



AARC OVER

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

Bulletin of Austin Amateur Radio Clubs

ISSN 1067-0262

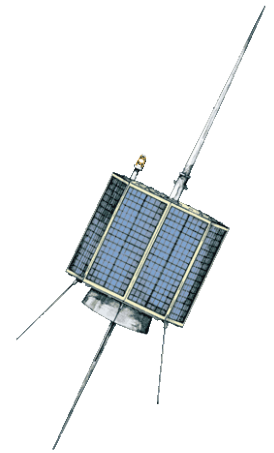
July 2016

Issue 7-2016

Look! Up In The Sky!

It's a plane. It's Superman. No. It's a bird! But not an ordinary bird. It's an amateur radio satellite. Up in the sky, anywhere from 200 to 2500 miles, there are a number of "birds" that have amateur radios installed, and they're available for amateur communication. This article is certainly not the be-all, tell-all about ham satellites - but I am trying to whet your appetite for more than just terrestrial contacts.

Did you know that more than 70 Amateur Radio satellites have been launched over the past forty years? The Soviet Union may have launched the first-ever space satellite (Sputnik 1) in October 1957, but the Jet Propulsion Laboratory (JPL) of the California Institute of Technology was soon to follow with Explorer 1 in January 1958. Since ham radio operators are a creative bunch of people, they thought that if the government could build a communications satellite, they could, too. *Project OSCAR* was created in 1961 and built the first four hamsats. And just what is OSCAR? Why, it's short for **O**rbital **S**atellite **C**arrying **A**mateur **R**adio.



(Continued on page 3)

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
		(*in UNPROTO, change N5HPC-5 to W5OEM-5)	
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)
Sun	(After Swapnet)	Newsline	146.94 MHz - (107.2)
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+

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Ham Radio Exams Results

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

Technician Class Licenses Processed

*Hector E. Barrios Molano, KG5NZV	Rebecca A. Carmack, KG5NZW	Brian P. Clark, KG5NZY
Nicholas A. Iglehart, KG5NZX	(anonymous), KG5NZU	Roger L. Rollie, KG5NZZ

General Class Licenses Processed

*Henry W. Palmeter, Jr., W3JMY

Extra Class Licenses Processed

John D. Fisher, KF5RDZ	James K. Hollister, KG5NOB	Mark P. Jenkins, AG5FL
Mary L. Steelman, KG5EXJ	David E. Tobey, KF5ORB	

Examiners Participating in this Test Session

*Gary Becker, AF5QB	Larry Gunter, WB5BEK	Gene Hinkle, K5PA
Arlen Levin, WA6AUF	Joe Makeever, W5HS	Tom Nevue, W2MN

Next ARRL VE Test Sessions

July 9th - Bethany United Methodist Church, Disciple Bldg. Room 203/204 @ 9:00a.m.

August 6th - Austin Summerfest @ Crowne Plaza Hotel @ 12:30p.m. See <http://austinsummerfest.org/> for more info on this special test session.

TNX ES 73 DE W5HS

Joe

6-18-2016

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

Extra Class

GJeffrey Fincher, KG5EBD	David Groves, KG5CRQ
--------------------------	----------------------

General Class

JGlen Olinger, KG5NAF	Thomas Montgomery, KG5NTJ	John Keene, KG5MZW
James Lee, KG5MIQ	Herman Hellman, KG5NSJ	Scott Allred, KB5ZVP

Technician Class (NEW)

Richard Villa	Wyatt Keller	Patricio Lankenau Ahumada
Steven Downum		

Our administering volunteer examiners were:

Craig Bean, AC5KW	Gary Popp, AE5JR	Sam Mihalik, KM5MY
Wally Marusa, K5WLY	Bill Duke, AF5JD	

Our next two amateur radio exam sessions will start at **2 PM** on **July 16th** and **August 20th** 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/>

It's summer and temperatures have been climbing. That must mean it's time for... **Austin Summerfest!** Registration is open now, as well as special hotel rates for those who are traveling into Austin. It is being held at the same location as last year - Crowne Plaza Hotel, 6121 North IH35, Austin, TX 78752.

