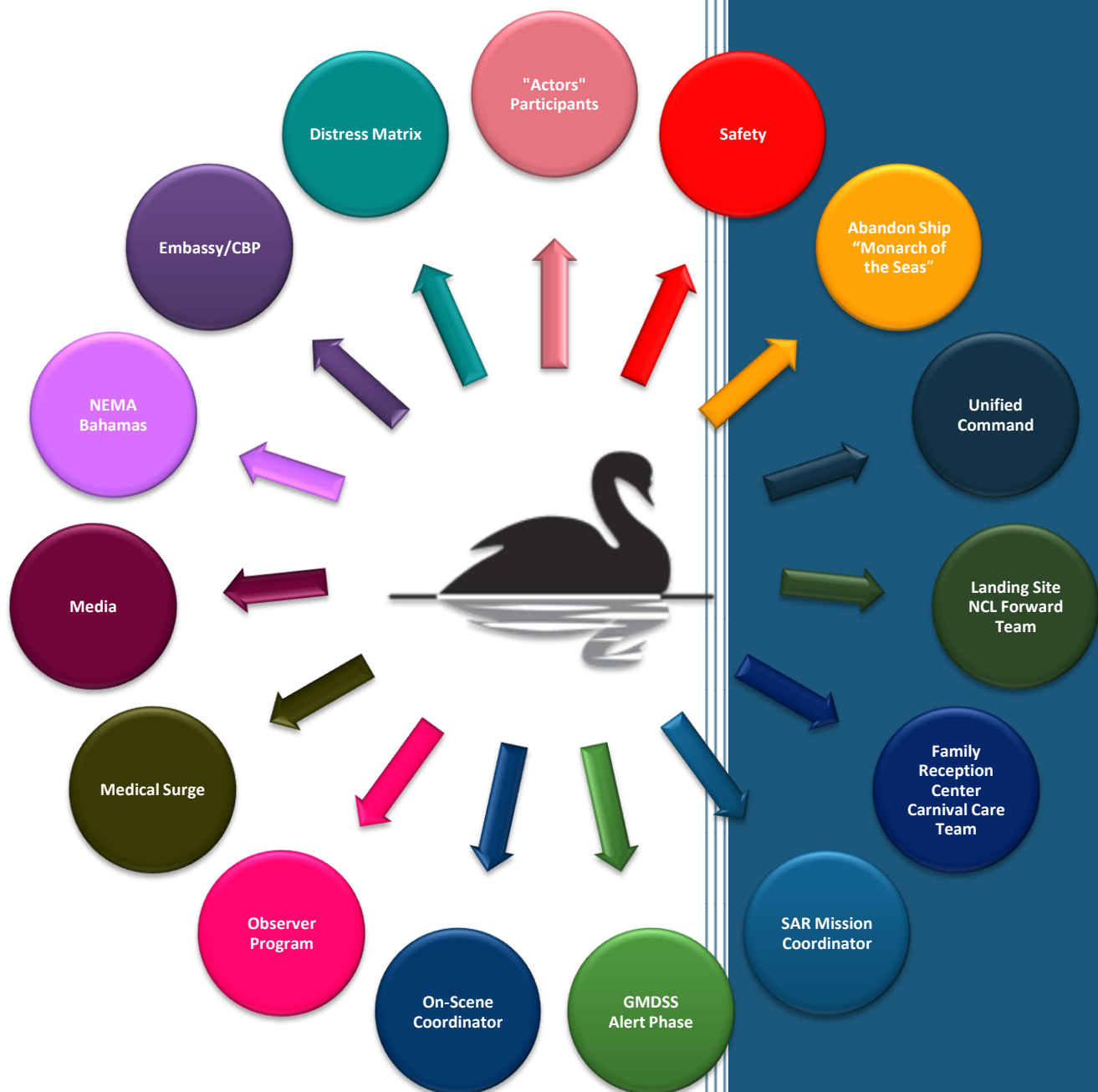


# BLACK SWAN

## AFTER ACTION REPORT EXECUTIVE SUMMARY



AUGUST 5, 2013

## Handling Instructions

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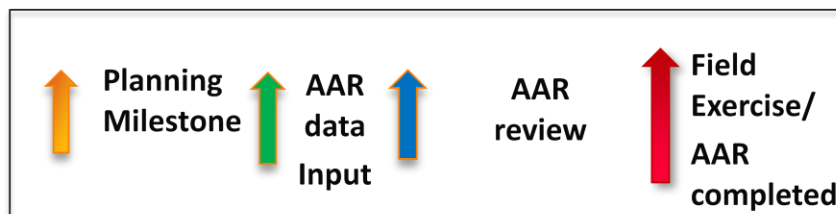
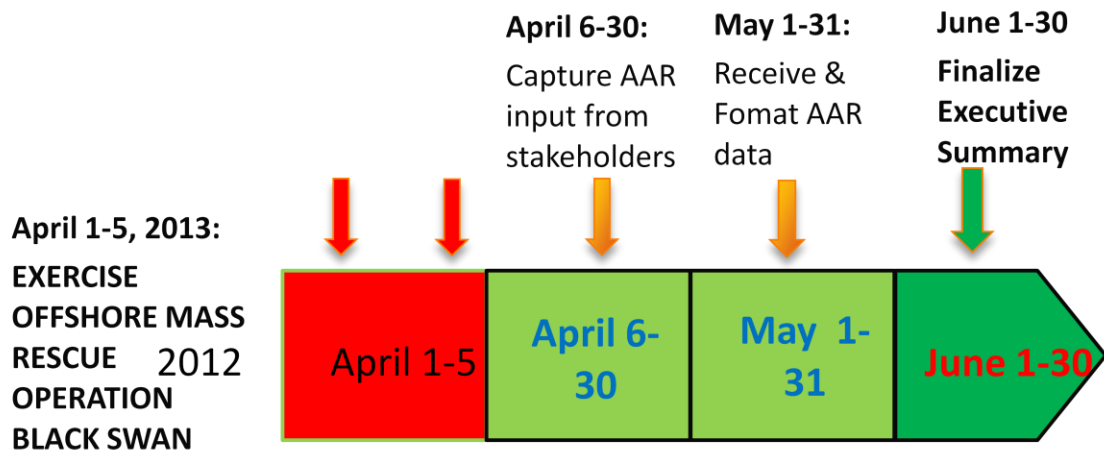
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## Black Swan Mass Rescue Operations AAR Milestones



