



National Search And Rescue Committee

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Department of Defense
Department of Interior
Department of Commerce
Department of Transportation
Department of Homeland Security
Federal Communications Commission
National Aeronautics and Space Administration

MINUTES

Regular Session 2-07
June 28, 2007
U. S. Coast Guard Headquarters
Washington, DC 20593-0001

RDML Wayne Justice, Chair, welcomed all present (see enclosure (1)). He stated that the National SAR Plan (NSP) and Committee Agreement were in route for signature. He remarked about the good progress underway on the National SAR Supplement. He informed the Committee that a revised National Response Framework (NRF) had just been provided to Agency Heads to review. He also noted that Coast Guard Headquarters is restructuring to align better with DOD, and that the Coast Guard is installing 406 MHz direction finders aboard its aircraft.

The Minutes of the last Regular Session of January 18, 2007, were approved.

1. WORKING GROUP REPORTS.

- a. *R&D Working Group.* Mr. Roy Dreibelbis (CSC) reported as follows on behalf of Mr. Dave Affens (NASA), who chairs the Group:
 - (1) Distress Alerting Satellite System (DASS): Seven DASS repeaters are in orbit, and being used to conduct the NASA-funded DASS proof of concept. The DASS concept of operations is complete, and the next key step is for the Air Force to accept the baseline requirements to include DASS in the Global Positioning System (GPS). Russia has indicated that it hopes to equip GLONASS middle Earth orbit (MEO) satellites for SAR.
 - (2) Mr. Ajay Mehta (NOAA) indicated that the Coast Guard had committed to providing its part of the ground system funding, and that a MEOSAR Local User Terminal site had been selected in Hawaii. The statement of work is finished; anticipate LUT construction contract award in 4th Quarter, FY08.
 - (3) Mr. Mehta reviewed the space segment plans for the Cospas-Sarsat low Earth orbit (LEO), geostationary (GEO), and MEO systems. He emphasized that DASS will likely be unable to fly on the initial GPS Block III satellites, which means it may be 2016 or later before DASS repeaters will be launched.

- (4) There are doubts about whether Russia will be able to equip GLONASS for MEOSAR during its planned 2008-2020 launches. In addition, Galileo needs to obtain public funding to be able to launch 406 MHz repeaters. Even if all current schedules are achieved, Cospas-Sarsat will likely fall below full coverage from about 2017 to 2020; this situation could be seriously exacerbated by any delays beyond 2016 of availability of DASS satellites. Uncertainties with GLONASS and Galileo make resolution of U.S. commitments to carry DASS equipment on GPS critical. In addition, the U.S. needs to respond soon to Canada's pending offer to provide the DASS satellite equipment; and to do that, the GPS requirement to include DASS must be resolved.
 - (5) Processing of 121.5 MHz signals will necessarily terminate in 2009; the only processing after that will be for 406 MHz.
 - (6) Mr. Mehta requested senior level support from the NSARC Member Agencies for DASS payloads to be flown on the GPS Block III-B satellites. The Committee concurred with a proposal from the Chair to prepare appropriate NSARC correspondence supporting a timely requirement to include DASS aboard GPS satellites launched from 2016. In addition, the Committee requested that DOD/DPMO and DOT/FAA advocate this via their representatives to the PNT Executive Committee which is scheduled to convene in August.
 - (7) Search Planning: Mr. Dreibelbis reported progress on a NASA project to examine whether NASA Goddard SAR Lab capabilities might be useful to enhance search planning. Some potential benefits would be 3D displays, environment observations, and weather and terrain overlays; each of these could help determine "areas of highest probability." This tool could incorporate the new Java World Wind capabilities. If successful, the system could eventually be used for land and maritime SAR cases.
- b. *Mass Rescue Working Group (MRWG)*. Mr. Dann Karlson (USCG) reported that about 30 persons had participated in the last MRWG meeting convened at the Naval Research Lab. The Group discussed input on mass rescue operations (MROs) for the Committee's National SAR Supplement (NSS) rewrite. Continuation of that work had led to the idea of developing an NSS Addendum on SAR associated with Incidents of National Significance (INSSs). The Group has also been discussing passenger vessel safety, including recent SAR cases involving passenger ships. Coast Guard Sector San Juan will be hosting an exercise that will emphasize passenger accountability during evacuation and rescue operations. The MRWG is expected to meet again in August.
 - c. *121.5 MHz Beacon Phase-out Working Group*. Mr. Al Knox (USAF) reported that Radio Technical Commission for Maritime Services (RTCM), in cooperation with the Radio Technical Commission for Aeronautics (RTCA), had considered whether a personal locator beacon (PLB) standard could be developed that would be especially suitable for use in aircraft, but had concluded that the current standard already seemed to provide PLBs suitable for use by aviators. To promote use of 406 MHz beacons by the aviation community, NOAA and the Air Force had been participating in all the annual fly-ins, some of which are sponsored by the Aircraft Owners and Pilots Association (AOPA). U.S. non-compliance with International Civil Aviation Organization (ICAO) Annexes 6

