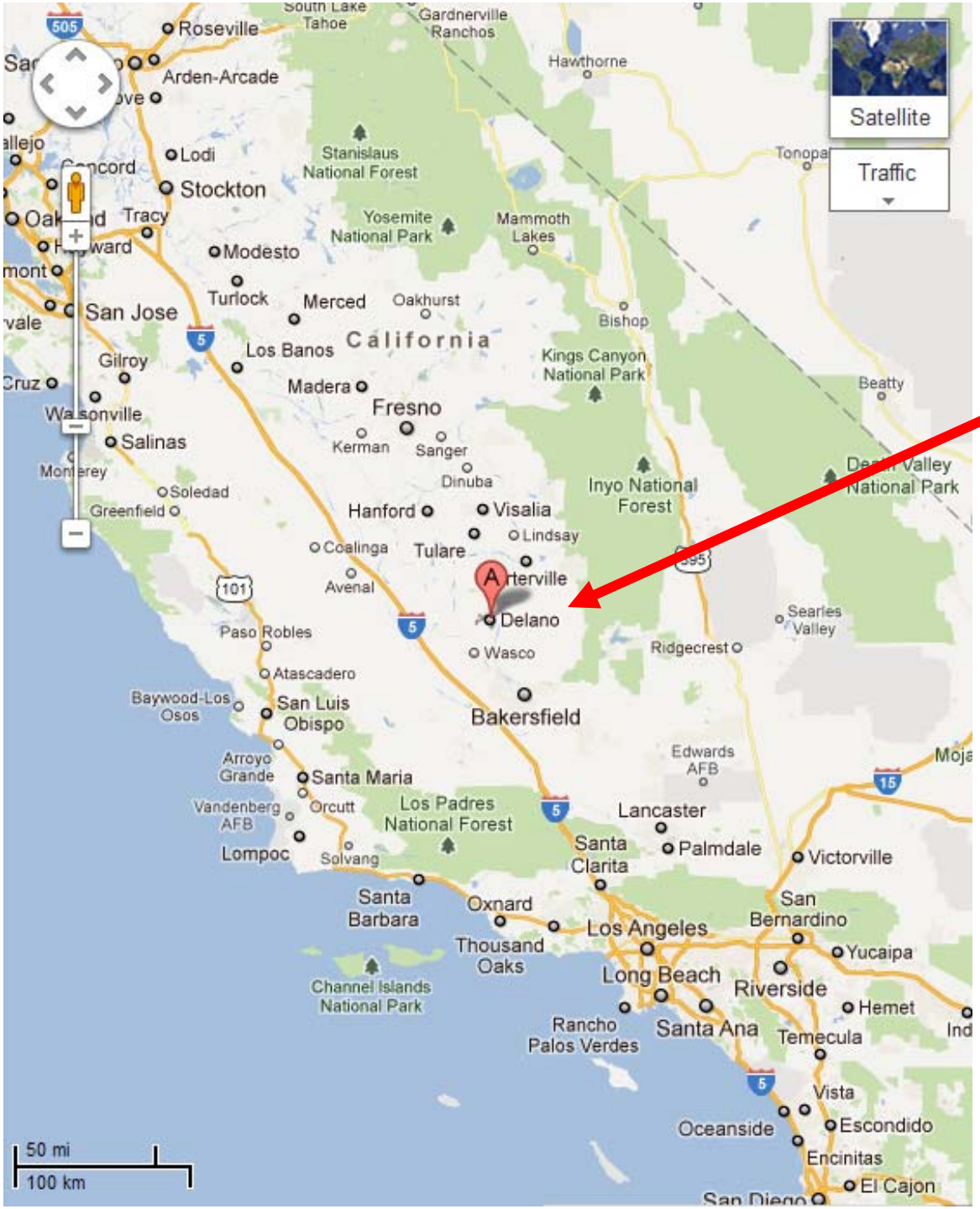
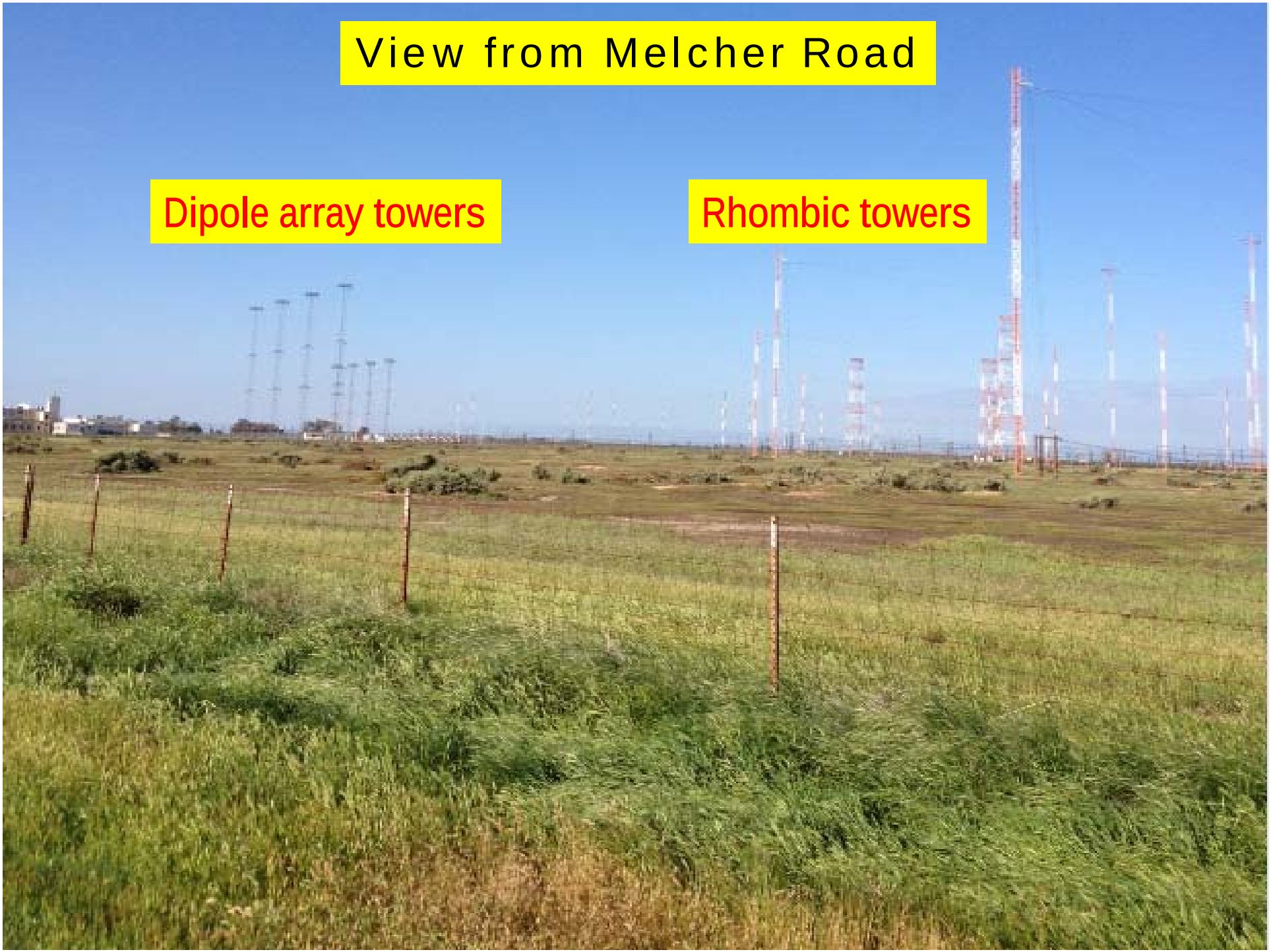
