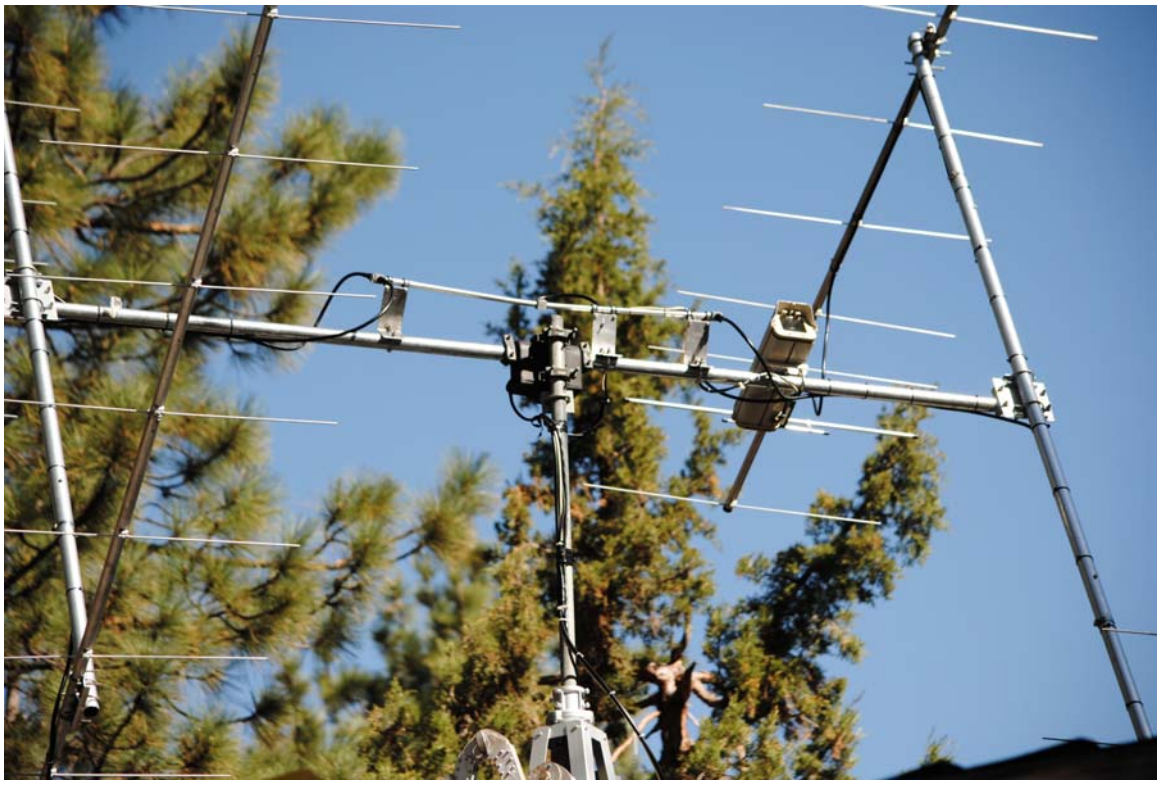
