

HAM DATES:

INDIAN RIVER CO.

Sept 1, 8, 15, 22, 29, 2020
Indian River Co. ARES NET
7:30pm, 145.130 (107.2) repeater

Sept 7, 14, 21, 28, 2020
Emergency Net, 7:30pm
146.640 (107.2) repeater

Sept 10, 2020
Vero Beach ARC meeting, 7:30pm
ZOOM (request invitation)

Sept 24, 2020
Indian River Co. ARES meeting
7:00pm 145.130 repeater

ST LUCIE CO.

Sept 1, 8, 15, 22, 29, 2020
Ft. Pierce ARC Rag chew, Traders,
Tech NET 8pm, 147.345 (107.2)
repeater Echolink: 2004 (W4AKH
-R)

Sept 2, 2020
St. Lucie Co. ARES NET, 7:30pm,
147.240 MHz (107.2) repeater

Sept 3, 10, 17, 24, 2020
Port St. Lucie ARA Rag chew,
Traders, Tech NET 7:30pm,
146.955 MHz (107.2)

Sept 9, 2020
Ft. Pierce ARC meeting, 7:30pm,
ZOOM (request invitation if not
member)

Sept 16, 2020
St. Lucie Co. ARES meeting on the
Air, 7:30pm, 147.240 repeater
(107.2)

Sept 23, 2020
Port St. Lucie ARA meeting
7:30pm ZOOM (request invita-
tion if not member)

MARTIN CO.

Sept 7, 14, 21, 28, 2020
Rag chew net 7:30pm, 145.150
MHz (107.2); 7/27 & 8/31 only
147.060 (107.2)

Sept 10, 2020
Martin Co. ARES meeting on the
Air 8:00pm 145.150 MHz (107.2)

Sept 24, 2020
Martin Co. ARA meeting
7:00pm (check MCARA website)

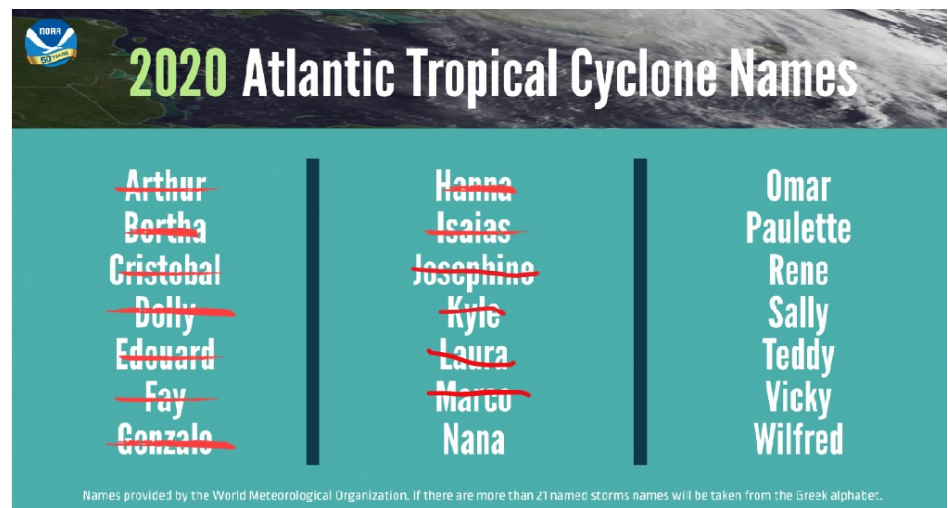
Treasure Coast Ham News

VOLUME 1, ISSUE 7

SEPTEMBER 2020

UPDATED 2020 ATLANTIC HURRICANE SEASON

We are about half way through our 2020 Atlantic hurricane season. The latest forecast from NOAA indicates the remaining part of this season may very well exceed the original forecast. The current forecast called for 19-25 named storms, 7 to 11 hurricanes and 3 to 6 major hurricanes. So far we have had 13 named storms.



By the time you receive this newsletter Marco will have been a storm event for Gulf Coast areas. Laura will have landed on the Texas and Louisiana coasts as a strong CAT 4+ hurricane. The hurricane will have caused significant devastation, flooding, power outages and a storm surge in excess of 10 feet. This is a wake up call for us. Is your Go Kit ready? Your county ARES and CERT organizations will need your help if we experience a major hurricane this season. Get involved and get prepared!

