

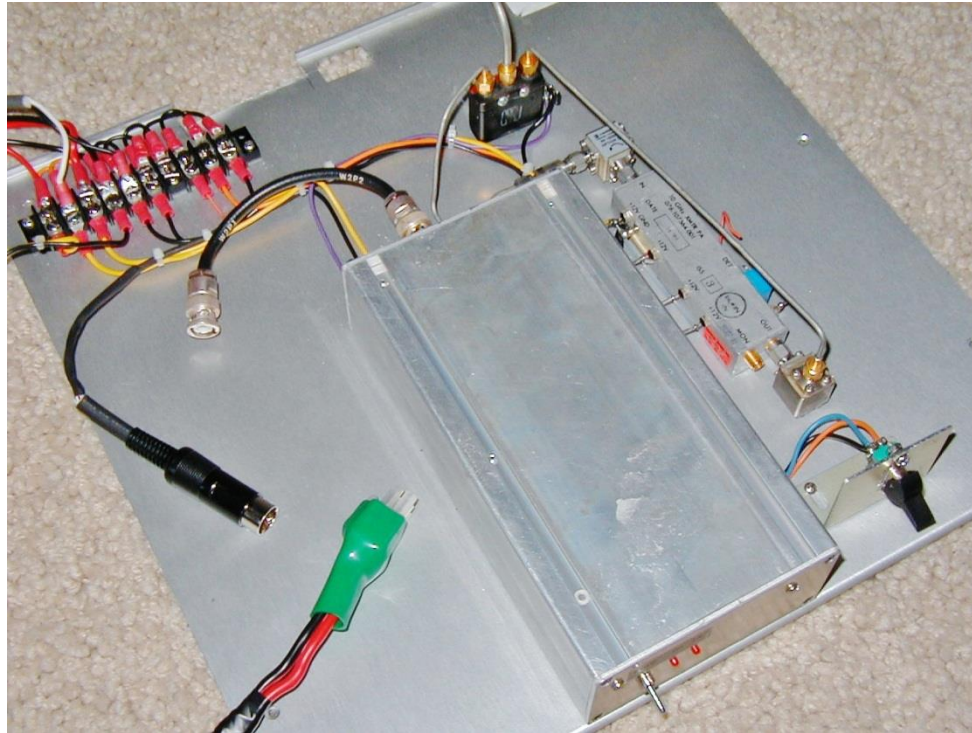
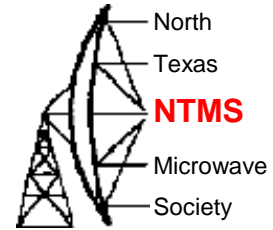
A Modularized 10 GHz Transverter

