

Mr. Donald Abelson
Chief of the International Bureau
Federal Communications Commission
445 12th Street SW
Washington, D.C. 20554

Dear Mr. Abelson:

The National Telecommunications and Information Administration, on behalf of the Executive Branch Agencies, has approved the release of an additional draft Executive Branch (NTIA) proposal for WRC-03. This proposal considers the federal agency inputs toward the development of U.S. Proposals for WRC-03.

The enclosed proposal would add two items to the agenda for the 2006 WRC Conference to address. The purpose of these agenda items is to provide an allocation for runway incursion systems and other aeronautical applications in the 5 090 - 5 150 MHz band. This proposal is forwarded for your consideration and review by your WRC-03 Advisory Committee. Jim Vorhies from my staff will contact Alexander Roytblat and reconcile any differences between NTIA and FCC views.

Sincerely,

(Original Signed September 26, 2002)
Fredrick R. Wentland
Acting Associate Administrator
Office of Spectrum Management

Enclosure

United States of America

DRAFT PROPOSAL FOR THE WORK OF THE CONFERENCE

Agenda Item 7.2: to recommend to the Council items for inclusion in the agenda for the next WRC, and to give its views on the preliminary agenda for the subsequent conference and on possible agenda items for future conferences, taking into account Resolution **801 (WRC-2000)**;

Background Information: The frequency band 5 000-5 250 MHz is allocated internationally to the aeronautical radionavigation service (ARNS) on a primary basis. The fixed-satellite service (FSS) (Earth-to-space) is allocated on a primary basis in the band 5 150-5 250 MHz for the use of feeder links for non-geostationary satellite systems of the mobile-satellite service (**5.447A**), as well as in band 5 091-5 150 MHz pursuant to **5.444A**. The aviation community is exploring new applications in the band 5 091-5 150 MHz.

Allocation for new civil aviation systems:

Two current aviation safety objectives are to provide more information to the pilot/cockpit, and to reduce runway incursions. In the bands 5 091-5 150 MHz, a new system called the airport network and location equipment (ANLE) would address both of these objectives. In its most basic form, ANLE is a high integrity grid of multilateration sensors, integrated with a wireless network that would provide aeronautical radionavigation and safety communications for the airport area and would provide the cockpit with access to appropriate information via a high-bandwidth connection. Those same transmissions would be used to derive three-dimensional position of the mobile user. This derived position that could then be broadcast via the ANLE data link to provide all users with situational awareness on the airport surface. Adding simple transmitters to other surface-movement vehicles would allow for the development of a high-fidelity complete picture of the airport surface environment. A new provision in this band would accommodate the systems such as ANLE. The International Air Transport Association (IATA) is considering a similar system called Airport Vehicle Position System (AVPS), which would also operate in the band 5 091-5 150 MHz. The AVPS is intended to monitor surface movement, reduce runway incursion and increase airport security.

New aeronautical-fixed service:

Currently there is no aeronautical band to support applications that transmit critical aeronautical data from systems such as wind shear radars, remote maintenance monitoring systems, runway lighting, low-level wind shear alert systems, automated weather surface observing systems, or automatic weather observation systems. Data from these systems are transmitted in other bands that are allocated to the fixed and mobile services, which are also used by others for non-aviation uses. Redundant paths are used to ensure integrity and reliability requirements are met. In most cases, this data is flight critical, thus the applications should be accommodated in an appropriate aeronautical allocation. The increasing trend of flight operations will result in shortage of assignments in these bands and little protection from other services. An allocation for the aeronautical fixed service in the band 5 091-5 150 MHz would help alleviate the spectrum congestion problem. It is impractical from a cost and loss-of-facility-use standpoint to run wires to transmit the information -- especially on established airports. The fixed links would operate compatibly with the ANLE and AVPS applications also planned for this band.

Proposal:

USA/ /1 MOD

RESOLUTION 801 (WRC-2003)

Agenda for the 2005/2006 World Radiocommunication Conference

The World Radiocommunication Conference (~~Istanbul, 2000~~), (Geneva, 2003).

Reasons: Editorial

resolves to give the view

USA/ /2 ADD

2.xx to consider a new worldwide primary allocation to accommodate a system that would provide supplemental radionavigation data in the band 5 091-5 150 MHz;

Reasons: New provisions in the ITU Radio Regulations in the band 5 091-5 150 MHz for supplemental aeronautical radionavigation data would accommodate systems such as the (Airport Network and Location Equipment) ANLE and Airport Vehicle Position System (AVPS) that would aid in providing more information to the pilot/cockpit and reduce the risk of runway incursions. ANLE would provide aeronautical radionavigation and safety communications for the airport area. The AVPS is intended reduce runway incursion and increase airport security. The AVPS would operate in the aeronautical radionavigation service.

USA/ /3 ADD

2.xx to consider a new worldwide primary allocation to accommodate the aeronautical fixed service links in the band 5 091-5 150 MHz;

Reasons: The new allocation of the aeronautical fixed service in the band 5 091-5 150 MHz would allow critical aeronautical data to be transmitted between aeronautical facilities in 59 MHz of contiguous spectrum for aeronautical use. Aeronautical fixed applications would transmit critical aeronautical data from systems such as wind shear radars, remote maintenance monitoring systems, runway lighting, low-level wind shear alert systems, automated weather surface observing systems, or automatic weather observation systems. The new service would also alleviate some of the spectrum congestion in other bands.
