

**The Central Texas Amateur Radio Club
 meets the first Tuesday of each month at 7:00 PM at the
 Bell County Communications Center, 798 West Avenue O, in Belton**

President's Corner

Kenneth Watkins, KE5ISN

Hope you were in an area that received some rain in October. Waco has set a record for rainfall in the month of October with 5.97 inches and more rain forecasted in the month. Tropical weather is still active with Hurricane Rina. Rina will affect Mexico and is forecast to further strengthen and turn toward Cuba and South Florida.



Category 2 Hurricane Rina off the Yucatan Peninsula

November 8th is election day. This is an off year election with constitutional amendments being the only state wide items on the ballot with some issues of local interest. Polls are open from 7:00 AM to 7:00 PM so get out and vote.

CTARC will have their annual election on November 1st at 7:00 PM at the Bell County EOC. Please come out and select your club officers for 2012.

- 73 de KE5ISN

What's New?



Symbolize your involvement as an ARRL Volunteer Examiner with this attractive black and gold pin. 1" round.



To order yours, visit the ARRL website at:
<http://www.arrl.org/shop/VEC-Pin>



Strays

“San Francisco 1875, the Carlton Hotel, headquarters of the man called Paladin.”



Have Gun Will Travel debuted on November 23, 1958 and was aired by CBS until November 22, 1960. It was one of the last radio dramas featuring continuing characters.

The show followed the adventures of Paladin, a gentleman-turned-gunfighter played by John Dehner on radio, who preferred to settle problems without violence, yet, when forced to fight, excelled.

Paladin lived in the Carlton Hotel in San Francisco, where he dressed in semi-formal wear, ate gourmet food, and attended opera. In fact, many who initially met him mistook him for a dandy from the East. When working, he dressed in black, used calling cards and wore a holster which carried characteristic chess knight emblems, and carried a derringer under his belt. The knight symbol is of course in reference to his name - possibly a nickname or working name - and his occupation as a champion-for-hire.

You can tune-in again and listen to all 105 episodes in the series by visiting: http://www.archive.org/details/HaveGunWillTravel_OldTimeRadio

The Central Texas Amateur Radio Net meets every Thursday at 8:00 PM on the W5BEC repeater, on 147.140(+) PL 123.0 Join Us!

November NCS & Back-Up NCS Schedule:

November 3 rd :	November 10 th :
Net Control: KE5ISN	W5VEX
Back-Up: W5VEX	K6WXA
November 17 th :	November 24 th :
Net Control: K6WXA	- No Net -
Back-Up: AD5SK	Thanksgiving

Daylight Saving Time Ends



Daylight Saving Time will end at 2:00 AM Sunday, November 6th. Be sure to set your clocks back one hour before you go to bed the preceding Saturday night.



SSB Sweepstakes Contest

Contest period runs from 2100Z, Nov. 19th to 0300Z, Nov. 21st on 160, 80, 40, 20, 15 and 10 Meters SSB.

For more information, please visit: www.arrl.org/sweepstakes

First Ever Nationwide Test of the Emergency Alert System

The FCC has set November 9th at 1:00 PM Central Standard Time for the first nation-wide test of the Emergency Activation or EAS System. The purpose of the test is to assess the reliability and effectiveness of the EAS as a mechanism to alert the public of emergencies.

Although EAS Participants currently take part in state-level monthly tests and local-level weekly tests, there has never been a nationwide test of the system. The Commission, along with the Federal Emergency Management Agency, will use the results of this test to assess what works within the EAS and what does not. Then working together with EAS stakeholders the two agencies say that they will make improvements to the system as appropriate.

New ARRL North Texas Section Manager

Effective Wednesday, October 5, the ARRL North Texas Section has a new Section Manager. Jay Urish, W5GM, stepped down for personal reasons.



Walt Mayfield, KE5SOO has been appointed the North Texas Section Manager, as of October 5, to fulfill the present term of office. Dave Patton, NN1N, made the appointment in consultation with West Gulf Division Director David Woolweaver, K5RAV.



Net Control Operators Wanted!

