



The National Search And Rescue Committee

Suite 3106 • 2100 2nd Street SW • Washington DC 20593-0001
Phone: (202) 267-1580 Facsimile: (202) 267-4418

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

MINUTES

Regular Session III-08
November 13, 2008
U. S. Coast Guard Headquarters
Washington, DC 20593-0001

INTRODUCTION

The meeting convened with CAPT David McBride, USCG, as Acting Chair. Enclosure (1) is the list of attendees.

CAPT McBride welcomed everyone and commented with appreciation on the Committee's work.

MINUTES

The Committee approved the minutes of the July 24, 2008 meeting with one correction. In the NASAR report section of the minutes, Mr. Cole Brown should have been identified as a member of the State SAR Coordinating Committee rather than as a member of the NASAR Executive Board, so "Executive Board" was changed to "State SAR Coordinating Committee."

MEMBER AGENCIES

a. Department of Commerce

Mr. Ajay Mehta (NOAA) reported that the Cospas-Sarsat Council had convened in Biarritz, France in October and had been attended by a 130 representatives of 33 countries and four international organizations. The U.S. delegation was comprised of representatives from NOAA, NASA, Air Force and Coast Guard.

2,386 persons had been rescued in 2007 as a result of Cospas-Sarsat, bringing the total at the end of that year to 24,798.

The Council added Eurofins in Germany to the list of beacon type approval facilities.

Cospas-Sarsat has a new Quality Manual to support its Quality Management System, a new RCC Handbook, and a new Strategic Plan with a mission statement and goals that are designed to cover 20 years.

The 406 MHz beacon population is expected to reach 753,000 by the end of 2008. The International Beacon Registration Database (IBRD) contains more than 9,000 registrations.

During 2009, the Closed Council will convene in Moscow in April, the Open Council will convene in Montreal in October, and the Joint Committee will convene in Durban in June. Two Expert Working Groups are also scheduled, one on Performance Indicators in the United States in February, and one on Medium Earth Orbit SAR (MEOSAR) in Montreal in March.

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Mr. Mehta reminded the Committee that NOAA had an implementation plan under which it had been effectively supporting NSARC goals, that it stresses partnerships in parallel with the *National SAR Plan* (NSP), and that MEOSAR implementation is part of its plans.

b. National Aeronautics and Space Administration

Mr. Dave Affens (NASA) reported that NASA had successfully completed its Distress Alerting Satellite System (DASS) proof of concept (POC).

c. Department of Transportation

Mr. Eugene Jiggitts (FAA) stated that he will report on the FAA cost-benefit analysis on general aviation use of 406 MHz emergency locator transmitters (ELTs) at the next NSARC meeting. The study was not yet releasable, but would be emailed to the NSARC Secretary for further distribution as soon as it is finished.

d. Department of Interior

Mr. Dean Ross (NPS) stated that the Park Service plans to have a National SAR Policy signed soon. He added the Park Service has 122 boat crews available to support Emergency Support Function 9 (Search and Rescue) of the *National Response Framework* (NRF).

e. Department of Defense

LCDR Matt Niedzwiecki (OSD/DPMO) reported that a Directive-type Memorandum (DTM) had been signed in October that directed use of 406 MHz beacons within DOD by February 1, 2009. DOD's directive on civil SAR will be rewritten to account for DASS. DOD is strongly committed to supporting catastrophic incident SAR (CIS).

f. Department of Homeland Security

Mr. Scott Dean (FEMA) stated that US&R Task Forces had been deployed several times already during 2008, that the Committee's CIS Addendum had been well received throughout federal and State levels, and that budget shortfalls within States were affecting the Task Forces.

The Secretary reported that a new version of the Coast Guard Addendum was expected to be approved soon. He added that the Commandant, in an effort to improve Coast Guard responsiveness, had established a single Operations Force Command that will be responsible for all Coast Guard districts, and that the PACAREA and LANTAREA commands will be disestablished. The Chair added that LANTAREA may serve as the OFC on an interim basis until about February.

