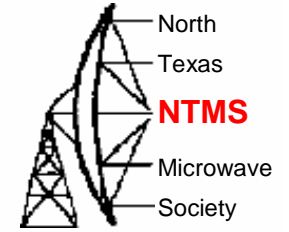


The North Texas Microwave Society Welcomes you to Ham-Com 2007 in Plano, Texas

June 8, 2007

NTMS Schedule



1PM Introduction to the NTMS by Al Ward W5LUA

1:30PM How to Operate the Microwave Bands in a Deed Restrictive Environment by Eric Silverthorn NM5M

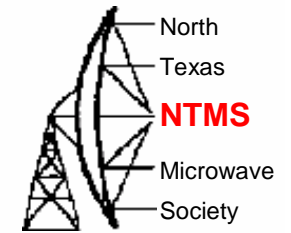
2PM Cheap Yagis for VHF-UHF by Kent Britain WA5VJB

2:30 PM Simple 10 GHz SSB/CW Station for the Beginner by Bob Gormley WA5YWC

3PM Getting Started on Microwave EME by Al Ward W5LUA

3:30 PM Wrap up and Q&A

The North Texas Microwave Society was formed in 1986

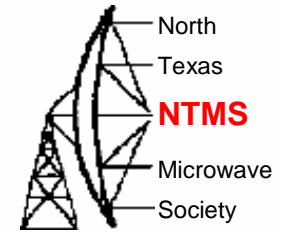


Our Goal:

**Dedicated to Promoting Activity, the
State of the Art in Equipment Design,
and
the Exchange of Ideas and Technology
for the Amateur Bands Above 902 MHz**

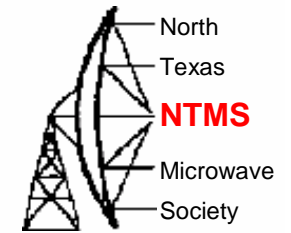
**President Steve Hicks N5AC
Vice President Al Ward W5LUA
Secretary Jim Hudson WA5JAT
Treasurer Wes Atchison WA5TKU
Feedpoint Editor Kent Britain WA5VJB
Web Master Joe Jurecka N5PYK**

NTMS Membership



- Dues \$12.00 per year
- Meetings or activity once a month
- Feedpoint is the official NTMS newsletter published 6 times per year - long time editor WA5VJB
 - contains a wealth of technical information and operational reports
- Club projects

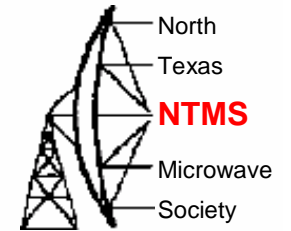
NTMS



- NTMS has a member's email reflector used primarily for technical discussion and propagation announcements
- NTMS web page www.ntms.org
- NTMS sponsors numerous North Texas beacons used for propagation studies and equipment check-out

W5HN

www.ntms.org



NTMS - Microsoft Internet Explorer provided by Agilent Technologies, Inc.

File Edit View Favorites Tools Help

Address http://www.ntms.org/

W5HN

North Texas Microwave Society

Dedicated to Promoting Activity, the State of the Art in Equipment Design, and the Exchange of Ideas and Technology for the Amateur Bands Above 902 MHz

NTMS Net
Sunday 8:00 PM
144.300 MHz

FEEDPOINT
The NTMS Monthly Newsletter
[Contact the Editor](#)

Optimized for 1024x768

NTMS Home

[Why Microwave?](#)

[Calendar Downloads](#)

[Membership](#)

[Microwave Update](#)

Knowledge Base

[802.11/HSMM](#)

[Software](#)

[Tech Library](#)

[W1GHZ Antennas](#)

[Grid Squares](#)

[Tech Links](#)

Operating

[Activity Reports](#)

[Beacons](#)

[Tropo Forecast](#)

[Regional Radar](#)

Update: 07 June

Upcoming Events

See full listing on [Calendar of Activities](#)

- 09 Jun [Hamcom at the Plano Centre, Plano, TX](#)
- 09 Jun Microwave Get together in the evening at the home of Steve NSAC and his wife Lori in Allen just a few miles from the Plano Centre
- 09 Jun NTMS Cross-polarized Party, NSAC's QTH
- 10 Jun [ARRL June VHF QSO Party](#)
- 24 Jun [ARRL Field Day](#)

Announcements

- ◆ [WW2R Presentation on VHF Drivers for Microwave LOs](#)

2006 Antenna Party Pictures

[Planning a presentation? Get our template here](#)

Please send in your contributions to **FEEDPOINT** to our Editor. **Have you contributed lately?**

Join the email reflectors!

