



ARASWF

Newsletter



Vol. MMXVII No. 1 - The Journal of the Amateur Radio Association of Southwest Florida
January 20, 2016

In This Issue:

- Nickels & Dimes
- Board Meeting Minutes
- Membership Meeting Minutes (no meeting in December)
- Upcoming Contest Calendar
- Winter Field Day

The next Club Meeting will be held January 24th at 7:00pm
at the Red Cross - 2610 Northbrooke Plaza Drive - Naples, FL

Nickels & Dimes

I hope your New Year is off to a great start - the club is, and moving forward at full speed!

The ARES team just finished supporting the annual Naples Daily News 1/2 Marathon event. You can find pictures on our website or check out the club Flickr account (see link below). Winter Field Day is just around the corner and is scheduled for the weekend of January 28-29th.

The new kid in town is Torsen Schultze - DG1HT and his recently installed DMR repeater (444.9875 MHz +5). Torsen, a new member from Germany, graciously donated a new Hytera repeater to promote and develop this new digital technology. Torsen is in the process of immigrating to the United States from Germany and is here in Naples for only a few weeks at a time until his status becomes permanent. We all wish him the best of luck in this endeavor and sent him a huge shout out and thank you for his generous contribution.

DMR is taking the VHF/UHF airways by storm across the globe, due in no small part to low HT prices and the superior performance compared with the other modes. This voice mode is growing faster than any other competitive mode on the market today, including D-Star.

Uli-AG0X is producing the DVmini product line-up (DMR, D-Star, Fusion, P25) here in Naples, and his business is booming. He has given many presentations: Orlando, Dayton, and mostly recently on the air with over 100 check-ins from across the country. He is the expert Elmer, if you have any questions – catch him during the social break at the upcoming meeting.

Mark-AC4ZM, who has led many *Digitally Schooled* workshops, next will cover - DMR-101 at the Red Cross on February 25th from 1-3pm. Don't miss this opportunity to get an overview of this exciting new technology.

Chris Taylor-KM4UJI, motivated through his participation at the recent Naples Daily News event, volunteered to investigate repeater funding and location opportunities in Immokalee in order to extend EmComm capability to the far eastern reach of Collier County. He also will pursue future ARES team support for additional running & cycling events. Good job, Chris!

These are a few of your active *sparkplugs* moving the club forward in 2017, it's never too late to get involved and make things happen!

Don't forget our next meeting January 24th 7pm at the Red Cross. Dr. Al Torres – KP4AQI will give another interesting antenna theory presentations. We are very fortunate to have him as a club resource.

Very 73,

Ken-W9KB

<https://www.flickr.com/photos/106607564@N04/>

<http://wirelesshold.com/modems.aspx>

Amateur Radio Association of Southwest Florida

**Executive Board Meeting held at Apollo, Naples, FL
Monday – January 17, 2017**

Present: Uli Altvater, AG0X – President
Frank Halas, W4RBW – Vice President
Ken Bills, W9KB – Secretary
Mark Harms, AC4ZM – Director
Craig Henning, NC2H – Director
Chris Taylor, KM4UJI - Director

Absent: Gary Lee, K8YMN – Director
Larry Kielasa, N4LAK – Treasurer

MEETING MINUTES

Meeting called to order: The meeting was called to order at 7:05 pm.

President's Report – Uli-AG0X welcomed group to his QTH.

Treasurer's Report – Ken-W9KB reported the Club checking and PayPal balance was \$4,094.30. This includes our club liability insurance (\$200) and Florida SunBiz filing (\$61.25)

Old Business:

Repeater Updates: The Macro Island Radio Club (MIRC) eight bay UHF folded dipole was reworked at Uli's shop. A combo VHF/UHF folded dipole (4 bays UHF/2 bays VHF) from this and parts our Club has in storage. The rebuilt antenna was installed at the Marbella site and is operational. The DMR UHF frequency is 444.9875 MHZ +5 MHZ and the D-Star frequency is 146.670 MHZ +600.

Website Updates: Craig-NC2H reported that he has added a few new pictures from the recent club events.

EmComm Updates: Mark-AC4ZM reported that he has planned a mini SET event for January 28th and plans to operate several modes. He also mentioned that the group continues to meet at 7PM on the second Tuesday of the month at the Red Cross. The ARES group just completed the 2017 Naples Daily News 1/2 Marathon Event.

VE Testing: Mark-AC4ZM reported that VE test team was busy all year, with at least one candidate for every month. He estimated we had 20-24 successful candidates for 2916.

Naples Daily News 1/2 Marathon: Chris-KM4UJI reported that the events was successful, all our members were deployed to their stations and communication links established. The club repeater (146.670 MHZ) was used to bring everyone online then simplex links (146.400 MHZ) employed to pass local net traffic. The weather was prefect for the event and no emergencies were reported this year.

New Business:

Upcoming Events:

- Winter Field Day – January 28-29th

Walk-In Items:

- Mark-AC4ZM encouraged Club net check-in's on Wednesday 8pm
- Chris-KM4UJI spoke about the need for an Immokalee repeater and will follow-up with contacts. He also volunteered to look for more biking or running events that may need EmComm support.
- Mark-AC4ZM reported he would run his Digitally Schooled program this year. The first topic will be a DMR-101 workshop.
- Mark-AC4ZM mentioned that Paul-KK4TPO expressed a desire for a low speed weekly CW net for over-the-air practice.

Next Board Meeting – February 21st (7pm at Uli's business QTH)

Adjournment: The meeting was adjourned at 8:50 pm.

Respectfully submitted,

Ken-W9KB
Secretary

Contest Calendar

January 2017

+ LZ Open Contest	0000Z-0400Z, Jan 21
+ Hungarian DX Contest	1200Z, Jan 21 to 1200Z, Jan 22
+ North American QSO Party, SSB	1800Z, Jan 21 to 0600Z, Jan 22
+ SKCC Sprint	0000Z-0200Z, Jan 25
+ CQ 160-Meter Contest, CW	2200Z, Jan 27 to 2159Z, Jan 29
+ REF Contest, CW	0600Z, Jan 28 to 1800Z, Jan 29
+ BARTG RTTY Sprint	1200Z, Jan 28 to 1200Z, Jan 29
+ UBA DX Contest, SSB	1300Z, Jan 28 to 1300Z, Jan 29
+ Winter Field Day	1700Z, Jan 28 to 1700Z, Jan 29

