February 12, 2019 Meeting Minutes of the Bishop Amateur Radio Club

BARC's officers for 2019 are:

Bill Chezum	(W6WWY)	– President
Jeff Tong	(AA7GK)	– Vice President
Terry Fenske	(K6UN)	– Treasurer
Noam Shendar	(W6RT)	– Secretary

Meeting called to order by President Bill Chezum (W6WWY) at 19:00. The meeting was held at the Salvation Army building in Bishop, CA.

Number in attendance: 15. These were, in alphabetic call sign order: Jeff (AA7GK), John (AD6NR), Steve (K6SEC), Terry (K6UN), Mike (KA6HII), Dave (KG6JZJ), Paul (KK6BAF), Bev (N6BEV) and her friend Rachel, Adrian (N6ZA), Jon (NW6C), Wayne (W6PB), Noam (W6RT), Bill (W6WWY), and Len (WA6IQO).

Minutes

Financial Report:

Terry (K6UN) reported that the club spent $117.18 on the Silver Peak repeater power bill and ham testing fees ($60 collected from examinees and then paid to ARRL). Income in the same period was $685, which included a 10-year prepaid membership by one member. The club's bank account balance now stands at $3,162.67.

Repeater System:

Note: *system diagrams and control codes are posted on BARC's repeater page*

John (AD6NR) walked through 2 repeater systems (ours and Mono County's). BARC has 4 repeaters, managed via a CAT-400 controller which connects to:

- Mazourka (port **2**) – a UHF link (with an in-band link Mazourka–Lone Pine)
- Mammoth (port **3**) – an in-band link
- Mono County (port **4**) – a UHF link

To toggle a connection, key in these DTMF tones into any of the repeaters:

- To **connect** a port: **A*n***, where "*n*" is the port number (see above)
- To **disconnect** a port: **B*n***, where "*n*" is the port number (see above)

In general, all ports are connected at all times.

The Mono County system is maintained by the county and has 3 repeaters, one on Antelope Peak (north of Benton), one on Conway Summit (between Lee Vining and Bridgeport), and one on Leviathan Peak (above Topaz Lake).

Conway is the Mono system's hub, with UHF links to the other 2 sites. We link to it by relaying a UHF signal from Silver to Mazourka to Conway.

In addition to turning links on an off using the controller on Silver, it is also possible to turn individual radios on and off (particularly useful if a radio is stuck on for some reason). Unlike the way Silver works, on/off commands must be transmitted into the specific radio being toggled. In general, the mnemonics for these commands are:

- The **first 2 digits** of the kHz part of the Tx frequency (i.e., "76" for 146.76)
- … followed by **# (pound) for off** or *** (star) for on**
- … into the Rx frequency of the repeater (your radio's Tx frequency)
- Example: to turn the Mazourka repeater off: transmit **76#** into 146.16

In general, all ports are connected at all times.

50/50 Raffle:

Terry (K6UN) will grab Rich's (KF6YLW) raffle tickets and bring them to the next club meeting.

Items from the Floor:

John (AD6NR) reported that 30-year leases for both the Silver and Mazourka repeater sites are done as of about 1 week prior to the meeting, capping a 3-year effort. He will send copies to club officers and will eventually place additional copies at each repeater site.

Bill (W6WWY) reported on interference at his QTH that results in his hearing the Bishop WX (weather) station on the Silver repeater Tx frequency (146.94). The trigger for this condition seems to be when a nearby Bishop Police patrol car transmits. There followed a long and detailed discussion around IMP (Inter-

Modulation Products) and what causes them, namely 2 signals being mixed by a passive radiator (essentially any disconnected vertical metallic element).

Bev (N6BEV) reported that the club sent a thank-you card to the pastor of the Lutheran Church at which we conducted the most recent ham exam.

