

Federal Aviation Administration
Aviation Rulemaking Advisory Committee

General Aviation Certification and Operations Issue Area
VHF Navigation and Communication Frequency Utilization

Task 1 – Modulation Interference

Task Assignment

Written material should be submitted not later than October 17, 1994.

ADDRESSES: The meeting will be held in room 8438, U.S. Department of Transportation, Nassif Building, 400 7th Street, SW., Washington, DC 20590-0001. Written material should be submitted to Mr. Albert Marmo, Executive Director, Commandant (G-NAB), U.S. Coast Guard, 2100 Second Street SW., Washington, DC 20593-0001, telephone (202) 267-1077.

SUPPLEMENTARY INFORMATION: Notice of this meeting is given pursuant to the Federal Advisory Committee Act, 5 U.S.C. App. 2, Section 1 *et seq.* The agenda for the meeting will be to review the status of development of draft inflatable PFD and component standards, including a summary of comments received, and discuss whether essential characteristics and the average boater's needs are being adequately addressed. The need for any of the categories of inflatable PFDs to have carriage or other limitations on their approval, ease of servicing and presence of user friendly indicators of proper servicing, and other relevant issues will also be considered.

Attendance is open to the interested public. With advance notice, members of the public may present oral statements at the meeting. Persons wishing to present oral statements should so notify the Executive Director listed above under **ADDRESSES**, no later than the day before the meeting. Written material may be submitted at any time for presentation to the Committee. However, to ensure advance distribution to each Committee member, persons submitting written material are asked to provide 25 copies to the Executive Director no later than October 17, 1994.

Dated: September 29, 1994.

R.C. Houle,
Acting Chief, Office of Navigation Safety and Waterway Services.

[FR Doc. 94-24818 Filed 10-5-94; 8:45 am]

BILLING CODE 4910-14-M

Federal Aviation Administration

Aviation Rulemaking Advisory Committee; VHF Navigation and Communication Frequency Utilization Working Group

AGENCY: Federal Aviation Administration (FAA), DOT.

ACTION: Notice of Establishment of a VHF Navigation and Communication Frequency Utilization Working Group.

SUMMARY: Notice is given for the establishment of a VHF Navigation and Communication Frequency Utilization

Working Group in support of the Aviation Rulemaking Advisory Committee (ARAC) on General Aviation Issues. In addition to informing the public of this activity, this notice provides a point of contact for further information; a brief description of the working group's task and application procedures for working group membership.

FOR FURTHER INFORMATION CONTACT:

Mr. Louis C. Cusimano, Assistant Executive Director for General Aviation Operations Issues, Flight Standards Service (AFS-800), 800 Independence Avenue S.W., Washington, DC 20591, Telephone: (202) 267-8452; FAX (202) 267-5094.

SUPPLEMENTARY INFORMATION: The Federal Aviation Administration (FAA) has established an Aviation Rulemaking Advisory Committee (ARAC) (56 FR 2190, January 22, 1991; and 58 FR 9230, February 19, 1993). One area that the ARAC deals with is general aviation operations issues. The issues involve the operation of general aviation aircraft and certification of airmen. The VHF Navigation and Communication Frequency Utilization Working Group is being formed to formulate and present recommendations to the ARAC, which will determine whether to forward them to the FAA.

Specifically, the Working Group's task is as follows: The VHF Navigation and Communication Frequency Utilization Working Group is charged with formulating and presenting recommendations on the implementation options, which will provide greater immunity from modulation interference while still allowing the United States to comply with the International Standards, Recommended Practices and Procedures for Air Navigation Services, contained in Annex 10 to the Convention of International Civil Aviation. To maximize opportunity for formulation and discussion of possible options, the working group should have a balanced membership from the aviation and broadcast industries. The working group should focus on the issues at hand, including: the economic impact of meeting the International Civil Aviation Organization (ICAO) requirements, alternatives for achieving improved frequency protection, evolutionary implementation considerations, ICAO work on future VHF air/ground (A/G) communication system, the evolving U.S. position for the proposed 1995 ICAO divisional meeting on precision approach and landing systems mix, early implementation of the Global

Positioning System and the U.S. Federal Radionavigation Plan.

The VHF Navigation and Communication Frequency Utilization Working Group will be responsible to the ARAC for the following reports:

A. The Working Group should recommend time line(s) for completion of the task, including the rationale, for consideration at the meeting of the ARAC to consider general aviation operations issues held following publication of this notice.

B. The Working Group will give a status report on the task at each meeting of the ARAC held to consider general aviation operations issues.