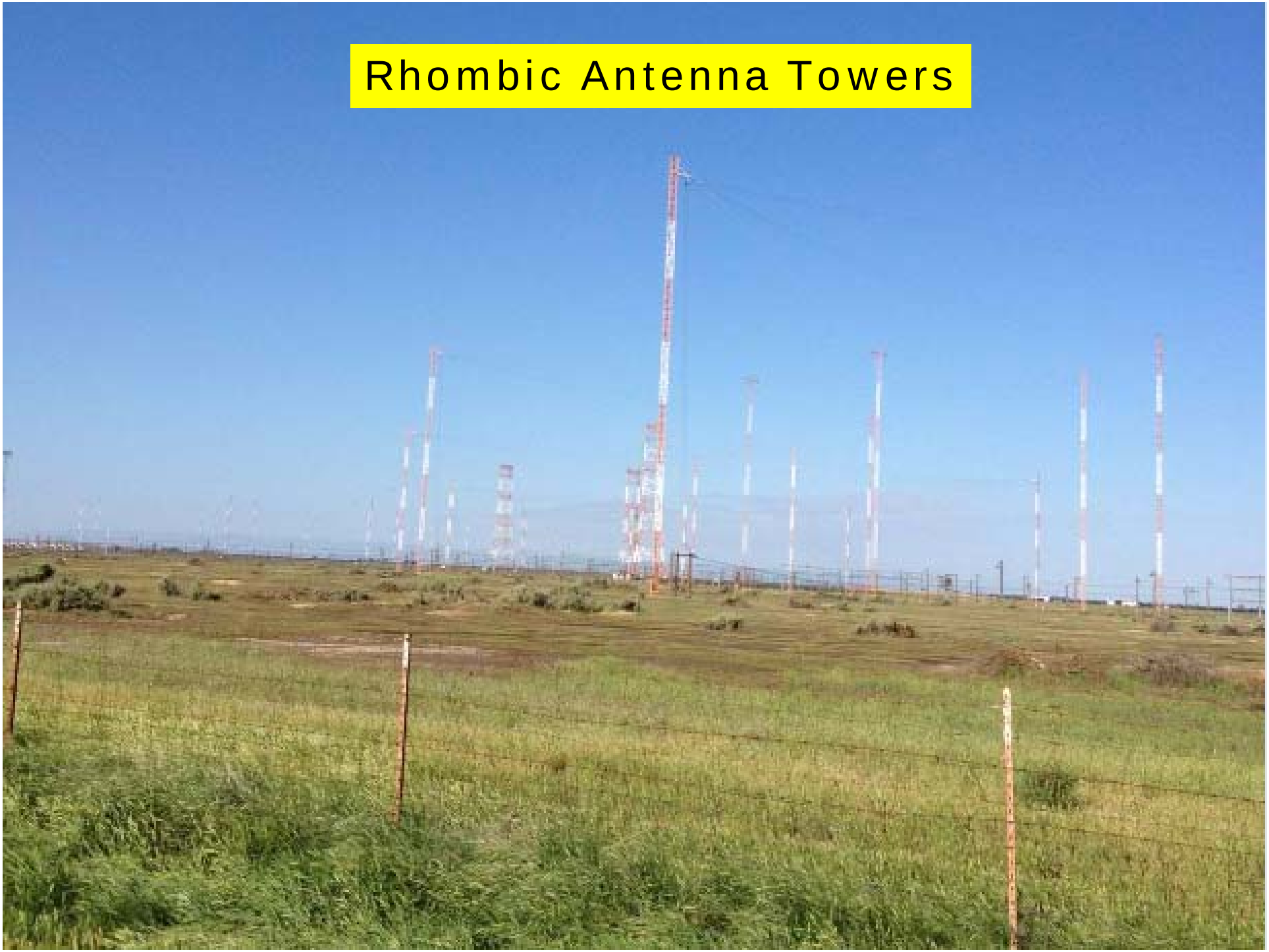

