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Biggs, Christein, and Nellis Receive Award

Patrick N. Poe, Regional Administrator Alaskan Region, and Steven J. Brown, Associate Administrator for Air Traffic Services, presented an award to the ASR staff on Thursday, July 19. The award was presented in recognition of the contribution made by Mike Biggs (ASR-200), Tom Christein (ASR-100) and Don Nellis (ASR-100) to the Alaskan Region's "Capstone Program."

The Capstone Program is an accelerated effort to improve aviation safety and efficiency through the installation of government-furnished Global Positioning System (GPS)-based avionics and data link communications suites in most commercial aircraft serving the Yukon-Kuskokwim delta area of Alaska. Up to 200 aircraft will be equipped, and Capstone will deploy a ground infrastructure for weather observation, data link communications, surveillance via Automatic Dependent Surveillance-Broadcast (ADS-B), and Flight Information Services (FIS) to improve safety and enable eventual implementation of new

procedures.

Frequency Management Seminar 2001

George Sakai, Director of the Office of Spectrum Policy and Management, ASR-1, opened the Frequency Management Seminar 2001 on June 5, 2001. Mr. Sakai welcomed the participants who represented all regional Airway Facilities Offices, the William J. Hughes Technical Center, and the Mike Monroney Aeronautical Center.

Mr. Sakai stated that this was the first FMO Seminar since 1997 and that the seminar was intended to bring the participants together to discuss issues of mutual interest. Donald Willis, Manager, Spectrum Planning and International Division, ASR-200, welcomed the participants and updated the group on the international issues that affect or will affect the regional offices.

Oscar Alvarez, Manager,

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Spectrum Assignment and Engineering Division, ASR-100, briefed the group on the Spectrum Strategic Plan which is under revision. One of the issues in the Strategic Plan that directly affects the regional FMO's is the option of "straight-line" management from ASR. The regional FMO's were asked to think about their position on this alignment.

After three days of discussions the participants developed a list of action items that will benefit the FAA and the Frequency Management community. George Sakai thanked all participants for their continued support and committed to holding an FMO seminar yearly if funding is available. The meeting was adjourned at 3:00 p.m., local time on June 7.

Welcome New Staff Members

Monteik Barksdale, a 1991 graduate of Bladensburg High School, joined the ASR-100 division on May 7, 2001. Previously, Monteik worked as an executive assistant at MCI WorldCom. Monteik brings to ASR an enthusiastic attitude and an interest in the role of Spectrum Policy in furthering the goals of the Federal Aviation Administration. As a spectator, Monteik's interests include football, basketball and boxing.

Margarette Ebate, an electrical engineer and a graduate of the Pratt Institute in New York, joined the ASR-200 division on



July 2, 2001. Previously, Margarette worked as a contractor with Quasars in support of the NAS Operations Program, Telecommunications Network Planning & Engineering Division, AOP-400. Margarette is looking forward to continuing to utilize and expand her technical engineering knowledge in the ASR environment.



Monteik Barksdale,
ASR-100



Margarette Ebate,
ASR-200

ASR Liaison at NOCC

ASR is expanding its mission with the establishment of a liaison at the National Operations Control Center (NOCC) collocated with the Air Traffic Control Systems Command Center (ATCSCC). The addition of this new position will allow ASR to work collaboratively with other Airway Facilities and Air Traffic partners, as well as industry organizations representing the users of the National Airspace System (NAS) to minimize operational impact.

Tom Christein to Retire



Tom Christein, a member of the ASR-100 staff, will be retiring effective January 3, 2002. Tom began his career in the Washington office of the FAA on April 1, 1969. His first assignment was in radar procurement. From 1973 – 1984, Tom was assigned to the New England Region, entering the field of spectrum management in 1977. Returning to Washington in June of 1984, Tom joined the spectrum family working NAVAID assignments. We wish Tom well in his retirement.

World Radiocommunication Conference 2003 Issues

While the Federal Government is in fairly good agreement with respect to most issues surrounding aviation spectrum and aviation issues, there are several issues on which the Department of Defense (DoD) and Federal Aviation Administration (FAA) do not agree. On August 16, George Sakai and the ASR staff hosted a meeting between the FAA, the DoD Global Positioning System (GPS) Joint Program Office (JPO), and the National Telecommunications and Information Administration (NTIA) to discuss several World Radiocommunication (WRC)

2003 controversies which deal with spectrum protection of aviation systems from proposed new GPS signals. On the agenda were proposals from the FAA on the protection of aviation distance measuring equipment from the new GPS L5 signal, and the protection of FAA radars from a new DoD GPS L2 signal. While there was no clear-cut resolution of either issue, participants agreed to take the appropriate action necessary to move these issues towards a resolution. A third issue, the coordination of United States input documents for various meetings of the International Civil Aviation Organization (ICAO) were discussed. The JPO had indicated that it was not fully aware of all relevant papers being proposed for ICAO meetings. A solution was proposed by the FAA to forward all GPS-related papers directly to the JPO, instead of relying on the internal DoD distribution system.

Navigation Outreach Workshop

Tom Christein, ASR-100, attended the Navigation Outreach Workshop in San Antonio, Texas, during the week of September 10, 2001. A presentation was given to highlight the role of spectrum management in the Federal Aviation Administration (FAA) Operational Evolution Plan. One outcome of the meeting was a verbal commitment from the Office of System Architecture and Investment Analysis to consider requiring directional distance measuring equipment (DME) antennas on localizers in areas

of acute frequency congestion. This will allow more instrument landing systems and DME's to be installed.

