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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

March 15, 1993

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Ms. Donna R. Searcy
Office of the Secretary
Federal Communications Commission
1919 M Street, NW
Washington, DC 20554

Re: In the Matter of Amendment of Part 21 of the Commission's Rules for the Domestic Public Fixed Radio Services

Dear Secretary Searcy,

Enclosed herewith is one (1) original, and five (5) copies of our comments in response to CC Docket 93-2.

Sincerely,

COMSEARCH

Douglass R. Hall

Douglass R. Hall
Vice President
Transmission Planning Services

Enclosures

No. of Copies rec'd 0+5
List A B C D E

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FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

Before the
Federal Communications Commission
Washington, DC 20554

In the Matter of	)	
	)	
Amendment of Part 21 of the Commission's Rules for the Domestic Public Fixed Radio Services	)	**CC Docket No. 93-2**

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COMMENTS OF COMSEARCH
ON THE
NOTICE OF PROPOSED RULE MAKING

Comsearch respectfully submits its comments in response to the Commission's Notice of Proposed Rule Making (NPRM) in CC Docket 93-2. In this NPRM the Commission proposes to revise Part 21 of its Rules to permit Point-to-Point Microwave Radio Service (PPMS) applicants to commence construction of proposed facilities upon filing FCC Form 494 prior to grant of an authorization. The proceeding also seeks comments on the proposed revision and elimination of several reporting requirements for Part 21 applicants.

Comsearch is an independent firm specializing in spectrum management of terrestrial microwave, satellite, and mobile telecommunications systems. In this role we provide consultant services to all classes of users including those regulated by Part 21 of the Rules. We offer our comments from this unique perspective.

Frequency Coordination Process

Comsearch has been involved in the frequency coordination process for over 16 years. During this period the rapid growth and expansion of Part 21, Part 25, and other users was facilitated by the success of the frequency coordination process. Effective coordination among users prior to system implementation has led to a high degree of frequency reuse and spectrum efficiency in these bands. We concur with the Commission that the frequency coordination process is essential to avoid interference conflicts.[1] The importance of this process cannot be overemphasized given the new proposals to allow increased use of these bands as outlined under ET Docket No. 92-9.[2]

Construction Authorization Upon Filing FCC Form 494

Comsearch believes that allowing construction to begin upon filing FCC Form 494, under certain circumstances, is a positive step toward improving service response to public demands. If the frequency coordination process has been completed properly all interference concerns should have been satisfied. The public notice period following the filing acts as a backup to the

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[1] NPRM, CC Docket No. 93-2, at para. 4

[2] "Redevelopment of Spectrum to Encourage Innovation in the Use of New Telecommunications Technologies", ET Docket 92-9, RM-7981,RM-8004

coordination process and allows users to verify that there are no discrepancies between the information coordinated and that which is filed on the FCC Form 494.

Application for Modification or Amendment on FCC Form 494

We believe that applications for modifications or amendments should also be included in this rule making, allowing construction to begin as soon as the FCC Form 494 is filed. As long as the same requirements for coordination and public notice periods exist as they do for new applications they should be handled in the same manner. The issue of modifications and amendments does, however, lead to discussion of the difference between major and minor changes and interpretations of when frequency coordination is required by the Rules.

47 CFR, § 21.23 provides the definitions of what are considered to be major amendments to an application. Major changes are coordinated with other potentially affected users as a standard practice. Minor changes are dealt with in a more vague manner under § 21.40 through § 21.42 of the Rules. These sections state that frequency coordination procedures, as necessary, should be complied with regarding minor modifications. It is the, as necessary, qualification that leaves interpretation of whether coordination is required up to the user. As an example of the potential problem, consider a modification for changing the

geodetic coordinates of a transmitter less than 10 seconds. Under the current Rules this qualifies as a minor change with the decision of whether to coordinate the change left up to the applicant. However, if the transmitter is operating on a short path in the 18 or 23 GHz band this amount of change could drastically alter the interference contribution of this transmitter into the existing environment. On the other hand, a coordinate change of this magnitude in the lower 2 GHz band, depending upon location, may not change the interference impact on the existing environment at all. It seems that it's in the best interest of the public to allow the potentially affected users the right to decide if the proposed change impacts their system. Under the current Rules it is not even required that they be notified in this situation. In practice, notifications are usually sent out even for minor modifications as a courtesy to other users, with the exception that a response is not required. Modifying the Rules to <u>require</u> this notification for all changes would only reflect general industry practice and close an existing loop hole.

