***-APRS:***

-Marc Zeitlin Feb 2012: ...I asked about customizing the "Byonics" APRS Microtrak RTG to make it work better for aircraft tracking. ...helpful suggestions, most common of which was to turn on "SmartBeaconing". I turned on "SmartBeaconing" set the turn angle to 15 degrees, set the transmit interval to 75 seconds (seemed like a reasonable compromise between being rude and not having the breadcrumbs be too far apart - some folks use 60 seconds, some 90, and some leave it at the default 120 seconds) and set the "Turn Slope" to 240.

I flew down to Camarillo today for lunch, and my tracks can be viewed at: <http://aprs.fi/N83MZ> If you set the timeframe to take in the whole day, you can see the track down and back, as well as my taxiing around at both Tehachapi and Camarillo.

I have NOT implemented the secondary/emergency setup (yet) - still have to install a switch and then program it for more frequent breadcrumb droppings in secondary mode.

I used my backup (unused) COM antenna in the second winglet. I got an SWR of 2.3, which is more than acceptable for the 144.39 MHz of the Byonics Microtrak RTG, which claims to be able to deal with SWR's of up to 8.

-Don Denhard, Feb 2012: I have a Byonics Micro-Tak APRS unit in my LongEZ <http://www.byonics.com/mt-rtg> ...didn't have any spare antennas in the winglet so I used the V2 magnetic antenna supplied with the kit. I mounted it on a steel plate 4"x6" on the floor of the rear sear with the antenna vertical behind the pilot's seat. ...mount the box away from fuel computer gauges and electronic flight instruments, when I first installed it behind the instrument panel it caused spurious interference every time the unit transmitted. I am planning on reducing the output power when I can borrow a SWR.

- Dave Philipsen Velocity STD FG N83DP Feb 2012: ...had a Byonics APRS installed in my Velocity for several years. ...antenna is a homemade wire dipole attached to the inside skin of fuselage. Used my MFJ antenna analyzer to trim the antenna to optimum SWR.

-Bruce Hughes Feb 2012: ... time to give some credit. APRS was and is a volunteer effort by a group of HAMS who designed, funded, and are building the network. On Marc's track to Camarillo you can see at least two ham stations near his home. You can use the system FREE because many unnamed individuals built and maintain it. All you have to do is buy the relatively inexpensive equipment for your airplane.

-Paul Lee Feb 2012: For composite planes you can use a simple rubber ducky like I do - mounted near bottom side of fuselage. <http://www.abri.net/sq2000/GPStrack.html> A frequency tuned ducky is very efficient. At 8K+ I have hit stations 100 mi away. .....You can donate a few bucks to findu.com, the backbone of APRS. See <http://www1.findu.com/donate.html>

-Tom Smith Mar 2012.. wanting to donate ... address....

[**http://www1.findu.com/donate.html**](http://www1.findu.com/donate.html)

-------- Original Message --------

Subject: [c-a] Re: COZY: APRS coverage

Date: Thu, 7 Jun 2012 16:14:54 -0700

From: Tim Andres <tim2542@sbcglobal.net>

To: Mike LaFleur <mike.lafleur@sbcglobal.net>

CC: cozy\_builders@googlegroups.com <cozy\_builders@googlegroups.com>,

Canard-Aviators Email List <canard-aviators@yahoogroups.com>

I used my installed-in-the-belly ... Marker beacon antenna. ...swr is sure to be high... Byonics folks said their transmitter would not be bothered by a bad mismatch. ...there are gaps in the reports, ... didn't see any more than 1 missed in a row. ... worth the $150 or so to install ... ...

Tim Andres

-------- Original Message --------

Subject: Re: [c-a] Re: COZY: APRS coverage

Date: Thu, 07 Jun 2012 20:20:57 -0700

From: Marc J. Zeitlin <marc\_zeitlin@alum.mit.edu>

Reply-To: marc\_zeitlin@alum.mit.edu

To: cozylist <cozy\_builders@googlegroups.com>, canard

<canard-aviators@yahoogroups.com>

.....Mike LaFleur wrote:

 > I looked at Marc's APRS data when he went to Half Moon Bay and I noticed that a couple of packets were picked up very far away indeed.

... using the second COM antenna, which measured an SWR of 2.7, IIRC. Byonics says up to \_8\_ is acceptable, amazingly enough.

Marc J. Zeitlin