Field Guide

Version 1.3

Affiliated Club

Amateur Radio Euless
Emergency Activation Plan

The City of Euless will initiate the activation via the Wireless Emergency Notification System.

In the event of Activation:

- Ensure that you and your family are safe.
- Monitor the ARE Repeater (442.900 PL 110.9) for information on the extent of the emergency. The ARE club will activate a Directed Net. Net Control will be assigned based on availability of resources. The first person to check into the repeater will become net control until another net control operator is assigned.
- Monitor the local Primary RACES Net for Tarrant County (146.94 PL 110.9)
- If you are able to help, please check in with Net Control on the ARE Club Net frequency, after all Emergency traffic has been passed. The Euless EOC will be utilizing Amateur communications as needed with CERT teams and other radio operators, to gather information about the condition of the city during the emergency.
- Be prepared to relocate as needed to support communications.

Resources

Refer to the following publications for details on emergency operations and frequency plans.

- ARE Club Operations Guide
- ARE Club Field Guide

COMMUNICATIONS RESOURCE AVAILABILITY WORKSHEET ICS 217A					Frequency Band **VOICE VHF/UHF**			Description **Amateur Radio Euless**	
HRIG	**Channel Configuration**	**Channel Name**	**Eligible Users/ Assignments**	**RX Freq N or W**	**RX Tone/ NAC**	**TX Freq N or W**	**Tx Tone/ NAC**	**Mode A, D. or M**	**Remarks**
1	VHF REPEATER	FTW PRI	EARC/ARES/ RACES	146.9400 W	N/A	146.3400 W	110.9	A	TACTICAL NET
2	VHF REPEATER	FTW BU	EARC/ARES/ RACES	146.7600 W	N/A	146.1600 W	110.9	A	TACTICAL NET
3	VHF REPEATER	FTW SW	EARC/ARES/ RACES	146.6800 W	N/A	146.0800 W	110.9	A	TACTICAL NET
4	VHF REPEATER	FTW SE	EARC/ARES/ RACES	147.1400 W	N/A	147.7400 W	110.9	A	TACTICAL NET
5	VHF REPEATER	FTW NE	EARC/ARES/ RACES	147.1000 W	N/A	147.7000 W	110.9	A	TACTICAL NET
6	VHF REPEATER	FTW NW	EARC/ARES/ RACES	145.1100 W	N/A	144.5100 W	110.9	A	TACTICAL NET
7	UHF REPEATER	FTW UHF	EARC/ARES/ RACES	444.1000 W	N/A	449.1000 W	110.9	A	TACTICAL NET
8	UHF REPEATER	FTW WIDE	EARC/ARES/ RACES	442.4000 W	N/A	447.4000 W	110.9	A	TACTICAL NET
9	VHF REPEATER	FTW ALT1	RACES ALT 1	146.8400 W	N/A	146.2400 W	110.09	A	TACTICAL NET
10	VHF REPEATER	FTW ALT2	RACES ALT 2	147.280 W	N/A	147.880 W	110.9	A	TACTICAL NET
11	VHR REPEATER	FTW TMS	RACES TMS	444.100	N/A	449.100	100.0	A	TACTICAL NET
12	UHF REPEATER	FTW VAN1	EARC/ARES/ RACES	444.1000 W	103.5	449.1000 W	103.5	A	TACTICAL NET
13	UHF Repeater	FTW VAN2	EARC/ARES/ RACES	444.1000 W	118.8	449.1000 W	118.8	A	TACTICAL Net
14	VHF SIMPLEX	REDCROS	EARC/ARES/ RACES	147.420 W	N/A	147.420 W	146.2	A	TACTICAL SIMPLEX
15	UHF REpeater	EOCBU	EARC/ARES/ RACES	443.875	110.9	448.875 W	110.9	A	TACTICAL NET
18	UHF REPEATER	EUELSS	EARC/ARES/ RACES	442.9000 W	N/A	447.9000 W	110.9	A	TACTICAL NET
19	VHF SIMPLEX	EUL SIMV	EARC/ARES/ RACES	146.5500 W	N/A	146.5500 W	N/A	A	TACTICAL SIMPLEX
20	UHF SIMPLEX	EUL SIMU	EARC/ARES/ RACES	446.5500 W	N/A	446.5500 W	N/A	A	TACTICAL SIMPLEX

RACES Skywarn Spotter Net

During severe weather events, the National Weather Service may request an activation of Tarrant County RACES Skywarn spotter net. This is a directed net open to RACES members only. The mission of this net is to provide "Ground Truth" reporting on the current weather conditions.

RACES Frequency List

(All repeaters use 110.9 Hz PL® tone. During RACES Nets you will hear Dit-Dah-Dit "R" as courtesy beep)

Primary Repeater	146.940 Mhz**
Backup Repeater	146.760 Mhz
Southeast	147.140 Mhz
Southwest	146.680 Mhz
Northeast	147.100 Mhz
Northwest	145.110 Mhz
Primary UHF	444.100 Mhz
Wide Area UHF	442.400 Mhz

** Monitored by NWS, RACES members should monitor and report on this repeater for all Weather Activations

Reporting Criteria

- Winds greater than 50 MPH
- Hail larger than 3/4 inch in diameter. (Penny)
- Wall clouds / Tornados / Wind Caused Damage
- Flooding impacting homes or making streets and highways impassable
- Conditions which impact life and safety of the public