WORKING GROUPS

a. Research and Development

Mr. Affens commented that NASA SAR budget is adequate mainly just to cover studies, and that hardware purchases normally require special funding such as the \$30 million that NASA had provided to support the DASS POC. NASA's MEO local user terminal (MEOLUT) acceptance testing had been completed successfully with only nine GPS satellites carrying SAR equipment. The LUT had performed in accordance with Cospas-Sarsat specifications. Based on this testing, NOAA had also purchased a MEOLUT. NASA is working with the international community to help ensure that enough satellites will be available to conduct the Cospas-Sarsat POC and demonstration and evaluation (D&E).

Mr. Roy Dreibelbis (CSC/NASA) reported that the R&D Working Group is following development of NASA's SAR Visualization Project (SAR VP), which uses World Wind (a NASA application similar to Google Earth) to overlay aircraft radar tracks in an effort to locate downed aircraft. SAR VP shows forward and lateral tracks from a pilot's perspective. Various speeds and altitudes can be simulated. Capability to overlay historical weather information is being developed so that along with radar tracks the highest probable aircraft impact areas can be identified.

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A briefing for the National Transportation Safety Board (NTSB) had been scheduled for the afternoon of the NSARC meeting to discuss how SAR VP could be enhanced to support accident investigations. NASA has assessed over 200 cases to look for trends where aircraft crashed after loss off radar.

Mr. Cole Brown (MD State Police) commented about a recent Maryland State Police helicopter crash on final approach to Andrews Air Force Base. The helicopter was equipped with automatic dependent surveillance-broadcast (ADS-B) equipment, which allowed association of voice commands with 3D flight information to determine the aircraft's position within a tenth of a minute.

Mr. Affens solicited ideas on how SAR VP can best be developed to meet SAR requirements.

b. 121.5 MHz Phase-Out

Mr. Dann Karlson (NOAA) reported that termination of 121.5 MHz processing by satellite was just 80 days away. The process to turn off the satellite relay equipment had been successfully tested. The next satellite launch scheduled for February 4th will not have the 121.5 MHz capability turned on.

The Oshkosh Air Venture, Aviation North Expo, and the AOPA Expo had included SARSAT booths and were very successful. NOAA conducted a mass mailing campaign in September to reach every pilot about the February 1st date.

The FAA will issue a notice to airmen (NOTAM), the Coast Guard will issue a notice to mariners (NTM), and the FCC will issue a public notice about the termination.

Canadian and Mexican requirements to carry 406 MHz ELTs will come into force in 2009, affecting U.S. pilots flying into those airspaces.

In response to a question from Mr. Jiggitts, Mr. Karlson referred to the NOAA SARSAT website for information indicating that only beacon alerts will be affected by the termination, not 121.5 MHz voice communications.

Mr. Mehta said that NOAA would like to work with the FAA to help ensure that pilots monitor 121.5 MHz as a recommended practice in case beacon alerts are transmitted after February 1st.

c. Correspondence

The Secretary reviewed the Group's progress. The CIS Addendum is under review and will have new material and updates based on its use over the past year during a meetings scheduled on December 9-10. States seemed to have appreciated information in the Addendum on what they can actually expect from the federal level. Mr. Brown said that Maryland is using the Addendum as a model for a State-level document.

Emergency Support Function-9 (ESF #9) of the NRF will also be re-written to refine its purpose and account for much that has occurred since Hurricane Katrina. Recommended changes will be provided to FEMA, the lead agency for the FRP with which ESF #9 is associated.

The Legal Addendum has been written and is under review by the Coast Guard's Maritime International Law Office.

NSARC's overarching guidance for implementing the *National Search and Rescue Plan* will be the *National Search and Rescue Manual* (NSM) which will be available for review soon. The Addendums are all associated with the NSM.

Mr. Al Knox (USCG) pointed out that the Transportation Safety Agency and DOD are each working on a SAR plan for the National Capital Region. The Washington, DC area is unique from continuity of operations and inter-state perspectives. A gap analysis is being conducted between the federal and area State plans, which will be harmonized as practicable.

