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September 27, 1993

Mr. William F. Caton
Acting Secretary
Federal Communications Commission
1919 M Street, NW Room 222
Washington, DC 20554

Re: Comments in PR Docket No. 93-199

Dear Mr. Caton:

Enclosed herewith are 10 copies (original and 9) of the comments in PR Docket No. 93-199, FCC 93-331 "In the Matter of Implementing Technical Requirements Applicable to Instrument Landing System Receivers Adopted by the International Civil Aviation Organization" .

If there are any questions, please do not hesitate to contact this office.

Sincerely,

COHEN, DIPPELL AND EVERIST, P.C.

S.K. Khanna

S. K. Khanna

SKK:cc
Encl.

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COHEN, DIPPELL AND EVERIST, P.C.
COMMENTS ON
NOTICE OF PROPOSED RULEMAKING
PR DOCKET NO. 93-199, FCC 93-331

SEPTEMBER 1993

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

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

In the Matter of)	PR Docket No. 93-199
Implementing Technical Requirements)	FCC 93-331
Applicable to Instrument Landing)	
System Receivers and VHF Omirange)	
Radio Receivers Adopted by the)	
International Civil Aviation Organization)	

These comments have been prepared by the consulting engineering firm of Cohen, Dippell and Everist, P.C. ("CDE") concerning the Federal Communications Commission's Notice of Proposed Rule Making ("NPRM") that proposes to implement new technical specifications for all Instrument Landing Systems ("ILS") and VHF Omirange Radio ("VOR") receivers on-board U.S. aircraft.

The NPRM seeks to implement the standards contained in the International Civil Aviation Organization ("ICAO") Convention.

For over ten years, CDE has participated at its own expense in many meetings in Washington, D.C., relating to electromagnetic interference associated with the Federal Aviation Administration ("FAA") facilities and aircraft receivers. In addition, the firm also participated in 1988 as an industrial delegate to the CCIR Study Group 10 (JIWP 810) in Helsinki, Finland. This firm has provided information to the Helsinki conference regarding multiple use antenna systems as well as research on all current multiple-use broadcast operations and their actual performance.

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The Commission believes the proposed ICAO standards would improve the immunity of ILS and VOR receivers to EMI interference. The NPRM proposes that the ICAO standards apply to all newly installed ILS and VOR receivers on-board U.S. aircraft after January 1, 1995, and to all ILS and VOR receivers on aircraft flying internationally and all domestic flights under instrument flight rules, after January 1, 1998. CDE supports the Commission in its effort in proposing standards that would increase the flight safety.

CDE offers the following additional comments which relate to this very important aspect to air safety.

CDE believes the Commission should look into adopting more stringent requirements than ICAO to further improve the immunity of ILS and VOR receivers to unwanted signals. Studies provided by the U.S. government in coordination with the FAA to the Joint Interim Party (JIWP 8-10/1-USA-6, CCIR Study Groups, Period 1986-1990, Helsinki, Finland) indicate the ILS and VOR receivers on board aircraft can be made immune to broadcast signals to a higher degree than the proposed ICAO standards with the use of filters. Therefore, in the presence of such evidence it would be prudent on the part of the Commission to analyze the use of filters in detail toward adopting a standard which could make the ILS and VOR receivers reject unwanted signals. We believe this matter is of paramount safety concern for the general public and the Commission

needs to adopt rules that takes advantage of the latest state of the art technology which results in safer aircraft communication.

In addition, we believe the current analysis method used by the FAA to evaluate potential of interference to ILS and VOR receivers does not reflect the real world situation.

It is well known that the majority of ILS and VOR radio receivers have been manufactured under the criteria established by the FAA. In our opinion, the FAA criteria does not adequately recognize the environment in which it has to operate. The FAA has consistently maintained that its criteria and procedures are sacred and absolute in all matters affecting aircraft. However, the FAA has not explained why it chose to ignore the FCC practice and procedures regarding assignment criteria in general and for the FM and TV Band, in particular.

The FAA claims that it has received numerous reports of false ILS indications and reports of missed VOR communications. The FAA has used this as a justification to impose its own EMI criteria on the assessment of new or modified TV and FM operations. However, the FAA has never provided any evidence of such interference; therefore, its unsubstantiated claims should not be used as a justification for setting interference standards. Furthermore, the FAA changes its procedures for analyzing the EMI impact with little or no notice. It makes no apology that its theoretical EMI assessment program does not accurately portray the real world

conditions, i.e, the actual interference problems experienced by pilots and their aircraft.

Therefore, CDE believes the Commission should either review and analyze the FAA EMI program in a Notice of Proposed Rule Making^{1/} or advance its own airspace model.^{2/}

If these two issues - adopting more stringent standards for ILS and VOR receivers and more realistic EMI computer model - are addressed by the Commission, it will enhance the safety criteria in meaningful terms that we all desire. In addition, it would result in deletion of unnecessary regulations. In this regard it should be noted that the present administration was elected to create jobs and remove needless regulations that offer no constructive benefit.^{3/}

Respectfully Submitted By,
COHEN, DIPPELL AND EVERIST, P.C.


Sudhir K. Khanna
District of Columbia
Professional Engineer
Registration No. 8057

Date: September 27, 1993

^{1/}Similar to Proposed Rule Making in MM Docket No. 85-108, adopted April 11, 1985, and released April 12, 1985.

^{2/}The Canadian airspace model may be a useful and constructive beginning.

^{3/}Vice-President Gore's National Performance Review, "Reinvent Government", Washington Post, September 5, 1993.