and 10 provisions on 406 MHz ELTs has caught the attention of senior FAA officials due to U.S. preparations for an audit by ICAO scheduled for the week of November 5th.

2. TASK FORCE REPORTS:

- a. *Universal Safety Oversight Audit Program (USOAP) Task Force.* Mr. Dann Karlson (USCG) elaborated on the ICAO audit, known as the Universal Safety Oversight Audit Program (USOAP). ICAO's Annex 12 concerns aeronautical SAR requirements; as a result, the Air Force and Coast Guard have been assisting the FAA to prepare the Annex 12 portion of the audit. Mr. Karlson reported that the U.S. appears to be 100% compliant with all Annex 12 requirements. However, the U.S. has a "difference" filed with ICAO on the Annex 6 and 10 provisions on 406 MHz ELTs; while these provisions apply only to equipment carried on international flights, the FAA is considering whether it should make any changes in this area.
- b. *National SAR Supplement (NSS) Task Force.* The Committee at its last meeting approved establishment of this Task Force to begin updating the NSS. The Task Force first met in April, 2007, when it discussed expanding the NSS to cover SAR related to the scope of the National Response Plan (NRP); USNORTHCOM has been leading this part of the work. One issue being resolved is which georeferencing system to use during response efforts; the NSS will document a georeferencing policy statement. The next Task Force meeting is expected to occur in July 2007.

3. NATIONAL SAR PLAN (NSP) AND NSARC AGREEMENT.

- a. At its last meeting, the Committee had approved submitting the NSP and the Committee Agreement to the NSARC Member Agencies for signatures. The Secretary stated that the Heads of five of the Member Agencies had signed the documents. He offered to assist the remaining Agencies in any way to complete this work.
- b. The Secretary is developing an NSARC Policy and Procedures Manual as directed by the Committee at its last meeting. An initial draft was distributed and *the Secretary invited the Committee to provide comments on this draft so it could be further revised prior to the Committee's next meeting.*

4. TEMPORARY FLIGHT RESTRICTIONS (TFRs).

- a. Mr. Mike McCormick (FAA), who is involved with FAA's response to security incidents and supports FEMA during Catastrophic Incidents, informed the Committee about TFRs established by the FAA within U.S. sovereign airspace for safety and security. TFRs are normally established via text messages known as Notices to Airmen (NOTAMs). Each TFR identifies its issuing authority. Title 14 of the Code of Federal Regulations provides for various types of TFRs, which usually describe the restricted space at a particular location in terms of circles or polygons with altitude separation. TFR text indicates its legal authority and provides a point of contact. Factors considered in establishing TFRs include safety, security, economic impact, effect on air traffic services (ATS), and the credibility of related intelligence. The news media are restricted only if their presence would adversely impact operations. TFRs can be used where ATS capability is lost. They are maintained as long as required, but usually for a short duration.

- b. Authorities requiring a TFR be established for disaster response, SAR or law enforcement operations should contact one of FAAs 20 Air Route Traffic Control Centers.
- c. This information will be included in the revision to the National SAR Supplement.

