National Aeronautics and
Space Administration
**Headquarters**
Washington, DC 20546-0001

19a 8/8 1
18 8/22

Doc. 31573/1

1942

also need to look @ US337

DOCKET FILE COPY ORIGINAL Ref. Doc. 31559/1

98-206

Reply to Attn of:

MT

RECEIVED

MAR - 5 2001

FEDERAL COMMUNICATIONS COMMISSION
OFFICE OF THE SECRETARY

August 7, 2000

Mr. Norbert Schroeder
Acting Chairman, IRAC
National Telecommunications and
Information Administration
Department of Commerce
Washington, D.C. 20230

Dear Mr. Schroeder:

Please add the following comments and attached mark up of IRAC Doc. 31559 to the August 8, 2000 IRAC agenda.

IRAC Doc. 31559 provides a possible IRAC response in anticipation of a draft FCC Report and Order on the use of the 13.75-14 GHz band for non-geostationary-satellite orbit fixed-satellite service (NGSO FSS) operations. NASA commends NTIA for its initiative in this regard and offers a few edits to the attachment contained in Doc. 31559 to accommodate NASA's future near term requirements. These changes can be found in the attached strikethrough revision of Doc. 31559 and primarily concern changes to the bandwidth identified in condition 3 under "Conditions for NGSO FSS Systems".

The Ku-band forward link for NASA's Tracking and Data Relay Satellite System (TDRSS) operates in the 13.75-13.8 GHz band and can support data rates up to 25 Mbps. Footnote S5.503, originally drafted at WARC-92 and recently revised by WRC-00, identifies an e.i.r.p. density limit across a specific band segment, 13.772-13.778 GHz. This band segment was identified at WARC-92 in order to protect the TDRSS forward link to NASA's Space Shuttle. This same link will be used in the interim communications system on the International Space Station (ISS). A permanent Ku-band transceiver is scheduled for implementation aboard the ISS in September 2003 that will require 10 MHz bandwidth of operation centered at 13.775 GHz. The changes to the attachment in Doc. 31559 therefore reflect the broader bandwidth over which the e.i.r.p. density limit should apply.

Provided the e.i.r.p. density limit of 51 dBW per any 6 MHz is applied over the 13.77-13.78 GHz band needed to support future ISS operations as shown in the attached revisions, NASA could support allowing NGSO FSS use in the 13.75-13.8 GHz band.

No. of Copies rec'd 2
List A B C D E

One further revision to the attachment in Doc. 31559 is the deletion of the entire section dealing with "Conditions for GSO FSS Systems". NASA believes that this could cause confusion as the FCC Report and Order will be addressing NGSO FSS only and not GSO FSS. We note that JTG 4-7-8 has been formed to examine sharing conditions between the systems operating in the services allocated to the frequency band 13.75-14.00 GHz. Issues concerning GSO FSS will be taken up by the JTG and would possibly result in a future FCC Report and Order.

Sincerely,

David P. Struba
NASA IRAC Representative
Office of Space Flight

cc:
NASA HQ/M/W. Readdy
/M/J. Rush
/M/R. Spearing
NASA Glenn/M/W. Whyte, MS 54-2
/M/J. Hollansworth, MS 54-2