TECHNICAL SPECIFICATIONS

Conventional Ku Band Transmit/Receive

CONTROL POINT

Name Paul Tanner (Truck Operator)

Telephone Number <u>239-707-2450</u>

MOBILE TRANSMIT ANTENNA

Transmit Antenna Manufacturer AVL Technologies

Transmit Antenna Model Number 1610K-11

Transmit Antenna Bandwith 1.0@-3dB/1.6@-10dB

Transmit Antenna Gain 2 port - 46.0 dBi Typical

Frequency Coordination Limits

(a) Range of Satellite Arc:

(1) Western Limit 143 W° (2) Eastern Limit 69 W°

(b) Antenna Elevation Angle at:

(1) Western Limit 31.6@127 W °min (2) Eastern Limit 52.3@63 W° min

(c) Maximum EIRP Density Toward Horizon 50.08

Antenna Facilities:

(a) Use of Antenna Occasional
(b) Antenna Size 1.6 meters

(c) Type of feed Switchable Wide Band Offset Feed Horn

(d) Antenna gain in dBi and the frequency at which it is measured:

45.5 dBi min/46.0 dBi typical across 13.75 to 14.5 GHz

Receiving System Noise Temperature 48° K at 10° Elevation

Specifics of operation

Frequency limits: 14 - 14.5 GHz

RECEIVE ANTENNA

Various Receive Site Used No Receive Antenna Manufacturer Andrew

Receive Antenna Model Number 206317-2/ESA46-124

Receive Antenna Bandwith .34 @ -3dB

.67 @ -15 dB

Receive Antenna Gain <u>53.8</u>

Antenna AGL <u>3 meters</u>

TRANSMITTER

Transmitter Manufacturer Advantech Wireless

Transmitter Model (100 W) SSPB-KS-2200G-100W

Number of high power amplifiers $\underline{1}$

Transmitter Frequency Bands (T/R) 14-14.5 GHz

(T/R) 11.7 - 12.2 GHz

Transmitter Digital Output Power 80 W +49 dBm/100W +50 dBm

Antenna Polarization <u>Linear</u>

Max EIRP for each RF carrier in the main beam:

<u>74.9</u> dBw

Max EIRP for density for each RF carrier in the main beam:

<u>50.5</u> dBw

Does the Transmitter employ Automatic Transmitter Power Control? No

TRANSMIT LOCATION (KMRA) in NAD 83

a. Centerpoint Coordinates

<u>26 - 36 - 27 N</u> Latitude

81 -51 - 48 W Longitude

b. Radius of Operation 500 miles