



# National Transportation Safety Board

Washington, D.C. 20594  
Safety Recommendation

Date: April 4, 1988

In reply refer to: A-88-45

Mr. Alfred C. Sikes  
Assistant Secretary for  
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On July 24, 1986, the Federal Communications Commission (FCC) adopted a rule allowing the L-band frequency spectrum previously allocated to the Aeronautical Mobile Satellite Service (R) 1/ (AMSS) (R) to be shared with a mobile satellite service (MSS). The rationale behind this rule was based in part upon a statement by the National Telecommunications and Information Administration (NTIA) that it is unlikely that the AMSS (R) will need the entire 28-megahertz band on an exclusive basis. The FCC claims that aviation can be properly served with no derogation of safety if aviation is given a priority in all or part of the spectrum.

In response to a Notice of Proposed Rule Making (NPRM) that proposed the shared use of the AMSS (R) assigned frequency spectrum with an MSS, the International Civil Aviation Organization (ICAO), the Air Transport Association of America (ATA), and Aeronautical Radio Incorporated (ARINC) opposed the shared use. The Federal Aviation Administration (FAA) initially opposed the shared use but in comments to the FCC agreed to change its position if guarantees would be provided that communications related to aviation safety would take priority over nonaviation communications.

Studies by the FAA, the ICAO Committee on Future Air Navigation Systems (FANS), and ARINC have projected that the presently allotted 28-megahertz AMSS (R) spectrum will be fully used for aviation communications early in the 21st century. If such is the case, the Safety Board envisions difficulty in recovering the total use of the AMSS (R) L-band spectrum from users already established on the available frequencies. Additionally, although guarantees will be made that communications involving aviation safety will be given priority, it can be readily envisioned that some users of the MSS-shared frequencies will be involved in health and safety activities and will desire a priority at least equal to aviation communications. Further, these demands will occur when there will be greater competition for available frequencies than there is at the present time.

1/ (R) indicates that the spectrum is reserved for aeronautical communications of en route flights related to the safety and regularity of the flights.

Aviation communications must be immediate. Such communications are required to separate aircraft in flight in an air traffic environment that is already nearing saturation in some areas of the United States and that is frequently altered by surface and en route weather conditions. Immediate communications are also required to pass severe weather information both to and from the aircraft, and to assist in aircraft emergencies. Therefore, the Safety Board believes that no action should be taken that could possibly interfere with such communications.

To ensure that the future communications requirements of aviation can be met, the National Transportation Safety Board recommends that the National Telecommunications and Information Administration:

Restrict the use of the L-band frequency spectrum (1545-1559 MHz and 1646.5-1660.5 MHz) assigned to the Aeronautical Mobile Satellite Service (AMSS) (R) to operational aviation communications and, in cooperation with the Federal Communications Commission, establish a common domestic policy limiting the use of the AMSS (R) frequencies to aviation operational communications. (Class II, Priority Action) (A-88-45)

Also as a result of this concern, the Safety Board issued Safety Recommendation A-88-44 to the Federal Communications Commission.

The National Transportation Safety Board is an independent Federal agency with the statutory responsibility "... to promote transportation safety by conducting independent accident investigations and by formulating safety improvement recommendations" (Public Law 93-633). The Safety Board is vitally interested in any action taken as a result of its safety recommendations and would appreciate a response from you regarding action taken or contemplated with respect to the recommendation in this letter. Please refer to Safety Recommendation A-88-45 in your reply.

BURNETT, Chairman, KOLSTAD, Vice Chairman, and LAUBER and NALL, Members, concurred in this recommendation.

By:   
Jim Burnett  
Chairman