The VHF Navigation and Communication Frequency Utilization Working Group will be comprised of experts from those organizations having an interest in the tasks assigned. A Working Group member need not necessarily be a representative of one of the member organizations of the ARAC. An individual who has expertise in the subject matter and wishes to become a member of the Working Group should write the person listed under the caption **FOR FURTHER INFORMATION CONTACT** expressing that desire, describing his or her interest in the task and the expertise he or she would bring to the Working Group. The request will be reviewed with the ARAC Assistant Chair for General Aviation Operations Issues and the Chair of the VHF Navigation and Communication Frequency Utilization Working Group, and the individual will be advised whether or not the request can be accommodated.

The Secretary of Transportation has determined that the formation and use of the ARAC are necessary in the public interest in connection with the performance of duties of the FAA. Meetings of the ARAC to consider general aviation operations issues will be open to the public except as authorized by section 10(d) of the Federal Advisory Committee Act. Meetings of the VHF Navigation and Communication Frequency Utilization Working Group will not be open to the public except to the extent that individuals with an interest and expertise are selected to participate. No public announcement of Working Group meetings will be made.

Issue in Washington, DC, on September 29, 1994.

Louis C. Cusimano,

Assistant Executive Director for General Aviation Operations Issues, Aviation Rulemaking Advisory Committee.

[FR Doc. 94-24693 Filed 10-5-94; 8:45 am]

BILLING CODE 4910-13-M

Recommendation Letter



AIRCRAFT OWNERS AND PILOTS ASSOCIATION

421 Aviation Way • Frederick, MD 21701-4798
Telephone (301) 695-2000 • FAX (301) 695-2375

Action ARin

January 21, 1996

Mr. Anthony Broderick
Associate Administrator for
Regulation and Certification, (AVR-1)
Federal Aviation Administration
800 Independence Avenue, S.W.
Washington, DC 20591

my

Dear Mr. Broderick:

The Aviation Rulemaking Advisory Committee (ARAC) VHF Navigation/Communications Working Group established under General Aviation Operations (G.A. Ops.) Issues Group has completed its assigned task and has been disbanded. In its task, the working group was asked to determine the need for implementation of International Civil Aviation Organization (ICAO) Annex 10, VHF Navigation and Communication Receiver Immunity Performance Standards, and to develop appropriate recommendations.

After several meetings, the working group reached consensus on a list of nine recommendations, most of which involved changes in procedures utilized by the Federal Aviation Administration (FAA) and the Federal Communications Commission (FCC). Most notably, the working group determined a requirement for new Annex 10 compliant transceivers is unnecessary, and recommends that the FAA request the Federal Communications Commission (FCC) withdraw proposed Rule 93-199.

On November 15, 1995, the G.A. Ops. issues group reached consensus on the list of recommendations which remained unchanged from those forwarded by the working group. Enclosed is a letter from the Chairman of the working group, Bill Benningfield, and the group's nine recommendations. On behalf of the ARAC, I ask that the FAA review and take action on these recommendations.

Should you have any questions, please feel free to call me at 301-695-2213.

Sincerely,

Steven J. Brown
Senior Vice President
Government and Technical Affairs
Cochairman of the ARAC General Aviation
Operations Issues Group

Acknowledgement Letter

MAR 14 1996

Mr. Steven J. Brown
Aviation Rulemaking Advisory Committee
Aircraft Owners and Pilots Association
421 Aviation Way
Frederick, MD 21701

Dear Mr. Brown:


Thank you for your January 21, 1996, letter forwarding the Aviation Rulemaking Advisory Committee's (ARAC) recommendations on implementation of International Civil Aviation Organization (ICAO) Annex 10, VHF Navigation and Communication Receiver Immunity Performance Standards.

I would like to thank the aviation community for its commitment to ARAC, and in particular, the dedicated efforts of the VHF Navigation/Communication Working Group in completing the task assigned by the FAA.

The Federal Aviation Administration (FAA) will evaluate the merit of each of the 9 recommendations and notify you when a determination of appropriate disposition has been reached.

Sincerely,

Original Signed By
Margaret Gilligan

 Anthony J. Broderick
Associate Administrator for
Regulation and Certification

Recommendation

H. W. Beningfield, Ph.D.
Director of Engineering

Commercial Flight Systems Group
Honeywell Inc.
5353 West Bell Road M/S51RAV
Glendale, AZ 85308-9000
602 436-4614

19 September 1995

Mr. Steve Brown
AOPA
Fax 301-695-2214

Dear Mr. Brown:

The Navigation and Communication Frequency Utilization Working Group has reached consensus on a set of recommendations to ARAC. These recommendations may be summarized as follows:

- The working group does not recommend any FAA rulemaking.
- Most of the recommendations involve procedural changes within FAA or between FAA and FCC.
- Some of the recommendations are that FAA ask FCC to initiate rulemaking.
- One recommendation is that FCC withdraw a pending rulemaking action.