Voice Of America
Delano, Calif.



VOA in Delano, CA

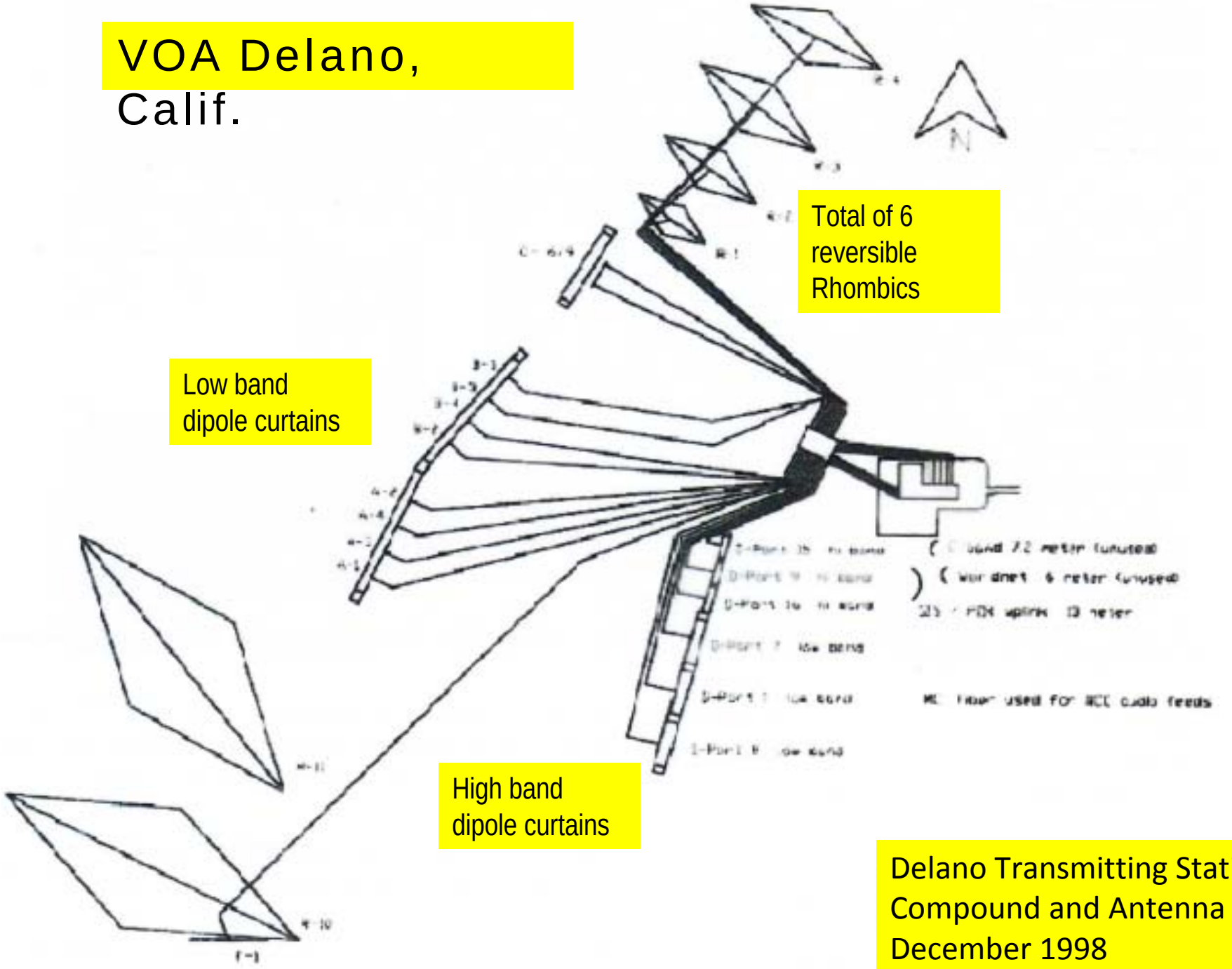
Between Visalia and Bakersfield, this 801 acre location houses one of the last powerful HF international broadcast stations.


View from Melcher Road
Dipole array towers
Rhombic towers


Rhombic Antenna Towers


Dipole Array Towers
These are 406 ft ‘skyhooks’

VOA Delano, Calif.

