# Introduction to Santa Fe ARES (SFARES)

December 2020

# SFARES

The SFARES Group is comprised of FCC licensed Amateur Radio Operators residing in the general Santa Fe, NM geographical area. Membership is open to any licensed operator interested in volunteer public service.

The SFARES mission is to augment and facilitate emergency communications and related services and activities for Santa Fe City and County Emergency Management.

# What is ARES?

ARES is an acronym for Amateur Radio Emergency Service, a public service of the ARRL (American Radio Relay League), the United States' national association of amateur radio operators. Santa Fe ARES is one of many state, county, and city ARES organizations throughout the United States.

ARES is an all volunteer organization which provides auxiliary radio communications without charge to:

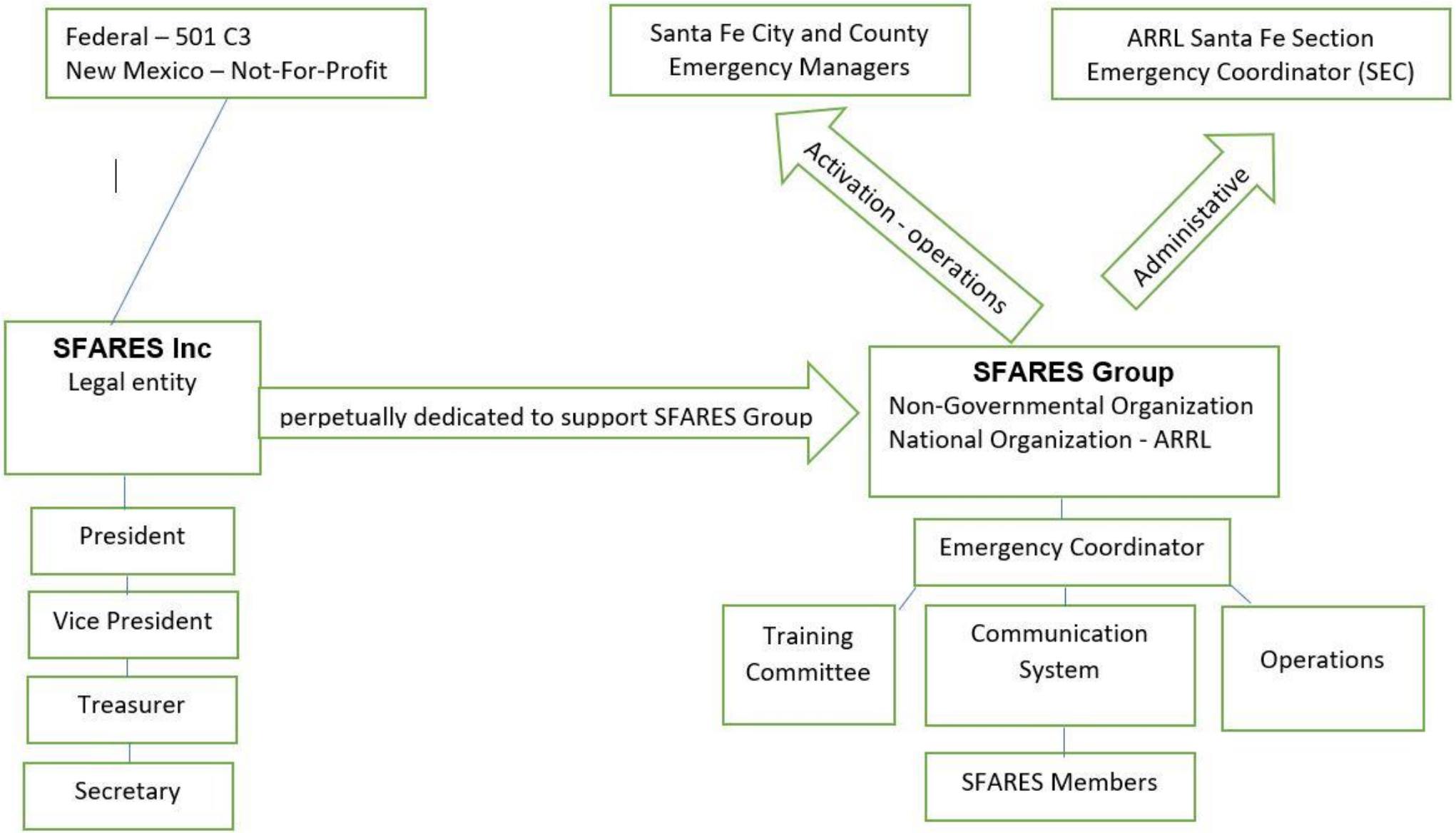
- government agencies during times of emergency, including hurricanes, earthquakes, and forest fires
- other organizations active in emergencies, such as hospitals or the American Red Cross
- other groups running festivals, parades, fund raising events and similar community or public service events.

