

NOTE: The following guidance has been developed by the International Maritime Organization (IMO) and the International Civil Aviation Organization (ICAO), is applicable worldwide for maritime and aeronautical mass rescue operations. This guidance should be considered by search and rescue (SAR) authorities (particularly rescue coordination centers), emergency and disaster response authorities, ship and aircraft owners and operators, and other government and industry persons responsible for planning for mass rescue operations.

Guidance for Mass Rescue Operations

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Introduction

1. A mass rescue operation (MRO) is one that involves the need for immediate assistance to large numbers of persons in distress such that capabilities normally available to search and rescue (SAR) authorities are inadequate.
2. Fortunately, MROs are relatively rare compared to normal SAR operations, but major incidents leading to the need for MROs have not been infrequent on a worldwide basis, and can occur anywhere at any time. Since the nature of such operations may be poorly understood due to limited chances to gain experience with major incidents involving MROs, this Guidance begins with a general discussion of MROs and related matters.
3. Flooding, earthquakes, terrorism, casualties in the offshore oil industry, accidents involving releases of hazardous materials, and major aircraft or ship incidents are examples which, because of their magnitude, may need to use the same resources as would be needed to carry out mass maritime or aeronautical rescue operations.
4. The sequence of priority in major multi-mission incidents must be lifesaving first, generally followed by environmental protection, and then protection of property.
5. Moral and legal obligations, as well as public and political expectations, drive the need to be prepared to carry out MROs safely and effectively should they become necessary. Since the need for MROs is relatively rare, it is difficult to gain practical experience to help deal with them. While the types of potential MRO scenarios, as well as the organizations, emergency response structures and circumstances vary from place to place, there are certain general principles, common actions, and examples that can be followed based on lessons of history, which this Guidance is intended to convey.
6. MROs are relatively low-probability high-consequence events. Effective response to such major incidents typically require immediate, well-planned and closely coordinated large-scale actions and use of resources from multiple organizations. Intense and sustained high priority lifesaving efforts may need to be carried out at the same time and place as major efforts to save the environment and property. Huge amounts of selected information will need to be readily available at the right times and the right places not only to support the response efforts, but to meet the needs of the media, public and families of the persons in distress, which may number in the hundreds or thousands. Many means of communications will need to be available and interlinked amongst organizations at various

levels to handle huge amounts of information reliably for the duration of the response. A surge in the numbers of competent staffing in all key organizations must be available immediately and be sustainable for up to weeks at a time. Equipment and logistics demands will jump to unprecedented levels. Successful MROs depend on the advance provision of flexible and all-level contingency plans. Intense integrated planning and operational efforts must also be carried out in real time throughout actual rescue efforts.

7. All who will be involved in the overall multi-agency, multi-jurisdiction, multi-mission, and possibly international response to a major incidents will need clearly understand who in charge, how to work with who is in charge, the respective roles of all involved, and how to interact with each other. SAR authorities may be responsible for all, or part, of the MRO responsibilities of the major incident response, and will be able to coordinate their efforts seamlessly with other incident responders under overall direction of another authority within or outside their agency. The broader response environment may involve hazards mitigation, damage control and salvage operations, pollution control, complex traffic management, large-scale logistics efforts, medical and coroner functions, accident-incident investigation, intense public and political attention, etc. MRO plans need to be part of and compatible with overall response plans for major incidents. Plans must typically allow for command, control and communications structures that can accommodate simultaneous air, sea and land operations.
8. Potential disastrous consequences of poor preparations for MROs in terms of loss of life and other adverse results are enormous. Major incidents may involve hundreds or thousands of persons in distress in remote and hostile environments. A large passenger ship collision, a downed aircraft, or a terrorist incident could, for example, call for the immediate rescue of large numbers of passengers and crew in poor environmental conditions, with many of the survivors having little ability to help themselves, and the dire results of failure are evident.
9. Preparedness to mount an extraordinarily large and rapid response is critical to preventing large-scale loss of lives. Such preparedness often depends on strong and visionary leadership and unusual levels of cooperation to achieve. There will often be strong resistance to paying the inherently high price in terms of time, effort and funding that preparedness for major incidents entails, particularly as they are rare events. The required levels of cooperation, coordination, planning, resources and exercises, required for preparedness are challenging and do not happen without the requisite commitment of SAR authorities, regulatory authorities, transportation companies, sources of military and commercial assistance and others.
10. SAR authorities should coordinate MRO plans with companies that operate ships and aircraft designed to carry large numbers of persons. Such companies should share in preparations to minimize the chances that MROs will be needed, and to ensure success if they are.
11. MRO planning, preparations and exercises are essential since opportunities to handle actual incidents involving mass rescues are rare. Therefore the exercising of MRO plans is particularly important. Appendix 1 provides guidance on planning and conducting such exercises.
12. The provisions of this document are intended to provide general guidance to authorities and organizations responsible for ensuring that MROs, should they be necessary, are successful.