The Central Texas Amateur Radio Net which many of you check-in to on Thursday nights, is in need of persons to fill the position of Net Control Operator.

Already short handed, Russell Mezynski, KF5LNX, one of our long serving net control

operators, has had to step away from the microphone due to other commitments.

If you're interested, please contact Kenneth Watkins, KE5ISN, via email at: ke5isn@aol.com.



Texas is neither southern nor western. Texas is Texas.
- Senator William Blakley

Special Event Stations

LA9DL and LA6VM will be active from Bhutan 3-13 November 2011 as **A52DL** and **A52VM** respectively. They will be active on 80-10m on SSB, BPSK & CW. QSL via their home calls.

W5JON will be operating as **V47JA** from Calypso Bay on St. Kitts, in the West Indies, through November 5th. Activity will be on 80 through 6 meters including 60 meters running SSB only. QSL via his home callsign.

Canada's Guelph Amateur Radio Club will be operating **VA3IF** at the birthplace of John McCrae in Guelph, Ontario. John McCrae was the author of the poem "*In Flanders Fields*". It will operate from November 5th to the 11th on 80 through 10 meters as well as IRLP node 2260.

DL2NUD, DL8YHR and DL9MS will be active as **8P9HP**, **8P9DL** and **8P9MS**, respectively, from Barbados between November 7th and the 21st. Their operation will be on the HF bands as well as 6 and 2 meter moonbounce. QSL via their home callsigns.

A team of German operators will be active from the Banana Islands, Sierra Leone, as **9LØW** from November 22nd to December 3rd. QSL as directed.

VE3EY and **VE3TA** will be active **portable FJ** from St. Barthelemy between November 22nd and the 29th. Using a TO3 prefix callsign. QSL via their home callsigns.

JF2QNM will be active **portable 9M6** from East Malaysia during the CQWW DX CW Contest November 26th and 27th. QSL to his home call.

N1SNB will be active as **6V7V** from La Somone, Senegal on November 26th and 27th. He plans to be on 160 and 80 meter CW and SSB from November 23rd to the 29th. QSL to his home call.

Listen for Australian special event station **VK100ARV** during the month of November. This is to commemorate the 100th anniversary of the Amateur Wireless Society of Victoria. Today it is known as Amateur Radio Victoria. QSL via VK3VTH.

AJ9C will be operational from Nicaragua as **YN2CC** starting on November 24th and continuing to December 5th.

G3RWF will be active as **5X1NH** from Uganda starting November 23rd for three weeks. His on the air time will have an emphasis on low bands using a new amplifier. QSL via his home callsign.

Texas State Guard Net

The Texas State Guard Amateur Radio Club will conduct a simplex net on the last Wednesday of each month at 7:30 PM. The net will be on 147.550 MHz simplex. After taking check-ins, the net control will hand over the net to operators in other areas to get check-ins then relay them back to the TSG net control. This is being done to see what kind of footprint we amateurs have in the region.

In the event of a natural or man-made disaster, power may be down to all area repeaters, and simplex will be our only means of communicating.

Amateurs Asked To Keep 7.060 – 7.063 MHz Clear

IARU Region 3 Disaster Communications Committee Chairman Jim Linton VK3PC, is asking all radio amateurs to keep 7.060 - 7.063MHz clear from unnecessary traffic, as Thai hams are using those frequencies during the flooding that is affecting millions of people in North and Central Thailand.

Texas ARES / RACES / Army MARS Exercise

To exercise ARES readiness of agency installations, Rapid Response Task Force Teams and individual stations in partnership with Texas Army MARS and RACES organizations, a Texas Combined ARES Exercise will take place on November 5th from 9AM to Noon.

The scenario for the exercise will be that a large stalled hurricane has impacted the Texas Coast with attendant infrastructure damage from winds, tornados and widespread flooding. Local areas are free to improvise effects for their areas.

This net will operate on frequencies of 3873 and 7285. Stations checking in will be asked to provide operator call-sign, location, local net frequency/tone if any, Winlink capabilities - e.g. VHF Packet, HF WINMOR, etc., station power type: commercial, generator, battery etc., and affiliation: ARES, MARS, RACES etc. Multiple are ok.