The website is up and technical sessions are starting to appear. But don't wait; you know you'll have a great time! You really don't want to miss it. This is the 33rd year of Austin Summerfest and we'd love to see you there. I've attended and really enjoyed the sessions and the indoor, *air-conditioned* swapfest. Tables and AC power is available for those who want to do some "horse trading". There will surely be plenty of opportunities to get some new or new-for-you gear. For those wanting to take the license exam on Saturday for either a new license or an upgrade, be sure to check the website for details.

What are you waiting for? Register online or mail in your registration early and save \$2 per person. You can now register, pay for tables, and buy extra prize tickets online with a credit or debit card, or a PayPal account.

Website: <http://austinsummerfest.org/> Registration form (fillable) has been attached to the end of this newsletter.

(Continued from page 1)

Early amateur satellites were only capable of sending telemetry information about the conditions of the equipment and the space environment. Today's hamsats still have beacon transmitters, often along with two-way communications transponders. These beaoning hamsats send telemetry reports of the amount of current being generated by the solar cells, the voltage available from the battery, the temperature of the battery, transmitter power and many other data regarding the satellite. This telemetry data can be fairly easily received and read by amateurs.

Some satellites can store messages for later download. But when a hamsat contains two-way radio equipment, old-fashioned "ragchewing" (conversation) is possible. There are even contests and achievement awards to add a little excitement. A couple of the awards include "Worked All States" for contacting a station in each of the United States via satellite, "Satellite DXCC" for contacts to 100 different countries via satellite, and a series of technical achievement awards.

How difficult is it to receive data from or communicate through one of the satellites? Well... I've listened in on QSOs using an inexpensive handheld transceiver on 2-meters using nothing more than a 15" replacement whip antenna. I wasn't totally prepared to transmit, so I just enjoyed following the satellite through its orbit, listening to the contacts being made. It doesn't take full legal power to reach a satellite either. In fact, it's best to use as little power as necessary, about 2-watts, so as to not overload the satellite. A whip antenna might work, but a small, 3-element hand-held beam will work a lot better. Looking at the frequencies of the satellites, you'll notice downlink and uplink frequencies. You'll need a dual-band FM transceiver with crossband transmit/receive capabilities or separate 2m and 70cm FM transceivers are suitable. Often, the uplink frequency is on 2m and downlink on 70cm. It is helpful to have a dual-band, hand-held beam; either make your own (lots of plans available on the internet) or purchase one of the commercial ones, i.e. Arrow or Elk.

Since the downlink is on 70cm, as the satellite passes overhead, Doppler shift will affect reception. It's best to use a receiver that is capable of tuning in 5kHz or smaller steps, to enable you to follow the shift as the satellite passes overhead.

And how do you know when the satellites will be overhead? And where to point the antenna? There are plenty of sites that will show you this information, but you'll find it easier when your outside to use an app on a smart phone or a tablet. On Android, my favorite is [ISS Detector Satellite Tracker](#)., which requires a small in-app purchase to track the hamsats. iTunes has the iPhone covered with [Satellite Explorer Pro](#) or [GoSatWatch](#). These apps use Keplerian data available for each satellite to calculate its path.

To receive and decode telemetry data, you'll need software that visualizes the raw data. Sometimes, the satellite builder will provide a program to do this. Otherwise, you'll need to do some digging. As noted in the May newsletter, some organizations may sponsor a prize for the first person to copy telemetry data from a newly launched satellite.

There's a lot more about "sat comms", but hopefully this article has intrigued you enough to grab your handheld, stand outside and maybe listen (and respond) to signals relayed from near space.

See page 5 for links associated with this article.

President	Don Dudley	AC5YK	president@austinhams.org
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TC ARES PIO	Steven Polunsky	W5SMP	tcares-pio@gmail.net

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	Analog/Digital Fusion
146.940 107.2 PL Tone	No	Most popular, WX, Swapnet & Newslite
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)

DE John Kinney (NXP.com) VIA N5MNW (Jeff Schmidt)

Sent: Thursday, June 30, 2016 4:43 PM

Reminder: The special event "The Original 13 Colonies Special Event" starts tomorrow and runs through Wednesday night, July 6.

Check here for more information: <http://www.13colonies.net/>

Good Luck,
John Kinney / RF Power / NXP Semiconductors

AWESOME LINKs OF THE MONTH!!!

Satellite Communications

DE K5MSK (Michael, editor)

These are the links associated with the main article on satellite communications.

