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Before the
FEDERAL COMMUNICATIONS COMMISSION
Washington, D.C. 20554

In the Matter of	)	
	)	
Amendment of Part 87 of the Commission's	)	PR Docket No. 93-199
Rules to implement technical requirements	)	RM-7610
applicable to instrument landing system	)	
receivers and VHF Omnirange Radio receivers	)	
adopted by the International Civil Aviation	)	
Organization	)	

REPLY OF AERONAUTICAL RADIO, INC., AND
THE AIR TRANSPORT ASSOCIATION OF AMERICA

Aeronautical Radio, Inc. (ARINC), and the Air Transport Association of America (ATA), by their attorneys, hereby reply to Comments submitted in response to the Commission's Notice of Proposed Rulemaking released July 14, 1993.[1] In reply thereto, the following is shown:

ARINC was established by civil aviation to provide that industry with communications on a not-for-profit basis. As part of its services to its members, ARINC hosts several industry committees, including the Aeronautical Frequency Committee (AFC), which advises on policies and procedures for use of the electromagnetic spectrum by the industry, and the Airlines Electronic Engineering Committee (AEEC), which develops form, fit, and function specifications and technical characteristics for avionics.

[1] See VOR/ILS Rulemaking, 8 FCC Rcd 4763 (1993).

ATA was formed in 1936 and is the principal trade and service organization of the scheduled air carriers in the United States. ATA comprises various committees that monitor and provide guidance on United States and international regulatory and legislative developments, and the effects of these developments on United States air service.

ARINC and ATA have both been actively involved in the establishment of the new international standards for VOR/ILS receivers. This activity has taken place principally under the aegis of the International Civil Aviation Organization (ICAO) in response to the desires of a number of European states to begin assigning channels in the band 102-108 MHz for use by FM broadcast stations. This segment of the band has been long in use in the United States as a result of the cooperation between the Federal Aviation Administration (FAA) and the Commission in reviewing proposed frequency assignments, and the United States broadcast community has made no persuasive case that the present VOR/ILS immunity standards have created any undue hardship for existing broadcast stations.

The FCC proposes to enshrine the 1998 ICAO ILS and VOR receiver requirements in Part 87 of the Commission's Rules. Because the FCC does not have the authority to license receiver installations on aircraft, the Commission proposes to enforce this regulation through its equipment authorization program. The equipment authorization program, however, covers only the manufacturing, import, and sale of

receivers that can, by their unintended radiation of electromagnetic energy, interfere with radio communications.[2]

The comments from the broadcast interests[3] supported the proposal, while general aviation and avionics manufacturers[4] opposed the rules. Taken as a whole, the commenters show that the Commission's proposal is unauthorized, unduly burdensome, and impossible to implement in the time frame contemplated for cessation of manufacture. Moreover, the proposed rules would conflict with the Administration's desire to streamline and simplify regulation as evidenced by Executive Order 12866 of September 30, 1993, inter alia, in that the benefits do not justify their costs and are duplicative of regulations of the FAA.[5] Although this recent Executive Order does not apply to independent regulatory agencies, such as the FCC, it presents sound policies for rulemaking actions by this agency. Thus, the Commission should withdraw the proposed rules and work with the FAA to ensure a reasonable program to balance improvements to ILS/VOR receivers with better siting and technical criteria for

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[2] See 47 U.S.C. § 302a.

[3] Broadcast interests supporting the proposal include the National Association of Broadcasters (NAB), Cohen, Dippell and Everist (CD&E), Hardy and Carey (H&C), National Public Radio (NPR), and the Association of Federal Communications Consulting Engineers (AFCCE).

[4] Aviation interests opposing the proposal include the Aircraft Owners and Pilots Association (AOPA), General Aviation Manufacturers Association (GAMA), Allied Signal (Allied), Honeywell, Tara Avionics, and a number of individual commenters.

[5] See Regulatory Planning and Review, E.O. 12866, 58 Fed. Reg. 51735, 51736 (October 4, 1993).

FM broadcast stations to increase the spatial and spectral separation between stations in the two services.

