

Lesson 12

FLARE INCIDENTS

Overview

Introduction

Due to the lack of information and numerous unknowns, flare cases are some of the most common and frustrating cases you will deal with. A legitimate flare is an international distress signal and must be treated like any other distress case. The false alarm rate of flare sightings is about 98%...this however, must not preclude you from taking every case seriously. The reading assignment should give you a thorough understanding of flare incidents and how to take a flare report.

The Auxiliarist who completes this course should incorporate the knowledge gained in this lesson into their Public Education courses. Recreational boaters ought to be made aware of how to properly report flare sightings to the Coast Guard.

To complete this lab you will need the following Nautical Chart 13218

Objectives

After completing this lesson, you should be able to:

- **OBTAIN** sighting data needed to complete a flare check sheet.
 - **STATE** the response policy for initial flare sightings.
 - **STATE** the response policy for unresolved night searches.
 - **IDENTIFY** the type and color of flares recognized as marine and aviation emergency signals.
 - **DEMONSTRATE** the clock method for determining the direction of a flare.
 - **DEMONSTRATE** the application of the fist method in determining range of a flare.
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References

The information in this lesson can be found in the following references:

1. Coast Guard Addendum, Section: 3.4.3 – 3.4.4 & Appendix I.1.1, I.1.4 & I.3 (all), and the Flare Sighting Check sheet.
-

Report taken by: _____ Date: _____

FLARE SIGHTING CHECKSHEET

OBTAIN INFORMATION ABOUT THE REPORTING SOURCE	
<i>Name</i>	First: _____ Last: _____
<i>Position</i>	Latitude: _____ Longitude: _____
	Bearing and range from prominent landmark: _____ Deg & dist _____
	Street _____
	address: _____
	Position uncertainty: +/- _____ nm
<i>Height of eye</i>	Height of reporting source, from sea level: _____ ft
	If the reporting source is in a building, floor number: _____
<i>Phone number</i>	Current location: _____
	Home or work: _____
OBTAIN INFORMATION ABOUT THE FLARE CHARACTERISTICS	
<i>Color</i>	(Circle any that apply) RED AMBER WHITE GREEN OTHER: _____
<i>Number of Flares</i>	Number observed: _____ Time of sighting: _____
<i>Time and Duration</i>	Interval between flares: _____ Duration of burn: _____
<i>Trajectory</i>	____ Rise only ____ Fall only ____ Steady (no rise or fall)
	____ Rapid rise and fall ____ Rapid rise and slow descent
<i>Origin</i>	Observed: yes / no ____ Near horizon ____ Between source and horizon
	Flare origin: ____ Surface ____ Air ____ Other: _____
<i>Type</i>	(Based on above information) PARACHUTE METEOR HANDHELD OTHER:

DETERMINE ANGLE OF OBSERVATION AND POSITION

Angle of Observation

How determined: _____

If determined by Fist Method: Fractions of a fist(s): _____

- Check one:
- Angle below the horizon
 - Angle above horizon
 - Angle measured from flare origin to apex
 - Steady, no angle of elevation observed

Degrees: _____ Not more than: _____ deg Not less than: _____ deg

Bearing from

How determined: _____

Observer

If determined by clock method: Bearing at _____ o'clock

Is the reporting source (or building that the reporting source is located in) perpendicular to the shoreline? yes / no

If no, what is the orientation of the location to the shore line? _____ deg.

Direction by: prominent landmark, street direction, moon, other

Degrees: _____ Uncertainty: +/- _____ degrees

Obstruction

List any obstructions in the line of sight of the reporting source.

Obstruction ___ in front of ___ behind flare ? Obstruction height: _____ ft

On-Scene weather

Wind: _____ / _____ Seas: _____ / _____ Visibility: _____ / _____

Vessels/ Aircraft

Were any vessels or aircraft observed in the area? yes / no

If yes, description:

OBTAIN CLEAR MENTAL PICTURE OF WHAT THE REPORTING SOURCE OBSERVED

Draw sketch here.

	1 fist	-----
	¾	-----
Angle above Horizon	½	-----
	¼	-----
HORIZON		-----
	¼	-----
Angle below Horizon	½	-----
	¾	-----
	1 fist	-----

AMPLIFYING INFORMATION

Reporting Source on a Vessel	Will the reporting source respond to the sighting? yes / no
	If yes, expected time of arrival on scene: _____
	Intended action by the reporting source: _____
Reporting Source on Land	Will the reporting source remain on scene or on the phone? yes / no
	If no, how can the reporting source be re-contacted? _____
	Intended action by the reporting source: _____
Additional information	_____

OBTAIN INFORMATION FROM MILITARY AND CIVILIAN AUTHORITIES

Determine if the flare sighting corresponds to any of the following:

Other flare sightings:	yes / no	Known SAR cases:	yes / no
Known Exercises in progress:	yes / no	Known Overdues:	yes / no
Known fireworks display:	yes / no		

ACTION TAKEN BY COAST GUARD

Distance Distance from reporting source determined to be:
 Minimum: _____ nm Maximum: _____ nm Uncertainty: +/- _____ nm
 Bearing: _____ Uncertainty: +/- _____ deg

SAR Phase Evaluate emergency SAR phase: DISTRESS ALERT UNCERTAINTY

UMIB Issue UMIB: yes / no Time issued: _____ Time cancelled _____

Launch Sorties

UNIT	STATION	ETA	ACTION

Other Assistance

Intentions

First Light Search

First light search planned: yes / no (Required for RED/ORANGE flares if there is insufficient information to either close or suspend).

Additional information: _____

ACTSUS

ACTSUS approved: yes / no

Report taken by: _____ Date: _____

FLARE SIGHTING CHECKSHEET

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Direction by: prominent landmark, street direction, moon, other

_____ Degrees: _____ Uncertainty: + / - _____ degrees

Obstruction

List any obstructions in the line of sight of the reporting source.

Obstruction ___ in front of ___ behind flare ? Obstruction height: ___ ft

On-Scene weather

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ACTSUS

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