



AARC OVER

**Keeping Austin Wireless
for Over 96 Years!**

Bulletin of Austin Amateur Radio Clubs

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Buzz Kill! Electric Ballasts In Grow Lights Are A Nuisance

Grow lights have been useful to plant growers for some for quite a while - and especially now with the legalization of marijuana in various areas. Quality grow lights can enhance production dramatically. However, some amateur radio operators are feeling the pain due to interference caused by electrical ballasts that are not FCC-compliant. The American Radio Relay League (ARRL) is asking the FCC to enforce federal law against such devices that give off more interference than allowed in homes.



(continued on page 5)

* **Updates Needed** * Are [these nets](#) active? Web site seems quite stale.

Periodic Events

Sun	7:00 p.m.	Travis ARES net	147.36 MHz + (131.8)
Sun	8:00 p.m.	Travis ARES Packet (*in UNPROTO)	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 - (107.2)
<i>Sun</i>	<i>(After Swapnet)</i>	<i>Newsline</i>	<i>146.94 MHz - (107.2)</i>
Mon.	7:30 p.m.	STX ARES Net	3.873 MHz
Tues.	7:30 p.m.	Hays ARES net	147.100 MHz +
Tues.	8:00 p.m.	Bastrop ARES Net	443.750 MHz + (114.8)
Wed	11:30 a.m.	Ham Social Luncheon, Jim's	146.94 MHz - (107.2)
Thu	9:00 p.m.	2m SSB Net	144.250 MHz (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
Sat	7:00 p.m.	AARC Elmer Net	146.94 MHz- (107.2)
Daily	6:30 p.m.	Central Texas Traffic Net	147.14 MHz+

In This Issue

<u>ARTICLES</u>	<u>Page(s)</u>
Ham Exam Results	2
Club Info	3
Over the WWWaves	4
Main article (continued)	5
Meeting Minutes (Jan.)	6
AARC Meeting info, Calendar of Events, Upcoming Exams & Meetings	7 " "

Ham Radio Exams Results

The following are the results of the ARRL VE Test session held on **March 4th** at Bethany United Methodist Church:

Technician Class Licenses Processed

Carla S. Dixon KG5SCK	Amy C. Ekiriwang KG5SCO	Ian M. Reichert-Watts KG5SCP
Michael D. Stewart KG5SCM		

General Class Licenses Processed

David D. Haun KB5UGN	John R. Price KG5RUC	James R. Taylor KG5SAO
Robert E. Walton KG5SCL	Charles D. Wolfson KG5SCN	

Examiners Participating in this Test Session

Larry Gunter WB5BEK	Rick Herndon K5FNI	Gene Hinkle K5PA
Ted Iglehart KF5END	Joe Makeever W5HS	Henry Palmetter W3JMY

Next ARRL VE Test Sessions

April 1st (**no foolin'!**) @ 9:00a.m. - Bethany United Methodist Church, Disciple Bldg. Room 203/204
May 6th @ 9:00a.m. - Bethany United Methodist Church, Disciple Bldg. Room 203/204

TNX ES 73 DE W5HS
Joe

3-18-2017

The South Austin W5YI VE team heartily congratulates the following people who earned new or upgraded amateur radio licenses at our **March 18th** session:

Amateur Extra Class

Larry Yancy, KD2LFG

General Class

Sean Sinay (NEW)	Efaine Chang (NEW)
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Technician Class (NEW)

Lawrence Harmon	Peter Whitesell	Logan Fagg
Adian Dressel	Travis Colbert	Brian Doyle
Marc Lloyd	Steven Moses	

Our administering volunteer examiners were:

Craig Bean, AC5KW	Gary Popp, AE5JR	Bill Duke, AF5JD
Shankar Thirunakkarasu, KG5KWS		

Our next two amateur radio exam sessions will start at **2 PM** on **April 15th** and **May 21st** 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**

2017 Officers

President	James Hollan	KG5SGR	president@austinhams.org
Vice President	Lew Thompson	W5IFQ	vice-president@austinhams.org
Treasurer	Jay Hoffman	KA5OST	treasurer@austinhams.org
Secretary	Angie Steelman	KF5ZXI	secretary@austinhams.org
Editor, AARCOVER	Michael Skurka	K5MSK	editor@austinhams.org
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ARRL Travis Co. Emer. Coord.	Mark Esslinger	W5MAE	ec@austinhams.org
TC ARES PIO	Steven Polunsky	W5SMP	tcares-pio@gmail.net

Please contact a club officer, attend a meeting, or 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
146.780/ -600kH	No	2m D-STAR Repeater [W5KA C]
146.880 107.2 PL Tone	No	Analog/Digital Fusion
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]
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.

The Austin Amateur Radio Club offers annual scholarships to licensees living in Travis, Williamson, Bastrop, Hays, Blanco, Caldwell, and Burnet counties.

Please see <http://austinhams.org/copeland.htm> for more information.