ARES can provide essential communications when:

- telephone and cellular systems, or an agency's regular radio systems, are disrupted or overloaded
- communications are needed at spots where telephone lines and cell coverage are not possible.

ARES operators can establish communications at any location, with or without commercial electrical service, using special amateur radio equipment and frequencies granted by the United States Federal Communications Commission (FCC).

# SFARES Organization



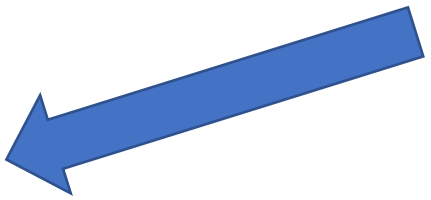
# Who does SFARES Report to?

- SFARES supports Santa Fe City and County Emergency Management, specifically the County Emergency Manager, Martin Vigil

## Local Emergency Manager Coordination

An important part of the local emergency manager's role is building relationships with all partners in the emergency management system to ensure the whole community is prepared. These partners include:

- Fire services.
- Police/law enforcement services.
- Emergency medical programs.
- Public works.
- Volunteers and voluntary organizations.
- Private and nonprofit sector organizations.
- Other groups involved in emergency activities.
- Citizens.
- Tribal/Territorial



ARES fits here

# Possible Emergencies in Northern NM

- Wildfire
- Train wreck
- Hazardous material spill (chemicals, nuclear material, etc.)
- Dam breach
- Cyber attack on communications, power and other utility infrastructure

# Santa Fe Amateur Radio Emergency Services (SFARES)

- When there is a need, the Santa Fe County Emergency Manager will contact Santa Fe ARES for communications support.
- The Santa Fe County Emergency Manager will contact Evelyn Ward (KE5GLR). Evelyn is the SFARES Emergency Coordinator who is the point of contact for all activations. (If Evelyn is not available, then the County Emergency Manager will contact Alden Oyer (AG5S) or Don Hinsman (N4VIP) to coordinate activities).
- The Emergency Coordinator will utilize the Call Multiplier phone messaging service to inform all members of an activation and how to proceed.  Those members responding as available for activation will then be contacted by the Emergency Coordinator and given additional instructions.

# Where to Start  (Links on SFARES Web Site)

**FEMA Emergency Management Institute – Independent Studies (ISP Courses)**

Complete certification in the following courses:

- IS 100.c – Introduction to the Incident Command System
- IS 200.c – Basic Incident Command for Initial Response
- IS 700.b – An Introduction to the National Incident Management System
- IS 800.d – National Response Framework, An Introduction

Recommended for a better understanding of the role of Amateur Radio during an emergency :

- IS 288.a – The Role of Voluntary Organizations in Emergency Management

**American Radio Relay League (ARRL) Course**:

- Public Service  and Emergency Communications Management for Radio Amateurs (EC-016) Course

# Ongoing In-Service Training for SFARES Members

Organizational SOP’s

Aspects of Emergency Operational Plan

Introduction to Central and Remote SFARES Communication Sites and their capabilities

Operation of various radios

Understanding local and regional Audio VHF, UHF, Simplex, repeaters, and National and Global HF

Understanding local, regional ,national and global Digital  D-Star, D-Rats, WL2K, VHF, UHF and HF

Learning situational awareness capabilities such as APRS and SARTrak

Becoming familiar with various software programs utilized in the communication sites.