## Executive Summary

### ***Black Swan Executive Summary***

Offshore Mass Rescue Operation Full-Scale Exercise 2013

United States Coast Guard, District Seven, Miami Florida

Prepared by Mr. Paul Culver & Mr. Jesse Rangle

#### PURPOSE AND SCOPE

***Black Swan***, the largest, most complex Full Scale Exercise (FSE) in design and execution of an Offshore Mass Rescue Operation (MRO) exercise in the history of the International Maritime Community. The exercise was successfully executed April 1-5, 2013 with 18 distinct venues geographically spanning from Florida to Freeport, Grand Bahamas Island, Bahamas.

***Black Swan***'s primary objectives:

- To strengthen emergency management processes for the U.S. Coast Guard, cruise industry, transportation hubs, and the Government of the Bahamas.
- Coordinate an effective response to emergencies, using available resources to save lives, protect property, minimizing economic loss, and to share the best practices.

#### BACKGROUND

Through unprecedented international and maritime community collaboration, the two year planning cycle involved an unprecedented 168 Design Team members, which included cruise industry operators & Trusted Agents. The Design Team and Trusted Agents focused their efforts exclusively on existing safety, emergency management and operational *processes*.

#### SUMMARY OF FINDINGS

- ***Black Swan*** was a success.
- Sponsoring agencies for any future ***Black Swan*** series exercises (Coast Guard Headquarters Search and Rescue-CG-SAR, Cruise Lines International Association-CLIA, Bahamas National Emergency Management Agency (NEMA) , and the stakeholders) should establish a Memorandum of Understanding (MOU) that states the objectives, design and exercise execution guidance, funding and support for the exercise.

#### LESSONS LEARNED

The entire *Lessons Learned* and *Best Practices* are located in the ***Black Swan*** After Action Report (AAR).

- ***Training & Drills:*** Conducting extensive drills, training and review of safety processes resulted in no injuries or mishaps and a successful full scale exercise.
- ***Standardization:*** Standardized Mass Rescue Operation (MRO) plans are important to enhance the ability of shore and ship organizations to pre-plan coordination of support.

- **Technology:** Accountability (electronic) Systems in use today or in development have limitations that necessitate a “pen and paper” back-up processes. There is currently no standardized technology to support emergency accountability operations.
- **Landing Site(s):** Pre-identified landing sites should be able to accommodate a large influx of evacuees and responders. Sites should be designed to minimize bottle necks and the flow of evacuees through the landing site areas (e.g. medical triage, medical care, logistics care centers, transportation hubs etc.).
- **Landing Site Management:** Having a "Dock master or Landing site master" identified in a landing site plan is critical to maintaining management, order, and organizational flow at the landing site. The person designated as the main coordinator (Dock/Landing site master) should be designated with the authority to take charge. This has been previously identified in MRO exercises that were conducted by the U.S. Coast Guard starting in 2007 in St. Thomas, USVI, Ketchikan, AK, and Bar Harbor, ME.
- **Communications:** Contingency plans must include shore and maritime based communication plans, etc. SAR coop plan communications, that have been tested, exercised, and determined to be effective.

## RECOMMENDATIONS

The most prominent *recommendations* are depicted below. These recommendations should be further developed by the U.S. Coast Guard in cooperation with the Cruise Lines International Association and the world International Rescue Organizations International Maritime partners.

1. **Standardization:** A standardization of offshore, near shore, and shore side MRO processes.
2. **Forward Response Team:** Cruise lines should establish a standard landing site(s) management concept of a Forward Response Team utilizing vessel’s crewmembers.
3. **Accountability:** A standardized technology and manual based cruise industry evacuee accountability tracking system.
4. **Communications:** Communication plans should be communicated utilizing established processes, i.e. maritime SAR coop plans and shore based contingency plans, to the responding rescue agencies personnel and stakeholders charged with coordinating a mass rescue or mass casualty situation.
5. **Data Based Landing Site(s):** Coast Guard Headquarters Search and Rescue-CG-SAR, Cruise Lines International Association-CLIA) should explore the benefit of developing a standardized data base of preferred landing sites for major cruise regions. Similar to the SAR data provider system that could be accessed internationally by existing SAR agencies. Recommend as a minimum, the data base could include location, ownership, access, and basic design layouts.

6. **Foreign Governments:** Exercises involving foreign governments must include a *minimum* of two (2) years notification to clearly identify the diplomatic channels & procedures, the scope of exercise participation, and the appropriate diplomatic note exchanges for a status of forces to engage in the exercise.

## CONCLUSION

**Black Swan** was hailed as an unequivocal success, by government officials, international agencies, local executives, as well as several media sources including the front page of the Bahamas Newspaper, “**Black Swan a Success.**” Captain Stephan Russell, Director of Bahamas National Emergency Agency (NEMA), praised the operation and noted that this was a good opportunity to test systems on the island. "I'm always pleased to see good ending results from these kinds of exercises. I was more than pleased several months back when we heard about the Black Swan Exercise along with the coastguard and the cruise line industry. It's a fantastic opportunity for us to test our systems and processes here in Grand Bahamas," he said.

