26MAY00

Federal Communications Commission
Authorization and Evaluation Division

Gentlemen,

We are submitting this application for adding an emission designator to our existing granted
equipment B8HACL-130T. The emission designation we want to add is 25M0D9W.

The addition of this emission designator does not change the equipment characteristics as applied
for under the original grant.

The ACL-130T is a heterodyne radio that accepts an internal or external 70MHz modulated
signal. The 70MHz modulated signal can be either analog or digital.

<u>NECESSARY BANDWIDTH</u>
To calculate the necessary bandwidth the following formula was used:

$Bn = 1/m(Din + Do)Fe \times \alpha$

Where: Bn = Necessary Bandwidth
       m = Modulation Efficiency = 4 for 16QAM
       Din = Input Data Rate = 58.2 MB/s
       Do = Overhead Data = 2.0MB/s
       Fe = Forward Error Correction = 204/184 (Reed Solomon)
       α = Filter Roll Off Factor = 1.35

$Bn = 1/4(58.2 + 2)204/184 \times 1.35$
$Bn = 1/4(60.2)1.1 \times 1.35$
$Bn = (15.05)1.1 \times 1.35$
$Bn = 16.555 \times 1.35$
$Bn = 22.35MHz$

Sincerely,

RF Technology, Inc.
John Timm
Technical Sales Manager