

OBSERVED FIRE REFERENCE CARD

GRID COORDINATE

- (1) "___DE___AF/FFE, k"
- (2) "GRID___, k"
- (3) (TGT DESC) "___IN EFFECT, k"

(DIR SENT AFTER M.T.O.)

GTA 7-1-32

JUNE 1987

I. GRID:

- A. DETERMINE A TWO CHARACTER, SIX DIGIT GRID FOR THE TARGET.
- B. DETERMINE A GRID DIRECTION TO THE TARGET AND SEND AFTER THE CALL FOR FIRE AND BEFORE ANY SUBSEQUENT CORRECTIONS.

POLAR PLOT

- (1) "___DE___AF/FFE, POLAR k"
- (2) "DIR___DIST___UP/DOWN___, k"
- (3) (TGT DESC) "___IN EFFECT, k"

II. POLAR:

- A. DETERMINE THE GRID DIRECTION TO THE TARGET.
- B. DETERMINE THE DISTANCE FROM THE OBSERVER TO THE TARGET.
- C. DETERMINE IF ANY SIGNIFICANT VERTICAL INTERVAL EXISTS.

SHIFT FROM A KNOWN POINT

- (1) "___DE___AF/FFE, "SHIFT (TGT#/REG PT#), k"
- (2) "DIR___, R/L___DD/DROP___UP/DOWN___, k"
- (3) (TGT DESC) "___IN EFFECT, k"

III. SHIFT:

- A. DETERMINE THE GRID DIRECTION TO THE TARGET.
- B. DETERMINE THE LATERAL SHIFT TO THE TARGET FROM THE KNOWN POINT.

$W = R \rho'$ (MIL RELATION FORMULA)

W = WIDTH OF LATERAL SHIFT (THE UNKNOWN)

R = DISTANCE TO THE KNOWN POINT DIVIDED BY 1000 AND ROUNDED TO ONE DECIMAL PLACE

ρ' = MEASURED ANGLE IN MILS FROM THE KNOWN POINT TO THE TARGET

- C. DETERMINE THE RANGE SHIFT FROM THE KNOWN POINT TO THE TARGET

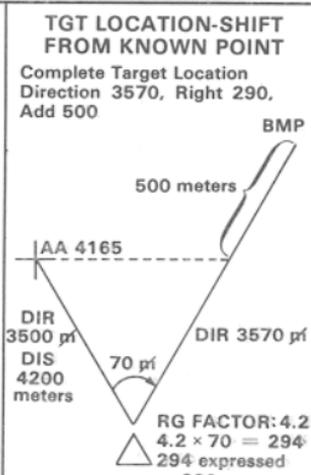
OBSERVED FIRE REFERENCE CARD

GPO: 1994 - 151-995

HEADQUARTERS, DEPARTMENT OF THE ARMY

FIST REPORT
 OBS I.D.
 DATE TIME GROUP
 LOCATION ALT °
 VISIBILITY
 ENEMY ACTIVITY
 FPF (GRIDS) °

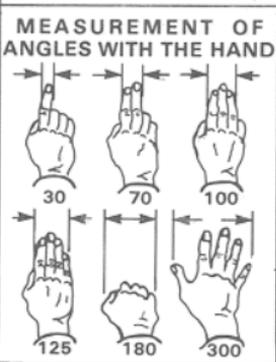
INTELLIGENCE SPOT REPORT IDENTIFICATION
 S SIZE
 A ACTIVITY
 L LOCATION °
 U UNIT °
 T TIME
 E EQUIPMENT
 ° ENCODE
 FLASH-TO-BANG TIME
 ELAPSED TIME BETWEEN
 IMPACT AND SOUND
 × 350 M (DISTANCE IN METERS)



OT FACTOR
 Distance to the target expressed in thousands
 Example: 1800 OT Factor 2
 2600 OT Factor 3
 800 OT Factor 0.8
 2500 OT Factor 2

ADJUSTMENT PROCEDURES
 Deviation Correction (L R from the round to the target)
 $W R \times pr$. R is the OT Factor, pr is mils from round to tgt
 Range Adjustment (Add Drop from the round to the target)
 Successive Bracket Technique
 400
 200
 100
 50

FIRE FOR EFFECT
 when you are within 50 meters



NAVAL GUNFIRE REQUEST DATA TRANSMITTED

SEGMENT

Firing Alert Spotter Identification
 Warning Order
 Target Number

break and read back

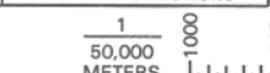
Target Location Grid, Polar, or Shift from a Known Point

break and read back

Attack Data Target Description
 Method of Engagement
 Method of Fire and Control

CAS REQUEST
 OBS I D
 WARNING ORDER (REQUEST CAS)
 TGT LOCATION (GRID COORDINATES)
 TGT DESC
 -FRIENDLY LOCATION
 -ADA THREAT
 RESULTS DESIRED
 DESIRED TIME ON TARGET (TOT)

ATTACK INFORMATION
 DIRECTION IP TO TGT (DEGREES)
 DISTANCE IP TO TGT (NAUT MILES)
 TYPE MARKING ROUND
 REIDENTIFY TGT (DESC)
 REIDENTIFY ADA
 THREAT/RESTRICTIONS



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