



Tech Amateur Radio Association

Maintaining Student Interest
Through Modern Projects

Skyler KGØSKY



New Mexico Tech

Socorro Radio Clubs

- TARA

- SARA

What grabs student attention?

- Space
- Flashy Projects that Makes cool stuff happen
- Stuff they can get involved in and build on their own for cheap
- New Technology
 - Actually using computers, not just radio linux etc.
- Free Food

What does not grab student attention

- Just talking to people around the world
 - “Um ... Use Skype, or any other app everyone and their dog can make”
- Boring Meetings with nothing but talking
- Lots of Math (Already have enough of that in all the classes)

Space Vehicles LLC

- Freshman EE Hands-On intro class
- Learn Arduino microcontrollers and basic electronics
- Final project – Balloon Launch
- Many students inspired to get license after learning the capabilities of tracking and communications to the balloon

Balloon Launch!

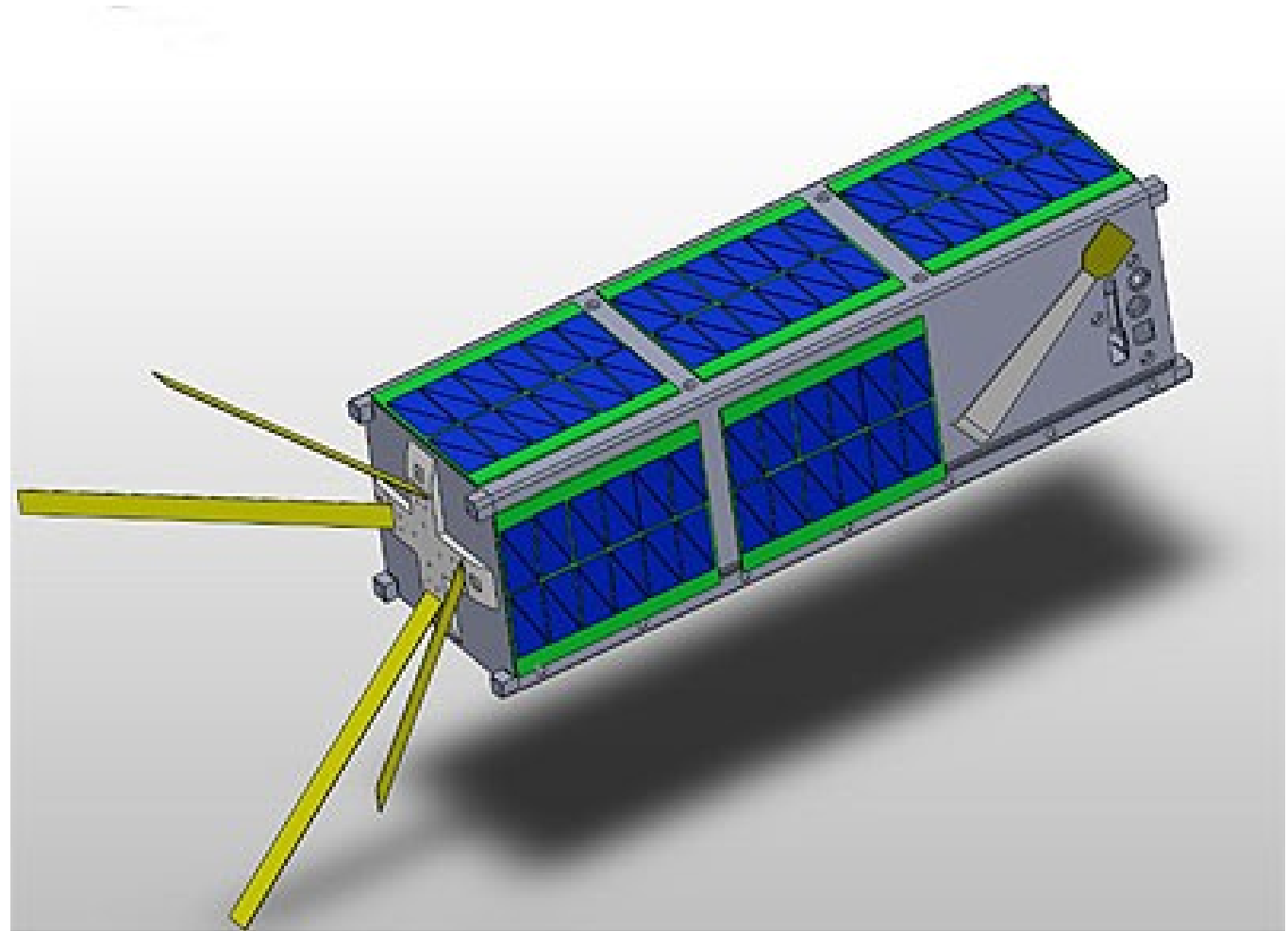






NMTSat

- Structural health monitor
- Electrical health monitor
- Langmuir Plasma Probe
- Magnetometer



NMTSat Ground Station





Fox Hunts



Large Scale Fox Hunts!!!



