

Projects

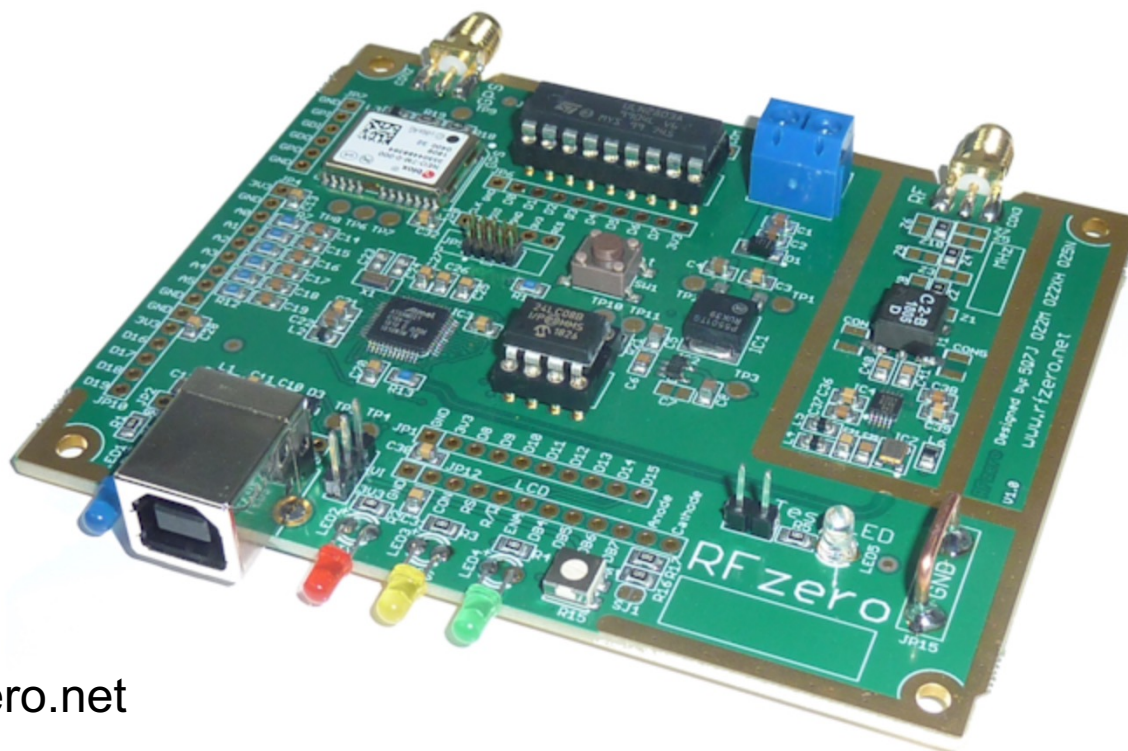
N5BRG

July 1, 2023

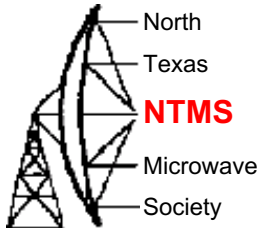
Virtual & In Person Meeting

Home

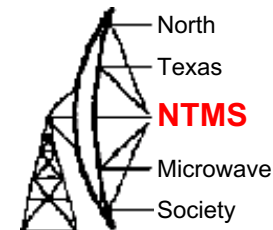
The RFzero™ is an Arduino multi-purpose GPS controlled Si5351A RF unit. It can be used as a beacon (IBP, SPB, CW, FST4, FST4W, FT4, FT8, JS8, JT9, ModeX (JT65, Q65, ...), PI4, WSPR, ...), stand alone WSPR/FST4W transmitter, signal generator, VFO, QO-100 dual LO, low cost GPSDO, e.g. for 10 MHz, IC-9700 LO, 90 MHz frequency counter or ... More than 40 programs, Arduino sketches, are integrated into the Arduino IDE, so you can write or modify the software yourself. With the RFzero Manager you don't even have to know anything about Arduino to use the RFzero™.