5. NATIONAL ACTIVITIES:

a. *National Association for Search and Rescue (NASAR).*

- (1) Mr. Dan Hourihan (Board of Directors, NASAR External Affairs) reported that NASAR held their bi-annual Board of Director's meeting January 20-21, 2007, in Chantilly, Virginia. Ms. Kathy Miller, Deputy Fire Chief (retired), Orlando, Florida Fire Department, was elected as NASAR president. NASAR will hold their next bi-annual Board of Director's meeting September 15-16, 2007, in Colorado Springs, Colorado.
- (2) The newly edited and updated version of the Managing the Lost Person Incident (MLPI) text is now available. This MLPI text will provide the core material for all future scheduled NASAR MPLI courses. Mr. Hourihan added that NASAR will continue to update this document and encouraged Committee participants to provide input.
- (3) The NASAR 2007 Conference took place in Charlotte, NC, May 31-June 2. On May 30, the Federal/State SAR Coordinators held their annual day long meeting. The meeting was well attended and included a presentation by NSARC Secretary Mr. Rick Button, who provided an overview of efforts underway to revise the National SAR Supplement and development the National SAR Manual. NSARC will work through NASAR with the nation's State SAR Coordinators to develop a Model State SAR Plan for inclusion in this project.
- (4) Mr. Hourihan stated that he received an appointment to the National Sherriff Association (NSA) Special Operations Committee, as an NASAR representative. He noted that this marks the first time a specific SAR individual has been appointed to a NSA committee. NSA plans to promote land search management training for law enforcement personnel and have a voice in the development of a National Mutual Aid System which builds upon the existing Emergency Management Assistance Compact (EMAC).

b. *Radio Technical Commission for Maritime Services (RTCM).*

- (1) Mr. Bob Markle (RTCM) stated that the RTCM Special Committee 110 on Emergency Beacons is nearing completion of its work on improving performance of Personal Locator Beacons (PLBs) in two areas. One is improvement in the standard for testing the 406 MHz signal which is received by Cospas-Sarsat satellites. The strength of the signal from the PLB depends upon the surface on which it is located (the "ground plane"). Performance will vary significantly if the PLB is resting on wet grass, as opposed to dry sand, for example. The Committee has concluded that the worst case occurs when the PLB is not directly on a surface, such as when it is being hand-held. A test has been drafted that will determine the strength of the signal when the PLB is suspended 1 m above a test ground plane. This should ensure that the PLB signal will be adequate under all expected ground plane scenarios.

- (2) The second area of PLB performance being considered is the reliability of position determination in beacons equipped with GPS processors (“location protocol” beacons). Position determination can be compromised when the PLB does not have a wide arc of the sky in view. It is proposed to use a GPS simulator in an environment which models a narrow view of the sky to ensure the best possible performance of location protocol beacons.
- (3) RTCM reported this work to the Cospas-Sarsat Joint Committee meeting in Turkey recently. They hope to have revisions to the RTCM PLB standard completed by the end of the year, when attention will be placed on the EPIRB standard.
- (4) Special Committee 110 met jointly with RTCA Special Committee 204 which is responsible for Emergency Locator Transmitters (ELTs) for aircraft. The agenda concerned carriage of PLBs on aircraft. RTCA had no objection to RTCM’s consideration of the matter. Subsequently RTCM SC 110 concluded that it was not necessary to impose additional standards on PLBs carried on aircraft.
- (5) Special Committee 110 is also going to consider performance standards for GPS processors in VHF handheld radios. The work is closely related to the PLB project, and it responds to a regulatory proposal by the FCC on behalf of the Coast Guard, which proposed requiring Marine VHF handheld radios to include a GPS processor. Any distress message would include the GPS position of the sender. RTCM expects to make recommendations to the Coast Guard and FCC after Special Committee 110 has considered the issues.
- (6) RTCM 2007 annual Assembly Meeting and Conference was held May 6-11, 2007, St Petersburg, Florida. Approximately 200 people attended. The GMDSS Task Force meeting was also held during this conference, as well as NOAA’s very successful Beacon Manufacturers Workshop.

