



Overview of Search and Rescue Considerations in the U.S. Coast Guard

➤ **SAR Program Objectives**

- Save - 84% of people at risk for death on the water
- Prevent the loss of at least 80% of property
- Effectiveness and Efficiency

➤ **Response Standards**

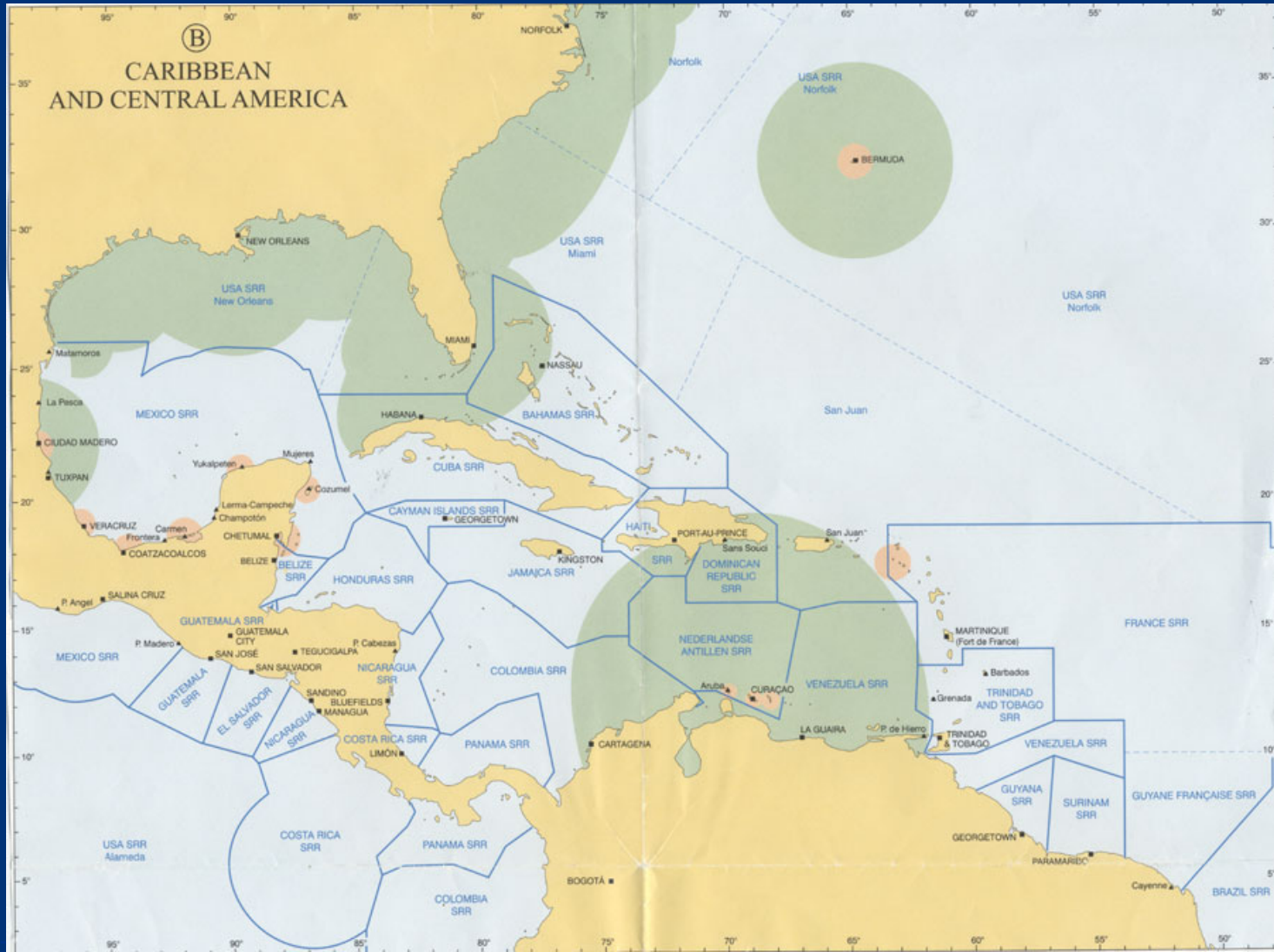
- Initiate action within 5 min of distress notification
- Launch within 30 min of distress notification
- On scene within 90 min of launch

➤ **Other Standards**

- 100% VHF-FM coverage out to **20 NM** from shore
- Maximum use of 406 MHz EPIRB offshore
- Use of SAROPS and AMVER (on high seas)
- 100% attendance and completion of SAR planner training