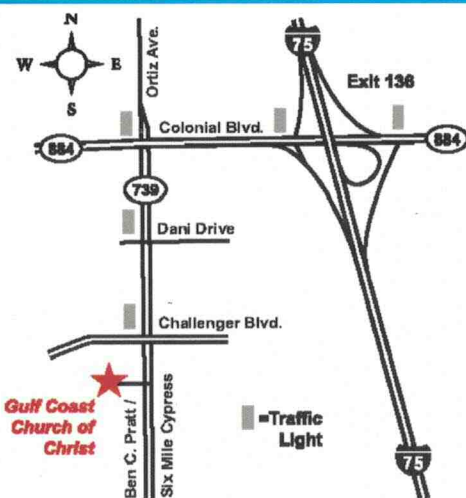
February 2017

+ Vermont QSO Party	0000Z, Feb 4 to 2400Z, Feb 5
+ 10-10 Int. Winter Contest, SSB	0001Z, Feb 4 to 2359Z, Feb 5
+ Black Sea Cup International	1200Z, Feb 4 to 1159Z, Feb 5
+ Minnesota QSO Party	1400Z-2400Z, Feb 4
+ AGCW Straight Key Party	1600Z-1900Z, Feb 4
+ British Columbia QSO Party	1600Z, Feb 4 to 0400Z, Feb 5
+ Mexico RTTY International Contest	1800Z, Feb 4 to 1759Z, Feb 5
+ North American Sprint, CW	0000Z-0400Z, Feb 5
+ CQ WW RTTY WPX Contest	0000Z, Feb 11 to 2400Z, Feb 12
+ SARL Field Day Contest	1000Z, Feb 11 to 1000Z, Feb 12
+ Asia-Pacific Spring Sprint, CW	1100Z-1300Z, Feb 11
+ Dutch PACC Contest	1200Z, Feb 11 to 1200Z, Feb 12
+ SKCC Weekend Sprintathon	1200Z, Feb 11 to 2359Z, Feb 12
+ New Hampshire QSO Party	1600Z, Feb 11 to 2200Z, Feb 12
+ FISTS Winter Unlimited Sprint	1700Z-2100Z, Feb 11
+ AGCW Semi-Automatic Key Evening	1900Z-2030Z, Feb 15
+ ARRL Inter. DX Contest, CW	0000Z, Feb 18 to 2400Z, Feb 19
+ Run for the Bacon QRP Contest	0200Z-0400Z, Feb 20
+ SKCC Sprint	0000Z-0200Z, Feb 22
+ CQ 160-Meter Contest, SSB	2200Z, Feb 24 to 2159Z, Feb 26
+ REF Contest, SSB	0600Z, Feb 25 to 1800Z, Feb 26
+ UBA DX Contest, CW	1300Z, Feb 25 to 1300Z, Feb 26
+ North American QSO Party, RTTY	1800Z, Feb 25 to 0600Z, Feb 26
+ High Speed Club CW Contest	0900Z-1700Z, Feb 26

SOUTHWEST FLORIDA HAMFEST!

Fort Myers, Florida January
20-21, 2017

For information:
SWFLHamfest.info



2017 SOUTHWEST FLORIDA HAMFEST

January 20-21, 2017

Gulf Coast Church of Christ at 9550 Six Mile Cypress Parkway • Fort Myers, FL
Just off of I-75, Exit 136. Talk-In Repeater: 147.345 (136.5Tone)

FREE PARKING • Handicap Parking Available • \$2,000 IN PRIZES!

Friday, January 20: Setup at 8 AM • Gates Open from Noon-5 PM

Saturday, January 21: Setup at 6 AM • Gates Open from 8 AM-3 PM

RAFFLE PRIZES and DOOR PRIZES!
over \$2,000 in radios and prizes to be given away!

VISITOR INFORMATION

General Admission: Early Tickets by mail or from FMARC members: \$5 • At the Gate: \$7
Kids 12 & Under: FREE with Paying Adult • **Students 13-18:** \$5 at Gate with Valid Student ID
On-Site Security Provided • Great Food at Reasonable Prices From Food Truck On-Site

FREE FCC LICENSE TESTING: Saturday, January 21, 2017 at 10AM
ARRL Card Checking

VENDOR INFORMATION

Indoor Vendor Tables: \$15 Each*

Commercial booth fees will be determined by space requested.

Reserve Your Booth or Table Early for Best Placement!

Tailgate Spaces: \$5* • **Additional Tailgate Spaces:** \$5*

**All tailgate and indoor vendors must also purchase a General Admission ticket for each person in their party.*

MAIL TICKET REQUESTS TO: FMARC PO Box 061183 Fort Myers, FL 33906

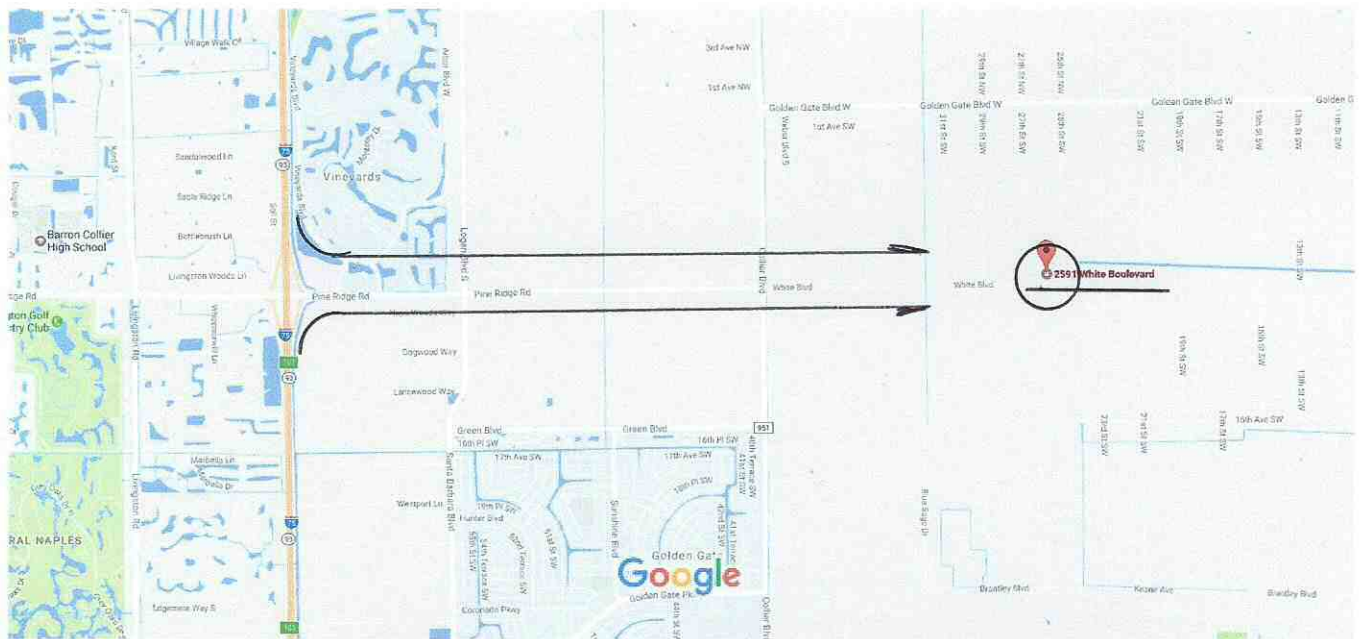
Please include SASE, otherwise tickets will be held atdoor. Cutoff date for receiving early ticket sales requests is Friday, January 13, 2017.

Need more information? **Email:** WO4K@arrl.net

Winter Field Day – January 28-29th



Google Maps 2591 White Blvd



Map data ©2016 Google 2000 ft



Home

2591 White Blvd
Naples, FL 34117



Ulrich Rohde, N1UL, Recognized for Pioneering Work on SDR

01/17/2017

Ulrich L. Rohde, N1UL, of Synergy Microwave Corp was invited to deliver the sixth Sir J.C. Bose Memorial Lecture at the IEEE Hyderabad Section on December 2 during a joint session of the IEEE MTT, AP, and EMC Societies in Hyderabad, India. Rohde's talk was "Next Generation Networks: Software Defined Radio — Emerging Trends." Click **here** to view a collection of slides used in the lecture.

