Société de l'Electricité, l'Electronique et des Technologies de l'Information et de la Communication (SEE) -Groupe régional Midi Pyrénées – Clubs 17, 23, 31

Association Aéronautique et Astronautique de France (AAAF) -Groupe Régional Toulouse Midi-Pyrénées

Aviation and the RF spectrum challenge

L'aéronautique face à l'enjeu des fréquences

Toulouse, France, 30 – 31 January 2003

Conference held under the auspices of the French Ministry of Transport

Centre de congrés Météo-France – 42 av. Gaspard Coriolis

Objectives

This is a crucial challenge indeed for Aviation. Radio-frequency spectrum is a common but limited resource, by laws of physics. Frequencies are extensively used to provide essential communication, navigation and surveillance functions, throughout all phases of flight. As such, they are critical to aeronautical safety and regularity and beyond to the continuous growth of the air transport and aviation industries, both of which exercise considerable leverage on national economies. Aircraft operators, in addition to facing tough technical challenges in managing aircraft operations as efficiently as possible, are now looking into offering novel value-added services to their passengers: e-mail and INTERNET access, on-demand video and more generally multi-media. All of which require significant bandwidth too.

Since already several years, other industries have been successfully lobbying for an ever greater share of this unique resource, both in national and international arenas, including in frequency bands hitherto allocated to aeronautical services - either exclusively or on priority basis . Additionally aeronautical bands are increasingly interfered with. Such harmful interference to aviation CNS systems directly impact aviation safety and regularity.

In parallel, the last few years have seen an unprecedented development of signal processing and telecommunication technologies , with a double-barrelled promise of ultimately better using and sharing this finite resource among different users. These have, however, not only diverging interests in matters concerning public safety but, equally significantly, disproportionate economic weights and associated lobbying powers.

This conference has the double purpose of dealing first with all the spectrum-related issues confronting Aviation and second, to take stock of all possible/prospective way-forwards, either on drawing boards or in the planning, or even still in R&D stages.

Steering committee

Chairman - A.Delrieu DGAC/DNA

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