By

Bob Gormley WA5YWC

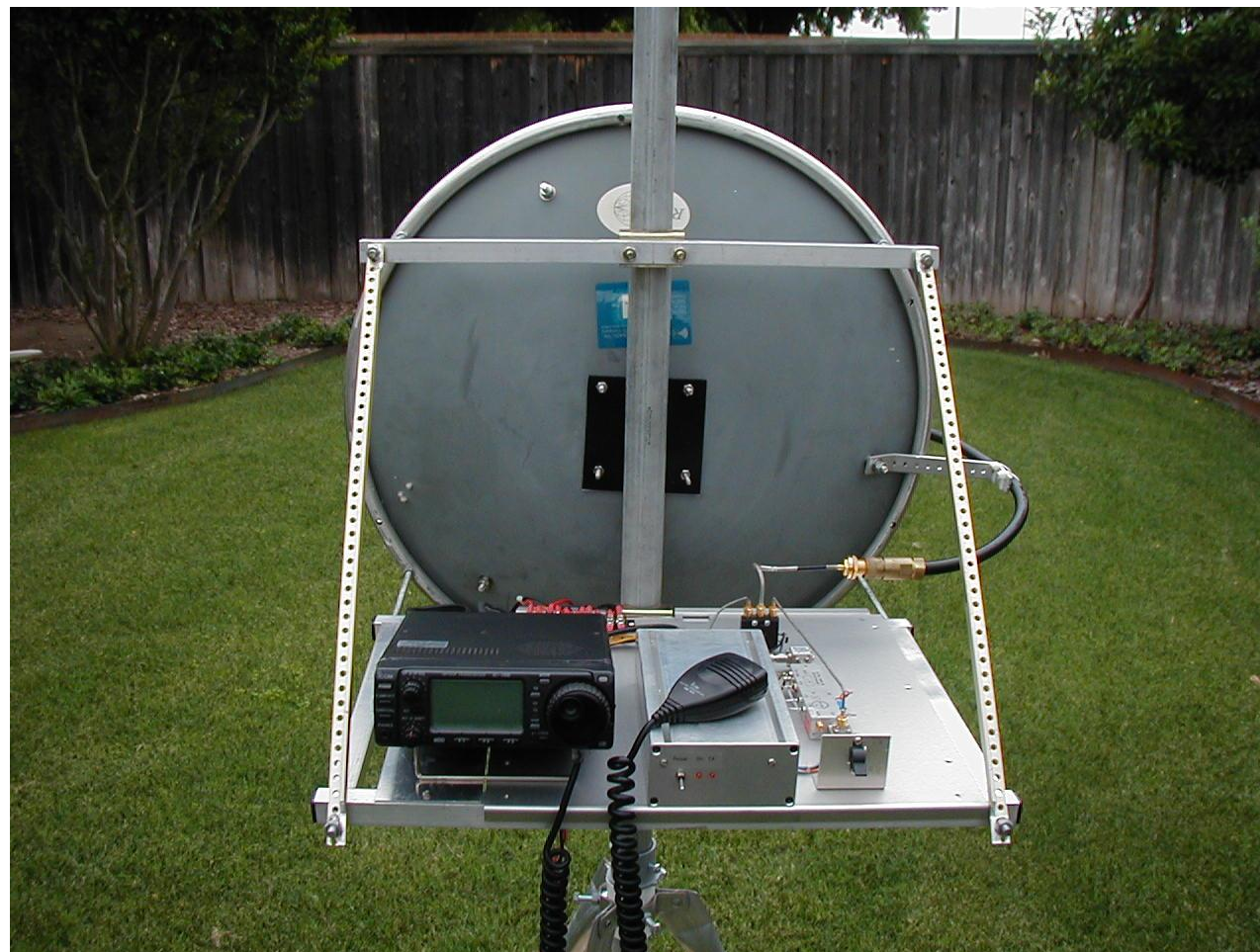
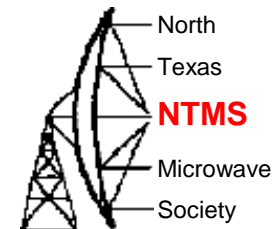
NTMS Mini Conference – November 3, 2012