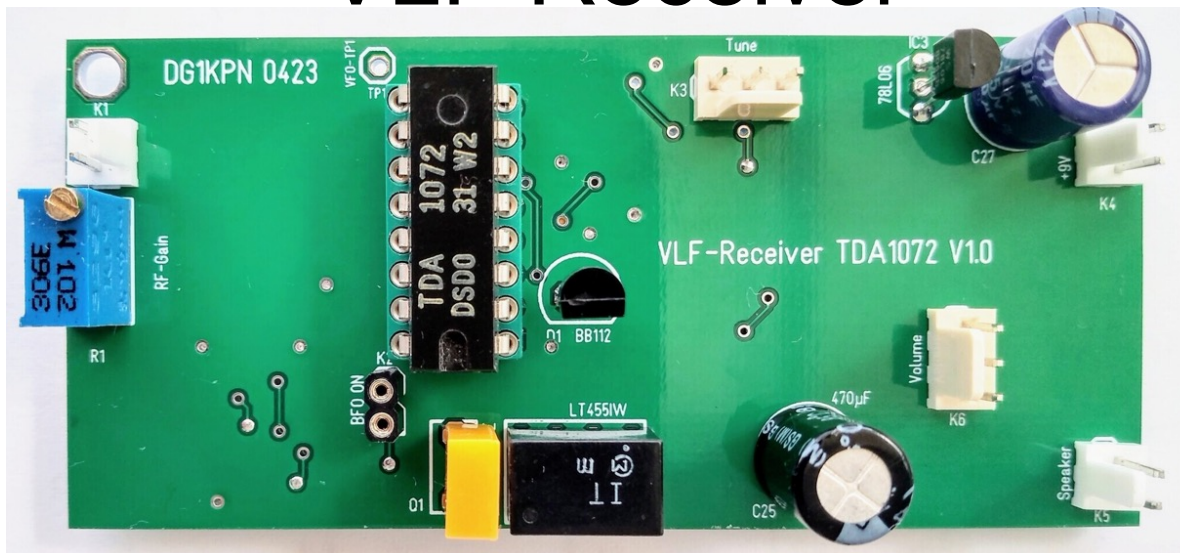
<https://rfzero.net>



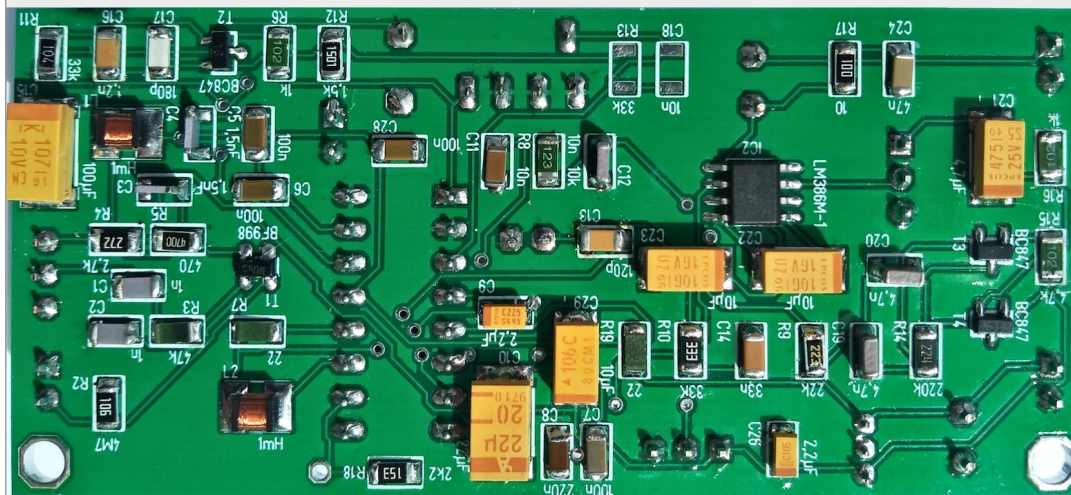
VLF Receiver



Top

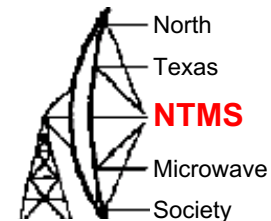


Bottom



Norbert Kohns DG1KPN

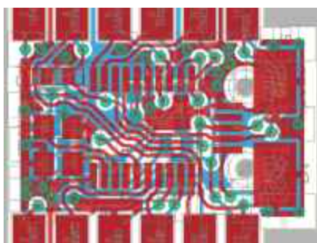
<https://qrp-labs.com/progrock2.html>