<http://www.amsat.org/> - AMSAT - the Radio Amateur Satellite Corporation; join to receive their Journal, store discounts, and more

<http://www.amsat.org/amsat-new/information/faqs/langdon.php> - AMSAT article - *Working your first Amateur Satellite*

<http://www.n2yo.com/satellites/?c=18> - A very useful list, with uplink/downlink frequencies, call signs, and more

<http://rammb.cira.colostate.edu/dev/hillger/amateur.htm> - A list of amateur radio satellites, launch dates, and photos

<http://www.work-sat.com/Home.html> - One of the best sources of information for *working* amateur radio satellites

<http://www.pe0sat.vgnet.nl/decoding/tlm-decoding-software/> - one site with more info about decoding & software

<http://www.rtl-sdr.com/how-to-receive-the-funcube-satellite-with-an-rtl-sdr/> - How to receive the FUNcube satellite with an RTL-SDR

DE K5FX (Glen)



The FCC is taking a serious look at the problem of **RF Noise pollution** in DA-16-676.

http://transition.fcc.gov/Daily_Releases/Daily_Business/2016/db0615/DA-16-676A1.pdf

Amateurs have a unique perspective on the extent of this problem due to our wide spectrum access, geographical diversity and varied utilization of the spectrum. Well researched and presented, technical comments are best, but logical, anecdotal recollections and comments will also make a difference.

We all know that the increase of RF noise, throughout the spectrum, has been devastating to many communication services. The rise of noise from unintentional radiators (lighting, computers, poorly designed switching power supplies/battery chargers and consumer products) is the most onerous and unnecessary. We all have a stake in this fight. Hopefully, they get a half million comments just from Hams.

If you have had enough of that CFL light bulb noise, TV cable QRN and the crud from your cell phone charger, get on the stick and send in some logical, informative and intelligent comments on DA 16-676 -- today. The comment period ends August 11!

Thanks.
gr
K5FX

Happy 4th of July!



Special Events Stations

It's the **Fourth of July**! It's quite a special event in U.S. history. Did you know...? Amateur radio operators participate in special events around the country. Huh? Let me explain a little. While amateur radio may consume a large portion of a ham's life, a ham might have other hobbies or interests, too. (Say it ain't so!) Yes, it's true.

And some of these hams help celebrate events that are (usually) happening locally. A Special Event Station is a station that has been setup for a specific event. And they often have very special call signs. You've heard of W1AW, right? (I hope so!) That's known as a 1x2 call sign. Well, Special Event Stations can have call signs even shorter than that - a 1x1 call sign!

Who runs special events stations? Regular hams like you and me. Well, maybe not me since my station is QUITE modest at home, and a horrible noise floor in the neighborhood. Many of the stations may run 1-kilowatt of power and have a directional beam. Others may sport a considerably more modest 100-watts and an "all-band" vertical. It's all up to the station operator.

What kinds of Special Events do these stations represent? I'm glad you asked! 1x1callsigns.org says its "A special event operation usually commemorates an event which is publicly significant to the amateur community. Ideally, this is a one time, or recurring celebration, festival, anniversary, convention, dedication, or public demonstration of amateur radio or the like." I've made contacts with special event stations such as W9IMS (Indianapolis Motor Speedway Amateur Radio Club), Route 66 On The Air (various stations along the infamous Route 66), and Museum Ships On The Air (commemorating the various battleships of U.S. history). I missed the 175th Anniversary of Texas (W5T, April 14-26, 2016). Numerous QSO parties will snag some 1x1 call signs as well.

Currently, several K2? call signs are operating to commemorate the 13 Original Colonies of the U.S. For example, K2L is the Special Event Station in South Carolina and is operating through July 6th. I found them on the air at 14.290 one evening. You may have to hunt around, or use one of the DX Spotting sites, to find out where the stations are at any moment.

If you do contact one of these Special Event Stations, be sure you find out where to send your self-addressed, stamped envelope (SASE) as most of these stations send special QSL cards - but ONLY if you send your SASE. Some ask for a small donation, i.e. a dollar, to help defray the cost of printing the special cards. To me, some of the cards are quite impressive. Most of the stations use QRZ.com to post the details, but be sure to jump online and copy the info because the 1x1 call signs are "recycled" and used by other special events throughout the year. K1A might have been the Memorial Day station recently, but it's up for grabs for other stations - subject to FCC guidelines, of course.