While working under a US Department of Defense contract at RCA in 1982, Rohde's department developed the first SDR, which used the COSMAC (Complementary Symmetry Monolithic Array Computer) chip. Introduced by RCA in early 1976, the RCA CDP1802 eight-bit CMOS microprocessor — a 40-pin LSI integrated circuit chip — was the company's first single-chip microprocessor. Rohde was among the first to present publically on this topic with his February 1984 talk, "Digital HF Radio: A Sampling of Techniques" at the Third International Conference on HF Communication Systems and Techniques in London.

The Hyderabad lecture's namesake, Sir Jagadish Chandra Bose, was a Bengali scientist who lived in British India in the late 19th and early 20th centuries and was an expert in math, physics, biology, and archaeology. Bose pioneered the investigation of radio and microwave optics, contributed significantly to plant science, and laid the foundations of experimental science.

Much of Bose's original scientific work was in the area of microwaves. He produced extremely short radio waves and was the first to use a semiconductor junction to detect radio waves. Bose's research on the response of tissues to microwaves and other stimuli led to many significant findings in that field, and the IEEE named him one of the fathers of radio science. —

*Thanks to **Microwave Journal***

Dr. Rohde is a member of ARASWF!

Hamvention Ready to Deal with Anticipated Traffic Flow at New Venue

01/17/2017

Hamvention® is ready to deal with the anticipated heavy traffic flow when the event opens on May 19 at its new location, the Greene County Fairgrounds and Expo Center in Xenia, Ohio. Mike Kalter, W8CI, said the all-volunteer Hamvention organizers have turned to professionals to address this aspect of the event. Kalter, who is treasurer of the sponsoring Dayton Amateur Radio Association (**DARA**), was **interviewed** last week by DX Engineering's Tim Duffy, K3LR.

"We recognized that we needed to reach out to a professional engineering firm that does this all over the country to help us to work with the local government officials, so that we can have a good solid plan to keep the people flowing in," Kalter told Duffy.

Kalter said arrangements have been made to have staging areas for those needing to either offload or load equipment from the indoor exhibit areas or the flea market.

He also pointed out that on-site parking would be free, and that no one will have to park in the mud. Kalter said areas set aside for parking are well drained, and he doesn't anticipate any problems, even if it rains during Hamvention. That goes for the flea market area as well, he said, noting that the arena infield area gets used events in good and bad weather alike.

Kalter said Hamvention expects to be able to post the plan for flea market spaces on its website soon. The layout for indoor vendor and exhibitor booths is already available on the Hamvention website. Kalter said that if everyone who attended Hamvention 2016 at Hara Arena shows up again this year, they will find plenty of room at the new venue. Maps are available on the website.

Turning to traffic of a different sort, Kalter noted that Greene County has brought in a high-speed Internet "pipe" to the new venue, and AT&T will drop telephone lines wherever they're needed.

Duffy asked whether the new venue would have an area similar to that outside Hara Arena, where those attending Hamvention could sit down with friends for a bite to eat or a drink. Kalter said there will be plenty of picnic tables as well as a temporary structure dedicated for socializing. He also promised that Hamvention 2017 will offer "a wide variety of great things to eat." That will include food vendors and food trucks.

Kalter said some 600 volunteers in all are required to make Hamvention happen each year, and the leadership team consists of 86 individuals.

Reflecting its new venue, "Hamvention — Same Friends, New Home" will be the theme for the 2017 event. Last summer's closure of Hara Arena forced the move to the new location more than 20 miles to the southeast.

The price of admission to Hamvention has gone up slightly; tickets will now cost \$22 for all 3 days (\$27 at the door). Accompanied minors 12 or younger may attend free. Online ordering is not yet available, but those planning to attend can **order tickets by mail**. Hamvention runs from Friday, May 19, until Sunday, May 21.

New "Amateur Radio Parity Act" Bill Introduced in US House of Representatives

01/16/2017

H.R. 555 — a new "Amateur Radio Parity Act" bill — has been introduced in the U.S. House of Representatives. The bill's language is identical to that of the 2015 measure, H.R. 1301, which passed in the House late last summer but failed in the waning days of the US Senate to gain the necessary support. As with H.R. 1301, the new measure introduced on January 13 in the 115th Congress was sponsored by Rep. Adam Kinzinger (R-IL), with initial co-sponsorship by Rep. Joe Courtney (D-CT) and Rep. Greg Walden, W7EQI (R-OR). Walden now chairs the House Committee on Energy and Commerce, to which the new bill has been referred. H.R. 555 will get an initial airing in the Subcommittee on Communications and Technology. When H.R. 1301 came up in committee, Walden spoke forcefully in favor of the measure, which ultimately attracted 126 House cosponsors.

"Rep. Kinzinger has again stepped forward to introduce this important legislation," said ARRL CEO Tom Gallagher, NY2RF. "His commitment stems from exposure to what the Amateur Radio community brings to the service of all communities. The ARRL and radio amateurs nationwide owe Rep. Kinzinger a resounding 'Thank You!' for his efforts on their behalf."

H.R. 555 calls on the FCC to establish rules prohibiting the application of deed restrictions that preclude Amateur Radio communications on their face or as applied. Deed restrictions would have to impose the minimum practicable restriction on Amateur Radio communications to accomplish the lawful purposes of homeowners association seeking to enforce the restriction.

The ARRL Board of Directors is expected to discuss the pending legislation when it meets January 20-21.



MIRC Lunch Meeting





Uli found the following document this week (following 10 pages)

Interesting work from ARASWF yesteryear

USING AIRBORNE DIGITAL REPEATERS IN
EMERGENCY COMMUNICATIONS

A paper prepared for the 12th annual
ARRL Networking Conference

September 10-11, 1993
Tampa, Florida

. Prepared by Gary Arnold, WB2WPA @ WB2WPA
3200 Areca Avenue
Naples, FL 33962-5912

The state of Florida is, as pointed out so dramatically on August 23-24, 1992, vulnerable to the destruction of a hurricane. Communications links so vital to recovery are often among the weakest, most vulnerable targets. Linking the southern half of the state with the state capitol in Tallahassee is more than difficult, because of the distances involved (Figure 1).

On the southwest coast of Florida in Naples, 110 miles due west of Ft. **Lauderdale**, the Collier County Emergency Operations Center provides link from **EOCs** up the west coast to Dade, Broward and Monroe Counties, including the National Hurricane Center in Coral Gables, Florida. A dual port network node is located at Ochopee providing 220 and 440 links to the east coast. Another is planned for a federal government site near the Dade County line, providing redundant sites along US **41 between** Naples and Miami.

To the north, the FMY node stack is located at the Lee County EOC in Ft. Myers, consisting of 2 meters, 220 and **440** nodes some 40 miles north of Naples. Thirty miles to the north is **Punta** Gorda with a 2 **meter/440** node serving Charlotte County, and linking to Sarasota. From there, the ROSE network takes over to Tampa, and Pasco County. There, the northbound network virtually stops, except for a tenuous connection along the I-4 corridor (Figure 2).

Packet radio connections have been made between the **WB2WPA** BBS in Naples, and the state EOC in Tallahassee, but the connections have relied on enhanced paths to provide a slow link which is not capable of providing reliable extended periods of communication. If a storm was to destroy the terrestrial **VHF/HF** network, the entire state would **have** to rely on HF **packet** communications to link the southern half of the state with Tallahassee.