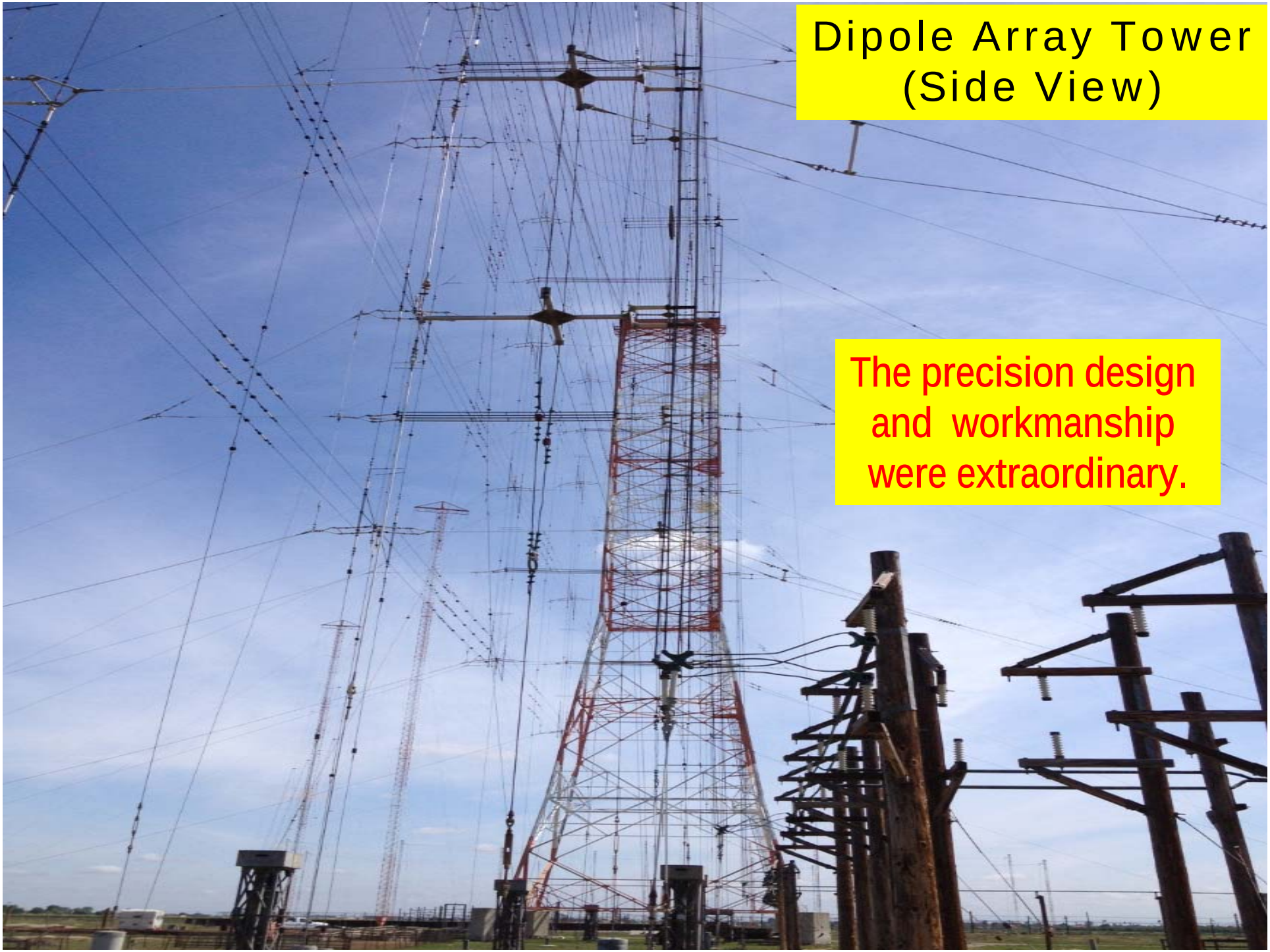


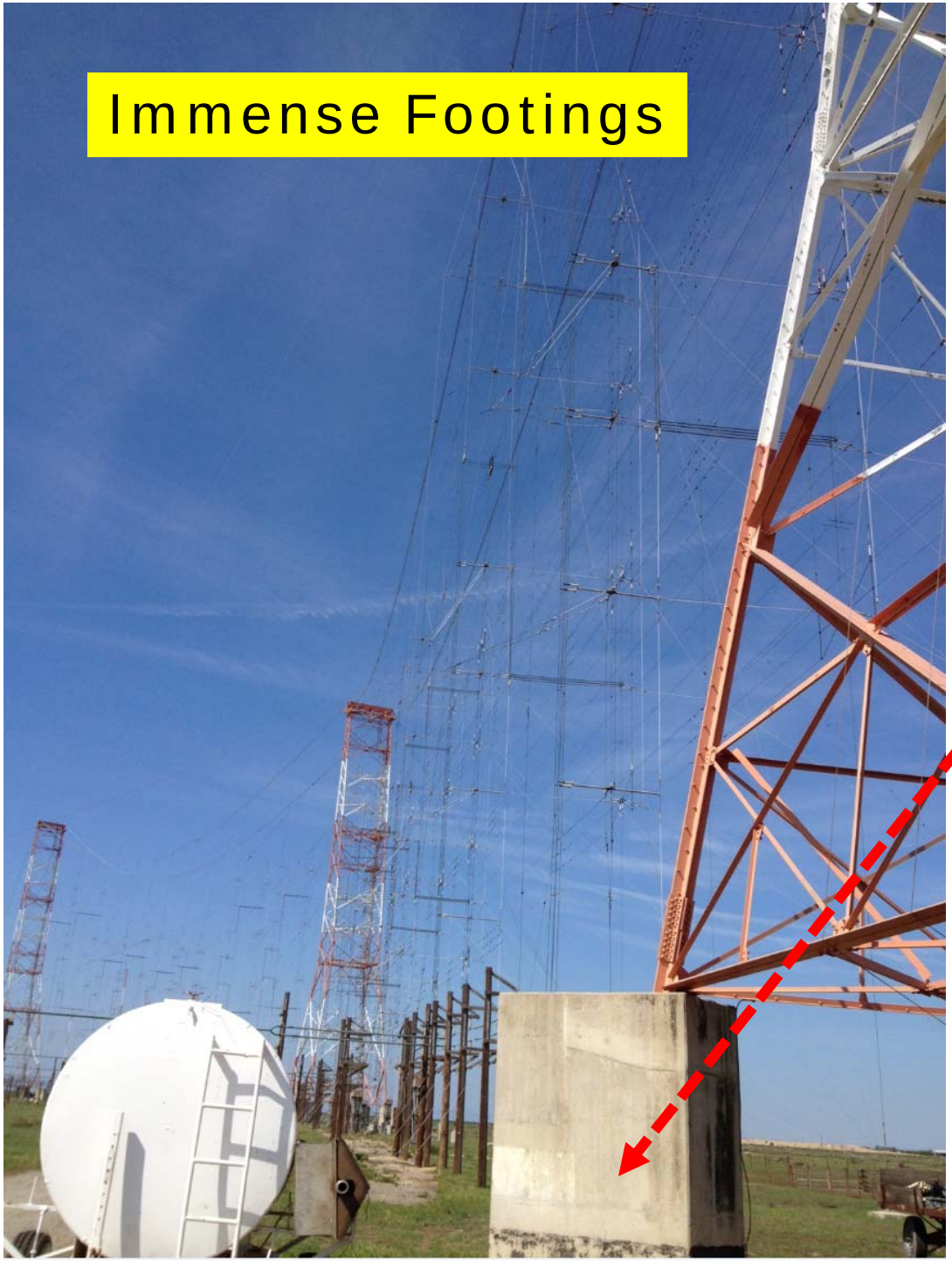
Total of 6 reversible Rhombics

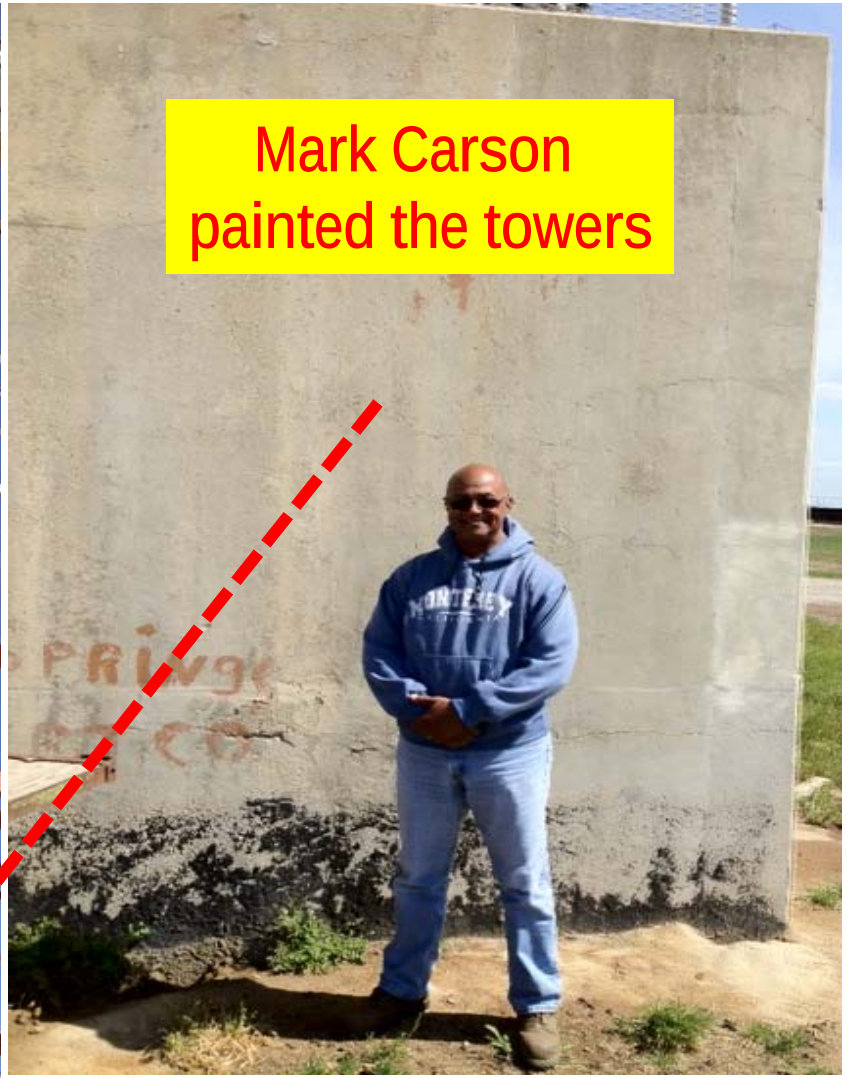
Low band dipole curtains

High band dipole curtains

