

Marine Board of Investigation: SCANDIES ROSE

Introduction

Captain Clint Schlegel

USCG Director of Search and Rescue Policy

- 13 years search and rescue experience
- 4 operational assignments
- Held operational authorities as SAR mission coordinator (SMC) and Active Search Suspension (ACTSUS)

Marine Board of Investigation: SCANDIES ROSE

Federal SAR Response Standards

14 U.S.C. § 521 is authorizing statute for the USCG to render aid to distressed persons on the high seas and waters within U.S. jurisdiction.

“Coast Guard may: (1) perform any and all acts necessary to rescue and aid persons and protect and save property. . . .”

Coast Guard performance of this mission is permissive in nature and Congress did not establish any mandatory duty on part of the USCG to undertake any SAR efforts or to respond in a particular manner.

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USCG internal SAR Response Standards

Internal USCG policy for a resource-planning standard includes a two hour total response time for any one rescue asset to arrive within their area of responsibility upon a distress notification.

- **Policy recognizes this does not create a requirement for assets to arrive within this time frame as each case is unique.**
- **Not all areas of responsibility can achieve this planning standard due to vast areas of open ocean and/or remote areas with little or no search and rescue demand.**
- **USCG policy permits wide breadth of response options to be tailored to each individual case**

Marine Board of Investigation: SCANDIES ROSE

USCG SAR Response Standards

USCG SAR Addendum:

“This document creates no duties, standard of care, or obligations to the public and should not be relied upon as a representation by the Coast Guard as to the manner of proper performance in any particular case.”

(SAR Addendum, COMDTINST M16130.2F, Preface & Program Overview, p. PPO-10, Sec 10).

International COSPAS/SARSAT Programme Overview

(COSPAS – Russian translation: “space system for the search of vessels in distress” // SARSAT – “search and rescue satellite-aided tracking”)

Global satellite coverage to receive & distribute 406 MHz distress alerts (ELT, EPIRB, PLB, SSAS)

International COSPAS/SARSAT

Parties: United States, Russian Federation, Canada, France
Participants: 39 Countries & 5 organizations
Dates: 1979 – MOU signed
1988 – International Cospas-Sarsat Programme Agreement (ICSPA). Signed by the 4 Parties, to provide Programme free of charge on a non-discriminatory basis.

Headquarters: Montreal, Canada (*Secretariat, staff of 11*)

Programme costs: Each party bears their own system costs.
Secretariat funded through annual dues.



International System Components

Satellites with SAR antenna (6 countries):

Geo-stationary (GEO) - 8
Low Earth Orbit (LEO) - 6
Mid Earth Orbit (MEO) - 49

Local User Terminals (LUTs; track, collect & process satellite comms):

GEO – 25; LEO – 60; MEO – 32

Mission Control Centers (MCCs; process distress alert data):

MCC – 32

Distress Alert Beacons: 2.5 million
Lives Saved 2019: 2,774

U.S. SARSAT

Parties: NOAA, USCG, USAF, NASA
Lead Agency: NOAA
Dates: 1984 – original MOU signed (renewed every 5 years)
Headquarters: Suitland, MD (*NOAA facility, staff of 6 with support from other NOAA divisions*)



U.S. System Components

Satellites with SAR antenna:

Geo-stationary (GEO) - 3 (*NOAA owned*)
Low Earth Orbit (LEO) - 5 (*NOAA owned – past service life*)
Mid Earth Orbit (MEO) - 21 (*USAF owned w/ nonstandard payload*)
Mid Earth Orbit (MEO) - 14 (*USAF owned – launch in 2025*)

Local User Terminals (LUTs; track, collect & process satellite comms):

GEO – 2; LEO/MEO – 9

Mission Control Centers (MCCs; process distress alert data):

U.S. MCC – 1 (Suitland, MD NOAA facility)
Distributes alerts to 31 different countries

Registered Beacons: 677,000 (additional 110,000 in DoD)
Lives Saved 2019: 421 (306 in maritime environment)