This Working Group met three times, all during 1995. The discussion during the second meeting developed a consensus that the broadcast industry's issues resulted largely from inconsistent execution by different FAA field offices and by different FAA employees, and from inadequate communication between FAA and FCC. The Working Group designated a subteam, which met between the second and third Working Group meetings, that proposed a set of recommendations.

At the third meeting, the Working Group discussed each of the proposed recommendations, adopting most after making editorial changes, and rejecting a few. Following the third meeting, the group honed the recommendations, and reached consensus on them.

The working group's recommendations are attached to this letter. I believe this concludes the working group's task, and that this working group may now be considered disbanded. If you'll let me know when and where the next General Aviation Operations Committee meeting is to be held, I'll try to attend to present the working group's recommendations, and to bring along the documentation file.



ARAC Navigation and Communication Frequency Utilization Working Group

Recommendations

page 1 of 2

19 September 1995

1. The working group recommends that FAA issue instructions to the regions requiring consideration of terrain and obstructions, as well as constraints imposed by other air traffic considerations, in evaluating the results of AAM analysis, and requiring that the results of the AAM analysis and evaluation be documented and made available to the proponent.
2. The working group encourages FAA to permit voluntary use of any FAA-approved technology (e.g.: filters) that may be developed to reduce receiver susceptibility to FM interference. It is not intended that use of such technology or of such devices be made mandatory.
3. The working group recommends that FAA request FCC to institute a rulemaking proceeding proposing the adoption of a rule requiring a petitioner for an FM allotment or an applicant for a frequency change to demonstrate that a site exists that satisfies the criteria of the Airspace Analysis Model. The study should be submitted to the FAA regional office concurrently with the submission to FCC.

The working group further recommends that FAA identify a process by which the coordination between FAA and FCC can be performed.

4. The working group recommends that FAA coordinate with FCC to obtain on-line access to FCC's data base of composite directional horizontal-plane antenna patterns, plus the associated search programs. FAA should require that proponents submit proposed directional horizontal-plane antenna patterns with FAA Form 7460-1.
5. The working group recommends that FAA hold filings of FAA Form 7460-1 confidentially until the proposal is circularized.
6. The working group recommends that FAA request FCC to institute a rulemaking proceeding proposing the adoption of a rule requiring that all FM station applications involving changes in frequency or substantial change of power, antenna height, or location be coordinated with FAA.

The working group encourages FAA to develop a mechanism so that minor changes in FM broadcast facilities, such as small site changes, can be made without involved procedures.

Concurrent with the above, FAA processing procedures must be reviewed so that an expedited and flexible review of the proposed change is completed within sixty days. This FAA review should be performed in concert with appropriate FCC and broadcast industry representatives so that areas of concern can be identified and remedies implemented regarding the application of the airspace model to broadcast facilities.

Additionally, FAA should issue instructions to its field offices to refrain from performing analysis for changes that merely correct old information.

ARAC Navigation and Communication Frequency Utilization Working Group

Recommendations
page 2 of 2
19 September 1995

7. The working group recommends that FAA issue notice that it will no longer give consideration to navigation receivers limited to 100 kHz channel spacing at such time as 90% of civil aircraft certified for IFR operation within the National Airspace System (i.e., complying with FAR 91.171, 91.205, 91.215, 91.411, and 91.413) are equipped with VOR/localizer receivers with 50 kHz channel spacing and with glide slope receivers with 150 kHz spacing.

8. The working group recommends that FAA eliminate the provisions in the VOR and localizer receiver TSOs that permit continued manufacture of receivers not meeting the ICAO 1998 immunity standard under previous TSOs.

9. The working group recommends that FAA request that FCC terminate, without adopting a rule, the NPRM that would require Annex 10-compliant receivers.

submitted by H. W. Beningfield, working group chairman



U.S. Department
of Transportation

**Federal Aviation
Administration**

800 Independence Ave., S.W.
Washington, D.C. 20591

APR 15 1998

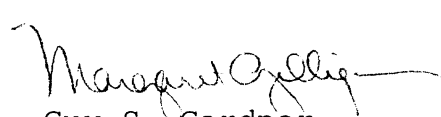
Mr. Glenn Rizner
Vice President, Operations
Helicopter Association International
1635 Prince St.
Alexandria, VA 22314

Dear Mr. Rizner:

This is to inform the Aviation Rulemaking Advisory Committee (General Aviation Operations Issues) of the disposition of the nine recommendations developed by the VHF Navigation/Communications Working Group when it completed its task in September 1995. The recommendations concern the need for implementation of International Civil Aviation Organization (ICAO) Annex 10, VHF Navigation and Communication Receiver Immunity Performance Standards. Each recommendation and action taken by the FAA is described in the enclosure.

