

UNITED STATES MARINE CORPS  
10th Marines, 2d Marine Division, FMF  
Camp Lejeune, North Carolina 28542

IN REPLY REFER TO

5100

CO

MAY 03 1985

From: Commanding Officer, 10th Marines  
To: Commanding General, Marine Corps Base, Camp Lejeune (Attn: AC/S Trng)  
Via: Commanding General, 2d Marine Division, FMF (Attn: G-3T)

Subj: ARTILLERY SURFACE DANGER ZONES AND IMPACT AREAS

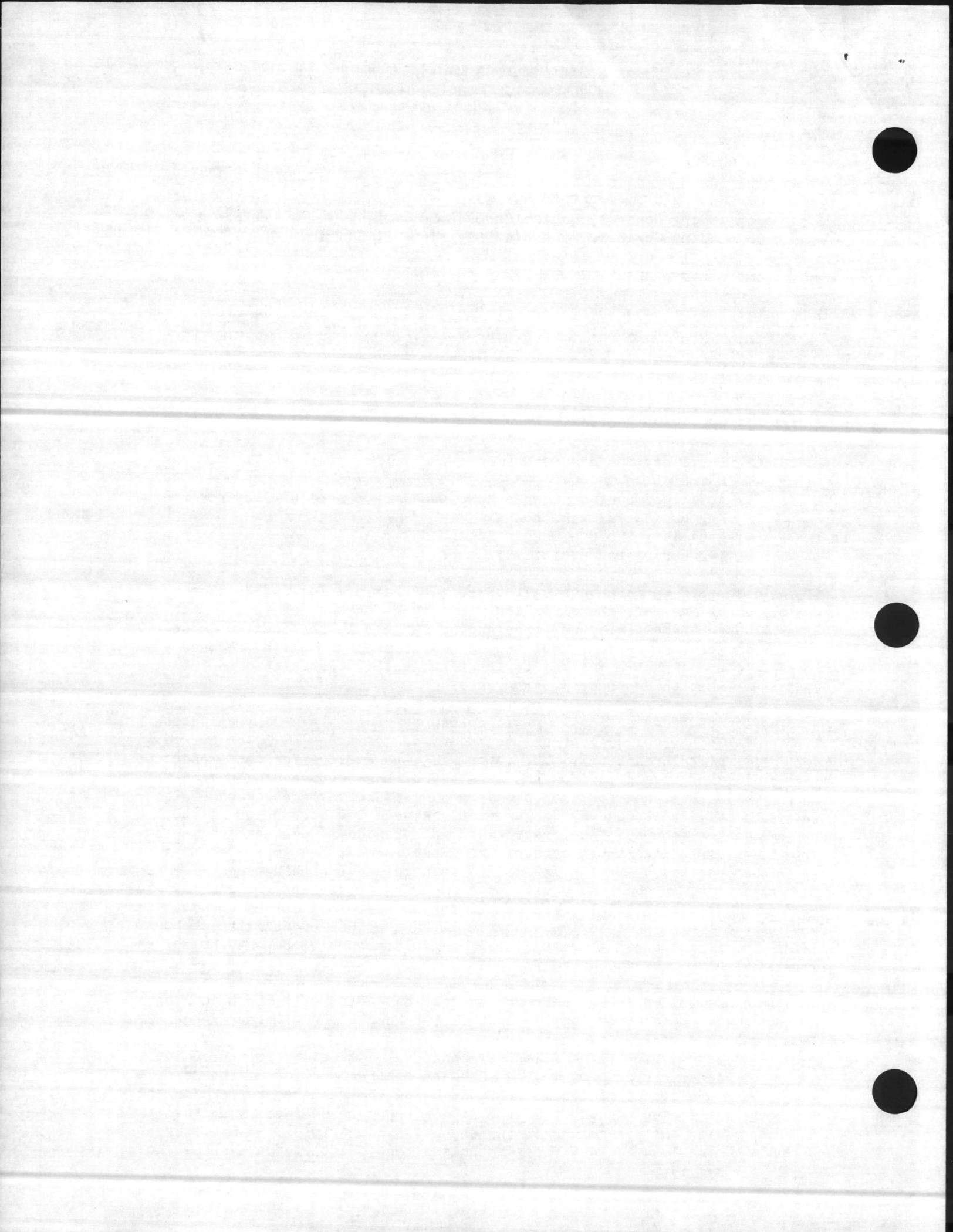
Ref: (a) Conversation between Capt Caspers (10thMar RSM) and LtCol Cizerle  
(MCB Range Cnt10) of 22 Apr 85  
(b) MCO P3590.1A  
(c) BO P11102.1K  
(d) RegtO P5100.12G

Encl: (1) Artillery Surface Danger Zone and Impact Area overlay for range  
G-10  
(2) Artillery Surface Danger Zone and Impact Area overlay for ranges  
N-1/BT-3  
(3) Artillery Surface Danger Zone and Impact Area overlay for range  
K-2 during daylight hours  
(4) Artillery Surface Danger Zone and Impact Area overlay for range  
K-2 during low visibility hours

1. As discussed in reference (a), the enclosures are forwarded. The enclosures define parameters for surface danger zones which will be for use of artillery cannon firing at fixed ground targets in the indirect mode. The surface danger zone defined includes an impact area as well as secondary danger areas. Impact areas and target areas will be restricted to the landmass within the surface danger zone.