Standard Reporting Format

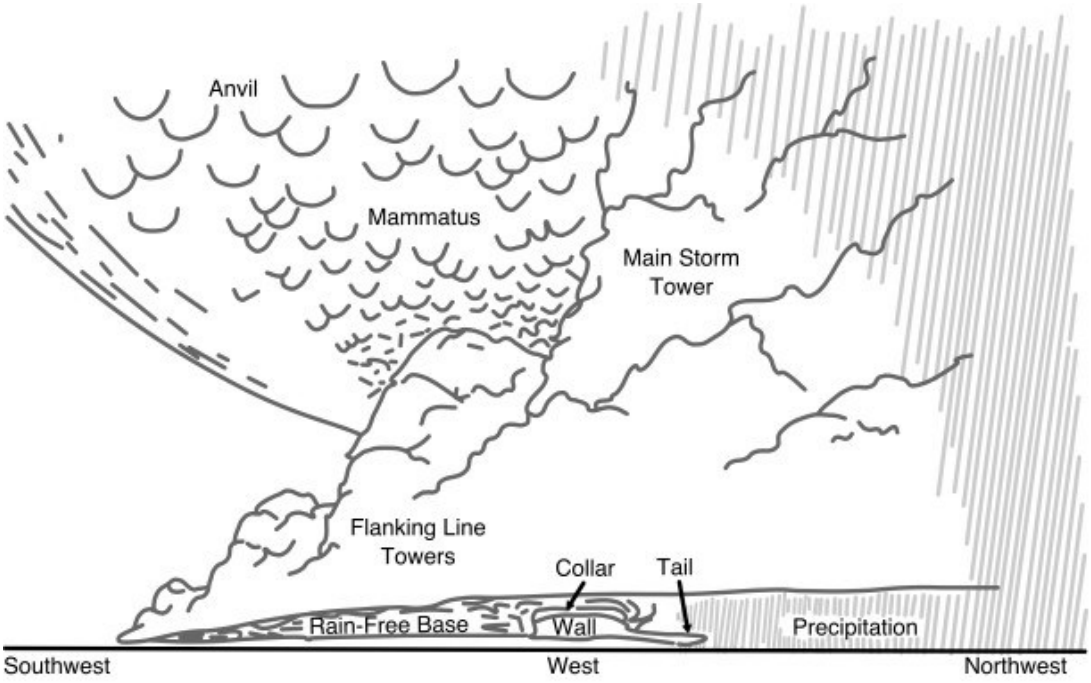
- Who are you? (Your Call/Tactical Call)
- Where are you? (Major Mapsco® Grid or Major Cross Streets)
- Wind Direction and Speed ? (Each time you report)
- What size of hail and intensity ?
- Any other important information?
- Your full amateur call sign

Hail Size Reporting

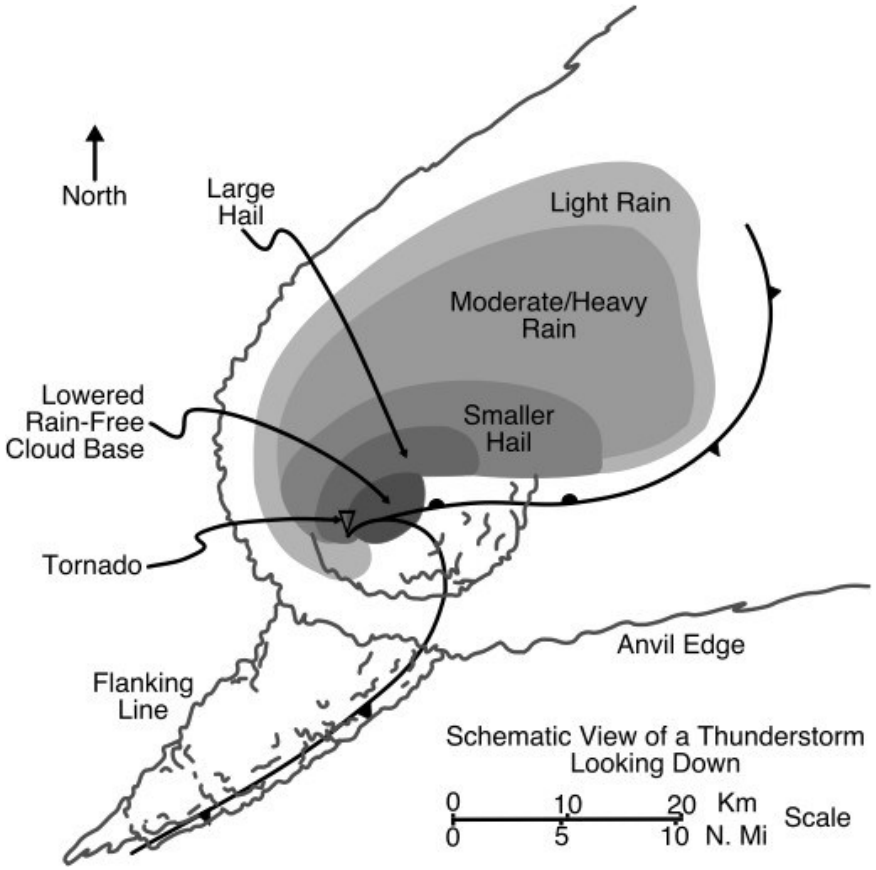
- Penny .75 Inch
- Nickel 7/8 Inch
- Quarter 1 Inch
- Half Dollar 1.25 Inch
- Golf Ball 1.75 Inch
- Tennis Ball 2.5 Inch
- Baseball 3.5 Inch
- Softball 4.5 Inch

Estimating Wind Speeds (Beaufort Wind Scale)

Wind Speed Estimation (MPH)	Description
25 - 31	Large branches in motion; whistling heard in telephone wires
32 - 38	Whole trees in motion; inconvenience felt walking against the wind
39 - 46	Breaks twigs off trees; wind generally impedes progress
47 - 54	Slight structural damage occurs
55 - 63 **	Damage to chimneys and TV antennas; pushes over shallow rooted trees
50 - 58 **	Small branches or limbs broken (less than 2" diameter)
58 - 70 **	Large limbs knocked down, the size of an adult's wrist; power lines knocked down; a few house shingles torn off.
70 - 80 **	A few small trees or shrubs can be uprooted; Very large branches broken off, Barns may sustain considerable damage.
> than 80 **	Trees may be uprooted or snapped, power poles snapped or knocked over; Large vehicles can be blown off the road. Roofs blown off homes.