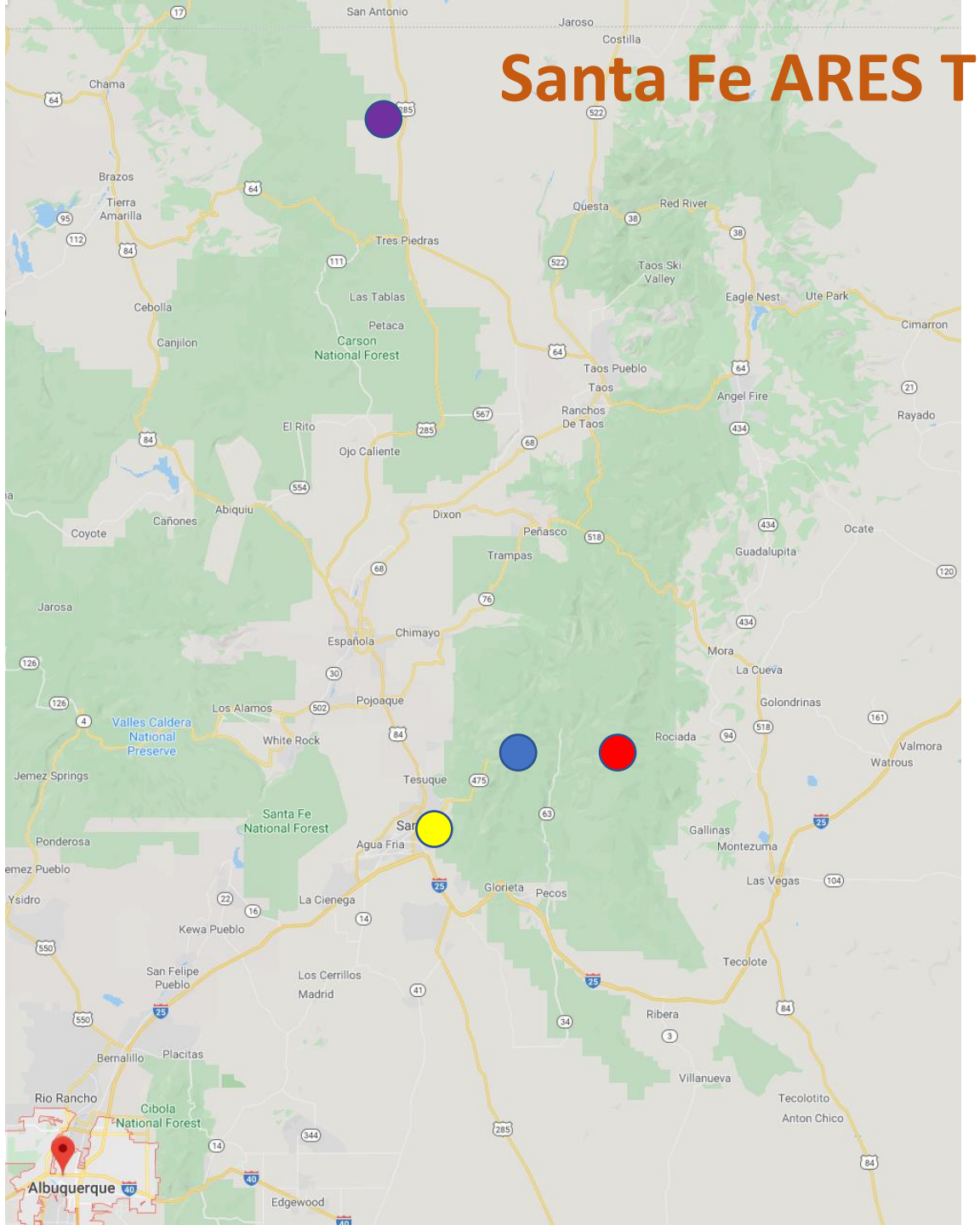
An understanding of the SFARES Mesh and its components

Introduction to antennas and other technical communications equipment

# SFARES participates in many Public Service Events

- QSO Party
- Field Day
- Chimayo Pilgrimage
- Santa Fe Century Bicycle Ride
- Jemez Mountain Trail Run
- Zozobra
- Other requested Marathons and events as they are organized through out the year

# Santa Fe ARES TESuque LINKed Network (TESLINK)




- St. Vincent's Hospital
  147.200 MHz (+600, 162.2)
- Tesuque Peak
  146.820 MHz (-600, 162.2)
  442.825 MHz (+5, 131.8) UHF linking freq for TESLINK
- Elk Mountain
  147.300 MHz (+600, 162.2)
- San Antonio Mountain
  146.760 MHz (-600, 67.0)
- DSTAR (Food Depot) (W5SF)
  145.210 MHz (-600, )

ARES Simplex Frequency
147.555 MHz

When SF ARES is activated, TESLINK is the **primary communications** network

These repeaters are provided and maintained by the Santa Fe Amateur Radio Club (SFARC)

