

GARS MOUTH

---

*VOLUME 58 EDITION 3*

*MARCH 2014*

[WWW.GARS.NET](http://WWW.GARS.NET)

*Welcome to the Gainesville Amateur Radio Society's  
Newsletter*

PRESIDENT: PETE WINTERS W4GHP

VICE PRESIDENT: JEFF CAPEHART W4UFL

SECRETARY: SAM ULLMAN K4ZVD

TREASURER: SUSAN TIPTON K9PDL

---

REPEATER TRUSTEE: SHANNON BOAL K4GLM

TECHNICAL DIRECTOR: WALT JOHNSON W4TKE

CHIEF VE: ALLAN WEST WA4JD

BOARD MEMBERS:

NEWSLETTER EDITOR: PHIL ROYCE KE4PWE

DAVID BIRGE WB9UYK

EVENTS AND ACTIVITIES COORDINATOR: NEEDED

SHANNON BOAL K4GLM

WEBMASTER:

JAMES CARR KC4MHH

PHIL ROYCE KE4PWE

ROBERT GUERTIN W1GLV

CAROL CHESNEY KG4FEX

RON SMITH KJ4HBF

EARL SLOAN KI4OXD

---

---

## PRESIDENT'S CORNER

---

As we move along towards the springtime, the club's participation on Sunday February 16<sup>th</sup> in the annual 5 Points of Life Marathon was welcomed by the event organizers. The day started a little chilly, but quickly warmed up to a nice pleasant day. In addition to the Public Service aspects, the event provided an opportunity for the members to operate in a Net Control environment.

At the February General Meeting a motion was passed to proceed towards the disposal of the storage trailer. In that regard, on February 22<sup>nd</sup>, a number of club members participated in a working party organized by Carol Chesney KG4FEX at the club's storage trailer. The purpose of the working party was to collect club assets that need to be stored elsewhere in preparation for the trailer being phased out.

Additionally items were identified that could be sold to metal and wood recycle operations. My heartfelt thanks to those members who willingly volunteered to store various assets belonging to the club. As of this writing I am in negotiations with several salvage firms to effect the disposal of the storage trailer.

On March 8<sup>th</sup>, Shannon Boal K4GLM led a group of us in a work day at the channel 5 repeater site.

Shannon with assistance from Jim Carr KC4MHH used Jim's service monitor to trouble shoot some issues with the repeaters. Debbie Boal, Cheryl Carr, Chris Carr, Ron Smith, and I all participated in surface preparation and painting of the repeater building structure.

As a club, we are participating in the annual "March for Babies" event on Saturday, March 22, 2014.

Volunteers for the event are still needed. The event coordinator is Allan West, WA4JD, please contact

him at [WA4JD@cookie.org](mailto:WA4JD@cookie.org), or (352) 238-2359 to volunteer.

The planning and preparation for the GARS Hamfest on April 26<sup>th</sup>, 2014 is well underway. Volunteers

are needed to help make this event a successful one. Please contact David WB9UYK at

[davidbirge@yahoo.com](mailto:davidbirge@yahoo.com), or myself, Pete W4GHP at [bugmeister13@cox.net](mailto:bugmeister13@cox.net), to volunteer your services.

73,

Pete Winters, W4GHP

---

## TABLE OF CONTENTS

---

Page 1	Executive Staff and Board Members
Page 2	President's Corner, Club Happenings
Page 3	VE, GARS Minutes
Page 4	Minutes Cont.
Page 5	Minutes Cont.
Page 6	Finances, Upcoming Events
Page 7	Key News
Page 8	Six and Up, Shack, What is this?
Page 9,10,11	From Space (A Great Story)
Page 12	Link of Month
Page 13	Credits, Reminders, Trade it or She will

Send edits, comments, articles to [garseditor@gmail.com](mailto:garseditor@gmail.com)

---

## FAMOUS WORDS

---

"You cannot teach a man anything; you can only help him discover it in himself." -Galileo

---

## CLUB HAPPENINGS

---

A few of us when to the Stuart Hamfest last Saturday and found some treasures, met with some old friends and made a weekend of it. Shannon Boal and his wife went with us and had a great time also.

The GARS trailer finally got cleaned out, and some work got attended to at the tower site.

I am working with Shannon and a few others and putting together a timeline of the life of the repeaters at the WRUF tower. And will be taking in my spare time and preventative maintaining the sets of duplexers at the site with Shannon, using one of my sets of duplexers and the temporary to fill in while we bench each set.

There has been some noise on the 820 machine, and I discovered it is either a D-Star or another type of a digital repeater somewhere in South Ga. We will figure it out hopefully before the cold weather goes away.

---

## VE REPORT

---

None this month

---

## GARS MEETING MINUTES

---

GAINESVILLE AMATEUR RADIO SOCIETY, INC.