**Black Swan's** success could not have been achieved without the full participation:

- Royal Caribbean Cruise Lines, Norwegian Cruise Lines, Carnival Cruise Lines and their passenger vessels Monarch of the Seas and Norwegian Sky.
- The Carnival Care Team's full activation of the family reception center and coordination from the Norwegian Care Team members' with the support of Aviem and Family Assistance Foundation and the CLIA Contingency Working Group.
- The logistical support from the Celebration Cruise Line and Balearia Ferry Ltd. and their vessels Bahamas Celebration, and Pinar Del Rio.
- The U.S. Coast Guard Cutters and aircraft, Bahamas NEMA, motor vessel Victoria, Bahamas Air Sea Rescue Association (BASRA), Royal Bahamas Defense Force (RBDF) and the Royal Bahamas Police Force (RBPf).
- The Pathfinders Task Force team members and situational awareness display in the Incident Command Post and their secure website.
- The Bahamas International Red Cross and Salvation Army, Grand Bahamas Yacht Club (GBYC).
- Florida Advanced Surgical Transport (FAST) team.
- The Jack Hayward “Wildcats” high school as the temporary shelter for the actors.
- U.S. Coast Guard Auxiliary members support as “volunteer actors” and coordinators.

**Black Swan's** historic and indelible mark on the United States Coast Guard and the International Maritime Community is profound; involving 1,195+ personnel & stakeholders, several countries, achieving the defined objectives, and attaining 100% personnel accountability with *no* injuries and *no* mishaps or near misses. Officially existing as the largest scale, most complex in design and execution Mass Rescue Operation exercise conducted by the U.S. Coast Guard!

Respectively submitted,

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Black Swan Exercise Director

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Black Swan Exercise Deputy Director



### **Operational Relevance of the Black Swan Exercise**

The Black Swan Exercise was instrumental to the stakeholders in providing essential capabilities and process management experience while setting a newly established foundation for interagency cooperation. On May 27, 2013 2224 Royal Caribbean Grandeur of the Seas passengers arrived in Freeport Bahamas as a result of a ship board fire. The lessons learned and experienced gained from participating in the Black Swan Exercise design, training and execution of the exercise was directly applied to safely and efficiently return all passengers from Freeport, Bahamas to Baltimore Maryland.

### **Outcome and Areas for Improvement**

#### **GMDSS/ALERT PHASE**

### **Exercise Elements**



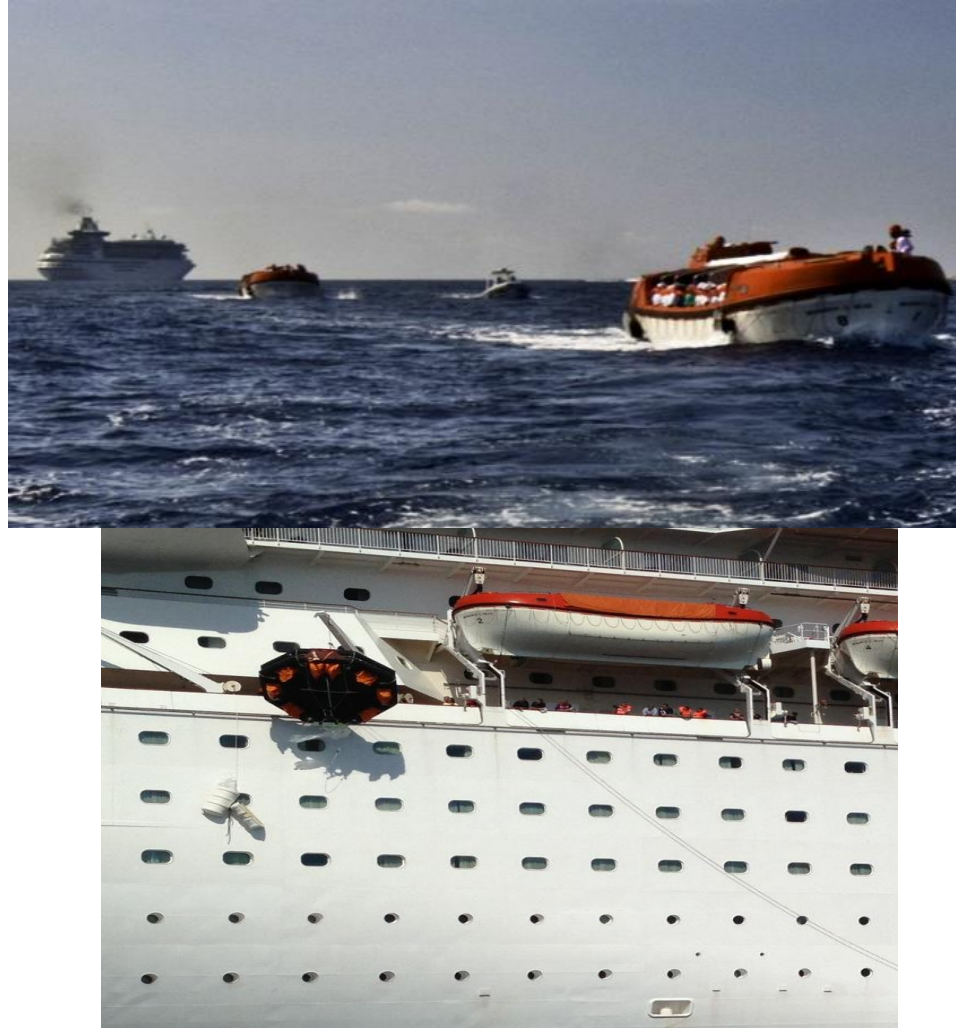
**STRENGTH:** While not a “new” lesson, the importance of the use of a variety of frequencies by a vessel attempting to contact a USCG shore station was underlined. As time progressed through the course of the exercise, frequencies that had been effective at the beginning of the exercise period became unreliable or impossible to use effectively.

**AREA FOR IMPROVEMENT:** Instructions for the use of Digital Selective Calling (DSC) the use of voice communications should incorporate information about the value of multiple frequencies



## ABANDON SHIP





**STRENGTH:** Highly proficient Royal Caribbean Cruise Lines company safety training and emergency response and management processes during emergency conditions (i.e., the abandon ship process allowed for a smooth process into survival craft once the order was given to abandon ship; mustering, accounting, and embarking passengers).

**AREA FOR IMPROVEMENT:** The importance for cross-training between all cruise line companies with a focus to established *standardized* training and *MRO management processes* in addition to the proactive implementation of their best practices.