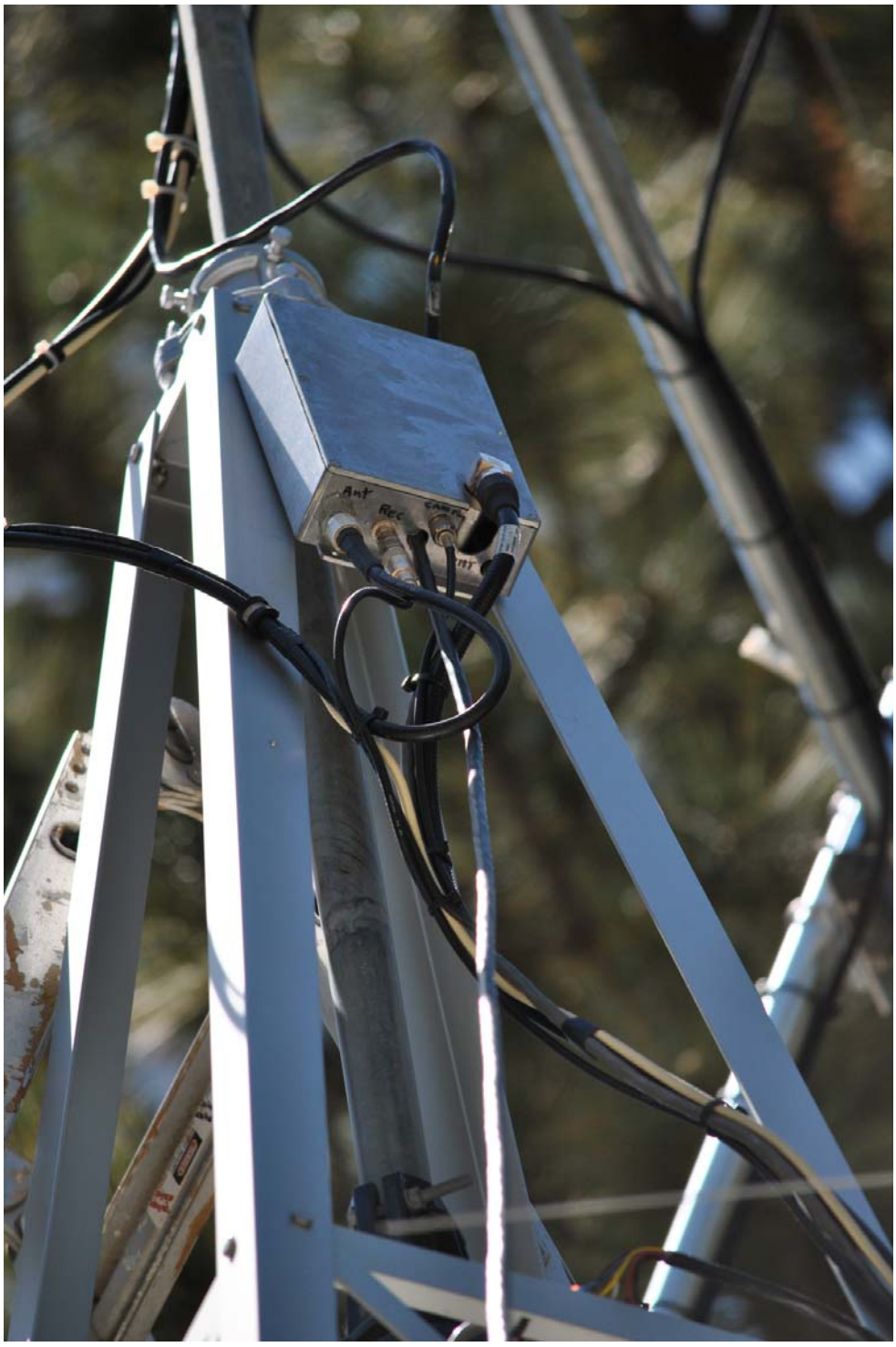
# EME — A New DXCC Challenge