INSIDE THIS ISSUE: VE AMATEUR RADIO LICENSE TESTING * FT. PIERCE ARC MEMBER ILL * NEW HAMS CORNER: GROUNDING * NEEDED: TREASURE COAST HAM DOCTORS * HAM RADIO TRIVIA * NEW RADIO SYSTEM LEADS TO CAPTURE OF BURGLARS * SHORT TAKES * AMP FOR SALE * STRESS RELIEF * DX NEWS * AMATEUR RADIO CROSSWORD PUZZLE * WHAT'S GOING ON WITH VHF/UHF CHINESE RADIOS? * CARTOON CHALLENGE * RAMBLINGS OF AN ANTENNA ALCHEMIST * QSL CARDS



If your club is testing, please let us know the location, date and examination results

VE Amateur Radio License Testing Update

License Test Scheduled

A testing session is scheduled for 9:00 AM Saturday, September 12th, 2020 at the Buffalo Chophouse restaurant, 918 SW Gatlin Blvd, Port Saint Lucie. There are a limited number of seats available, so if interested, please contact Bob Brown, ASAP. (772) 201-5485 or brownpsl@comcast.net.

New Question Pool for Extra Class Exam

A reminder for those studying for the Extra Class Exam – The question pool has changed effective July 1, 2020. Changes in the new question pool include a reduction in the total number of questions from 712 to 622. In total, 139 questions were removed because they

were deemed to be outdated, and 49 new questions were added to reflect new technologies. Of the 573 questions carried forward from the old question pool, 239 of them have been modified.

A new study manual containing the updated question pool has been released by ARRL. If you are working toward your Extra Class ticket, be sure you have the most current study materials. You can purchase the updated manual from the [ARRL web site](#).

Also, the complete question pool is available for download from the [National Council of Volunteer Examiner Coordinators](#).

(Attention Club VEs – Please keep us posted on your VE activities. Advise us of sessions your club schedules and keep us apprised of the results of those sessions. Send your information to tchamnews@gmail.com.) For further information on VE testing please contact:

Vero Beach ARC

Bud L. Holman
(772) 559-3342
budholman@earthlink.net

Ft. Pierce ARC

Jess Porter
w4dns@arrl.net

Port St. Lucie ARA

Robert Brown
(772) 201-5485
brownpsl@comcast.net

Dictionary of Ham Radio Terms

Many of us were licensed years ago. Much has changed since then. Let's take a look at a few old and new ham terms.

ADC: Analogue to Digital Converter.

ADIF: Amateur Data Interchange logging format.

Bandpass Filter: Filter designed to pass a certain

range of frequencies.

BPS: Bits per second.

dB: dB relative to an isotropic source.

Diplexer: A frequency splitting device used to couple two transceivers to either a single antenna or a dual-band antenna.

Duplexer: A device that allows an antenna to transmit and receive at the same time.

ORSS: Very low-speed operation – typically CW below one character per minute.

Now that you are warmed up, are you ready for something a bit more challenging?

Try our amateur radio crossword puzzle in this issue. Good luck.

Ft. Pierce Amateur Radio Club Member

Fort Pierce ARC member Jim Jacques, K6RXX, was hospitalized with pneumonia. He was administered medications and oxygen

and is recovering. Jim expected to be moved to a rehab facility during the week of August 20th to continue his recovery.

Please keep Jim in your thoughts and prayers.

Submitted by Jess, W4DNS



New Hams Corner: Grounding Techniques for your Ham Shack & Antenna

Florida is the lightning capital of the United States.

Lightning Packs a Punch

It is claimed that the average lightning strike in Florida is 70,000 Amps. 40,000 amps is the US average.

Lightning usually hits a high point – the antenna – and comes down the transmission line to find ground. It does so generally as a **'Common Mode'** event, as opposed to a **'Normal Mode'** event. That is, the whole cable conducts the strike, not just the center conductor.