Schematic View of a Tornadic Thunderstorm
Side View Looking West



Phonetic Alphabet

Phonetic Alphabet								
ITU					Police/Fire			
A	ALPHA	N	NOVEMBER		A	ADAM	N	NORA
B	BRAVO	O	OSCAR		B	BOY	O	OCEAN
C	CHARLIE	P	PAPA		C	CHARLES	P	PAUL
D	DELTA	Q	QUEBEC		D	DAVID	Q	QUEEN
E	ECHO	R	ROMEO		E	EDWARD	R	ROBERT
F	FOXTROT	S	SIERRA		F	FRANK	S	SAM
G	GOLF	T	TANGO		G	GEORGE	T	TOM
H	HOTEL	U	UNIFORM		H	HENRY	U	UNION
I	INDIA	V	VICTOR		I	IDA	V	VICTOR
J	JULIET	W	WHISKEY		J	JOHN	W	WILLIAM
K	KILO	X	XRAY		K	KING	X	XRAY
L	LIMA	Y	YANKEE		L	LINCOLN	Y	YOUNG
M	MIKE	Z	ZULU		M	MARY	Z	ZEBRA

H.A.N.D.

To assist in emergency situations the following reporting format has been developed that follows the letters of the word HAND.

H – Have – What type of emergency do you Have? Is it a fire, accident with injury, medical emergency?

A – At – You are At location? An address or distance and direction from the nearest major intersection.

N – Need – What assistance do you Need? Fire and Rescue, Police Officer, or Ambulance?

D – Details – What Details will help responders?

Details are those things that responders need to know before arriving on the scene. For instance: if there is a fire, a fuel or chemical spill; if there are fumes; multiple victims, or other hazards for which they need to prepare? Is there a Hazardous Material Placard on a vehicle involved in an accident. The numbers tell the responders the nature of the material involved. Do not approach vehicles that display Hazardous Material Placards. If the placard cannot be seen from your location, do not approach the vehicle and stay up wind if possible. Inform NCS or the emergency dispatcher if called in via auto-patch or cell phone that there is a Hazardous Material Placard.

Tarrant County Standard Emcomm template

Location	Name	Frequency	Tone	Comments	Location	Name	Frequency	Tone	Comments
1	FTW PRI	146.94	110.9	RACES PRIM	38	TA6760	146.76	110.9	
2	FTW BU	146.76	110.9	RACES BACK	39	WS6780	146.78	131.8	DECATU
3	FTW SW	146.68	110.9	RACES SW	40	HU6780	146.78	114.8	Hunt-V
4	FTW SE	147.14	110.9	RACES NE	41	DA6880	146.88	110.9	Dal-Pri
5	FTW NE	147.1	110.9	RACES SE	42	DN6920	146.92	110.9	Den-Pri
6	FTW NW	145.11	110.9	RACES NW	43	TA6940	146.94	110.9	Ftworth
7	FTW UHF	444.1	110.9	RACES UHF	44	DA6960	146.96	110.9	Dal-Sec
8	FTW WIDE	442.4	110.9	CedarHill	45	KF6980	146.98	88.5	
9	FTW ALT1	146.84	110.9	RACES ALT 1	46	WS6980	146.98	192.8	BOYD
10	FTW ALT2	147.28	110.9	RACES ALT 2	47	GS7000	147	100	Gray-Pri
11	FTW TMS	444.1	100.0	RACES TMS	48	DA7040	147.04	136.5	Mesquite
12	FTW VAN1	444.1	103.5	OLD VAN	49	PR7040	147.04	110.9	
13	FTW VAN2	444.1	118.8	NEW VAN	50	TA7100	147.1	110.9	
14	REDCROS	147.42	146.2	Red Cross	51	DA7120	147.12	100	Rich
15	EOCBU	443.875	110.9	EOCBU	52	TA7140	147.14	110.9	E-TARRA
16	2M Call	146.52	N/A	VHF Call	53	CI7180	147.18	107.2	PARK VHF
17	70 Call	446.00	N/A	UHF Call	54	GS7220	147.22	100	COLLINSV
18	Euless	442.9	110.9	UHF Repeater	55	GS7280	147.28	107.2	Gray-Sec
19	EUL SV	146.55	N/A	VHF Simplex	75	DN7380	147.38	110.9	LAARK
20	EUL SU	446.66	N/A	UHF Simplex	76	DN1325	441.325	88.5	Denton
21	TA5110	145.11	110.9	NW-TARRA	77	RW1525	441.525	141.3	Rock-U
22	DN5170	145.17	110.9	Den-Sec	78	DA1925	441.925	110.9	W5EBQ
23	DA5190	145.19	110.9	KA5CTN	79	DA2400	442.4	110.9	CedarHil
24	DA5210	145.21	110.9	MARS	80	DA2625	442.625	110.9	Mesquite
25	DA5310	145.31	110.9	Mesquite	81	DA2650	442.65	110.9	Carrollt
26	CI5350	145.35	100	N5GI	82	DA2700	442.7	110.9	GARLAND
27	EL541E	145.41	110.9		83	CO2775	442.775	100	GAINESVI
28	FN5470	145.47	88.5	Fannin	84	DA2800	442.8	110.9	UTD
29	CK5490	145.49	85.4		85	CI3200	443.2	100	MERA UHF
30	JN5490	145.49	88.5		86	PR3250	443.25	110.9	
31	HU5490	145.49	167.9	COMMERCE	87	DN3525	443.525	118.8	Denton
32	DA6640	146.64	118.8	K5AHT	88	DA4025	444.025	110.9	WX5O
33	DA6660	146.66	110.9	Garland	89	DN4050	444.05	110.9	DENTON
34	TA6680	146.68	110.9	SW-TARRA	90	DA4075	444.075	110.9	CARROLLT
35	DA6700	146.7	110.9	W5EBQ	91	TA4100	444.1	110.9	
36	DA6720	146.72	110.9	Irving	92	CI4250	444.25	79.7	PARK UHF
37	CI6740	146.74	110.9	MARC	93	GS4750	444.75	100	Grayson UHF

