

To: FCC Office Of Engineering and Technology
Renewal Application Reviewing Engineer

From: George B. Hutchison
Applicant for Renewal
Experimental License WC2XPF
File Number: 0038-EX-RR-2002

Date: 8 April 2002

Attention: Mr. Anthony Serafini

Mr. Serafini:

Per your advice we contacted a number of different people and divisions within the FCC regarding our project. One of the major drawbacks is that there is no specific bureau into which this project truly fits. The closest is the Wireless Telecommunications Bureau, and the scope of the project appears to necessitate a major rule-making undertaking, as opposed to waiving a small number of rules. This will take time.

Before the rule-making request can be initiated, I feel that in order to establish a better foundation for the proposed "Domestic Short-Wave Data Broadcast Service" rulemaking, it would be prudent to test data communications protocols and methods more current than ITA#2 via Frequency Shift Keying (F1D).

A number of additional protocols have been considered. Our current Modulation Designation allows us about 1550 Hz Bandwidth, allowing 74.2 Baud 5-level teletype.

I would like to add AMTOR/SITOR-B (Forward Error Correcting) to our allowed formats, as well as PSK31, Phase-Shift Keying at 31.25 Baud. I would also like to retain the 74.2 Baud teletype, and the current 1K55F1D would cover this, as well as the AMTOR/SITOR (FEC) mode. PSK31, with multi-channel capability would fall into the J7B or J7D designation.

The PSK31 has the possibilities of running several channels simultaneously, with which I would like to be allowed to experiment. This would permit such services as sports, headlines, weather, etc., to run concurrently on one radio circuit, allowing the receiving party to select that which interests him/her at the moment, yet stay within a very reasonable bandwidth and not require the 50 KW installations demanded by AM or Shortwave Broadcasting.

Due to the significant possibility of undesirable sidebands and other spurious signals, I propose to be permitted use of quality rf equipment. I have a Harris RF-230S Military Sideband transceiver due here shortly, as well as a Henry 4K-Ultra Linear Amplifier, which is a type-accepted unit designed for such applications as embassy and interagency communications. These items run very conservatively, and are known for their high performance.

I have attached a document detailing a frequency search pursuant to a

change in our 20 meter frequency. I desire to change 13972 to 13952 so as to establish a harmonious relationship with the SailMail Association, as is explained on the Frequency Search Document.

My proposed operating schedule is to continue daily operation, but rotate the communication modes. The manner of rotation would have to be ascertained through experimentation and feedback from those interested.

I am not certain of the period of time it would take to establish a basis for determining the mode(s), duration, and days of presentation of the proposed broadcasts. This would be a part of the experimentation. A year would be a minimum, and perhaps two, depending on the response from the listenership. Consistency and dependability are major factors in establishing a steady audience. The current reputation we have is very good, and I wish to maintain that.

I am sure you will have questions. Please feel free to e-mail me at w7ksj@attbi.com, or call me at work, 425-226-1550.

Thank you for your assistance and consideration in the past. I hope you will find this proposed addition to the project within reasonable limits of acceptability.

Sincerely,

George B. Hutchison