MINUTES OF A MEETING OF

THE EXECUTIVE BOARD

(BOARD OF DIRECTORS)

February 6, 2014

A meeting of the Executive Board (Board of Directors) of the Gainesville Amateur Radio Society was held on Thursday, February 6, 2014, at the home of David Birge, WB9UYK, 8015 S.W. 51<sup>st</sup> Blvd., Gainesville, Florida. The meeting was called to order by the President, Pete Winters, W4GHP, at 7:00 o'clock PM. The following members of the Executive Board were in attendance in addition to Mr. Winters:

Jeff Capehart, W4UFL  
David Birge, WB9UYK

Ronnie Smith, KJ4HBF  
Sam Ullman, K4ZVD  
Susan Tipton, K9PDL  
Bob Guertin, W1GLV

Not in attendance were Shannon Boal, K4GLM, and Jim Carr, KC4MHH. The Minutes of the meeting of the Executive Board that was held on January 9, 2014, were unanimously approved.

Announcements. The President made the following announcements:

Ed Sills, AF4VC, is in the hospital recovering from heart surgery.

The President announced that it would be helpful to have the members pay their annual dues earlier in the year. The President asked the members of the Executive Board to urge the members to pay their dues.

Equipment Insurance. The President led a discussion of whether GARS should purchase a replacement insurance policy from the ARRL covering its equipment. The cost would be between \$250 and \$300 per year and would have a \$50 deductible. The President said that he and Bob

Guertin would look into the policy and make a recommendation.

Vice President's Report. Jeff Capehart reported that the speaker at the February general membership meeting will be Bill Dion, the Interim Emergency Services Director of the Red Cross. Speakers and topics for future meetings include an update on Swampsat.

Jeff reminded the members of the Executive Board that GARS will be providing communications services at the Five Points of Life Run on February 16<sup>th</sup> and the March for Babies Run and Walk on March 22<sup>nd</sup>.

Jeff announced that GARS will work with the Gator Amateur Radio Club on a Tech Day on February 15<sup>th</sup>. There will be instruction preparatory to the Technician Exam and administering of the exam itself. The cost is \$15 for taking the exam.

Jeff also announced that GARS will work the Gator Amateur Radio Club to host the Scouts on March 1<sup>st</sup>. The event will include instruction leading to the Radio Merit Badge. The Scouts will then be given a tour of the W4DFU station. Each Scout who is participating will need a fully signed parental permission form.

COMMITTEE REPORTS. The President called for Committee Reports.

There was not a Repeater report.

Phil Royce, KE4PWE, the webmaster and GARS Mouth Editor, was not in attendance, but had asked that additional articles be submitted for the web site and for GARS Mouth. There will be an article on WINTER FIELD DAY, which was held on January 25, 2014 at Kanahapa Veterans' Park.

OLD BUSINESS. The President called for Old Business.

Carol Chesney, KG4FEX, will chair a work day on February 22<sup>nd</sup> to work on the storage trailer. The President announced that he is looking into GARS' giving the trailer to charity, consistent with prior discussions.

The GARS Hamfest is scheduled for April 26, 2014, from 0700 until 1330. The President reported that plans are progressing satisfactorily. GARS will be paying \$150.00 for use of the Family Life Center all day. The admission will be \$5.00 per person, including sellers. Susan Tipton suggested that GARS ask for donations in addition to the \$5.00 admission charge. Discussion was held of operating a station from the Hamfest location, selling refreshments, and having a testing session. No decision was made on those subjects.

The President announced that Shannon Boal is organizing a work project for the repeater. No date has been set as yet.

**NEW BUSINESS.** The President called for New Business.

The President announced that GARS would be undertaking programs intended to expand its current membership. Examples of programs would include holding a testing session and then giving new hams a membership application and a package that would include information about GARS. Each new ham would also be given one year free membership as an "affiliate member".

**FINAL ANNOUNCEMENTS.** The next meeting of the Executive Board will be on Thursday, March 6, 2014, at 7:00 o'clock PM at the home of David Birge, 8015 S.W. 51<sup>st</sup> Blvd., Gainesville, Florida 32608 (ph. 352-379-0239).

There being no further business to come before the meeting, the same was, on motion duly made, seconded and unanimously adopted, adjourned.

---

Samuel C. Ullman, Secretary

GAINESVILLE AMATEUR RADIO SOCIETY, INC.

MINUTES OF A MEETING OF

THE GENERAL MEMBERSHIP

FEBRUARY 19, 2014

A meeting of the General Membership of the Gainesville Amateur Radio Society was held on Wednesday, February 19, 2014 at the AvMed Building, 4300 N> W. 89thBlvd, Gainesville, Florida. The meeting was called to order by the President, Pete Winters, W4GHP at 6:30 o'clock P.M.

The President led the Pledge of Allegiance to the flag and the introduction of the members.

