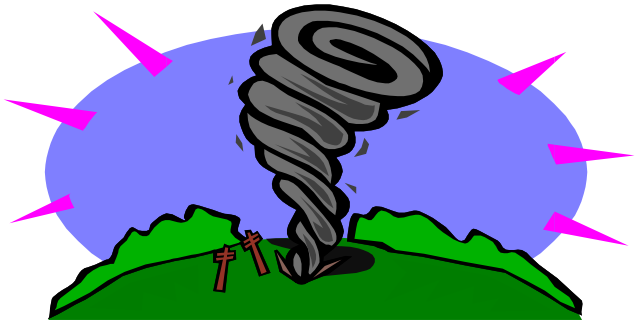
FANNIN COUNTY A.R.E.S. and

R.A.C.E.S.



“STORM COWBOY”

Reference Manual

SKYWARN MISSION

TO LOCATE POSSIBLE THREATS

TO LIFE AND PROPERTY

And

PROVIDE INFORMATION FROM WHICH

WARNINGS CAN ISSUED

TABLE OF CONTENTS

Welcome to the Fannin County

"STORM COWBOY"

This manual is produced as a reference manual for the ARES and RACES services of Fannin county Texas. Special thanks to the publishers of the "CLOUD COWBOY" Published for Dallas County RACES.

The NET operations in the Fannin county emergency system are typically ARES and thus any amateur radio operator is allowed to enter the NETS and support the operations. All operators must be aware however in the event a R.A.C.E.S net is in operation only R.A.C.E.S operators are authorized to operate on the net. This directed by the FCC and thus must be enforced by NET control. This type of operations will be called up by the Emergency Coordinator for Fannin County and special rules apply during such a NET. In the event of a threat to life or property any operator may enter the NET by calling the NET control operator and using the standard "BREAK BREAK" call and then waiting for the NET Control to reply and assist with the emergency.

This book is the first edition to be published specifically for Fannin County but can be used by anyone as reference information for Storm Spotting activities.

Please feel free to contact the author with any comments or suggestions and also feel free to copy and use the document as you see necessary. Just reference the original "CLOUD COWBOY" and this "STORM COWBOY"

RADIO **A**MATUER **C**IVIL **E**MERGENCY **S**ERVICE

WHAT IS R.A.C.E.S.

R.A.C.E.S. is an organization of licensed amateur radio operators who volunteer their time and equipment to provide supplemental communications to local, county, and state governments in times of emergency or natural disaster. Its operation is governed by FCC regulations found in Part 97 Subpart E. A major function performed by R.A.C.E.S. in the Fannin County area is providing information to the National Weather Service and Fannin County EOC Centers during periods of threatening or severe weather.

The Fannin County R.A.C.E.S. organization is authorized by the City of Savoy Office of Emergency Preparedness per Part 97, Subpart E.

WHO CAN PARTICIPATE

By F.C.C. regulations only certified appointees may participate in R.A.C.E.S. operations – including training sessions. At the National Weather Service's request, only R.A.C.E.S. appointees who have attended a SKYWARN school can make weather reports during SKYWARN nets.

Any Amateur radio operator with a Technician or higher class license may apply through his or her city's R.A.C.E.S. radio Officer to be certified by the

WHAT IS EXPECTED?

R.A.C.E.S. appointees are expected to have a sincere interest in providing communications as a public service of amateur radio and should have equipment capable of operating on the designated R.A.C.E.S. frequencies listed later in this booklet.

Each R.A.C.E.S. Organization has their own training and participation requirements,

For example Dallas County and Garland require participation in a minimum of 18 on-the –air training nets per year. Each applicant should understand the commitment required by their organization prior to submitting their application. The following is the list of Fannin County requirements.

1. The National Weather Service requires that participating stations in storm spotting activities attend a 'SKYWARN' training course prior to making reports during weather nets.

ANNUAL RENEWAL REQUIREMENTS

AMATUER **R**ADIO **E**MERGENCY **S**ERVICE

WHAT IS A.R.E.S.

ARES is a public service organization coordinated by the American Radio Relay League. It consists of licensed Amateur Radio Operators who have voluntarily registered their qualifications and equipment to provide emergency communications for public service events as needed.

ARES groups are dedicated to serving the communities where they live, working hand in hand with the American Red Cross, local and state governments, and other nonprofit, community-service organizations.

The central focus of **ARES** training and activates are to keep its members well practiced in providing emergency communications when normal means of communications have failed.

FANNIN COUNTY

FREQUENCIES

Primary 2 meter repeater 145.47 (-0.600)

Secondary 2 meter repeater 145.13 (-0.600)_

Primary Simplex in event of repeater failure 145.47 MHz.

Secondary Direct and Talk around 146.46 MHz.

Primary 450 Repeater 443.750 (+5.00)

Primary Direct in event of repeater failure 443.750 MHz.

Secondary Direct and Talk around 446.000 MHz.

Other Frequencies of interest.