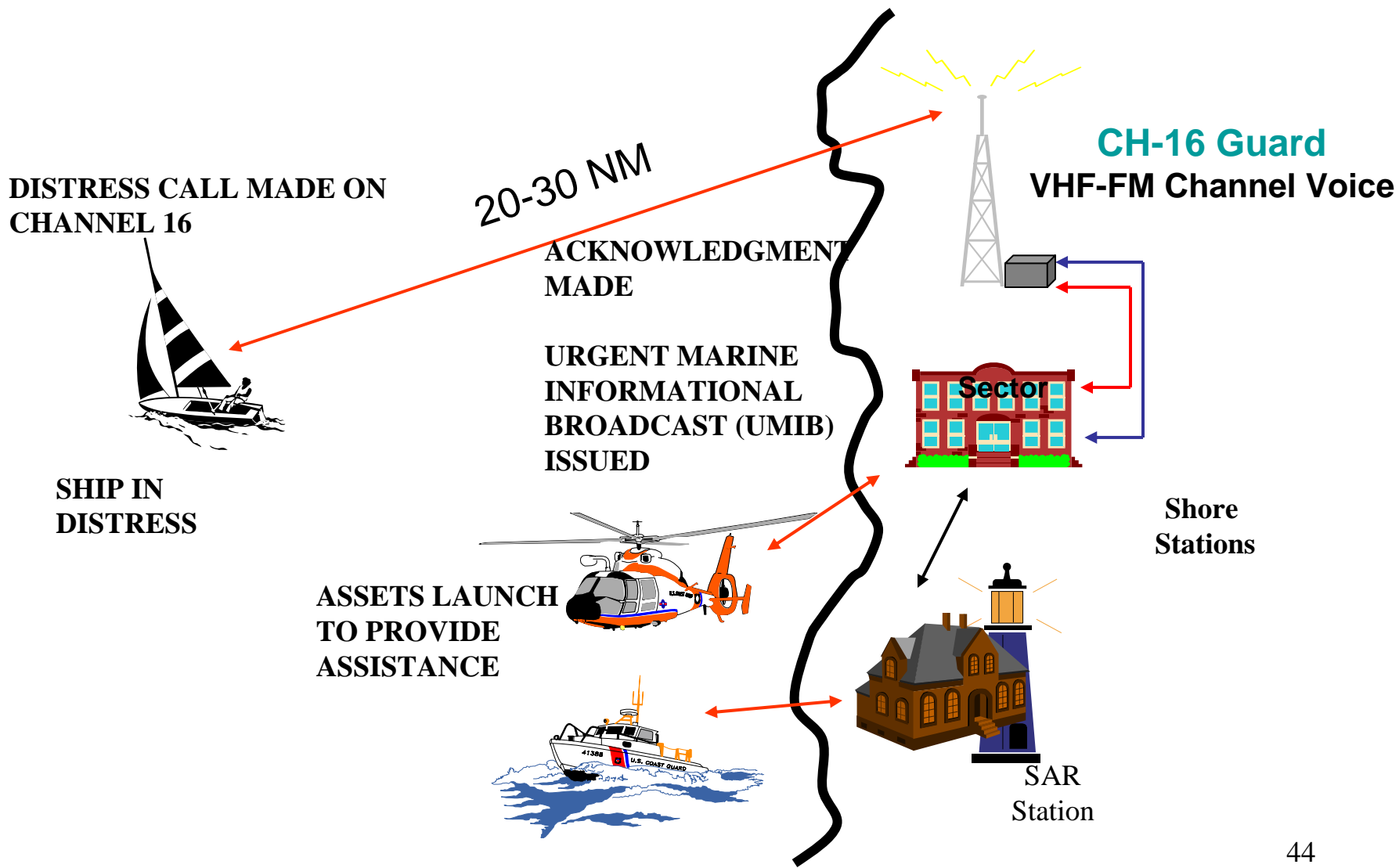


Maritime SAR Region (SRR)





Typical SAR Scenario





Aeronautical Distress Incident Over Water

- Key concerns include:
 - **SAR over land is different from SAR over water - search objects drift**
 - **Communications frequencies are different for different transportation modes (land, maritime and aeronautical)**
- Aircraft and Merchant Ships are required to carry certain “safety pubs”
 - **AIP, IAMSAR Manual Volume III, ...**