At **the** 1989 Florida Governor% Hurricane Conference in Tampa, I proposed a method of flying nodes in **"orbits"** along the length of the 120 mile wide peninsula at relatively high altitudes, providing a 2 hop link between the southern end of the 'state and the State EOC.

Under the plan, Civil Air Patrol aircraft would fly circles between 6,000 and 10,000 feet near **Wauchula** in Highlands County, some 50 miles ESE of Tampa Bay, and near Cedar Key or Gainesville in the north central portion of the state. Conceivably, these two aircraft could link the state from Jacksonville and Tallahassee to Miami and Naples. A third aircraft over the panhandle near Apalachicola would tie in the rest of the state.

Basic tests were run using a single aircraft to basically determine the maximum usable range of air to ground link. A Cessna **172** was equipped with a small lantern battery, a Yaesu 5 watt handheld, and a **PacCom** TNC carried in the back seat of the aircraft. For the original test, a quarter wave rubber duck" antenna was strapped to an unused VHF antenna on the belly of the aircraft.

An operator at the keyboard 'of the WB2WPA-5 BBS in Naples established a contact with the aircraft before takeoff (the airport is about 2 miles from the EOC, and the antenna is at 140 feet). A CAP operator in the EOC was to maintain voice contact with the aircraft and CAP HQ on CAP VHF frequencies.

The aircraft departed Naples on a heading of 045 degrees, and was directed to fly to LaBelle in Hendry County, about 50 miles north-northeast of Naples, while climbing to 6,000 feet. At the EOC, an additional 2 meter radio monitored the packet frequency in use, 145.050. The frequency was selected because it was the Naples LAN frequency and local operators were encouraged to access the aircraft. The frequency is also used as a LAN frequency in the Tampa Bay area on the west coast, and Stuart and Daytona Beach on the east coast.

Over the LaBelle VOR the aircraft was full quieting, both on packet and voice. Connects were made and broken repeatedly to be sure that they could be made when needed, covering both coasts and virtually the entire southern half of the state. The aircraft was also used to connect through a landbased node to the Daytona Beach area (Figure 3). During connections, messages were up to and downloaded from the PBBS in the TNC. Heard lists were downloaded to determine how well the aircraft was hearing.

From LaBelle, the aircraft was sent north toward Wauchula, maintaining 6,000 feet. As it continued north, Key West became less and less apparent, but more and more stations were heard in the Lakeland (30 miles east of Tampa) and Daytona Beach areas.

From Wauchula, contacts were made between Naples, Tampa and Daytona with ease, until the aircraft reached its northernmost point in Hardee County (Figure 4). Signals were still usable, but collisions on such a busy frequency were slowing things down.

The aircraft returned to Naples, and continued providing excellent coverage of the southern half of the state, almost to touchdown.

This initial experiment indicated that at 6,000 feet, we could expect good communications from the 140 foot high omni antenna at the EOC to the rubber duck antenna on the plane to about 110420 miles. Some polarization problems were seen as the antenna flexed toward the rear of the aircraft, and plans were then discussed aimed at retrying the experiment at other altitudes, and with a more rigid, permanently mounted antenna.

In March of 1993, the Florida Wing of Civil Air Patrol held its annual Disaster Recovery Exercise (DREX) utilizing several bases around the state, and the state EOC in Tallahassee.

In Naples, it was decided to include some testing and training using the County's new \$125,000 Mobile Command Center, which is equipped with packet using both HF and VHF. Antennas are roof and tower mounted, with power levels of 5 and 40 watts available on HF packet.

CAP frequencies would be used, and two aircraft would be available carrying packet digis, but not nodes, as CAP is currently using digipeater technology instead of transport level nodes. One aircraft would fly from Naples and head north. A second would leave the Tampa Bay area and head up the coast.

Again, voice communications were available for coordination with the aircraft on VHF, as well as HF CAP frequencies for coordination with other CAP bases and Tallahassee. **FEMA's Operation Secure** frequencies were also used direct to Tallahassee and the State EOC.

The equipment on both aircraft was basically the same as in the original test, except that permanently mounted quarter wave rigid belly antennas were installed. This kept the packet antennas away from the CAP and aircraft VHF antennas on top of the cabin.

Because of poor performance and highly irregular connections between Tallahassee and the southern half of the state using the VHF/UHF network, state officials were skeptical at best. As the **exercise** continued, the aircraft, flying at 10,000 feet, moved toward their target areas.

Again, connections were made and broken repeatedly to test "connectability? Heard lists were dumped, and the Naples aircraft was hearing the Tampa aircraft very well. An operator on board confirmed good signals. .

From Naples a connection was requested of the Tampa aircraft TNC, via the Naples aircraft. Even though it was a digied connection, it was suprisingly fast. The heard list did not indicate that the state EOC was being heard. The northern aircraft was contacted via an HF request to its base. **Its** position was northern Hillsborough County at 10,000 feet. A request was sent to move farther north, as the heard list was downloaded repeatedly, looking for Tallahassee.

On HF, contact was maintained with the State EOG, which continued sending connect requests to the northernmost aircraft. Finally, a connect was reported. Both Naples and Tallahassee were connected to the same **airborn** TNC, Tallahassee directly, and Naples via a **one digi** hop!

The mission commander in Naples appeared in the bus, asking if we could send a priority message to Tallahassee. The message **was** created using a text editor in the **onboard** computer in the Command Center. Connections with the aircraft were broken from both ends. Coordinating on HF, the command center requested a connection with Tallahassee via the Naples aircraft and the Tampa aircraft, **now** orbiting near New Port **Richey** in Pasco County...and , **running** a little low on fuel!

The Tampa aircraft was a bit farther 'south than had been hoped, right on the edge of capability of maintaining communications with the State. The connection went through! The first south Florida to Tallahassee packet connection via aircraft **was** made.

The text was sent, **in** formal CAP format. When the STA light went out (finally) in the Command Center, we knew it had **gone** through. A few seconds later came an HF voice confirmation: they HAD the message in Tallahassee!

A second message had been prepared, and the connection was broken, in an attempt to upload the message to the second aircraft's PBBS. It was loaded fairly easily, again digipeating through the first aircraft, which was now also running a bit low on fuel. From Naples, on HF, the Tallahassee station was advised

that the message had been uploaded to the Tampa aircraft **PBBS**, and that we had been told that the aircraft was returning to Tampa.

Sadly, the aircraft had moved too far south and had begun its descent into Tampa by **then**, and Tallahassee was not able to retrieve the message. The Naples plane was ordered home, and the experiment was concluded.

Plans were immediately discussed for a **third** experiment, this time flying amateur radio NET/ROM or **TheNet nodes**, or ROSE switches aboard the aircraft, in order to get TNC to TNC acknowledgement at each step improving throughput. We are also looking at using discrete VHF/UHF frequencies and higher speeds to allow more traffic to pass through the system. Some examples for future tests:

- 1: Fly single frequency nodes at 1200 baud to link north and south Florida on otherwise quiet frequencies.
- 2: Equip the aircraft with 9600 baud or faster **TNCs**.
- 3: Using sophisticated laptop computers, attempt flying full service BBS software, allowing land based BBS hubs to autoforward to aircraft 1, which would then forward to aircraft 2 which would then **downlink** to the north Florida hub BBS.
- 4: Develop cooperative plans between CAP and ARES/RACES to permanently equip at least 1 plane in Naples, Miami, Tampa, Orlando, Gainesville, Jacksonville, Tallahassee and the panhandle with high speed links to the ground and each other, capable of being quickly deployed in a rotation that will keep three aircraft in the air for as long as possible, or on a scheduled basis providing at least interim packet communications using both amateur and CAP frequencies linking emergency operations centers throughout the state.
- 5: Locate and assign packet equipped mobile communications centers for deployment along with amateur radio communications teams into disaster areas in coordination with the Florida ARES/RACES Communications **Assistance** Team Plan adopted in July 1993.
- 6: Attempt to connect the entire state of Florida using 3 aircraft (Figure 5) by flying a third aircraft north and slightly west of Apalachicola in the panhandle. If further linking were needed, say to FEMA in Atlanta, a fourth aircraft in Georgia might well provide that link.