I would like to thank the Aviation Rulemaking Advisory Committee (General Aviation Operations Issues) and the VHF Navigation/Communications Working Group for their expenditure of resources towards developing recommendations in response to the task assigned.

Sincerely,


for Guy S. Gardner
Associate Administrator for
Regulation and Certification

Enclosure

**Aviation Rulemaking Advisory Committee
General Aviation Operations Issues
FAA Action Taken on ARAC Recommendations**

Recommendation 1-- "...[T]hat the Federal Aviation Administration (FAA) issue instructions to regions requiring consideration of terrain and obstructions, as well as constraints imposed by other air traffic considerations, in evaluating the results of AAM analysis, and requiring that the results of the AAM analysis and evaluation be documented and made available to the proponent."

Action Taken by the FAA--The FAA's policy on consideration of terrain and obstructions was forwarded to the regional Frequency Management Officers in a policy letter from the manager of the Spectrum Engineering Division (ASM-500) dated April 20, 1989. This letter specifically stated that in areas inside the frequency protected service volume where an airplane cannot possibly fly due to terrain or physical obstruction, the predicted interference will not have an adverse impact on the aeronautical navigation facility. Notice has been given at meetings and training sessions about the necessity to inform the proponent of the results of the airspace analysis model (AAM) evaluation and this will continue to be emphasized in the future.

Recommendation 2--FAA is encouraged "to permit voluntary use of any FAA-approved technology (e.g. filters) that may be developed to reduce receiver susceptibility to FM interference. It is not intended that use of such technology or of such devices be made mandatory."

Action Taken by the FAA--The FAA believes that current certification policy satisfies this recommendation. The FAA develops performance-oriented airworthiness requirements; the FAA does not prescribe specific design-oriented requirements. Designers and manufacturers are free to determine their own specific designs as long as the designer or manufacturer shows that the design will result in a product that is in compliance with FAA performance-oriented airworthiness requirements. This policy is articulated at FAA/industry training sessions, standards writing activities, and certification meetings.

Recommendation 3-- "...[T]hat FAA request FCC to institute a rulemaking proceeding proposing the adoption of

a rule requiring a petitioner for an FM allotment or an applicant for a frequency change to demonstrate that a site exists that satisfies the criteria of the Airspace Analysis Model. The study should be submitted to the FAA regional office concurrently with the submission to FCC." The ARAC further recommended that "FAA identify a process by which the coordination between FAA and FCC can be performed."

Action Taken by the FAA--The FAA does not intend to request rulemaking by the FCC. Meetings between the FAA and the FCC were held and the matter was discussed.

Recommendation 4-- "...[T]hat FAA coordinate with FCC to obtain on-line access to FCC's data base of composite directional horizontal-plane antenna patterns, plus the associated search programs. FAA should require that proponents submit proposed directional horizontal-plane antenna patterns with FAA Form 7460-1."

Action Taken by the FAA--The FAA has been working with the FCC's FM branch to have the directional antenna patterns added to the database that the FAA already receives. As part of the FAA's revision of 14 CFR part 77 (proposed August 3, 1990; 55 FR 31722), various improvements are being considered, including submission of directional horizontal-plane antenna patterns.

Recommendation 5-- "[T]hat FAA hold filings of FAA Form 7460-1 confidentially until the proposal is circularized."

Action Taken by the FAA--Filings are not presently released until a proposal is circularized; therefore, regional offices are being reminded to keep case particulars in confidence until circularized.

Recommendation 6-- "[T]hat FAA request FCC to institute a rulemaking proceeding proposing the adoption of a rule requiring that all FM station applications involving changes in frequency or substantial change of power, antenna height, or location be coordinated with FAA." The ARAC further encouraged the FAA "...to develop a mechanism so that minor changes in FM broadcast facilities, such as small site changes, can be made without involved procedures." The ARAC also stated that the FAA's "...processing procedures must be reviewed so that an expedited and flexible review of the proposed change is completed within sixty days. This FAA review should be performed in concert with appropriate FCC and broadcast industry representatives so that areas of

concern can be identified and remedies implemented regarding the application of the airspace model to broadcast facilities. Additionally, FAA should issue instructions to its field offices to refrain from performing analysis for changes that merely correct old information."