My 10 GHz Journey

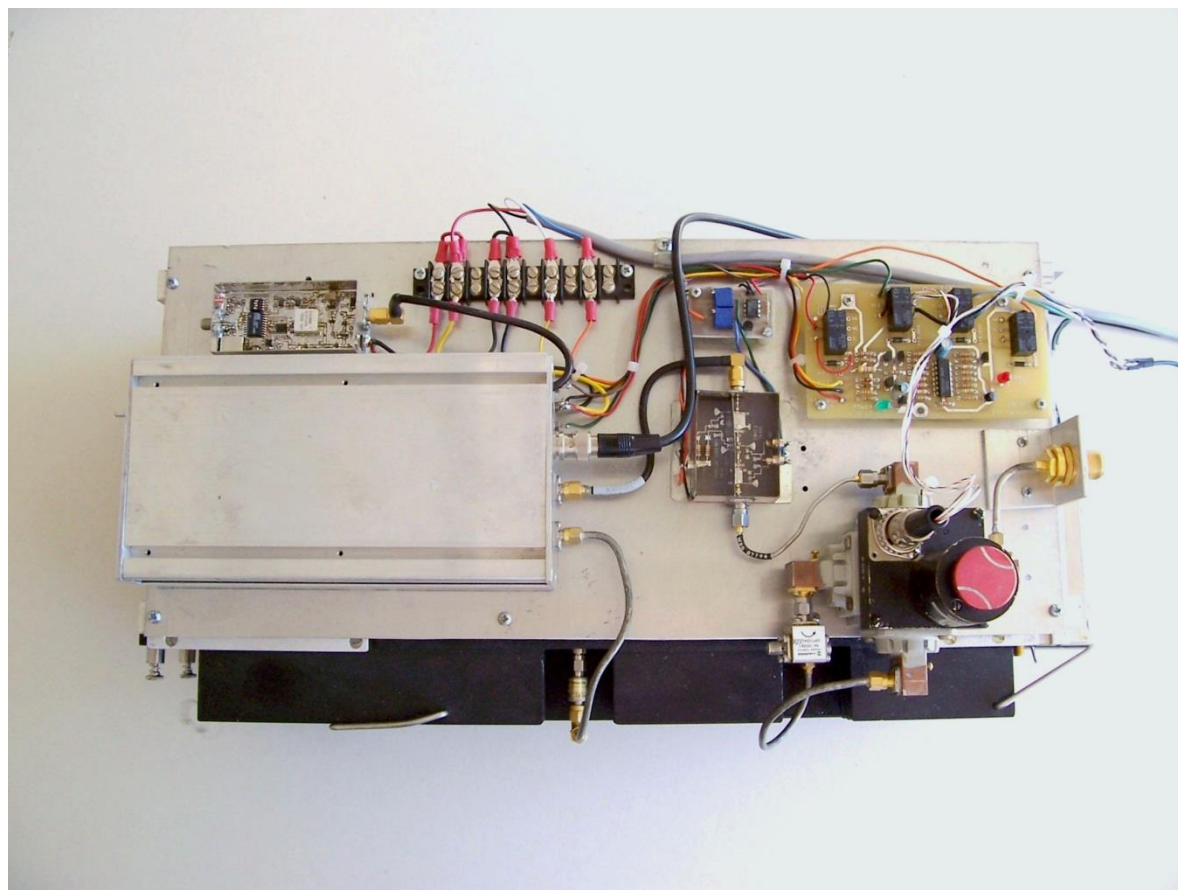
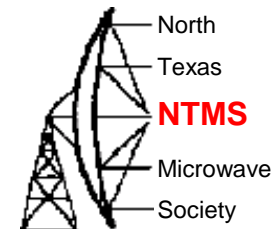


DEMI transverter and a Harris LPA (320 mW)
2002

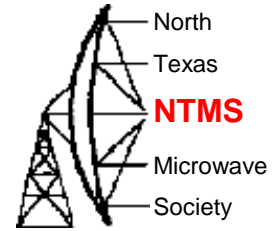
First 10 GHz Rover Station 2002



Synthesized LO and TWTA 2006



Roving 10 GHz and Above contest California 2009



2011 ARRL 10 GHz and Above contest In Sacramento, CA.



DEMI transverter and Harris 3W SSPA
and FlexRadio 1500

November 5, 2011 Mini Conference highlights:

