



AARC COVER

Keeping Austin Wireless for Over 96 Years!

Bulletin of Austin Amateur Radio Clubs

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February 2016

Penultimate Issue!!!

Issue 2-2016

The Austin Community Foundation Announces the Jesse Copeland Austin Amateur Radio Club Scholarship

Austin Amateur Radio Club Scholarship Program in memory of Jesse Copeland

A one-time payment of an amount to be determined will be awarded to those students who hold a valid amateur radio operator's license and have a 3.0 (B) grade average. Students must be from the Greater Austin area, (those counties touching Travis Co.) or connected with the Austin Amateur Radio Club.

Application Deadline: January 31 (postmarked)

Selection Criteria:

1. **Proof of amateur radio license** – copy attached.
2. **Academic preparedness** – an official transcript from an accredited high school or college/ university needs to be submitted.
3. **Extra** – curricular activities – list activities on form.
4. **Work experience** – on form
5. **Financial need** – on form

(Continued on page 5)

Periodic Events

Sun	7:00 p.m.	Travis ARES net	147.36 MHz + (131.8)
Sun	8:00 p.m.	Travis ARES Packet	145.73 MHz -
Sun	8:00 p.m.	Williamson ARES net	146.64 MHz - (162.2)
Sun	9:00 p.m.	ARO Swapnet	146.94 MHz -
Sun	(After Swapnet)	Newsline	146.94 MHz -
Mon.	7:30 p.m.	STX ARES Net	3.873 MHz
Tues.	7:30 p.m.	Hays ARES net	147.100 +
Tues.	8:00 p.m.	Bastrop ARES Net	443.750 + (114.8)
Wed	11:30 a.m.	Ham Social Luncheon, Jim's	146.94 MHz -
Thu	9:00 p.m.	2m SSB Net	144.250 (USB)
Thu	11:00 a.m.	Lunch, Pokey Joe's 183&Great Hills	444.1 MHz+
Thu	11:45 a.m.	Lunch Whataburger Oltorf & Burleson	146.94-(107.2)
Fri	8:00 p.m.	6m SSB Net	50.230(texasvhf.org/)
Sat	7:00 - 8:30a.m.	Breakfast @ Waterloo Ice House	444.1 MHz +
Sat	9:00 a.m.	Chapter 67 QCWA QSO Net.	3.920 MHz LSB
Daily	6:30 p.m.	Central Texas Traffic Net	147.14MHz+

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Ham Radio Exams Results

The following are the results of the ARRL VE Test Session held on January 9th at Bethany United Methodist Church:

Technician Class Licenses Processed

Patricia G. Bahr KG5KZW
Jonathan S. Gilliam KG5LAB
Steven J. Schreiber KG5LAA
Stephen A. Whitfield KG5KZZ

Dennis B. Demers Sr. KG5KZX
Dale A. Haag KG5LAE
Johnie Smith IV KG5LAC

David N. Gardner KG5KZY
Harold G. Jones KG5LAF
Curtis M. Tomlinson KG5LAD

General Class Licenses Processed

David A. Davisson KG5KSJ
Jason M. Hobbs KG5KNL

Charles J. Glynn KG5LAG
Steven H. Moss KG5LAI

Murphy E. Hawkins Jr KG5LAH

Extra Class Licenses Processed

Hubert A. Bahr AG5CD

David W. Boren W5DKE

Robert J. Porter K5FAR

Examiners Participating in this Test Session

Gary Becker AF5QB
Joe Makeever W5HS

Steven Bonds NQ2S
Tom Nevue W2MN

Gene Hinkle K5PA
Bil Wehling N5VE

Next ARRL VE Test Sessions

February 6th - Bethany United Methodist Church, Disciple Bldg. Room 203/204
March 5th - Bethany United Methodist Church, Disciple Bldg. Room 203/204

TNX ES 73 DE W5HS
Joe

1-17-16

The South Austin W5YI VE team heartily congratulates the following people who earned new or upgraded amateur radio licenses at our January 16th session:

Technician Class (NEW)