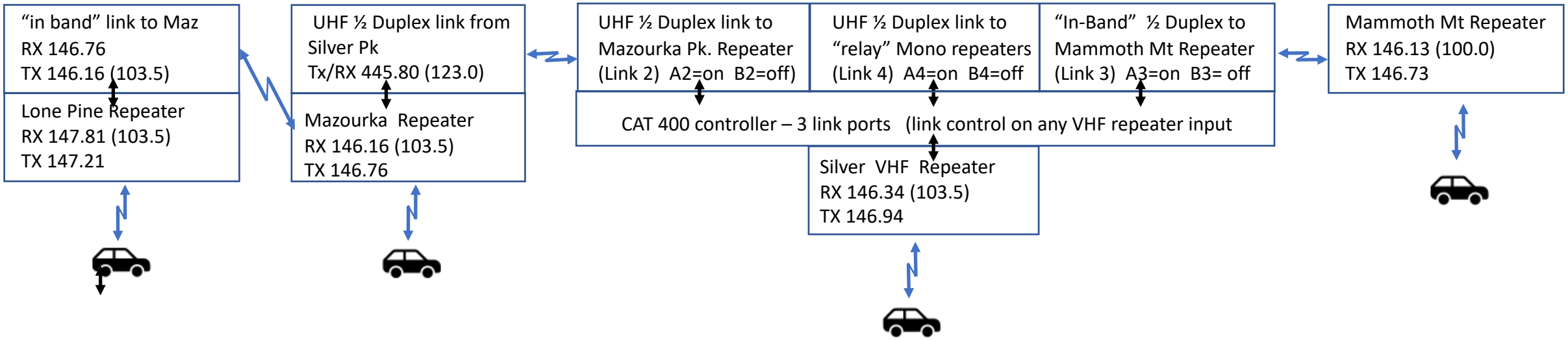
Len (WA6IQO) would like to see more participation in the club's Sunday morning HF net, one of the oldest HF nets in the country. Details:

- 3.950 MHz (75/80 meters) LSB
- Every Sunday morning at 08:00
- Rag-chewing begins around 07:15
- Informal and friendly

Meeting adjourned at 20:12.

Noam Shendar (W6RT)
Secretary
Bishop Amateur Radio Club, Inc. (BARC)

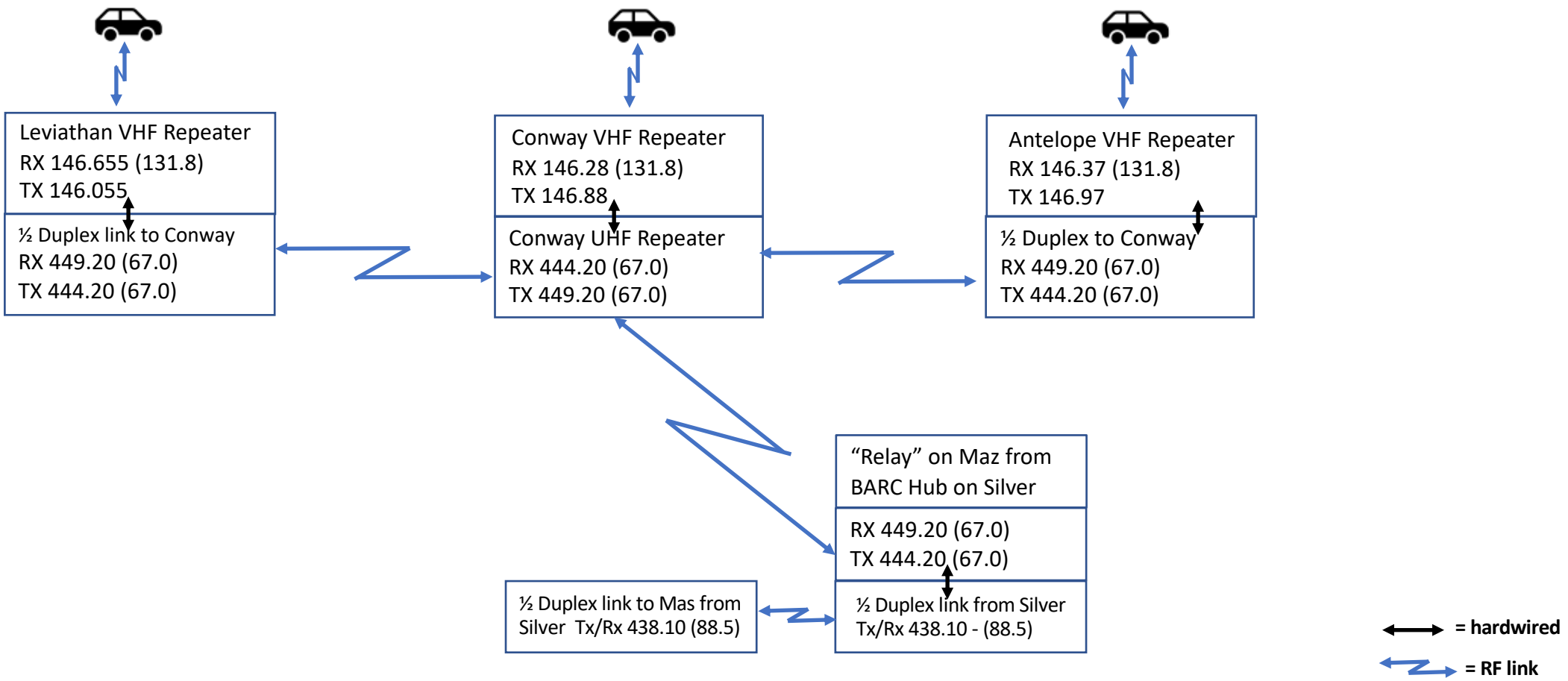
BARC Repeater Network – Basic Block Diagram