First Edition of the Federal Aviation Administration Radio Spectrum Plan Completed

Members of ASR-100 and ASR-200 have completed the subject plan, which is presently focused on examining whether there will be sufficient spectrum resources available in the 118-137 MHz very high frequency (VHF) band to satisfy new air-ground communications requirements until a new system can be implemented in the year 2010 time period. The plan will be expanded and updated on a yearly basis and will take into account the broad spectrum of communications, navigation, and surveillance services. This VHF plan is a support element in the FAA's 10-year Operational Evolution Plan. Based on study to date, it is concluded that the present VHF system will be able to support the efficient operation of the National Airspace System until 2010, assuming that the identified improvement measures can be successfully implemented



Standards and Recommended Practices (SARPs) Development of Universal Access Transceivers

ASR personnel took part in a meeting of the International Civil Aviation Organization (ICAO) Aeronautical Mobile Communications Panel (AMCP) Working Group-C in Anchorage, Alaska. During that meeting, ASR was influential in getting a recommendation that the AMCP begin SARP's development for the UAT. This is an important outcome, as the UAT is one of the prime components of the Alaska Capstone trials, and SARP's are necessary to facilitate international acceptance of the technology. It is expected that ICAO, via State Letter for Panel agreement, will distribute the working group recommendation. Meanwhile, the working group has decided to continue development of draft UAT SARP's in expectation of that concurrence.

Spectrum Guidance to the Emergency Operations Staff (ADA-20)

Members of the ASR staff attended a Command and Control Communications (C3) Technical Interchange Meeting (TIM) on October 30 in Palmdale, California. Representatives from Western-Pacific Region, Desert to the Sea (DTS) System Management Office (SMO), Operational Support, and ADA-20 were also present at the TIM. The

purpose of the meeting was to discuss a plan to evaluate and select the best radio from various vendors for the accelerated C3 program and initial deployment in the DTS SMO area. ASR provided information concerning emission characteristics and spectrum requirements for transmitters and receivers. ASR will be reviewing the draft technical specifications for the radios and coordinating tests of the radios with ADA-20 and the William J. Hughes Technical Center to insure compliance with spectrum requirements. ASR also expressed concerns over the co-location of C3 sites on non-Federal commercial sites, and it was agreed that present and future assignments for the C3 systems would be located at FAA facilities.

Interference Monitoring Detection System (IMDS) Program Briefing at the National Flight Inspection Symposium

Personnel from ASR provided three briefing segments at the National Aviation Systems Standards (AVN) symposium in San Antonio, Texas on the IMDS program initiatives. These initiatives serve as a baseline to the National Airspace System (NAS) Interference Detection and Locating capability. This capability is being pursued under the Acquisition Management System to protect the NAS radio spectrum; in particular, the global positioning system signal-in-space, and all other spectrum utilized by aviation's Navigation, Communication and Surveillance (CNS) Systems. The symposium

organizers were pleased with the information ASR provided in this field.

Ultra-wideband Update

The long anticipated Federal Communications Commission (FCC) report and order addressing ultra-wideband (UWB) devices has been provided to the Federal Aviation Administration and other Federal agencies in draft form for review. This report and order, when released, will establish the rules that govern how certain UWB devices will be allowed to operate. The Department of Transportation and FAA position on UWB technology has not changed...in order to protect aeronautical systems, UWB systems cannot be allowed to cause radio frequency interference to aeronautical safety systems.

UWB technology uses extremely narrow pulses that generate very wide bandwidths...often on the order of 1 GHz or more. The power levels of UWB devices can vary widely, and high power versions have been used for quite some time in specialized applications (e.g., military).

The FAA has had a major role in this rulemaking effort. Early-on, it worked with the National Telecommunications and Information Administration (NTIA) to support a broad Government test program. Most testing completed to date has shown that there will be interference to aeronautical safety systems, such as GPS

and long-range radars, if UWB devices are implemented as the industry proposes.

RFI Investigation and Resolution Training

In 1994, the Office of Spectrum Policy and Management developed a radio frequency interference (RFI) investigation and resolution course (Academy course number 45018). The course was developed as part of a Capital Investment Plan (CIP) effort to train and provide Airway Facilities field personnel with the knowledge and necessary tools to resolve radio frequency interference (RFI) problems affecting the National Airspace System (NAS). During this time, ASR has trained over 380 Airway Facilities personnel. In 2000, ASR entered into partnership with the Aviation Systems Standards Organization (AVN) to train flight inspection pilots and technicians on techniques to investigate and locate RFI sources from the air. To that effect, ASR modified the basic RFI course and created a new course tailored for AVN personnel. Five AVN RFI sessions have been conducted since 2000. ASR is further expanding the Federal Aviation Administration's capability to resolve RFI incidents by brokering a partnership with the Airline Pilots Association (ALPA). This effort will give the FAA a real-time capability to gather RFI reports directly from airline pilots, thus improving the response time to RFI incidents.

These training courses have greatly increased ASR's ability to resolve RFI incidents in a timely manner.



Captain John Zimmerman of United Airlines speaks to students

ASR-2 Vacancy

ASR was granted approval to re-advertise the ASR-2 position. Detail assignments will continue until a permanent selection is made.

Status of Vacancy Announcements

Selection process is underway for the ASR-100 Airway Transportation System Specialist position located at the NOCC, Herndon, VA.

The vacancy announcement for the Electronics Engineer position in ASR-100 closed on December 14.

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*The Office of Spectrum Policy and Management
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