ECs are encouraged to bring up a local net per their plan and to activate or simulate activation of local agencies where activation is not possible. Individual member participation should be encouraged. Exercising county Communications Response Teams with simulated local deployments is also encouraged. Link up and communicate with local Army MARS members operating as part of their Fall Field Day as well as other MARS stations. (Communications between ARES and MARS will be on amateur frequencies and via Winlink.)

Individual operator participation is strongly encouraged. This will be good practice plus generate more traffic for the exercise.

Special ARRL Webinar *Hams, Emergencies and the News*

Time and again, Amateur Radio has been called upon to provide emergency communications. In some places, the hams made the news and were highly praised; while in other places, the community never knew they were there because no one worked with the news media.

On November 3, the ARRL's national Public Relations Committee will present a 90 minute webinar *Hams, Emergencies and the News*. This webinar which will run from 8 - 9:30 PM CDT, is intended for Public Information Officers, group leaders and hams who want to learn how to appropriately work with the media in an emergency situation. Key presenters will be Howard Price, KA2QPJ, of ABC News in New York and Mark Kraham, W8CMK, Radio Television Digital News Association Chairman.

Together, Price and Kraham will discuss the needs of news media in events and what hams can provide to reporters. A panel of veteran hams, ARES leaders and PIOs will look into how radio amateurs can effectively meet those needs. If it did not get in the media, it never happened. The ARRL Public Relations Committee recognizes this and is determined to help resolve the problem. In the tornadoes, fires, hurricanes, floods and drought of this past year, radio amateurs did wonderful service for their communities. But how much of it got into the media? How can we best present our community services?

To register for this informative, interactive internet meeting, please visit: <https://www3.gotomeeting.com/register/804342222> and complete the registration form.



AT LAST !

Just as we were ready to mail last month's issue, the word came from Washington that the Navy Department had cut the ropes and removed restrictions on amateur transmitting. After throwing everything within reach at the office boy, and finishing off by jamming the waste basket down over his head, we grabbed the telephone and told the printer for the love of Mike to make room for an emergency sheet to go into every QST, and that we would pound something out immediately and be over in ten minutes. Talk about Impulse Exaltation! We were both impulsive and excited. It seemed like the coming true of a dream. To realize that we could call up and holler QRT and QRM and do all of the other things that we had been longing to do since April, 1917, made it difficult to focus properly.



The far reaching effect of the removal of the ban on transmitting cannot be estimated. Probably every amateur in the country got as excited as we did here in the editorial sanctum. Maybe they didn't throw things, but if they were real dyed-in-the-wool, blows-in-the-grass, all wool and a yard wide radio bugs, they wanted to. These amateurs are going to make the removal on the ban of receiving look like a half-inch spark coil that has been rained on. Receiving is alright, but it is not to be compared with receiving and transmitting. It is the transmitting that makes amateur radio what it is. The removal of the restrictions is going to be felt in every line of business from the lumber yard to the instrument maker. The Old Man's electrical supply store will have to order soldering paste by the

barrel and the hardware stores are going to note a marked increase in the demand for everything from nails to copper wire.

But there is another side to this fair picture. A lot of us are going to find that some pet scheme is not going to work anywhere nearly as perfectly as we expected it would. Instead of radiating five amperes, it is going to be three-quarters of an ampere, or the tone is going to be ragged, or the coupling has got to be lesser, or the insulation about five times better. We are not going to have the air shack full of QRM right off quick. It is going to take time to get back, and a terrible lot of good hard work. But that is where we amateurs shine. All of the troubles will be gradually fixed up and transmitting distances that we never dreamed of are going to be matters of every day occurrence. The days of real sport are at last with us. Come on fellows, and get into the air again.



Fire & Rain

Information compiled from the Texas Forest Service, the Clearwater Water Conservation District and the National Weather Service Climate Prediction Center

Rains during the Columbus Day weekend are giving many firefighters a well deserved break after nearly a year in fire season, and fire managers will be evaluating fuel conditions and resource needs. The lull may not last long, as little impact has been made on the long-term drought effects. Most of East Texas and the Trans Pecos received no rain and heavy fuels remain critically dry.