Just a few of the upcoming Special Events include: Hurricane Katrina 11th Anniversary (K5W, weekend of Aug.26th), International Lighthouse Lightship Weekend (N4J, weekend of Aug.20th), Route 66 On The Air (many W6? stations, Sep.9-18), Pearl Harbor Commemoration (W2W, Dec.2-12), and, of course, NJ Santa's Workshop (W2S, Dec.10-25). To search for other events by call sign, date, or keywords, visit <http://www.1x1callsigns.org/> and select Search 1x1 Calls from the menu on the left side of the page. Be sure to check out the FAQs, too. Maybe there will be a special event that YOU would like to host.

For more info, visit: <http://www.arrl.org/special-event-stations>

Shout-Out: Thanks to N5MNW (Jeff) for suggesting this topic.

FCC Says “No” to Lifetime Amateur Radio Licenses

DE ARRL (Edited to fit available space)

ARLB021 FCC Says "No" to Lifetime Amateur Radio Licenses

The FCC has denied the petition of an Arizona radio amateur, who had petitioned for lifetime Amateur Radio licenses. Mark F. Krotz, N7MK, of Mesa, had filed his Petition for Rule Making (RM 11760) with the FCC last November, and the FCC invited public comments in February. Krotz wanted the FCC to revise Part 97.25 of its rules to indicate that Amateur Radio licenses are granted for the holder's lifetime, instead of for the current 10-year term. Hundreds of radio amateurs commented on the petition, but the FCC was not swayed by those favoring the idea.

"Based on our review of the record, we are not persuaded that the petition discloses sufficient grounds for the requested rule change," the FCC said in a June 21 Order. "Krotz's primary argument is that extending the term of amateur licenses to the lifetime of the holder would reduce the Commission's administrative and personnel costs, but it is not clear to us that the proposal actually would enhance administrative efficiency." That's because the vast majority of license renewals are submitted online and processed automatically by the Universal Licensing System (ULS), "with minimal staff involvement," the Order said.

The Order can be found on the web in PDF format at, http://transition.fcc.gov/Daily_Releases/Daily_Business/2016/db0622/DA-16-707A1.pdf.

[...]

In 2014 the FCC granted lifetime credit for examination elements 3 and 4, but applicants seeking relicensing under that provision still must pass examination element 2. The FCC pointed out in its Order that this was done to address the concerns of commenters that a licensee who had not renewed also may not have maintained or expanded his or her knowledge and skills.

Just for Fun

You Know You Have A Ham Radio “Problem” When...

- You wonder every morning at work... Did I leave the soldering iron on?
- You find yourself thinking in cw - dit dah dit dit,
- At local parties and bars, you find yourself uncontrollably mumbling CQ CQ CQ,
- You pull over and check your antennas before driving under a Low Clearance overpass,
- You visit your friends' homes and start planning where to string up your dipole,
- You watch a movie with someone operating a radio, and your compelled to point out the mistakes in technique,
- When someone asks you to spell your name, you use phonetics (Mike India Kilo Echo).

Word Search – Satellites

Can you find all the words and terms related to Satellites? Words may be forward, reverse, up, down, or diagonal. Words were taken from this month's article.

E B U C N U F E K I T Q A R O
C P R X B Q L N G Z A M I E U
J R P E Y E I W T U S S Z D L
Y P O J L L A D L A E T B N Q
S W H S P P O C T I B R O O J
J I O U S W P W O L U K Y P U
F H X Q N B S O E N C E X S W
L K B L E Q A T D V U P B N P
F H I T E T I N V A G L F A X
R N S R B L W L D S J E O R W
K A T E L E M E T R Y R S T S
P X D E C O D E W I K I C P T
M Y T B F K N A U T P A A K U
N A G U X Q M Q X C B N R H H
S J M Q O U K L T Q Y V U A O

AMSAT
BEACON
CROSSBAND
CUBESAT
DECODE

DOPPLER
DOWNLINK
FUNCUBE
KEPLERIAN
ORBIT

OSCAR
SATELLITE
TELEMETRY
TRANSPONDER
UPLINK

Meeting Minutes — AARC General Meeting, 7 June 2016

Start: 7:00 pm

Attendance: 58

Visitors: We had 8 visitors tonight. Welcome!