2. The impact areas defined by the enclosures were obtained by using the largest value (by caliber) of the secondary danger areas A, B, or C from Table 11-1 of reference (b). The outer limit parameters for the impact area were defined by moving in from the boundary of the surface danger zone the corresponding distance for the secondary danger area. In accordance with reference (b), the secondary danger area, between the boundaries of the surface danger zone and the impact area, is intended to contain fragments from items exploding at the edge of the impact area. The impact areas will be further reduced by moving inward the appropriate probable errors for range and deflection, in accordance with procedures of references (b) and (d), to define the available target area for firing units. Projectiles fired at the edge of the target area derived above will have a 100% probability of burst within the impact area; given that all possible errors (inherent, human, and constants) have been accounted for.

3. Enclosure (1) modifies the reference (c) dimensions for the G-10 range surface danger zone by moving the southeast corner of the surface danger zone west a distance of 150 meters to provide the required buffer for Highway 172. Also, enclosure (1) modifies reference (c) dimensions for the G-10 range surface danger zone by moving the west central portion of the surface danger zone a distance of 100 meters to provide the required buffer for the G-3 range. It is recommended that the impact areas be defined by caliber in accordance with the dimensions of enclosure (1) to maximize the available target area for 10th Marines present table of equipment weapon systems. An



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added benefit if these modifications and recommendations are adopted is that artillery No Fire Areas presently used to protect personnel on the G-3 and G-6 ranges from secondary danger area hazards will no longer be required.

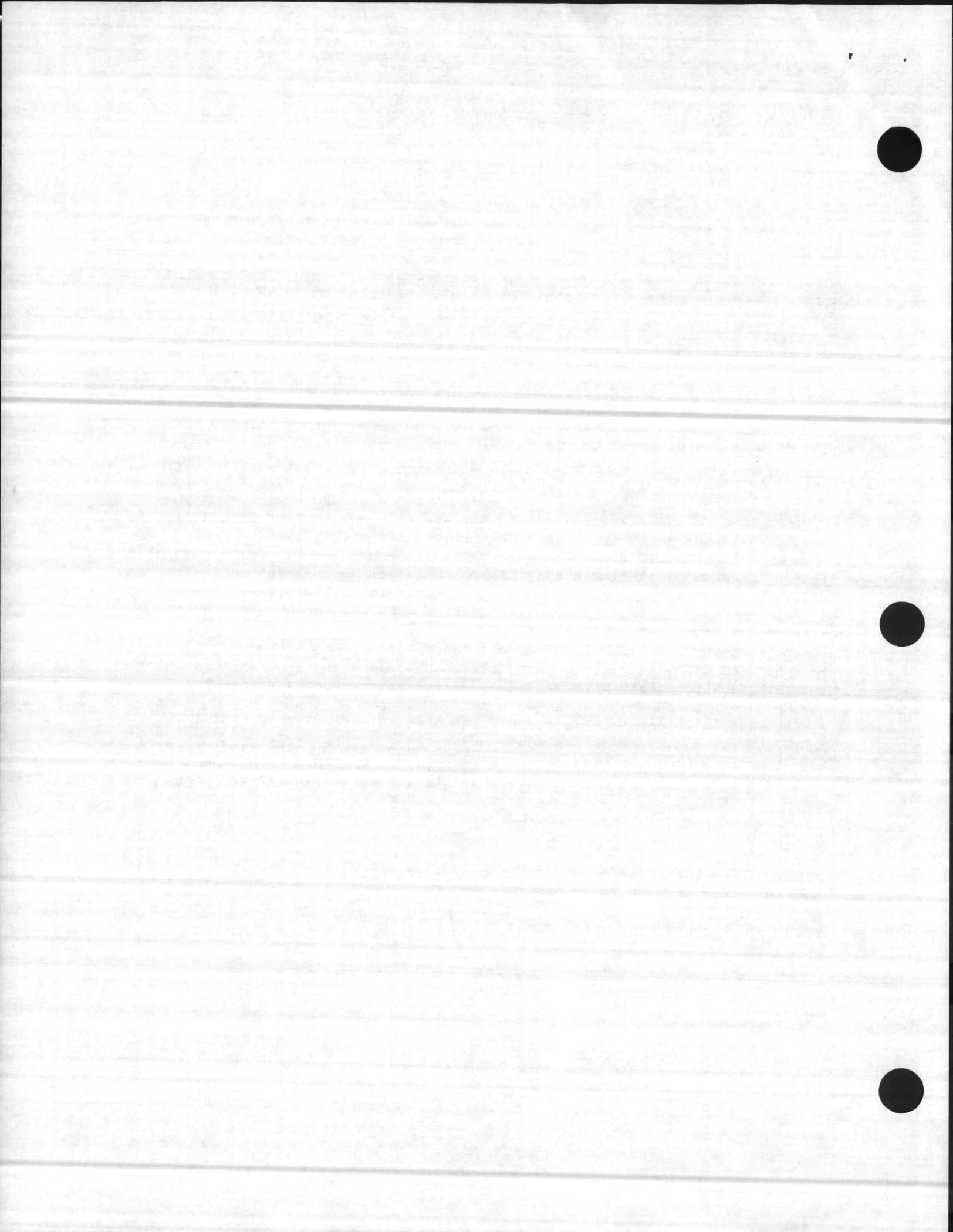
4. Enclosure (2) uses coordinates for the N-1 and BT-3 surface danger zones, contained in reference (c) to define a combined surface danger zone. As the targets available within the N-1 range lie along the beachline and among the dunes behind the beach, it is considered necessary to extend the surface danger zone into the ocean within range BT-3 to maximize use of the N-1 range. Thus, firing units conducting indirect fire within the N-1 range will require submission of training area requests for simultaneous use of N-1 and BT-3 ranges unless the dimensions for the N-1 range within reference (c) are changed to incorporate the secondary hazard area seaward of the beachline defined within enclosure (2).