Further testing is planned with these experiments in mind. We would be most interested in hearing from other groups who have done airborne testing, or who would be interested in assisting in our further tests.

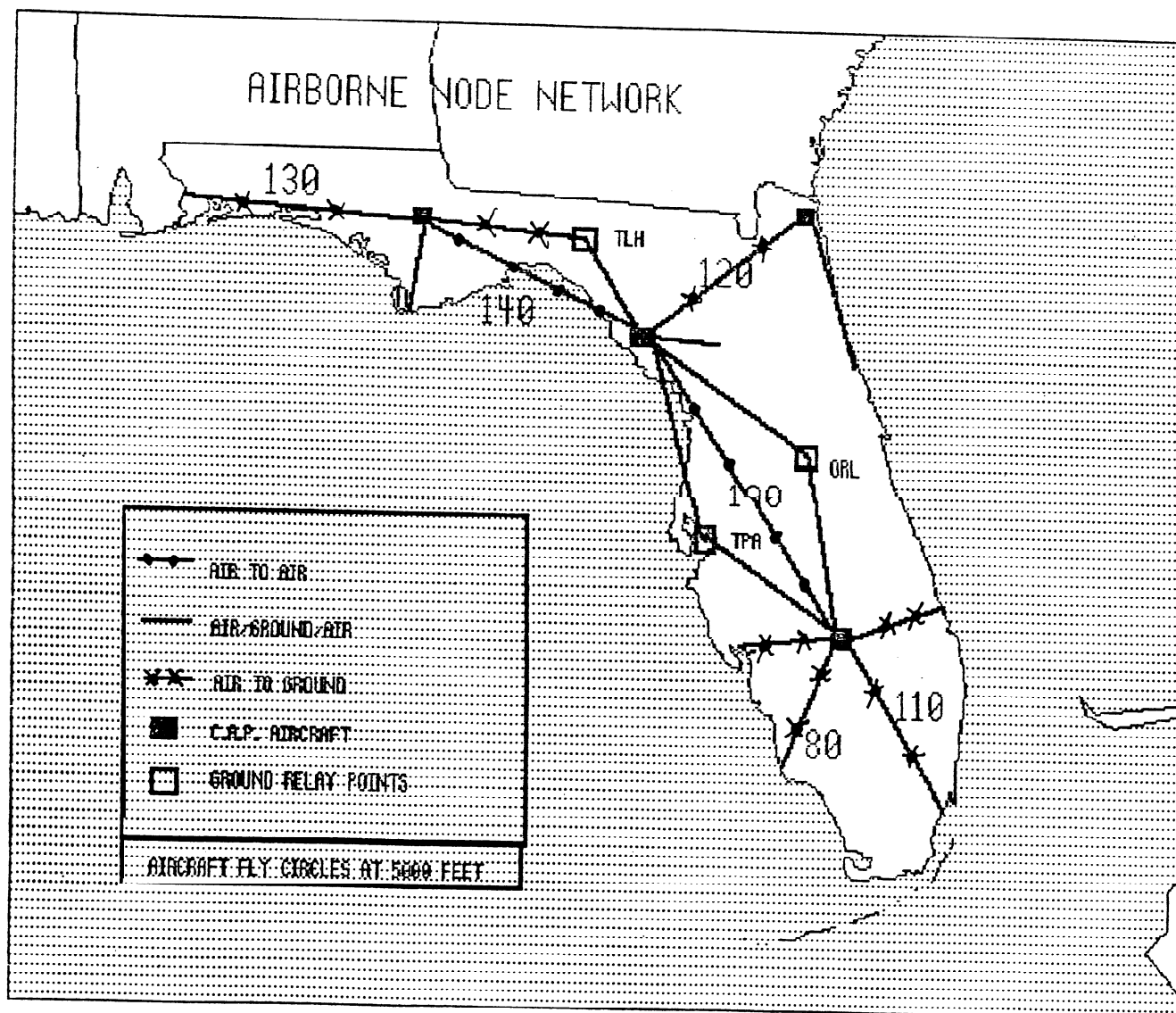


FIGURE 1: Airborne network and distances within Florida

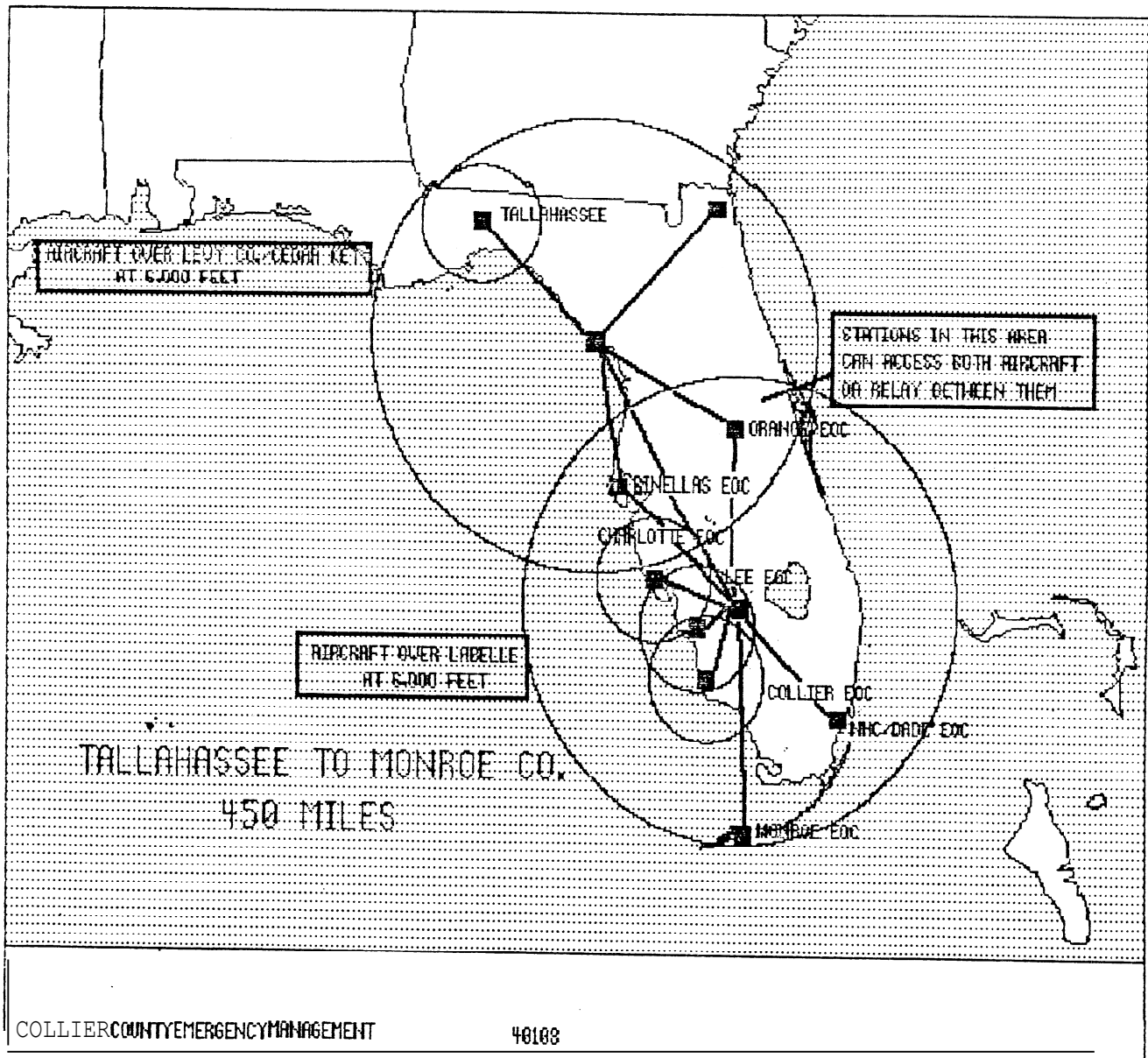