Stripped to their essentials, the broadcast comments focus on their displeasure with the FAA's exercise of its jurisdiction to protect the national airspace from electromagnetic interference. For example, NAB intemperately complains of the "invariable, 'knee-jerk' reflex of the FAA staff . . . to impose -- or attempt to impose -- the most stringent restrictions possible on communications facilities."[6] Hardy & Carey objects to "heavy-handed, often arbitrary, rejection by the F.A.A. . . ."[7] Cohen, Dippell & Everist objects to the FAA changing its procedures for evaluating EMI "with little or no notice."[8] NPR finds the FAA's regulations to be "overly broad or misdirected."[9]

In short, the problem that the broadcast interests wish solved is one that is currently -- and properly -- being considered by the FAA.[10] The broadcast interests wish the FCC to extend its jurisdiction beyond its statutory authority and adopt regulations that are, at best, duplicative in order to resolve a problem that they have with the FAA. The unproductive "turf battle" between the FCC and FAA sought by

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[6] NAB Comments at 6 n.10.

[7] H&C Comments at 2.

[8] CD&E Comments at 3.

[9] NPR Comments at 3.

[10] See FAA Notice 90-18 (Docket 26305), August 3, 1990.

the broadcast interests will not serve anyone's interest, let alone the public interest. This duplication of effort is one result that Executive Order 12866 seeks to eliminate.[11]

The aviation commenters stress the impossibility of meeting a January 1, 1994, cutoff for manufacturing of the avionics, the cost and difficulty of retrofitting domestic aircraft to meet the international standards, and the lack of FCC jurisdiction to regulate receiver standards. These documented problems and costs associated with the FCC's proposal to extend the new ICAO requirements to all aircraft in the United States must be weighed against the minimal benefit to broadcasters from such action. Proper siting of new broadcast facilities cannot be considered unreasonable or unduly burdensome where necessary to protect safety-of-life functions. As Honeywell explains: "Careful allocation of frequencies to entertainment businesses to minimize interference to a safety-related service is better characterized as 'prudent' than 'onerous.'"[12]

The Commission should carefully consider the cost of extending the ICAO requirements to aircraft operating only in domestic airspace. AOPA estimates the cost of conversion for general aviation to be $781 million.[13] Undue haste in phasing out ILS and VOR receivers in airline aircraft used domestically would also impose unnecessary burdens. The Commission should follow the guidance of Executive Order

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[11] 58 Fed. Reg. at 51736.

[12] Honeywell Comments (September 22, 1993) at 3.

[13] AOPA Comments at 4. See also Allied-Signal Comments at 2.

12866 and base any decision to impose a regulation "only upon a reasoned determination that the benefits of the intended regulation justify its costs."[14] Here, the costs clearly outweigh any benefit.

The Commission need not reach this balancing of costs and benefits, because, as ARINC and ATA demonstrated in response to the Petition for Rulemaking submitted by John Furr & Associates, the specification of standards for aviation receivers is outside the jurisdiction of the FCC. For example, when Congress determined that television broadcast receivers should be subject to FCC jurisdiction, it enacted the All-Channel Receiver Act, which became Section 303(s) of the Communications Act. At that time, the Chairman of the FCC wrote to the Chairman of the Senate Subcommittee on Communications:

> You will recall that the original All-Channel Receiver proposal would have given the Commission blanket authority to prescribe minimum performance standards for such receivers. At the hearings held both by your committee and the House Committee, this provision was criticized on the ground that it would have permitted Commission regulation of all receiver performance characteristics. The Commission made it clear its intention to prescribe standards only to the extent necessary to ensure that receivers are capable of efficiently receiving all channels, and we agreed that our statutory authority should be so limited.[15]

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[14] 58 Fed. Reg. at 51736.

[15] Letter from Newton N. Minow, Chairman, FCC, to Senator John O. Pastore, Chairman, Senate Subcommittee on Communications, May 11, 1962, in 1962 U.S. Code Cong. & Admin. News at 1891.

If the Commission sought a limited extension of its authority with regard to setting standards for television receivers in order to comply with the will of Congress, the agency obviously has no general authority over other classes of receivers.