New hams:

Jim Hollister, KG5NOB

James Hollan, KG5NTG

New members: none

Upgrades:

Mary Steelman, KG5EXJ, General to Extra

Randy Horwitz, KG5LVR, Technician to General

Call sign changes: none

Sally Howard, AB5YL

Paul Martin, K0AUS

Approval of minutes: Minutes of the May meeting were approved as distributed in the AARCover.

Announcements:

General:

◆ Ham of the Month: Jim Kinter, K5KTF

Events: (For details, see the SwapNet newsletter)

◆ Hamcom

◆ Big Spring Amateur Radio Tailgate

◆ Field Day

◆ Texas City Hamfest

◆ Summerfest

◆ Roger Wines: Williamson County ARES is having a SET in conjunction with Field Day in Liberty Hill

Officer and committee reports:

◆ Jay Hoffman, KA5OST, treasurer: not here

◆ Angie Steelman, KF5ZXI, secretary: I don't have the count in front of me, but we were over 60 last month. That's great - please sign the sign in sheet so we can keep track.

◆ Lew: Still looking for presentations. Esp Fusion, DMR, and any other favorite subjects. Send me your thoughts.

◆ Don Dudley, AC5YK, president: see below

◆ Michael Skurka, K5MSK, newsletter editor: none

◆ Kirby Spruiell, ARES: We've had 3 weather nets since last meeting and good interaction with National Weather Service. We appreciate everyone who participates.

◆ Rick Kirchhof, BBHN: We will have a significant presence at hamcom. Come by and see the presentation.

◆ Don Dudley, AC5YK, president: We are rolling out the new makeup of the technical committee. It used to be the repeater committee but that's not a good name, therefore we are changing the name to the Technical Committee. The policy / how it works will be in an article in the newsletter. The purpose is to be good stewards of our funds. For any particular project for which the committee feels lacking in technical skills or background, they can reach out to others to act as consultants. The technical committee will advise the officers and the officers will decide how to proceed with a project. We will put a policy page on the website.

Lew Thompson: For those interested in MARS, see me. We will have a booth at Hamcom. There will be no MARS presence at Summerfest due to a scheduling conflict.

Break for refreshments at 7:34 p.m.

Presentation: Field Day 2016 by Jeff Schmidt, N5MNV and Stuart Rohre, K5KVH

Space weather presented by Lew Thompson

Field Day 2016 Follow-Up

From: "Stuart Rohre" <rohre@arlut.utexas.edu>

Date: Wed, June 29, 2016 5:30 pm

Subject: Thank you to all who made Austin Amateur Radio Club Field Day possible in trying radio conditions of NO SUNSPOTS



Thanks Red Cross for hosting again, the operations from the CSTAR chapter campus.

Thanks to Michael Vanzandt, and Austin Energy, for prepping and delivering and picking up the solar power trailer, which powered four stations for 24 hours of the weekend.

Thanks to Bob Morgan for Solar power assistance, and installing the NVIS antennas which were used extensively in these unusual conditions and loan of his new L network tuner designed by himself.

Thanks to Jeff Schmidt who co chaired Field Day and managed the set up of the combined phone and VHF station tower and all who put their backs into set up and take down of antennas and tower and masts on the CW / digital station as well. Also, captaining the VHF upper HF stations.

Thanks to all who contributed messages to send for the radiogram bonus or equipment such as tuners, spare radios, or accessories.

Thanks to Lew Thompson who captained the CW/ digi stations, set up with helpers, an all band tuned vertical; and, a feed point tuned dipole and the support poles for it. And, sent the 10 bonus messages, and the SCM message also for bonus credit and assisted the CW ops Peter and Milos with their CW success in spite of no sunspots.

Thanks to those who patiently waited for six meters to do miracles which did not come this year, as well as VHF bands.

Thanks to all who tried to work some HF phone bands, but were often stymied by the rapid fade outs from stations calling too long, who just faded away. And then were replaced by another station who might start out moderately strong but again fade from a contact. These were the most trying radio conditions we have seen: Four Days of NO sunspots! (That enable our out of state contacts by reflections).