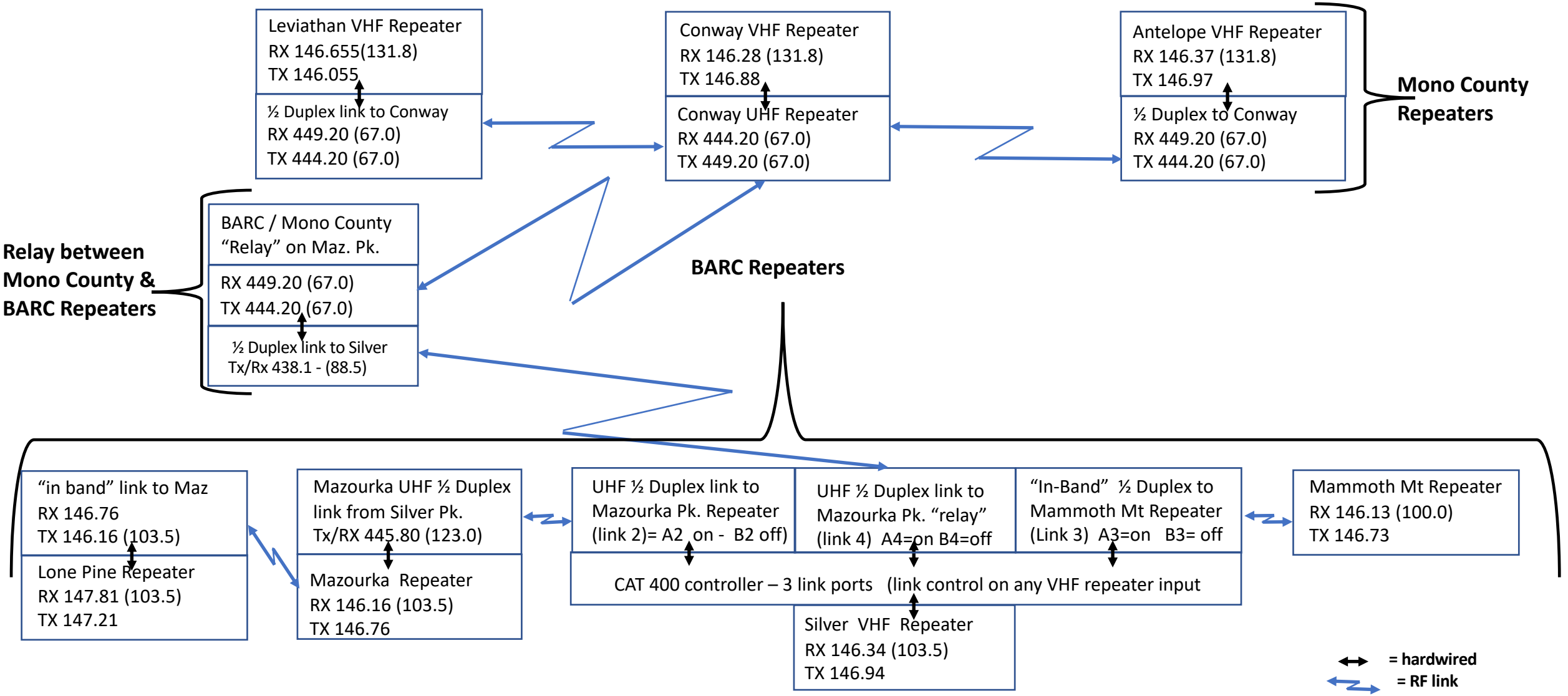
Note: "1/2 Duplex" = a simple transceiver