General Guidance

13. For a situation involving large numbers or persons in distress, on scene responsibilities for the safety of passengers and crew will be shared by the OSC and the aircraft pilot in command or ship master,

with the pilot or master assuming as much of this responsibility as possible before or after the aircraft or ship is abandoned.

14. Pilots and masters are responsible for maneuvering the aircraft or ship as feasible and appropriate. They also have overall responsibility for safety, medical care, communications, fire and damage control, maintaining order, and providing general direction.
15. Unless a ship appears to be in imminent danger of sinking, it is usually advisable for passengers and crew to remain on board as long as it is safe to do so.
16. In the case of a downed aircraft, whether passengers would be safer on board should be assessed for each situation. Usually they should promptly evacuate the aircraft at sea. On land this decision must account for the conditions of the aircraft and the environment, expected time to rescue or aircraft repair, and whether required passenger care can be best provided inside the aircraft.
17. The OSC will normally be designated by an SMC. An OSC may be able to handle certain communications on scene and with appropriate remote authorities to help free the pilot or master to retain the integrity of his or her craft. However, these persons are themselves in need of assistance, and anything the OSC can do to help them should be considered, bearing in mind that the OSC's main duty is coordinating SAR facilities and rescue efforts under the SMC's general direction.
18. It is important to minimize unnecessary communications with the master of a ship or pilot in command of an aircraft in distress, and this should be taken into account in advance planning. Exchanges of information during joint planning by use of SAR Plans of Cooperation (see MSC Circular 1000) and other means will reduce the need to ask the pilot or master for this information one or more times during a crisis. Persons or organizations that want this information should be directed to a source ashore or on the ground that is prepared to handle what could be many requests.
19. High priority should be given to tracking and accounting for all persons on board and all lifeboats and rafts, and efforts to keep them together will help in this regard. Availability of accurate manifests and accounting is critical. The need to relocate survival craft and check for persons in them can waste valuable resources. One option is to sink survival craft once the persons in them have been rescued; however, the potential that other survivors may find and need the craft should be considered.
20. Navy vessels are often better equipped than commercial vessels for retrieving people who have abandoned a ship or aircraft, and use of any such vessels should be considered.
21. Helicopter capabilities should be employed if available, especially for retrieval of weak or immobile survivors. Lifeboat crews should be trained in helicopter hoist operations. Lowering a rescue person from the helicopter to assist survivors may be viable.
22. Ship companies should be encouraged to equip large passenger ships and possibly other types of vessels with helicopter landing areas, clearly marked hoist-winch areas, and onboard helicopters to facilitate more direct transfers of numerous persons.
23. If a ship with a large freeboard cannot safely retrieve survivors from the water or survival craft, it may be possible to first retrieve them onto small vessels, and then transfer them to progressively larger ones.