5. It is requested that enclosure (3) be considered for use as the surface danger zone for daylight use of the K-2 range. The surface danger zone defined by enclosure (3) modifies paragraph 2003.6a(2) of reference (c) guidance by extending the secondary danger area (which parallels the impact area) into the Stone Creek and Grey Point sectors of the New River. The revised danger limits are considered necessary to ensure sensible use of the available impact and target areas on the landmass within the K-2 range. In lieu of water traffic control requirements of reference (b), it is requested that procedures of paragraph 4013 of reference (c) be implemented for daylight use of the K-2 range. During hours of low visibility enclosure (4) is recommended as a temporary surface danger zone and impact area until such time as continuous surveillance of navigable waters may be resumed, be it radar, boat or visual observation post surveillance. As enclosure (4) does not encroach upon navigable waters and the secondary danger areas present no hazard to public safety within the New River, it is recommended that the visual surveillance requirement be waived while the enclosure (4) surface danger zone is in use. It is further recommended that measures be undertaken to permit continuous radar and boat surveillance of the affected sectors of New River in accordance with the requirements of reference (b) so that enclosure (3) may be used during both daylight and low visibility firing exercises, and at which time necessity for enclosure (4) may be suspended.

6. Implementation of the special procedures requested above and the surface danger zones of the enclosures is considered necessary to comply with reference (b) while making judicious use of available impact areas for indirect firing of artillery cannon.