Making use of the Harris Farinon 10 GHz modules

Long range plan was to integrate the modules into a IC-251A

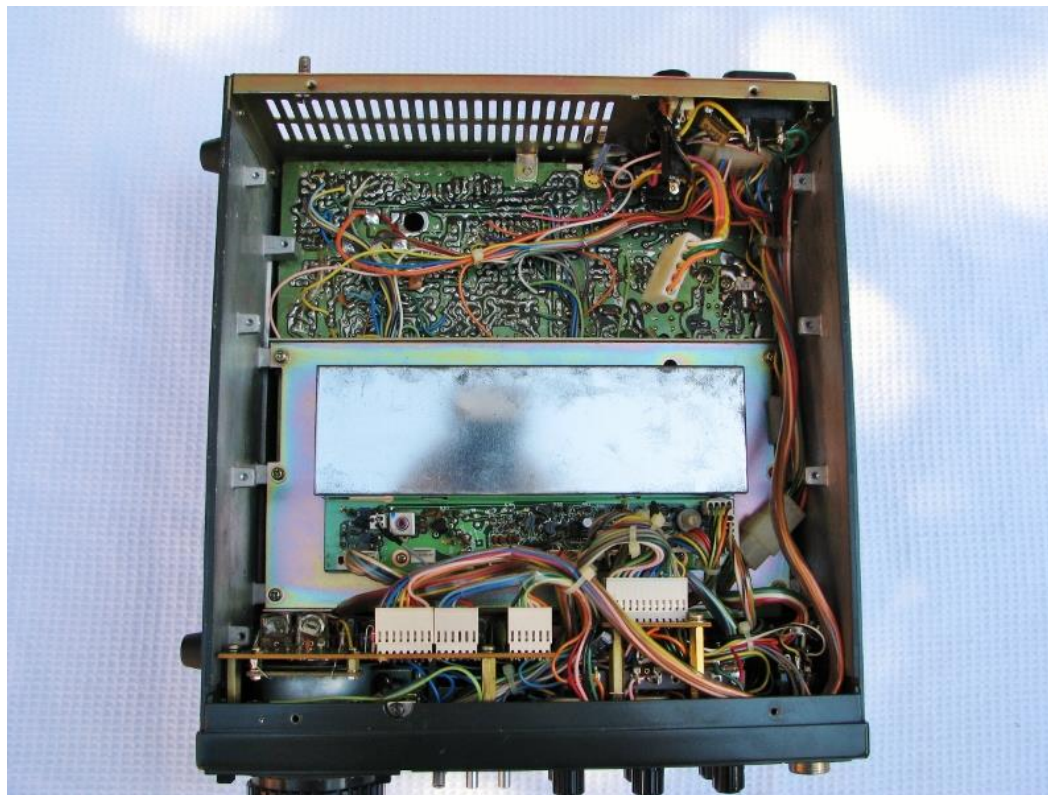
Began work on this project April 2012

The IC-251A developed reliability issues

New plan #1: Integrate modules with IC-706 and new 36" dish

New plan #2: Integrate some modules with 40 watt TWTA

IC-251A Integration Project

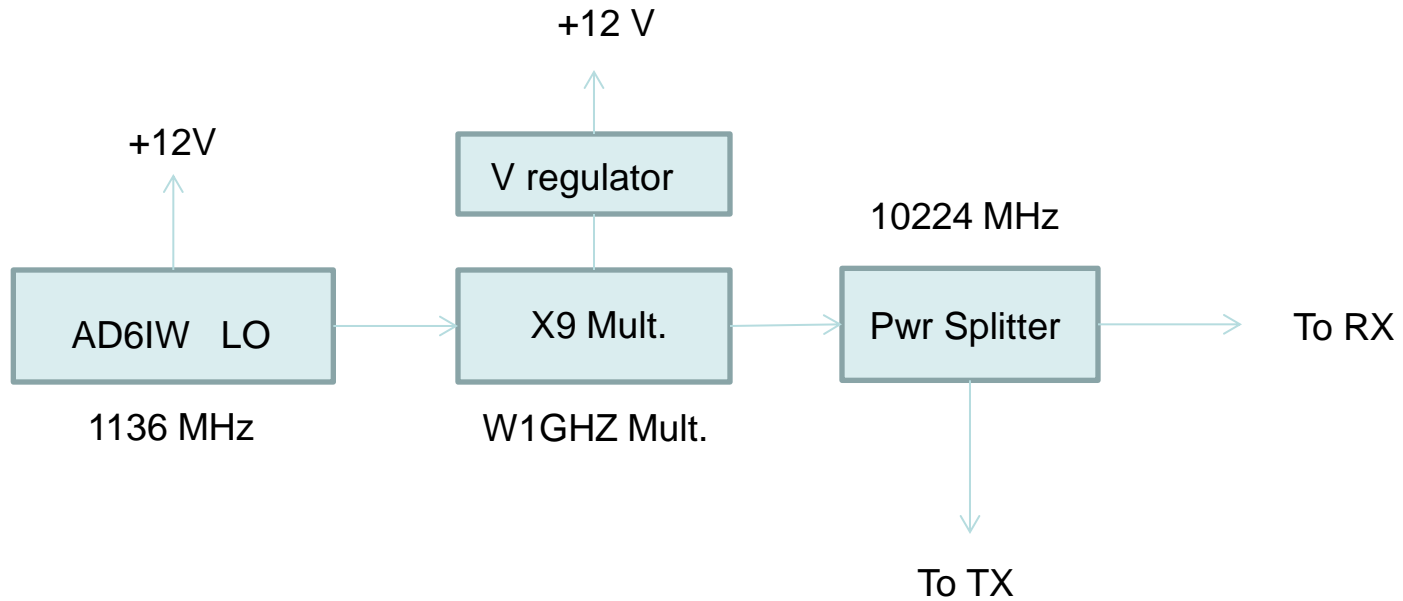


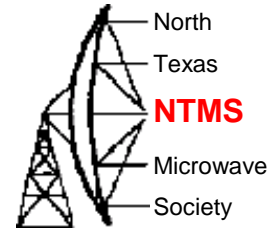
Radio developed reliability issues

New Objective:

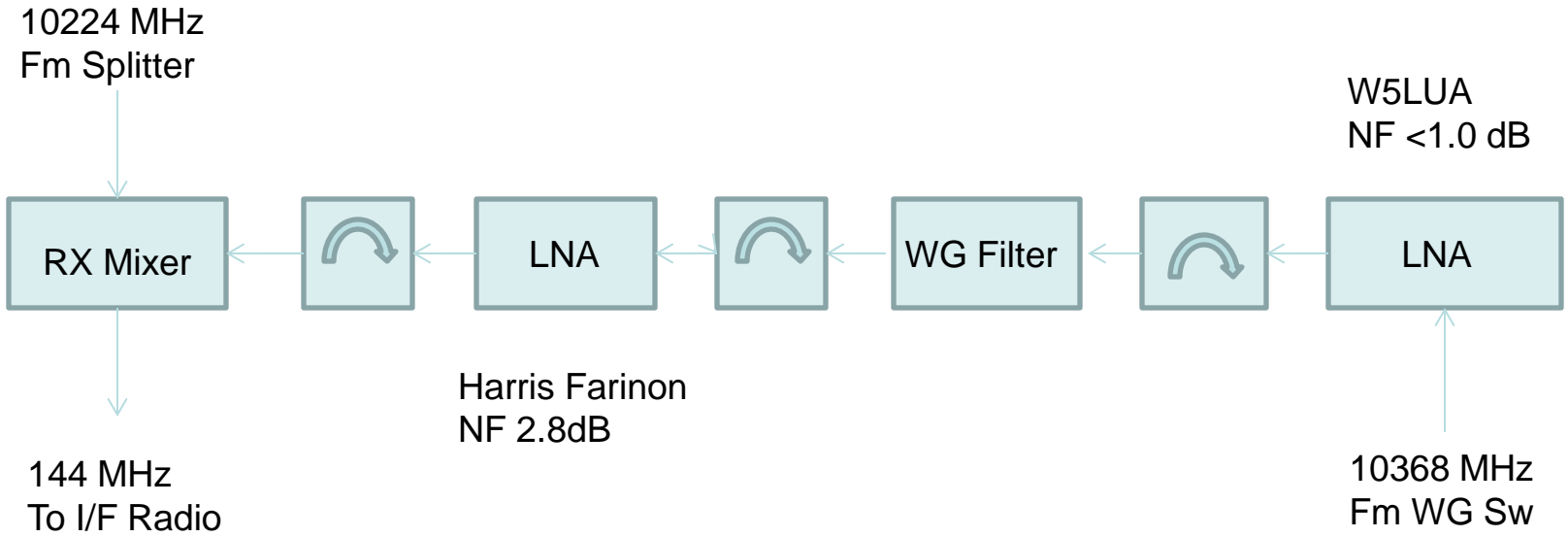
Design an easy to build modularized 10GHz transverter using existing junk box parts and scrounged subassemblies whenever possible.