Moreover, Congress specifically has assigned the Secretary of Transportation responsibility and authority for prescribing standards governing aircraft appliances, as may be required in the interest of flight safety.[16] "Appliances" are defined as "instruments, equipment, apparatus . . . or accessories, of whatever description, which are used . . . in the navigation, operation, or control of aircraft in flight (including . . . communication equipment and any other mechanism or mechanisms installed in or attached to aircraft during flight) . . .."[17]

The Commission apparently recognizes the limitation on its authority because it attempts to rely on Section 303(r) of the Communications Act. This provision gives the Commission authority to

> [m]ake such rules and regulations and prescribe such restrictions and conditions, not inconsistent with law, as may be necessary to carry out the provisions of . . . any treaty or convention insofar as it relates to the use of radio, to which the United States is or may hereafter become a party.

This section, however, is restricted to matters over which the Commission has jurisdiction and cannot be used to enlarge the agency's authority. Here, the FCC

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[16] 47 U.S.C. § 1421(a)(2).

[17] 47 U.S.C. § 1301(12)(emphasis added).

attempts to bootstrap a treaty provision that regulates the equipment to be carried by United States aircraft when operating in foreign airspace to enable it to regulate safety equipment on aircraft when operating in domestic airspace. Such a regulation is not authorized by Section 303(r) because it is not "necessary to carry out the provisions" of ICAO Annex 10. FAA regulation of the technical characteristics of airborne ILS and VOR receivers fully occupies this field.

NPR, perhaps because of the weakness of the FCC's authority, suggests that Section 303(f) of the Communications Act might also support the proposed rules.[18] But, the regulations adopted under Section 303(f), which are "necessary to prevent interference between stations," relate to radio transmitters, not to receivers. As noted above, the FCC back in 1962 specifically eschewed any general authority to promulgate receiver standards.

NAB also has requested the FCC to consider rules requiring near-term retrofitting of existing avionics with external filters to achieve the new immunity standards.[19] Addition of an external filter on a typical ILS Localizer receiver would be detrimental to safety of flight. Measurements conducted on behalf of CCIR Task Group 12/1 (CCIR TG12/1) on FM Broadcast interference to ILS/VOR receivers at the FAA Technical Center during the week of March 27, 1993, show receiver sensitivity on the order of -98 dBm measured at the receiver input. FAA and ICAO standards for

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[18] NPR Comments at 2.

[19] NAB Comments at 9-10.

minimum signal within an ILS service volume, as measured at the output of an isotropic antenna, is -86 dBm. CCIR TG12/1 has adopted 9 dB as typical of aircraft antenna cable losses, along with an additional 3.5 dB multicoupler loss. This results in a signal as low as -98.5 dBm at the receiver input. It is obvious that the additional loss (typically about 6 dB) that would be caused by the insertion of an external filter on a typical ILS Localizer receiver cannot be tolerated.

Finally, more recent measurements for CCIR TG12/1 confirm the difficulty in meeting the new standards identified by the avionics manufacturers. CCIR TG12/1 tested receivers at the FAA Technical Center during the week of September 27, 1993. Only two units were submitted for test as meeting the 1998 requirements, and of these, only one passed. The avionics manufacturers still have work to do to accommodate the new ICAO requirements, and it is unreasonable to impose a precipitous termination on the manufacture of current models.

In sum, the problems facing the broadcast interests are currently under consideration by the FAA, and the Commission should defer to that agency in matters of aircraft equipage, especially here, where the proposed rules are outside the FCC's jurisdiction. The aviation commenters have established that the rules, as proposed,

would cause a significant financial and operational hardship for aviation and avionics manufacturers. ARINC and ATA urge the Commission to adopt no rule in this matter.

Respectfully submitted,

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October 27, 1993

CERTIFICATE OF SERVICE

I, Phyllis C. Hall, a secretary at the law offices of Wiley, Rein & Fielding, hereby certify that on this 27th day of October, 1993, I caused copies of the foregoing "Reply of Aeronautical Radio, Inc., and the Air Transport Association of America" to be mailed via first-class postage prepaid mail to the following:

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