The president opened the Sickness and Health Report of the meeting by welcoming back Jim Carr KC4MHH who has been suffering for several weeks with a cold virus type of illness. He also gave an update on Ed Sills Af4VC medical condition by announcing that Ed will have heart surgery on February 25, 2014 at North Florida Regional Medical Center. Ed expects to be able to join us at the March 2014 General Meeting.

The president asked for the minutes of the January 2014 General Meeting and the February 2014 Executive Board Meeting to be accepted as presented in the GarsMouth. At this point it was indicated by Gars Mouth Editor that he (to his knowledge) had not received via e-mail. Thus being said, the motion to accept the minutes was withdrawn. The president and the GarsMouth editor will check with the Secretary to ensure that the proper e-mail address for forwarding is being used.

The Treasurer's Reports for the months of December 2013, and January 2014 were presented by the treasurer Susan Tipton K9PDL. It was noted that expenses for the Christmas

Banquet was well within expectations, and the "donation" bucket was a success in helping to this end. The report for January 2014 was presented and showed no pattern out of line with the normal expected expenses. A motion was made (Gary Hunt KF4QEX) and seconded (Carol Chesney KG4FEX), and unanimously adopted to accept the treasurer's reports as presented.

The GarsMouth editor/webmaster presented his reports. The editor mention to the members that the GarsMouth has been recreated from scratch as the previous template was "scrambled" and could not be recovered. He mentioned that the lines of Morse code throughout the January 2014 edition will continue. Those who solve the "decoder ring" will win a prize. One prize was duly noted to be awarded to Jeff W4UFL for his solution to the puzzle which he posted via video on the rooms video monitor. He further mentioned that he website is up and running, but still undergoing further modification.

The Repeater Trustee's report was given. It was reported that 146.820 and 146.985 repeaters are working; Shannon hopes to have the 220 Repeater up and running for test soon. Repeater Trustee mentioned that he needs a "work day" at the repeater site similar to last one held in November 2013. He has suggested Sat, March 8th, 2014, more information to be published via e-mail as to particulars.

Vice-President Jeff Capehart presented the ARES/RACES reports. Conversations with the American Red Cross have begun with ARES/RAQCES concerning Red Cross installing a NBI antenna. Jeff thanked the area hams that participated in the 5 Points of Life Marathon as communicators. The event went very well per Jeff. Mentioned that the next ARES Meeting will be held on Monday, March 17th.

#### OLD BUSINESS:

Preparations for GARS HamFest on April 26th, 2014 are progressing. Phil KE4PWE mentioned that approximately 250 "business cards" (printed free by Vista Print) were passed out at the Orlando HamCation advertising GARS HamFest. To clarify a question from a member, a ticket costs \$5.00 which includes admission for one person and "tailgate" space. It does not include tables or chairs, please bring your own. The club does have the use of the Family Life Center (Social Hall) at the church for restroom facilities, and in case of inclement weather.

Preparations are underway to sell the club storage trailer for salvage value. The president has made phone calls, and has received an offer of \$500.00 for the trailer. Carol Chesney has done an outstanding job in determining what the club needs to save and what needs to be disposed of within the trailer. She (Carol) has a work day scheduled for Sat, February 22nd to conduct a more extensive inventory, and decide what club members can store for the club. The storage issue of club material is deemed a "volunteer" issue by the club to the membership. In discussion, it was

mentioned that we may be able to salvage the table legs and chairs to an independent source, ass the yard that has given a price for the trailer will not pay money for any materials left in the trailer. The president and Carol will work together to attempt to find a vendor to salvage the contents.

#### NEW BUSINESS:

Carol Chesney KG4FEX spoke about a possible project to help repair "beeping" Easter eggs. She has information about an "Easter Egg Hunt for the Blind". The sponsor of this project uses plastic Easter eggs that have a mini transmitter in them for the blind children to find the egg. We may be asked to help repair the eggs on site. She will bring back more information.

The "Gator Club" tower project is underway. This project involves removal, repair/rehab, and re-installation of their towers in conjunction with the roof repairs to the UF Dental Building. Jeff W4UFL may issue calls for additional help from hams outside of their club during this project. Any help would be appreciated; Jeff will publish needs in advance to keep all informed.

#### PROGRAM:

The February program was presented by Mr. John Hampton, Disaster Services Director of the Gainesville office of the American Red Cross. The program was directed at telling the club what services the Red Cross provided was disaster emergencies and asking for a enhanced working relationship with GARS, which by all concerned was mentioned to be "strained and rocky" in the past. The program was positive by Mr. Hampton, and will receive by the club.

The President announced that the next meeting of the Executive Board would be held on Thursday march 6th, at 7:00 o'clock PM at the home of David Birge, WB9UYK, 8015 SW 51st blvd, Gainesville, FL 32608 (ph 352-379-0239).