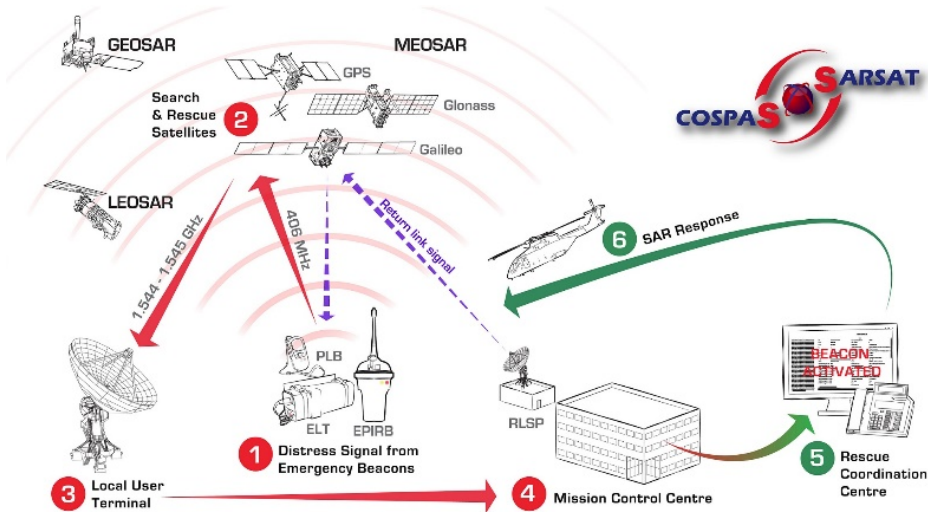
No part of a report of a marine casualty investigation shall be admissible as evidence in any civil or administrative proceeding, other than an administrative proceeding initiated by the United States. 46 U.S.C. §6308.



SARSAT



SARSAT system diagram



U.S. SARSAT = red steps 1-4

USCG SAR system = green steps 5-6

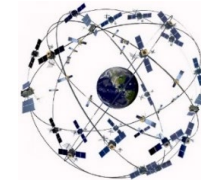
COSPAS-SARSAT Participants



1982-2019: 51,000 lives saved worldwide

2016-2020: 40% increase in U.S. beacon registrations (~50K/year)

2019: In U.S., 73% of SARSAT lives saved were in the maritime domain.



Marine Board of Investigation: SCANDIES ROSE

Overview of the U.S. SAR system

Layers of policy and operational oversight from broad to local:

Policy documents:

International

- 1944 Convention on International Civil Aviation (Chicago Convention)
- 1979 International Convention on Maritime SAR (SAR Convention)
- 1999 International Aeronautical and Maritime Search and Rescue (IAMSAR) Manual

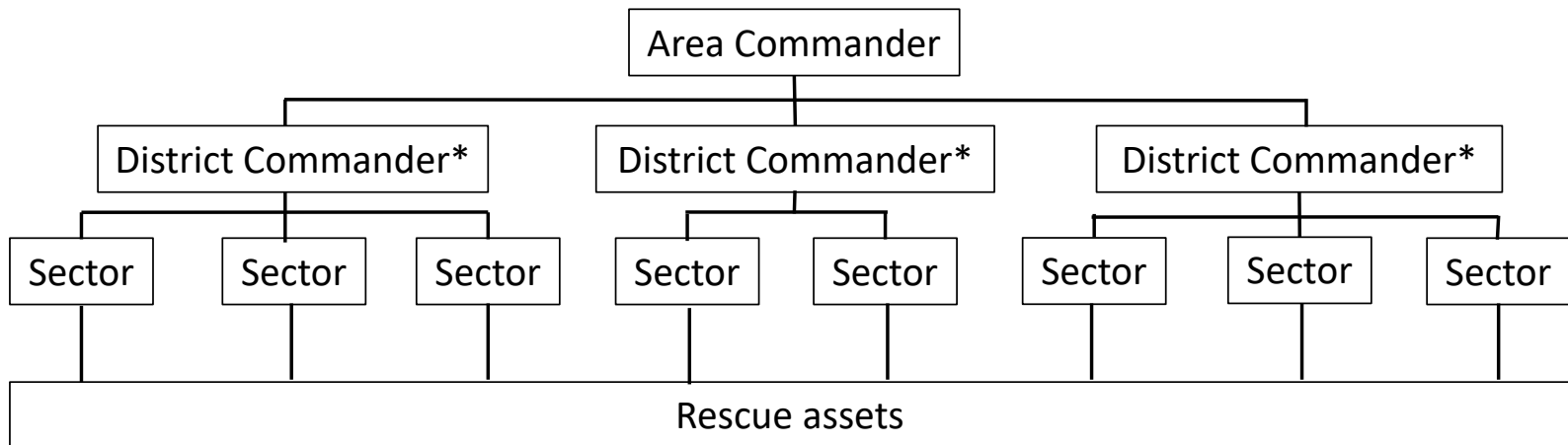
Domestic

- U.S. National Search and Rescue Plan (DHS, DOC, DOD, DOI, DOT, FCC)
- U.S. National Search and Rescue Supplement (NSS) to the IAMSAR Manual
- U.S. Coast Guard Addendum to the NSS
- USCG Atlantic and Pacific Area SAR Plans
- USCG District SAR Plans