For the general NTMS reflector, request via email to [Harold Reasoner](#)

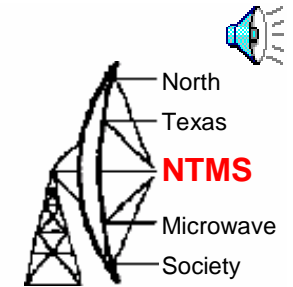
For the HSMM group, join the [Yahoo Group](#)

What else could be changed or added to the website which would help **you** use it better?

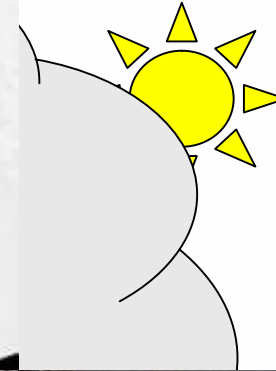
Email the [Webmaster](#)

NEC 325S01 devices are available through NTMS. [Datasheet](#). If you are interested, contact [Kent](#)

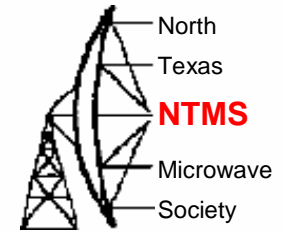
NTMS Propagation Beacons



Frequency (MHz)	Call	Grid	Power Output	Antenna	Height Above Ground	Status
50.070	W5HN	EM13sj	0.5 W	Halo	180 ft	ON THE AIR
144.281	W5HN	EM13sj	1.5 W	Halo	180 ft	ON THE AIR
222.060	AA5C	EM13se	8 W	Folded Dipole	45 ft	ON THE AIR
432.380	W5HN	EM13kf	0.5 W	Square Loop	280 ft	ON THE AIR
902.380	W5HN	EM13kf	+38 dBm	Alford Slot	280 ft	ON THE AIR
1296.380	W5HN	EM13kf	+33 dBm	Alford Slot	280 ft	ON THE AIR
2305.001	AA5C	EM13se	1 W	Alford Slot	48 ft	ON THE AIR
3456.325	W5HN	EM13kf	+13 dBm	Alford Slot	280 ft	ON THE AIR
5760.325	W5HN	EM13kf	+14 dBm	6 Slots in WR-137	280 ft	ON THE AIR
10368.238	W5HN	EM13kf	+14 dBm	8 Slots in WR-90	280 ft	ON THE AIR
10368.380	NT5NT	EM12px	1 W	200 Deg Horn - West	246 ft	ON THE AIR
24192.100	W5HN	EM13kf	0 dBm	18 dB Horn - East	280 ft	ON THE AIR
24192.380	N4FRE	EM13qd	1.1 W	18 dB Horn - South	30 ft	ON THE AIR
24192.400	AA5C	EM13se	+17 dBm	Alford Slot	48 ft	ON THE AIR
47088.100	N4FRE	EM13qd	+10dBm	33dBi lens	30 ft	ON REQUEST