Location	Name	Frequency	Tone	Comments	Location	Name	Frequency	Tone	Comments
100	CI45125	444.5125	123	Celina	121	WIN910	144.91		WIN910
101	145.46	145.46		145.46	123	WIN930	144.93		WIN930
102	145.6	145.6		145.6	124	WIN950	144.95		WIN950
103	145.7	145.7		145.7	125	WIN970	144.97		WIN970
104	146.4	146.4		146.4	126	WIN990	144.99		WIN990
105	146.48	146.48		146.48	127	WIN010	145.01		WIN010
106	146.5	146.5		146.5	128	WIN030	145.03		WIN030
107	146.52	146.52		146.52	129	WIN050	145.05		WIN050
108	146.54	146.54		146.54	130	WIN070	145.07		WIN070
109	146.56	146.56		146.56	131	WIN090	145.09		WIN090
110	146.58	146.58		146.58	132	APRS-SEC	144.34		APRS-SEC
111	147.42	147.42		147.42	133	APRS-PRI	144.39		APRS-PRI
112	147.44	147.44		147.44	134	444.6	444.6		444.6
113	147.51	147.51		147.51	135	445	445		445
114	147.52	147.52		147.52	136	445.5	445.5		445.5
115	147.55	147.55		147.55	137	446.1	446.1		446.1
116	147.56	147.56		147.56	138	446.5	446.5		446.5
120	147.58	147.58		147.58	139	447	447		447

Frequency Plans

Euless CERT Team FRS Radio Assignments

Please note that FRS radios should be set to Privacy Code 21

Channel #	Frequency	Assignment
1	462.5625	Neighborhood Watch to Responders
2	462.5875	CERT Team Leaders to Command
3	462.6125	CERT Planning Section
4	462.6375	CERT Logistics Section
5	462.6625	CERT Admin Section
6	462.6875	CERT Team Leader to Public Safety
7	462.7125	Safety Officer
8	467.5625	CERT OPS inter-Team Primary Channel
9	467.5875	RED Team
10	467.6125	GREEN Team
11	467.6375	WHITE Team
12	467.6625	ORANGE Team
13	467.6875	BLUE Team
14	467.7125	BROWN Team

Privacy Codes CTCSS Tones in Hz

FRS 1	67.0	FRS 14	107.2	FRS 27	167.9
FRS 2	71.9	FRS 15	110.9	FRS 28	173.8
FRS 3	74.4	FRS 16	114.8	FRS 29	179.9
FRS 4	77.0	FRS 17	118.8	FRS 30	186.2
FRS 5	79.7	FRS 18	123.0	FRS 31	192.8
FRS 6	82.5	FRS 19	127.3	FRS 32	203.5
FRS 7	85.4	FRS 20	131.9	FRS 33	210.7
FRS 8	88.5	FRS 21	136.5	FRS 34	218.1
FRS 9	91.5	FRS 22	141.3	FRS 35	225.7
FRS 10	94.8	FRS 23	146.2	FRS 36	223.6
FRS 11	97.4	FRS 24	151.4	FRS 37	241.8
FRS 12	100.0	FRS 25	156.7	FRS 38	250.3
FRS 13	103.5	FRS 26	162.2		

ARES® HF Net Frequencies

North Texas Section ARES®

- 3860 KHz LSB for evening and night operations
- 7277.5 KHz LSB for morning and day operations

Texas ARES®

- 3872 KHz LSB for evening and night operations
- 7285 KHz LSB for morning and day operations
- 7290 KHz LSB for Health and Welfare traffic

NOAA Frequencies

Channel	Frequency
1	162.4
2	162.425
3	162.45
4	162.475
5	162.5
6	162.525
7	162.55

National Simplex Frequencies

- 2m VHF 146.52
- 70cm UHF 446.00

Citizens Band

Channel	Frequency	Channel	Frequency
1	26.965	21	27.215
2	26.975	22	27.225
3	26.985	23	27.255
4	27.005	24	27.235
5	27.015	25	28.245
6	27.025	26	27.265
7	27.035	27	27.275
8	27.055	28	27.285
9	27.065	29	27.295
10	27.075	30	27.305
11	27.085	31	27.315
12	27.105	32	27.325
13	27.115	33	27.335
14	27.125	34	27.345
15	27.135	35	27.355
16	27.155	36	27.365
17	27.165	37	27.375
18	27.175	38	27.385
19	27.185	39	27.395
20	27.205	40	27.405

US Amateur Radio Bands

US AMATEUR POWER LIMITS

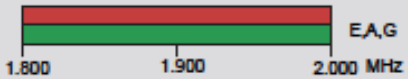
FCC 97.313 An amateur station must use the minimum transmitter power necessary to carry out the desired communications. (b) No station may transmit with a transmitter power exceeding 1.5 kW PEP.

Effective Date
March 5, 2012

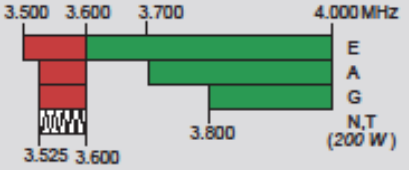
Published by:
ARRL The national association for AMATEUR RADIO®
www.arrl.org
225 Main Street, Newington, CT USA 06111-1494

160 Meters (1.8 MHz)

Avoid interference to radiolocation operations from 1.900 to 2.000 MHz



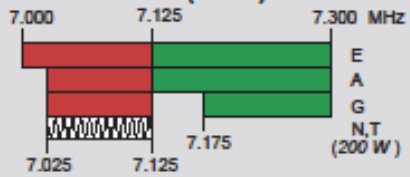
80 Meters (3.5 MHz)



60 Meters (5.3 MHz)

General, Advanced, and Amateur Extra licensees may operate on these five channels on a secondary basis with a maximum effective radiated output of 100 W PEP. Permitted operating modes include upper sideband voice (USB), CW, RTTY, PSK31 and other digital modes such as PACTOR III as defined by the FCC Report and Order of November 18, 2011. USB is limited to 2.8 kHz centered on 5332, 5348, 5358.5, 5373 and 5405 kHz. CW and digital emissions must be centered 1.5 kHz above the channel frequencies indicated above. Only one signal at a time is permitted on any channel.