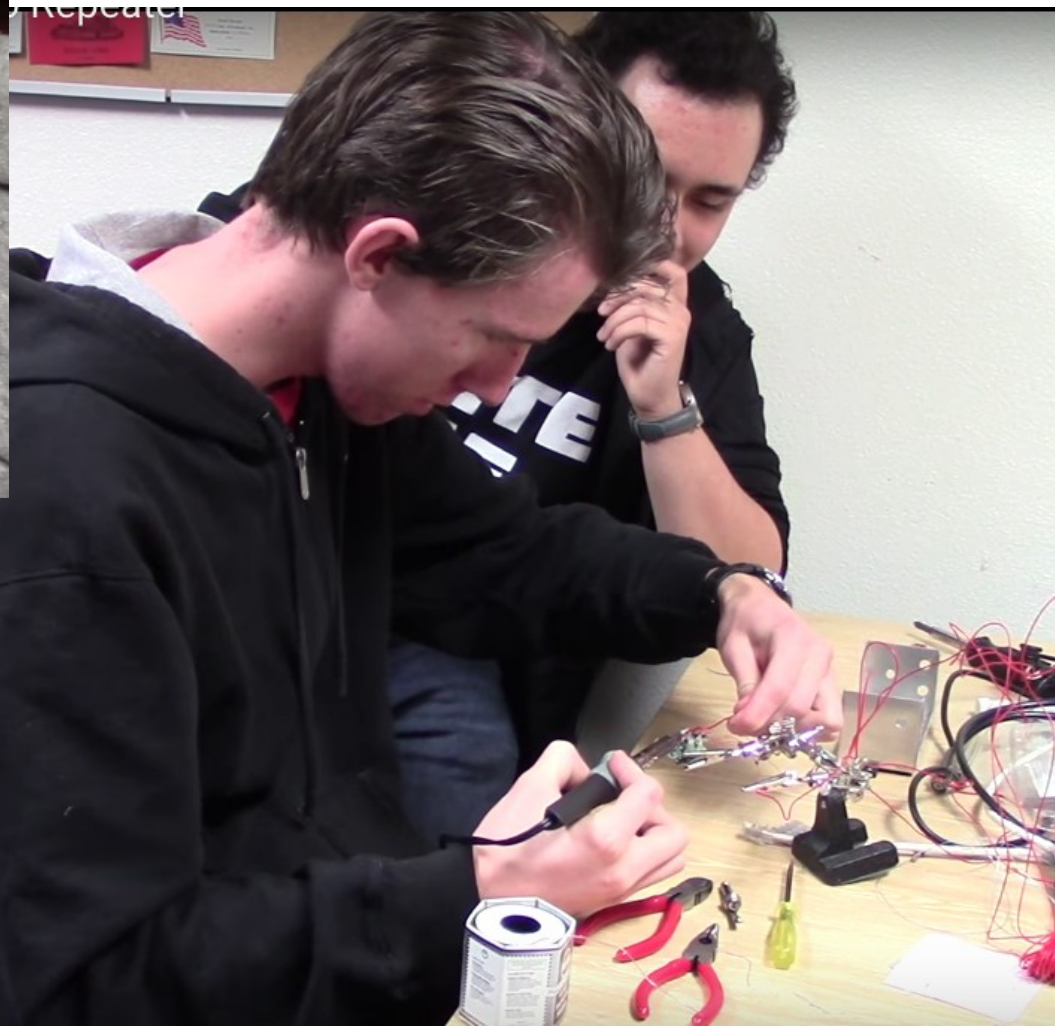