7. Point of contact at this headquarters is Captain Caspers at extension 5527/1640.

  
C. CATOE



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OP-1

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OP-2

OP-3  
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G-10 SDZ

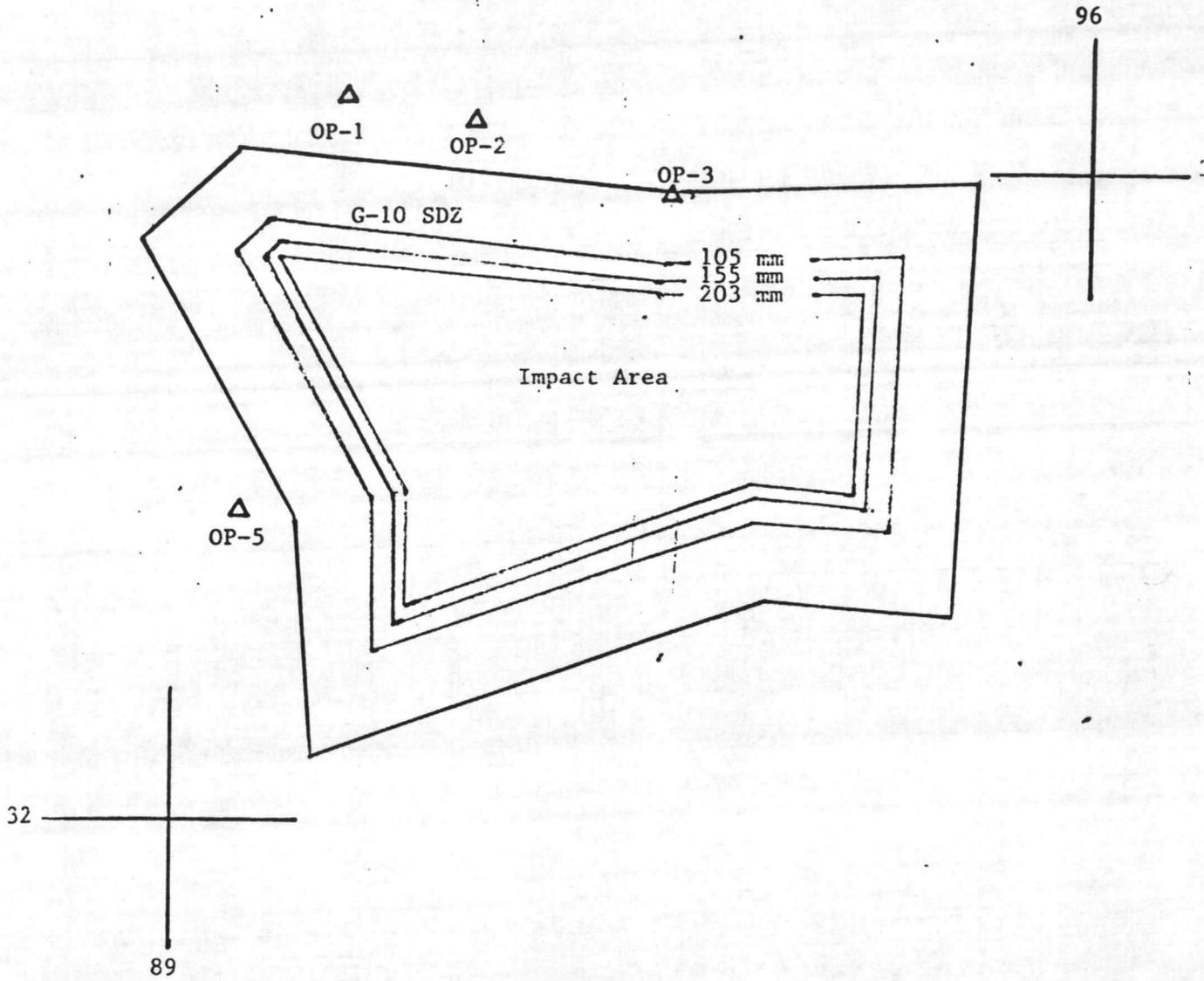
105 mm  
155 mm  
203 mm

Impact Area

△  
OP-5





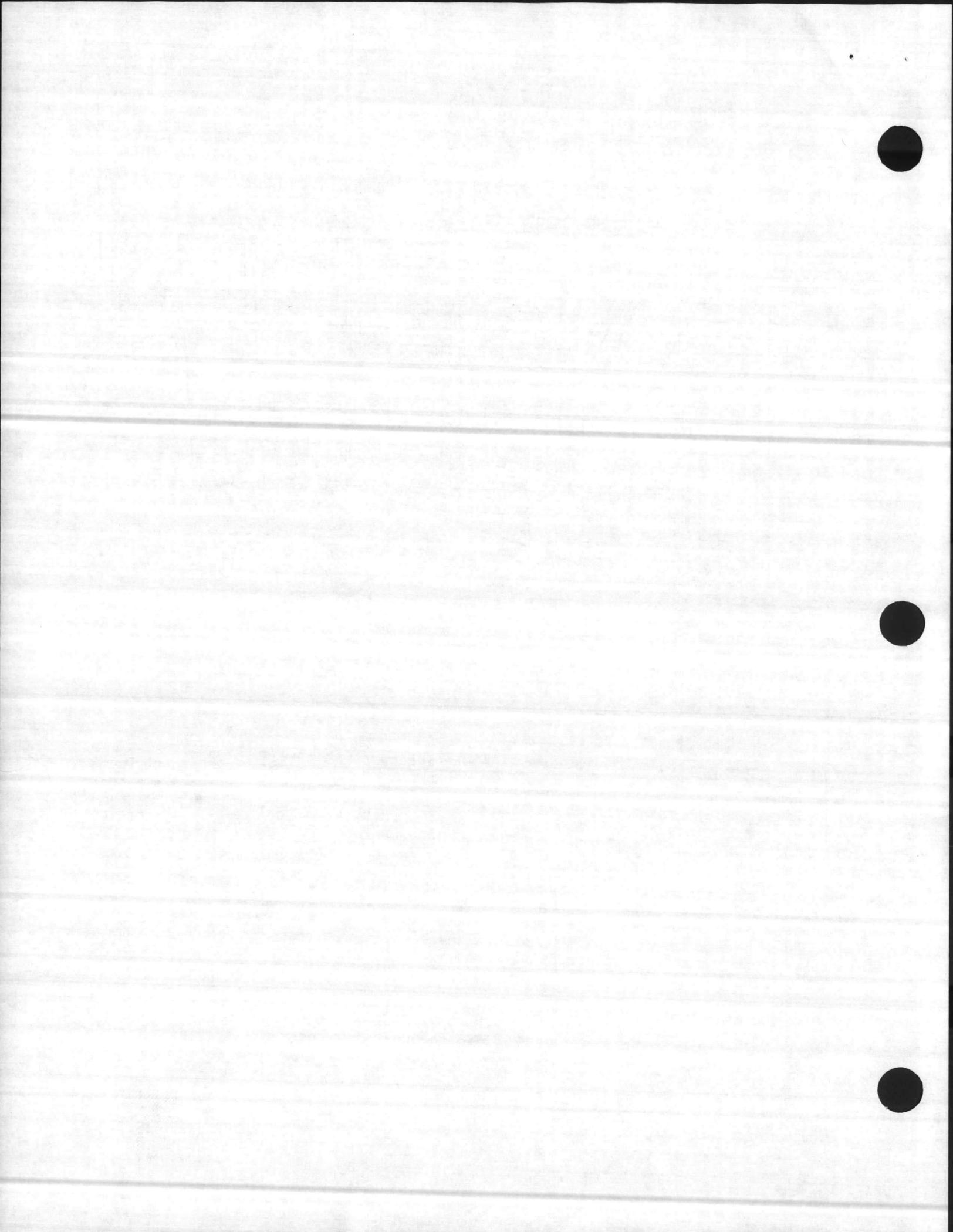


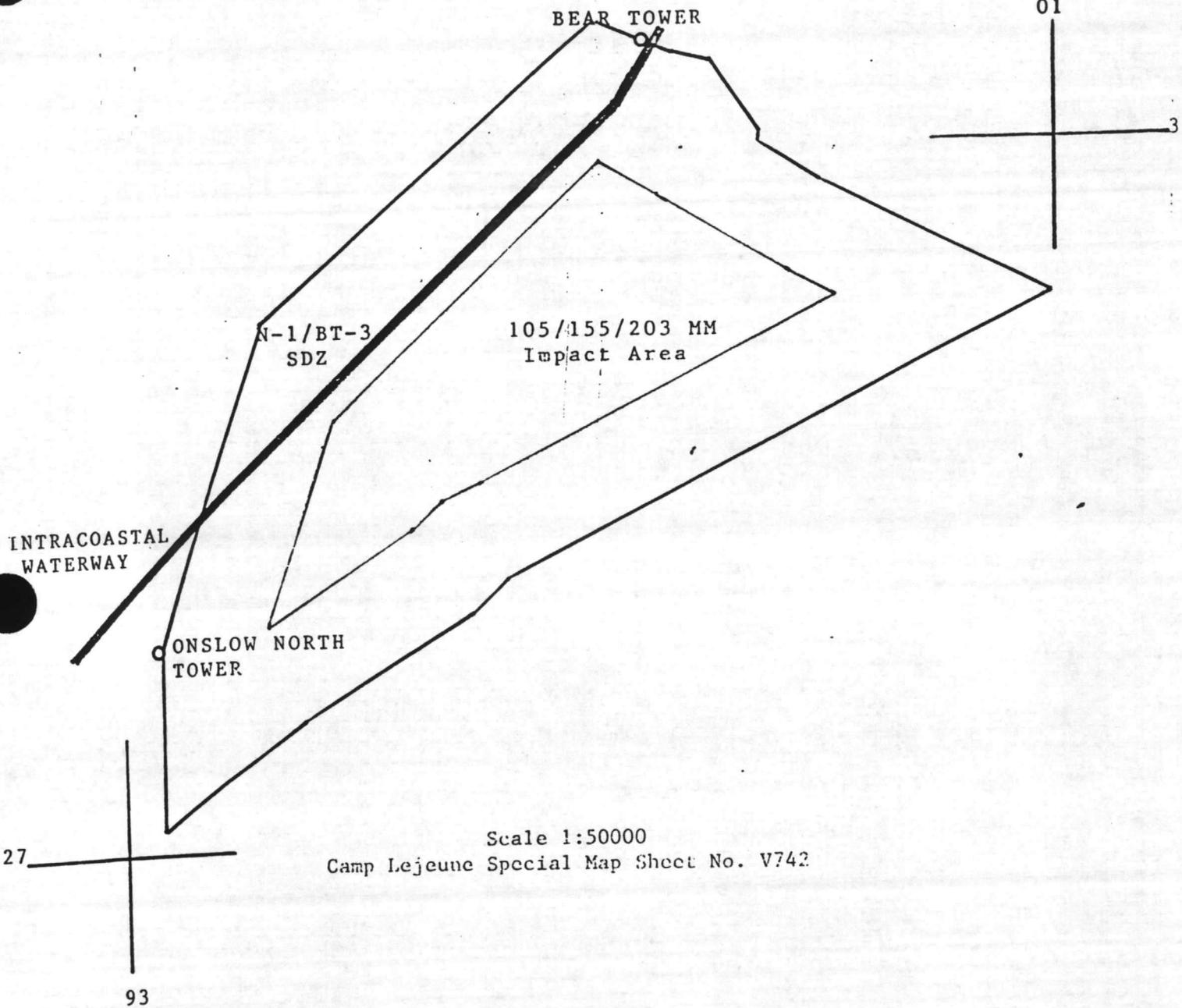
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Camp Lejeune Special Map Sheet No. V742

Surface Danger Zone/  
Impact Area

Grid Reference

G-10 SDZ	From Grid 89473719 to 92733685 to 95123695 to 95003360 to 93503372 to 90103250 to 89923433 to 88743645 to 89473719.
G-10 <u>203mm</u> Impact Area	From Grid 89793629 to 92733599 to 94233605 to 94183451 to 93413458 to 90773364 to 90773456 to 89793629.
<u>155mm</u> Impact Area	From Grid 89763642 to 92693610 to 94343615 to 94283440 to 93433448 to 90703350 to 90723451 to 89663632 to 89763542.
<u>105mm</u> Impact Area	From Grid 89683658 to 92723626 to 94543634 to 94473421 to 93403429 to 90583328 to 90513450 to 89453636 to 89683658.





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Surface Danger Zone/  
Impact Area

