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FM 6-40

DEPARTMENT OF THE ARMY FIELD MANUAL

FIELD ARTILLERY CANNON GUNNERY

This copy is a reprint which includes pages from Changes 1 and 2

HEADQUARTERS, DEPARTMENT OF THE ARMY

NOVEMBER 1960

Quadrant change card	Chart range 1,500 meters
Observer's site Correction (in meters)	Quadrant change (in mils)
1/2	0.3
1	0.7
2	1.4
3	2
4	3
5	3
6	4
7	5
8	5
9	6
10	7

Figure 112. Quadrant change card.

Section V. DESTRUCTION MISSIONS

454. General

a. A destruction mission is a mission to destroy a target by one or more direct hits. There are two primary considerations in the selection of the weapon-charge combination to be used. A large enough projectile to accomplish the mission should be selected, and the weapon charge combination should give the smallest PE_r possible. Most destruction missions should be fired by medium or heavy artillery; however, in some situations light artillery can be effective. The 8-inch howitzer is an excellent weapon for a destruction mission because of its small probable error and the effectiveness of its projectile.

b. A destruction mission is a precision mission. Because the destruction of the target is the objective, the observer, not the S3, will terminate the mission as soon as destruction has been accomplished.

455. FDC Procedure for Destruction Mission

a. The correct deflection for destruction missions is determined in the same manner as in a precision registration.

b. An adjusted quadrant elevation is determined after six positive FDC range sensing in fire for effect. The adjusted QE is computed to the 0.1 mil. Firing is continued, if necessary, with the adjusted QE (nearest 0.1 mil). After each succeeding group of six positive FDC range sensings, a new adjusted QE is computed. In computing the second adjusted QE, one-half of the computed elevation change is applied to the old adjusted quadrant elevation. In computing the third adjusted QE, one-third of the computed elevation change is applied. In computing the fourth and any succeeding adjusted QE's one-fourth of the computed elevation change is applied.

c. Since weapons used in destruction missions are selected for small PE_r, a large percentage of the time 4 PE_r will be less than 50 meters. When the trial range is announced by the HCO, the S3 should determine if 4 PE_r is less than 50 meters and if it is, he should establish a full fork bracket as outlined in paragraph 297.1.

Example: 155-mm How. Trial Rg 2010 meters.

F = 2

Note. S3 determines $PE_r = 8$. Therefore 4 PE_r = 32 which is less than 50. S3 used full fork method.