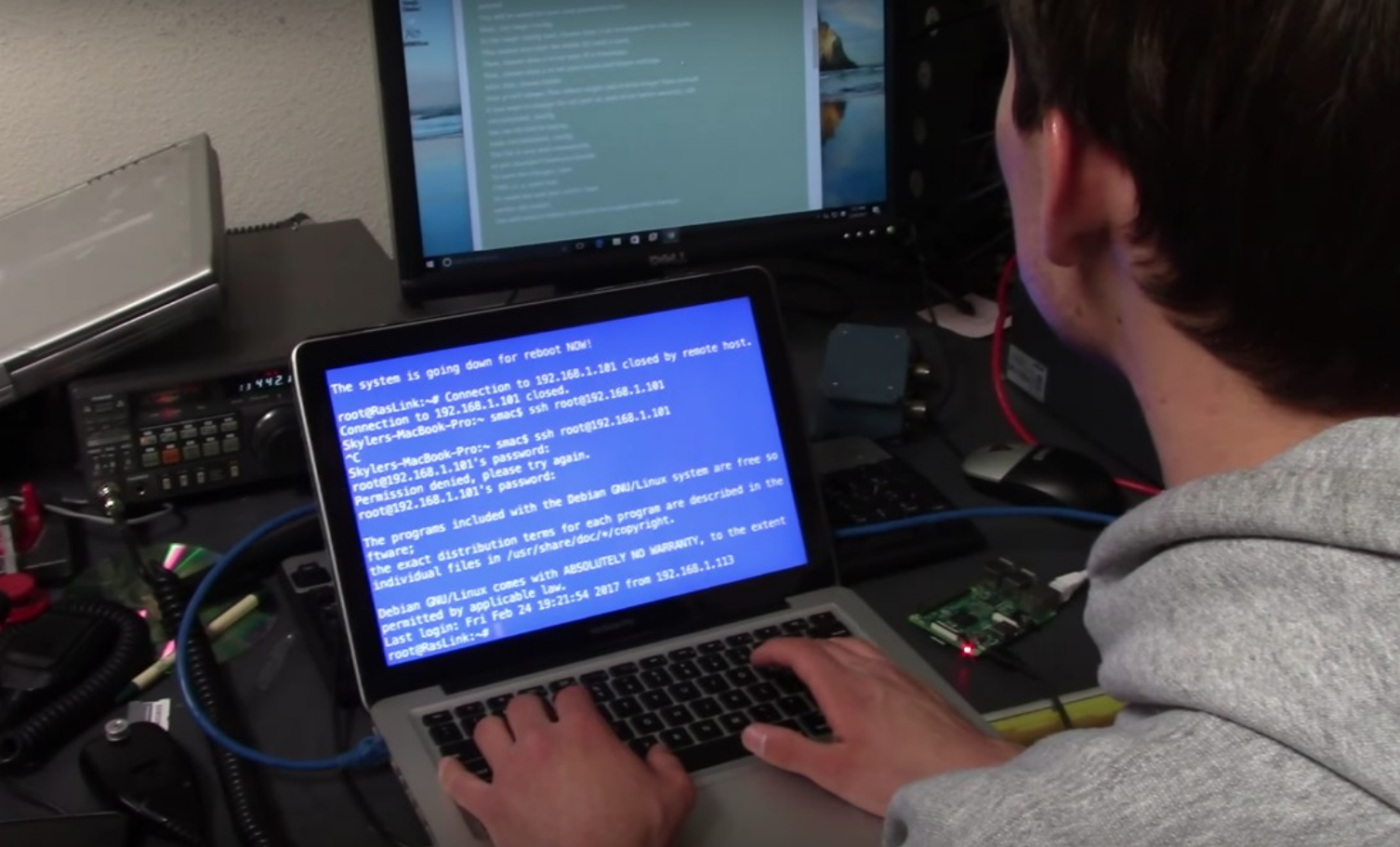