Figure 2: Two aircraft link from South Florida to Tallahassee showing approximate coverage from aircraft (large circles) and through terrestrial links normally used (small circles).

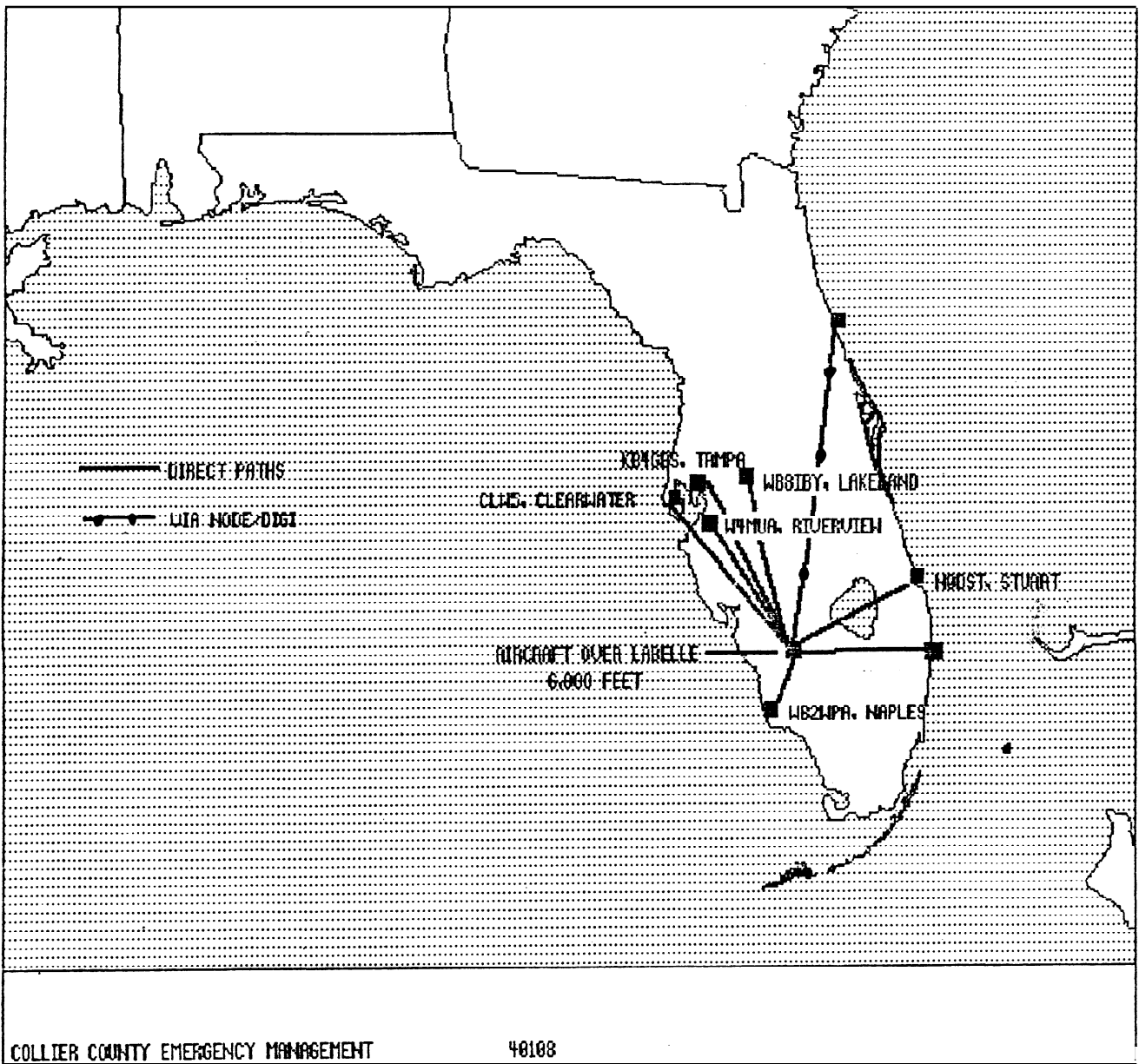


Figure 3: Areas worked via single aircraft located at 6,000 above LaBelle, Hendry County, Florida on 145.050 mHz