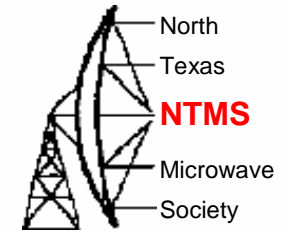


NTMS 2 Meter SSB NET



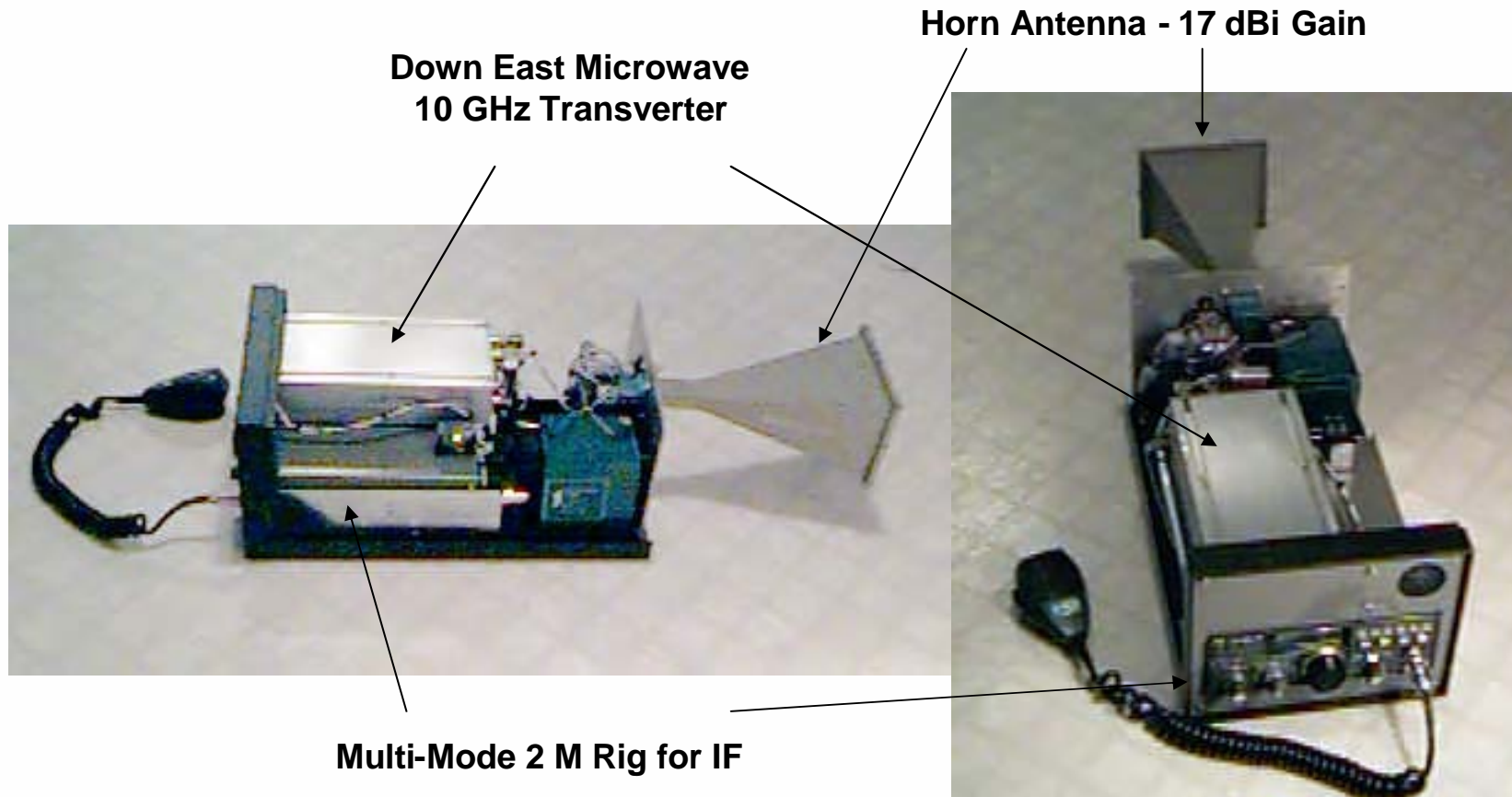
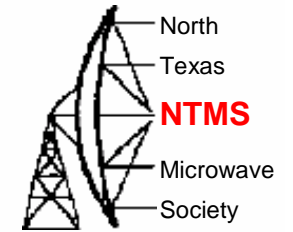
- Meets Sunday night at 8 PM Local Time on 144.300 MHz
- K5ZSJ Primary net control
- Technical Discussions
- Plans for Rover Expeditions, Contests, etc.
- Good way to check out the microwave equipment

How to get on the microwave bands??