c. *Civil Air Patrol (CAP).*

- (1) Dr. Paul Schuda (CAP) reported that it has already been a very busy year for CAP. CAP has been credited with saving 57 lives so far in FY07 and their main operational season is still ahead. Also, CAP is continuing to upgrade its capabilities but is experiencing a delay in federally-mandated narrowband frequency transition. Some of CAP's nationwide frequency assignments are currently delayed because coordination with Mexico and Canada has not been completed. This will cause delays in fielding the new repeater network. Several of CAP’s repeater sites are located on remote mountain tops and are only accessible a few months of the year, so they will not be able to upgrade those sites until spring-summer 2008. The impact on CAP's customers should be minimal. A waiver has been requested to allow CAP to continue operating on its current frequencies until new assignments are made.
- (2) The ARCHER (hyper-spectral imaging equipment) is aboard more than a dozen aircraft; however, no lives have been saved with it yet; ARCHER is expected to be used more as proficiency is gained.
- (3) About 25% of CAP aircraft are equipped with satellite phones, partly for transmitting digital photos; however, substantial space-segment problems have been experienced.

d. *Global Maritime Distress and Safety System (GMDSS) Task Force.* Mr. Jack Fuecshel (Task Force Director, GMDSS) reported the following highlights of the Task Force meeting held during the RTCM Annual Assembly in St. Petersburg, Florida, on May 10, 2007:

- (1) Approved Report of the ad hoc group on MMSI Policy and Procedures. These ID numbers are in the Automatic Identification System (AIS). This is a major security program adopted by IMO using VHF line-of-sight transmitters but capable of being monitored over long distances via LEO Satellites. AIS will further impact mass SAR operations as the IMO is moving to require an AIS-SART on all survival craft. The MMSI Policy and Procedures Task Force also made the following additional recommendations:
 - (a) Recommended means to eliminate duplicate listings and recycle MMSIs;
 - (b) Recommended a validation program to keep listings up to date;
 - (c) Recommended access to USCG database for registration agents; and
 - (d) Approved new Petition to FCC to implement better MMSI management
- (2) The GMDSS Task Force received an FCC Public Notice inviting comments on waiving rules to permit early approval of Class B AIS. The Task Force plans to make comments by the July 5 deadline.
- (3) The USCG Communications Stations are installing auto-response equipment to handle radio test calls. The Task Force plans to comment on FCC proposed rules on Class B AIS equipment. And the International Maritime Organization (IMO) is considering requirements for fitting of AIS SARTs (SAR radar transponders) in all passenger ship survival craft, which could positively impact MROs.
- (4) The next Task Force meeting will be on August 9, 2007, in Arlington, VA, at the RTCM Headquarters. The follow-on meeting will be October 19, during the NMEA Annual meeting at Amelia Island, Florida.
- (5) *The Chair commented that it may be a major challenge to manage and use all the data that will be collected from AIS equipment.*

6. INTERNATIONAL ACTIVITIES.

- a. Mr. Dave Edwards (USCG) reported on the following activities: The U.S. participated in the NATO SAR Working Panel along with 25 other member nations and 23 nations that participate in the Partnership for Peace.
- b. The IMO Sub-committee on Communications and Search and Rescue (COMSAR), which met in February, worked on amendments to the IAMSAR Manual, and is looking at solutions for non-responsive SAR points of contact (SPOCs) that have been unavailable to handle distress alerts.
- c. The ICAO-IMO Joint SAR Working Group will meet in September, and forward its report and any recommendations to COMSAR; Mr. Edwards and LTCOL Jed Hudson (Air Force Rescue Coordination Center – AFRCC) are U.S. representatives.