Delano Transmitting Station
Compound and Antenna Field
December 1998

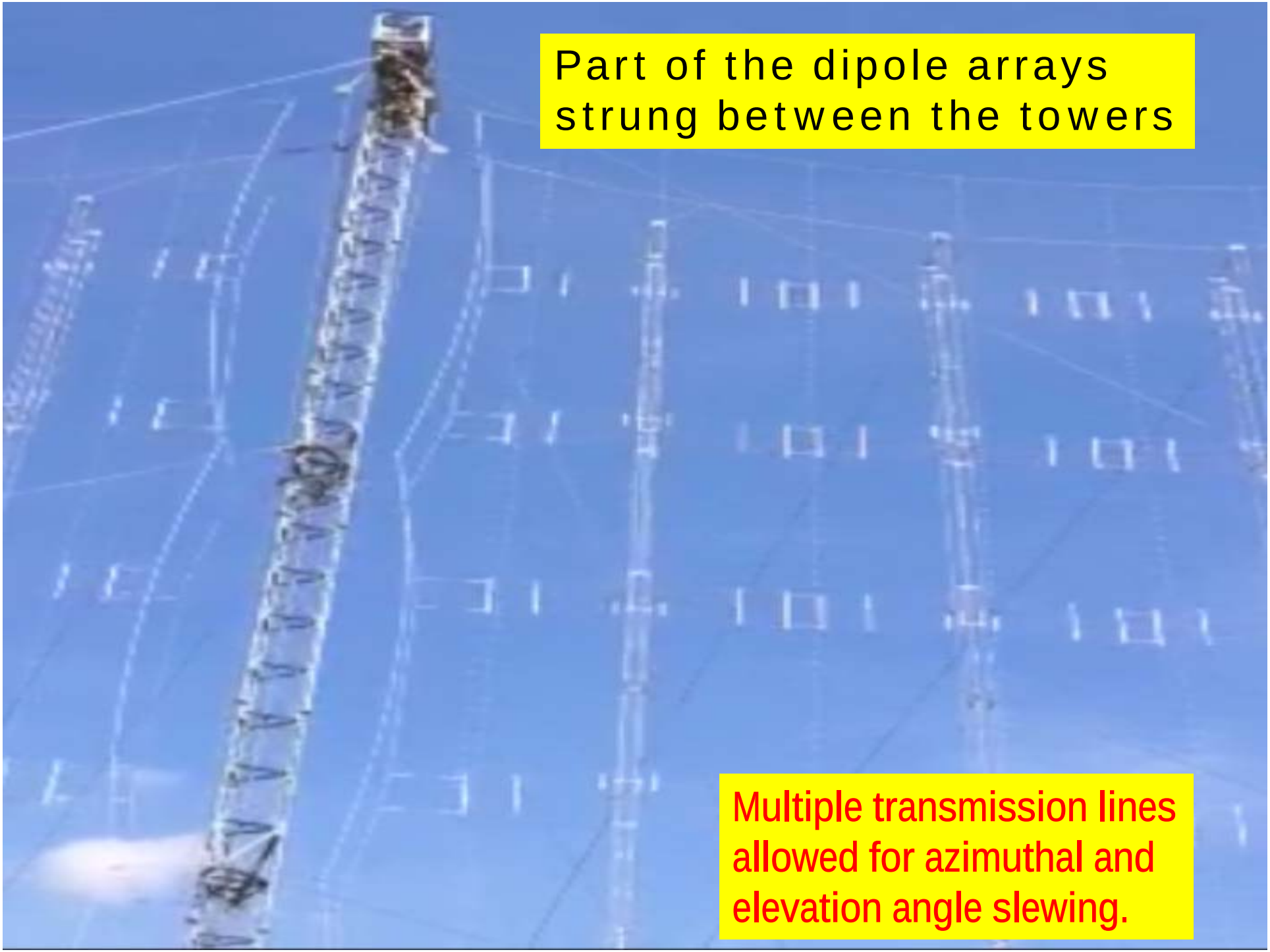

Dipole Array Tower
(Side View)
The precision design
and workmanship
were extraordinary.



