

MR/Box File

Mr David Storey
C/o Radio Communications Agency
Wyndham House
189 Marsh Wall
London E14 9SX

17th August 2001

Dear Mr Storey,

RE: INDEPENDENT REVIEW OF SPECTRUM SURVEY

We clearly understand that spectrum capacity is not infinite and that new methods need to be found in order to ensure the most efficient use of that resource.

In responding to this issue AOPA is doing so on behalf of its members but in particular General Aviation (other GA organisations may have their own views).

I am sure that the Government and its advisors are aware of the particular flight safety issues surrounding the use of radio navigation aids: the main point being that these systems are related to the safety of life. Instrument landing systems (ILS) and en-route navigation aids (i.e. VORs/NDBs) provide a means of safety flying across the UK and landing at an airport at a time when weather conditions may be less than ideal. Small aircraft (e.g. aircraft less than 5.6kgs) usually have less sophisticated systems on board – unlike the Airlines.

The Global Positioning System (GPS) may in future be the primary system of choice for GA as it has the ability to provide en-route navigation and when augmentation is available it could be used as an ILS.

Over the last couple of years AOPA has been involved in discussions on the sharing of Spectrum, mainly with telecommunications companies, i.e. mobile telephones through the RA, ICAO & ITU. Through the ITU there are in existence Radio Regulations that refer to the protection of Spectrum which is used in connection with aviation – these are Articles S4(5) RR343 and S4 (10) RR953. These articles may need revision but in essence they give global protection to frequencies used by aviation from harmful electromagnetic interference. Aviation is a global activity and therefore global solutions will need to be found.

Aircraft systems must meet strict standards where failure modes are based on 10⁻⁷ that is to say that the possibility of a failure of a critical system is 1 in a million flight hours. Before we would accept the sharing of Spectrum with say mobile telephones we would need to be convinced beyond reasonable doubt that the possibility of interference with aviation systems was based on 10⁻⁷ criteria.

AOPAs position on spectrum management and/or use is as follows:

- 1) AOPA wants complete protection of all aviation systems (GNSS, ILS, VOR & NDB) worldwide through exclusive allocation of the Spectrum; until
- 2) it can be demonstrated that sharing Spectrum with other users (i.e. mobile phones) has no risk of electromagnetic interference and that if sharing is to be permitted that 10^{-7} would be used as the baseline criteria for non aviation products; and
- 3) until such time that a global solution to these issues has been found, to the satisfaction of all users of Spectrum, the UK must continue to comply with all ITU regulations.

Yours sincerely,

Martin Robinson
Chief Executive AOPA UK

CC: John Arscott DAP