There being no further business to come before the meeting, the same was, on motion duly made, seconded and unanimously adopted, adjourned at 8:10 P.M.

---

Janet H. Sloan, GARS Member

---

## GARS FINANCES

---

Your membership dues are due as of January 1, and you will be out of membership if you lapse after March 31, so please renew and support your club.

\$\$\$

To be able to provide activities such as the club picnic, Christmas party, the club "repeaters", food and materials for Field Day, Hamfest, etc. it takes \$\$\$\$. Support GARS by paying your dues, the dues are due January 1 of every year, and so see Susan Tipton at the January GARS general meeting before the meeting starts. Even give a little more for the activities that make GARS and active association. A small note that even the donut money at the meetings, supports the GARS, so have a cup and a bit of sugar and spice and some camaraderie and top off that donation cup.

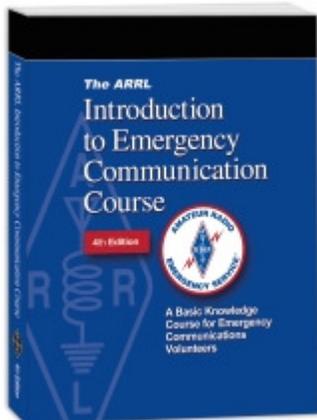
GARS financial report will be provided at the general meeting and will not be published in the GARS Mouth.

---

## UPCOMING EVENTS

---

**March for Babies will be on March 22 at dawn so mark your calendars and contact Pete Winters or Allan West to volunteer for a great cause.**



### EMCOMM COURSE MARCH 29 @ 9 to Noon.

I will be facilitating a 3-hour review of material 9am-noon and then Allan will be doing the certification examination (CE) after lunch in the 1-3pm time frame. Both will be at the EOC on Saturday March 29 and are open to any hams interested in getting certified in ECOMM Basic for emergency communications. The ARRL requires exam takers to be licensed hams.

Thanks!  
Jeff, W4UFL

## Hamfests as listed in ARRL

---

04/12/2014 | [CY HARRIS MEMORIAL FREE FLEA](#)

---

**Location:** Oakland Park, FL  
**Type:** ARRL Hamfest  
**Sponsor:** Broward Amateur Radio Club  
**Website:** <http://browardarc.org>

---

04/12/2014 | [SOUTHEAST FLORIDA EMCOMM SYMPOSIUM](#)

---

**Location:** Boca Raton, FL  
**Type:** ARRL Hamfest  
**Sponsor:** Palm Beach County ARES & Palm Beach County Citizens Corps  
**Website:** <http://www.sflcommunications.org>  
[Learn More](#)

---

04/19/2014 | [FLAMINGO NET / UNIVERSITY OF MIAMI ARC FREE FLEA](#)

---

**Location:** Coral Gables, FL  
**Type:** ARRL Hamfest  
**Sponsor:** Flamingo Net ARC / University of Miami ARC  
**Website:** <http://www.flamingonet.8m.net>

---

04/19/2014 | [TARCFEST XXXI](#)

---

**Location:** Tampa, FL  
**Type:** ARRL Hamfest  
**Sponsor:** Tampa Amateur Radio Club  
**Website:** <http://www.hamclub.org>

---

04/26/2014 | [GARS 2014 HAMFEST AND TAILGATE EVENT](#)

---

**Location:** Waldo, FL  
**Type:** ARRL Hamfest  
**Sponsor:** Gainesville Amateur Radio Society  
**Website:** <http://www.gars.net>

---

05/24/2014 | [WORMFEST 2014](#)

---

**Location:** Pinellas Park, FL  
**Type:** ARRL Hamfest  
**Sponsor:** The Glorious Society of the Wormhole  
**Website:** <http://www.TheWormholeSociety.org>

---

07/11/2014 | [MILTON ARC'S 19TH ANNUAL HAMFEST](#)

---

**Location:** Milton, FL  
**Type:** ARRL Hamfest

**Sponsor:** Milton Amateur Radio Club

**Website:** <http://www.miltonarc.org>

08/23/2014 | [TARCFEST XXXII](#)

**Location:** Tampa, FL

**Type:** ARRL Hamfest

**Sponsor:** Tampa Amateur Radio Club

**Website:** <http://www.hamclub.org>

10/04/2014 | [OPARC HAMFEST TAILGATE](#)

**Location:** Jacksonville, FL

**Type:** ARRL Hamfest

**Sponsor:** Orange Park Amateur Radio Club

**Website:** <http://oparc.net/hamfest>

10/10/2014 | [FLORIDA STATE CONVENTION \(MELBOURNE HAMFEST\)](#)

**Location:** Melbourne, FL

**Type:** ARRL Convention

**Sponsor:** Platinum Coast Amateur Radio Society

**Website:** <http://www.pcars.org>

11/08/2014 | [SPARCFEST](#)