24. Depending on the circumstances, it may be safer to tow survival craft to shore without removing the occupants at sea. Lifeboats could be designed to support passengers for longer periods of time, and to be able to reach shore on their own from longer distances offshore.
25. To the extent practicable, MROs should be coordinated by an SMC in an RCC. However, depending on the magnitude, nature and complexity of a mass rescue incident, the rescue efforts may be better coordinated by an appropriate operations center higher within the SAR agency or government. Considerations in this decision might include, among others:
 - Extensive rescue support by organizations other than those commonly used for SAR
 - Need for heavy international diplomatic support;
 - Serious problems in addition to potential loss of lives, such as environmental threats, terrorist actions, or national security issues
26. The following factors should be considered in MRO planning:
 - Use the Incident Command System (ICS) or other effective means of handling multi-agency, multi-jurisdiction, multi-mission scenarios
 - Identify situations within the SRR that could potentially lead to the need for MROs, including scenarios that might involve cascading casualties or outages
 - Mobilisation and coordination of necessary SAR facilities, including those not normally available for SAR
 - Ability to activate plans immediately
 - Call up procedures for needed personnel
 - Need for supplemental communications capabilities, possibly including the need for interpreters
 - Dispatching of liaison officers
 - Activation of additional staff to augment, replace or sustain needed staffing levels
 - Recovery and transport of large numbers of survivors (and bodies if necessary), accounting for survivors potentially having injuries and lack of training, age limitation, hypothermia, etc.
 - A means of reliably accounting for everyone involved, including responders, survivors, crew, etc.
 - Care, assistance, and further transfer of survivors once delivered to a place of safety, and further transfer of bodies beyond their initial delivery point
 - Activation of plans for notifying, managing and assisting the media and families in large numbers
 - Control of access to the RCC and other sensitive facilities and locations
 - RCC backup and relocation plans, as appropriate

- Ready availability to all potential users of plans, checklists and flowcharts
27. At some point the ability of an RCC to continue to effectively coordinate the MRO and still handle its other SAR responsibilities might be overwhelmed, and another RCC or a higher authority may need to assume responsibility for the MRO.
28. With these possibilities in mind, MRO plans may provide for various degrees of response, along with criteria for determining which amount of response will be implemented. For example, as local SAR resources are exhausted, or from the outset, SAR resources may need to be obtained from distant national or international sources.
29. Experiences in responding to major incidents have resulted in other practical advice such as the following:
- Plan and exercise how any agency receiving notification of an actual or potential mass rescue event can immediately alert and conference call other authorities that will potentially be involved, brief them, and enable immediate actions to be taken by all concerned (this will require identification of contacts in each agency that can be contacted on a 24-hour basis, and that have authority to immediately initiate actions and commit resources).
 - Coordinate all rescue operations effectively from the very beginning.
 - Begin quickly with a high level of effort stand down as appropriate rather than begin too late with too little effort.
 - Use more capable resources like cruise ships for taking large numbers of survivors on board.
 - Ensure that MRO emergency plans address communications interoperability or inter-linking.
 - Retrieve and protect debris as evidence for follow on investigation.
 - Put security plans in place to limit access to the RCC.
 - Arrange in advance to involve the Red Cross, chaplains, critical incident stress experts, and other such support for human needs.
 - Identify senior agency spokespersons to protect the time of workers directly involved in the response, and designate a senior official to provide information to families.
 - Clearly identify the point at which the SAR response (lifesaving) has ended, and the focus shifts to investigation and recovery.
 - Be prepared to use ICS when appropriate.
 - Ensure that air traffic and air space can be and is controlled on scene.
 - The SMC can often benefit from assigning additional liaison personnel on scene.
 - Anticipate development and needs and act early.

- Ensure that the scopes of SAR plans and other emergency or disaster response plans are coordinated to reduce gaps, overlaps and confusion about who is in charge and what procedures will be followed at various times and places.
- Control access to the scene, including access by the media.
- Work out in advance how use of private resources can be appropriately used to supplement other SAR resources.
- Ensure that SAR plans provide for logistics support for large numbers of rescuers and survivors, including pre-arranged accommodations if possible, and availability of food, medical care, and transportation.
- Consider requesting assistance from airlines and shipping companies other than the one whose aircraft or ship is involved in the incident, and know the types of assistance that such organizations might provide.
- Bar coded bracelets can be an effective means of identifying children before, during and after an emergency.
- Attempt to reduce the burden on a pilot or master and crews.
- If safe and appropriate to do so, place a marine casualty officer on board to assist the master and SAR personnel
- Share, capabilities, expertise and assets among government and industry to take maximum advantage of the strengths of each.

Communications

30. Communication plans must provide for a heavy volume of communications use, as a major incident will normally involve many responding organizations that need to communicate effectively with each other from the beginning. As necessary, advance arrangements should be made to link means of interagency communications that are not inherently interoperable. Interagency communications must be based on terminology that all involved understand.