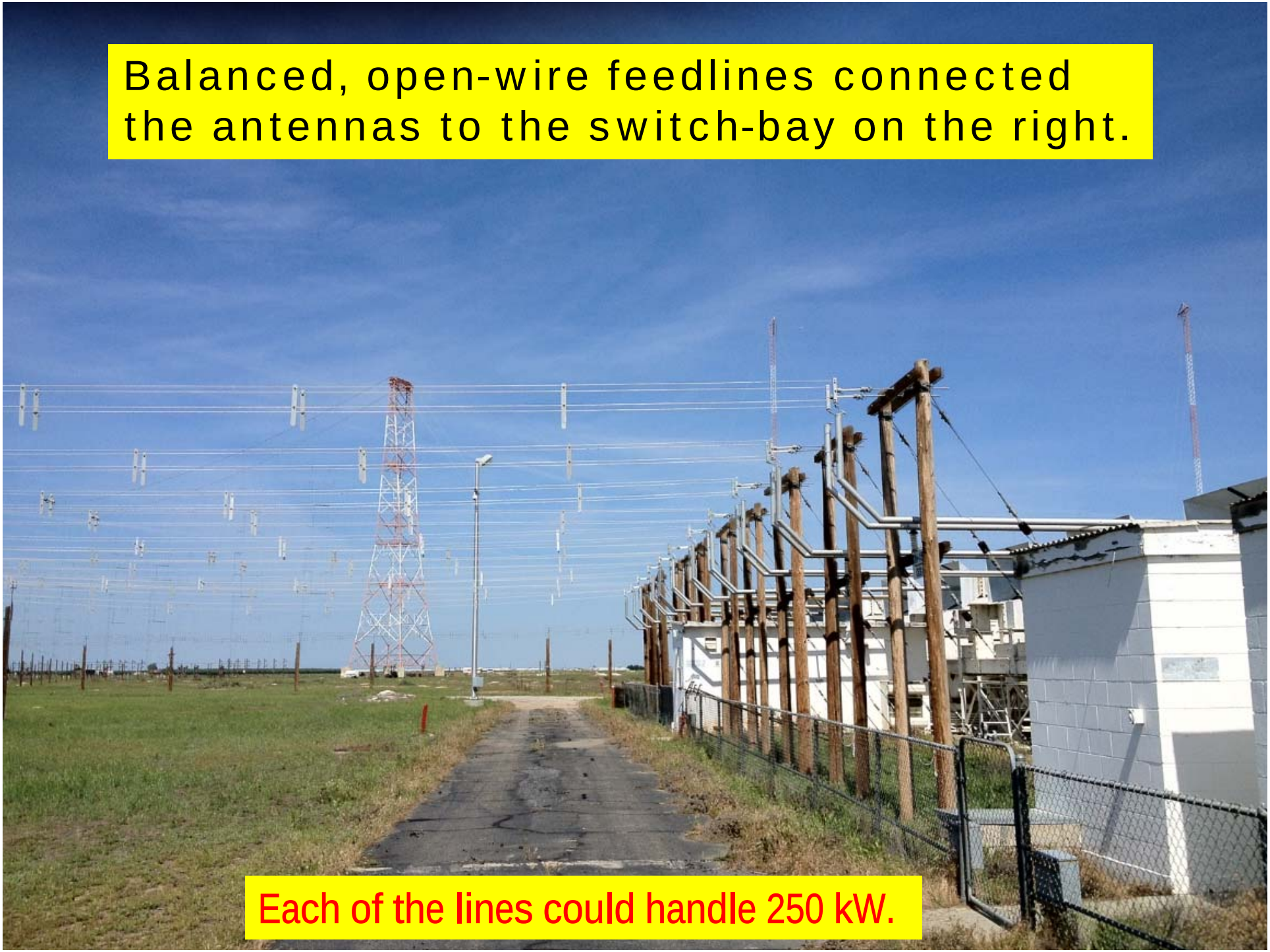


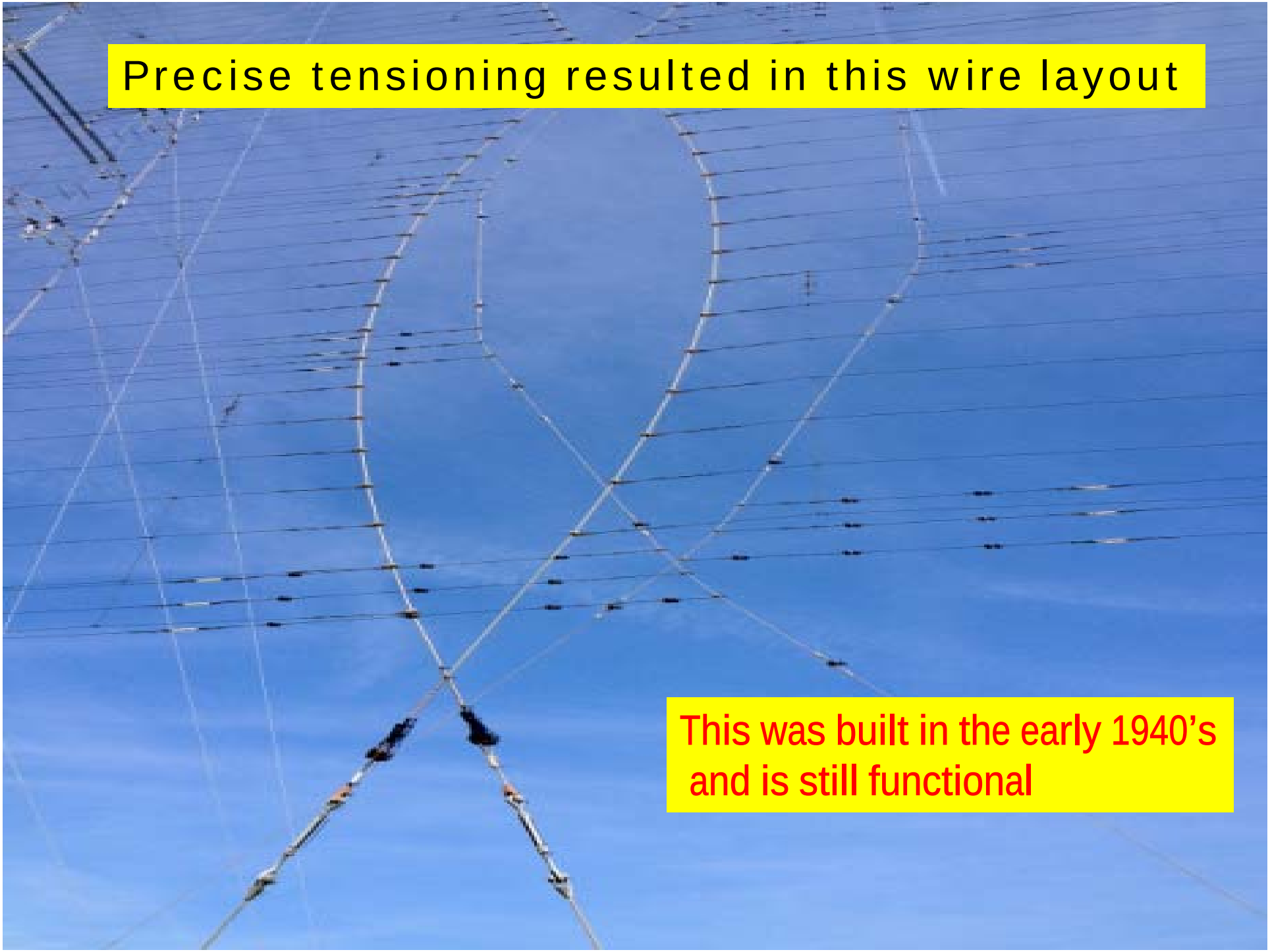
Can you imagine the forces exerted on each tower leg?'