Gerald Harbert
Tom Parish
Thomas Koschmieder
Daniel Williams

Greyson Bourgeois
Dominic Spadacene
Travis Metcalf

General Class

Harold Jones, KG5LAF
Clinton Davis, KG5JQW

Steven Straka (NEW)

Extra Class

Shankar Thirunakkarasu, KG5KWS
Daniel Zahara, KG5FOC

Jon Barron, KF5CIP
Charles Glynn, KG5LAG

Our administering volunteer examiners were:

Craig Bean, AC5KW
Sam Mihalik, KM5MY

Gary Popp, AE5JR
Bill Duke, AF5JD

Our next two amateur radio exam sessions will start at
2 PM on February 20 and March 19, 2016 in
Fleck Hall, room 118 on the campus of St. Edward's University.
All sessions are walk-in and the exam fee is \$14 (cash or check).

For additional information regarding our amateur radio examination sessions,
please contact Craig, AC5KW at (512) 474-6443 or by e-mail to
ac5kw@arrl.net or visit our web page at <http://texashams.org/w5yi-austin/>

Columbia: Shadows of Challenger

Crockett Grabbe, KF5LTT

© 2015

Astronaut Ellison Onizuka answered the press question posed to him about what he hoped to accomplish. He described how he was looking forward to an opportunity to take an emergency space walk. He had trained for such a contingency and hoped to opportunity to use it would arise in his shuttle flight. He of course never got that chance.

The press conference of Challenger astronaut Onizuka was held 2 days before that ship exploded 73 seconds after takeoff on January 28, 1986. The contingency of having the equipment on board to make an emergency space walk was an element of safety, but safety was horrifically ignored in the O-ring problem in that launch. How well did NASA learn the lessons of substantially enhancing the safety considerations?

In fact, when foam struck the wing on the takeoff Columbia on January 16 of 2003, no equipment for a space-walk was on board to inspect the damage. Unlike the fateful Challenger mission, no preparation had been made for an emergency space-walk to gather that data. Furthermore, the followup *Report of the Columbia Accident Investigation Board* indicates that most of the NASA officials on ground argued the incident could not possibly have done any significant damage, even though the engineers had no data to analyze that erroneous claim.

The *Report* on the Columbia disaster indicates that the NASA engineers requested to use spy satellite images of the shuttle to gather needed data for that assessment. Furthermore, the *Report* states that if those images had been used they would probably have revealed how severe the damage was from the foam impact. However, the top flight managers in a critical flaw also failed to act on that request. That resulted in 7 astronauts losing their lives on reentry, very analogous to the previous flight managers on the Challenger whose failure caused 7 astronauts to lose their lives 17 years before.

A day after the Columbia disaster I was interviewed by both a station on satellite radio and a reporter with Kyodo press (Japanese). On both I stated that, like the Challenger accident, the Columbia astronauts may have survived until they hit the ground, and described how an emergency space-walk could have gather essential data on the extent of the damage from that foam collision. I discussed how after the Challenger accident years ago there was the first discussion of providing the astronauts with safety capsules and parachutes to escape a disaster like that, and speculated that if such equipment was available on the Columbia, the astronauts could have possibly survived the disaster.

Whether or not safety capsules and parachutes could have let the Columbia astronauts survive like it could have on Challenger, the failure of NASA to obtain the data and fully check out that foam accident ensured that the astronauts would plunge to their deaths. With space walk equipment on board they could have not only gathered the data to show the seriousness of the problem, but likely could have repaired it.

In any flight the most dangerous periods are the takeoff and landing. The fact that both preparation for emergencies and concern for safety was given a low priority of the Columbia mission indicates that very little was learned from the Challenger disaster. A number of reports from engineers at NASA indicate that it was given an inadequate priority for years. The Columbia failure was a disaster waiting to happen.

The manned space program is the most expensive item on the NASA budget, well exceeding the costs for much cheaper unmanned missions, and safety needs to be given the top priority for those expenditures. However 14 deaths in less than 20 years imply it was not. That is the legacy of the shuttle program, which has ended its days. But NASA is putting the emphasis going forward on the expensive space station program. Several unmanned programs are more productive, and never risk a single life.