Major Incident Coordination

31. Regardless of the magnitude and priority of the lifesaving efforts involved in responding to a major incident, if any other functions are being carried out concurrently on scene by other than SAR personnel, the overall response involving SAR and the other functions, e.g., firefighting, should be well coordinated.
32. If certain basic concepts and terms are recognized and understood by all emergency responders, they will be much better prepared to coordinate joint efforts.
33. Standard SAR procedures should typically be followed for the SAR part of the response, but these procedures will be largely independent of other efforts. Companies or authorities handling other aspects of the response will follow command, control and communications procedures developed for their respective organizations and duties.

34. The SAR system can function in its normal manner or use modified SAR procedures established to account for special demands of mass rescues, but it should be appropriately linked and subjected to a scheme for management of the overall incident response.
35. For major incidents, crisis management for the overall response may also be needed. The **Incident Command System (ICS)** is one simple and effective means of meeting this need. ICS works best with some advance familiarization and exercising. Since SAR and transportation authorities are likely to encounter use of ICS within emergency response communities, Appendix 3 provides general information for familiarization with ICS. ICS is an example of an effective system used for emergency management, and is a tool that can be used where no equivalent means of overall incident management is in place.

Industry Planning and Response

36. SAR authorities should coordinate MRO plans with companies that operate aircraft and ships designed to carry large numbers of persons. Such companies should share in preparations to minimize the chances that MROs will be needed, and to ensure success if they are. Appendix 2 provides guidance on industry roles, and discusses how companies could arrange for use of company field teams and emergency response centers as possible means of carrying out their MRO responsibilities. For passenger ships, SAR Plans of Cooperation are part of MRO plans.

Public and Media Relations

37. What the media reports may matter more than what SAR services do for shaping of public opinion about MROs. Importantly, the role of the media may be critical in shaping the actions of the public and those directly involved in the distress situation in a way that contributes to safety, success and panic control. There should be no unwarranted delays in providing information to the media. Information must be readily available, clear, accurate, consistent, and freely exchanged among emergency responders and others concerned, such as the public and families of persons on board.
38. Identify spokespersons and outline what they will say, staying factual. If SAR services do not provide a public spokesperson for a major incident, the media will. Spokespersons should be cautious about speculating on causes of accidents, and should inform the media that current operations are focused on saving lives.
39. Ensure that the media knows who is in charge of coordinating rescue operations.
40. A single spokesperson not directly involved in the incident can be valuable in relieving the IC and SMC of this duty.
41. Many entities are involved in a major incident, including ships, aircraft, companies, and SAR services. Coordination is required to ensure that there is one message with many messengers. Interviews should be live if possible.
42. Prompt establishment of a joint information center away from the SMC will help achieve this goal. The center can establish proper procedures for establishing what messages will be released to the public, and how those messages will be released. Since the messages may be sensitive, it is critical that everyone communicate the same information. The Center can be responsible for coordinating information made available via the internet and perhaps establishing and maintaining a public web site.

43. The media is a 24-hour global market, with news broadcast worldwide around the clock. The media will find a way to get to the scene for first hand information, pictures and video. By providing transportation to the scene and controlling media access, safety and what is reported can be improved and better controlled.
44. Media outlets may have more resources to mobilize on scene than do SAR authorities, and RCC operating plans should account for how to deal with such situations.
45. Information should be provided to the public on what SAR facilities are being used, and if possible a web address or list of contact phone numbers should be provided for families, media, and others to contact for more information.
46. Preparations should be made so that large numbers of callers can be accommodated without saturating the phone system or crashing the computer server.
47. Advance preparation of standby web pages by transportation companies and SAR authorities can help in responding to floods of requests for information. These pages can be quickly posted to provide general information the media can use. Web information must be timely and accurate. Once posted, these pages can be easily updated with the status of the incident., and could also include:
 - Contact information
 - Basic government or industry facts
 - Industry and SAR definitions
 - Photographs and statistics of aircraft, ships and SAR facilities
 - Answers to frequently asked questions
 - Links to other key sites
 - Information on passenger capacity, crew size, vessel plans, and firefighting capabilities
 - Library footage of a vessel inspection or of the crew performing lifesaving drills
48. Besides the media, families and other organizations will also want this information.