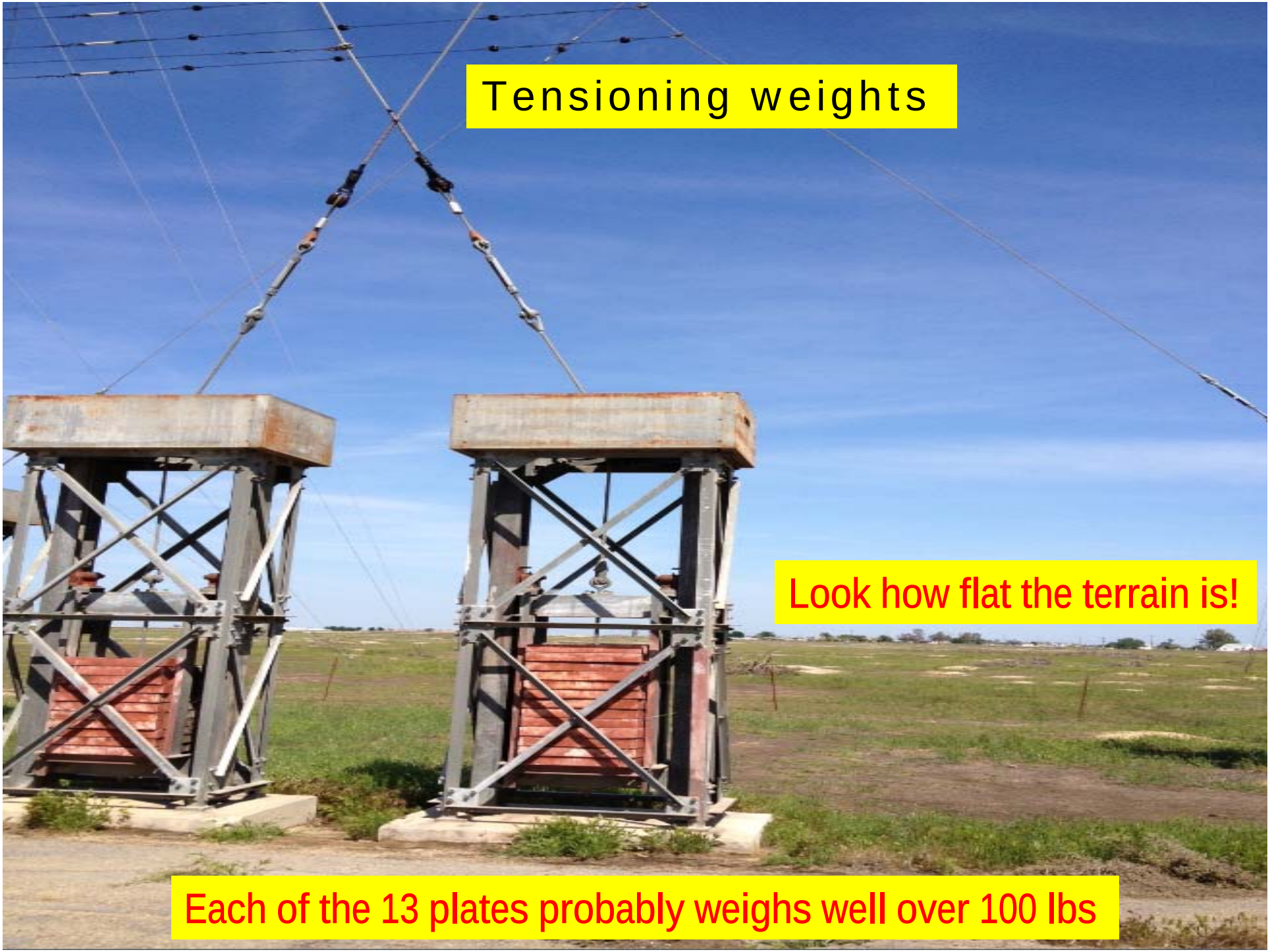

Up close and ‘personal’
Notice the perfect, alternating white and red painting detail


Part of the dipole arrays strung between the towers
Multiple transmission lines allowed for azimuthal and elevation angle slewing.


Maintenance at 200’
LAWHON
It goes up another 200’


Balanced, open-wire feedlines connected the antennas to the switch-bay on the right.
Each of the lines could handle 250 kW.


Precise tensioning resulted in this wire layout
This was built in the early 1940's
and is still functional


Tensioning weights
Look how flat the terrain is!
Each of the 13 plates probably weighs well over 100 lbs


HF Exciters
DL 7
1
The 1 Megawatt transmitter had already been disassembled

Appendix A: Transmitters, Broadcasters, Languages, and Targets

Transmitter Number & Power[1]	Broadcaster and Program Language	Target Area
DL – 01 250 kW	**Voice of America** Spanish	Central America South America
	Office of Cuba Broadcasting/Radio Marti Cuban Spanish	Cuba
	British Broadcasting Corporation English	Central America South America
	British Broadcasting Corporation Spanish	Central America South America
	Elliniki Radiofonia Tileorasi English and Greek	Eastern North America
DL – 02 250 kW	**Voice of America** Spanish	Central America South America
	The Royal Thai Government English and Thai	Pacific West Coast North America
	Elliniki Radiofonia Tileorasi English and Greek	Western Pacific Area
DL – 03 250 kW	**Office of Cuba Broadcasting/Radio Marti** Cuban Spanish	Cuba
	Elliniki Radiofonia Tileorasi English and Greek	Eastern North America
DL – 04 250 kW	**VOA Worldwide** English	Central America South America
	Office of Cuba Broadcasting/Radio Marti Cuban Spanish	Cuba
	British Broadcasting Corporation English	Central America South America
DL – 06 250 kW	*British Broadcasting Corporation* Spanish	Central America South America
DL – 07 250 kW	**Voice of America** Spanish	Central America South America
DL – 08 250 kW	**Voice of America** Creole	Haiti
	Voice of America Creole and Spanish	Central America South America Haiti
DL – 09 50 kW	Standby	To Be Determined
DL – 10 50 kW	Standby	To Be Determined