I stated in a 1989 newspaper editorial that as much money in NASA should be devoted to the unmanned programs as to the manned program, and pointed out that missions putting men and woman into space are an order of magnitude more expensive than unmanned mission because of the tremendous cost of supporting people there. There strong pressure to cut corners on safety to reduce these costs.

An example of an unmanned satellite program is the satellites that put up for ham communication. These missions are dirt-cheap compared to manned missions, and there are many more unmanned missions that the public never hears about. Scientists carry out many more experimental pursuits on these missions. For example, as a research scientist at the University of Iowa, I analyzed data gathered on missions like ISEE-1, ISEE-3, Polar, Geotail, and Spacelab-2. Many productive uses of space missions can be achieved at modest expense and at no risk whatsoever to astronauts.

Austin Amateur Radio Club, Inc., PO BOX 4739, AUSTIN TX 78765-4739, Web site: <http://www.austinhams.org>

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Please contact a club officer, attend a meeting, mail us to join the organization, you can also join or renew online.
The Austin Amateur Radio Club, Inc. (AARC) has annual membership dues of \$20.00 per person or \$30.00 per family. AARC maintains the following repeaters:

FREQUENCY	AUTOPATCH	USE
146.880 107.2 PL Tone	No	General
146.940 107.2 PL Tone	No	Most popular, WX, Swapnet & Newsline
224.800	No	
444.100	No	
444.200 107.2 PL Tone	No	
440.650 +5	No	70cm D-Star Repeater [W5KA B]
146.780/ -600kHz	No	2m D-Star Repeater [W5KA C]
1293.100/-20	No	23cm D-Star Repeater[W5KA A]
1248.200	No	23cm D-Star DD (data, simp./reversible)[W5KA A]

Persons using the repeaters are asked to join the club to help support these valuable resources.

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Viewpoints expressed in the AARCOVER do not necessarily reflect those of any club, or of its members, directors, or officers. Material quoted from the ARRL Letter is supplied by the American Radio Relay League, Inc.

Members and other readers are encouraged to submit material for publication. Call Mitch London, if mailed submissions are required. Electronic files are encouraged! Submissions may be edited for publication.

Deadline is the 22nd of the month.

Material may be used in a later issue. Unless otherwise noted, permission is granted to reprint AARCOVER articles, provided you credit the author and the AARCOVER.

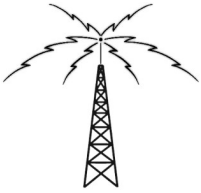


For Changes in your ADDRESS, PHONE NUMBER or CALL SIGN:

See Jay Hoffman, KA5OST

ka5ost @ arrl.net

Jay handles all changes for membership information .



Over the WWaves...



A Collection of useful and interesting Websites sent in by our readers
(All links have been checked by editor as working at time of publication)

AWESOME LINK OF THE MONTH!!!

Geek Factor 10!!!

"How Bob McGwier used a Cray-2 supercomputer to decode a ham radio transmission heard in Star Trek IV"

<http://swling.com/blog/2016/01/how-bob-mcgwier-used-a-cray-2-supercomputer-to-decode-a-ham-radio-transmission-heard-in-star-trek-iv/>

Forwarded by Chip Rosenthal, KE5VHV

(Continued from page 1)

6. **Essay** – Include the college(s) selected, full time or part-time student, career goal if known or primary areas of interest, and give some indication of the motivation of the applicant. Length of essay ranges from one paragraph to one page (max).

Applications will be reviewed in February. Scholarship amounts will vary year to year depending on the endowment earnings and the number of applicants. Payment will be made directly to the scholarship recipient's college of choice.

Scholarship Recipients will be notified by mail.