## ON-SCENE COORDINATION



**STRENGTH:** The designation of On Scene Coordinator was given to the Coast Guard Cutter Tarpon (professional rescue organization resource) who immediately began organizing the responding vessels to rescue and escort the lifeboats into the designated landing site.

**AREA FOR IMPROVEMENT:** Conduct regular (yearly) workshops for Masters and licensed officers (non-professional rescue vessels) to improve their skills and knowledge of the International Aeronautical and Maritime Search and Rescue (IAMSAR) volume III, On Scene Coordination duties.



### MIAMI RESCUE COORDINATION CENTER (RCC)

STRENGTH: The Miami Rescue Coordination Center (RCC), who immediately began organizing the responding vessels, designated the Coast Guard Cutter Tarpon as the On Scene Coordinator, and began the rescue and escort of the lifeboats into the designated landing site.

AREA FOR IMPROVEMENT: Establish more effective communications utilizing the vessels SAR cooperation plan and established processes ashore related to the coordination of where those rescued would be taken.

### PINAR DEL RIO (BAHAMAS EXPRESS)

STRENGTH: Master and Chief Mate effectively coordinated the rescue utilizing two (2) U.S. Coast Guard Cutters as the designated On Scene Coordinator (OSC) by assigning a working VHF-FM channel and established the strategy with the cutters to rescue the passengers from the lifeboat.

AREA FOR IMPROVEMENT: Propose a schedule, coordinated by Coast Guard Headquarters Search and Rescue-CG-SAR, Cruise Lines International Association-CLIA and its members, to conduct workshops for Masters and licensed officers to improve their knowledge of the International Aeronautical and Maritime Search and Rescue (IAMSAR) volume III, On Scene Coordination duties. These duties are not normally conducted by Non-Rescue vessels and any opportunity to improve their knowledge will better prepare them for emergency situations.

### SAR MISSION COORDINATION



STRENGTH: U.S. Coast Guard's Marine Information for Safety and Law Enforcement (MISLE) case 631416, created for the exercise, was effectively utilized as the collaborative process by both Sectors Jacksonville - Miami and District Seven and achieved good documentation for all actions taken during the exercise.

## MIAMI RESCUE COORDINATION CENTER

STRENGTH: The most useful link for the common operational picture (COP) was via the Pathfinders Task Force process “Pathfinder Rapid Assessment System” (PRAS). The RCC/OSC communications was via Voice Over Internet Protocol (VOIP) recently added to the suite of communication gear for the U.S. Coast Guard patrol boats. RBDF proved indispensable both for local knowledge and as a relay when other communications links failed.

AREA FOR IMPROVEMENT: The current internal notification process for the U.S. Coast Guard Sectors is ineffective and time consuming. Due to the ***Black Swan***, Sector Jacksonville intends on creating an "internal key personnel notification group page" to create a phone conference room which the watch floor could send out rapidly and would direct all who received the page to call into the conference room. This would also allow watch standers to conduct all other required tasks while the key personnel call into the phone conference room, a roll call could be conducted, and then the Command Duty Officer (CDO) can conduct one brief to all. From this conference call the sector can make the DADSAFE (1-800-323-7233) call for external notification with the key personnel attending the internal phone conference brief.

## LANDING SITE(S)





**STRENGTH:** The Forward Response Team (Norwegian Cruise Line vessel, Norwegian Sky) effectively coordinated with shore based responders to manage the primary landing site according to the local shore side and landing site specific plans developed for the exercise. The development of these coordinated Mass Rescue Operation (MRO) plans for both shore and ship assets quickly permitted a unified command and control team at the landing site to effectively share available resources and skills.



AREA FOR IMPROVEMENT: Standardization of Ship and shore side Mass Rescue Operation (MRO) plans, procedures and planning formats will facilitate the ability of shore and ship organizations to pre-plan operations without regard to company or location. As part of the MRO planning process, the best options for landing sites locations should be jointly identified and pre-planned by Search And Rescue (SAR) agencies, shore-side responders and the cruise industry.

### FAMILY RECEPTION CENTER



STRENGTH: The Care Team (Carnival Cruise Lines) effectively demonstrated a high level of proficiency managing processes and protocols related to the support and management of passengers involved in a maritime casualty event.

AREA FOR IMPROVEMENT: The Badging processing station became "log jammed" which caused passengers to stand in line for a prolonged period (it should be noted that exercise stressed this area) as the sequencing of displaced persons arrivals exceeded the designed processing plans

#### FORT LAUDERDALE-HOLLYWOOD INTERNATIONAL AIRPORT

STRENGTH: The Fort Lauderdale Red Cross was not notified of the exercise until the day before, which was intentionally set by in order to simulate real world processes. The Red Cross successfully supported with an entire team, was fully prepared, highly skilled and knowledgeable, and provided critical support to the Family Reception Center.

AREA FOR IMPROVEMENT: Better coordination between the cruise line and airport Family Reception centers. Communications between all of the involved stakeholders would be required to improve for the friends and family member's coordination.

### MEDICAL SURGE







**STRENGTH:** The opportunity to work with all agencies (Florida Advanced Surgical Transport team) involved in Black Swan was a significant event in our team development. The last minute cancellation of the US Air Force aircraft provided a “real world” need to adapt to changing circumstances, re-configure our set up load plan to three (3) 463L pallets for transport on the U.S. Coast Guard C-130 aircraft, and work with a different group of aviation professionals to execute the mission with limited time for planning.

**AREA FOR IMPROVEMENT:** Develop standardized medical surge patient movements plan for the Opa locka U. S. Coast Guard Air Station that establishes the main patient reception area outside the facility perimeter/flight line to facilitate rapid access to ground ambulance transport.

## RAND MEMORIAL HOSPITAL

STRENGTH: The training provided, contingency plans developed, and planning process established allowed the Hospital to manage and provide trauma care for the passengers and crew of the exercise. Coordination with the non-government/government partners was essential in carrying out the Black Swan Exercise, and for future mass casualty.