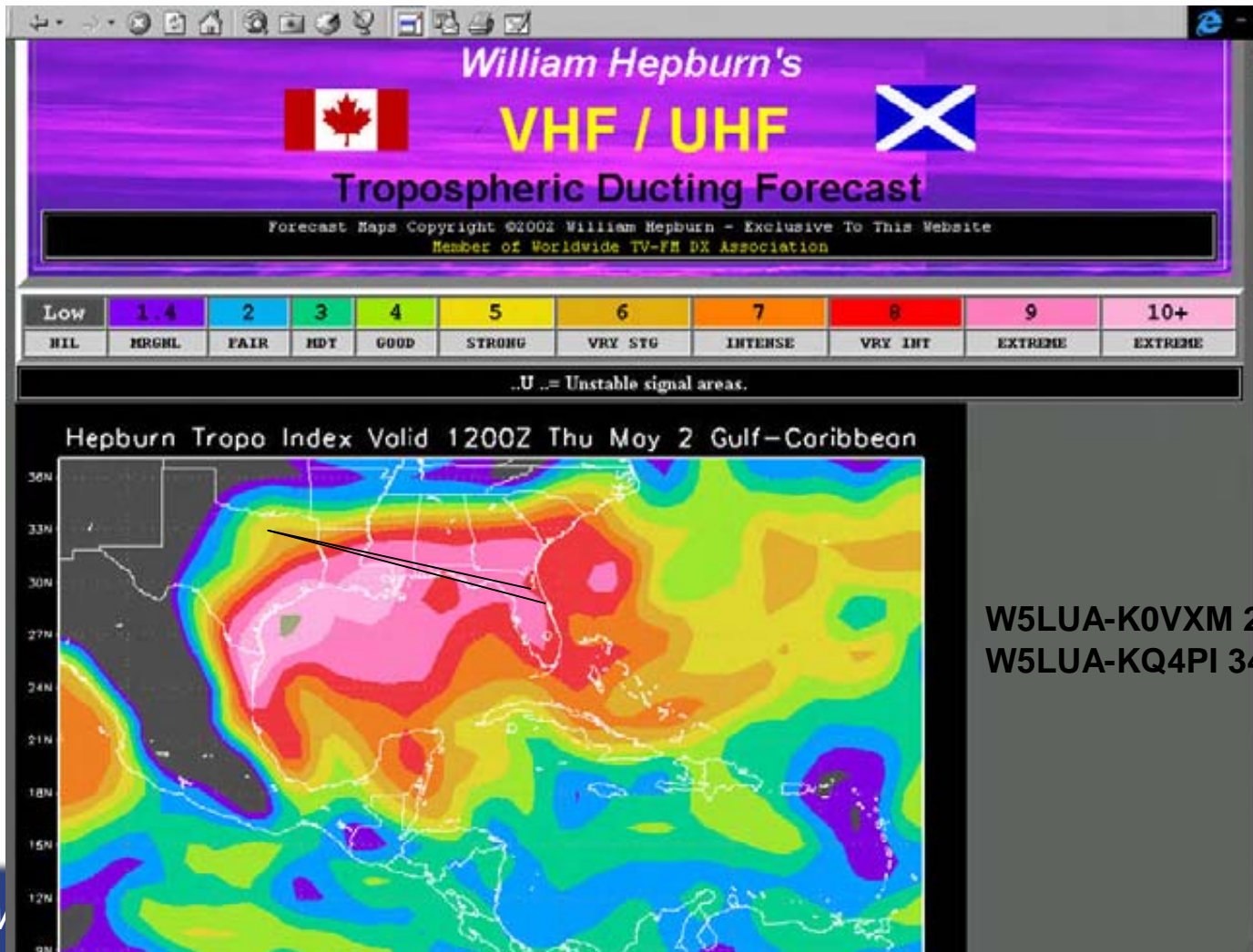
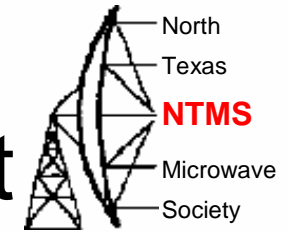


