DOCKET FILE COPY ORIGINAL

Before the
Federal Communications Commission
Washington, D.C. 20554

ET Docket No. 94-32

In the Matter of

Allocation of Spectrum Below 5 GHz Transferred from Federal Government Use — PP-88

THIRD REPORT AND ORDER

Adopted: November 1, 1995; Released: December 5, 1995

By the Commission:

I. INTRODUCTION

1. By this action, the Commission denies a pioneer's preference request submitted by In-Flight Phone Corporation (In-Flight). In-Flight seeks a preference in the General Wireless Communications Service (GWCS) at 4660-4685 MHz for its proposal for a live programming service to airline passengers. For the reasons discussed below, we find that In-Flight's proposal does not warrant a pioneer's preference.

II. BACKGROUND

2. Our pioneer's preference rules were established to provide a means of extending preferential treatment in our licensing processes to parties that demonstrate their responsibility for developing new communications services and technologies.[1] A party awarded a pioneer's preference receives the rights to obtain a license to operate in the service that it has innovated, using the design and technologies upon which its award is based. The pioneer's preference rules ensure that innovators have an opportunity to participate either in new services that they take a lead in developing or in existing services which they substantially enhance. A pioneer's preference applicant must persuade us that its proposal is innovative, has merit, and that it is the original developer of the innovation at issue.

3. Under the pioneer's preference rules, a necessary condition for the award of a preference is that the applicant demonstrate that it has developed the capabilities or possibilities of a new technology or service, or demonstrate that it has brought the technology or service to a more advanced or effective state. A preference is granted only if the service rules adopted are a reasonable outgrowth of the applicant's proposal and lend themselves to the grant of a preference. The applicant must also demonstrate that the new technology or service is technically feasible by submitting either the results of an experiment or a technical showing. Finally, preferences are not granted casually. Rather, each applicant has a significant burden to persuade us that its proposal is innovative. If a preference is awarded, the recipient's license application will not be subject to mutually exclusive applications.

4. In-Flight originally filed its pioneer's preference request in October 1992, in the narrowband Personal Communications Services (PCS) proceeding, ET Docket No. 92-100. It sought a preference for a live ground-to-air audio news, information, and entertainment programming service for airline passengers to be provided by a network of land-based transmitters that would operate in the 901-902 MHz and 940-941 MHz bands. In-Flight argued that its proposal would accommodate a large pent-up public demand for a programming service aboard aircraft and that it warranted a preference for three reasons: 1) originating the service concept; 2) improving the state-of-the-art in ground-to-air communications by developing special circuitry that mitigates the effect of multipath fading and by providing seamless handoff of programming transmissions as aircraft pass over ground stations; and, 3) providing the service by spectrum efficient and economical terrestrial, as opposed to satellite, technology.[2]

5. Although In-Flight's pioneer's preference request was not placed on public notice in Docket 92-100, Telocator, PacTel, Paging, and Claircom Communications Group, L.P. (Claircom) opposed it on procedural grounds, stating that it was late-filed and was not a permissible narrowband PCS service. Claircom also contended that providing a live audio service to airline passengers via a matrix of ground stations is not innovative.[3] In-Flight filed replies to these pleadings, in which it asserted that its pioneer's preference was timely filed and was a permissible narrowband PCS service.[4] Subsequently, we adopted rules in Docket 92-100 that were not related to In-Flight's audio ground-to-air programming service proposal.[5] No action was taken with respect to In-Flight's pioneer's preference request, and it remains pending.

---

[1] The pioneer's preference regulations are codified at 47 C.F.R. §§ 1.402, 1.403, and 5.207. *See* Establishment of Procedures to Provide a Preference, GEN Docket No. 90-217, *Report and Order,* 6 FCC Rcd 3488 (1991), *recon. granted in part, Memorandum Opinion and Order,* 7 FCC Rcd 1808 (1992), *further recon. denied, Memorandum Opinion and Order,* 8 FCC Rcd 1659 (1993) . In October 1993, we initiated a review of our pioneer's preference rules; *see* ET Docket No. 93-266, *Notice of Proposed Rule Making,* 8 FCC Rcd 7692 (1993); *First Report and Order,* 9 FCC Rcd 605 (1994), *recon. denied, Memorandum Opinion and Order,* 9 FCC Rcd 6837 (1994); *Second Report and Order and Further Notice of Proposed Rule Making,* 10 FCC Rcd 4523 (1995) (petition for reconsideration pending); *Third Report and Order,* FCC 95-218, released June 8, 1995 (petition for reconsideration pending).

[2] *See* "Application for Pioneer's Preference," filed by In-Flight October 30, 1992.

[3] *See,* respectively, "Formal Opposition of Telocator," filed December 21, 1992; "Comments of PacTel Paging," filed January 26, 1993; and "Opposition to Petition for Acceptance of Application or Rule Waiver and Limited Opposition to Application for Pioneer's Preference," filed by Claircom February 3, 1993.