AREA FOR IMPROVEMENT: Continue the coordination with non-government/government partners it is essential to carry out any future mass casualty incidents. Build a memorandum of understanding between the USA and the Bahamas to continue the relationships that can help to mitigate any mass rescue or casualty disaster in the Bahamas.

## VETERANS HOSPITAL MIAMI

STRENGTH: Overall, the exercise was very successful. The Miami Veterans Administration Hospital Service (VAHS) Patient Reception Team (PRT) responded promptly to establish the Patient Reception Area (PRA) at the USCG Miami Air Station.

AREA FOR IMPROVEMENT: The use of handheld scanners (EM Track System) to keep track of the patient at the (PRA) was a big improvement during the exercise.

## JACKSON MEMORIAL HOSPITAL MIAMI

STRENGTH: Overall, the Black Swan MCI Exercise was successful. Participants of the exercise and those who attended the post-exercise “Hotwash” debriefing meeting stated that the exercise gave them clarity of their defined roles and responsibilities during EOP activation and how it would be applied in response to a real MCI emergency.

AREA FOR IMPROVEMENT: Communication ability between responding hospital departments using hand-held two-way emergency radios was lacking interoperability in some locations. Although there have been significant improvements with radio equipment, a few areas lacked a sufficient signal to transmit and receive.

## MEDIA



**STRENGTH:** There was very strong inter-agency collaboration among the U.S. Coast Guard, the Bahamian authorities and the cruise industry on the development and execution of a communications plan during the exercise. The exercise also helped build relationships among the communicators. So, for example, Cruise Lines International Association's (CLIA) public affairs organization is better positioned to handle a crisis that might occur in the Bahamas on account of the networking and relationship building that took place leading up to and during the exercise



AREA FOR IMPROVEMENT: Recommend developing a simulated public affairs program to be implemented with our stakeholders where we simulate events that deal with the media, concerned citizens, stakeholders, and politicians during the exercise. To accomplish this in future exercises the Joint Information Center (JIC) should be activated and provide the Unified Command members with actual talking points, press releases, mock media briefings, etc. Also recommend developing standardized evaluation criteria to ensure exercise players understand what will be tested and evaluated, from a public affairs stand point, during the exercise.

### GRAND BAHAMA DISASTER COMMITTEE EOC, FREEPORT BAHAMAS



**STRENGTH:** Multiple agencies represented at the Emergency Operation Center (EOC) allowed for effective interagency cooperation and employed “right” size staffing processes in response to the Mass Rescue Operation.

**AREA FOR IMPROVEMENT:** The Emergency Operation Center (EOC) focus should be on working together as a team and understanding their role as support and coordinating of asset. Train their members in policy and methodologies in supporting the Incident Command Post (ICP) and established Incident Command System (ICS) structure.

#### URBAN RENEWAL 2.0, BAHAMAS-TEMPORARY SHELTER



**STRENGTH:** The opportunity to activate the temporary shelter before an emergency to validate our preparedness in caring for displaced personnel in times of need. As quoted by the facility manager, "What a great learning experience the whole exercise was! I am happy that my country and team had the chance to be a part of which may very well be a once in a lifetime opportunity to work with all of those professionals in such an important exercise".

**AREA FOR IMPROVEMENT:** Develop a communications plan for the temporary shelter(s) that provides multiple channels to communicate with internal and external agencies.

## CUSTOMS AND BORDER PROTECTION/US EMBASSY



## CUSTOMS AND BORDER PROTECTION (CBP) FREEPORT AIRPORT

STRENGTH: Agency processes and protocols were effectively applied given the nature of the elevated numbers of individuals being processed.

Note: The processes and protocols were tested and validated with the processing of the 2224 Grandeur of the Seas passengers returning to Baltimore, MD, May 28 2013.

AREA FOR IMPROVEMENT: Movement of airport employees throughout the secured areas. During exercise play, most people were already located in the areas that they needed to be. This may not be the case during an emergency and other airport employees could possibly need our assistance to facilitate their movement, so as not to get caught up in all the passenger traffic. Ideally processes should be created to facilitate travel within the facility while keeping in mind the importance of security.

## U.S. EMBASSY NASSAU

STRENGTH: The Consular staff at Embassy Nassau effectively and efficiently applied the theories and policies found in Foreign Affairs Manual, section 1800 and the Emergency Action Plan in a no-fault environment under careful observation and evaluation of a consular crisis management subject matter expert. This unique opportunity resulted in an honest assessment by Embassy Nassau and Office of Citizens Services (OCS)/Consular Crisis Management (CCM) of existing consular crisis management guidance documents and policies and their practical deployment in the event of a crisis.

AREA FOR IMPROVEMENT: Improve staff knowledge of the Emergency Action Plan, guidance for assisting third country nationals, and guidance to consular staff responding at the primary focal point of the disaster.

## **DISTRESS MATRIX WORKSHOP**

STRENGTH: The Global Maritime Distress and Safety System (GMDSS) decision matrix collaboratively brought together Master's from different maritime trades to openly discuss using the decision matrix, i.e. cruise ships, fast ferry's, cargo, and tank ships, to make an initial call to any rescue service. Open discussions with no retribution provided a forum allowing the masters to discuss between peers the "when and why" they would make a call to notify a rescue agency of their position and status without a declared emergency.

AREA FOR IMPROVEMENT: The need to provide similar forums or workshop (yearly) for peers that normally do not work together, i.e. masters of different types of vessels, aircraft pilots from different companies, and rescue services responders. This builds professional relationships and experience between peers which provides the opportunity to improve preparedness for mass rescue operation incidents.



## “ACTORS” PARTICIPANTS



STRENGTH: Effective coordination sustained over five days between the actor coordinators and logistics to ensure exercise processed for each stage, as well as considerations for food and transportation was as seamless (including mobilization and demobilization). Success was no injuries or mishaps and maintaining 100% accountability.



AREA FOR IMPROVEMENT: The need for strong leadership and communications is essential during an exercise and ensures effective command and control of the actors at all times. The potential for actors to get off track exists and potentially could result in injuries or mishaps, the loss of accountability, and the exercise objectives not being achieved.