**Location:** Pinellas Park, FL

**Type:** ARRL Hamfest

**Sponsor:** St. Petersburg Amateur Radio Club

**Website:** <http://www.sparc-club.org>

11/15/2014 | [FREE FLEA](#)

**Location:** Coral Gables, FL

**Type:** ARRL Hamfest

**Sponsor:** Flamingo Net ARC / University of Miami ARC

**Website:** <http://www.flamingonet.8m.net>

12/12/2014 | [WEST CENTRAL FLORIDA SECTION CONVENTION \(TAMPA BAY HAMFEST\)](#)

**Location:** Plant City, FL

**Type:** ARRL Convention

**Sponsor:** Florida Gulf Coast Amateur Radio Council

**Website:** <http://tampabayhamfest.org>

to become an Amateur Radio operator, check out this website link. <http://www.arrl.org/what-is-ham-radio>

## KEY NEWS

World's most powerful lasers to beam Morse code from Salford Quays

Laser beams mounted on the roof of the Lowry will illuminate the night sky above Salford Quays on Friday in a week-long exhibition in memory of all the men and women who served in the First and Second World War and honouring Second World War code-breaker Alan Turing.

The majestic show, entitled Thank You, was created by curator Craig Morrison, who specialises in digital art. The lights will say thank you to Turing in Morse Code, shooting beams two miles into the sky.

According to Morrison, the Quays are the perfect location for the display. "Unlike a lot of other cities, everyone in Manchester seems to know about Turing. The city really adopted him as one of their own.

"I wanted to articulate Turing's epitaph about wondrous lights and I think the display does that nicely while tying in with his life story."

Born in 1912, Turing was a mathematician and computer scientist who played a vital role at Bletchley Park, Britain's code-breaking centre during the war.

He broke the enigma code, a complex system of communications used by the Germans, and also wrote a renowned theoretical paper in 1934, which paved the way for search engines such as Google.

His ideas were decades ahead of his time but instead of appreciation, Turing was arrested and prosecuted for homosexuality in 1952, when it was still a criminal offence.

He died two years later of cyanide poisoning, aged 41, in what an inquest ruled a suicide.

"He was an amazing figure and a genius who laid the foundations for modern computing but unfortunately his death often overshadows his life," added Morrison. "I wanted to bring attention to what he achieved and lasers seemed a fitting way. I hope anyone who goes down to the Quays will look up at the display and spare a thought for Turing."

**Morrison's exhibition will be a star attraction for Quays Culture, who run festivals in the city promoting art.**

**Starting Friday 21 March, the lights will switch on every night for a week from 6.30pm - 11pm.**



### ARE YOU SIX AND UP?

Realtime Propagation mapping website

<http://www.dxmaps.com/spots/map.php?Frec=50>

### SHACK OF THE MONTH



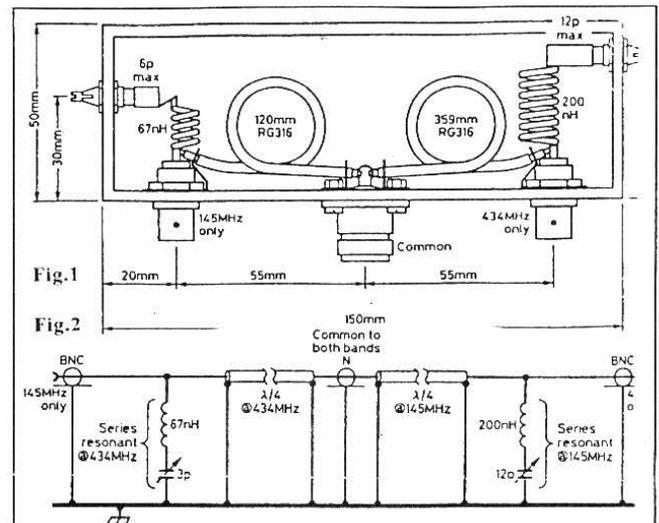
Hi, My name is Steve Burnham and this is my ham radio shack and my call is KC5TJT.

### SPACE WEATHER

#### WHAT IS THIS?

You might just make this item. More of these schematics will be on GARS website under the Technical Resources webpage.

2meter and 440 duplexer filter for dual band antenna from my Russian Friend YO5OFH. He has a lot of great ideas and plans on his site.



[http://www.cqham.ru/projects/hamradio\\_projects.htm](http://www.cqham.ru/projects/hamradio_projects.htm)

### CLUB HAPPENINGS CONT.

I was unable to attend the general meeting so I do not know what the meeting was about. Next month we will have an update on the activities of the meeting.

From Pete Winters and David Birge about the SPARS event.