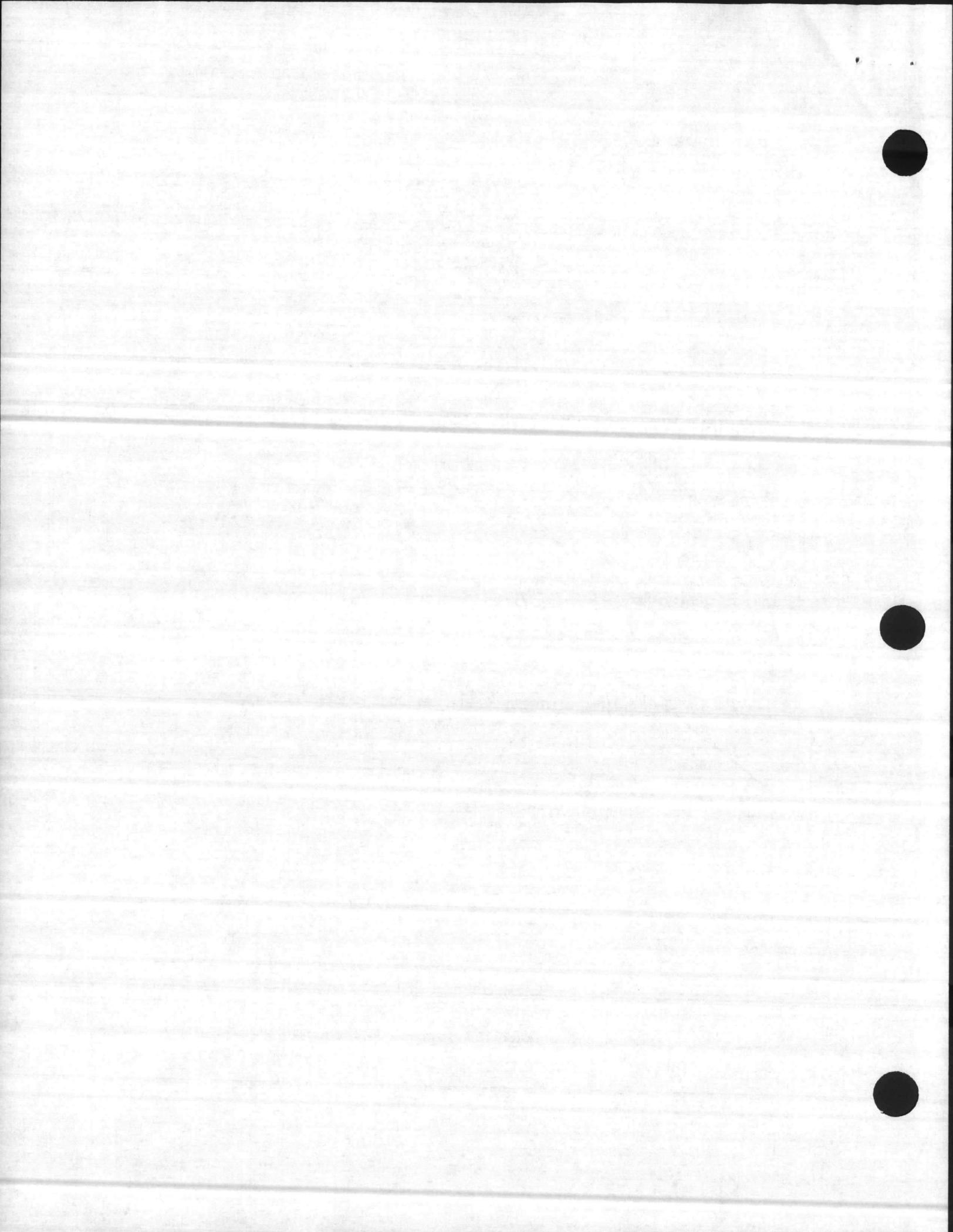
N-1/BT-3 SDZ

N-1/BT-3 Impact  
Area  
(All Calibers)

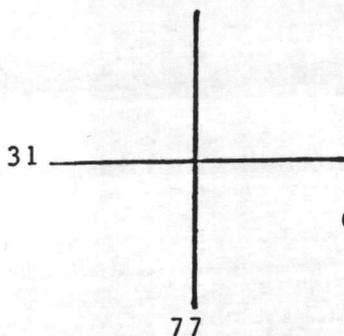
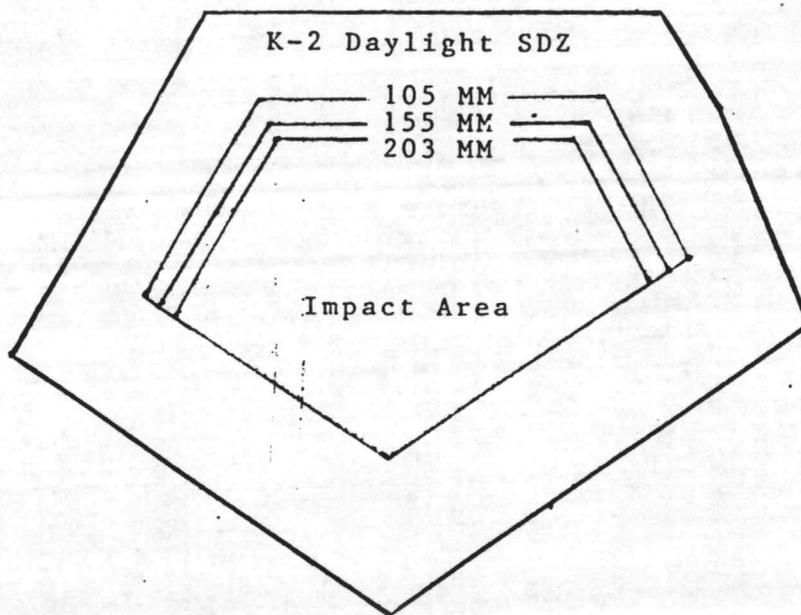
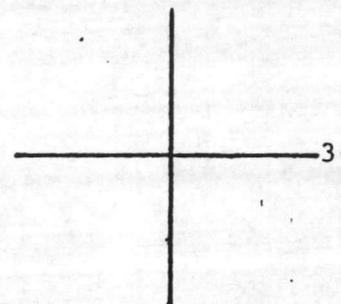
Grid References

From Grid 93342722 to 93352876 to 94253150 to 97143405 to 97773377 to 98103370 to 98503310 to 98503300 to 99003269 to 99653235 to 00953167 to 96352929 to 96062900 to 94592811 to 93342722.

From Grid 94282892 to 94873067 to 97163285 to 97653255 to 98683189 to 99133167 to 95113012 to 95782995 to 95542971 to 94282892.



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Scale 1:50000  
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Surface Danger Zone/  
Impact Area

Grid Reference

(Daylight)  
K-2 SDZ

From Grid 78703552 to 81703552 to 82113490 to 82503400 to 82753342 to 79943148 to 77403322 to 77503341 to 78703552.