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Overview of the U.S. SAR system

Layers of policy and operational oversight from broad to local:



- Denotes internationally recognized Rescue Coordination Center (RCC)

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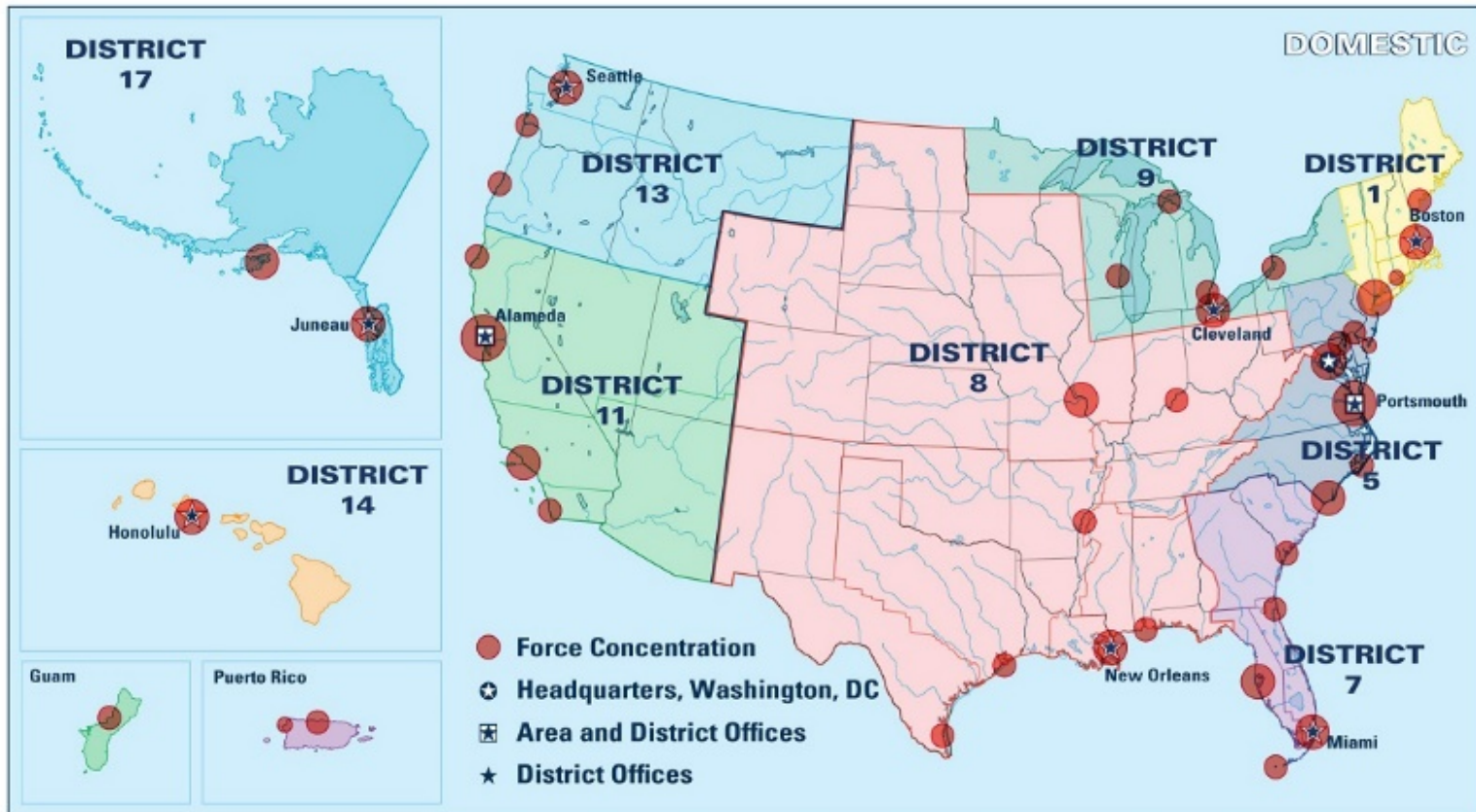
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International SAR convention definitions:

Rescue Coordination Center: A unit responsible for promoting efficient organization of search and rescue services and for coordinating the conduct of search and rescue operations within a search and rescue region;

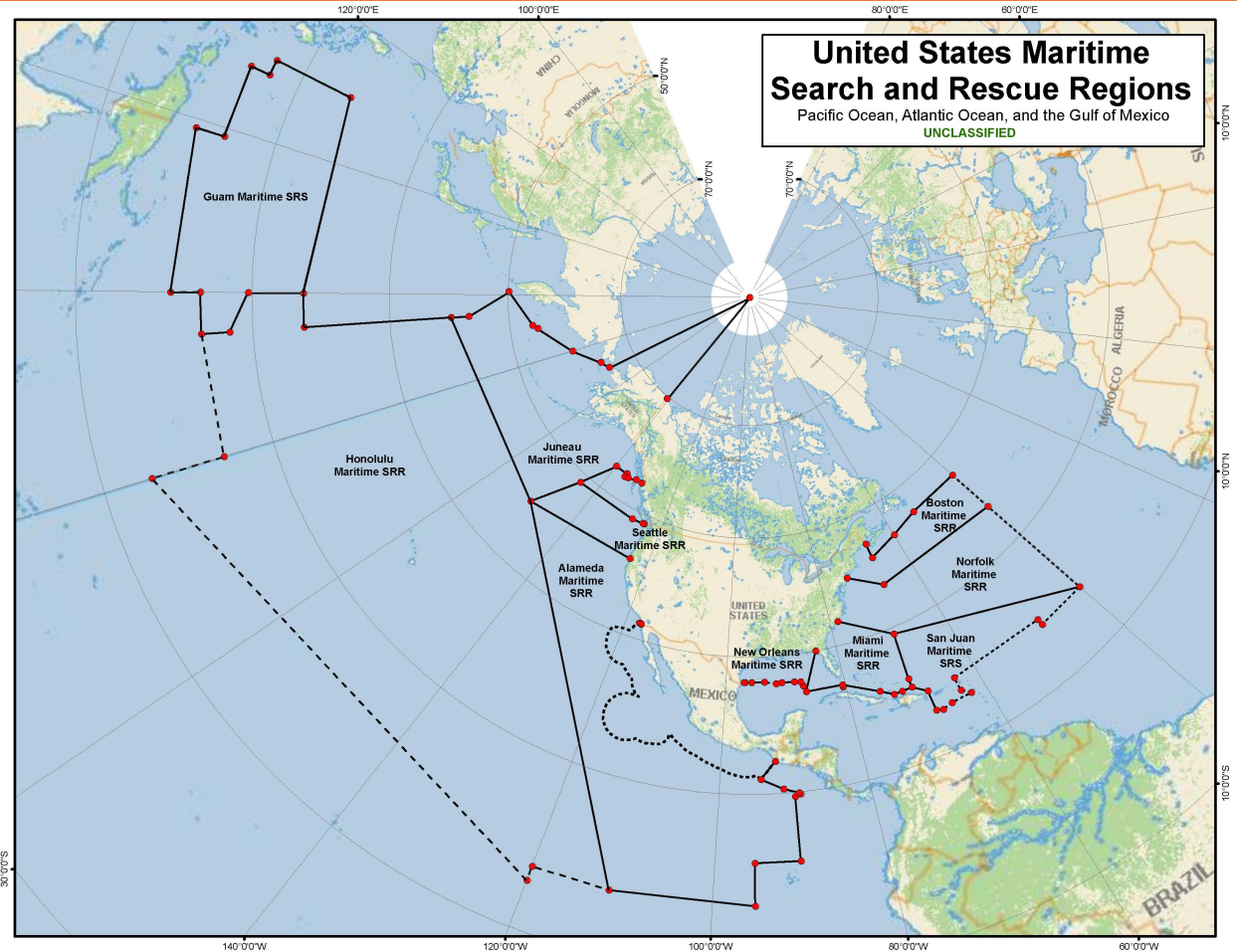
Each Rescue Coordination Center and rescue sub-center, shall arrange for the receipt of distress alerts originating from within its search and rescue region. Every such center shall also arrange for communications with persons in distress, with search and rescue facilities, and with other rescue co-ordination centers or rescue sub-centers.

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U.S. Maritime Search and Rescue Regions



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Juneau Aeronautical and Maritime Search and Rescue Region