Following the Bastrop County Complex Fire, a 34,000-acre inferno deemed the most destructive wildfire in state history which forced thousands of evacuations, destroyed more than 1,500 homes and killed two people, the Texas Forest Service conducted a damage assessment to better determine the total volume of damaged and destroyed timber.

The assessment indicates that 12 million cubic feet of trees were killed by the fire. Another 13 million cubic feet were considered to be still alive, but likely to die soon.

Before the massive wildfire, the forests in the fire perimeter contained more than 31 million cubic feet of live trees.



October 9th rainfall radar image

After the fire, just seven million cubic feet were considered likely to survive, according to the damage assessment.

When you combine the trees that are dead and likely to die, the total volume of trees lost surpasses 24 million cubic feet, which is equal to about 850,000 green tons of timber.

According to East Texas timber markets, those trees would have been worth \$14 million as they stood in the forest.

As a result of the continuing drought, Stage-4 water restrictions went into effect throughout the region during the first week of October, prompting a dire warning for Central Texas. “Water on your yard today may be the drinking water you need tomorrow,” said Clearwater Board President Leland Gersbach. The water district is so concerned about the water levels, it lashed out at residents who ignore the severity of the problem and continue to use water for landscaping. “What you waste today, you will certainly regret tomorrow,” said the district’s release.

Texans need to get a grasp of the severity of the situation, and pray for civility, if and when we have no water. People need to understand the severity of the ongoing drought. What we have today may be the water that goes away.

In its recently released Drought Information Statement, the National Weather Service headlined the Central Texas drought situation with the words, “*Drought Will Persist Despite Heavy Rain.*”

The U.S. Drought Monitor for October showed a record 88 percent of Texas in exceptional drought. The statewide precipitation total for September barely topped an inch. For the state as a whole, this was the driest water year (October-September) on record.

Several inches of rain fell in western portions of north Texas during the Columbus Day weekend. This heavy rainfall will temporarily ease drought conditions. But, one rain event cannot end a drought of this magnitude.

A second winter of La Nina conditions is expected with an enhanced likelihood of below normal precipitation. As a result, the drought is likely to persist or worsen across north and central Texas. The fire threat for the upcoming winter is expected to be considerable.

During the last 11 months, over 6,000 square miles have burned across the state – an area larger than the state of Connecticut. The fire season that has continued unabated through the warm season is expected to increase in intensity as winter approaches.



The on-going drought has taken its toll on the agricultural industry as well. Last summer, Hay was selling at \$12 per ton; the average cost for Texas ranchers is currently around \$170 per ton with Hay imported from as far away as the northeastern states.

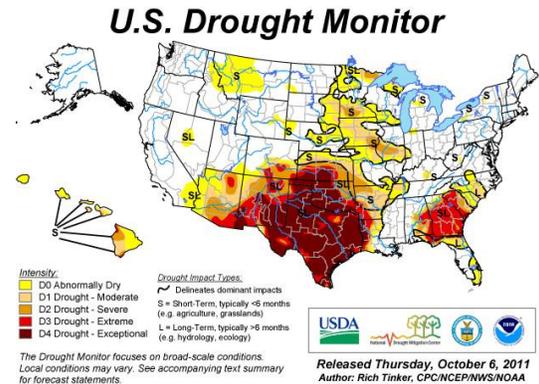
The number of cattle over-all remains in decline; the average size herd is down 38% across the state.

The number of cattle nation-wide is the lowest it has been since the 1950's.

The current drought began last Fall during the onset of a moderate to strong La Nina. For the winter following a significant La Nina event, there is a 2 in 3 chance of a second La Nina winter.

La Nina overwhelmingly favors below normal precipitation during the cold season (Autumn through Spring). For North and Central Texas, the 3-month CPC outlook favors the driest tercile throughout Autumn and Winter. Thus, the drought is likely to persist or worsen into 2012.

