

John Kennedy

From: domhnull@cns.bu.edu
Sent: Friday, June 16, 2006 4:15 PM
To: John Kennedy
Subject: RE: FCC File # 0122-EX-PL-2006 [Reference Number: 4399]

Stop Buzzer is Domhnull Granquist-Fraser 623-556-6589.

Quoting John Kennedy <John.Kennedy@fcc.gov>:

> Please report the name and cell phone number of the stop buzzer.
>
> *** Non-Public: For Internal Use Only ***
>
> -----Original Message-----
> From: domhnull@cns.bu.edu [mailto:domhnull@cns.bu.edu]
> Sent: Friday, June 16, 2006 2:26 PM
> To: John Kennedy
> Subject: Re: FCC File # 0122-EX-PL-2006 [Reference Number: 4399]
>
>
> Peak effective power is 35 watts, as there is no amplifier and
> therefore 0 dB gain. Maltitude is 3000 feet above ground level (max:
> 10,000 ft altitude.
>
> Thank you,
>
> DG Fraser
>
>) Quoting John Kennedy <John.Kennedy@fcc.gov>:
>
> > Mr. Fraser,
> >
> > Please respond to the questions below.
> >
> > John K.
> >
> > -----Original Message-----
> > From: John Kennedy
> > Sent: Friday, June 16, 2006 11:29 AM
> > To: 'Granquist-Fraser, Domhnull'
> > Subject: RE: FCC File # 0122-EX-PL-2006 [Reference Number: 4399]
> >
> > Also, please report the name and cell phone number of a stop buzzer,
> > a
> >
> > person who will be able to immediately cease transmissions at any
> > given time if interference occurs.
> >
> > -----Original Message-----
> > From: John Kennedy
> > Sent: Friday, June 16, 2006 10:05 AM
> > To: 'Granquist-Fraser, Domhnull'
> > Cc: Sacks, Joseph J; Wells, Claude R; Declue, Gary L
> > Subject: RE: FCC File # 0122-EX-PL-2006 [Reference Number: 4399]
> >
> >
> > Mr. Domhnull Granquist-Fraser, Ph.D.,
> >
> > What is the maximum altitude and the peak effective radiated power
> > at which the devices will be used.
> >

> > John K.

> >

> > -----Original Message-----

> > From: Granquist-Fraser, Domhnull

> > [mailto:domhnull.granquist-fraser@lmco.com]

> > Sent: Thursday, June 15, 2006 1:44 PM

> > To: John Kennedy

> > Cc: Sacks, Joseph J; Wells, Claude R; Declue, Gary L

> > Subject: RE: FCC File # 0122-EX-PL-2006 [Reference Number: 4399]

> >

> >

> > Mr. Kennedy,

> >

> > Thank for your time today.

> >

> > Your Question:

> >

> > Dear Mr. Gary Declue:

> >

> > Please explain the purpose of this experiment.

> >

> >

> > Confirmation Number: EL251947

> >

> > jkenney@fcc.gov

> >

> >

> > This license request is for a Global Positioning System (GPS)

> > Real-Time Kinematic (RTK) system.

> >

> > RTK is a process where GPS signal corrections are transmitted in

> > real

> > time from a reference receiver at a known location to one or more

> > remote rover receivers. The use of an RTK capable GPS system can

> > compensate for atmospheric delay, orbital errors and other variables

> > in GPS geometry, increasing positioning accuracy up to within a

> > centimeter. Used by engineers, topographers, surveyors and other

> > professionals, RTK is a technique employed in applications where

> > precision is paramount. RTK is used, not only as a precision

> > positioning instrument, but also as a core for navigation systems or

> > automatic machine guidance, in applications such as civil

> > engineering and dredging. It provides advantages over other

> > traditional positioning and tracking methods, increasing

> > productivity and accuracy.

> >

> > Using the code phase of GPS signals, as well as the carrier

> > phase,

> > which delivers the most accurate GPS information, RTK provides

> > differential corrections to produce the most precise GPS

> > positioning.

> >

> > The RTK process begins with a preliminary ambiguity resolution.

> > This

> > is a crucial aspect of any kinematic system, particularly in

> > real-time

> >

> > where the velocity of a rover receiver should not degrade either the

> > achievable performance or the system's overall reliability.

> >

> >

> >

> > The system scans the 450-470 MHz band to find an unused channel.

> >