### U.S. COAST GUARD AUXILIARY MASS RESCUE OPERATION SPECIALIST (AMROS)



STRENGTH: A pilot program within the Seventh Coast Guard District; members were fully utilized to coordinate and provide a good span and control for the volunteer “actors”. AMROS member involvement provided an outstanding operational MRO experience while better understanding critical functions required to successfully managing a mass rescue operation.

AREA FOR IMPROVEMENT: Continue to implement and train the Auxiliary Mass Rescue Operation Specialist in their selected areas of interest and establish the necessary Performance Qualification Standards (PQS) to further the program for the Seven Coast Guard District Auxiliary and U.S. Coast Guard.

## SAFETY



**STRENGTH:** Extensive planning, site visits to the ship and Bahamas, and great coverage at all the moving parts, with *no* injuries and *no* mishaps or near misses. (See attached Site Safety Plan)

**AREA FOR IMPROVEMENT:** Safety *communications* network was unreliable and needs to be improved. Simply establishing an internationally accepted communication plan that could be used by any country, transportation provider, rescue agency would go a long way towards maximizing lives saved, reducing the risk to the responders of the incident, coordination of safety objectives to provide effective and efficient mitigation processes for any disaster whether manmade or natural.

## UNIFIED COMMAND



### ROYAL CARIBBEAN CRUISE LINE CRISIS CENTER

**STRENGTH:** Royal Caribbean Cruise Lines had the staffing, expertise and methodologies to respond to a mass rescue situation/major incident. Although not using Incident Command System, any assigned liaison officer could have easily fit into their organization.

**AREA FOR IMPROVEMENT:** Executives for the Coast Guard, Cruise Industry, and International Government stakeholder should meet to discuss establishing a liaison officer exchange program to improve communications and coordination between the effected stakeholders. The program should include training that includes understanding each other's roles, responsibilities, capabilities, and planned response.

### FREEPORT UNIFIED COMMAND

**STRENGTH:** The networking efforts and interaction of the Unified Command (UC) members themselves was positive.

**AREA FOR IMPROVEMENT:** Continue to improve the partnership through an interoperability training program between the U.S. Coast Guard, CLIA members, and the Bahamian government in the roles and responsibilities and relationships of response and support partners for the unified command organization.



## VIRTUAL COMMAND

**STRENGTH:** The “virtual command post” process was accomplished by the Situation Unit and the Pathfinders Task Force process “Pathfinder Rapid Assessment System” (PRAS). In real time, the system transmitted a total of more than 2,150 time/date stamped and geocoded forms with pictures from responders in the field directly to the Incident Command Post (ICP). The Bahamian Emergency Operation Center, other agencies, and stakeholders were then able to view Black Swan Exercise data, “virtual command process” in near real time via a secure, web-portal created by Pathfinders Task Force.

**AREA FOR IMPROVEMENT:** Consider developing a standardized process and definition for “virtual command” that could be shared between all rescue agencies, cruise lines, and international governments to allow immediate collaborative situational awareness for any involved entity with a mass rescue situation.

## OBSERVER PROGRAM



STRENGTH: Effectively provided a networking opportunity for Observers/Executives, along with a venue to discuss the numerous Mass Rescue Operation processes exercised during the Black Swan and their own organization processes and protocols.

AREA FOR IMPROVEMENT: A defined sponsor to more effectively manages and provides a closer involvement to observe processes during the Abandon Ship phase on board the ship (i.e. movement of crew & passengers).

**Best Practices** The most prominent *Best Practices* are depicted below. Comprehensive listings of Best Practices are located in the ***Black Swan*** After Action Report (AAR).

The ***Black Swan***'s accomplishment is a testament to the best practice in partnerships, sustained commitments and contributions of all of the stakeholders.

The Pathfinder field reports (Situational Awareness) and mobile technology were recognized by the U.S. Coast Guard as a best practice. The suite of applications included representative and real time pictures, a triage spreadsheet and a geo-coded map view tracking patient movement from embarkation, abandoning ship, lifeboat, landing site, and through the Family Reception Center. The Miami Rescue Coordination Center (Coast Guard Command Center Miami) indicated the Pathfinder situational awareness as outstanding.

Any exercise with an "observer program" should identify a sponsor for the program as a best practice to provide the necessary funding, facilities and logistic support for those members attending. Most foreign, national, state, county, and local agencies do not have to means or authorities to provide this level of care to achieve to objective of providing the observers the opportunity to truly see, understand the actions being taken, and to discuss the elements observed and the application to their agency's mass rescue or mass casualty contingency plans.

**Consideration** The most prominent consideration for *recommendations* are depicted below. Comprehensive listings of recommendations are located in the ***Black Swan*** After Action Report (AAR).

***Training and Workshops:*** Continuing providing joint Incident Command System and Emergency Operation Center training and workshops to develop the necessary safety and Mass Rescue Operation emergency processes (Roles & Responsibilities, application & implementation, and Relationships). Develop a coordinated exercise program to validate existing contingency

plans that deal with manmade or natural incidents. This will greatly improve passenger and crew safety, preparedness in emergency management, communication expectations and realities for future incidents that involve Mass Rescue Operations.

*Note: The Seventh Coast Guard District area of responsibility includes the Caribbean and Bahamas waters as the leading cruising destination for passengers or 33.7 percent of the world cruise destination. Implementing a proactive relationship between the U.S. Coast Guard, Cruise Line International Association (CLIA) members, and all of the Bahamas Islands and Caribbean nations will improve mass rescue or mass casualty contingency planning and will greatly improve the areas overall preparedness. Thus improving the safety and security of the responders as well as maximizing the protection and safe welfare of the passengers will become the standard for mass rescue operations throughout the world.*

**Standardization:** Development of standard near shore MRO processes and related Contingency Plans. Shore side response agencies should evaluate the development of corresponding operational MRO plans that enhance response coordination with the cruise industry. As part of the MRO planning, the best options for landing sites locations should be jointly identified and pre-planned by shore and industry responders.