SPAR Winter Field Day (modified)

By Pete Winters W4GHP and David Birge WB9UYK

January 25, 2014, dawned a somewhat chilly morning as members of GARS assembled at the

Kanapaha Veterans Park to participate in Winter Field Day. This the first time GARS participated in the Winter Field Day. The event was sponsored by SPAR (Society for the Preservation of Amateur Radio).

A survey of the park facilities was conducted and it was determined that operations would be conducted

from a large picnic shelter at the north side of the park. Starting at 0930, Shannon Boal

K4GLM, as the event chairman directed the setting up of wire antennas for the 10 and 15 meter bands.

The 40 meter band antenna, which consisted of electrified "livestock" fence wire was strung between two trees.

Ed Pertiore KE6HNN, set up a 2 meter station with a J pole antenna as the GOTA station.

Several members of another organization had shown interest in obtaining their Amateur Radio licenses and the event gave them the opportunity to experience "hands on" radio. Susan Halbert, KG4VWI assisted Ed in the operation of the GOTA station.

Shannon K4GLM, also provided excellent technical skills in identifying and solving several equipment "glitches" that occurred during the days operations. Keeping with the view that "Field Day" is an emergency operational event, all equipment was powered by several deep cycle 12 volt batteries.

David Birge, WB9UYK used his culinary skills and provided all who attended a lunch of burgers and hot dogs cooked to perfection. He even found a little time to operate on 40 meters.

Numerous members of GARS and GARC (Gator Amateur Radio Club) made contacts throughout the United States, and the Canadian Provinces of Alberta and Quebec. 16 members of GARS and 5 members of GARC participated in support of the event. A good time was had by all.

This event was a perfect example of the cooperation, problem solving, operating skills and general "fun" exemplified by ham radio operators. If you missed the event, it was your loss. We look forward to seeing you at the 2015 *expanded participation* "Winter Field Day".

---

### FROM SPACE

---

More than 30 years ago, Robert Farquhar stole a spacecraft.

Now he's trying to give it back.

The green satellite, covered with solar panels, is hurtling back toward the general vicinity of Earth, after nearly three decades of traveling in a large, looping orbit around the sun.

If Farquhar, a former mission design specialist for NASA, gets his way, the agency will command the spacecraft to fire its thrusters, veer close to the moon, and slip back into the spot where it was intended to be when it was launched in 1978 —

and where it was when Farquhar and his accomplices "borrowed" it.

Whatever name it sailed under — International Sun-Earth Explorer 3, and International Cometary Explorer, among others — this spacecraft has scored a number of firsts over the years, including the first comet flyby.

Back in the 1980s, space agencies were racing to . But NASA wasn't going — officials said a comet mission was too expensive. That did not sit well with Farquhar, who had dreamed of achieving the first comet encounter ever.

So he figured out how to divert an existing satellite, called the (ISEE-3), that was stationed between the Earth and the sun in an innovative that he had pioneered.

Farquhar came up with a complicated trajectory that would let this spacecraft intercept a different comet called in September of 1985, months before the armada of other space probes would arrive at Halley's.

"We beat all the other countries of the world," recalls Farquhar. "The European Space Agency. The Russians. The Japanese."

President Reagan even sent him a congratulatory letter. But some of the scientists who'd been using ISEE-3 to study things like solar wind were not amused by the comet caper.

"They thought that — it was in the newspapers, even — that we stole their spacecraft," says Farquhar. "We didn't steal it; we just borrowed it for a while! That's what I tried to tell them. "After all, he notes, the spacecraft was set on a course that would eventually bring it back.

"OK, so we took it away in 1983 and you get it back in 2014. How many years is that?" says Farquhar, quickly calculating. "Oh, that's about 31 years."

Farquhar is now 81 years old. He's been called the master of getting to places. His genius is inventing esoteric flight plans that take advantage of gravitational boosts from the moon and close flybys of Earth to send space probes zipping around the solar system in surprising ways.

He's so adept at calculating these exotic trajectories that often, just for fun, he's made sure that key mission events fall on birthdays or anniversaries.

The exploits of ISEE-3 were the first ones to really show off what Farquhar could do. "Certainly all the people in the space business know that that's my spacecraft. It's very personal with me," he says.

His makes it clear how personal. For example, Farquhar writes that when he was hospitalized after a heart attack, the spacecraft suffered a battery failure — making him believe they shared a "supernatural connection."

"It's my baby," says Farquhar. "It's something I worked on for a long time and I had to sell it to NASA, and sell it to a lot of people."

What Farquhar is selling now is the idea of waking up this old satellite and doing what he promised.



There's a short window in the next few months, before August, when ISEE-3 could be commanded to slow down and follow a flight path that would return it to the spot where it was stationed before it went off chasing comets.

"It would not just be a curiosity. It would actually be a useful scientific tool," says , director of the Laboratory for Atmospheric and Space Physics at the University of Colorado.

