

**Civil/Military Cooperation and Coordination Seminar  
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**Flexible use of airspace  
for Search and Rescue**

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| ICAO

UNITING AVIATION

# Lessons learned from recent events in Aviation

*SAR-GMDSS REGIONAL CONFERENCE  
Manama, Bahrain, 21 and 22 October 2014*





## 3 events

Air France AF 447

June 2009

Malaysian Airlines MH 370

March 2014

Malaysian Airlines MH 17

July 2014





	<b>START OF SEARCH</b>	<b>LOCATION OF WRECKAGE</b>
<b>AF447</b>	<b>8H50 AFTER EVENT</b>	<b>6,5 NM FROM LAST KNOWN POSITION</b>
<b>MH370</b>	<b>SHORTLY AFTER EVENT</b>	<b>UNKNOWN</b>
<b>MH17</b>	<b>4H00 AFTER EVENT</b>	<b>DONETSK</b>





	<b>SAR ISSUES</b>	<b>RECOMMENDATIONS</b>
<b>AF447</b>	<b>NO SAR COORD PLAN BETWEEN BRAZIL AND SENEGAL</b>	<b>90 DAY ULB BATTERIES AIRBORNE ACTTIVATION OF ELT MANDATORY USE CPDLC/ADS-C TRIGGERED TRANS OF DATA DRIFT BUOYS ON ALL SAR A/C</b>
<b>MH370</b>	<b>COORDINATION DEALING WITH MEDIA LONG-TERM SEARCH RESCUE OR RECOVERY</b>	<b>FLIGHT TRACKING CIVIL/MIL COOPERATION PLAN FIR/SRR BOUNDARIES</b>
<b>MH17</b>	<b>CRASH IN CONFLICT AREA</b>	<b>PROCEDURES/RULES FOR FLIGHTS OVER CONFLIT AREA</b>



## Lessons learned:

- Media relations
- SAR exercise involving all stakeholders
- Civil/Military coordination



## Special ICAO Meetings in May 2014

- Briefing to ICAO Council May 2014
  - ‘Progress Since 2009 and the Work Ahead’
    - ICAO HQ ongoing effort to improve “Provision of timely and adequate SAR services”
- ICAO HQ Special Meeting on Global Flight Tracking
  - ICAO should increase its resources allocated to Search and Rescue in order to improve the effectiveness across national and regional boundaries.

# Search and Rescue Region (SRR)

- The military often provides SAR response for a State and the military often strongly influences the use of airspace, including over SAR regions.
- SRR defined by IMO and ICAO conventions.
- National airspace (over territorial land and territorial sea) is a national SRR.
- Flight information region (basis for aeronautical SRR) and maritime SRRs beyond the territorial sea.



# ICAO/IMO Joint Working Group on SAR

- September 2014, the ICAO/IMO JWG on SAR recommended that IMO and ICAO adopt a new term regarding airspace:

“Area of SAR action: An area of defined dimensions that is established, notified or agreed for the purposes of protecting aircraft during SAR operations and within which SAR operations take place.”

- IMO and ICAO will decide upon this in 2015; and, new guidance will be published.

# Flexible Use of Airspace for SAR

- Many States already use the concept of “Area of SAR action” for safety of flight in search areas.
- Need close collaboration with national Civil Aviation Authority in advance of SAR operations.
- SAR Mission Coordinator (or other SAR operations point of contact) would request local air traffic service to declare a temporary area for special consideration of safety of flight operations (Notice to Airmen NOTAM)).

# Flexible Use of Airspace for SAR

- The area is typically defined by:
  1. Position (or a set of four coordinates to form a box)
  2. Radius in nautical miles from the position
  3. Up to an altitude of “xxxx” feet
- The organization requesting the special area would be responsible to manage the entry and exit of aircraft.
- For international and oceanic airspace, entry cannot be denied so the goal is to manage it.
- Search operations can be conducted safely and aircraft not involved in SAR operations are informed that a temporary event is in progress.



Incidents such as AF 447 and MH 370 can and will happen to any State.

The handling of the search and rescue response and the impression it makes upon the world is all up to You.

Steps that can help include:

- Clear understanding of Civil/Military cooperation and coordination nationally and internationally.
- National SAR Committee.
- Finalize search and rescue agreements - Multilateral or bilateral.