

NAVAL SURFACE FIRE SUPPORT COMMUNICATIONS

Agency:	Observer to ship
Nomenclature:	Naval surface fire ground spot net, HF Air spot net, UHF
Frequency:	2 to 30 Mhz, HF
Compatible Equipment:	USA - GRC-106, GRC-193 USMC - PRC-104, GRC-193, MRC-138, PRC-77, PRC-75, PRC-41 USAF - PRC-104, MRC-107/108/144, GRC-206

PLANNING

Supporting ship: _____
(include gun type and number of guns)

If this unit is unavailable or direct communications are unavailable,
indicate the unit through which support will be requested: _____

Call sign: _____

Frequency: _____

Ship: _____

Gun type : _____

Number of guns : _____

Period effective from : _____ to _____

CALL-FOR-FIRE

(Give in three separate transmissions)

Observer transmits to ship.

- 1.¹⁶ " _____ *this is* _____ "
(ship ID) (observer ID)
- 2.¹⁶ "*Fire mission*" and, if known, "*target number* _____ "
(provided by field artillery FSO, USMC FSCC, or USN SACC)

NOTE: Wait for read-back.

- 3.¹⁶ Location of target. Select the appropriate method.

☐ **Grid coordinates:**

"*Grid* _____"

"*Altitude* _____" in meters

"*Direction* _____" in mils/grid

(Mils are in relation to grid north. Any other combination may be used but must be specified; for example, "*Direction 180 degrees magnetic.*" [See note on page 24.]

¹⁶ Required only for air spotters.

☐ Polar plot:

"Direction _____" in mils/degrees

"Distance _____" in meters

"Up/down _____" in meters
(vertical shift)

☐ Shift from known point:

"From _____"
(target number/reference point)

"Direction _____" in mils/degrees
(from observer to target)

"Spotter-TGT Line _____" in mils/degrees

"Left/right _____" in meters
(lateral shift)

"Add/drop _____" in meters
(range shift)

"Up/down _____" in meters
(vertical shift)

4. Target description: ¹⁷ " _____"
(type, size, cover)

¹⁷ Mandatory elements.

5. Method of engagement: " _____ "

danger close

fuse

number of salvos

armament

reduced charge (ammunition)

number of guns

special instructions such as—

continuous/coordinated illuminator

internal, sustained fire

time on target

6. Method of control:¹⁷ " _____ "

fire for effect

ship adjust

spotter adjust (specific adjustment)¹⁸

cannot observe

at command (can apply to each of the four methods above)

¹⁷ Mandatory elements.

¹⁸ Spotter adjust is standard information and does not need to be included for brevity. However, if the observer desires something other than this standard spotter adjustment, he must be specific in the correction.

MESSAGE TO OBSERVER

"Gun target line _____"
(direction from gun to target)

"Ready _____" in seconds
(time of flight)

"First salvo at _____"
(danger-close missions only)

"Summit"¹⁹ _____" in feet or meters
(in feet, if air spotter; in meters, if ground spotter)

Table 8. Naval Surface Fire Support Capabilities

Weapon	Full Charge Max Range (m)	Reduced Charge Max Range (m)	Fire Rate /Tube (max/sust)	Ammo	Fuzes
5"/54 MK 45	23,100	12,200	20/20	HE, ILLUM, WP	Q, MT, CVT, VT, DEL
76-MM ²⁰	12,700	NA	80/NA	WP	PD

¹⁹ Required only for air spotters.

²⁰ Units equipped with 76-mm weapons are not normally assigned naval surface fire support missions except in extraordinary circumstances.

Table 9. Naval Surface Fire Support Illumination Factors

Weapon	Shell Type	HOB (m)	Burn Time (sec)	Rate of Fall (m/sec)
5"/54	MK 88/91	500	45/72	10/2

Table 10. Naval Surface Fire Support Danger-Close Distances

Weapon	Distance (m)
5"/54	750