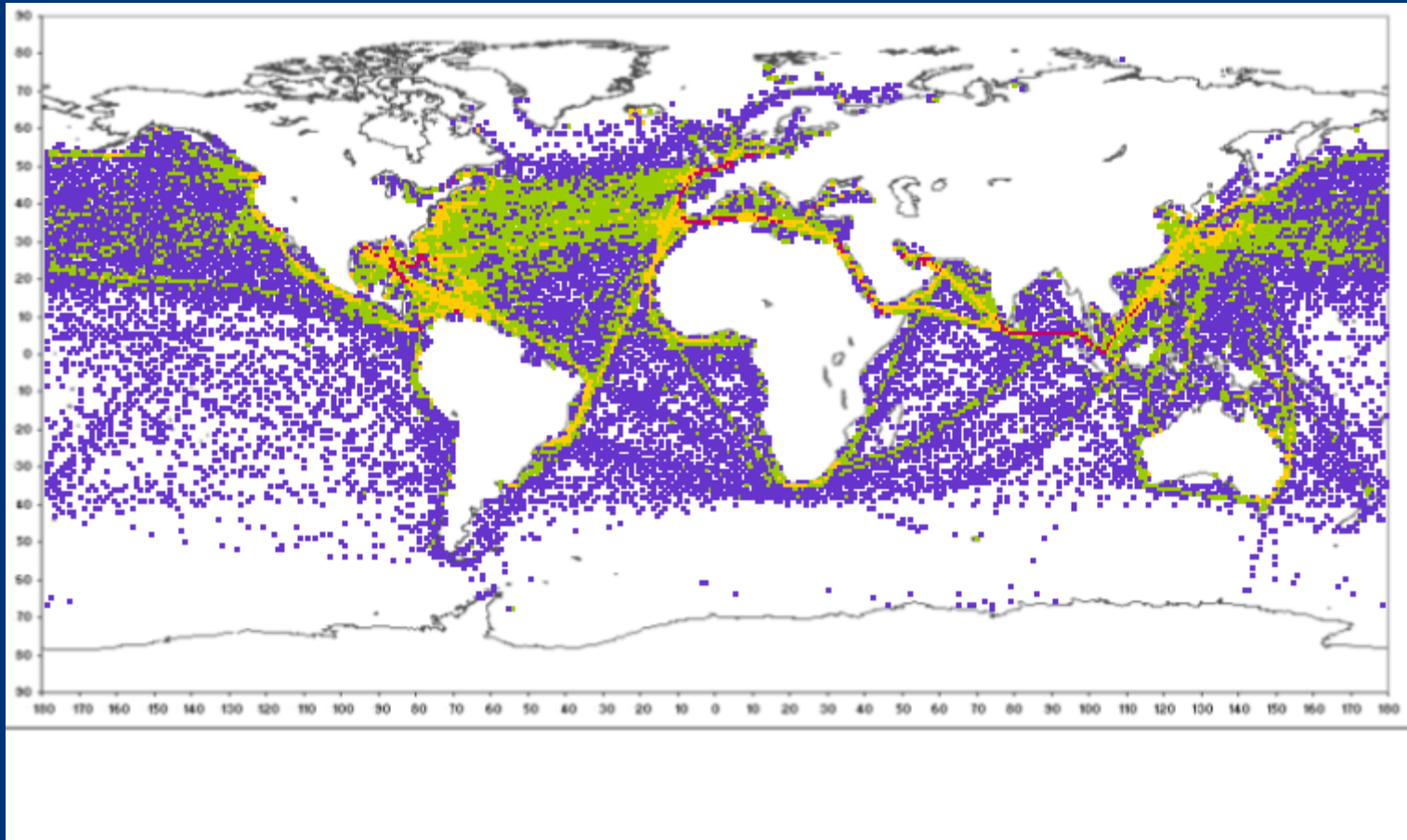
SAR Units (designated Ships, Aircraft and Boats)

Augmented by:

- Other Government Agencies
- Military (“Not-to-Interfere” Basis)
- Local Government facilities
- Volunteers (boats and planes)
- Private Companies
- Neighboring States
- Ships at Sea



Merchant Shipping Patterns





Ship Reporting Systems

- Somewhat similar to air traffic control
- Ships provide a position report to a designated point and in a specified format
- Amver is an example of a Ship Reporting System
 - **Global ship reporting system for SAR endorsed by IMO**
 - **Amver data available to any SAR authority**
- Your China Ship Reporting System
- Long-range Identification and Tracking (LRIT) System in 2009