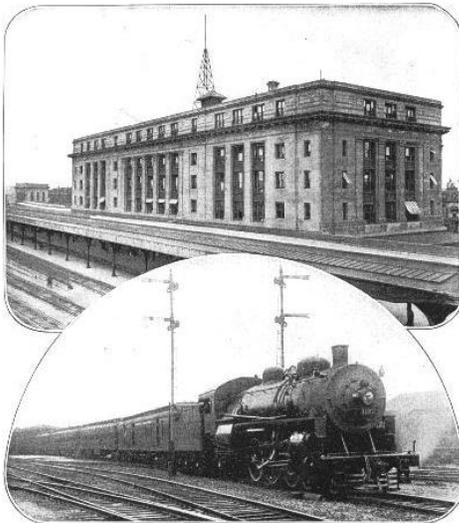
Even where formal restrictions are not in place, Texans are urged to be responsible about water usage.



GETTING *the* WIRELESS *on* BOARD TRAIN

Charles Frederick Carter

When Frederick Wally stepped out of a little cubby-hole in one corner of the forward day coach on the Lackawanna Limited, west-bound, as it neared North Scranton, Pennsylvania, Tuesday, November 25, 1913, and pinned a sheet of paper on the wall, the passengers in the front seats, who had been casually wondering what caused the strange, crackling sounds that had been coming from the cubby-hole, pricked up their ears, figuratively speaking. Some of the more curious left their seats to see what the sheet of paper might be. With uncomprehending minds, they read these words:



THE TERMINALS

The Lackawanna Limited pulling out and the station at Scranton, Pennsylvania. The aerials on the train are so low that they are indistinguishable in the picture but the large ones on the station are visible.

“El Paso, November 25, After a lull of a few hours the battle of Tierra Blanca was resumed this morning. General Villa, commanding the rebels, ordered the artillery turned on a Federal train his troops had surrounded during the night. The battle is now extending along a front of twenty miles.”

One of the passengers peeked into the cubby-hole, then exclaimed in tones of amazement: “Wireless, by jinks!” Then the amazed traveler rushed back through the length of the train, spreading the incredible information that a wireless operator was on board receiving news bulletins just as was done on ocean liners.

In a little less than no time five coach loads of passengers were trying to crowd into the front end of one car.

As Operator Wally pinned up bulletin after bulletin the passengers began to realize that they were witnessing a historic event; for those news bulletins were the first ever received by wireless telegraph on board a moving train.

Altogether some two hundred and fifty words of condensed news bulletins were received. They were read over and over until most of the passengers could have repeated them and nothing but this latest and most wonderful development of the wireless telegraph was talked about on the Limited that day.

Thirty miles east of Buffalo, Wally, who did not know the call for the wireless station at that city, began calling for "radio station". The operator at the wireless station maintained by an evening newspaper, happened to be staying late that night in order to deliver a message to a steamship somewhere on Lake Erie. Thinking he had picked up the steamer, he answered, and to his inquiry Wally replied: “Lackawanna Limited. We’ve got a wireless outfit on board.” “Quit your kidding,” retorted the newspaper man. “Not kidding. Come down to the station when we get in and see.”

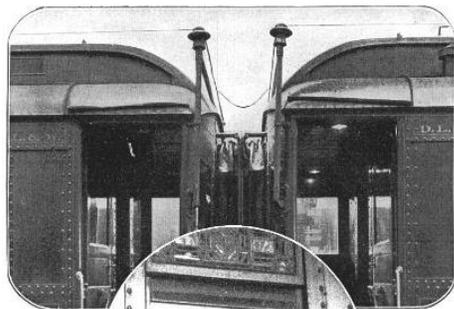


LIKE THOSE THAT GO DOWN TO SEA
The operator on the train has a little room of his own like those used on shipboard, and his work promises to become as important as the ship sender's.

Preparation for the experiments which led up to these results were begun by the Delaware, Lackawanna and Western Railroad in the hope of developing a more reliable method of directing the movements of trains than is now available. The experiment was begun merely with the idea of ascertaining if the wireless was not more reliable than the usual form of telegraph. Sleet storms, particularly in the mountains, often break down the wires, thus paralyzing traffic.