AllStar Link

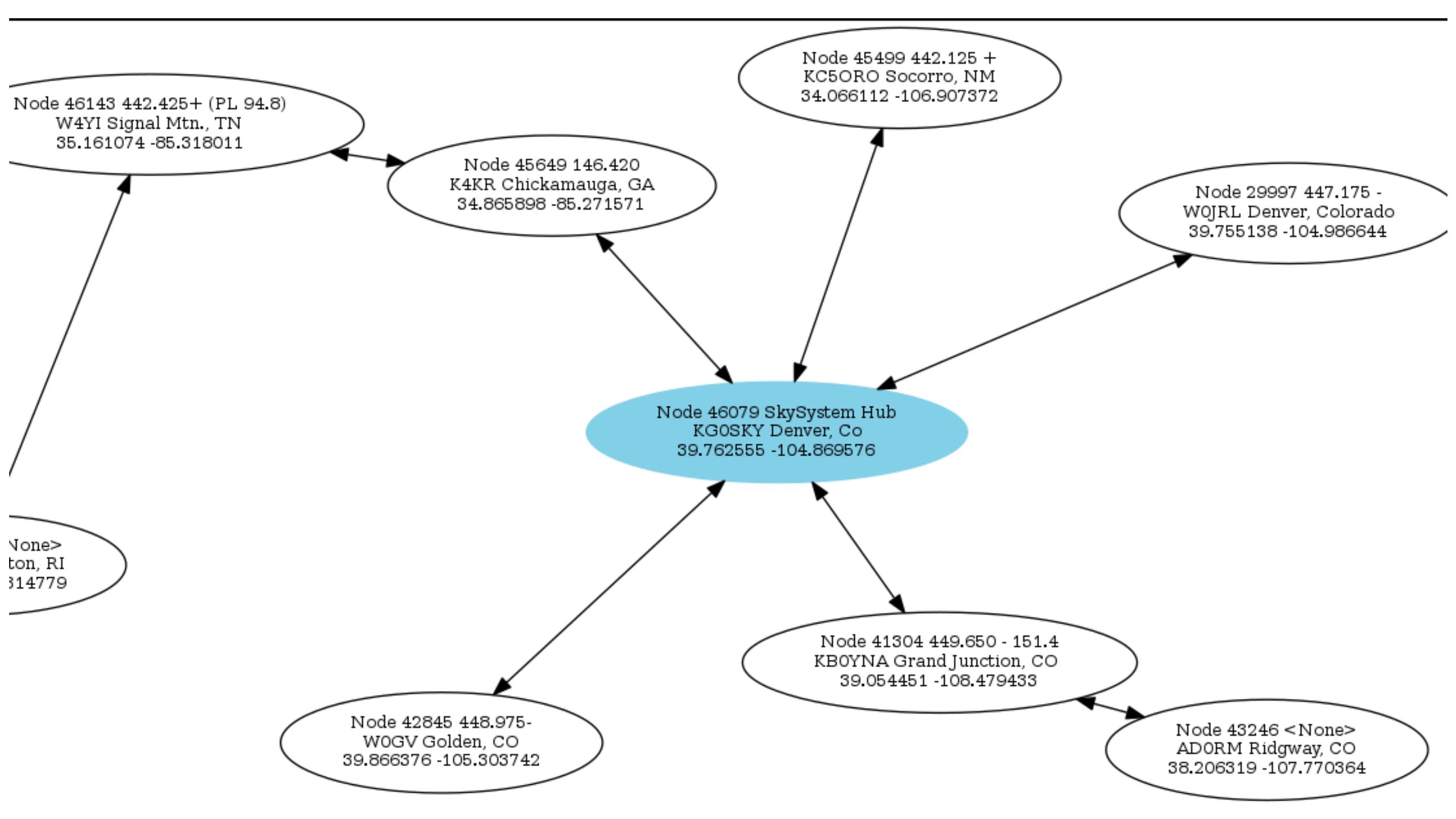
- Interested in new modes for UHF/VHF technician, but nobody has fancy digital Radios
- Everyone has a Baofeng
- Unlimited Linking Capability , very cheap to build repeaters/ nodes and all scriptable in linux
- Analog_bridge

TARA Repeater Project










New TARA Repeater Project





West Peak Electronic Site (TARA PLANNED)