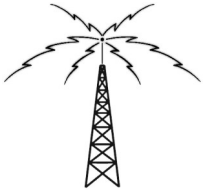
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Members and other readers are *encouraged* to submit material for publication. Contact the Editor, if mailed submissions are required. Email and/or electronic files are encouraged! Submissions may be edited for publication (for content and/or space). **Deadline is the 25th of each month**, but late articles may be considered for future publication. Material may be used in a later issue. Unless otherwise noted, permission is granted to reprint AARCOVER articles, provided you credit the original author and the AARCOVER. If material is included in another publication, a courtesy copy to the Editor is appreciated.



AARC Members:
For Changes in your ADDRESS, PHONE NUMBER or CALL SIGN
See: Jay Hoffman, KA5OST / ka5ost@arrrl.net
Jay handles all changes for membership information.



Over the WWaves...



Awesome Links and other Useful Info!

(submitted by members and others at-large)

- Interesting current paper on NVIS antennas, ... you may find of interest - DE N5CID (Don)
<https://link.springer.com/article/10.1007/s11235-017-0287-2>
- TeraHertz transmitter in Japan delivers 105Gbps wireless speeds via a Single Channel!
<http://www.ispreview.co.uk/index.php/2017/02/terahertz-transmitter-delivers-105gbps-wireless-speeds-via-single-channel.html>
- Got Pi? Raspberry Pi Zero W is a new \$10 Linux-friendly computer with Wi-Fi and Bluetooth.
<https://betanews.com/2017/02/28/raspberry-pi-zero-w-is-a-10-computer-with-wi-fi-and-bluetooth/>
- Some hams love Baofeng HTs. Here's something that others might like: a *teardown* of the UV-5R!
<https://www.allaboutcircuits.com/news/teardown-tuesday-baofeng-amateur-radio-transceiver/>



FREE Community Emergency Response Team (CERT) Training

G-317 / Office of Homeland Security and Emergency Management

FREE 3-Day Course - April 21, 22, 23. Each day is from 8:00 AM to 5:00 PM.

The CERT course consists of eight modules, which address:

- Disaster preparedness
- Fire suppression
- Disaster medical operations (2 modules)
- Light search and rescue
- Team organization and disaster psychology
- Terrorism and CERT
- Course review and disaster simulation

To register, complete the [online application](#) or [download an application for print](#), and mail or fax to the address/fax on the application.



REMINDER

The Austin Amateur Radio Club offers annual scholarships to licensees living in Travis, Williamson, Bastrop, Hays, Blanco, Caldwell and Burnet counties.

Please see <http://austinhams.org/scholarships> for more information.



I've read articles where hams have driven up and down their neighborhood streets with spectrum analyzers, and other equipment, searching for the source of the interference. In one case in Maine, the source turned out to be a licensed grower a mile away! The grower had no idea he was causing any disturbance.

The ARRL has thus far filed four complaints against the FCC, but hasn't heard back yet. In the meantime, more complaints continue to trickle in, particularly in Colorado and California - two other states that have legalized growing. Other states which allow cultivation of recreational marijuana includes Maine, Massachusetts, Oregon, Alaska, Washington state and the District of Columbia.

Grow lamps can be distinctive in the pattern of the interference they radiate. They normally are powered on and off at specific intervals and marijuana grow lighting can be powerful enough to produce the same amount of interference as a 1,000-watt AM radio station, said Bill Crowley, the Maine section manager of the ARRL.

One of ARRL's resident radio interference experts tested an inexpensive ballast sold by big-box retailers and found it produced 640 times the level of interference compared to that of a legal unit! The interference, as reported by one amateur radio operator in Boulder, CO, often sounds like a harsh, grating static generated by a lightning strike - except it doesn't stop.

In a letter dated March 12th to the FCC, the ARRL complained that interference from grow lights was greatest in the medium- and high-frequency bands between 1.8 and 30 megahertz. The ARRL continued, stating "The level of conducted emissions from this [grow light] is so high that, as a practical matter, one RF ballast operated in a residential environment would create preclusive interference to Amateur radio HF communications throughout entire neighborhoods."

So the next time your QSO is interrupted by a high level of interference, don't blame the atmosphere. It might just be your neighbor's grow lights!

Sources:

<https://www.usnews.com/news/best-states/colorado/articles/2017-02-28/growing-problem-pot-lights-give-ham-radio-operators-a-buzz>

<http://www.csindy.com/coloradosprings/marijuana-grow-lights-cause-problems-for-ham-radio-operators/Content?oid=2893921>

Editor

Meeting Minutes — AARC General Meeting, 7 March 2017

Start: 7:04 pm

Attendance: 47

We had four visitors this month. Welcome!

We had one new ham this month. Congratulations!

There were no new members or upgrades. There was one call sign change: N00J is now K5XJ.

Approval of minutes

The minutes from February were approved as printed in the AARCover.

Announcements:

We are now accepting membership dues.