Access the application here

<http://www.austincf.org/Scholarships/ApplyforaScholarship.aspx#67444-austin-amateur-radio-club-scholarship>

Please contact me if you have questions or would like additional information:

Stuart Rohre, K5KVH
k5kvh@arrl.net
Copeland board chairman

Mailing address for completed applications:
Austin Community Foundation

4315 Guadalupe Street, Suite 300 Austin, Texas 78751

Direct 512 220 1412 ACF



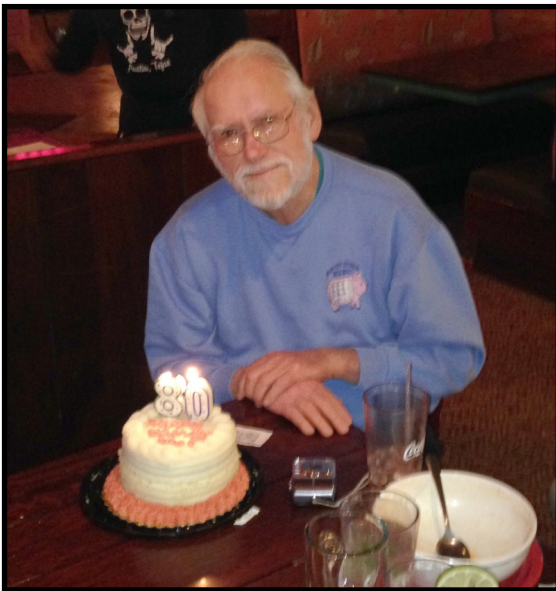
AARC Get Together

Your self-appointed "historian" of Austin ARC was at it again trying to dig up some interesting AARC history for our annual W5KA birthday get-together. It was January 12th at 7:00 p.m., at Baby A's, 9505-B Stonelake Blvd, the regular club meeting place. As usual the "first round" was be on me.

We chatted about AARC history and some old photos. If anyone has old AARC stuff, bring it next time, please.



Joe Canfield, one of only a few hams left who met and knew Paul was able to make it and share his recollections. Coincidentally Joe turned 80 on January 12th please wish him a Happy Birthday.



For the edification of you newbies Paul Hargis was born here in Austin in 1907, started building radios as a teen in Lubbock, and owned and operated an electronics wholesale business here and in Waco until his death at age 49 in 1956. He was very much the supportive patron of AARC. AARC received the Club Station License, W5KA, in the late '50s or early '60s and it is used on all of our repeaters.

His wife Jewel supported AARC continuously in so many ways that she was elected our first Honorary Life Member though she was never licensed. She died in 2002 at age 94. They had no children.

73,

Joe Fisher, K5EJL
"Electronic Junque Lover"





Ham Questions

Forwarded by Juanita Miyasaki, KD5OIE

1. Why is the lowest frequency amateur radio band called "Top Band?" Shouldn't it be called "Bottom Band?"
2. Why are there "Q" signals, but no "P" signals or "G" signals or "F" signals?
3. Why is Morse Code called Continuous Wave, when it isn't continuous? CW signals are never "continuous," instead, the dits and dahs start and stop every few milliseconds.
4. Why is a pilot's license issued by the federal government good for life, but an amateur radio operator's license has to be renewed every ten years? Why ten years? Why a renewal at all?
5. Why do some hams want to operate "QRP?" Do they take their cars to the dealership and ask the service manager if they can reduce the engine's horsepower and torque? If it's good to operate with miniscule power, wouldn't it also be good to operate with a miniscule antenna? How about using a resonant loading coil for an antenna with no radiating element attached? Or a dipole laid on the ground? That would certainly make it a challenge! How about going back to crystal-controlled transmitters instead of using VFOs? Why is transmitter output power the only thing they want to curtail or reduce? Is 500 watts into a dipole at 20 feet equivalent to 5 watts into stacked monobanders at 150 feet?
6. Why do they call the top amateur radio operator's license an Amateur Extra Class License, when thousands of Extra class licensees from 1952 (when the Extra class license was implemented) to 2000 had to pass a 20 word per minute code test to obtain that license, and hams obtaining an Extra class license today are not required to take a Morse code receiving test at all? Is AMATEUR RADIO / FCC, run by idiot nerds?
7. Why do DX stations say for example, "The K5 Xray station again please," then immediately answer a W9 station who called out of turn? Why do DX- PEDITIONS demand the CODE OF CONDUCT, then go for 15 minutes OR MORE.... without ID-ing?
8. If 160 Meters is the "Gentlemen s Band," is 2 Meters the "Moron's Band?"