Thanks to Joe Canfield who was back helping out this year and served as Safety Officer for the bonus for inspecting the site and set ups for good safety practices.

Special thanks to Lori Schmidt, who helped out but could not stay the whole time! She looked after the kitchen needs before the BBQ, while Joe Fisher tended the fire with helpers and cooked.

Joe Fisher, what can I say, would be too little. This was the best BBQ we have had, and the more moderate temperature and longer cooking time made for the most tender meats. There was beef, chicken, sausage and ribs and you hit the ball out of the park, or should I say sank the long basket shot, to produce gourmet results in a Field kitchen! Your BBQ pit trailer is great!

Thanks to Kerby Spruiell for taking care of electrical safety issues, and picking up the parts from Home Depot on the other side of the Mueller Development. Everything was brought up to safe practice with Kerby's machine shop skills. (Ask Kerby how to saw a straight line on a piece without a vice to hold it.)

Thanks to David Rivenburg, network advisor; and to especially Paul Kinney for mesh networking the computers and Joe Canfield and Paul for loan of computers as well as Stuart's and Jeff's computers for logging duty and network server duty. Only hiccup Paul and Stuart experienced was my laptop would not translate local time to Zulu time correctly until we reloaded the time zone information. Lesson learned don't start the logging programs until the local computer clock is checked and set.

There are so many thanks due to members who operated or came up and helped set up and take down and put things away, and vacuumed the rugs, emptied the trash, and all those housekeeping duties needed for a big event. We had 50 people sign into the log, and thanks to them for that.

This compares to 53 persons counted in 2015. A big round of applause if you came to Field Day! Forgive me if I overlooked any names to praise. (I am still catching up on sleep)

Thanks again all of you!
Stuart Rohre K5KVH
Field Day 2016 co chairs
Jeff Schmidt N5MNW

AARC Meeting Info.

Applied Research Lab
10000 Burnet Road

Business Meeting 7:00 pm

Topics: Travis County ARES -
Communications Trailer;
Solar WX Summary

Officers Meeting

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

2016 Calendar of Events

All Through 2016 - National Parks On The Air

<http://www.arrl.org/NPOTA>

Amateur Radio will be helping the National Park Service celebrate their 100th anniversary. Hams from across the country activate NPS units, promote the National Park Service and showcase Amateur Radio to the public!

July 16 - Texas City Hamfest <http://tidelands.org/>

Doyle Convention Center, 2010 5th Ave N, Texas City.
Talk-in: 147.14 MHz (PL 167.9 Hz)
secondary: 442.025 MHz (PL 103.5 Hz)

July 22-23 - Oklahoma Section Convention (Ham Holiday 2016) <http://www.hamholiday.com/>

Sponsored by: Central Oklahoma Radio Amateurs

August 5-6 - Austin Summerfest

<http://www.austinsummerfest.org/>

Crowne Plaza Hotel, 6121 North IH35, Austin, TX
(NE corner of IH-35N and US-290E)
Registration now available online!

September 10 - Lubbock ARC's 3rd Annual Hamfest

<http://K5LIB.org/>

September 17-18 - CTX Tour de Cure

Ham coordinators: Lee N5NTG, lee@besing.com and
Jeff N5MNMW, n5mnw@arrl.net

Details pending, please reference:

[http://main.diabetes.org/site/TR/TourdeCure/TourAdmin?
pg=entry&fr_id=11041](http://main.diabetes.org/site/TR/TourdeCure/TourAdmin?pg=entry&fr_id=11041)

September 30-Oct 1 - Belton Hamfest

www.tarc.org/hamexpo/ www.beltonhamexpo.org/

2016 Upcoming Amateur Exams

ARRL VEC - July 9

9 a.m. at Bethany United Methodist Church.

ARRL VEC - August 6

12:30 p.m. at Austin Summerfest

\$15 fee. For more info, contact:

Joe Makeever, W5HS (512-345-0800)

W5YI VEC - July 16 & August 20th

2 p.m. in Room 207, Fleck Hall, St. Edwards Univ. Contact Craig Bean, AC5KW arrl.net (512-474-6443) for more info. \$14 fee.

Upcoming Meetings...