These days, other satellites monitor space between the Earth and the sun, says Baker. But he believes ISEE-3 could provide additional measurements that would be valuable.

"It's not often that something that you've sent off supposedly into oblivion sort of comes back to you," says Baker, who worked with data from ISEE-3 when he was younger. "It really, to me, is a fascinating thing that we can even dream of reassembling the puzzle here and put it back the way, sort of, it was — before Bob stole the spacecraft."

But waking up an old spacecraft, as though it were Rip Van Winkle, is not easy.

"No other spacecraft has been what you might call asleep for such a long period of time," says Edward Smith, one of the scientists who worked on the mission at NASA's Jet Propulsion Laboratory in Pasadena, Calif. "I'll believe it when I see it, but it's an exciting opportunity and I'm taking it seriously."

This is the sequence that took the satellite from its solar mission to its encounters with comets Giacobini-Zinner and Halley.

This is the sequence that took the satellite from its solar mission to its encounters with comets Giacobini-Zinner and Halley.

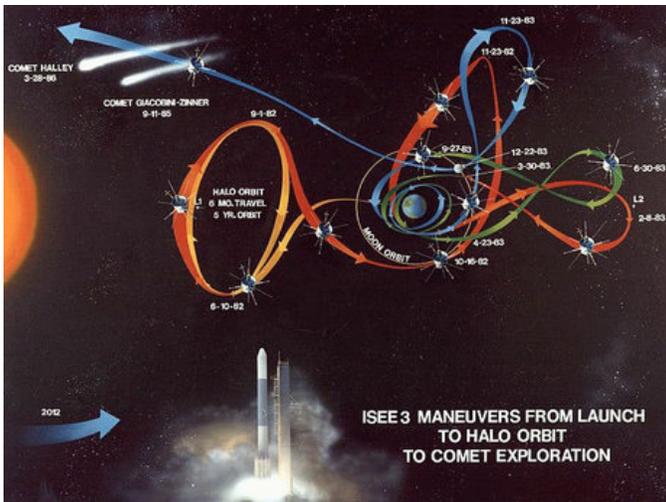
NASA/GSFC

People have been scrambling to see what's possible. They've had to dive into archives and pull out old documents to figure out things like, what language does this machine even speak?

Not everyone who used to work on ISEE-3 is still around.

James Green is now director of the planetary science division at NASA headquarters. When he was in his 30s, he set up a state-of-the-art computer network to help researchers quickly get their data during the spacecraft's comet mission. He recently sat in his office, reviewing a list of the spacecraft's science instruments and the researchers who were in charge of them, way back when.

"Keith Ogilvie's here, I'm sure he's retired. ... Smith is retired. ... Jean-Louis Steinberg, I believe he's retired," says Green, running down the list. "Bonnard Teegarden — he's retired many years ago."



Another problem is that some of the old equipment needed to talk to the spacecraft is just ... gone. NASA got rid of it when systems were modernized, says Green, who explains that "deep space communication has changed radically over the last 25 years."

Three PhoneSats, like the one seen here during a high-altitude balloon test, were launched into space on Sunday. The slightly modified cellphone satellites cost a few thousand dollars in parts.

But it looks like an 18-meter satellite dish at the Johns Hopkins Applied Physics Laboratory still has the right hardware. "And so NASA has given them the approval to be able to try that out," Green says.

Workers there are trying to see how well they can communicate with the spacecraft and assess its condition. This is still a kind of unofficial effort, however, because NASA managers haven't made any firm commitment to this spacecraft — despite Farquhar's relentless lobbying.

"You know, Bob Farquhar is a man of his word. If he said he would do everything he could — because he's borrowed the spacecraft — to put it back, that's what he's going to try to do," Green says.

During a 2010 symposium commemorating a quarter-century of comet discoveries, Farquhar (left) swapped stories with James L. Green, NASA's director of planetary science.

During a 2010 symposium commemorating a quarter-century of comet discoveries, Farquhar (left) swapped stories with James L. Green, NASA's director of planetary science.

He says Farquhar is a legendary figure around NASA. "We owe a lot to Bob's creativeness to get our spacecraft in locations that we want them," he says. "And so from that

perspective he's really a neat guy, really important in our field."



Robert Farquhar, his daughter, and wife 1978.

Meanwhile, Farquhar isn't optimistic that this particular spacecraft will end up where he wants it.

"Well, I think the chances are, oh, 50-50," he says.

When he recently sat down at home to talk about his quest, he was wearing plaid flannel pajamas and a robe because he wasn't feeling well. Still, he spoke for nearly two hours.

"It's the most cost-effective spacecraft we ever had and I'd like to make it even more cost-effective. It can do more missions," says Farquhar.

But only if a command is sent soon, by late May or early June. This is his last chance.