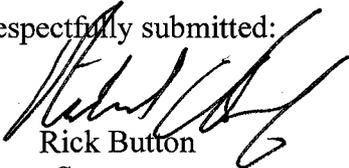
- d. The USCG is planning a SAR Workshop to be held in the Dominican Republic; USSOUTHCOM will help fund this effort.
- e. The Asia-Pacific Air Navigation Planning and Regional Group (APANPIRG) is convening in Bangkok, Thailand, in July 2007, to support regional implementation of ICAO provisions, including provisions of ICAO Annex 12 (SAR) and the IAMSAR Manual.
- f. The U.S., Australia, New Zealand, and French Polynesia will convene a biennial forum on improving SAR for Pacific island nations in Honolulu, Hawaii, in November, 2007.
- g. The State Department is leading international efforts to improve emergency response preparedness in Antarctica and surrounding waters, where there are a number of unique concerns (i.e., dramatic increase in tourism), and where no sovereignty exists.

7. MEMBER AGENCY REPORTS.

- a. *Department of Commerce.* Mr. Mehta reported that Sarsat is supporting about one rescue per day. Cospas-Sarsat will be holding a strategic planning meeting later this year, where it will be important to have ICAO and IMO involved. The next Cospas-Sarsat Council meeting will convene in late October in Washington, DC, coinciding with the 25th anniversary of the first Sarsat rescue; the State Department will host a senior level reception to help celebrate this anniversary, with the first person rescued (from Canada) attending.
- b. *Department of Interior.* Ranger Greg Lawler (NPS) provided an overview of the Park Service SAR services, beginning with its statutory authorization to conduct SAR operations. SAR is one of a multitude of areas of Ranger expertise. The Park Service uses the Incident Command System (ICS) for all types of operations, including SAR, and works in all environments from high elevations to oceans surf on land and water. It often must conduct large-scale searches in remote areas. During 2006, the Park Service handled 3,623 SAR incidents mainly related to, in decreasing order of frequency, hiking, swimming, boating, and climbing.
- c. *Department of Homeland Security.* Mr. Dean Scott (FEMA) indicated that FEMA now supports the use of the Global Area Reference System (GARS) for locating aircraft during SAR operations over a search area, and supports documenting this in the NSS.

8. NEXT MEETING. The Committee scheduled its next General Session for November 15, 2007.

Respectfully submitted:



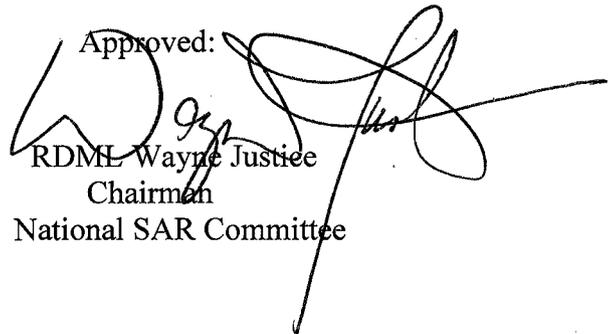
Rick Button
Secretary

National SAR Committee

Date:

Encl: (1) Attendance List

Approved:



RDML Wayne Justice
Chairman

National SAR Committee

ATTENDANCE

NSARC REGULAR SESSION 2-07
JUNE 28, 2007

NAME	AGENCY/ORGANIZATION
RDML WAYNE JUSTICE	USCG
MR. AJAY MEHTA	NOAA
COL JOSEPH SOKOL	USNORTHCOM
MR. DANN KARLSON	USCG
MR. RICHARD BUTTON	USCG
RANGER GREG LAWLER	NPS
MR. DEAN SCOTT	FEMA/US&R
DR. PAUL SCHUDA	CAP
MR. DAN LEMON	CSC/SAR CONSULTING
LTC JED HUDSON	USAF/AFRCC
LTC TUAN TON	OSD/DPMO
MR. DAN HOURIHAN	NASAR
MR. ALLAN KNOX	AFRCC
CAPT SCOTT LAROCHELLE	USCG
LCDR KYLE WEAVER	USNORTHCOM
LCDR BRAD BRENNEMAN	USCG
MR. BILL RUARK	NOAA/SSAI
MR. ROY DREIBELBIS	CSC/NASA
LCDR KATHY NILES	USCG
CAPT JACK FUECHSEL	GMDSS
MR. MICHAEL McCORMICK	FAA/DOT
MR. DAVE EDWARDS	USCG
MS. WILLIE FOSTER	USCG

Enclosure (1)