Follow Up Actions

49. It is very important to develop and share lessons learned from actual MRO operations and exercises. However, concerns (often excessive) about legal liability may discourage highlighting matters that could have been done better.
50. Since lessons learned can help prevent recurring serious mistakes, agreement should be reached among principal participants on how lessons learned can be depersonalized and made widely available. Lessons learned from MROs should be shared not just locally, but internationally.
51. Careful accounting for survivors after they have been delivered to a place of safety remains important. They need to be kept informed about plans for them and about the ongoing response

operations. With large numbers of persons often staying in different places, keeping track of and working with them can be difficult.

52. Transportation companies are often best suited to handle and assist survivors during this time. Crewmembers may be placed at various locations to record passenger names and locations. Another possibility is for airlines or passenger ships to attach plastic cards to life vests to give passengers phone numbers for contacting the company. Some companies use bar coded bracelets to track children who are passengers.
53. Communicating with passengers is more difficult in remote areas, where phone service may be inadequate or lacking. If phones do exist, calling the airline or shipping company may be the best way to check in and find out information. In more populated areas, local agencies may have an emergency evacuation or other useful plan that can be implemented.
54. To protect passengers from harassment by interviewers and cameras, survivors might be placed in hotels or other places of refuge. However, triage and landing locations must be established and publicized to all rescue personnel and good Samaritans.

APPENDIX 1

Exercises for Mass Rescue Operations

Since opportunities to handle actual incidents involving mass rescues are rare and challenging, exercising MRO plans is particularly important. Mass evacuation and rescue operations are difficult and costly, leading to a tendency to use simulation excessively during exercises rather than physically exercising on scene efforts.

MRO exercise objectives need not be addressed in a single large exercise, but may be satisfied in part by routine incorporation into multiple drills, some intended mainly to test other systems. However, realistic drills are necessary and costly, and over 1,000 volunteer ship passengers or hundreds of volunteer aircraft passengers will likely be needed to conduct a realistic exercise.

Separate rooms can be used to simulate command posts that would normally be in separate locations.

MRO exercises should ideally achieve the following objectives:

- Account for:
 - Crew and passenger lists
 - Rescued passengers and crew until they can return to their homes
 - All persons associated with the rescue and aftermath operations
 - Lifeboats, including empty boats or rafts
 - High freeboard issues for likely rescue facilities
- Identify and task available resources
 - Use of Amver
 - Potential resources ashore and afloat
 - Resources from local agencies (medical personnel, hospital facilities, fire department, general community, transportation resources)
 - National and regional military and other resources
- Evaluate notification processes, resource availability, timeliness of initial response, real-time elements, conference capabilities, and overall coordination
- Ensure all agency roles are sorted out, understood, and properly followed.
- Test capabilities of potential OSCs and ability to transfer OSC duties
- Evaluate span of control
- Evacuate a ship or aircraft
- Coordinate activities and achieve information exchanges
 - Communications (RCC-RCC, government-industry, RCC-OSC, on scene, shore-ship, ground-air, ship-air, SAR facility-survival craft, etc.)

- Information for all concerned (identify, merge, purge, retrieve, and transfer to the right place in the right form at the right time)
- New communications and information management technologies
- Media and next-of-kin
- Safely transfer and care for passengers (evacuation, in survival craft, rescue, medical, protection from environment, post-rescue transfers, etc.)
- Test all communications links that may be needed for notification, coordination, and support.
- Conduct medical triage and provide first aid
- Assess ship's safety management system effectiveness
- Exercise coordination with local response agencies
- Provide food, water, lifejackets, and other protective clothing to survivors.
- Test mass rescue plans
 - SAR services
 - Company (including aircraft and ship plans)
 - Any relevant emergency response organizations, e.g., disaster response, military, firefighting and medical
 - Transportation and accommodations
- Assess how effectively earlier lessons learned have been accounted for in updated plans, and how well these lessons were disseminated
- Exercise salvage and pollution abatement capabilities
- Carry out emergency relocation of the disabled craft
- Exercise external affairs, such as international and public relations
 - Necessary participants involved
 - Joint information centers established quickly and properly staffed
 - Press briefings handled effectively, e.g., consistent information from different sources
 - Notification of next of kin and family briefings
 - Staff and equipment capacity to handle incoming requests for information
 - Rescued persons tracked, kept informed and needs monitored, and reunited with belongings