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PRESENTATIONS

a. TWA Flight 800

Dr Paul Schuda (NTSB/CAP) reviewed the TWA Boeing 747 mid-air aircraft explosion at about 14,000 feet altitude on July 17, 1996, after takeoff from JFK Airport in New York on a flight to Rome at about 8:30 PM. NTSB's accident report was adopted in August 2000. The cockpit voice recorder and flight data recorder were recovered, but there were no survivors. The remains of all 230 victims and 95% of the wreckage were recovered from three underwater debris fields covering an area of about 1 ½ x 4 ½ miles formed by the breakup of the plane. The recovery from 20-150 feet of water took about 10 months.

There had been speculation that a bomb may have caused the explosion, but the breakup was determined to be caused by overpressure in a center wing tank caused by ignition of fuel vapors in the tank. Heat flow from air conditioning packs on a hot day may have provided sufficient heat in the tank for the fuel vapors to ignite. There may have also been some voltage transfer between adjacent low and high voltage electrical cables that provided an ignition source.

The reconstructed aircraft is available to see at NTSB's facility in Leesburg, VA.

b. Civil Air Patrol

COL John Swain (CAP) said that CAP began during WWII when volunteers conducted anti-submarine patrols. CAP was incorporated as a non-profit organization under PL 476-1946, is an auxiliary of the Air Force, and flies about 80% of the Air Force Rescue Coordination Center (AFRCC) SAR missions. CAP has 536 single engine aircraft of various types. There are 57,000 members, including 22,000 cadets.

CAP has one wing per State and supports emergency response, homeland security, disaster relief, air defense, law enforcement and special operations missions, largely with operational, logistics and reconnaissance flights. CAP also uses ground teams.

With a strong emphasis on professionalism, CAP uses imaging, communications, direction finding and other technologies to help conduct over 70,000 mission hours annually in support of federal, State and local governments and organizations such as the Red Cross. For this, CAP is reimbursed for fuel. About 80 % of its missions involve flights.

CAP conducts many missions annually in support of the AFRCC for missing persons and aircraft, and typically saves about 100 lives annually.

RELEVANT ACTIVITIES

a. National Association for Search and Rescue (NASAR)

Mr. Dan Hourihan (NASAR) reported that he is working on behalf of NASAR with the National Sheriff's Association (NSA), particularly in the area of improving SAR training. The NSARC Secretary plans to attend an NASAR meeting to discuss NSARC.

NASAR's next Conference will take place in Little Rock, AR, May 28-30, 2009, and will be preceded by a two-day State SAR Coordinator meeting; federal representatives will participate one of these two days.

Mr. Hourihan emphasized that the NSARC liaison position to the NASAR Board meetings is vacant and requested that the Committee assign a representative.

b. National and International Activities

Mr. David Edwards (USCG) informed the Committee about the following past activities:

- August 12-14, 2008, *Antarctic SAR Workshop* hosted by Chile but organized by the five countries with SAR regions encircling Antarctica (Chile, Argentina, South Africa,

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Australia and New Zealand). Three other key countries were invited – France, UK and US. SAR interests were represented by the U.S. Coast Guard (USCG) and the Air National Guard (ANG). The ANG C130 fleet is highly regarded by all countries.

- September, 15th session of the *ICAO/IMO Joint Working Group on SAR*. USCG and USAF/AFRCC are two of the 16 total SAR experts (eight maritime and eight aeronautical) on this Group which sets the stage for much of the SAR accomplishments of the International Maritime Organization (IMO) and International Civil Aviation Organization (ICAO). The U.S. was selected by the Group to lead holistic review of the IAMSAR Manual.
- September 22-24, 3rd annual *Joint SAR Conference* at Tysons Corner, VA organized by the commercial company called Institute for Defense and Government Advancement.
- October 15-18, annual Canadian *SARScene* in St Johns, Newfoundland. Mr. Rick Button and Captain David McBride attended from the Coast Guard.