40 Meters (7 MHz)

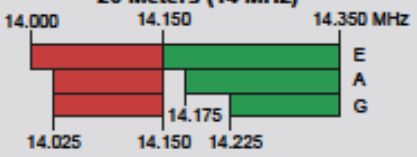


Phone and image modes are permitted between 7.075 and 7.100 MHz for FCC licensed stations in ITU Regions 1 and 3 and by FCC licensed stations in ITU Region 2 West of 130 degrees West longitude or South of 20 degrees North latitude. See Sections 97.305(c) and 97.307(f)(11).
Novice and Technician licensees outside ITU Region 2 may use CW only between 7.025 and 7.075 MHz and between 7.100 and 7.125 MHz. 7.200 to 7.300 MHz is not available outside ITU Region 2. See Section 97.301(e). These exemptions do not apply to stations in the continental US.

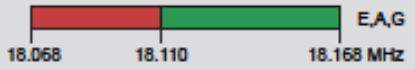
30 Meters (10.1 MHz)

Avoid interference to fixed services outside the US.

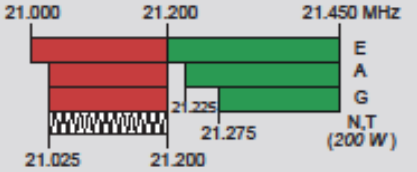
20 Meters (14 MHz)



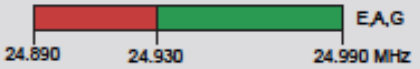
17 Meters (18 MHz)



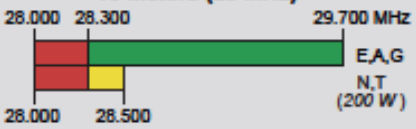
15 Meters (21 MHz)



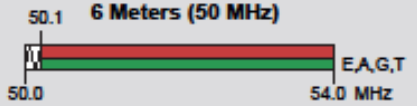
12 Meters (24 MHz)



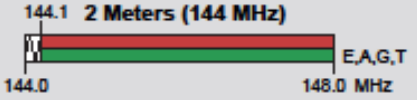
10 Meters (28 MHz)



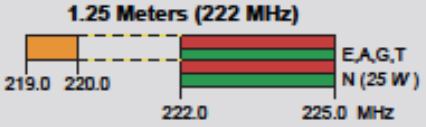
6 Meters (50 MHz)



2 Meters (144 MHz)

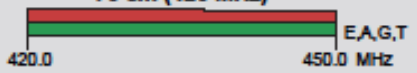


1.25 Meters (222 MHz)

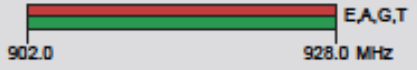


*Geographical and power restrictions may apply to all bands above 420 MHz. See *The ARRL Operating Manual* for information about your area.

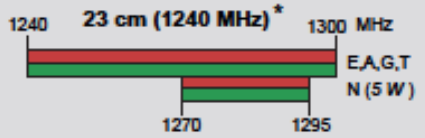
70 cm (420 MHz)*



33 cm (902 MHz)*



23 cm (1240 MHz)*



All licensees except Novices are authorized all modes on the following frequencies:

2300-2310 MHz	10.0-10.5 GHz *	122.25-123.0 GHz
2390-2450 MHz	24.0-24.25 GHz	134-141 GHz
3300-3500 MHz	47.0-47.2 GHz	241-250 GHz
5650-5925 MHz	76.0-81.0 GHz	All above 275 GHz

* No pulse emissions

KEY

Note:
CW operation is permitted throughout all amateur bands.

MCW is authorized above 50.1 MHz, except for 144.0-144.1 and 219-220 MHz.

Test transmissions are authorized above 51 MHz, except for 219-220 MHz

- RTTY and data
- phone and image
- CW only
- SSB phone
- USB phone, CW, RTTY, and data
- Fixed digital message forwarding systems only

E = Amateur Extra
A = Advanced
G = General
T = Technician
N = Novice

See *ARRLWeb* at www.arrl.org for detailed band plans.

ARRL
We're At Your Service

ARRL Headquarters:
860-594-0200 (Fax 860-594-0259)
email: hq@arrl.org

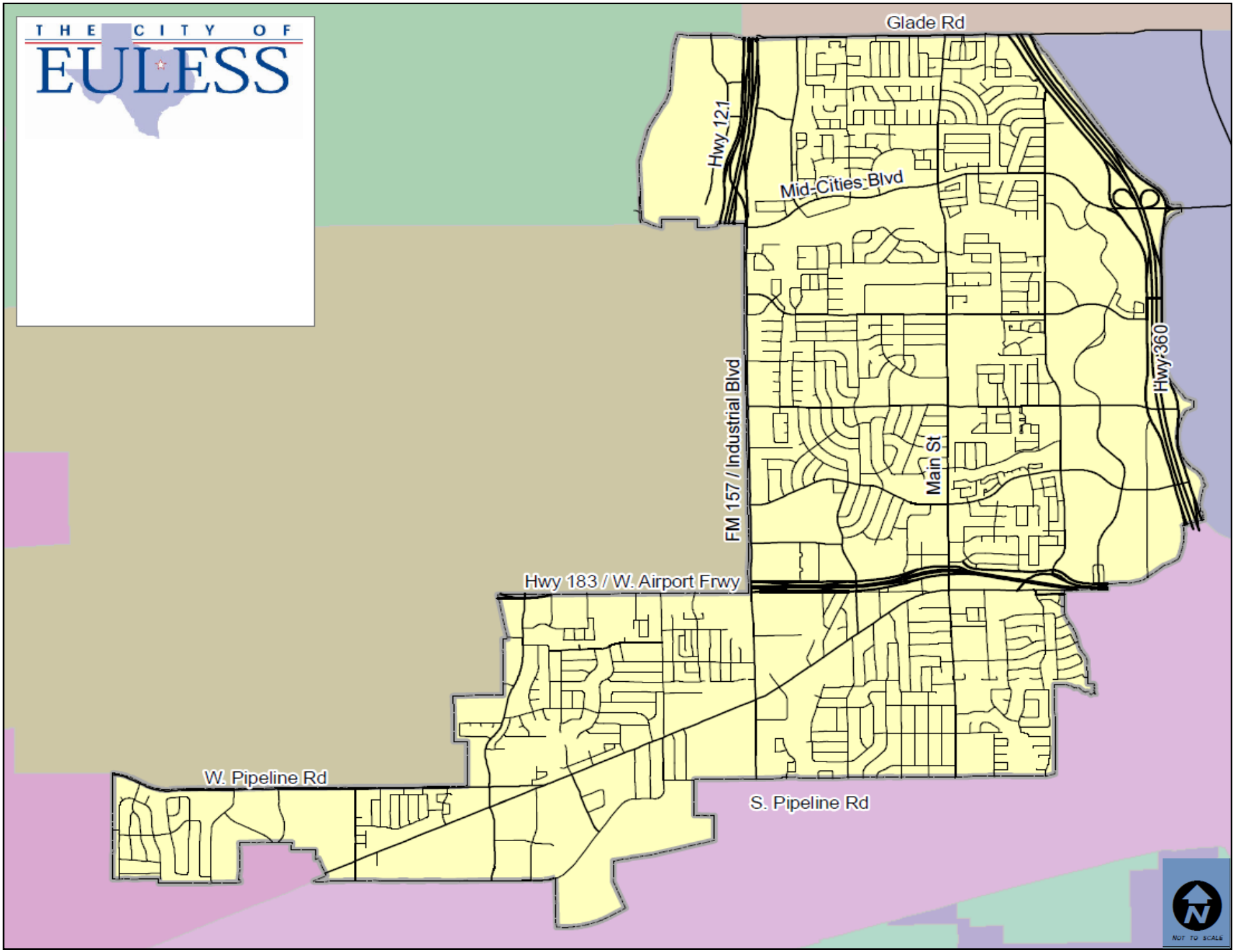
Publication Orders:
www.arrl.org/shop
Toll-Free 1-888-277-5289 (860-594-0355)
email: orders@arrl.org