The following steps are normally carried out during exercise planning:

- Agree on the exercise scenario, goals and extent
- Assemble a multi-disciplinary planning team and agree on objectives for each aspect of the exercise
- Develop the main events and associated timetables

- Confirm availability of agencies to be involved, including any media representatives or volunteers
- Confirm availability of transportation, buildings, equipment, aircraft, ships or other needed resources
- Test all communications that will be used, including tests of radios and mobile phones at or near the locations where they will be used
- Identify and brief all participants and people who will facilitate the exercise, and ensure that facilitators have good independent communications with person who will be controlling the exercise
- Ensure that everyone involved knows what to do if an actual emergency should arise during the exercise
- If observers are invited, arrange for their safety, and to keep them informed about the exercise progress
- For longer exercises, arrange for food and toilet facilities
- Use “exercise in progress” signs, advance notifications, and other means to help ensure that person not involved in the exercise do not become alarmed
- Schedule times and places for debriefs
- Agree and prepare conclusions and recommendations, with the entity responsible for handling each recommendation along with the due date for any actions
- Prepare a clear and concise report and distribute it as appropriate to the participating organizations
- Consider the outcome of this exercise in planning future exercises

APPENDIX 2

Industry Planning and Response for Mass Rescue Operations

SAR authorities should coordinate MRO plans with companies that operate aircraft and ships designed to carry large numbers of persons. Such companies should share in preparations to minimize the chances that MROs will be needed, and to ensure success if they are. This Appendix provides guidance on industry roles, and discusses how companies could arrange for use of company field teams and emergency response centers as possible means of carrying out their MRO responsibilities.

Early notification of potential or developing MROs is critical, due to the level of effort required to mount a very large-scale response. It is much better to begin the response process and abort it should it become unnecessary, than to begin it later than necessary should the actual need exist. Pilots and masters should be advised and trained to notify SAR services at the earliest indication of a potential distress situation.

Company response organizations should be able to help SAR services by organizing support, equipment, advice, and liaison any of their ships or aircraft.

Companies should be prepared to provide information to preclude the need for multiple sources attempting communications with the aircraft pilot in command or ship captain for information that is unavailable or available from another source. Receiving and handling requests for information aboard the distressed craft can interfere with the pilot's or master's ability to handle the emergency and handle critical on scene leadership needs.

Companies operating large aircraft or ships should be advised to be able to field a coordinated team that can handle emergency response functions around the clock should the need arise. Such a team might include staff as indicated in the following Table.

Typical Company Field Team

Team Leader	Maintains overview, directs operations and keeps management informed
Communicator	Maintains open (and possibly sole) line of communications to craft in distress
Coordinating Representative	Usually a pilot or master mariner, who coordinates with SAR and other emergency response authorities, organizes tugs, looks at itineraries, arranges to position ships or ground facilities that may be able to assist, and organizes security and suitable delivery points for passengers crew when they are delivered to safety
Technical Representative	Maintains contact with regulatory authorities, classification societies, insurers and investigators, and provides liaison and advice for firefighting, damage control, repairs, and other specialized or technical matters
Environmental Representative	Involved with environmental impact and spill response
Medical	Gives medical advice, tracks casualties, and arranges medical and identification

Representative	services for survivors.
Passenger and Crew Representatives	Provides information and support to whoever is designated to care for next of kin and keep them informed, identifies transportation needs, and may need to deal with various countries, languages, and cultures
Media Representative	Gathers information, coordinates public affairs matters with counterparts in other organizations, prepares press releases, briefs spokespersons, and arranges availability of information by phone and web sites
Specialists	From within or outside the company who may facilitate some special aspect of the response or follow up

The company may operate an **Emergency Response Center (ERC)** to maintain communications with the craft in distress, remotely monitor onboard sensors if feasible, and keep emergency information readily available. Such information might include passenger and crew data, aircraft or ship details, incident details, number of survival craft, and status of the current situation.