ProgRock2 - triple GPS-disciplined programmable crystal

Details

Created: 16 December 2022
 Last Updated: 13 March 2023
 Hits: 11910



A programmable crystal replacement. It has three independent outputs with frequency range 3.5kHz to approx 300MHz, and can be optionally **GPS disciplined**. Configuration is by a micro-USB connector and PC terminal emulator

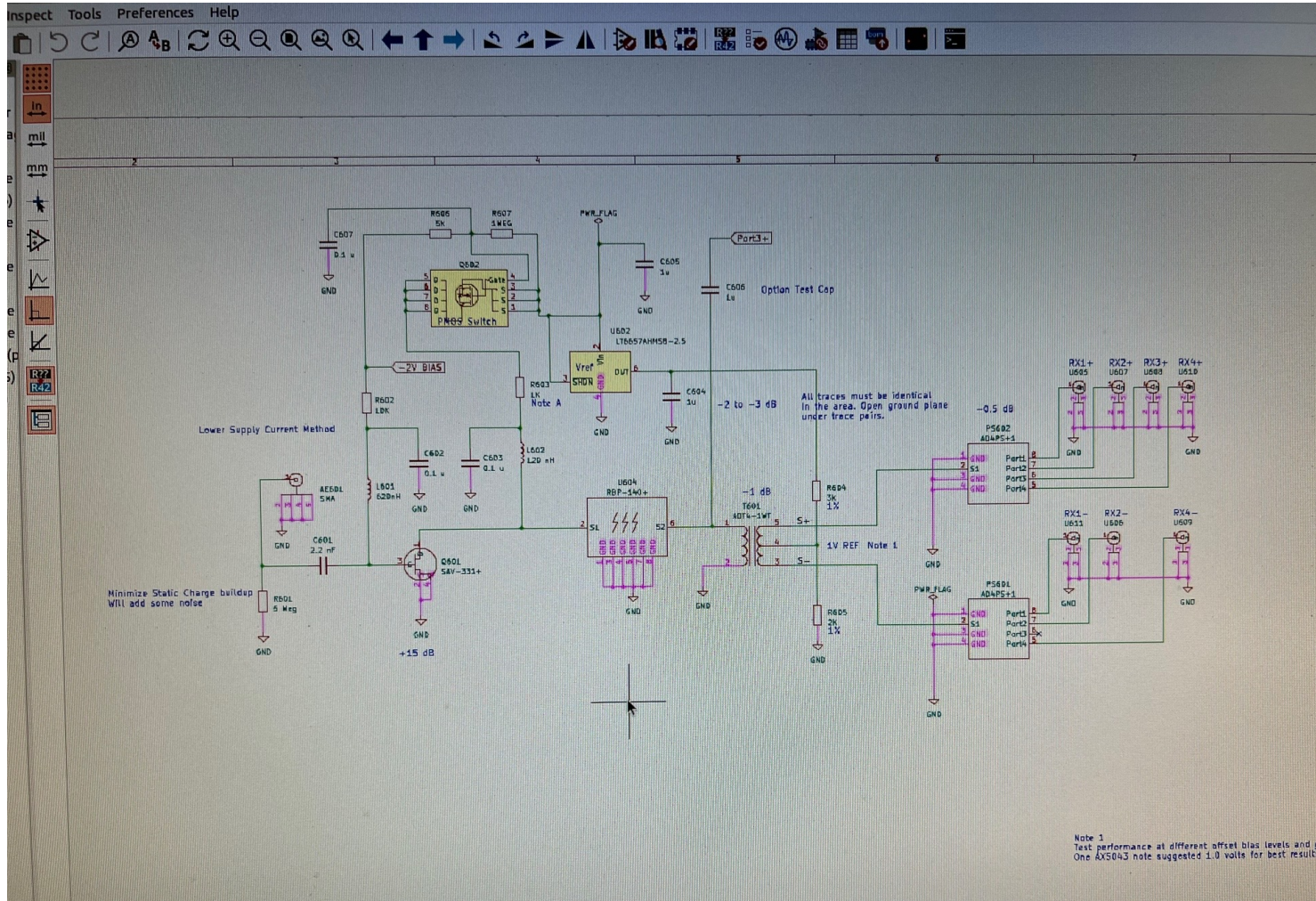
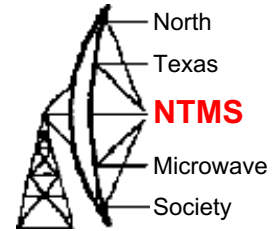
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The features of this module are as follows:

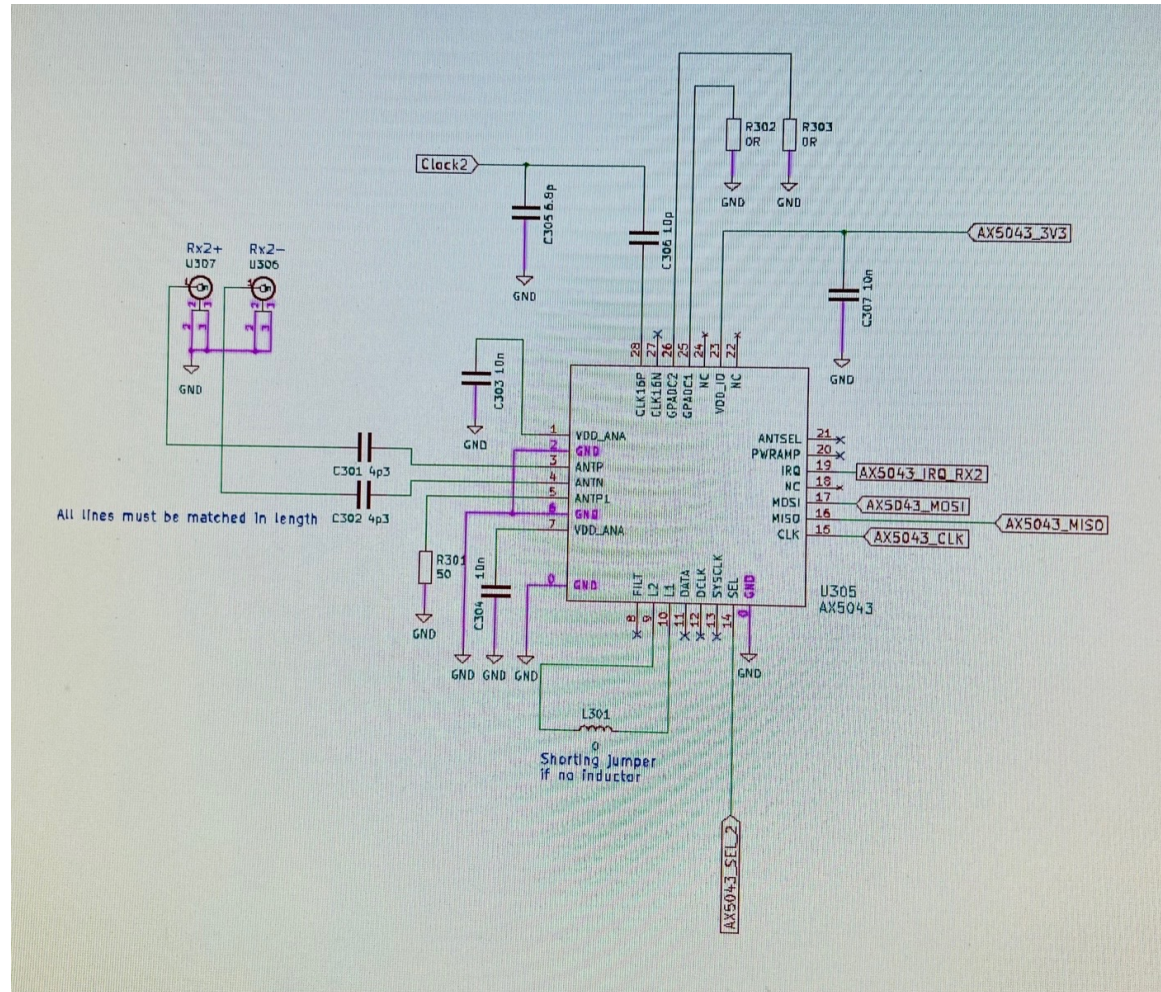
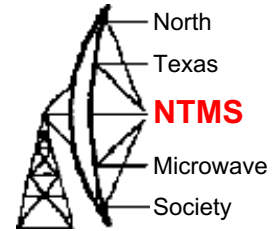
- Tiny size PCB, a little smaller than an HC6 crystal: 0.725 x 0.675 inches (18.4 x 17.1mm)
- Factory assembled, ready-to-use (no assembly required)
- 3 independent 3.3V p-p squarewave outputs (2 if you use GPS discipline)
- You can feed the outputs through [LPF kits](#) to get sinewave outputs
- 8 selectable “banks” of frequencies, chosen by 3 input control signals
- Frequency range 3.5kHz to 200MHz from onboard Si5351A or MS5351M
- Extended frequency range up to approx. 228MHz if you don't mind violating the Si5351A datasheet specifications
- Quadrature output mode (Clk0 and Clk1 on same frequency but configurable 0, 90, 180 or 270-degree phase offset)
- GPS frequency discipline using 1 pps from a GPS receiver
- Power supply voltage 3.5 to 12V DC
- Frequencies and configuration stored in non-volatile memory for next power-up
- QRP Labs Firmware Update (QFU) bootloader