Membership/Circulation Desk:
www.arrl.org/membership
Toll-Free 1-888-277-5289 (860-594-0338)
email: membership@arrl.org

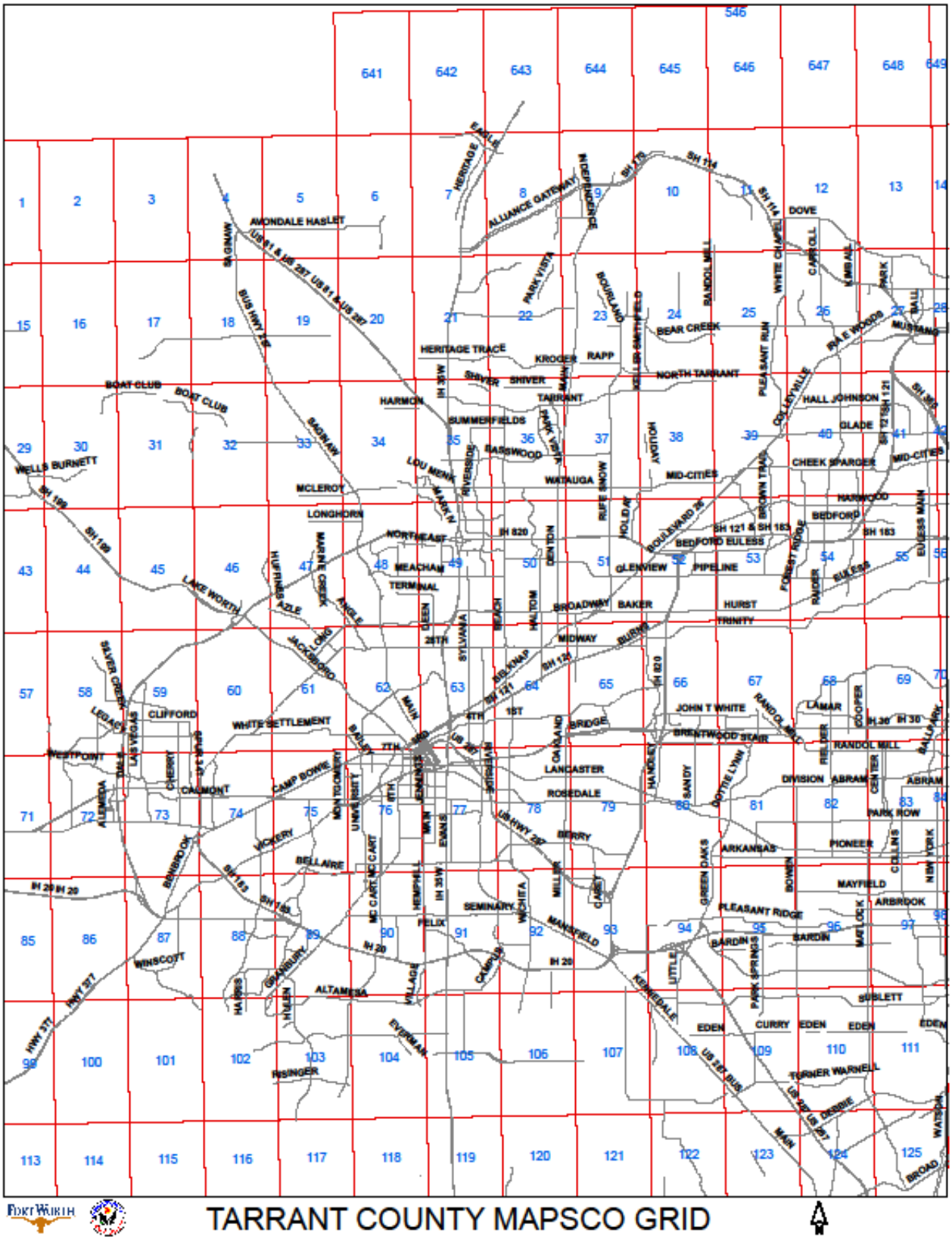
Getting Started in Amateur Radio:
Toll-Free 1-800-326-3942 (860-594-0355)
email: newham@arrl.org