**Forward Response Team:** Develop a standard concept for a Forward Response Team for management of a landing site(s) nationally and internationally. The concept would establish standardization that can be applied across the board for any incident land or maritime based worldwide. All Forward Response Teams members should be first aid trained to assist/supplement company and local medical teams as required. Utilization of vests to identify functions is important for rapid coordination of ship and land side responders.

**Accountability:** Explore the development of a worldwide cruise industry evacuee accountability tracking system that could be standardized throughout the industry for both manual and technology based systems.

**Data Base:** Explore the benefit of developing a data base of preferred landing sites for major cruise regions that could be accessed by existing SAR data providers. The data base should include location, ownership, access, and basic design. Utilize existing guidance documents and assistance from U.S. Coast Guard Passenger Vessel Safety Specialist program in development of standardized company plans/processes.

## Black Swan Overview



**Exercise  
Purpose and  
Scope**

Black Swan was a joint offshore emergency exercise coordinated by the Bahamian government, the U.S. Coast Guard, the cruise line industry, and emergency response teams to test and evaluate safety procedures at sea.

The exercise is "Dedicated to the preparedness agencies, specialists, and emergency responders around the world who face danger to save lives, property, and our environment during catastrophic low probability high consequence incidents through sharing best practices, lessons learned, and improving our emergency processes."

Why Black Swan? Black Swans are events described by Nassim N. Taleb in the book, *The Black Swan*, where he regards almost all major scientific discoveries, historical events, and artistic accomplishments as "black swans" — undirected and unpredicted. Events that can and often do change the course of history (e.g., Titanic sinking, Exxon Valdez, etc).

The three-day exercise, designed to better understand each agencies' capabilities and concerns during a maritime mass rescue event. Observers included representatives from national and international governments and non-governmental organizations, foundations, and other entities; some of these are highlighted below.

- National Transportation Safety Board (NTSB)
- United States Department of State (DoS)
- United States Government Accounting Office (GAO)
- Grand Bahamas Port Authority, Central Government
- Bahamas Maritime Authority
- British Consulate General in Miami
- Canadian Embassy in Jamaica
- Jamaica Search and Rescue
- Australian High Commission & Maritime Safety
- Port of Spain
- Norway Maritime Search and Rescue
- New Zealand Search and Rescue
- Finland Boarder Guard Executive Fire Office
- Helsinki Finland University EMS Director, Nautical & Port Operations
- Cruise Lines International Association (CLIA) members
- European Maritime Safety Agency
- Grand Bahama Port Authority
- International Maritime Organization
- International Maritime Rescue Foundation
- Mediterranean Shipping Cruises
- Turks and Caicos (various Ministries and Departments).

This was the inaugural "Black Swan" as part of a series of Mass Rescue Operations based exercises for the U.S. Coast Guard designed to educate and prepare participants for a potential catastrophic event(s) involving a mass rescue operations at sea.



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**Operational  
Data**

The Full-Scale Exercise allowed a consortium of maritime and land based assets to operationally deploy.

U.S. Coast Guard crews involved in the exercise included members aboard the U.S. Coast Guard Cutters Joshua Appleby, Tarpon and Diamondback. Crewmembers from the Bahamas Air Sea Rescue Association (BASRA) and Officers of the Royal Bahamas Police and Defense Force (RBPF/RBDF).

Cruise line assets involved in the exercise were Royal Caribbean Monarch of the Sea and Norwegian Sky, both of which were utilized for an evacuation process of passengers and tendering to port. Carnival Cruise Line provided family guest care facilities (Reception Center) and Norwegian Cruise Lines provided a landing site forward team, tender craft to secondary rescue (Lucayan Harbor) and their Care team to transfer the passengers from the landing site to the Family Reception Center. Celebration Cruise Line and Balearia Bahamas Express provided logistical and evacuation support for the exercise.

During a Mass Rescue Operation, the “designated landing site” is the secure shore side location where rescue craft disembark evacuated passengers and crew, and where local emergency services and accountability procedures are initiated. A landing site enables all shore side support resources to be consolidated at one location reducing overhead requirements. Multiple sites require more people and supplies – both of which are normally in short supply during a crisis. The Grand Bahama Yacht Club was identified as the primary landing site to land the survival craft from the Monarch of the Seas. It also provided a secure location away from the tourist visiting Grand Bahama. The dock provided a sheltered location, open space to conduct accountability, triage, and immigration services for the displaced passengers. Transportation (under police escort) was provided from the landing site to either the hospital for medical assistance or to the Family Reception Center located at the Grand Lucayan Hotel.

The Lucayan Harbor (Freeport Harbor Docks) was designated as the secondary landing site. However, when multiple landing sites are required. Each site must be established, supported and managed to meet the response functions expected. Considerations to geographic location, number of evacuees, dock size or arrangement, rescue vessel mooring limitations, or any number of other reasons must be taken into account.

Note: The observation was made that the primary landing site (Grand Bahama Yacht Club) would not accommodate a large number of passengers due to its limited waterside space. The secondary site proved to be more effective.

**Location of Operations**

Waterborne operations at Grand Bahama Island. Search and Rescue Coordination by Miami RCC with participation from U.S. Coast Guard Sectors Miami and Sector Jacksonville, Florida. Command and Control was centralized at the ICP Lucayan Harbor and Emergency Operation Center, Freeport City, Grand Bahama Island.