Jul	Aug	Austin Meetings/Happenings	Time	Address
5	2	AARC Meeting @ Applied Research Lab	7:00 p.m.	10000 Burnet Rd
26	23	Travis County A.R.E.S. @ Applied Rsrch Lab	7:00 p.m.	10000 Burnet Rd
28	25	CERT Meeting @ CTECC	6:30 p.m.	5010 Old Manor Rd
25	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

AUSTIN SUMMERFEST 2016

August 5 & 6, 2016

Crowne Plaza - Austin
6121 North IH-35
NE Corner of IH-35N & US 290E

Austin, Texas
78752

Our 33rd Anniversary!

Once again it's time for fun in the sun in central Texas as we make the Capital City the place to be in the middle of the Texas summer. Come and enjoy old friends, the swapfest, and all the events at Austin Summerfest 2016, the ARRL Texas State Convention. And as always, we also host the Summer Meeting of the Texas VHF-FM Society.

Same hotel as
last year !!!

Check out
www.austinsummerfest.org
for late breaking news!

Schedule

All the activity is concentrated on Friday night and Saturday, to allow you flexibility in your weekend travel plans. But do come early, as things fire up at 6 Friday evening and go 'till 9, and start up again Saturday at 8 am, with swapping 'till 3:30 and dealers & sessions 'till 4:30.

The Texas VHF-FM Society meeting will run from 1 to approximately 3 pm, so mark your schedule.

Prizes

Prizes Galore! You have a chance at a slew of them, including these Major Prizes:

- Grand prize is a **Yaesu FT-857D** HF/6M/2M/70CM compact all-mode transceiver.
- Our *Featured Prize* is a **Yaesu FT-7900R** 50W/45W 2M/70CM mobile transceiver.
- A special *Bonus Prize* is a **Yaesu FT-60R** 2M/70CM 5W heavy-duty handheld.



Bonus Prize,
Yaesu FT-60R

Furthermore, if you register in advance by mail you have a shot at still one more prize—another **Yaesu FT-60R!**

With your registration you get one ticket good for Saturday's door prizes and the Major Prizes, and you can buy more tickets at \$1 each. Plus, if you rent a room at the Crowne Plaza, you'll get five bonus tickets for each room-night, up to a total of ten tickets. (See next page for prize rules.)



Grand Prize,
Yaesu FT-857D



Featured Prize,
Yaesu FT-7900R

Swapfest

For lots of folks, our main event—wall-to-wall goodies of every description, brought to you in carpeted, air-conditioned comfort on Friday evening and Saturday.

Rules:

- Full-sized tables: 6 feet by 30 inches. \$10 each, limit of 3 to a customer. First come, first served.
- AC power is available at an additional \$5 per customer, through advance registration only.
- We'll attempt to honor requests from groups of sellers for adjacent tables, if we receive your registrations in the same envelope.
- If you advance register for swap tables, we'll attempt to notify you in advance if they are unavailable due to being sold out (a rare occurrence). Be sure to give us your email address so we can notify you that way.
- Your table(s) will be held for you until 10 am Saturday.
- Swapfest hours are 6 to 9 pm Friday and 8 am to 3:30 pm Saturday. Opening times are for both sellers (for setup) and shoppers.
- Buyers and sellers must be registered at the convention.

We'll be holding a Tailgate swapfest on the east side of the Crowne Plaza Hotel. You need not be registered at the Convention to sell at the tailgate, but of course you'll want to attend the indoor swapfest and sessions, so it would be a good idea to register.

Technical Sessions

- ARRL West Gulf Division Director **Dr. David Woolweaver K5RAV** conducts this year's **ARRL Forum**, with Vice Director **John Robert Stratton N5AUS**. This year's special guest speaker is **Norm Fusaro W3IZ**, ARRL Field Services and Radiosport Assistant Manager.
- **Steve Hicks N5AC**, Vice President of Engineering for **FlexRadio Systems** will give us the latest information on Software Defined Radios.
- **Greg Jurens K5GJ**, President of the **Roadrunners Microwave Group** hosts a session on the latest topics on the "high end."
- **Frank Aguilar N5SSH**, South Texas Section Emergency Coordinator, hosts a session on **Emergency Communications**.
- The **Central Texas DX & Contest Club** will present **Marvin Bloomquist N5AW**, world renowned amateur radio contester and **Steve Hicks N5AC**, Vice President of Engineering, FlexRadio Systems. Marvin brings a wealth of contesting experience and Steve will talk on using the Flex 6000 for DX and contesting.
- Join our **QRP Workshop** to find out how to do "the mostest with the leastest".
- **Troy Kimmel KE5BCK** along with other leading Austin meteorologists will conduct a program on the latest in forecasting technology and recent weather events in the central Texas area.