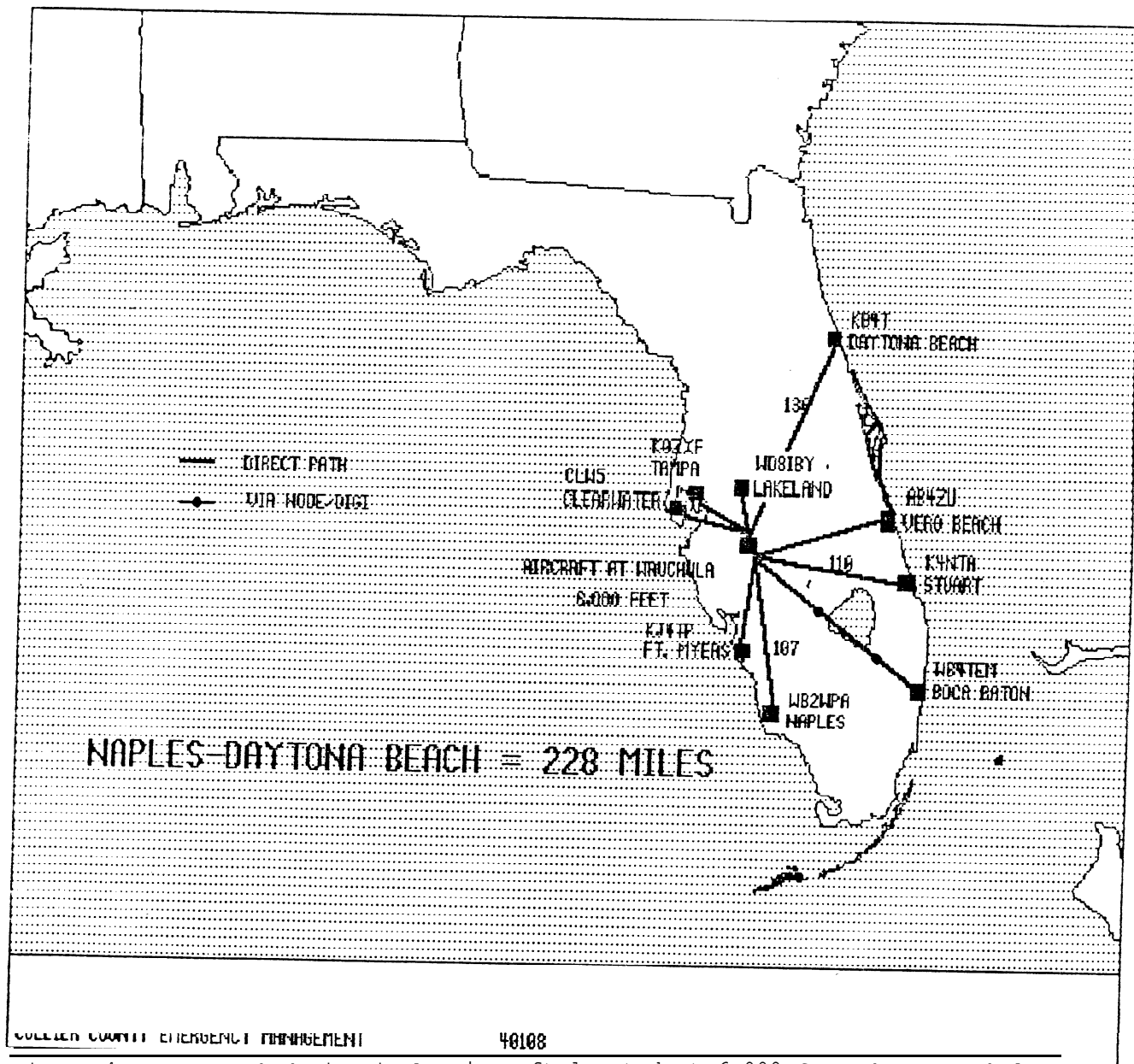


Figure 4: Areas worked via single aircraft located at 6,000 feet above Wauchula, Hardee County, Florida on 145.050 MHz, including 220+ mile path from Naples, Collier County, to Daytona Beach, Volusia County.

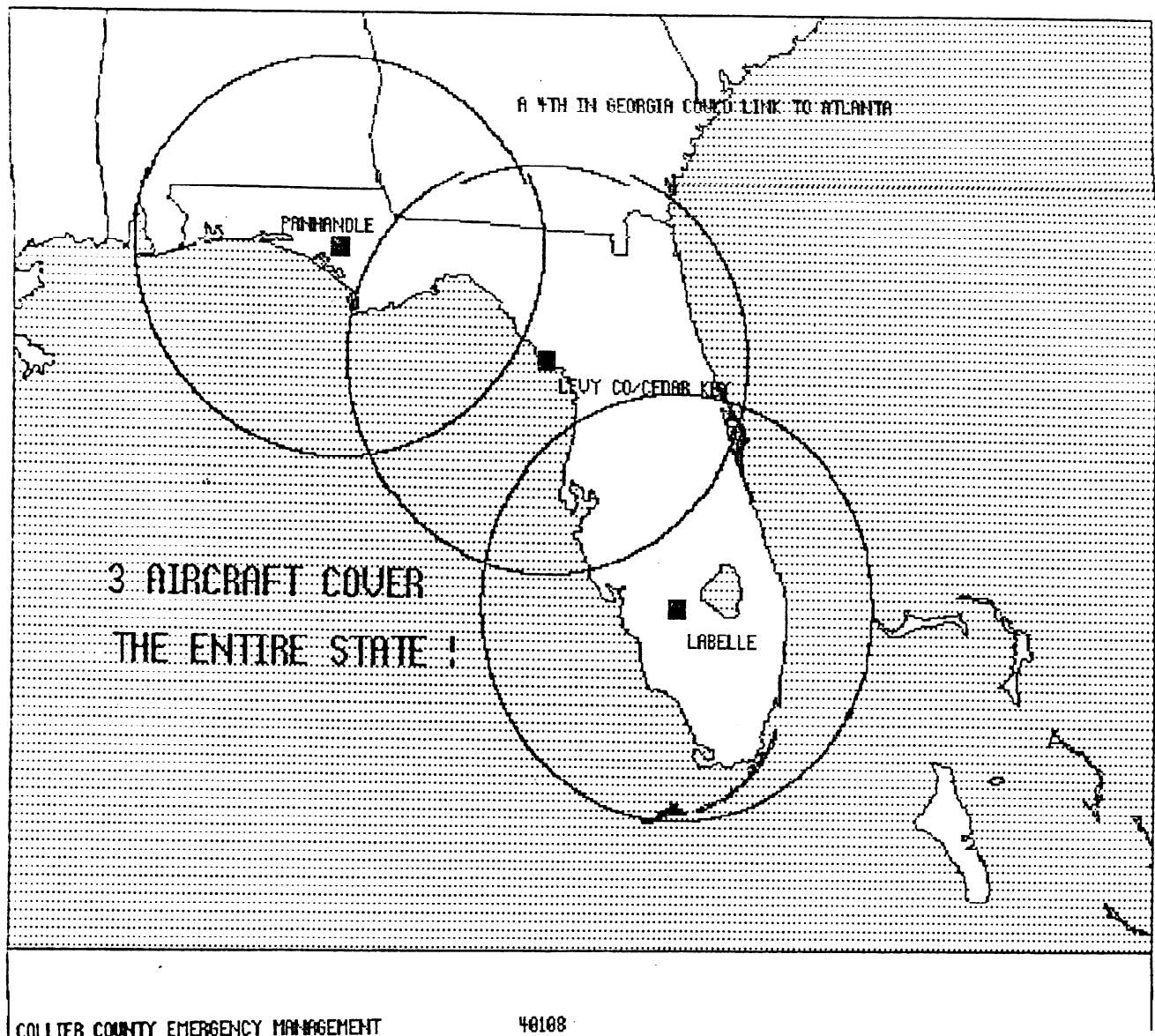


Figure 5: Theoretical three aircraft system, providing full coverage of the state of Florida, plus parts of southern Georgia and southern Alabama, with aircraft at 6,000 feet.