- Commercial transceivers typically top-out at 1296 MHz
- Transverters are used to cover other bands
- A transverter translates a lower frequency like 144 MHz or 2 Meters to a much higher frequency
- The transverter sets the power output and system noise figure
- Good feedline required – heliax and waveguide
- Good antennas are a must – loop yagis through 3456 MHz, parabolic dishes best for 5760 MHz and higher

W5KQJ 10 GHz Station



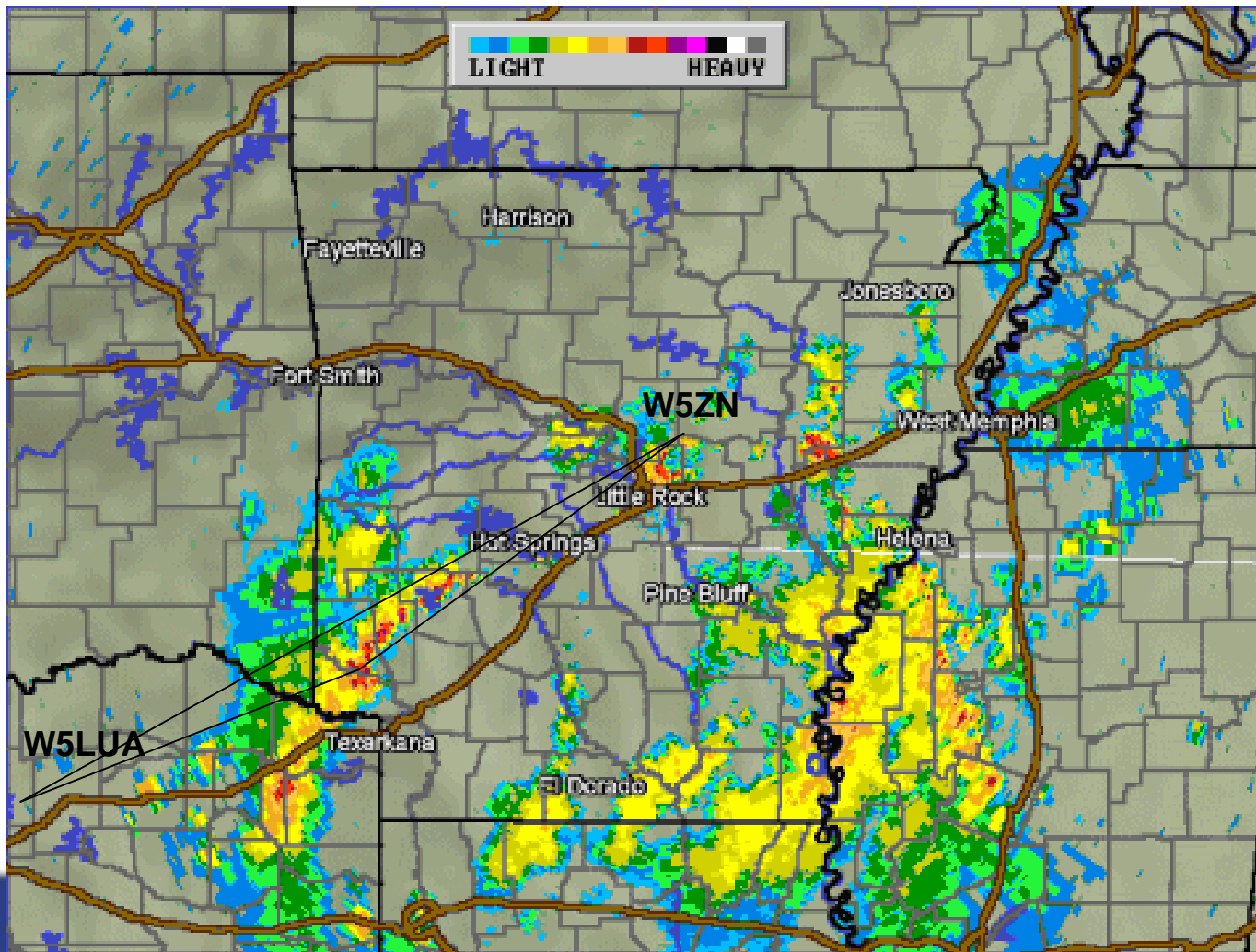
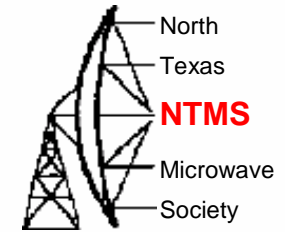
Hepburn's Propagation Forecast