Dallas R.A.C.E.S.	146.88 MHz.	Garland R.A.C.E.S.	146.66 MHz.
Collin County (ARES)	147.18 MHz.	Collin County (ARES)	146.74 MHz.

STANDARDIZED REPORTING FORMAT

To assist you in emergency situations we have developed a reporting format that follows the letters HAND.

H = HAVE = What type of emergency do you HAVE?

Is it Fire, accident with injury, medical?

A = AT = You are AT_____

An address or distance and direction from the nearest major intersection.

N = NEED = What assistance do you NEED?

Fire Truck, Police, Ambulance, etc.

D = DETAILS = What DETAILS will help responders?

DETAILS are those things that the responders need to know BEFORE they arrive on the scene. For instance, is there a fire, or fuel or chemical spill? Are there fumes, are there multiple victims, is there a hazard they need to prepare for? If there is a Hazardous Material Placard on a vehicle involved in the accident the number tells the responders what material they will have to deal with, however,

DO NOT APPROACH VEHICLES THAT DISPLAY HAZARDOUS MATERIAL PLACARDS!

If you can't see it from your location, don't go closer; just tell the dispatcher that there is a placard.

H – " I HAVE A _____

A – AT _____

N – I NEED "(Fire, police, ambulance)"

D – (DETAILS) _____

ESTIMATING WIND SPEED

WIND SPEED	OBSERVATIONS
30-44 MPH	Trees in motion. Light-weight loose objects (e.g., lawn furniture) tossed or toppled.
45-57 MPH	Large trees bend, twigs and small limbs break and a few larger dead or weak branches may break. Old/weak structures (e.g., sheds, barns) may sustain minor damage (roofs, doors). Buildings partially under construction maybe damaged. A few loose shingles removed from houses. Carports may be uplifted, minor cosmetic damage to mobile homes and pool lanai cages.
58-74 MPH	Large limbs break, shallow rooted trees broken/uprooted. Semi-trucks overturned. More significant damage to old/weak structures. Shingles, awnings removed from houses, damage to chimneys and antennas; mobile homes, carports incur minor structural damage; large billboard signs may be toppled.
75-89 MPH	Widespread damage to trees with trees broken/uprooted. Mobile homes may incur more significant structural damage; be pushed off foundations or overturned. Roofs may be partially peeled off industrial/commercial/warehouse buildings. Some minor roof damage to homes. Weak structures (e.g., farm buildings, airplane hangars) may be severely damaged.
90+ MPH	Many large trees broken or uprooted. Mobile homes severely damaged; moderate roof damage to homes. Roofs partially peeled off homes and buildings. Moving automobiles pushed off dry roads; barns, sheds demolished.

ESTIMATING RAIN RATE

Measured reports are much more desirable than estimated reports.

They are generally much more accurate. Sometimes it's hard to estimate properly under severe weather conditions. Over-estimating is as bad as or worse than under-estimating storm criteria.

Rainfall Intensity

Light Less than 0.2"/Hr.
Moderate 0.2" to 1.0"/Hr.
Heavy 1.1" to 2.2"/Hr. (Minimum reportable rain)
Very heavy 2.3" to 4.5"/Hr.
Intense 4.6" to 7.1"/Hr.
Extreme More than 7.1"/Hr. (Anybody know how to build an arc?)

MINIMUM REPORTING CRITERIA

1. **FUNNEL/WALL CLOUD SPOTTED**

0 FUNNEL

1. is surface damage occurring?
2. Is funnel visible Half-way to ground?
3. What are your location's Map Grid Coordinates?
4. Direction and Distance from you to Funnel?

1 **WALL CLOUD**

1. Is there visible Rotation in the cloud?
2. Is the surface damage occurring?
3. Where is the updraft located on the wall cloud?
4. What are you locations Map Grid Coordinates?
5. Direction and rate of travel of wall cloud?

ALL OTHER REPORTS CEASE WHEN A FUNNEL OR WALL CLOUD IS REPORTED!!

1. HAIL LARGER THAN ¼ INCH

2. What are your location's map grid coordinates?
3. What is the estimated size of the hail? (inches/Coin size?)
4. How much is falling (Occasional/Heavy)

3. DAMAGING WINDS (OVER 50MPH)

1. What are your location's map grid coordinates?
2. Is the wind speed greater than 50 MPH? (Can't walk against the wind)
3. What is the direction of movement?
4. Briefly describe the damage that is occurring?

4. FLASH FLOODING

1. Is water flowing across the road? (Is there a current?)

CURB DEEP WATER DOES NOT MEET MINIMUM REPORTING CRITERIA.

2. Is rising water threatening life or property?
3. Are children playing in culverts or flood waters?

5. RAIN OVER 1 INCH PER HOUR

(Visibility less than five car lengths)

1. What are your location's map grid coordinates?
2. What is the estimated rainfall in inches/hour?

FANNIN COUNTY LOCATOR

A B C D E