# Other Communications Resources

## All Santa Fe ARES Radios are programmed with this list of repeaters

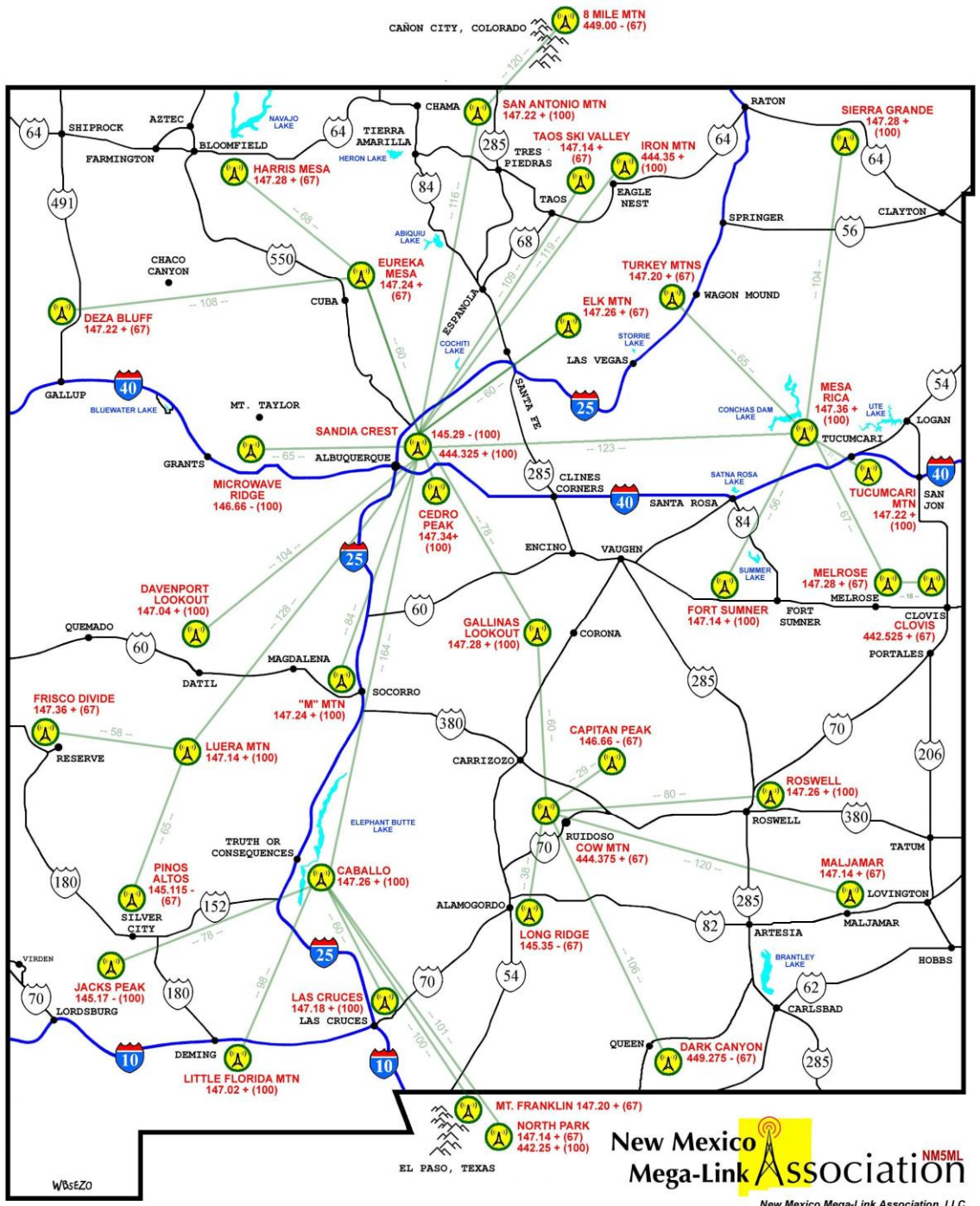
TESLINK Channels

| | HAM PRIMARY | |
|---|---|---|
| 001 | ST VINC | 147.2000 |
| 002 | TESUQUE | 146.8200 |
| 003 | A TESQ | 147.0200 |
| 004 | PAJA MT | 145.1900 |
| 005 | L ALAMO | 146.8800 |
| 006 | PICURIS | 147.1200 |
| 007 | U TESQ | 442.8250 |
| 008 | LOS ALA | 442.0000 |
| 009 | KF5SGT | 447.7750 |
| 010 | VSFARES | 147.5550 |
| 011 | USFARES | 446.5550 |
| 012 | CLINES | 147.0600 |
| 013 | CEDRO P | 145.1500 |
| 014 | MADERA | 147.0800 |
| 015 | RAVEN | 146.7200 |
| 016 | ELK MT | 147.3000 |
| 017 | SAN ANT | 146.7600 |
| 018 | K5FIQ | 442.4500 |
| 019 | M ELK M | 147.2600 |
| 020 | SCREST | 145.3300 |
| 021 | M CREST | 145.2900 |