East Peak Electronic Site

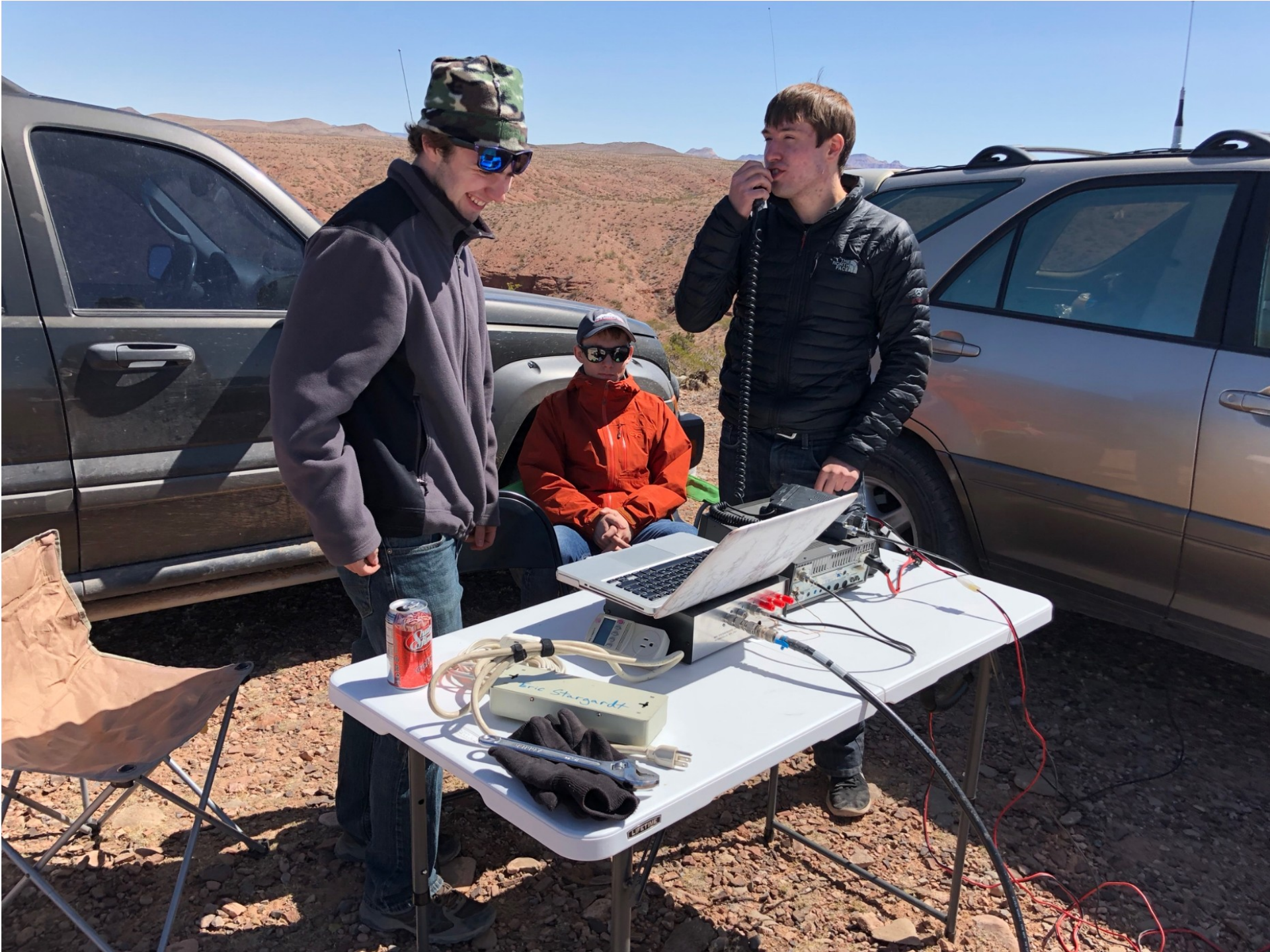
M Mountian

QSO Party

- Operated 100% Solar
- Middle of Quebradas Back Country









Spreading Ham Radio to other student groups

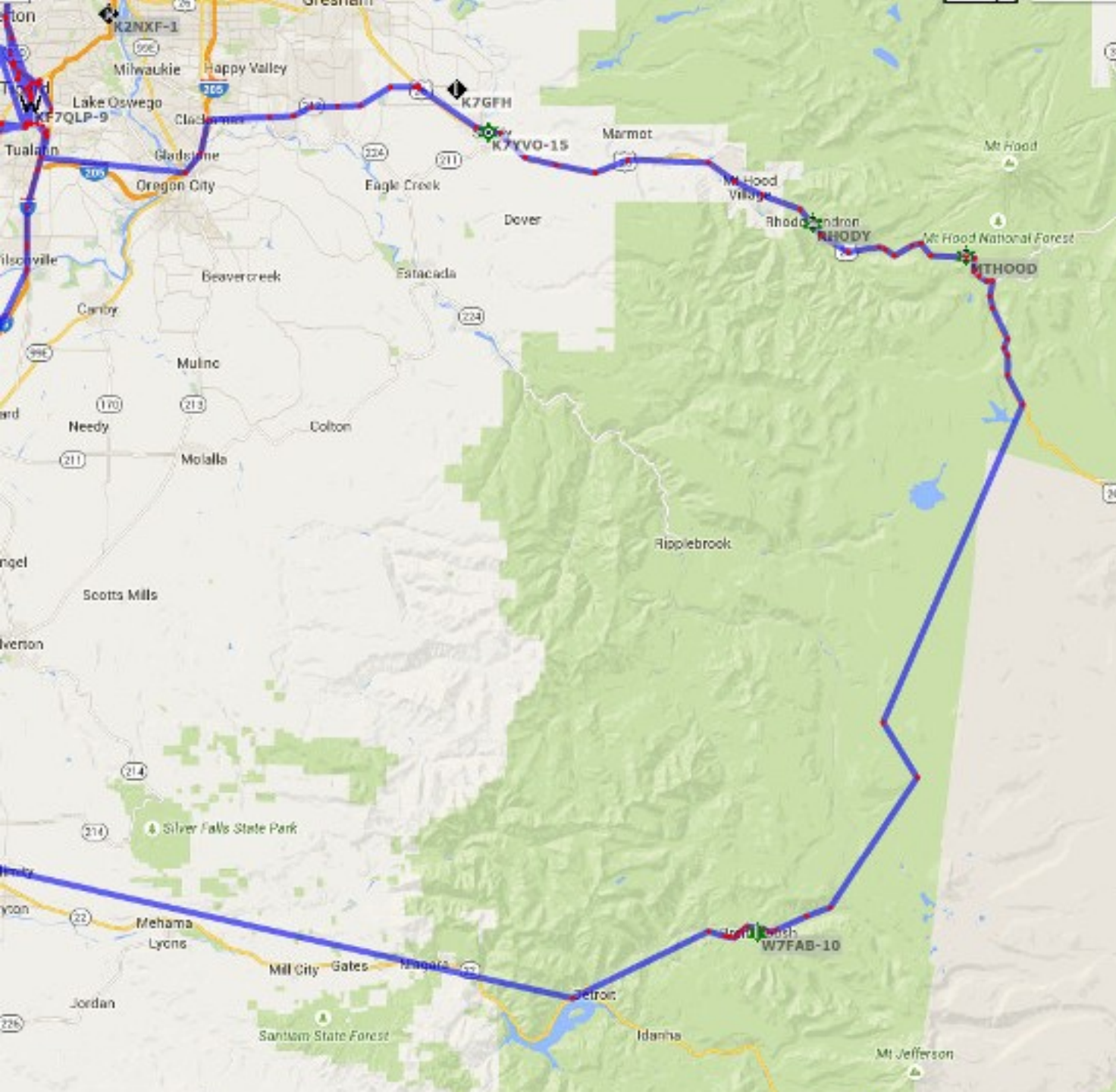
- **Socorro Search And Rescue**
 - Tyler KI6WSS



NMT Off-Road Club

- Works much better than CB for maintaining comms in the middle of nowhere
- ADPS to track trips





How I got interested in Ham Radio

- Anthony Salazar

Conclusion / Questions