Exams: 860-594-0300 email: vec@arrl.org

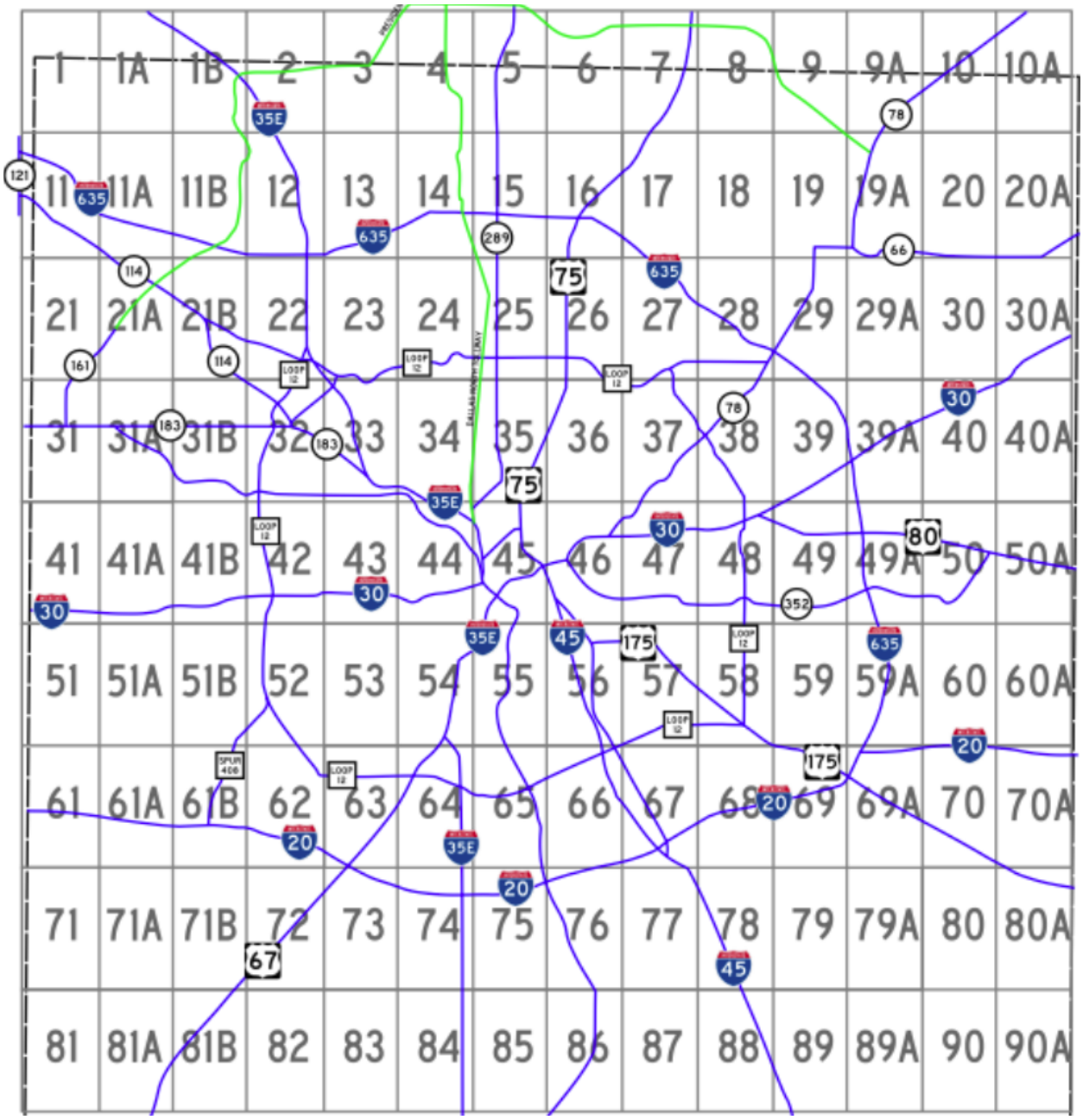
 rev. 4/12/2012


THE CITY OF
EULESS
Glade Rd
Hwy 121
Mid-Cities Blvd
FM 157 / Industrial Blvd
Main St
Hwy 360
Hwy 183 / W. Airport Frwy
W. Pipeline Rd
S. Pipeline Rd
NOT TO SCALE