On November 4th the first train order ever sent by wireless telegraph was sent from the dispatcher's office at Scranton to Binghamton.

The wireless telegraph would prove equally useful in delivering orders for passenger trains; it would be serviceable in sending news bulletins for the edification of passengers and also enable them to send messages without waiting for the train to stop at a telegraph station.



MAKING HISTORY
The aerials on the cars which enabled David Sarnoff, the chief inspector of the Marconi Company (below), to send the first



message from a speeding train. He is seated in the wireless room of one of the cars. He handled train orders and commercial messages.

The wireless telegraph for use at sea and for long-distance transmission has been well developed. But before it could be applied to the railroad a good many problems had to be solved. In the first place, a wireless station must have a ground wire just the same as the ordinary form of telegraph. A moving train obviously could not have a ground wire, but could it use the rails instead?

Still another problem was the electric current required to operate it. The only source of supply was the train lighting system, power for which was obtained from the car axles. Would this current prove satisfactory? If it did, would the wireless use enough of the current to dim the lights?

The first train equipped with wireless telegraph left Hoboken for Buffalo, November 21. On board were the general superintendent of telegraph and telephones, a Marconi operator and several Marconi experts. All uncertainties quickly vanished. When thirty miles east of Scranton, the train raised the wireless station there without difficulty. The rails proved satisfactory as a ground wire and the train lighting current served admirably for the wireless without affecting the lights.

The apparatus used being much less powerful than that used on ships, its radius of communication is smaller. On that first day, the train was in continuous communication with one of the two stations from a point thirty miles east of Scranton to a point thirty miles west of Binghamton.

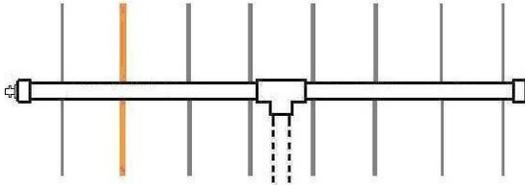
On the second trip the wireless demonstrated its practical usefulness. First, the conductor became ill. Ordinarily, a delay in getting a substitute would have been necessary. Either the Limited, which makes few stops, would have had to make a special stop to allow a telegram to be sent, or it would have had to wait at Scranton while the substitute was secured. In this instance, a wireless message was sent while the train was running at its usual speed. The substitute was waiting on the platform; grip in hand, when the train pulled into Scranton. Besides this, the train was so crowded that the conductor saw he would need another coach. The wireless operator asked for the coach while the train was running; and a switch engine was waiting with the car all ready for a quick coupling when the train reached Scranton.

450 Yagi 8 “Junk Box Special”

Rick Murray, K6WXA

This antenna was constructed from bits and pieces of junk material I found laying around the garage, and in my junk box. I started looking at all this stuff and was wondering what I could do with it. Looking it over, I found that I had enough scrap material for an eight element yagi for the 70Cm band.

The main support beam is made from 3/4" PVC pipe, with the six directors and the reflector made from left over sections of stainless steel whips. Though they appear the same length, each of the directors descends in length by 1/16th of an inch. The two driven elements are made from 1/4" copper tubing and are separated by a fiberglass rod insulator running within the two elements. The driven elements are balun-fed through a wire tuning loop. The feedline coming off the balun enters the PVC pipe through a hole, and then terminates at a BNC connector at the back of the antenna.



This antenna being a “junk box special” I was a little nervous—okay, a whole lot nervous, as it was set up for evaluation and testing. Surprise, surprise...11 DBd of forward gain, and a VSWR of less than 1.5:1 from 440 to 450 MHz.

When I presented this antenna at the local radio club meeting in California, I was asked one question: “*Why did I build the antenna from the particular materials that I used, instead of using...*” The answer was simple, this was a junk box project using only the materials that I happened to have on hand.

