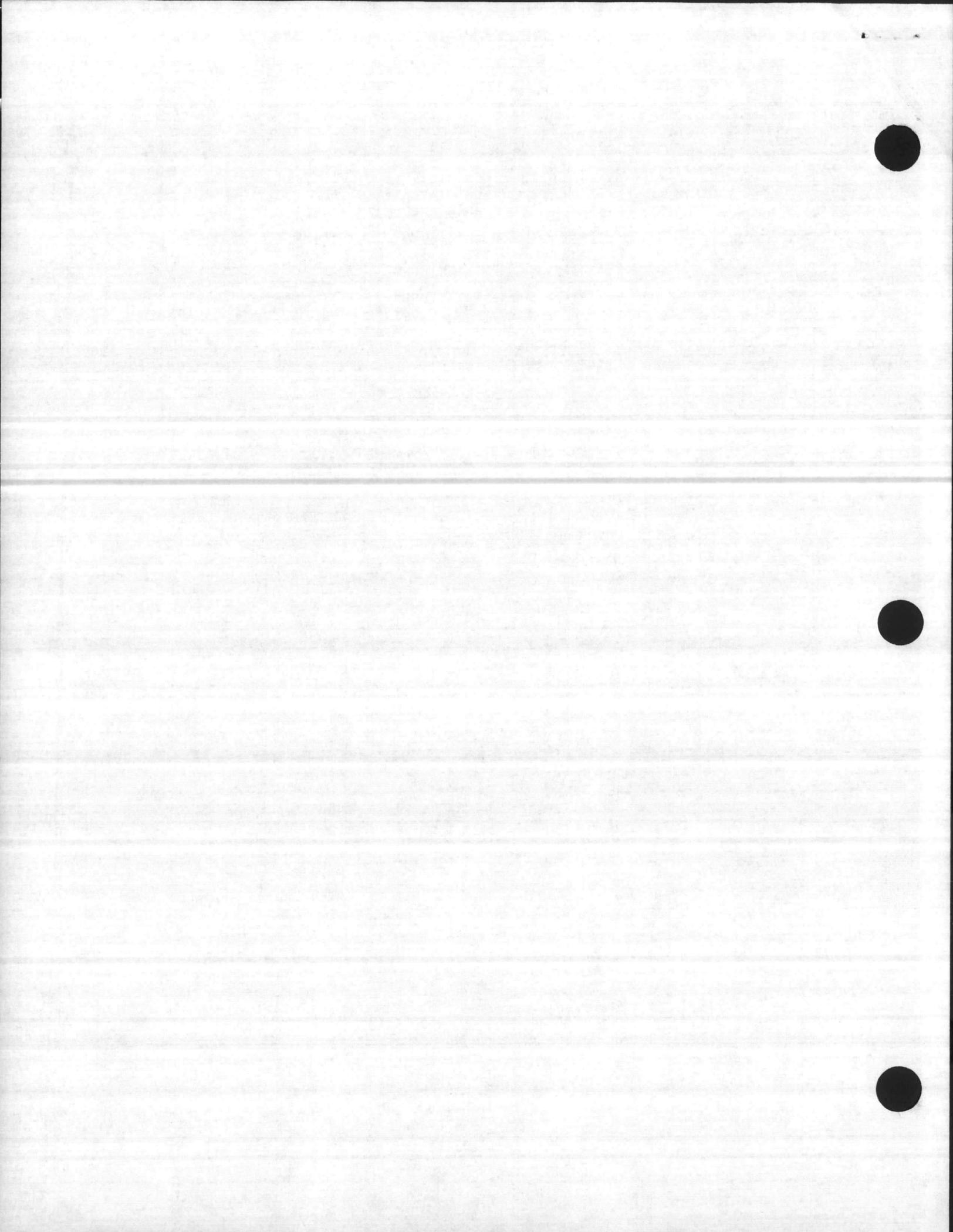


RANGE CONTROL SOP

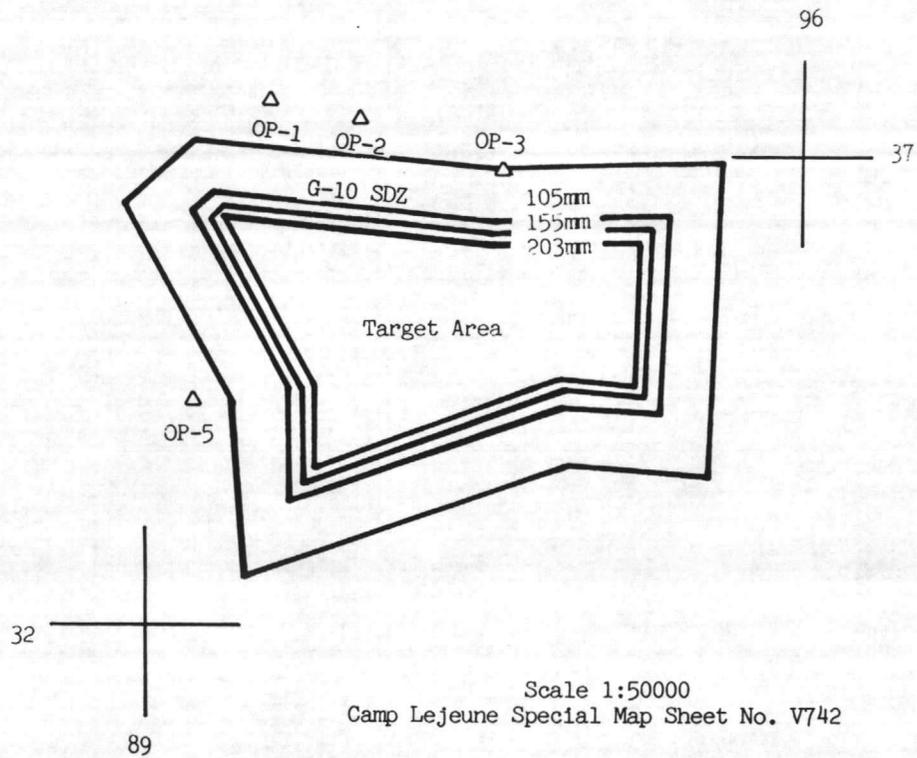
G-10 Rotary Wing

- Rotary wing aircraft will utilize a west to east delivery pattern for firing 2.75" rockets and aerial gunnery (7.62mm only). The center of the lane will be at OP5 with right and left limits ending 250m on either side of the OP. Run in headings will be 70 degrees magnetic from the center of OP5. The start fire line is the berm used as the firing line for range G-3 and the cease fire line is the fire break, located 500m east of the firing line of range G-3. The area between OP5 and the range G-3 firing line will be used as a arm/dearm area for rotary wing aircraft and may be used for hover firing.

NOTE FOR SPECIAL INSTRUCTIONS: No personnel are allowed on ranges G-3 or G-6 during rotary wing aircraft delivery of 2.75" rockets.



RANGE CCNTROL SOP
 G-10 INDIRECT FIRE RESTRICTIONS



Surface Danger Zone/
 Impact Area

Grid Reference

G-10 SDZ	From Grid 89473719 to 92733586 to 95123695 to 95003360 to 93503372 to 90103250 to 89923443 to 88743645 to 89473719.
G-10 203mm Impact Area	From Grid 89793629 to 92733599 to 94233603 to 94183451 to 93413458 to 90773364 to 90773456 to 89793629.
155mm Impact Area	From Grid 89763642 to 92693610 to 94343616 to 94283440 to 93433448 to 90703350 to 90723451 to 89663632 to 89763642.
105mm Impact Area	From Grid 89683658 to 92723626 to 94543634 to 94473421 to 93403429 to 90583328 to 90513450 to 89453636 to 89683658.