K-2 203mm Impact Area

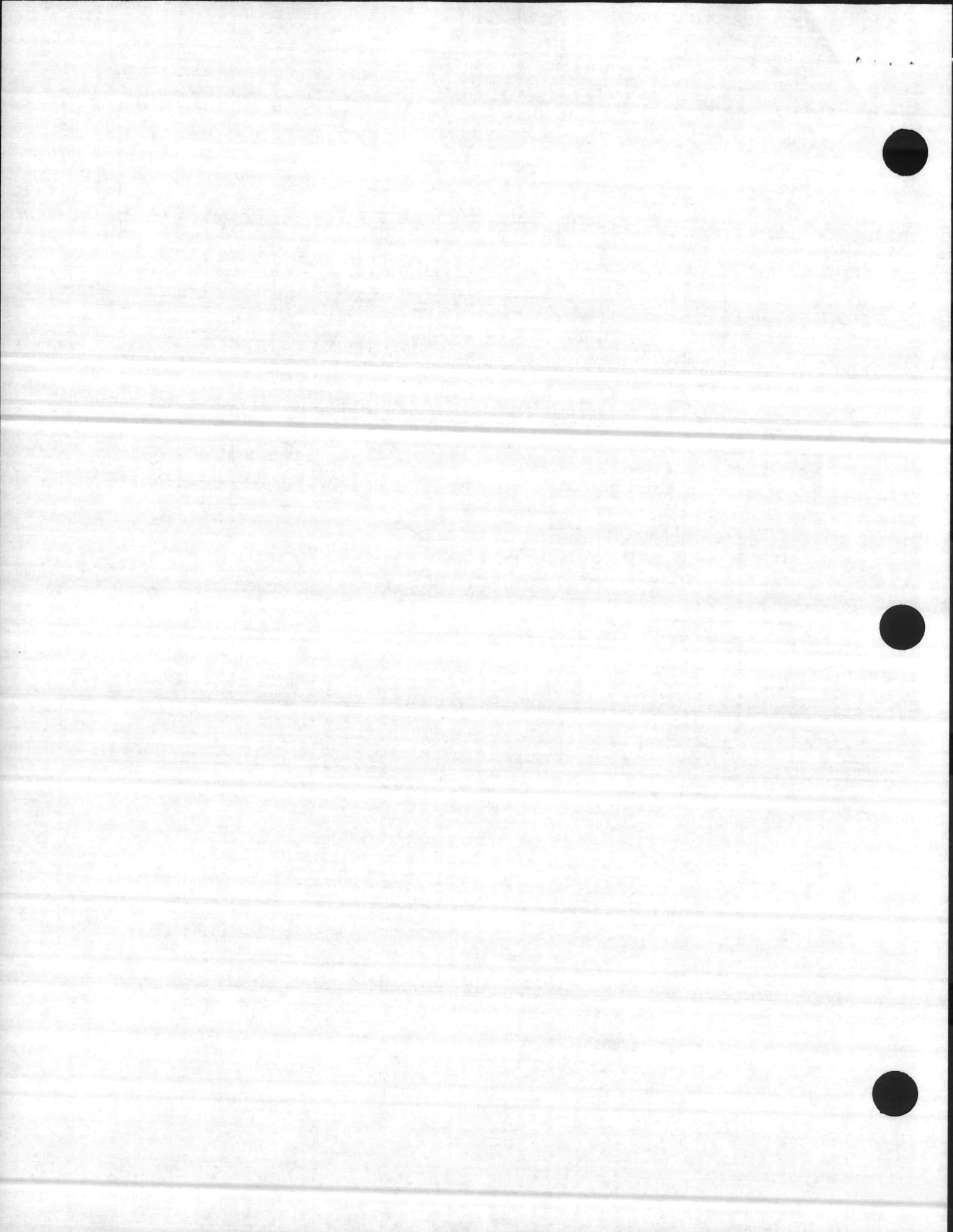
From Grid 79193468 to 81163468 to 81653371 to 79933253 to 78523350 to 79193468.

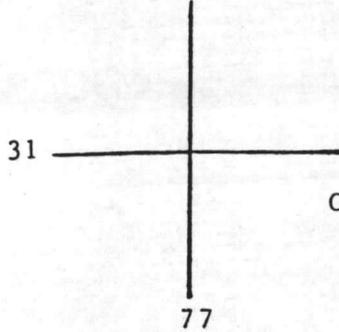
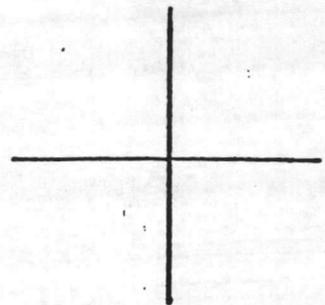
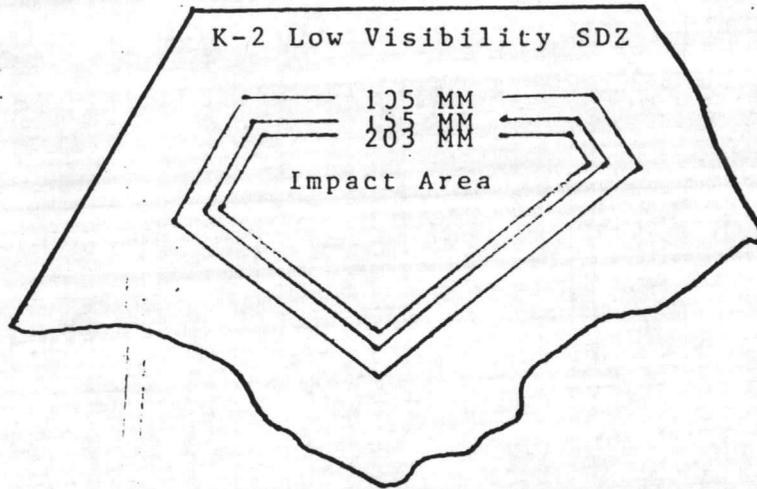
155mm, Impact Area

From Grid 79143476 to 81263478 to 81783379 to 79933253 to 78403356 to 79143476.