Elimination of FCC Form 494A

The filing of Form 494A upon completion of construction or modification serves the purpose of official notification that the proposed change or addition has been completed. Without this official notification we are left to assume that the changes have been completed. At risk is the integrity of the databases used to

do frequency coordination. We believe this is one of the important reporting milestones in the licensing process that should be kept in place in some form. We applaud the efforts of the Commission to streamline the Rules in order to accelerate service to the public but emphasize caution in replacing official notification of completion with an assumption of completion. As suggested in the NPRM, this could open the door for increased warehousing of spectrum and deterioration of the databases that are the foundation of the frequency coordination process.[3]

Proposed Revisions to FCC Form 494

Comsearch assists in preparation of FCC Form 494 for many of our clients. The complexity of the technical information on the first page of the current form is significant.[4] This complexity increases the chance of human error when the information is entered onto the form manually. Computer automation has greatly improved this process and reduced the possibility of errors by allowing software to access databases and automatically populate the more technical portions of the form. In considering revision of FCC Form 494 we submit the following comments.

1. The current form confines the technical information to the front page. This simplifies the technical data entry as it

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[3] NPRM, CC Docket 93-2, at para. 16

[4] See FCC Form 494, dated January 1991

is not split over multiple pages as is the proposed form in Appendix D of the NPRM. The significant change to the first page of the proposed form is the removal of items 10) Transmitter Information and 11) Antenna Information to the second page. This leaves a great deal of blank space on page 1 that seems could be better utilized.

2. There is not enough space allowed for certain variables to be entered clearly. Considering that many users complete these forms using typewriters or printers with standard font sizes there must be a reasonable amount of space for data entry. The current form in use already has a limited space problem but there is even less space for some variables on the proposed form. Examples of this include the areas for antenna codes, heights, and transmitter model numbers. Allowing adequate space will improve legibility and reduce errors.

3. Instructions on the current and proposed form call for heights to be entered in feet <u>and</u> meters.[5] It seems that either is sufficient if properly designated but both are unnecessary. This has been affirmed in discussions with Commission staff and should be corrected in the form instructions. There is insufficient room on the form for both sets of units in any case.

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[5] See Instructions for FCC Form 494, Item 7 (f),(g), and (h), and Item 8 (3), antenna heights

4. Considering the different techniques of deriving coordinates today and discussions surrounding use of NAD 27 vs. NAD 83 it seems appropriate that there be a designation on the FCC Form 494 to identify the base for the supplied coordinates. While most users and applicants understand the Commission still requires NAD 27 data there are some that do not know there is a difference. Requiring this verification will help eliminate mistakes and maintain database integrity for interference analysis purposes. Current instructions to the form do not differentiate sources of derivation.[6]

5. Comsearch recommends maintaining the technical information on one page of Form 494, as it is currently, with some spacing improvements. As proposed on the revised form, removing the current item 2) Fee Data from the technical page should allow for some additional space. By moving item 10) Transmitter Information and item 11) Antenna Information back onto the first page this additional space could provide one or two more lines under item 11) Antenna Information, which is often needed.

6. Comsearch suggests that the Commission work with an industry group, such as the National Spectrum Managers Association

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[6] See Instructions for FCC Form 494, Item 7 (j), and Item 9 (g)

(NSMA), to interactively discuss proposed changes to FCC Form 494 before adopting a new format. The NSMA is an industry group representing frequency coordinators and spectrum managers responsible for completing FCC Form 494's on behalf of their companies and clients. This cooperation would be beneficial to both the users and the Commission in the complementary goal of providing the required information in a format that minimizes complexity and reduces errors.

Respectfully Submitted,
COMSEARCH

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