CHAPTER 6 – ARTILLERY FIRE SUPPORT

601. GENERAL

1. This chapter describes the method by which arms, other than artillery, call for artillery fire support. Throughout, the Artillery commander concerned is referred to as the ARTY OBSERVER and the crew/unit commander who calls for fire as the OBSERVER.

602. PRINCIPLES

1. If possible, the shoot is carried out by the ARTY OBSERVER with the supported arm OBSERVER providing all the information necessary to identify the target and to judge what firepower to employ. However, if the ARTY OBSERVER cannot identify the target, the OBSERVER adjusts fire using normal artillery techniques of adjustment and then turns responsibility for fire for effect over to the ARTY OBSERVER. If at any time the ARTY OBSERVER identifies the target, he should immediately assume control.

603. PROCEDURES

- 1. Two distinct sets of radiotelephone traffic occur. One set of transmissions is between the OBSERVER and the ARTY OBSERVER on the supported arm net; the other set of transmissions is between the ARTY OBSERVES and his guns on the artillery net.
- 2. Two situations as previously stated in art 602 may arise when a supported arm commander requests artillery support:
 - a. The ARTY OBSERVER can identify the target from the OBSERVER's description; and
 - b. The ARTY OBSERVER cannot identify the target from the OBSERVER's description.

3. If the supported arm OBSERVER adjusts the target, he will either send target grid corrections to the ARTY OBSERVER on the supported arm net, or he may be directed to change to the artillery net and send corrections direct to a designated fire unit. This procedure reduces the number of transmissions required and speeds response.

604. TRANSMISSION BETWEEN THE OBSERVER AND ARTY OBSERVER

- 1. A request for fire support from a supported arm OBSERVER to an ARTY OBSERVER will include the following elements:
- a. Warning order;
- b. Target location;
- c. Direction;
- d. Description of target; and
- e. Method of engagement.
- 2. The warning order between the OBSERVER and the ARTY OBSERVER will normally be "FIRE MISSION".
- 3. Target location between the OBSERVER and the ARTY OBSERVER will normally be given as a six-figure grid reference. However, if the OBSERVER cannot give a grid reference, the following alternative methods may be employed:
 - a. Reference Point. A reference point is used which either
 is obvious and clearly visible, or has been previously
 agreed upon, or is a previously engaged and recorded

target known to both parties. The target is indicated by a target grid correction from the reference point.

EXAMPLE:

- (1) **Reference Bridge:** Direction 1780, Right 200, Add 100; and
- (2) Reference Target ZT2486: Direction 0800, Left 200, dd100.
- b. **Reference Salvo.** In poorly mapped or featureless country, the ARTY OBSERVER may be asked to provide a reference point in the form of a converged group of rounds. He should be given a rough indication of where to place it, such as by reference to the axis of advance or a map square, e.g., "Mark Grid 4250". The OBSERVER then gives a target grid correction;
- c. **Tracer or Smoke.** The supported arm may fire tracer or smoke at the target;
- d. **Personal Contact.** The ARTY OBSERVER and the supported arm OBSERVER may liaise in person; and
- e. **Optical Instruments.** The supported arm OBSERVER may use optical instruments available to the ARTY OBSERVER to indicate the target.
- 4. Direction must always be ordered, and is normally the horizontal clockwise angle measured by the OBSERVER from Grid North, i.e., the grid bearing to the target, and is ordered to the nearest 10 mils. It is always given as a four-figure group, e.g., "Direction 0840" is given as

"Direction zero eight four zero" while "Direction 0800" is given as "Direction zero eight zero zero". Direction is always the bearing from the OBSERVER to the target.

- 5. Target description between the OBSERVER and the ARTY OBSERVER must include:
 - a. A tactical description of the target to permit the artillery to judge the weight of fire it merits, e.g., "Four MGs" or "Coy forming up for attack"; and
 - b. A physical description to help the ARTY OBSERVER identify the target, e.g., "Green bushes in brown field" or "Track junction".
- 6. The method of engagement indicates to the ARTY OBSERVER the type of support the OBSERVER requires. Elements which may be included are:
 - a. Type of engagement, e.g., neutralization, destruction, mark, adjusting target;
 - b. Ammunition by type or fuze, e.g., Smoke, Delay, Time, WP; and
 - c. Volume of fire, e.g., "Neutralize for five minutes".
- 7. An example of a complete target indication from a supported arm OBSERVER to an ARTY OBSERVER is as follows:

"Fire mission Grid 249523 Direction 0890 2 MGs in ditch at crossroads Neutralize for 3 minutes ASAP". The ARTY OBSERVER will read back this message and unless he identified the target Immediately, he will say "WAIT OUT". If he then succeeds in identifying the target, he will say "TARGET' IDENTIFIED" and carry out the shoot on the artillery net.