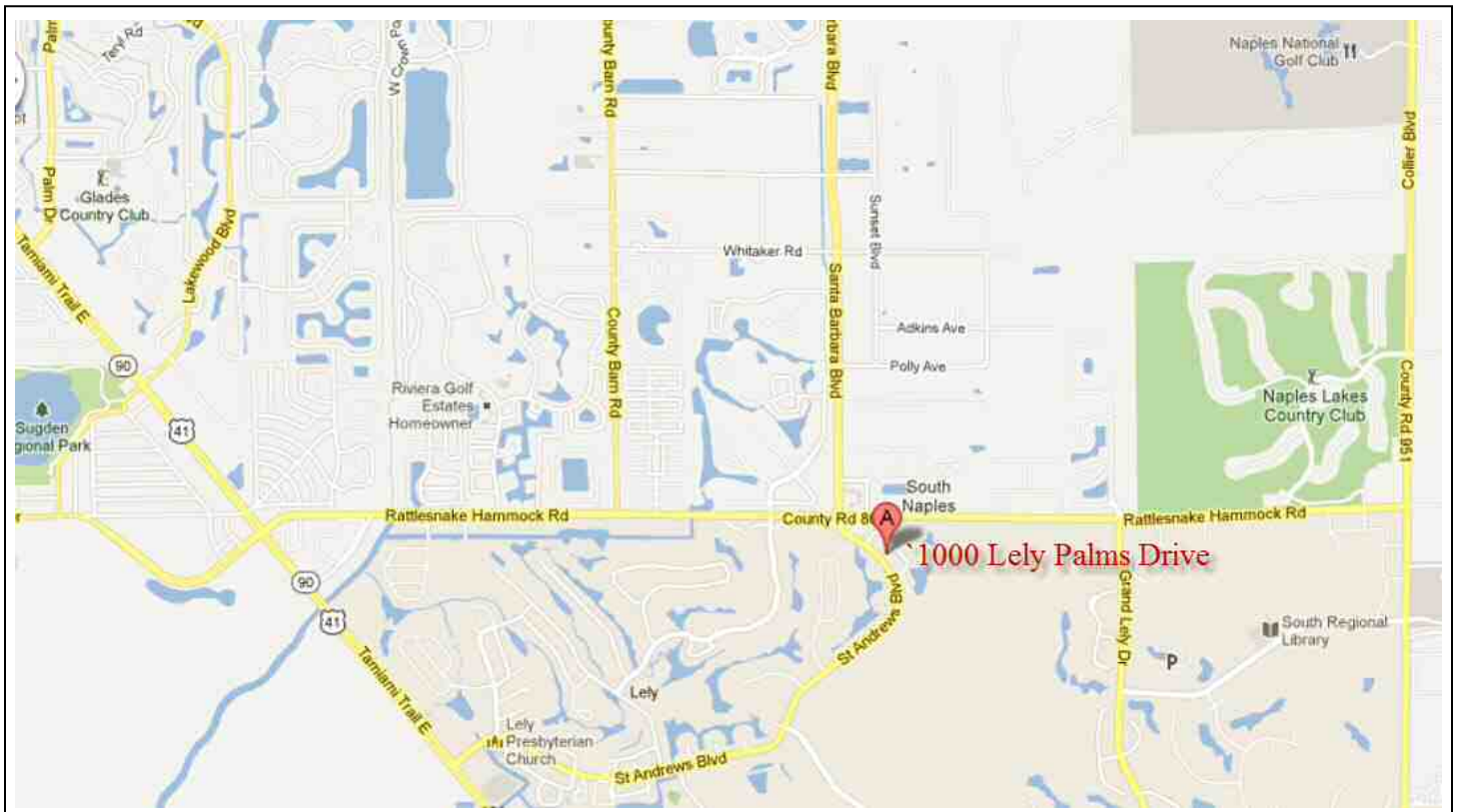


Royal Palm Chapter 152 meets every second Thursday of the month

at the Lely Palms Manor, Next Luncheon Meeting: February 9th at 12:15 pm

1000 Lely Palms Blvd.

Naples, FL 34114



**AMATEUR RADIO ASSOCIATION
OF SOUTHWEST FLORIDA, INC.**

MEMBERSHIP APPLICATION

I hereby petition the officers and members of the AMATEUR RADIO ASSOCIATION OF SOUTHWEST FLORIDA, INC. for membership. I attest that I hold a current FCC issued Amateur Radio License, and that I will follow legal procedures and protocol, and conduct myself in a manner that will further Amateur Radio.

NAME: _____ **CALL:** _____

ADDRESS: _____

CITY: _____ **STATE:** _____ **ZIP:** _____

PHONE: _____ **EMAIL:** _____

LICENSE CLASS: _____ **ARRL MEMBER:** ☐ YES ☐ NO

HAVE YOU EVER PREVIOUSLY BEEN A MEMBER OF ARASWF ☐ NO ☐ YES - Year _____

SPOUSE'S NAME: _____

SPOUSE'S CALL (If Applicable): _____ **SPOUSE'S LICENSE CLASS:** _____

OUT OF AREA ADDRESS (If Applicable): _____

OUT OF AREA PHONE (If Applicable): _____

This Application must be filed prior to the Membership Business Meeting at which time action will be taken. It is not mandatory that the applicant be in attendance.

The Membership Business Meetings are held the fourth Tuesday of every month at 7:00 PM (except June, July, August and December) at the American Red Cross Building at 2610 Northbrooke Plaza Drive, Naples, Florida.

The ARASWF Newsletter is distributed monthly by e-mail prior to the monthly Membership Business Meeting and contains meeting dates, location and other information, and will be sent to the e-mail address indicated on this Application. If you do not have an e-mail address, the please notify us and request that the Newsletter be sent to you via U.S. Mail.

Please mail this Application with a copy of your Amateur Radio License and a check or money order in the amount of \$25.00 (annual membership dues), to the ARASWF at the address below. Paid membership is valid for one calendar year. If a new member's Application is dated after July 1st, the annual membership dues are one-half the annual dues amount, and a check or money order in the amount of \$12.50 should accompany this application.

Please make checks or money orders payable to "Amateur Radio Assn. of Southwest Florida", or to "ARASWF".

**Amateur Radio Assn. of Southwest Florida
P.O. Box 111604
Naples, FL 34108**



Amateur Radio Emergency Service®

ARES® Registration Form

Name:	
Call Sign:	
Mailing Address:	
City, State, ZIP code:	
e-mail address(es):	
Home phone number:	
Work phone number:	
Cell phone number:	
License Class:	

Check bands and modes that you can operate:

MODE	HF	6 meters	2 meters	222 MHz	440 MHz	Others	
SSB							
CW							
FM							
DATA							
PACKET							
Other modes (specify below)							
Mobile Operation							

Can your home station be operated without commercial power? Yes [] No []

Signature _____ Date _____

Contact ARES® and ARRL Section Leaders in your area: www.arrl.org/sections/.

Learn about ARRL-sponsored Amateur Radio Emergency Communications Courses:

www.arrl.org/online-course-catalog

Club Information

Next Meeting Time: January 24th @ 7:00PM

Meeting Location:
American Red Cross
2610 Northbrooke Plaza Drive
Naples, FL

Club Repeaters:

- ARASWF FM - WB2QLP 146.670 MHz (-600 kHz) PL 136.5 HZ
- ARASWF D-Star – AA4PP 145.490 MHz (-600 kHz)/441.5 MHz (5.0kHz)
- ARASWF D-Star – AB4NP 145.270 MHz (-600kHz)
- ARASWF EmComm – K4YHB 147.030 MHz (+600 kHz)
- ARASWF DMR – AB4NP 444.9875 MHz (+5 MHz)

2017 Club Officers:

President: Uli Altvater – AG0X@araswf.org
Vice President: Frank Halas – W4RBW@araswf.org
Treasurer: Larry Kielasa – N4LAK@araswf.org
Secretary: Ken Bills – W9KB@araswf.org
Director: Mark Harms – AC4ZM@araswf.org
Director: Chris Taylor – KM4UJI@araswf.org
Director: Craig Henning - NC2H@araswf.org
Director: Gary Lee – K8YMN@araswf.org
Newsletter Editor: Larry Kielasa – N4LAK@araswf.org
Webmaster: Craig Henning – NC2H@araswf.org

Club Website:

<http://www.araswf.org>

Visit
the



**Amateur Radio Association
of Southwest Florida, Inc.**

Web Site

www.araswf.org