This module is the replacement for the original [ProgRock kit](#). It is much smaller than the original ProgRock and ready-assembled. It does not have ProgRock's 4-way DIP switch for programming (which was a bit awkward anyway); there is a micro-USB connector for programming via a PC serial terminal and for firmware updates.

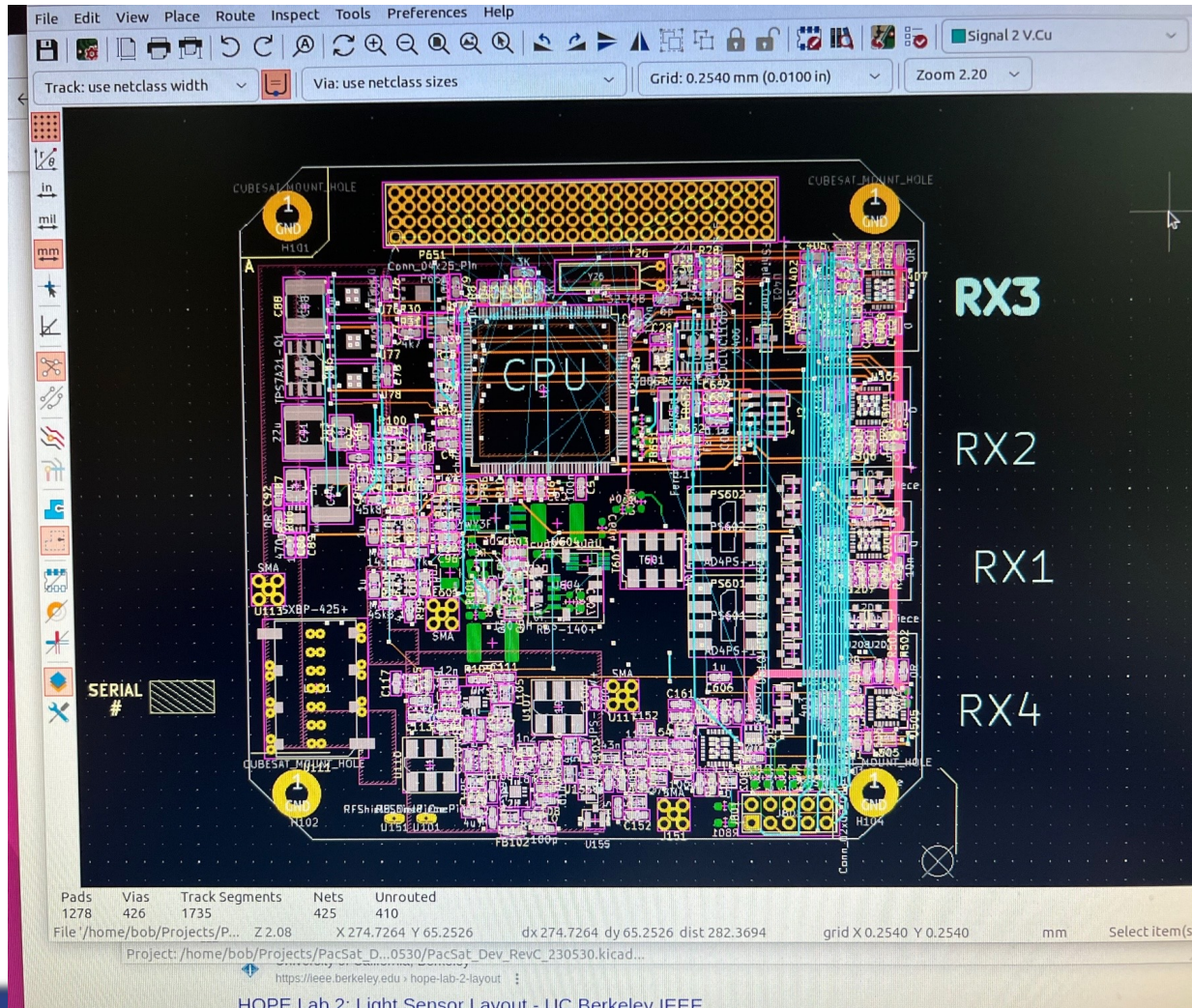
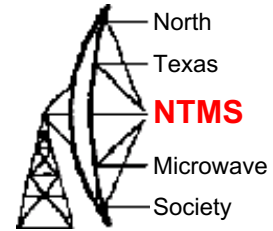
Pac Sat-Dev