If ISEE-3's path doesn't change, it will fly by the Earth and the moon in August. David Dunham of KinetX Aerospace, Inc., one of Farquhar's long-time collaborators, says the encounter will change its orbit. The spacecraft will swing back toward Earth again in about 15 years, but it won't be close enough to recapture.

"If we miss this time, then it just would be too far from the Earth," says Dunham. "I haven't looked — maybe sometime two centuries from now it might come close enough to the Earth again."

But at that point, Dunham says, who knows if the spacecraft would still be alive.

Paul E. Alers/NASA and thanks to NPR for reporting this.

---

### WHAT'S THE SECRET CODE, DO I NEED A DECODING RING?

---

I am pleased to announce that Jeff Capehart W4UFL and Shannon Boal K4GLM decoded the January clues, and Van decoded February's clues.

**This month we will not have one, but stay tuned to April, for April first means something in coding.**

From the early 40s to Y2K there were radio and television shows that provided clues and puzzles to resolve, some of them included badges like Capt. Midnight and Special



Decoder Rings like in Jonny Quest from PF Flyers.

So there are all these C.W. messages in the whole newsletter and I'm sure you all are asking what does this all mean. Well to keep your interest in the entire newsletter, there will be a message spaced out throughout the paper for you to put together. Rules: If you put together the message correctly, you will receive a PL259, if you put together the message and tell me what book, yes I said book that the message is in by name, date, chapter and page(You must include all four), you will receive an item, parts, or even a copy of the book that will represent the topic of interest. This will only happen every quarter, and you only can win once a year, so that everyone has a chance to win. So happy decoding. Email [garseditor@gmail.com](mailto:garseditor@gmail.com) the answer to win, or present to the President of GARS incase I'm not present. KE4PWE

---

### LET ME CHECK MY CALENDER

---

Please check the GARS.net website for updates.

March for Babies will be on March 22 at dawn so mark your calendars and contact Pete Winters or Allen West to volunteer for a great cause.

---

### DID YOU KNOW

---

GARS is on two tower sites, and boy those antennas are up there. I visited the site during some installation work for the county and took a few photos, if you look close there is a tower climber above the second microwave.



WRUF



TV 5

---

### LINK'S OF THE MONTH

---

Great Radio Shows

<http://www.olderadioworld.com/>

Have you visited this site yet? DIY is the new term for what we have been doing for decades but it is still a great site.

<http://www.instructables.com>

<http://www.solarham.net/>

---

### TECHNICAL CORNER

---

Very cute robot, but takes some time and imagination to do it.

<http://www.instructables.com/id/Arduino-V-Twin-Flux-Capacitor/>

---

### TRADE IT OR SHE WILL TRADE YOU

---

If you have anything that you would like to sell, trade, donate or give away, email [garseditor@gmail.com](mailto:garseditor@gmail.com) and we will put the item in here. Please understand that this will be restricted to only Amateur Radio related items only, no property, vehicles or other large items that would have radio attached, just use common sense.

This item belongs to KI4CVI, Everett Scroggie Jr. He license expired in Nov '13, and due to age and health issues he does not want to renew his license.

Everett's e-mail is [scroggie36@fastmail.fm](mailto:scroggie36@fastmail.fm), Everett prefers that one contact him at the e-mail address to discuss sale, etc. Yeasu FT-5100 with Base Antenna \$150.00 10 years old



---

### CREDITS

---

ARRL, Instructables, NASA, NPR, Time Human

DXMAPS, CSABA, And the Manchester Evening News

---

### REMINDERS

---

Don't forget the GARS Hamfest

Gainesville Amateur Radio Society every year puts on a Hamfest and a Tailgate Event and this year will be no different. We use to call it the poorman's hamfest because it was inexpensive and you had a lot of fun doing it. We are bringing that back. \$5.00 is all you need to be either inside the building or outside tailgating. Bring your own tables and chairs, there might be some provided but bring your own just in-case. Food and drinks are extra. The event starts at 7AM and ends around 1:30PM.

**Volunteers needed**, Contact Shannon Boal or Pete Winters.

14370 Kennard St.(SR-24), Waldo, FL, 32694  
Maps on GARS website [www.gars.net/tailgate.htm](http://www.gars.net/tailgate.htm)  
Look in your closet, look in your shed, look in your attic.

*This GARS Newsletter was brought to you in part by Carnation Condensed Milk, George Burns, and Gracie Allen.*

*Producers: Neutralized Triode*

*Editors: Phil KE4PWE and Lilly No Call Just Yet*

*Stage Hands: Cap Resistor*

*Mike Grip: "D" One O'Four*

*Set and Lighting Manager: Tom Foolery*

*Script and Controller: Frequent Followers Consortium*

*No Bits and Bytes were abused in the writing of this Newsletter and all zero's and one's are able to be recycled under the Clean Air Act. Hope you enjoyed it and we will see you next month. 73 and 88*