Source: Delano Transmitting Station, November 2004

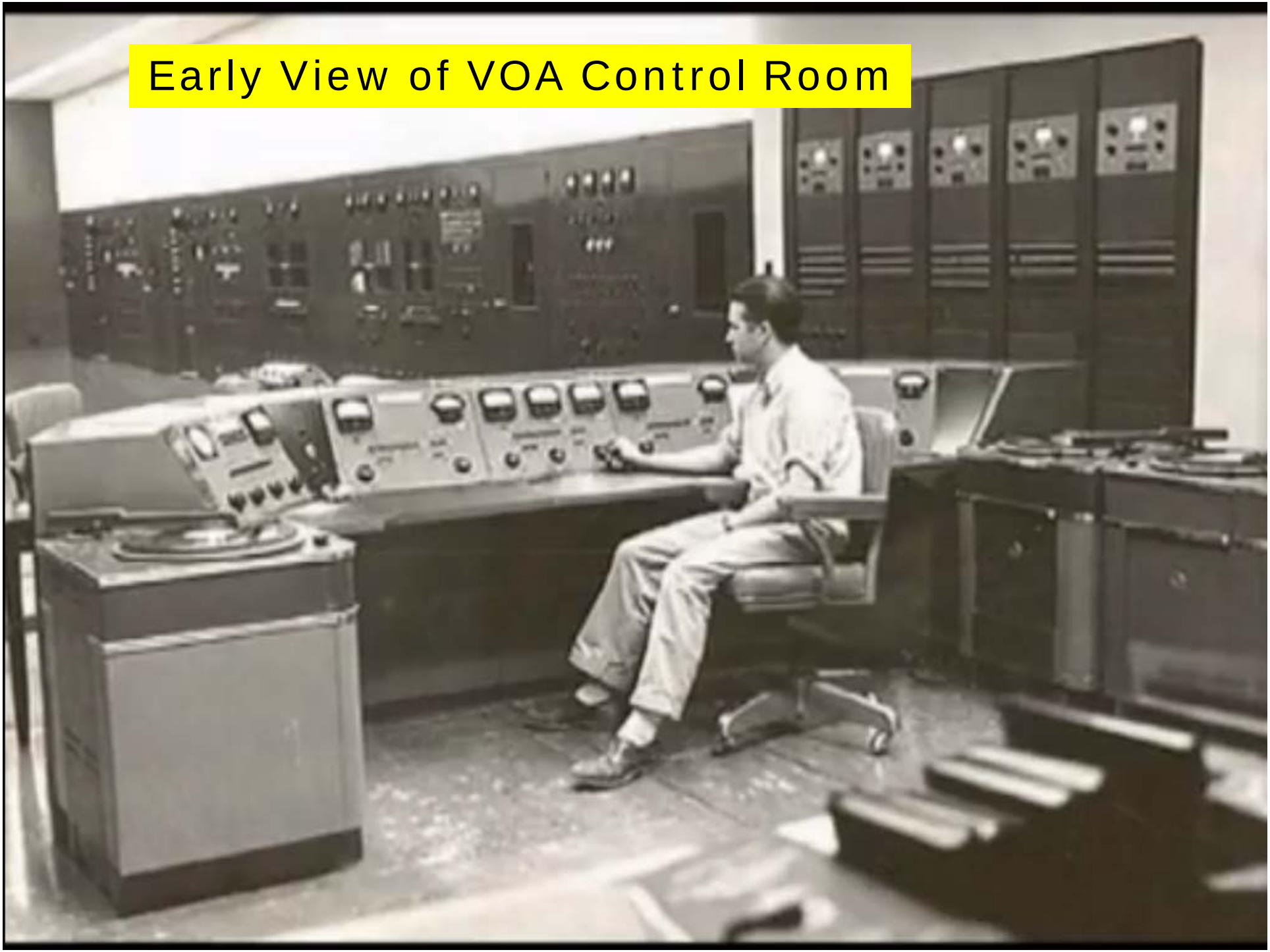
Delano Transmitter/Operating Schedule

[1] Delano does not have a DL-05 transmitter or make use of that transmitter number.


Where does the power come from?
Several of the higher power amplifier tubes


Continental Electronics
Forward and Reflected Power Meters
REFLECTED KILOWATTS
2 kW is considered a reasonable reflected power

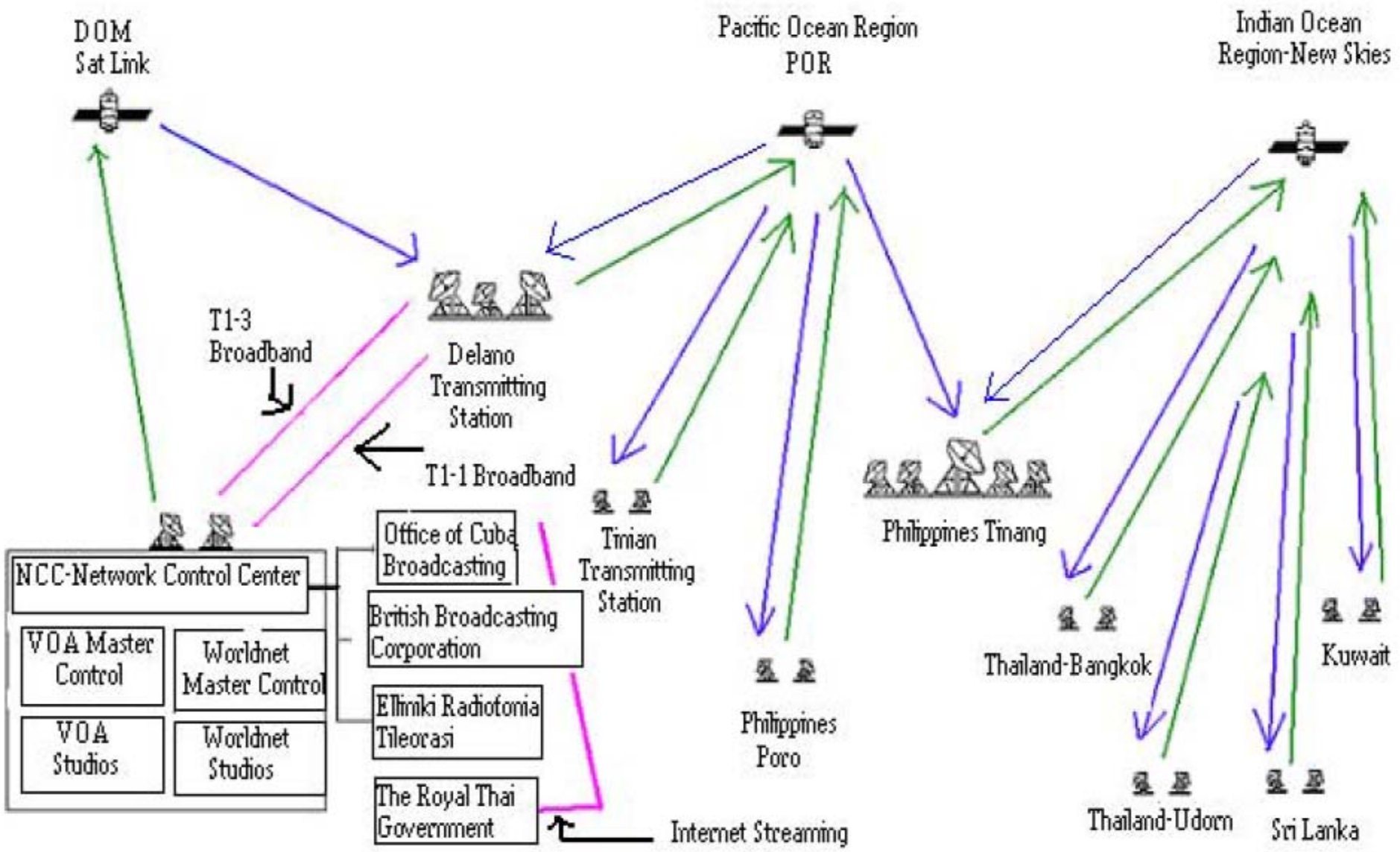

Jennings
Vacuum
Variables
25 – 650 pF
55 kV
JENNINGS
14 x 25x 2
14 x 25x 2
Perfect for your new High Power 6m linear amplifier? They have probably all been thrown out by this time. They must have had 40 of these there.


Early View of VOA Control Room

An IBM “386-x” controlled all antennas and transmitters

Delano connected by satellite the US, Indian and Pacific Ocean Regions

Satellite Interconnections



Washington, DC provided the programming for overseas broadcasts

That's It Folks!

Questions?