Mr. Edwards also advised about the following upcoming events:

- Japan Coast Guard sponsoring International SAR Workshop (November 18, 2008), the third and final workshop on the theme of regional SAR systems to expand capability and capacity worldwide. The USCG has been invited to send representatives from Headquarters and the Rescue Sub-center in San Juan.
- USCG team to Mexico (December 8-12) to train on Search and Rescue Optimal Planning System (SAROPS); Mexico intends to develop its own SAROPS training capability for itself and other countries.
- IMO Subcommittee on Communications, Search and Rescue (January 09), an annual week-long meeting covering on international maritime standards and guidance; about 16 persons from federal and commercial entities will participate from the U.S.
- USCG team to train in Malta (February 09) on SAROPS; Malta also intends to develop its own SAROPS training capability. The U.S. European Command is fostering such engagement activities within its theater of operations.
- USCG team to support the U.S. Africa Command-sponsored SAR workshop in Ghana (Feb-Mar 09).
- Annual Shepherds SAR Conference and Exhibition near Washington, D.C. (March 30-31, 2009) (see www.shephard.co.uk for more information).

Other efforts covered by Mr. Edwards were as follows:

- Polar issues: the State Department is active on Antarctica passenger ship safety and other issues, including a multi-lateral (eight-nation) SAR agreement.
- Africa: IMO has a high level strategic initiative for Africa and is pressing for establishment of regional maritime RCCs there. This could align with DoD AFRICOM effort and with availability of USCG search planning tool called SAROPS.

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c. Radio Technical Commission for Maritime Services (RTCM):

CAPT Jack Fuechsel (USCG (Ret)) reported that the RTCM Special Committee 110 (SC-110) on Emergency Beacons had completed revision of the Personal Locator Beacon (PLB) standard and is looking at improving PLB reception of GPS signals in 2009. RTCM will petition the FCC to update its regulations to reference the revised standard.

SC-110 is also considering performance standards to provide for integration of GPS receivers in VHF handheld radios based on a request from the Coast Guard to the FCC. This would enable any distress message from the radios to include the GPS position of the sender. The Coast Guard is considering a requirement to carry such radios on small commercial vessels without a fixed radio installation.

SC-110 continues to support Cospas-Sarsat through participation and technical submissions to the Expert Working Group and Joint Committee meetings, including consideration of technical issues related to next-generation beacons for the MEOSAR system.

The RTCM Board of Directors is expected to establish a new Special Committee at its December meeting to consider standards for devices with alerting and locating functions such as a device currently on the market called SPOT.

e. Global Maritime Distress and Safety System (GMDSS) Task Force

CAPT Fuechsel reported highlights of the Task Force meeting held on October 3, 2008, in San Diego during the National Electrical Manufacturers Association (NEMA) Annual Assembly. The Task Force approved draft comments to the Coast Guard on rulemaking related to radio safety requirements for small fishing vessels (below 300 tons). The Commercial Fishing Industry Vessel Safety Advisory Committee (CFIVSAC) had earlier supported similar recommendations.

The Task Force also updated a checklist used to conduct annual GMDSS inspections, and the new list has been posted on the FCC website with links to it from the Task Force and Coast Guard.

San Diego-based Coast Guard Auxiliaries demonstrated a display used to familiarize boaters with Digital Selective Calling (DSC), to urge boaters to register for MMSI numbers, and to show boaters how to connect DSC radios to GPS.

The next Task Force meeting will be held on January 8 at RTCM and the following meeting will be held in St Pete Beach, Florida on May 7, 2009 during the RTCM Annual Assembly.

NEXT MEETINGS

The following dates were selected for the regular NSARC meetings during 2009: February 19; July 16 and December 3, 2009.

Respectfully submitted:


Mr. Rick Burton
Secretary

Approved:

 FOR 2/19/09
CAPT David McBride
Acting Chair, National SAR Committee

Date: February 19, 2009

Encl: (1) List of Attendees