AARC General Meeting Minutes, 5 Jan 2016

Meeting called to order at 7:01 pm

- **Visitors:** Eight visitors this month. Welcome!
- **New hams:** Brett Finch, KG5KWW
- **New members:** Jim Austin, KA2RVO
- **Upgrades:** John Oventile, KG5KFB
- **Call sign changes:** none
-

Approval of minutes:

It was moved and seconded to approve the minutes as printed in the newsletter

Past events:

- Christmas party was awesome; lots of folks were there, wonderful tabletop decorations, wonderful entertainment, great prizes. Attendance was in the 70s
- Joe Canfield, N5HPC: Nov 10 was ARES areawide drill; many scenarios were presented and many groups were activated.
- Don Dudley, AC5YK: Club serves as “base” club with many special interest groups therefore will hear from many of them later on in the meeting.

Upcoming events: Note: these will not be listed on a regular basis please go to the website or see the Swapnet newsletter for the details.

- Schertz SARC Fiesta Schertz on 1/9/16
- Skywarn: Will be on 1/16 at ACC Eastview campus, 1400 Webberville Road. Training begins at 8:15 am with a basic training; afternoon session is advanced training. From Jay Hoffman, KA5OST: This is the 25th anniversary and there will be special presentations with everyone attending receiving a commemorative gift.
- ARES NCS (net control station) class on 1/23
- Joe Fisher, K5EJL: W5KA celebration at Baby A's on 1/12 at 7:00 pm, first round is on Joe
- Stuart Rohre, K5KVH: Joe Canfield has a birthday next Tues

General announcements:

- 2016 dues are due
- from Roger Wines, W5WIA: TCARES meets on 4th Tuesday at 7:00; STX convention is in Rosenberg in March; TX emergency conference in San Antonio (week long event)
- Austin hams website can be used to pay dues
- Don Dudley encourages use of Amazon smile
- Stuart Rohre: Statewide ARES HF net now on 3876

Officer reports:

- Don Dudley, AC5YK, president: I want to move to bigger facility because I want to grow club. It may be someplace without food or in a different region. Watch for survey soon. I am also looking for someone to serve as “membership” chair. I want to lay to rest the Jim Greenwood estate issue it is being handled by attorneys, the board received a report from John Stratton. It will become another fund administered by the Austin Community Foundation. I also want club to be advised of budget.
- Lew Thompson, W5IFQ, vice president: My task is to find programs. Don advised that they were to be very technical and ~1 hour in length. Contact me if you have a subject of interest.
- Jay Hoffman, KA5OST, treasurer: This is my 8th year as treasurer. Dues are due, but not for everyone. Dues are not by calendar year but by one year from previous submission. Update for Amazon Smile: organization receives 0.5 of 1% of eligible purchases; last year the club received \$6. Jeff Schmidt, reapplied for special services

club status. I have forms if you want an AARC name tag for \$13 (including sales tax). The club has ~\$14,600 in the checking account and ~\$13,700 in savings. We currently have 226 members with 5 honorary members.

- Angie Steelman, KF5ZXI, secretary: I am starting my second year as secretary and am responsible for recording the minutes at all of the meetings. I will also provide attendance updates at each meeting.