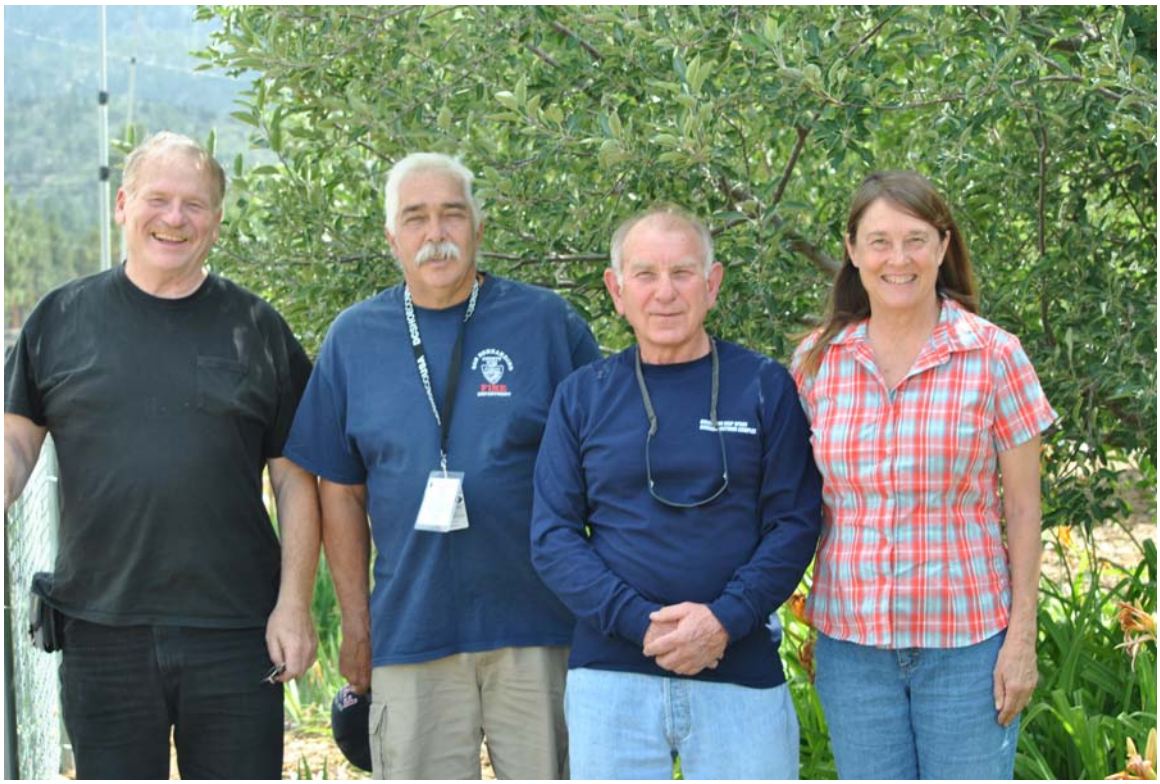
**Robert Ramsaur, WA6MQF**



A close up of the array shows the mounting frame layout. The finished antenna array consisting of four Cushcraft 13B2 2 meter Yagis, the $M^2$ Divider, Yaesu G-550 Elevation Rotator and the Sony CCD camera. The horizontal boom is made from 1 ½ in galvanized pipe and the H legs are constructed from 2 concentric thickness (1.5" and 1.375") of aluminum tubing. In the center is the Yaesu elevation rotator and above it is the 4 port $M^2$ power divider. Four equal lengths of LMR400 connect the divider to the 4 Yagis. LMR400 also connects the power divider to the tower mounted pre-amp. Right of center is the weather proof Sony CCD camera and on both ends are the H frame legs that support the 4 antennas.




This Figure shows the mast-mounted box containing the pre-amp and two relays. The large relay inside the box connects the antenna array to the Heliax and the smaller relay connects the array to the pre-amp input. During transmit the small relay switches a 50 Ω termination to the pre-amp input. The pre-amp is connected to the transceiver with a RG8X cable run.



The entire 4 antenna array, mounting frame and roof-top tower were constructed and installed using only hand tools and a ladder. My friends from the Big Bear ARC provided the human energy needed. They are, from left to right, Bud Wyatt, KC0ITA; Tom Fry,KF6Q; Mike Bode, WB6CLZ, and Cindy Bode, WB6CIN.

## *Useful EME related Web Sites*

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| physics.princeton.edu/pulsar/K1JT/ | WSJT home page, JT65 and other downloads |
| www.livecq.com | Listing of JT65 EME stations currently calling CQ |
| www.vhfdx.info | Listing of active VHF DX stations & frequencies DX Sherlock |
| www.dxscape.com | Listing of active HF/VHF DX stations & frequencies |
| www.chris.org/cgi-bin/jt65emeA | JT65 EME Link by N0UK, EME running dialog with much information |
| w5un.net/ | W5UN Home Page, SKYMOON – Moon tracking program |
| www.bigskypaces.com | W7GJ 2 m EME tips |
| www.thinkman.com | Dimension 4 free program to synchronize computer clock |