Link on
www.ntms.org

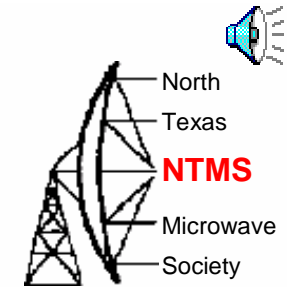
W5LUA-K0VXM 2304MHz 1000MILES
W5LUA-KQ4PI 3456MHz 936 MILES

KATV CH 7 Weather Radar



**2 Way CW
Rainscatter
QS0
June 17, 2000
2145 GMT
10368 MHz
W5LUA-W5ZN
EM13QC-
EM45DH
320 miles /
515km**

Earth-Moon-Earth



DX via the Moon



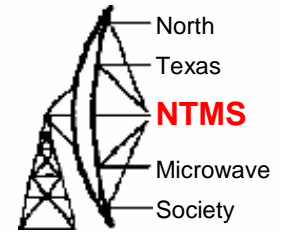
The moon is used as a passive reflector to enable long distance contacts on the microwave bands.

The first EME contacts on 3456 MHz, 5760 MHz, 10368 MHz, and 24192 MHz were made by NTMS members

Transmitter power ranges from 1W to >1000W

Al Ward, W5LUA in front of his dish sharing success on the first 24 GHz EME contact with VE4MA in Canada