The new website is up - visit austinhams.org

Nominations are being accepted for the Copeland scholarship.

See the swapnet newsletter for upcoming events.

Officer reports

- ◆ Treasurer: Jay Hoffman, KA5OST - Paid \$500 to a law firm which will be reimbursed. Paid "a couple hundred" for a Fusion radio to replace Don Dudley's radio and it is now on the air. It will eventually be located at the Beasley dealership at Burnet and Justin Ln.
- ◆ Secretary: Angie Steelman, KF5ZXI - We had 47 people sign in last month. Thanks for signing in if you have, please do sign in if you haven't yet.
- ◆ Vice-President: Lew Thompson, W5IFQ - I handle the presentations and am always looking for presenters or topics. Email me if you have ideas.
- ◆ Newsletter: Mike Skurka, K5MSK - Send me ideas and/or articles. The website works on mobile devices, too!
- ◆ ARES: Kerbey Spruiell, KG5DLD - I would like to invite new hams to ARES - see me or visit the website. Toured the trailer - comes with at 15 KW generator. ARES has been placed on "enhanced readiness status level 4" because of SXSW - the cell towers get overloaded. MS150 bicycle run: we need 8 hams on Sunday, April 30.
- ◆ BBHN: No changes at this time. Joe Fisher - work is still progressing on getting the antennas back on at the Red Cross.

Space weather was presented by Lew Thompson, W5IFQ.

The scheduled presentation for tonight (Winlink) was postponed in favor of hearing a talk from Ivo, SQ5BIH, from Poland, talk about his experiences as a ham.

Meeting was adjourned at: 8:50 pm.

~~~ End of Minutes ~~~



*[Editor's Note: The Winlink presentation has been rescheduled for the May meeting.]*

## 2017 Calendar of Events

### AARC Meeting Info

7:00pm to 9:00pm / Tuesday, April 4  
 Location: Applied Research Lab  
 10000 Burnet Road, Austin TX

#### **Topic:**

DStar - including local repeater information  
 and operating details

Solar WX Summary: W5IFQ (Lew)

### Officers Meeting

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

## 2016 Upcoming Amateur Exams

**ARRL VEC - April 1st (no foolin'!) & May 6th**  
 9 a.m. at Bethany United Methodist Church.  
 Room 203/204. \$15 fee. For more info, contact:  
 Joe Makeever, W5HS (512-345-0800)

**W5YI VEC - April 15th & May 21st**  
 2 p.m. in **Room 207**, Fleck Hall,  
 St. Edwards University. \$14 fee.  
 Contact Don Dudley  
 AC5YK @ARRL.net  
 for more info. \$14 fee.

<http://texashams.org/w5yi-austin/>

### **Apr 8-9 TX State Parks On The Air**

[www.tspota.org/index.htm](http://www.tspota.org/index.htm)

### **Apr 9 - WCARC Sunday Spring Picnic**

Quarry Splash Pavilion in the Southwest Williamson County  
 Regional Park / 3:00pm to 8:30pm / Leonor KF5YTZ

### **Apr 22 - Red Cross Fire Alarm Campaign**

TCARES volunteers are need to assist Canvas & Install Teams.  
 Contact Kerby KG5DLD - kerbyray@yahoo.com

### **Apr 28 - 30 MS150 Bike Ride**

Houston-LaGrange-Austin bikeride  
 Rest stop Hams needed at Gilbert Elementary &  
 Webberville Park  
 Contact Kerby KG5DLD - kerbyray@yahoo.com

### **Apr 29 - Red Poppy Ride Georgetown**

Craig W5TSN 512-864-4050 craig@boegler.org

### **May 13-14 - Maker Faire Austin**

Palmer Events Center. Dark Room, Fashion Show, Power Tool  
 Drag Racing, etc. AARC will again have a booth!

### **May 19-21 - Dayton Hamvention**

New location in 2017 Greene County Fair & Exposition Center  
<http://hamvention.org/hamvention-announces-venue-for-2017/>

### **Jun 9-10 - Ham-Com**

Irving Convention Center at Las Colinas  
 500 West Las Colinas Blvd., Irving TX 75039  
 Talk-in Primary: 146.720 (+) 110.9  
 Secondary: 147.180 (+) 107.2

### **Jun 24-25 - ARRL Field Day**

**More events listed in the SWAPNET Newsletter!**

## Upcoming Meetings...

| Apr | May | Austin Meetings/Happenings                     | Time      | Address             |
|-----|-----|------------------------------------------------|-----------|---------------------|
| 4   | 2   | AARC Meeting @ Applied Research Lab            | 7:00 p.m. | 10000 Burnet Rd     |
| 25  | 23  | Travis County A.R.E.S. @ Applied Rsrch Lab     | 7:00 p.m. | 10000 Burnet Rd     |
| 27  | 25  | CERT Meeting @ TBD (see <a href="#">Link</a> ) | 7:00 p.m. | TBD                 |
| 24  | 22  | 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*