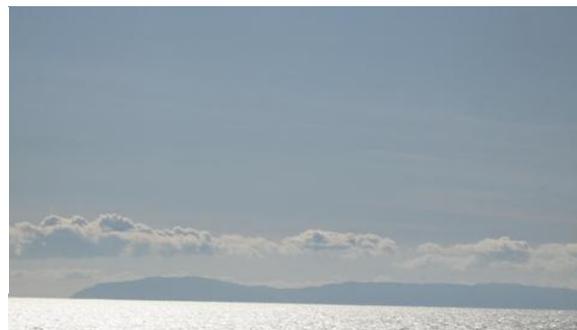
The real test for this antenna would come months later when I was asked to work at an aid station for the Palos Verdes Marathon. The location of the aid station was a radio nightmare... it was situated in a valley with high ground on three sides. Initially I tried using my mobile rig at 35 watts out through a mag-mount antenna and found that I was unable to key-up the repeater I needed. Then I put up a temporary mast and pointed my home-brew yagi due west in the direction of the repeater in use. Again, I was unable to get into the repeater due to the geography of the valley.

But, looking south down the valley, I could see the southern end of Catalina Island, about 26 miles off the coast. I pointed the antenna at the island and using the island’s geography as a reflector, I was able to get a constant “full smash” signal into the repeater. And at just 5 watts out!

If you’re interested in building this antenna, the construction plans for it are available on the following page.

But this project comes with a challenge: You can’t go out and buy any of the parts to build it.

Ya gotta build it all from scrap.



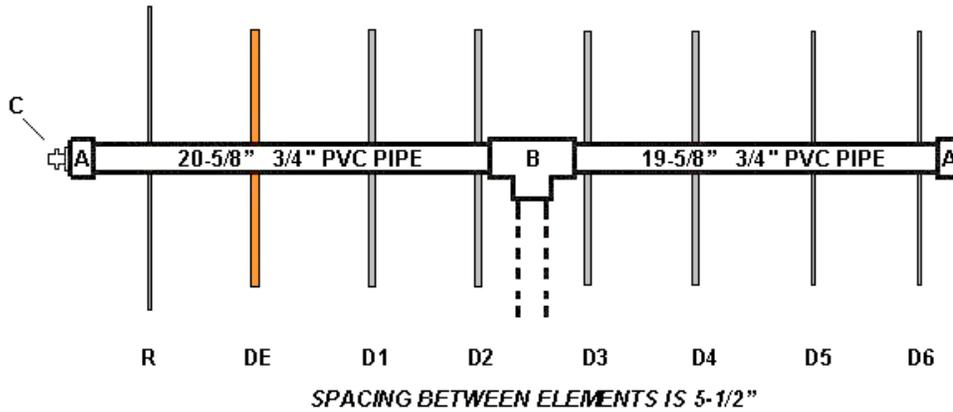
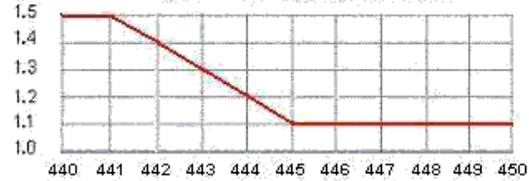
Southern end of Santa Catalina Island in the distance.

70cm Yagi 8

"Junk Box Special"

11 Db Gain

VSWR Results:



- ### PARTS IDENTIFICATION
- A. 3/4" PVC CAP
 - B. 3/4" PVC "T"
 - C. BNC POST
 - R 13" OF 1/8" STAINLESS STEEL ROD
 - DE DRIVEN ELEMENT, 2-EACH, 5" 1/4" COPPER TUBING
 - D1 DIRECTOR, 11-3/8" OF 3/16" STAINLESS STEEL ROD
 - D2 DIRECTOR, 11-5/16" OF 3/16" STAINLESS STEEL ROD
 - D3 DIRECTOR, 11-1/4" OF 3/16" STAINLESS STEEL ROD
 - D4 DIRECTOR, 11-3/16" OF 3/16" STAINLESS STEEL ROD
 - D5 DIRECTOR, 11-1/8" OF 1/8" STAINLESS STEEL ROD
 - D6 DIRECTOR, 11" OF 1/8" STAINLESS STEEL ROD