Action Taken by the FAA--The recommendation that the FAA request the FCC to institute rulemaking will be satisfied by the FAA's adoption of 14 CFR part 77 (proposed August 3, 1990; 55 FR 31722). Concerning the re-evaluation of proposals that merely correct old information, the regions have been advised to be aware of such situations.

Recommendation 7-- "...[T]hat FAA issue notice that it will no longer give consideration to navigation receivers limited to 100 kHz channel spacing at such time as 90% of civil aircraft certified for IFR operation within the National Airspace System...are equipped with VOR/localizer receivers with 50 kHz channel spacing and with glide scope receivers with 150 kHz spacing."

Action Taken by the FAA--This recommendation is satisfied by FCC's rules in 47 CFR 87.133, which requires all aircraft be equipped with 760-channel communications. In most aircraft, the communications and navigation receivers are in the same unit.

Recommendation 8-- "...[T]hat FAA eliminate the provisions in the VOR and localizer receiver TSO's that permit continued manufacture of receivers not meeting the ICAO 1998 immunity standard under previous TSO's."

Action Taken by the FAA--The FAA is developing a new TSO, expected in December 1998, which will cancel TSO-C36a, C36b, C36c, C36d, C40a, and C40b.

Recommendation 9-- "...[T]hat FAA request that FCC terminate, without adopting a rule, the NPRM that would require Annex 10-compliant receivers."

Action Taken by the FAA--The proposal regarding 47 CFR part 87 (FCC No. 93-331, Implementing Technical Requirements Applicable to Instrument Landing System Receivers Adopted by the International Civil Aviation Organization," published in the Federal Register on July 26, 1993 (58 FR 39722), was not adopted by the FCC.



U.S. Department
of Transportation
**Federal Aviation
Administration**

800 Independence Ave., S.W.
Washington, D.C. 20591

JUN 3 1994

Mr. Steven J. Brown
Senior Vice President
Government and Technical Affairs
Aircraft Owners and Pilots Association
Frederick, MD 21701-4798

Dear Mr. Brown:

In 1985, International Standards, Recommended Practices and Procedures for Air Navigation Services Aeronautical Communications, Annex 10 to the Convention of International Civil Aviation, was approved by International Civil Aviation Organization (ICAO) member states with the goal of providing greater immunity from modulation interference. According to the ICAO adopted implementation timetable, VHF navigation and communication receivers installed after January 1, 1995, in aircraft engaged in international flight must meet the ICAO requirements. Additionally, all aircraft engaged in international flight after January 1, 1998, must be equipped with VHF navigation and communication receivers which comply with ICAO Annex 10.

In support of ICAO, the Federal Aviation Administration (FAA) developed technical standards to serve as acceptable criteria for the design and manufacture of VHF navigation and communication receivers. These standards are contained in applicable technical standard orders issued by the FAA and are based on the Radio Technical Commission for Aeronautics documents containing ICAO specifications. However, implementation options have not yet been evaluated.

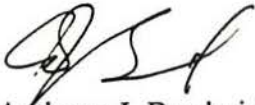
Pursuant to the March 1, 1994, Aviation Rulemaking Advisory Committee (ARAC) meeting on General Aviation Operations Issues, ARAC is requested to formulate and present recommendations to the FAA on the implementation options for United States compliance with the International Standards, Recommended Practices and Procedures for Air Navigation Services contained in Annex 10. To maximize opportunity for formulation and discussion of possible options, I suggest a balanced working group membership from the aviation and broadcast industries. To assist the working group in focusing on the issues at hand, the following issues are suggested for consideration: the economic impact of meeting the ICAO requirements, alternatives for achieving improved protection, evolutionary implementation considerations, ICAO work on a future VHF air/ground (A/G) communication system, the evolving U.S. position for the proposed 1995 ICAO

divisional meeting on precision approach and landing systems mix, early implementation of the global positioning system, and the U.S. Federal Radionavigation Plan.

If possible, I would appreciate your response as soon as possible so that the assignment of this task may be announced in the Federal Register. If you have any questions regarding this matter, please contact Mr. Ron Myres (202-267-8150) or Mr. Abbas Rizvi (202-267-3848).

Thank you for your continued support of the ARAC process.

Sincerely,

A handwritten signature in black ink, appearing to read 'AJB', is positioned above the typed name.

Anthony J. Broderick
Associate Administrator for Regulation
and Certification