= hardwired
= RF link

Mono County Repeater Network – Basic Block Diagram



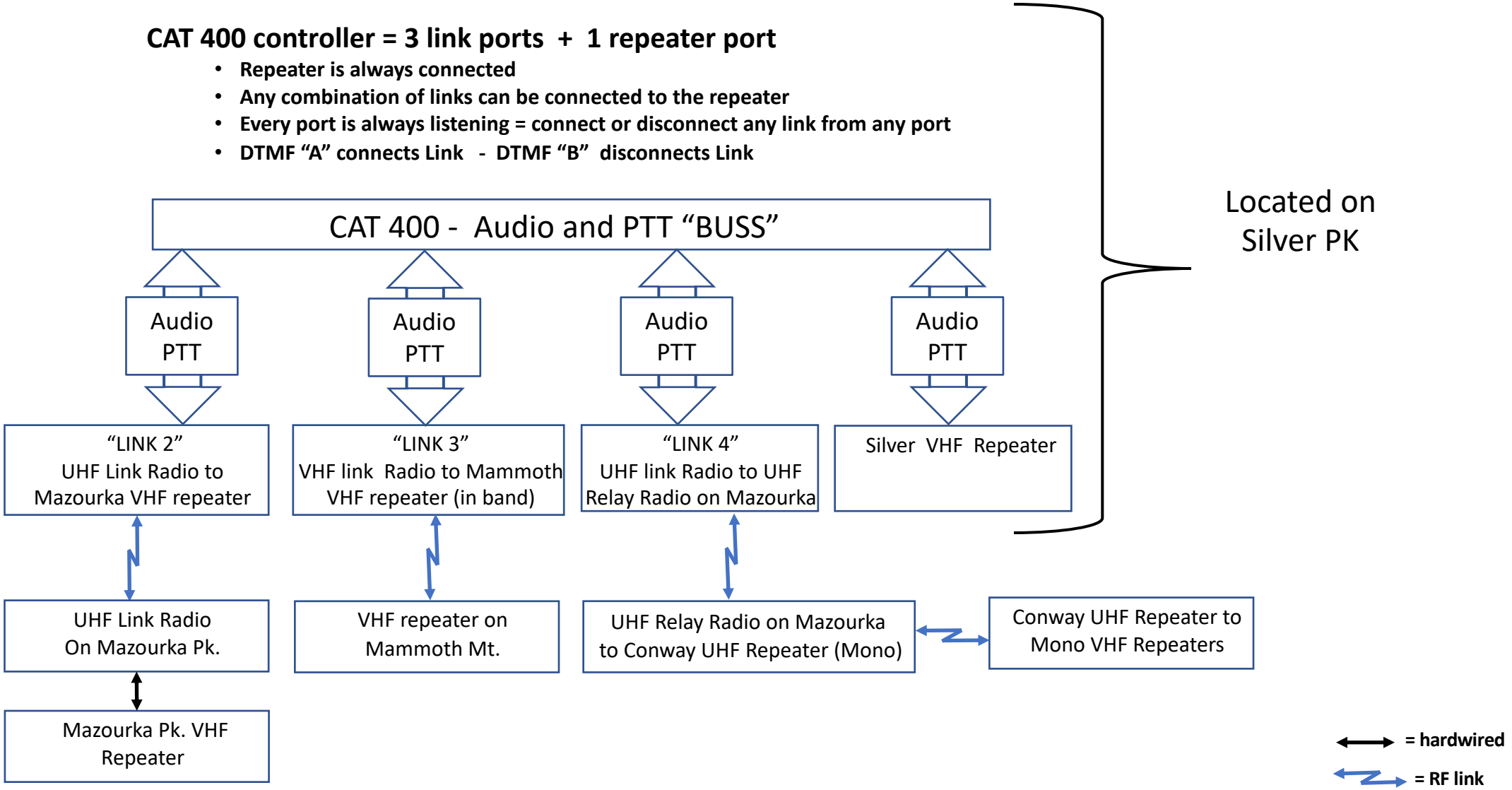
Eastern Sierra Repeater Network – Basic Block Diagram



BARC Repeater Network - Link Control System

CAT 400 controller = 3 link ports + 1 repeater port

- **Repeater is always connected**
- **Any combination of links can be connected to the repeater**
- **Every port is always listening = connect or disconnect any link from any port**
- **DTMF "A" connects Link - DTMF "B" disconnects Link**



BARC Repeater Network – Radio Control Diagram