Transportation companies should have readily available contacts with tour companies, shore excursion companies, airlines and cruise lines, hotels, etc., since such resources can be used to address many problems experienced with landing large numbers of survivors into a community.

Contingency plans for cooperation should be developed between SAR authorities and transportation companies, and these plans should be sufficiently exercised to ensure they would be effective should an actual mass rescue situation arise. Such plans should identify contacts, coordination procedures, responsibilities, and information sources that will be applicable for MROs. These plans should be kept up to date and readily available to all concerned.

Respective functions of the ERC and RCC should be covered in coordinated pre-established plans, and refined as appropriate for an actual incident. These centers must maintain close contact throughout the SAR event, coordinating and keeping each other apprised of significant plans and developments.

There are other steps the transportation industry could be urged to undertake to improve preparedness for MROs. The following are some examples:

- Carry SAR plans on board aircraft or ships
- Provide water and thermal protection for evacuees appropriate for the operating area
- Provide a means of rescue to bring people from the water to the deck of ships
- Use preparation checklists provided by SAR authorities
- Conduct an actual physical exercise in addition to simulations
- Provide the capability to retrieve fully loaded lifeboats and rafts

- Enhance lifeboat lifesaving capabilities
- Provide ways to assist persons in lifeboats who are seasick, injured or weak
- Provide on board helicopter landing areas and helicopters
- Prepare to assist survivors once they have been delivered to a place of safety
- Have aircraft or ship status and specifications readily available, such as inspection records, design plans, communications capabilities, stability calculations, lifesaving appliances, classification society contacts, passenger and cargo manifests, etc., so that such information will not need to be obtained directly from a pilot or master
- Work with SAR authorities to develop and be able to rapidly deploy air droppable equipment or supplies for survivors, maintain strategically located caches for this purpose

Acceptance of certain responsibilities by industry demonstrates commitment to passenger safety and can free SAR services to handle critical arrangements relating to SAR resources, coordination and communications.

APPENDIX 3

Incident Command System Overview

For major incidents, crisis management for the overall response may also be needed. The **Incident Command System (ICS)**, one widely used means of meeting this need, but works best with some advance familiarization and exercising within and among the transportation and emergency response communities. Since SAR and transportation authorities are likely to encounter use of ICS within emergency response communities, this Appendix provides general information for familiarization with ICS. The following terms are relevant to ICS:

Incident Commander (IC): the primary person functioning as part of the incident command system, usually at or near the scene, responsible for decisions, objectives, strategies and priorities relating to emergency response

Incident Command Post (ICP): location at which primary functions are carried out for the Incident Command System

Incident Command System (ICS): on scene emergency management concept that provides an integrated organizational structure adaptable to the complexity and demands of a major incident involving multiple missions, response organizations or jurisdictions.

Unified Command (UC): the incident commander role of the incident command system expanded to include a team of representatives that manages a major incident by establishing common objectives and strategies and directing their implementation

ICS is designed for use when multiple organizations and jurisdictions need to be jointly involved in an emergency response activity and coordinate their efforts.

While organizations have their respective systems of command and control or coordination, these should be compatible with systems others use so organizations can function well jointly when necessary. Commonality and similarities among crisis management systems locally, regionally, and internationally foster effective joint efforts.

ICS does not take control, responsibility or authority away from SAR services; SAR services remain focused on lifesaving, while ICS focuses on promoting an effective overall incident response.

ICS training, advance coordination and liaison will be rewarded by better performance and success when a crisis situation arises. As a tool for managing major incidents, ICS:

- Accommodates all risks and hazards
- Is simple, powerful, and flexible
- Can easily expand or contract as the incident warrants
- Relieves the SAR system of coordinating non-SAR missions
- Enables SMC to use ICS contacts to draw on additional resources
- Ensure better communication and cooperation between agencies

The ICS organization can grow or shrink as the situation dictates, and provides a logical process and progression to achieve results. Its organization should be allowed to grow with increased demand and shrink when operations decline, both of which require anticipation.

Advantages of ICS can be lost when organizations develop their own unique and relatively complex versions of ICS; it works best when it remains simple, flexible and standardized so everyone on scene from all organizations understands it.