Driving Directions

The Crowne Plaza is at 6121 IH-35 North at US 290, Austin, TX, 78752. Phone (512)323-5466. Talk-in is on 146.34/94. Tone: 107.2Hz

Northbound on IH-35: Take Exit 238-A (RM 2222). Continue on the frontage road over US 290. Turn right into the west entrance of the Crowne Plaza parking lot.

Southbound on IH-35: Take Exit 238 B-A, marked East 290 Houston West 2222. As you go up the ramp, it splits. Bear right at the fork, taking the West 2222 ramp. As you get back down to ground level, stay in the left lane and take the U-turn under IH-35 to the northbound frontage road of IH-35. Get to the right side of the northbound frontage road as soon as possible and take the first right turn into the west entrance of the Crowne Plaza parking lot. If you miss the first turn into the lot, take the second one into the northmost end of the hotel parking lot and work your way back to the front of the hotel.

Westbound on US 290: Take the IH-35 North (Waco) exit. Shortly after the exit ramp, bear to the right; turn right into the south entrance of the Crowne Plaza parking lot. This turn comes up quick; if you overshoot, just follow the turn lane to the right onto the northbound frontage road and turn right into the west entrance of the Crowne Plaza parking lot.

Summerfest will be held in the hotel's convention center in the southeast side. The tailgate swapfest area will be made available Saturday morning in the parking lot section in the southeast corner of the hotel property.

Prize Rules

We'll award door prizes throughout the day Saturday, until noon. For these, you must claim your prize by 12:45 pm Saturday. We'll post your name/call or ticket number at the prize drawing table. Prize tickets are only valid for persons registered at the convention.

At 1:00, we begin drawings for our three Major Prizes.

For the Major and Advance Registration Prizes, you need not be present to win. If you're a winner, we'll post your name and hold your prize. If you haven't claimed it by the end of the day, we'll send it to you.

License Exams

An exam session Saturday afternoon will cover all elements. Bring a photo ID and one other form of identification, and \$15.00; if you're upgrading, bring your current license, any applicable CSCE's, and a photocopy of each. For more info email **Larry Gunter WB5BEK** at wb5bek@arrl.net

On Saturday morning **Jeff Schmidt N5MNW** has just what you need: **A Welcome and Information for New Hams**.

Amenities

Come on up to our hospitality suite. Room 505—that's where you'll find your old friends and new ones, too. There are soft drinks and munchies on Friday night, and refreshments on Saturday morning.

The Crowne Plaza's restaurant will serve a buffet lunch on Saturday.

Administration Matters

Exchange views with West Gulf Division Director **David Woolweaver K5RAV**, Vice Director **John Robert Stratton N5AUS**. Find out what's going on and offer your opinions and insights. The ideal way to get or stay involved!

As always, we host the Summer Meeting of the Texas VHF-FM Society, scheduled for 1:00 Saturday afternoon.

Craft and Skills Events

Sandy Talen hosts our crafts session. No prior experience required. Come for a short while or the whole session and take home a completed crafts project. Did we mention, no charge? Children are welcome, but an adult must be with the children to supervise and help.

AUSTIN SUMMERFEST 2016



The ARRL Texas State Convention The Texas VHF-FM Society Summer Meeting

A word about our special guests...

The Texas VHF-FM Society is a group of several hundred radio amateurs with a special interest in the design and operation of VHF and UHF repeaters. The first meeting of The Society was held on August 8, 1965 on the picnic grounds of Zilker Park in Austin, Texas. Forty-five licensed hams were in attendance, including five XYLs. The Society now counts as members the licensees or technical custodians of nearly all the repeaters in Texas. Today, it continues in that role, minimizing intercommunity friction and helping the maximum number of amateurs operate and use repeaters. The Society educates, mediates, and arbitrates all matters of frequency coordination brought to its attention. The members of the Society invite you and your friends to join us; we know you will find it fun and rewarding to be a part of this organization.