Special interest groups:

- **Newsletter:** Don Dudley asked for comments for the newsletter and reminded everyone that Mitch London is looking for someone to take over.
- **Technical:** Stuart Rohre reported that the repeaters appear to be working (no notifications via online submission) and that lots of wet weather has ended up delaying the antenna tower project at the Red Cross. We have an antenna up for constant monitoring of 2 meter APRS. If you want to help, leave your name with Stuart. Can't work if greater than 12 mph winds or with wet tower.
- **ARES:** Announcements made earlier in the meeting.
- **BBHN:** Brian Wood, KF5GAH informed the group that the BBHN meetings are no longer on the 4th Wednesday of the month but are now on the 2nd Wednesday starting in February. Jeff Schmidt will update the newsletter.
- **AARC Ladies:** no report

Special business:

- Election and appointment of Copeland Fund board members (one elected, one appointed)
 - Don Dudley appointed Marie Van der Weele for a 3 year appointment.
 - Joe Fisher was nominated to serve a 3 year position. A quick vote was taken: most were in favor with one opposed.
- Stuart Rohre: Midnight Jan 31 is deadline for scholarships. They are mostly aimed at undergraduates but they have been awarded to graduate students from time to time. The applicant must be from the greater Austin area which is defined as Travis county and any county that touches Travis county. Contact Stuart Rohre for more info.

Lew Thompson presented the space weather report.

Meeting adjourned: 8:01 pm.

Short break

Presentation: Lew Thompson, NVIS



AARC Meeting Info.
Baby A's near the Arboretum
9505-B Stonelake Blvd.
(Come early and have dinner!)

Business Meeting 7:00 pm

February 2—Steve Hick N5AC(Flex Radio's VP Engineering) HF radio architectures, Phase Noise and IMD

Officers Meeting

Officers meet from 6:00 to 7:00 pm prior to regular club meeting and are open to all. Contact an officer for more information.

2016 Upcoming Amateur Exams

ARRL VEC— February 6th & March 5th
 9a.m. at Bethany United Methodist Church. Contact Joe Makeever, W5HS (345-0800) or Joe Thiel, N5SMN (832-0450) for info. \$15 fee.

W5YI VEC- February 20th & March 19th
 2p.m. in room 207, Fleck Hall, St. Edwards Univ. Contact Craig Bean, AC5KW@arrl.net, (474-6443) for more info.
<http://texashams.org/w5yi-austin/>

2016 Calendar of Events

Feb 5-6 Texas Weather Conference

University of Texas Commons Learning Center in Austin Inaugural event, organized by the NWS Austin/San Antonio Weather Forecast Office, presentations & training sessions by emergency managers, meteorologists, and university professors
<http://www.txwxconference.com/>

Feb 7 WeatherFest

Bob Bullock Museum
http://events.kvue.com/Weather_Fest/318064269.html

Feb 27 Inaugural 4th Saturday San Antonio Amateur Radio Swap-N-Shop

1st event- will be FREE tables & tailgate!!!
 Eisenhower Indoor Flea Market
 3903 Eisenhower Rd San Antonio, Tx 78218
 Talk-in 146.415 simplex
 Event (4th)Saturday 8AM-1PM
 Free admission & Parking, concessions on-site
 Contact KD5CAL@yahoo.com 210-618-1482

Mar 5 Irving ARC Hamfest

Betcha Bingo Hall 2420 West Irving Blvd. Irving, TX
 Irving Amateur Radio Club
 Talk-In: 146.72 - (PL 110.9)
 Ken N2VIP 609-510-3068 n2vip@arrl.net
www.irvingarc.org

Mar 5 27th Annual Elk City Hamfest

Elk City Community Civic Center 1016 East Airport Industrial Road, Elk City, OK 73644
 Talk-In: 146.76 (PL 88.5)
 Contact: Earl Bottom, n5neb1988@gmail.com

Upcoming Meetings...

Feb	Mar	Austin Meetings/Happenings	Time	Address
2	1	AARC Meeting Baby A's	7:00 p.m.	9505 Stonelake Blvd.
23	22	Travis County A.R.E.S. Pickle Research Ctr	7:00 p.m.	10000 Burnet Rd.
25	24	CERT Meeting, CTECC	6:30 p.m.	5010 Old Manor Rd.
22	28	CTDXCC Meeting Old Quarry Library	6:30 p.m.	7051 Village Ctr Dr.

If your club is listed here and has incorrect time or dates, please let us know!
editor@austinhams.org