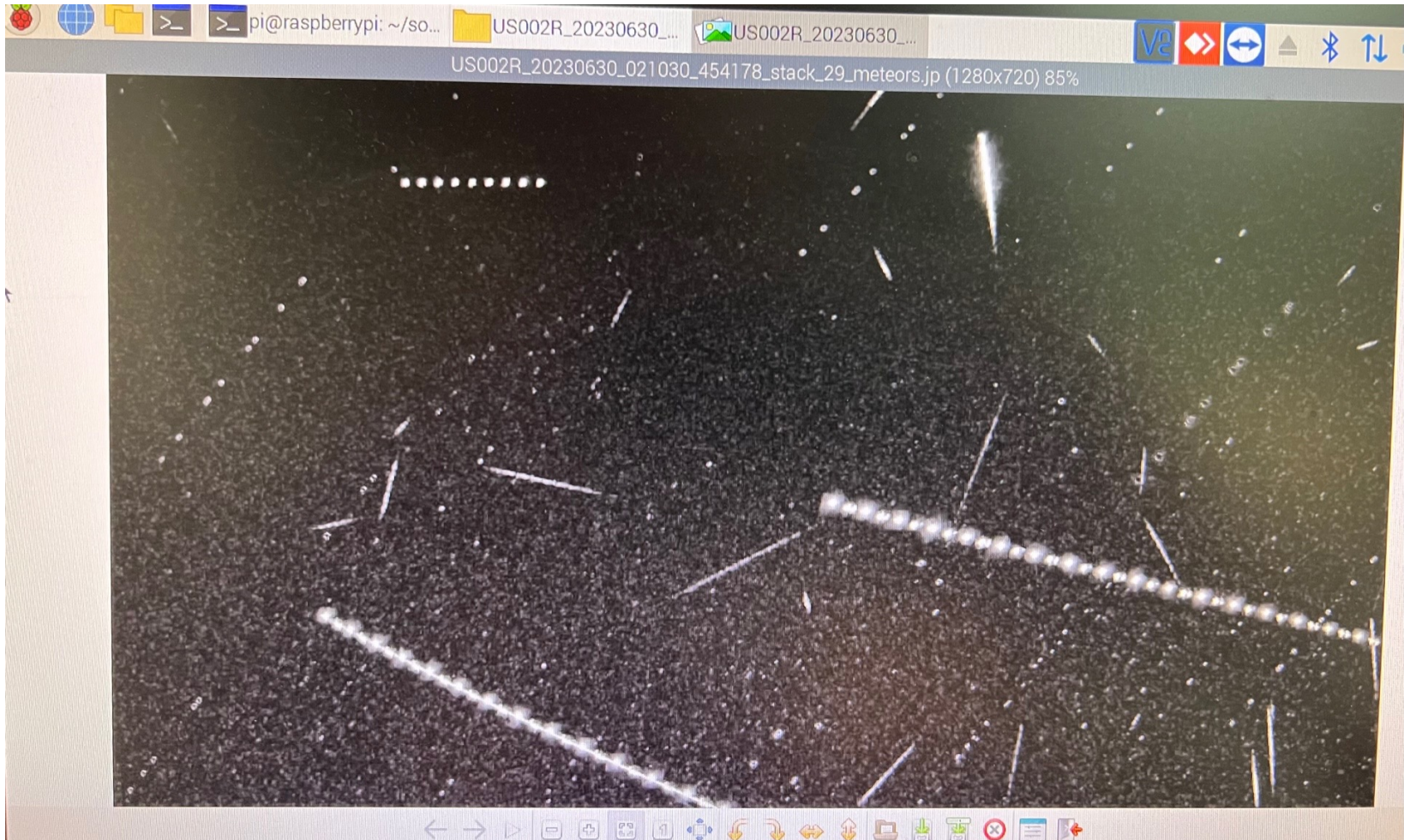
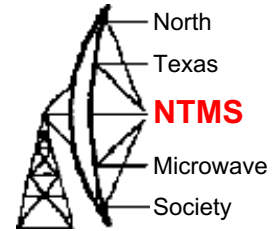
AMSAT PacSat-Dev



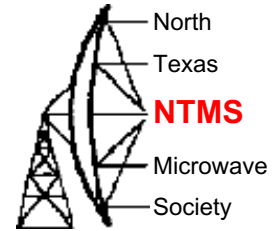
AMSAT PacSat-Dev



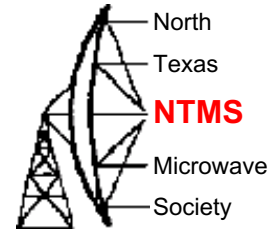
Meteor Camera 6/30/23



Meteor Camera



Field Cabinets



Inside of newest cabinet