**If TESLINK repeaters are not available or greater a greater coverage area is needed, then any of the other repeaters listed may be used.**

Supports Digital Modes (DSTAR, Fusion)

● Part of NM Mega-link network

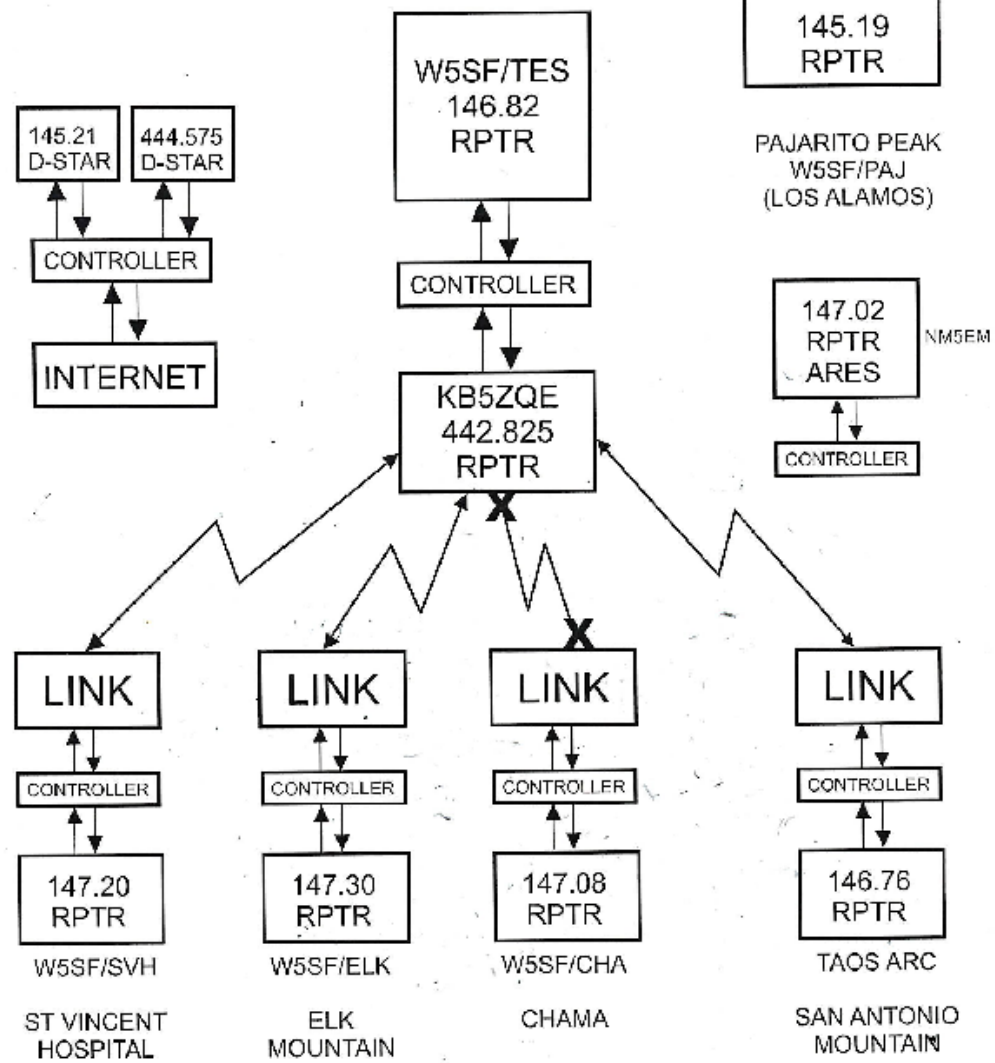



# Other Communications Resources

## NM Megalink – 37 linked repeaters across NM and West Texas

| Northern New Mexico | Elev. | Freq. | Tone | Operational Status |
|---|---|---|---|---|
| Elk Mountain (N of Pecos) | 11,600 | 147.260+ | 67 | |
| Eureka Mesa (E of Cuba) | 9,667 | 147.240+ | 67 | |
| Harris Mesa (SE of Bloomfield) | 6,949 | 147.280+ | 67 | |
| Iron Mountain (NE of Eagle Nest) | 11,732 | 444.350+ | 100 | |
| San Antonio Mountain (N of Tres Piedras) | 10,908 | 147.220+ | 100 | |
| Sierra Grande (E of Raton) | 8,720 | 147.280+ | 100 | **Stand Alone** |
| Taos Ski Valley (NE of Taos) | 11,900 | 147.140+ | 67 | |
| Turkey Mountain (W of Wagon Mound) | 8,480 | 147.200+ | 67 | |
| | | | | |
| **Central New Mexico** | **Elev.** | **Freq.** | **Tone** | **Operational Status** |
| Cedro Peak (SE of Tijeras) | 7,767 | 147.340+ | 67 | |
| Clovis (Downtown) | 4,295 | 442.525+ | 67 | |
| Ft. Sumner (W of Fort Sumner) | 4,580 | 147.140+ | 100 | |
| Gallinas Lookout (W of Corona) | 8,730 | 147.280+ | 100 | |
| La Mosca (NE of Grants) | 10,991 | 444.800+ | 67 | |
| Melrose (W of Clovis) | 4,560 | 147.280+ | 67 | |
| Mesa Rica (S of Conchas Dam Lake) | 5,390 | 147.360+ | 100 | |
| Microwave Ridge (E of Grants) | 9,332 | 146.660- | 100 | |
| Sandia Crest (East of Albuquerque) | 10,680 | 145.290- | 100 | |
| Sandia Crest (East of Albuquerque) | 10,680 | 444.325+ | 100 | |
| Tucumcari Mountain (S of Tucumcari) | 4,975 | 147.220+ | 100 | |
| | | | | |
| **Southern New Mexico** | **Elev.** | **Freq.** | **Tone** | **Operational Status** |