10 GHz Tune-up Party

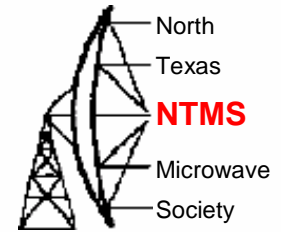


Bob-K5WO starts work on DEMI 10 GHz transverter



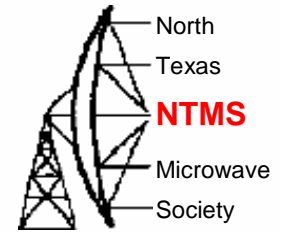
10 GHz Tune-up Party

Roger-N5PGH and Chuck AF8Z work on DEMI transverter

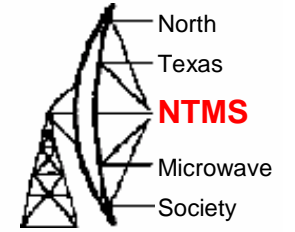


10 GHz Tune-up Party

Ted-WB5TBL, Al-W5LUA, Dave-WW2R, Craig-KA5BOU



NTMS Rover Sprint



QTH : Nortel Networks Richardson, TX EM12PX

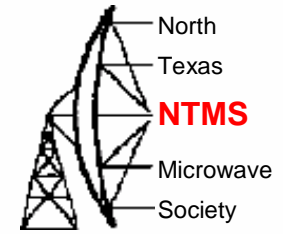


W5LUA & N5QGH



K5ZSJ

NTMS Rover Sprint



QTH : Nortel Networks Richardson, TX EM12PX



N5PYK

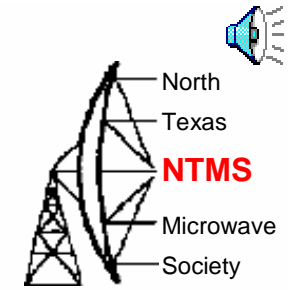


K5ZMJ

N5PGH

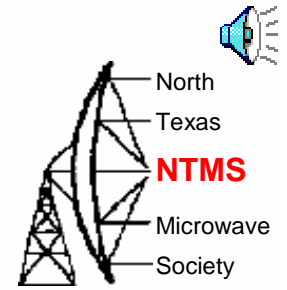
Expedition to Canadian, OK

WA5TKU & W5LUA at Arrowhead State Park

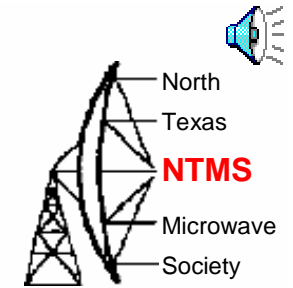


Microwaving in West Texas

K5WO & WA5YWC



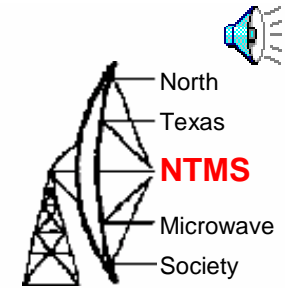
HSMM (802.11)



- NTMS working group experimenting with networks and long distance links
- Best link DX, using COTS equipment plus gain antennas under part 97 is 25 miles...and that's over flat terrain.

HSMM
High Speed
Multimedia

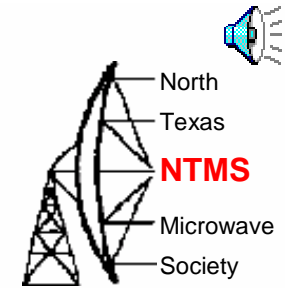
Central States VHF Society Conference



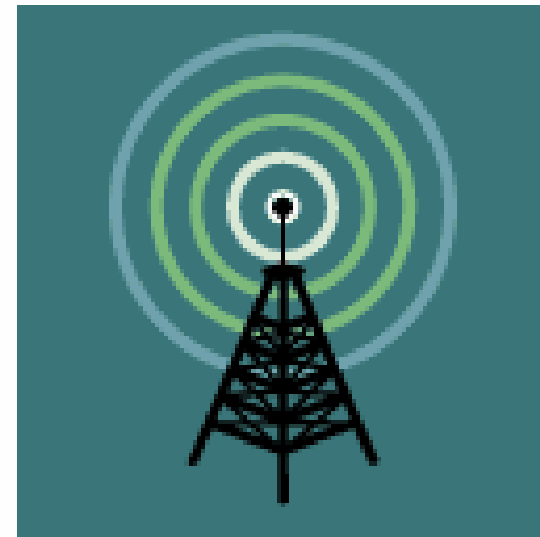
- Premier National Conference for VHF and UHF Amateur Radio Enthusiasts
- Annual Conference running since 1974
- The Road Runner Microwave Group will sponsor the 2007 CSVHF Society conference in San Antonio, Texas in July of 2007
- Contact ND2X (nd2x@arrl.net) for details
- Check www.csvhfs.org for conference schedule and updates



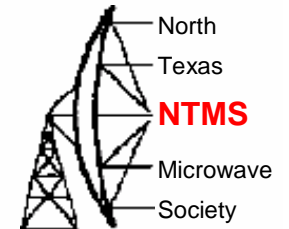
Microwave Update Conference



- Premier National Conference for Amateur Microwave Enthusiasts
- Worldwide Attendance
- The NTMS Sponsored MUD in October 2004
- The San Bernardino Microwave Society Sponsored MUD in 2005
- The Midwest VHF-UHF Society Sponsored MUD 2006 in Dayton, Ohio
- The 2007 MUD will be sponsored by the Pack-Rats-Mt. Airy VHF Radio Club Oct 18-20 in Valley Forge, PA
- Check www.ntms.org and www.microwaveupdate.org for updates



The Main Event



1:30PM How to Operate the Microwave Bands in a Deed Restrictive Environment by Eric Silverthorn NM5M

2PM Cheap Yagis for VHF-UHF by Kent Britain WA5VJB

2:30 PM Simple 10 GHz SSB/CW Station for the Beginner by Bob Gormley WA5YWC

3PM Getting Started on Microwave EME by Al Ward W5LUA

3:30 PM Wrap up and Q&A