
**Office of Spectrum Policy and Management, ASR-1**
**April 1999**
**Volume 1, Issue 2**

**ASR Personnel Notes:** ASR welcomes a new engineer to the team. Emile Edora joined ASR-200 on May 10. He comes to us from the Boeing facility in Everett, Washington. He will be working ADS-B issues as well as the various data link programs which FAA is planning for implementation. His skills and background will be another valuable resource for the FAA spectrum management community.

We are saddened by the death of Dave Adaska on May 8, 1999. Dave joined ASR in 1993. Dave will be missed for his pleasant and generous personality and generous nature.

## 1999 Schedule of RFI Training Courses –

ASR has completed the first of 3 RFI courses at the FAA Technical Center in Atlantic City, New Jersey. The course was extended to 48 hours (Tuesday to Tuesday) and is recommended to Airway Facilities technicians whose duties include investigation and resolution of RFI problems in the field. If you are interested in attending this course, please contact your regional Frequency Management Officer as listed on the last page of this newsletter.

**Air Force Modifies Airborne Radar to Protect FAA Microwave Network** The Air Force has completed the modification of the Global Hawk unmanned Air Vehicle Radar and is ready to begin a full range of flight tests. The original design of this radar had the potential to disrupt critical FAA radio communications link microwave systems. ASR and the Western Regional Frequency Management Officers worked with the Air Fore to allow a limited number of test flights while maintaining the necessary protection for the FAA microwave network. With the modifications, the global Hawk Radar development can now proceed without risk to the air traffic control system and the flying public.

**The FAA Finalizes Coordination to Support the DOD GPS Test –** ASR, along with the Air Traffic Service, Military Operations and Procedures Office coordinated with the DOD on two separate GPS tests ensuring National Airspace system operational safety while enabling the DOD to accomplish their important testing. These tests support DOD's efforts to increase future GPS receivers jam resistance and evaluate GPS satellite operation prior to launch. The test commended on March 1 through March 2 and affected the GPS signal in areas of New York and Florida. All coordination has been accomplished and associated NOSTAM were issued.

## Y2K Compliance Support –

Personnel from ASR engineered two air/ground communications frequency assignments for use at the Mike Monroney

Aeronautical Center. These communications will be used to support AOS-200's Y2K compliance testing. The air ground communications data generated by these channels will be routed, along with other NAS critical data through typical Air Traffic Control Tower (ATCT) Center equipment (i.e., VSCS, HOST, and Recorders). This testing will simulate NAS operations that will occur from 12/31/99 to 1/1/00, and ensure that the FAA's NAS is ready for the year 2000.

## Civil Air Traffic Control Frequency Assigned for Automated Surface Observation System (ASOS) at Camp David

– ASR coordinated with the DOD to allow Camp David to use a Civil Air Traffic Control frequency for the new ASOS at Camp David. Normally installations, such as Camp David that service only DOD aircraft, operate exclusively on Military Air Traffic control frequencies not available on civil aircraft radios. Since it is possible that from time-to-time civil helicopters may be called upon to transport people to or from Camp David and the Military helicopters that normally land at Camp David are equipped with both Civil and Military air Traffic Control radios, the use of a civil frequency was approved for the Camp David ASOS. The weather broadcast from the ASOS will be available to civil Aircraft in the vicinity of Camp David.

## Non-Ionized Radiation Hazard Measurements (RADHAZ) at Jacksonville, Florida High Frequency NARACS Completed –

Personnel from the Airway Facilities Southern Region Frequency Management office with support from ASR completed non-lionized RADHAZ on the HF National Radio Communications system (NARACS) located at Jacksonville, Florida, ARTCC. These measurements were requested by the Tampa system Management Office (SMO), due to AAF at ARTCC personnel concerns with potential of high radiation level. All survey measurements taken in the vicinity of the Spira-Cone antenna and around the building structure as well as parking lot space behind the ARTCC building did not exceed the permissible exposure levels as established in FAA Order 3910.3A, Radiation Health Hazards and Protection. In addition, at the request of the Tampa SMO, Jacksonville ARTCC, and AAF Manager Office, additional non-ionized measurements will be performed in the future with the Whip NARACS antenna mounted on the ARTCC roof is repaired and put back into service.