10224 MHz LO Chain

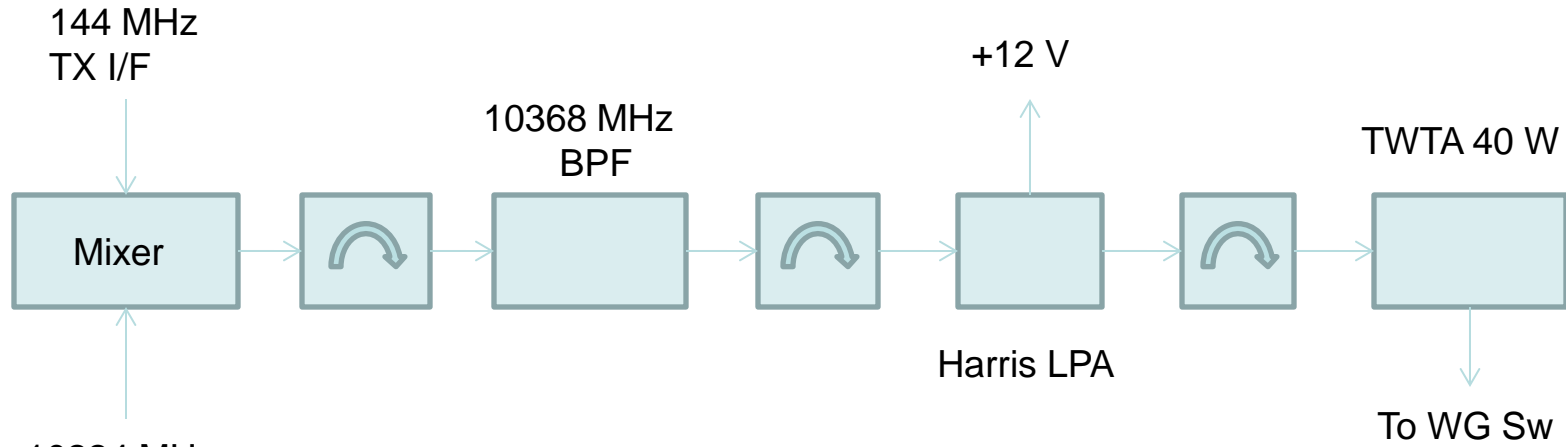




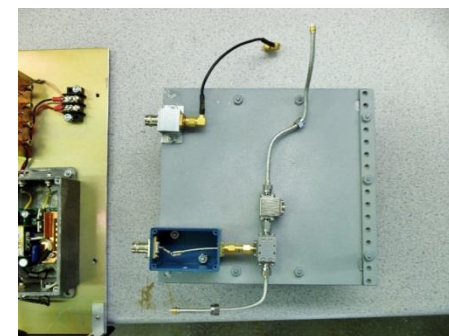
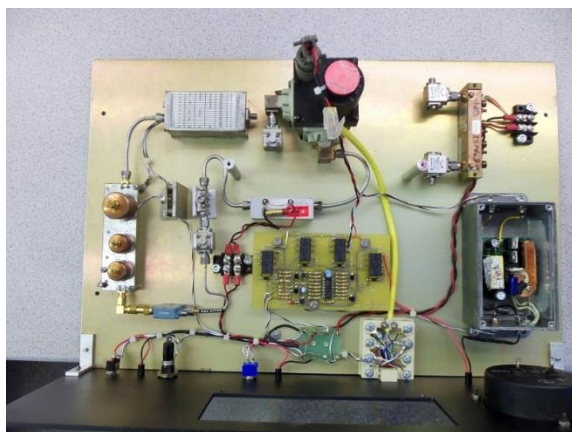
RX Converter



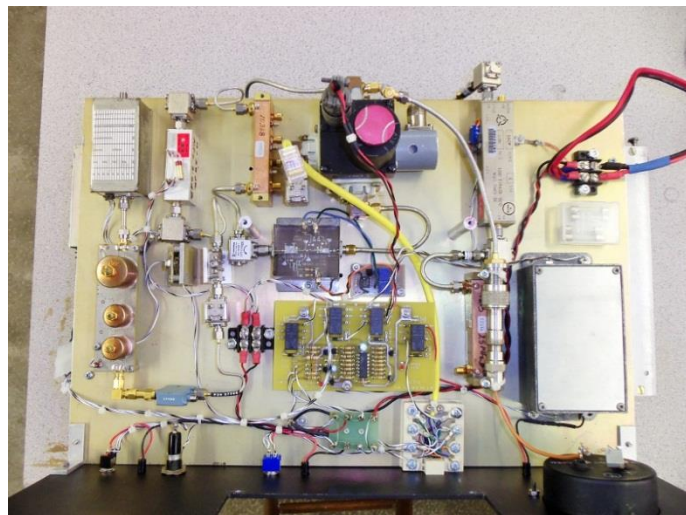
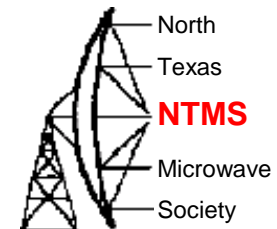
TX Converter



Phase 1 fabrication



Phase 2: Add more parts



10 GHz and Above Contest 2012