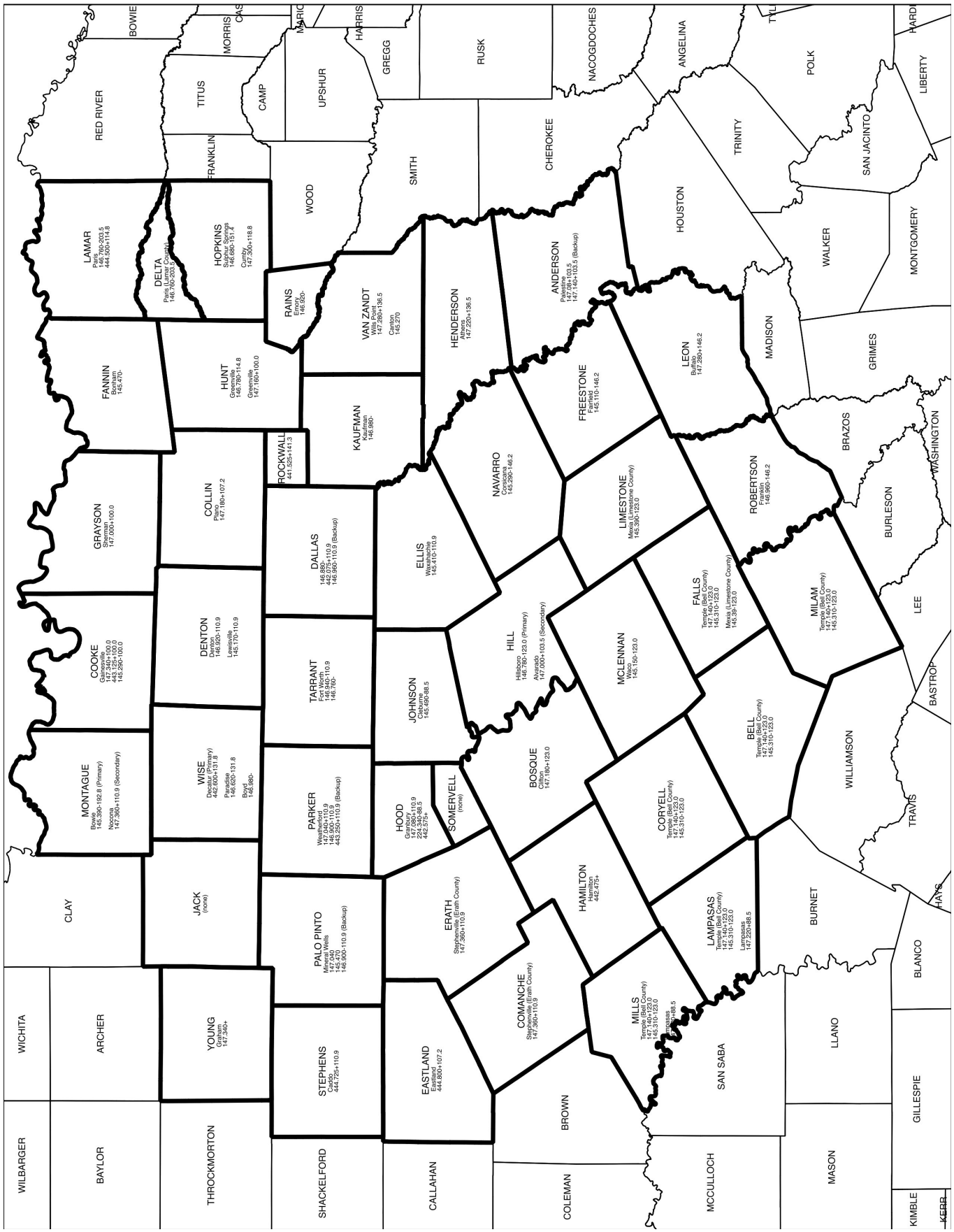
Tarrant County Mapsco Grids



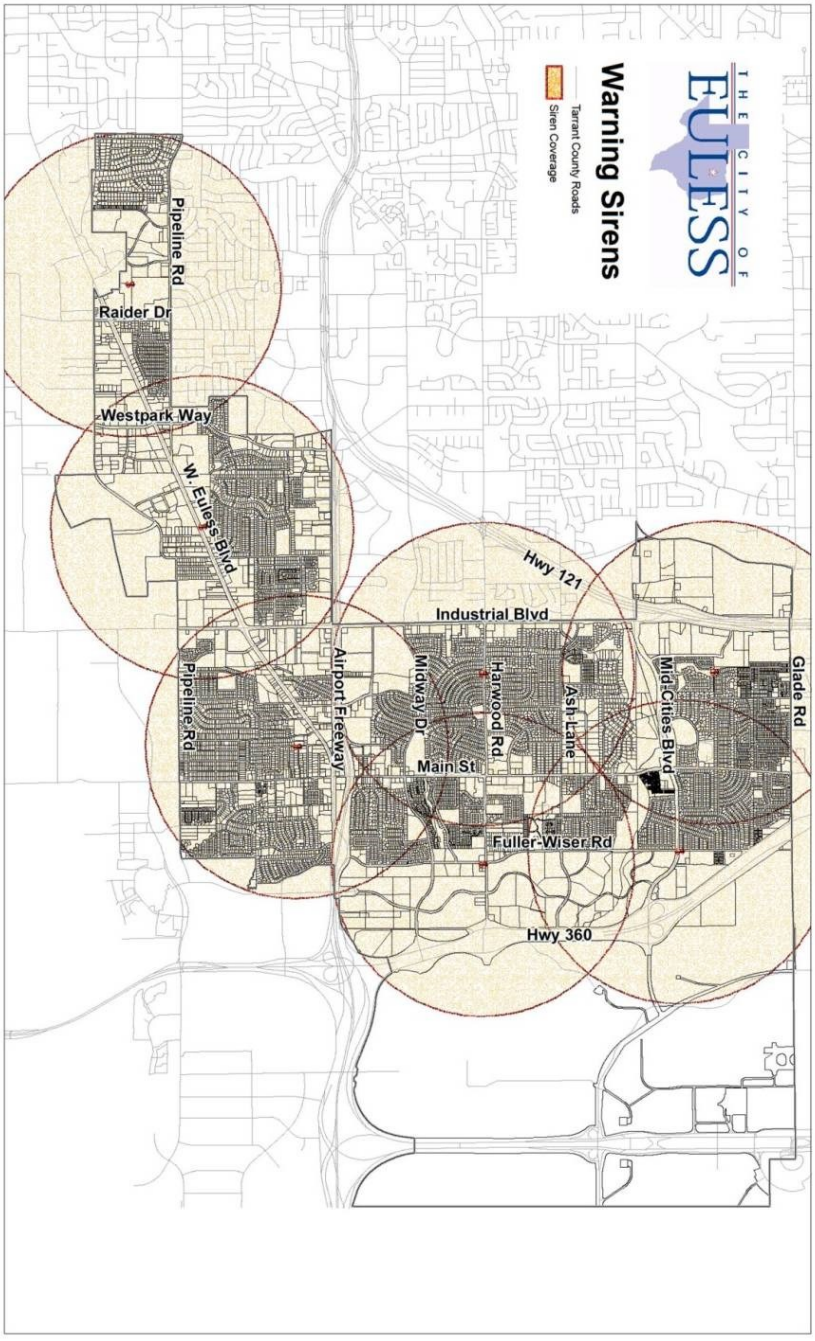
Dallas County Mapsco Grids



North Texas Counties SKYWARN Frequencies



City of Euless Warning Sirens



1. Priest Lane and Tallow Dr. (South of Canterbury)
   32.873915 N -97.093606 W

2. Mid-Cities Blvd and Fuller-Wiser Rd.
   32.872628 N -97.073543 W

3. Harwood Road between N Ector and Donley
   32.851417 N -97.094657 W

4. Harwood Road and Fuller-Wiser Rd.
   32.851160 N -97.072856 W

5. Martha St. and Arnett (South of hwy 10 and West of Main
   32.833951 N -97.086096 W

6. West Euless Blvd. and Debra Dr.
   32.825078 N -97.111373 W

7. West Euless Blvd. and Raider Dr. (In the Villa Bella Apartment Homes)
   32.817762N -97.137745W

Amateur Radio Euless
1102 W. Euless Blvd
Euless, TX 76040
www.w5eul.com
info@w5eul.com