## Message for SMO technicians -

If  you have any unresolved radio frequency interference to communications in the National Airspace System, please contact the appropriate Frequency Management Officer as follows:

| | | |
|---|---|---|
| AAL | Cal Hoggard | 907-271-5240 |
| ACE | Greg Wheeler | 816-426-5647 |
| AEA | Dennis Eng | 718-977-6613 |
| AGL | Tom Stanonis | 847-294-7809 |
| ANE | Thuy Nguyen | 781-238-7490 |
| ANM | Harry Gardner | 425-227-2328 |
| ASO | Jim Burchfield | 404 305-6672 |
| ASW | Bill Allen | 817-222-4761 |
| AWP | Barry Simmons | 310-725-3475 |

## The Global Positioning System (GPS) Exhibit in Japan -

As part of the ongoing U.S. Government efforts to promote the use of the GPS worldwide and to protect its radio spectrum at the next  World Radiocommunication Conference in Turkey; the U.S. sponsored a large GPS exhibit at the Asia-Pacific Economic Cooperation conference from March 8 through 12 in Miyazaki, Japan. The exhibit

showed various applications of the GPS including air traffic control and distributed the current U.S. position of keeping the GPS band exclusive allocation for use by aeronautical radionavigation. Representatives from the Air Transport Association, NASA, U.S. Coast Guard, Office of Science and Technology Policy, and ASR, representing the FAA, participated in the exhibit.

**Preliminary Decision on Flight Information Services (FIS) Radio Spectrum -** On May 1, 1998, the Administrator of the FAA issued a policy statement for implementation of FIS using the very high frequency band from 118-137 MHz. Since then, ASR, has been working with several FAA offices to provide this capability --- particular for general aviation users. The major issue was the lack of radio spectrum available to implement this new service. As determined during studies for the next generation air/ground communications (NEXCOM) program, there is no available spectrum on which to implement new systems in the 118-137 MHz band. In addition, the lightly used spectrum above 136 MHz which is designated for air traffic control (ATC) use was planned for transition to NEXCOM. In order to satisfy the FIS requirement, the FAA in a cooperative effort with the general aviation industry, petitioned the Federal Communications Commission to provide four frequencies, currently designated for aeronautical operational control (AOC), to be used for an interim implementation of FIS. The airline industry strongly objected to this proposal; claiming that using four AOC frequencies for FIS would constrain growth of their planned systems. The Acting Deputy Administrator asked that a joint industry/FAA agreement be reached on the FIS frequency issue. In a briefing on March 17, the Associate Administrator for Research and Acquisition, ARA-1, agreed to a compromise supported by ASR which will provide one frequency from the AOC channels and one frequency from the ATC channels for implementation of FIS. While this is not the ideal solution to this issue from a FAA viewpoint, it does represent an acceptable compromise that will minimize impact to transition plans for NEXCOM. The Acting Deputy Administrator is scheduled to be briefed on March 29 for final decision.

**Memorandum of Understanding (MOU) Between the Office of Spectrum Policy and Management ASR-1, and the National Airspace System Implementation Program (ANI) -** ASR-1 and ANI-1 signed a MOU on May 6, 1999. Specifically, the MOU focuses on the staffing, funding, management, and responsibilities of the spectrum engineering position within the ANI organization. The spectrum engineering function within the interim Engineering Center, the permanent Engineering Center, and at the regional Implementation Centers are all addressed. The MOU clarifies the responsibilities of both ASR and ANI in the establishment and maintenance of the spectrum engineering positions. The signing of this MOU completes another milestone in the 1998 ASR's Spectrum Strategic Plan.

**Office of Spectrum Policy and Management (ASR), Participates in Preparatory Meeting for World Conference -** Representatives from ASR participated in a meeting of the International Telecommunication Union (ITU) Working Party 8D, from April 19 to 28, in Geneva, Switzerland. This working party is one of the ITU's technical groups and is tasked by the 1997 World Radiocommunication Conference to develop technical recommendations on sharing between the aeronautical radionavigation service/radionavigation-satellite service

and the mobile satellite service in a portion of the Global Positioning System (GPS) band (1559-1567 MHz). In addition, other spectrum issues critical to civil aviation were addressed at this ITU working party meeting. The meeting concluded that sharing is not feasible in any portion of the 1559-1567 MHz band. Another significant item discussed was the United States (U.S.) proposal to use the frequency 1176.45 MHz as the second civil GPS safety signal. Despite strong opposition from European countries, the U.S. delegation was successful in including 1176.45 MHz as one of the possible new allocations for the GPS to be considered at the next World Radiocommunication Conference in 2000.

**Federal Aviation Administration**
**Office of Spectrum Management and Policy, ASR-1**
**800 Independence Avenue, SW**
**Washington, DC 20591**