Specific locations and venues for the Black Swan full-scale exercise included the following:

- Monarch of the Seas, Cruise Ship-Abandon Ship (Primary)
- Norwegian Sky, Cruise Ship (Tender-Abandon Ship-Forward Team-Primary/Secondary)
- Balearia Fast Ferry-Abandon Ship (Secondary)
- Unified Command/ICP-Lucayan Harbor, Port Authority, Grand Bahama
- Fort Lauderdale-Hollywood International Airport, FL
- Opa-Locka Airport- U.S. Coast Guard Air Station, FL
- Veterans Affairs Hospital, Miami FL
- Jackson Memorial Hospital, Miami FL
- Jacksonville Command Center, Sector Jacksonville, FL
- Miami Rescue Coordination (RCC)
- Landing Site (1)-Grand Bahamas Yacht Club, Bell Channel
- Landing Site (2) Lucayan Harbor Freeport-Port Authority
- Family Reception Center; Grand Lucayan Hotel
- Customs & Border Protection-Airport
- US Embassy, Consulate Processing-Freeport International Airport
- FAST Critical Care & Transportation-Freeport International Airport, Opa Locka Miami Airport, USA
- SMRT-7 (Florida State Medical Response Team-SMRT), Opa Locka Miami Airport, USA
- Rand Memorial Hospital and Island Clinics-Grand Bahama Island
- National Emergency Management Agency (NEMA)-Nassau Bahama
- Grand Bahamas Disaster Committees- Emergency Operations Center
- Bahamas Customs and Immigrations-Grand Bahama Island
- Sir Jack Hayward “Wildcats” High School- Temporary Shelter, Grand Bahama Island

## **Participating Agencies**

- USCG Headquarters, Atlantic Area, & District Seven
- USCG Cruise Ship Center of Expertise
- USCG Research and Development Center
- USCG Communications Area Master Station Atlantic/Pacific
- USCG Sectors Miami & Jacksonville
- USCG Air Stations Opa Locka & Clearwater, HH-65, HC-144/130
- USCG District Seven Auxiliary members
- USCG Cutters, Joshua Appleby, Tarpon, and Diamondback
- USCG Liaison Officer Bahamas, Turks & Cacaos
- USCG Reserves
- US Department of State, Embassy Nassau & Consulate staffs
- US Department of Defense & Volunteers
- United States Air Force Reserves & Aeromedical Evacuation Branch
- Operation Bahamas, Turks and Caicos
- Pathfinders Task Force
- Cruise Line International Association
- Royal Caribbean Cruise Lines
- Monarch of the Seas
- Norwegian Cruise Line-Forward & Care Teams
- Norwegian Sky
- Carnival Cruise Lines-Carnival Care Team
- Pullmantur Cruise Lines
- Disney Cruise Line
- Crystal Cruise Line
- Family Assistance Foundation
- MCA Falmouth
- Celebration Cruise Line
- Bahamas Celebration
- Balearia Bahamas Express (Pinar Del Rio)
- AMVER
- NOAA
- NEMA, RBPF, RBDF, BASRA, Disaster EOC Committees
- Rand Memorial Hospital, EMS, and Private Transport services
- High Seas Radio
- Port Authority-Shipping Agents
- International Red Cross
- Salvation Army Grand Bahama Island
- Florida Advanced Surgical Transportation Team
- British Consulate, Overseas Territories Directorate
- Grand Lucayan Hotel, Freeport
- Bahamians-Customs, Immigrations, and Border Protection
- Fort Lauderdale Airport-Jet Blue, TSA, American Airlines, Broward County Chapter Red Cross

## Exercise Artificialities and Limitations

The Design Team maintained realism while maximizing operational training opportunities for participants. Participants were made aware of associated “artificialities” and were advised to consider potential scenario and real world implications when responding to the event.

Agencies, departments and organizations not participating were simulated through the use of a Simulation Cell (SIMCELL). Representation of those non-participating agencies was simulated with subject matter experts able to provide guidance and direction related policies, procedures and doctrine.


Waterborne assets from the USCG and Bahamas were prepositioned in the area the day of the exercise.

Safety was the primary concern with the on-water transfer of people and the deployment of the lifeboats and liferaft.

## Master Scenario Events List (MSEL)

The Master Scenario Events List was the exercise “flow rate”. The Black Swan exercise did not use a scenario to drive each element exercised. The exercise was based on existing processes. Each of the 15 elements exercised was scheduled to interact through the MSEL schedule. Assigned exercise design team members coordinated and monitored their element once the exercise began. The exercise directors acted as the SIMCELL by following the MSELs listed, checking with each element coordinator, and monitoring the “flow” of each element. To maintain coordination, the progress was communicated to the next scheduled element coordinator, and to ensure the connectivity throughout the exercise period.

## BLACK SWAN 2013



DL=Design & Logistics

FSE= Full Scale Exercise

M=Design Team Planning Milestone

D=Design Team Deliverable

EA=Expected Action

K=Key Event

Updates

MASTER SCENARIO EVENTS LIST (MSEL)

INSTRUCTIONAL GUIDE:

The Master Scenario Events List (MSEL) is a chronological timeline of design and planning milestones, logistics requirements, expected actions and scripted events designed specifically to support geographically dispersed organizations and a wide variety of functional areas in a collaborative data-sharing environment. The MSEL aids the Senior Controller to manage the ebb and flow of the exercise and is the primary tracking and management tool which the control team employs to ensure stakeholder objectives are achieved. The document supports lessons learned development and data gathering during post exercise operations. *The MSEL is not intended for audiences beyond the core design and control team.*

#	Date	Time	Event Type	Method	From	To	Event	Expected Action	Special Instructions	POC	Status
Pre-Exercise Design & Planning											
1	4/6	N/A	DL	N/A	N/A	N/A	Request CIA Membership Participation	N/A	N/A	Paul Culver	Completed
2	4/25	N/A	DL	N/A	N/A	N/A	SMC Workshops/CCL/D7 RCC Visit	N/A	N/A	Paul Culver	Completed
3	5/1	N/A	DL	N/A	N/A	N/A	FORCECOM: Exercise Support Team (EST) Requested	N/A	N/A	Paul Culver	Completed
4	5/2	N/A	DL	Phone Email	N/A	N/A	EST Team Lead Contact UEPTL and Review Exercise Scope/EST Contract/Expectations	N/A	N/A	Jesse Rangle	Completed
5	5/13	N/A	DL	N/A	N/A	N/A	Exercise Support Team Contract Reviewed & Signed	N/A	N/A	Jesse Rangle Paul Culver	Completed

Legend: DL= Exercise Design Logistics, FSE=Full Scale Exercise, M=Design Team Planning Milestone, D=Design Team Deliverable, EA=Expected Action, K=Key Event

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