105mm Impact Area

From Grid 79073494 to 81353495 to 81913388 to 79933253 to 78303363 to 79073494.





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Surface Danger Zone/  
Impact Area

Grid Reference

(Low Visibility)  
K-2 SDZ

From Grid 78703552 to 81703552 to 82113490 then south and west along the New River shoreline to 77503341 to 78703552.

K-2 203mm Impact Area

From Grid 79193468 to 81223468 to 81363450 to 80003337 to 78903419 to 79193468.

155mm Impact Area

From Grid 79143476 to 81283478 to 81493448 to 80003326 to 78803416 to 79143476.

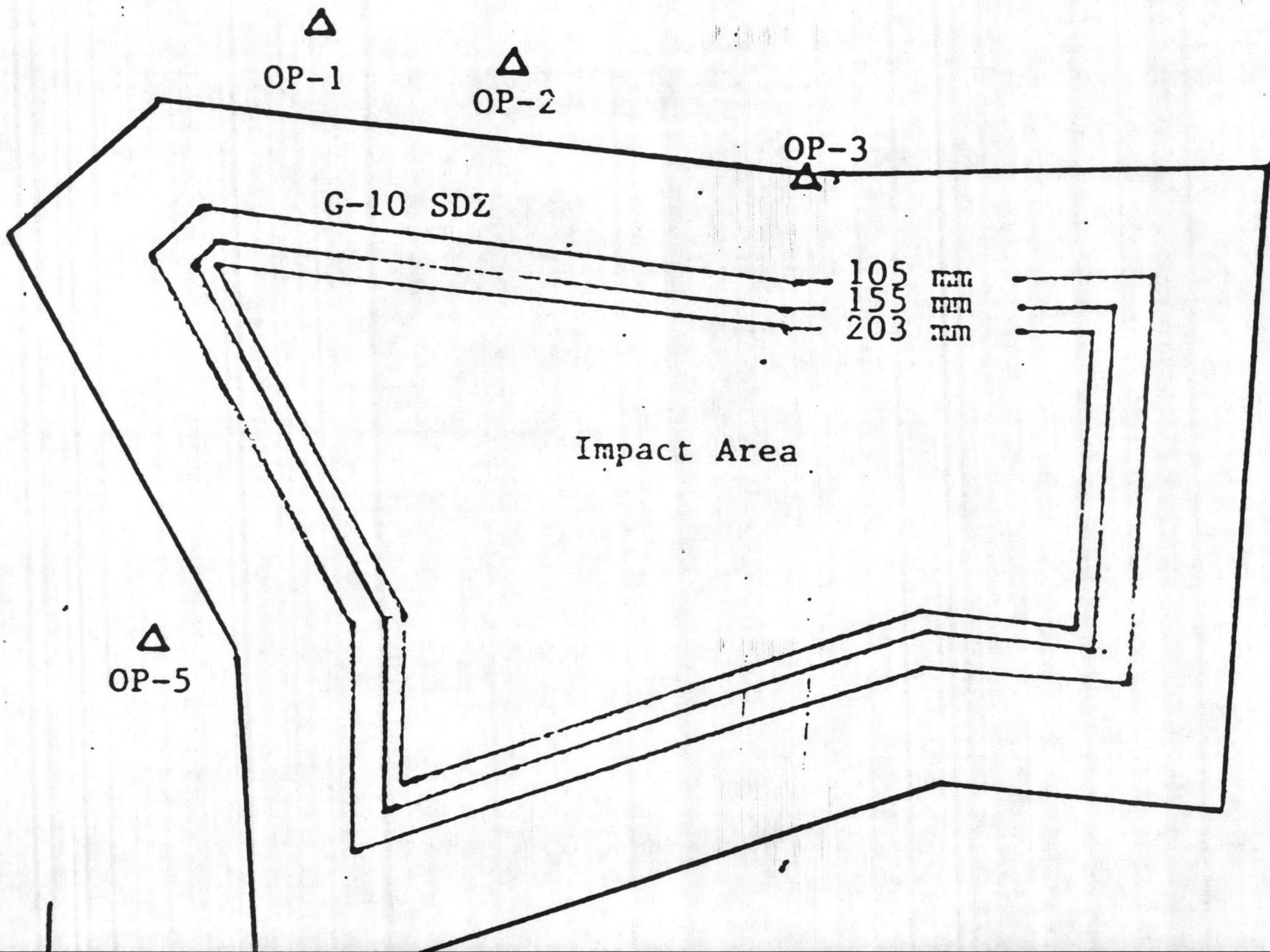
105mm Impact Area

From Grid 79073494 to 81383495 to 81703446 to 80003306 to 78583412 to 79073494.



21.7





△  
OP-1

△  
OP-2

OP-3  
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G-10 SDZ

105 mm  
155 mm  
203 mm

Impact Area

△  
OP-5