[4] *See,* respectively, "Reply of In-Flight Phone Corporation to Opposition of Telocator," filed December 22, 1992; and "Reply to Comments of PacTel Paging and Opposition of Claircom Communications," filed February 9, 1993.

[5] *See First Report and Order,* ET Docket No. 92-100, 8 FCC Rcd 7162 (1992).

6. In May 1994, we released a *Notice of Inquiry (NOI)* in the instant proceeding, seeking information on potential applications of 50 megahertz of transferred Federal Government spectrum at 2390-2400, 2402-2417, and 4660-4685 MHz.[6] In November 1994, we issued a *Notice of Proposed Rule Making (NPRM)* proposing the allocation of this spectrum for general Fixed and Mobile services. In February 1995, we issued a *First Report and Order and Second Notice of Proposed Rule Making (Second NPRM)* finalizing the allocation proposal, and proposing, *inter alia,* to allocate the 4660-4685 MHz band for a GWCS.[7]

7. In March 1995, In-Flight filed a Petition for Declaratory Ruling (Petition), requesting that its pending pioneer's preference request be considered in the GWCS in the instant proceeding. Specifically, In-Flight states that while initially it had hoped to provide a ground-to-air entertainment service as a narrowband PCS licensee, the rules adopted in Docket 92-100 prevented provision of its service as such a licensee. Accordingly, In-Flight asks that we rule that its pioneer's preference request is applicable to the instant proceeding and that it was filed in a timely manner.[8] In-Flight also states that it would provide video, as well as audio programming, as a GWCS licensee. However, it states that this change to its pioneer's preference request is immaterial to the underlying merits of its pioneer's preference request because: 1) its service concept permits transmission of live programming to airline passengers from land-based transmitters regardless of whether these transmissions consist of audio programming alone or both audio and video programming; and, 2) it would have proposed an audio and video service in Docket 92-100 but for the fact that the bandwidth under consideration in that proceeding was insufficient to accommodate both audio and video programming.[9] The Petition was placed on Public Notice in April 1995;[10] however, no comments were filed in response to this petition.

8. On June 8, 1995, in response to our *Third Report and Order* in the pioneer's preference review proceeding requiring that parties with pending pioneer's preference requests file amendments to their requests to bring them into conformance with new pioneer's preference rules, including rules pertaining to unjust enrichment,[11] In-Flight filed a Supplement to its pioneer's preference request. In its Supplement, In-Flight stated that it is unlikely to recover its investment in developing what it now refers to as its "aircraft audio and video programming service" unless it receives a pioneer's preference, and also requested that its preference request be placed on public notice.[12]

9. On June 16, 1995, the Commission's Office of Engineering and Technology (OET) placed In-Flight's pioneer's preference request, including the Supplement, on Public Notice and assigned it file number PP-88 in Docket 94-32.[13] On July 3, 1995, Claircom filed an opposition to PP-88, arguing that In-Flight's audio programming service is not innovative. Claircom maintains that USA Today Sky Radio filed an experimental application to provide a satellite-based live broadcast service almost simultaneously with In-Flight's experimental application, and argues that except for the mode of transmission, the proposed services were almost identical. Claircom also contends that live ground-to-air audio programming was proposed years before In-Flight filed its pioneer's preference request and that, in any event, retransmission of live programming from broadcast stations is not innovative.[14] On July 13, 1995, In-Flight filed a reply reasserting that its proposal is innovative, that it developed technical innovations that make possible the provision of a ground-to-air programming service from terrestrial transmitters in an efficient and cost-effective manner, and that its experimental license application and petition for rule making to establish a ground-to-air service were both filed three months prior to USA Today Sky Radio's experimental application.[15]

III. DISCUSSION

10. With respect to In-Flight's proposals set forth in its October 1992 pioneer's preference request, March 1995 Petition for Declaratory Ruling, June 1995 Supplement, and experimental reports, we conclude that the information submitted therein fails to justify a preference in the instant proceeding. First, we find that the GWCS service rules are not a reasonable outgrowth of In-Flight's ground-to-air programming service proposal. While, in developing these rules, we sought to allow licensees to provide a wide variety of fixed and mobile services in order to meet various needs, we did not craft the rules based on In-Flight's proposal. Rather, In-Flight's ground-to-air programming service is only one of a multitude of services that could be provided in the GWCS. Awarding In-Flight a preference in this proceeding would therefore be inconsistent with our

---

[6] *See* Allocation of Spectrum Below 5 GHz Transferred from Federal Government Use, 9 FCC Rcd 2175 (1994).

[7] *See,* respectively, 9 FCC Rcd 6779 (1994) and 10 FCC Rcd 4769 (1995).

[8] We concur with In-Flight that its pioneer's preference request is applicable to the instant proceeding, and herein partially grant its Petition, based on its representation that it is no longer seeking to provide a 900 MHz ground-to-air entertainment service. Accordingly, In-Flight's original request for a pioneer's preference in Docket 92-100 is moot, and we herein dismiss it.

