

AIRWAVES



Building a Better Fan Dipole

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Special points of interest:

We need people to present a topic at our club meetings

Based on research done by the Stanford Research Institute (SRI) to construct a three-frequency multi-band dipole that would work without any need for cut and try techniques, we pass on this information in the hope that it will help you more easily get this type of antenna on the air quicker.

They found that the wires at the center feed point had to be separated by at least 5 1/2 inches vertically and the ends separated by 38 inches in the 2 to 18 MHz range. As in any fan dipole construction, all of the dipoles are connected in parallel but in the SRI method, the separation between them at the feed point must be maintained.

Compared to the construction effort of a standard multi-band dipole the only difference is the fabrication of a feed block or center insulator that is about 12 inches vertically by 3 inches wide, so make sure this is made of a good insulating material such as Lucite, Bakelite, fiberglass, or PVC. While the ceramic that they use in the ceramic rings on telephone poles is an excellent insulator, we wouldn't recommend it for the fabrication of this antenna.

The end 38 inches of separation can be maintained by separate halyards on each element or a spreader bar with a common halyard.

The bandwidth will be at least plus or minus 2% for a 1.5 to 1 SWR according to Stanford Research Institute.

To determine the lengths of the elements, use the following formulas:

Lowest freq antenna $468/\text{freq} \times .96$

Middle antenna $468/\text{freq} \times 1.04$

Lowest antenna (highest freq antenna) $468/\text{freq} \times 1.04$

It is recommended that a 1:1 current balun be installed at the feedpoint.

<http://www.hamuniverse.com/multidipole.html>



January Club Meeting Minutes

Michael Ketchum – Vice-President, opened the meeting at 11:40.

We went around the room introducing ourselves and giving our call signs.

Michael announced that he had ham radio license plate forms if anyone needed one.

Announcements made by club President, Stephen Denison:

- Hunt County SkyWarn meeting this evening at Greenville Civic Center.
- Irving Ham Club Meeting – 3/5
- SVARA Meeting 3/17 at 7pm at Greenville Hospital 2nd floor.
- Ham Expo at Belton, Texas – 4/16.

Field Day – pursue location at Greenville Hospital. – Proposed dates of June 24 -25.

- Need to resolve shifts.
- How to do a GOTA station?

Ham Radio class flyers were passed out

- Instructors and VEs needed for classes.

North Texas Ham Radio Rodeo discussed for 1st Saturday in May.

REvised MFARC logo was shown and discussed. Another pass at the logo will be presented at the next meeting for final consideration. Location will be shown as a black dot.

Presentation by Robert Hite (KF50LB) : East Texas CERT organization.

Adjournment at 12:30

ATTENDANCE:

John Nelson	N0DFW
Robert Hite	KF50LB
Bob Yakel	KG5KKE
Scott Davis	KK7JS
Michael Ketchum	K5MDK
David Rogers	KG5KPU
Jae Stutzman	K5JAE
Sam Mize	KF5SSM
Will Sanitate	
Jon Titzell	KF5PUR
Scott Joseph	K5BGL
Stephen Denison	W5SMD
Larry Smith	K5XB
Jim Harper	KK5Y
Joe Lum	KE5ZBL
Roy Hunter	

February Meeting Presentation– East Texas CERT

The Federal Emergency Management Agency began promoting the nationwide use of the Community Emergency Response Team (CERT) concept in 1994. Since then, CERT teams have been established in many communities throughout the country.

East Texas CERT serves Rockwall, Hunt, Collin, and Kaufman counties. They have extensive training in many disciplines including search and rescue, fire suppression and prevention, and triage. East Texas CERT is the only CERT group that has training for setting up a landing zone and guiding in helicopters.

In order to join CERT, an individual must take a 2 day, 20 hour course. There are several courses being offered this year.

For more information about East Teaxes CERT, visit the website at www.easttexrc.org or email info@easttexrc.org.

IEEE Technology Fair

The Greenville chapter of the IEEE is holding a Technology Showcase on Wednesday March 16th in the Rec Hall. The Showcase will run from 10:45 to 1:00. Majors Field Amateur Radio Club is planning on hosting a booth with radio equipment, technician class fliers, and a working radio station.

We need volunteers to help man the booth during the fair. If you are available, please contact Michael Ketchum.

Upcoming Classes and Test Sessions

The Majors Field Amateur Radio Club is planning on having classes on the following Days:

March 25, 26 Technician Class, Test on March 26
 May 26, 27, 28 General Class, Test on May 28
 November 4, 5 Technician Class, Test on November 5

If anyone is interested in taking a class, teaching a class, or becoming a volunteer examiner to administer the test, please email classes@wd5gsl.org.

Presentations Wanted

We are looking for presenters to present a short topic on Ham Radio at our monthly club meetings. Presentations may include, but are not limited to:

- Building or Modifying Station Equipment
- Different types of Digital Operation
- Software used for Ham Radios
- Emergency Radio Equipment
- Ham Radio Activities, such as contests or events

If you would like more information on a particular topic, and would like someone to do a presentation on it, you may suggest it as a topic. Please email Stephen Denison or Michael Ketchum to present a topic or to suggest a topic for presentation.

March

17 SVARA Meeting at 7:00pm at Greenville Hospital
 24 MFARC Meeting PD North Conference Room at 11:45am
 25-26 Technician Class at Greenville Hospital

REGULAR ACTIVITIES

Daily DFW Early Traffic Net (NTS) at 6:30pm 146.88 – PL 110.9Hz

Daily DFW Late Traffic Net (NTS) at 8:30pm 146.72 – PL 110.9Hz

Daily DFW CW Traffic Net (NTS) at 7:00pm and at 10pm on 3541 KHz www.k6jt.com

Thurs Sabine Valley Amateur Radio Association Net Every Thursday night at 7:00pm on the K5GVL/R 146.780 MHz (+) PL 114.8Hz

Friday Majors Field Amateur Radio Club Talk-In Net Every Friday morning on your way in to work on the WD5GSL/R 147.160 MHz (+) PL 100.0Hz

Contest Calendar: <http://www.hornucopia.com/contestcal/weeklycont.php>

**MAJORS FIELD
AMATEUR RADIO
CLUB**

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**We're on the
Web!**

See us at:

www.wd5gsl.org

Your article submissions
are welcomed. Please
submit to Stephen
Denison

Majors Field
Amateur Radio Club
Greenville, Texas



Club Officers

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Secretary Treasurer John Nelson – N0DFW
 John.C.NelsonJr@L-3com.com

Club Station

Club Station: TBD

VHF Repeater: WD5GSL/R
 147.160 MHz (+) PL 100.0 Hz
Friday Morning Talk-In Net

UHF Repeater: WD5GSL/R
 444.625 MHz (+) PL 151.4 Hz
 Temporary Antenna Position Limits Range Currently