605. CORRECTION OF FIRE BY THE OBSERVER

- 1. If the ARTY OBSERVER does not identify the target he will say "TARGET NOT IDENTIFIED SEND CORRECTIONS".
- 2. From this point the procedure is the same whether this situation is as above or the OBSERVER originally asked for "MARK".
- 3. The ARTY Observer gives artillery fire orders to his guns to produce an initial round at the point indicated by the OBSERVER. Corrections by the OBSERVER are sent to the ARTY OBSERVER who edits them and transmits the corrections to the guns.
- 4. The following is an example of a shoot called for by an Armored Observer. This example shows the three cases of target identification from indication, a target identified after corrections by the OBSERVER and a target not identified at all by the ARTY OBSERVER.

Serial	Supported Arm Observer	ARTY OBSERVER	Remarks
1	Golf One Two — THIS IS — One Four Alfa — FIRE MISSION — OVER		Warning order.
2		— Golf One Two — FIRE MISSION — OUT	
3	— One Four Alfa — Reference Point — Red House — Direction — Zero five five zero — RIGHT two hundred — Infantry platoon in copse — Neutralize for four minutes now — OVER		
4		— Golf One Two — Reference Point — Red house — Direction Zero five five zero — RIGHT two hundred — Infantry platoon in copse — Neutralize for four minutes now — WAIT OUT	

If the ARTY OBSERVER identified the target in the fist instance, the next transmission is Serial 5A; if not, Serial 5B is sent.

Serial	Supported Arm Observer	ARTY OBSERVER	Remarks
5A		One four Alpha – THIS IS – Golf One Two – TARGET IDENTIFED - OVER	ARTY OBSERVER identifies target and brings down fire for effect.
6A	- One Four Alpha – TARGET IDENTIFIED - OUT		

If the ARTY Observer does not identify the target in the first Instance, Serial 5B follows Serial 4.

Serial	Supported Arm Observer	ARTY OBSERVER	Remarks
5B		One Four Alpha - THIS IS - Golf One Two- TARGET IDENTIFIED SEND CORRECTIONS - OVER	ARTY OBSERVER does not identify target and requires OBSERVER to send corrections.
6B	One Four Alpha – TARGET NOT IDENTIFIED SEND CORRECTIONS - OUT		
7		One Four Alpha – THIS IS – Golf One Two – SHOT - OVER	
8	- One Four Alpha – SHOT - OUT		
9	Golf One Two –THIS IS – One Four Alpha – RIGHT two hundred – ADD four hundred – OVER		
10		Golf One Two – RIGHT two hundred – ADD four hundred – OUT	

Serial	Supported Arm Observer	ARTY OBSERVER	Remarks
11		One Four Alpha – THIS IS – Golf One Two – SHOT – OVER	
12	One Four Alpha – SHOT – OUT		
13	Golf One Two – THIS IS – One Four Alpha – DROP two hundred – OVER		
14		Golf One Two DROP two hundred OUT	

If the ARTY OBSERVER at this stage identifies the target, the next transmission is Serial 15A; if not, Serial 15B is sent.

Serial	Supported Arm Observer	ARTY OBSERVER	Remarks
15A		One Four Alfa – THIS IS – Golf One Two – TARGET IDENTIFIED – OVER	Target is Identified by ARTY OBSERVER.
16A	One Four Alfa – TARGET IDENTIFIED - OUT		ARTY OBDERVER continues adjusting and brings down fire for effect.

If the ARTY OBSERVER does not identify the target at all, Serial 15B follows Serial 14.

Serial	Supported Arm Observer	ARTY OBSERVER	Remarks
15B		One Four Alfa — THIS IS — Golf	
		One Two — SHOT — OVER	
16B	One Four Alfa — SHOT — OUT		
17	Golf One Two — THIS IS — One Four Alfa — ADD one hundred — OVER		
18		— Golf One Two ADD one hundred — OUT	
19		One Four Alfa — THIS IS — Golf One Two - SHOT — OVER	
20	- One Four Alpha - SHOT - OUT		
21	Golf One Two – THIS IS – One Four Alpha – ON TARGET - OVER		
22		Golf One Two – ON TARGET – OUT	ARTY OBSERVER now brings down fire for effect.

Serial 23 follows Serial 6A, 16A, or 22 as the case may be.

Serial	Supported Arm Observer	ARTY OBSERVER	Remarks
23		One Four Alpha – THIS IS – Golf One Two – SHOT – OVER	
24	- One Four Alfa – SHOT – OVER		
25	Golf One Two – THIS IS – One Four Alpha – Fire Effective – Record as Target - OVER		
26		Golf One Two – Fire effective – Record as Target – OUT	Target is recorded for future reference.
27		One Four Alfa – THIS IS – Golf One Two – Target recorded as Papa One Eight Six Four - OVER	
28	One Four Alfa – Target recorded as Papa One Eight Six Four - OUT		

(606 to 699 not allocated)