

From: Jameslew683@aol.com
To: Carl Huie
Date: 12/3/02 1:09PM
Subject: Servac STA information

amendment

395 ST02

Dear Mr Huie

Here is the antenna information that was sent to me by the UK manufacturer of the Pipe Hawk system.

I hope it contains the answers that you need.

Please find attached a letter to support a request for flexibility in providing exact co-ordinates for field operation of the unit.

Thanking you for your support

James

Dear James

In reply to the questions you raised to support your FCC application;

1) Lower and Upper Frequencies

The frequencies range for the Pipe Hawk Unit is 150 to 950 (The brochure says to 1,000MHz but it actually does not push that high.) The peak radiation occurs with the co-polar antenna at 400MHz. The upper frequency is probably around 700MHz.

-10dB Bandwidth 150MHz to 700MHz

2) Power

As the they also want EIRP which is peak power, this should be average power. I can give you no better value than the one you have used already, 2mW.

3) EIRP (Effective Isotropic Radiated Power)

This depends critically upon how you measure it which the FCC are well aware of! In there definition they define it as if measured in a 50MHz bandwidth but then state that they do not know how to measure it in a bandwidth of less than 3MHz!

The EIRP at the frequency of maximum radiation (400MHz) is less than -40dBm when measured with the radar in normal use and with a bandwidth of 1MHz.

Hope this helps.

Richard

OMEGA TOOLS SERVAC

395-5702 *Amendment*

FCC
Experimental Radio Services
P.O.Box 358320
Pittsburgh
PA 15251-5320

3rd December 2002
Our Reference FR/JL-1202/04

Dear Sirs

Further to our application for a Special Temporary Authority for one Pipe Hawk GPR unit to be imported and utilized within the requested States of the US.

I write to request some compassionate flexibility in your request for exact co-ordinates for operation of the equipment. There are already a number of UWB ground radar systems operating within the United States. They are registered under a waiver program with the FCC, which requires the operators of each system to be contactable, traceable and to record a log of each and every instance of where the system was utilized. See FCC ET Docket No 98-153 and order DA 02-1658.

We have requested a Special Temporary Authority for one Pipe Hawk system, as we did not have a unit imported prior to the July 15th 2002 deadline for imported equipment. We need the STA so that we may import one unit for urgent evaluation and locating problems within the gas utilities of our requested states

In an attempt to reduce the operational territories to more specific regions we can confirm that the Pipe Hawk unit would be utilized within the gas network distribution areas of: WE Energy – Wisconsin, NICOR – Illinois, NY GAS group – New York State, Columbia Gas Inc – Ohio & PGS – Florida.

As an independent US owned and operated company we will be financially handicapped if we are unable to obtain permission to import and operate a Pipe Hawk GPR system. It has taken us almost two years of marketing cost to obtain evaluation requests from the Gas Utilities. Please understand our position and our desire to comply with all necessary requirements.

We respectfully await your decision

Yours sincerely



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