In its basic form, a person is designated as the **Incident Commander (IC)** to handle overall coordination, including setting objectives and priorities.

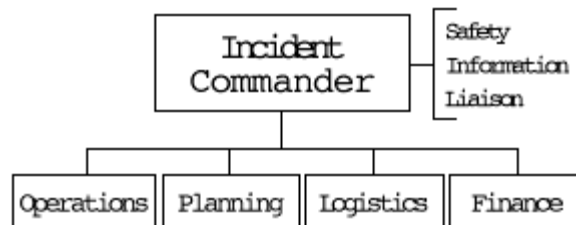
Support functions (sections supported by one or more persons) can be established *as needed* and on the scale needed to keep the IC informed and assist in certain areas. The four support sections in the ICS organization are the:

- **Operations Section**--helps manage resources to carry out the operations
- **Planning Section**--helps develop action plans, collect and evaluate information, maintain resource status, and arrange to scale up or scale down activities
- **Logistics Section**--helps provide resources and services needed to support the incident response, including personnel, transportation, supplies, facilities and equipment
- **Finance-Administration Section**--assists with monitoring costs, providing accounting and procurements, keeping time records, doing cost analysis, and other administrative matters

Other additions to directly assist the IC might include:

- An **Information Officer**--assists the media and others seeking incident information, ensures the IC has appropriate information available, and helps to provide information to the public and families of persons in distress
- A **Safety Officer**--monitors safety conditions, and develops measures to ensure safety and reduce risks
- **Liaison Officers**--serve as primary contacts for on scene representatives of their respective organizations

The following Figure illustrates the basic ICS organization.



Incident Command System Organization

The IC usually establishes an **Incident Command Post (ICP)** as a base for ICS activities.

For particularly demanding incidents, the ICS organization can be expanded. For example, for operations that are particularly large-scale, sustained or complex, the IC can be augmented by establishment of an actual or virtual (without everyone co-located) **Unified Command (UC)** populated by operational managers representing the primary response organizations involved. If the UC is made up of linked independent command posts, a government post and an industry post for example, ideally there should still be a person from each command post assigned to work at the other post(s) involved.

For a situation like a major passenger aircraft or ship disaster, a **Joint Information Center (JIC)** should be established, perhaps in association with the Information Officer position, to facilitate and coordinate the vast information that will need to be managed internally and shared with the public.

Whether ICS should be used depends on the duration and complexity of the incident. If it is used, coordination of SAR functions with other functions is usually achieved by assigning a representative of the SAR agency or of the SMC to the Operations Section of the ICS organization. This allows SAR services to be plugged into ICS and overall operations while still being able to function with relative independence in accordance with normal SAR procedures. ICS has an overall incident focus, while SAR services must remain focused on lifesaving.

A determination should be made as early as possible on who will be responsible for overall coordination, and how the overall response will be organized and managed. Procedures that all involved understand and support should be applied to managing the overall response for mutual support, effort prioritization, and optimal use of available resources, and to enhance on scene safety and effectiveness.

Interagency contingency planning should identify who the IC should be for various scenarios. Typically, the IC will be assigned from the government organization with primary responsibility for the type of function most prominent for the particular incident. However, with appropriate access to experts and information from all agencies concerned, a key consideration in selecting the IC should be familiarity and experience with the IC function, i.e., the IC should be a person who can best handle the responsibility.

The IC should be someone good at managing on scene operations, and will usually be located at or near the scene. Everyone involved, regardless of rank or status, will normally be in a support role for the IC, similar to the way the SMC function is carried out.

The IC function can be transferred as the situation warrants, although such transfers should be minimized as is the case for transfers of SMC functions during a mission. It is important to designate an IC early, in contingency plans if possible, and make a transfer later as appropriate, as delay in designating an IC can be quite detrimental.

Except when functions other than SAR are relatively insignificant to the incident response, the IC should normally be someone other than the SMC. The priority mission will always be lifesaving, and the SMC should normally remain unencumbered by additional non-SAR duties.

Similarly, the IC's command post should normally be at a location other than in the RCC, because the RCC needs to remain focused on, and be vigilant and responsive to, its normal SAR responsibilities in addition to handling SAR aspects of the major incident.