| Buck Mountain (NW of Ruidoso) | 10,752 | 444.375+ | 67 | |
| Caballo (SE of Truth or Consequences) | 7,550 | 147.260+ | 100 | |
| Capitan Peak (NW of Roswell) | 10,450 | 146.660- | 67 | |
| Las Cruces (E of Las Cruces) | 5,270 | 147.180+ | 100 | |
| Little Florida Mountain (SE of Deming) | 5,260 | 147.020+ | 100 | |
| Long Ridge (E of Alamogordo) | 7,782 | 145.350- | 67 | |
| "M" Mountain (W of Socorro) | 7,201 | 147.240+ | 100 | |
| Maljamar (NW of Hobbs) | 4,300 | 147.140+ | 67 | |
| Roswell (E of Roswell) | 3,971 | 147.260+ | 100 | |
| | | | | |
| **Western New Mexico** | **Elev.** | **Freq.** | **Tone** | **Operational Status** |
| Davenport Lookout (N of Datil) | 9,300 | 147.040+ | 100 | |
| Deza Bluff (N of Gallup) | 9,000 | 147.220+ | 67 | |
| Frisco Divide (WNW of Reserve) | 8,419 | 147.360+ | 67 | |
| Jacks Peak (NE of Lordsburg) | 7,986 | 145.170- | 100 | |
| Luera Mountain (S of Datil) | 9,420 | 147.140+ | 100 | |
| Pinos Altos(N of Silver City) | 8,163 | 145.115- | 67 | |
| | | | | |
| **Western Texas** | **Elev.** | **Freq.** | **Tone** | **Operational Status** |
| Mt. Franklin (N of El Paso) | 5,470 | 147.200+ | 67 | |
| North Park (NE of El Paso) | 3,950 | 442.250+ | 100 | |
| North Park (NE of El Paso) | 3,950 | 147.140+ | 67 | |

# SANTA FE AMATEUR RADIO CLUB
# REPEATER SYSTEM
Thanks to Alan
N5BGC



# Appendix

- Regular meetings and radio nets
  - 2nd Saturday of the month meetings (via Zoom during pandemic)
  - Tuesday before the 2nd Saturday D-RATS net, 7:30pm (via Internet)
  - Tuesday before the 2nd Saturday radio net, 8:00pm on Teslink
  - First Sunday State-wide emergency services net, 3.939 MHz, LSB
    - 7:30pm Mountain Daylight Time, or
    - 5:00pm Mountain Standard Time