In-Flight also requested that we make a ruling well in advance of the August 10, 1995 statutory deadline for adopting final rules in the instant proceeding, so that we could render a decision on In-Flight's pioneer's preference request at the same time final rules were adopted. However, because the pleading cycle on In-Flight's pioneer's preference request was not complete until July 13, 1995, we were unable to make a pioneer's preference decision simultaneously with our adoption of the *Second Report and Order* in this proceeding. *See* 47 U.S.C. §§ 309(j)(10)(B)(iii) and 925(a). Section 925(a) required that we adopt final rules governing use of the 2390-2400, 2402-2417, and 4660-4685 MHz bands by August 10, 1995. We took this action in the *Second Report and Order* in this proceeding, *see* FCC 95-319 (released August 2, 1995).

[9] *See* "Petition of In-Flight Phone Corp. for Declaratory Ruling," filed March 16, 1995.

[10] *See* DA 95-967, released April 28, 1995.

[11] *See* note 1, *supra.* C

[12] *See* "Supplement to In-Flight's Application for Pioneer's Preference."

[13] *See* DA 95-1365.

[14] *See* "Claircom Licensee Corporation Opposition to Pioneer's Preference Request of In-Flight Corporation." (Between the time of its opposition filed in Docket 92-100 and the instant filing, Claircom changed it name from Claircom Communications Group, L.P.)

[15] *See* "Reply of In-Flight Phone Corporation to Claircom Opposition."

pioneer's preference rules, which state, *inter alia:* "In determining in its discretion whether to grant a pioneer's preference, the Commission will consider whether the applicant has demonstrated that it (or its predecessor-in-interest) has developed an innovative proposal that leads to the establishment of a service not currently provided or a substantial enhancement of an existing service. Additionally, the preference will be granted only if rules, as adopted, are a reasonable outgrowth of the proposal and lend themselves to the grant of a preference."[16] The GWCS rules were developed independently from In-Flight's proposal, and cannot therefore be viewed as "a reasonable outgrowth of the proposal."

11. Second, we find that In-Flight has failed to demonstrate the technical feasibility of its proposal in the 4660-4685 MHz band. In-Flight's technical achievements in developing and testing equipment in the 901-902 MHz and 940-941 MHz bands are not directly relevant to the 4660-4685 MHz band due to differences in propagation. The latter band is five times as high in frequency and is in the Super High Frequency (SHF) range, whereas the 900 MHz bands are in the Ultra High Frequency (UHF) range. A study prepared at the time the Commission was considering allocating frequencies for an air-ground radiotelephone service in the 800-900 MHz range stated that differences in propagation between the 900 MHz range and higher bands could be significant.[17] Nowhere in the material submitted by In-Flight is there any reference to testing or construction of prototypes above the 900 MHz range.[18] Accordingly, In-Flight has failed to establish a nexus between its achievements at 900 MHz and its request for a pioneer's preference in the 4660-4685 MHz band.

12. Finally, we agree with Claircom that In-Flight's proposed ground-to-air entertainment service is not sufficiently innovative to warrant a preference in any band. In analyzing the technical components of In-Flight's pioneer's preference request, we find that In-Flight has not demonstrated that its technological developments are innovative in either the 900 MHz or the 4660-4685 MHz bands given the current state-of-the-art technologies used in providing 800 MHz air-ground radiotelephone service. In-Flight failed to demonstrate that the special circuitry it proposes for mitigating the effects of multipath interference and the errorless, rate-buffered switch circuitry it proposes for providing seamless handoff between ground stations are beyond the technologies used in that service.[19]

13. In sum, we deny In-Flight's pioneer's preference request for the reasons discussed above -- the GWCS rules are not a reasonable outgrowth of In-Flight's proposal; In-Flight has not shown the technical feasibility of its proposal for the 4660-4685 MHz band; and In-Flight's proposal is not sufficiently innovative to warrant a preference.

IV. ORDERING CLAUSES

14. Accordingly, IT IS ORDERED, That the pioneer's preference request (PP-88) filed by In-Flight Phone Corporation in this proceeding IS DENIED. IT IS FURTHER ORDERED, That the request for pioneer's preference filed by In-Flight Phone Corporation in ET Docket No. 92-100 IS DISMISSED AS MOOT. IT IS FURTHER ORDERED, That the petition for declaratory ruling filed by In-Flight Phone Corporation IS GRANTED IN PART AND DENIED IN PART.

FEDERAL COMMUNICATIONS COMMISSION

William F. Caton
Acting Secretary

[16] *See* 47 C.F.R. § 1.402(a).

[17] *See* "Air-To-Ground Propagation at 900 MHz," by Joseph R. Child. A copy of this study has been placed in the record of this proceeding.

[18] In-Flight requested a modification to its experimental 900 MHz license in October 1994 to change frequencies to 2390-2400 MHz, and a new experimental license for the latter band was issued. In-Flight has reported no results from this new license.

[19] We note that In-Flight received its license to provide 800 MHz air-ground telephone service in December 1990.