A Good Ground is Needed

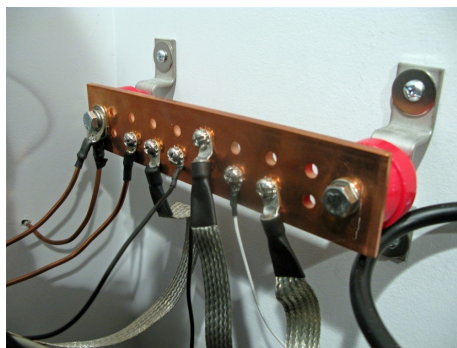
A good ground is 5 ohms. This results in a voltage spike of 350,000 volts. If the strike finds ground by going thru the radio, it becomes a fuse, blows up, and the warranty on your rig is void.

Minimize Damage

The key to minimizing lightning damage is to prevent the surge current from entering the shack and flowing through the equipment. We do this by providing it with a shorter, lower impedance, path to ground.

A good, low resistance and low reactance (inductance), single point ground system is necessary. All shack inputs and outputs (RF, telephone, internet, and cable TV) should be located close to, and bonded to, a single point ground buss.

Good coupling is needed to the ground system with multiple ground wires or flat copper strap. Do not use stranded or braided wire outside due to corrosion and IM generation (salt enters wire: mini-diodes).



Typical ground buss

Cabling Considerations

Route cables with minimum bends. Always keep current 'flow' in mind.

Never disconnect or cut an existing ground wire. Bond cables to ground rods using an approved clamp such as a 'split bolt'.

Soldering is allowed, but only in addition to a proper mechanical connection.



Close-up view of a ground clamp

Protection for the Shack

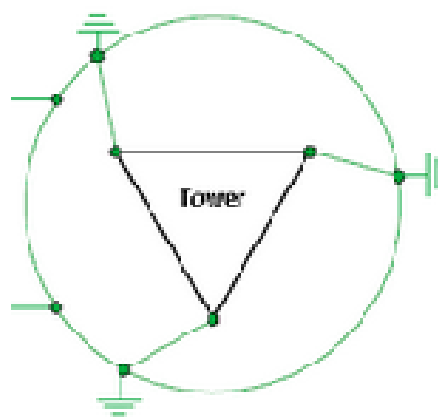
A good low impedance ground rod system for the shack consists of multiple rods placed 8 – 16 feet apart, connected together, and bonded

externally to the electrical entrance ground, any copper plumbing, or telephone and cable grounds.

Use 8' copper clad steel ground rods and bronze 'acorn' type clamps (or Cad Weld).

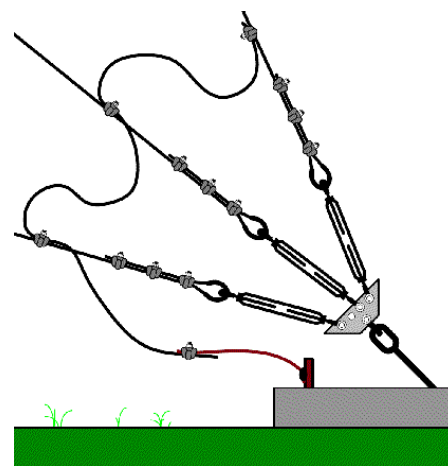
Don't Forget the Tower

If you have a tower, the ground system for it should be installed around the base.



Ground each leg of the tower

Tower guy wires also need protection. Bond the guy wires to each other and tie them to ground.



Ground the guy wires

(continued on page 4)

New Hams Corner: Grounding Techniques for your Ham Shack & Antenna

(continued from page 3)

Surge Protection

Verify or install surge protection at the building electrical power entrance panel. Be sure it is suitable for the rated service (normally 200 Amps).

Install wiring on the load side of larger breakers (AC, water heater, range, dryer). This work is best done by an electrician for code compliance and safety.

Many codes require a TVSS device be installed inside the panel for explosion protection. This will depend on the device type(s).

The electrician should also verify a good, tight ground connection.

Ground All Shields

Be sure to ground the outer conductor (shield) of all coaxial cables as they leave tower/mast. Route cables with minimum radius bend. Rotor and other control wires should be coiled.

Route all cables and their protectors to the single point ground buss. Now ground your equipment to the ground buss, but do it directly – do not ‘Daisy Chain’.

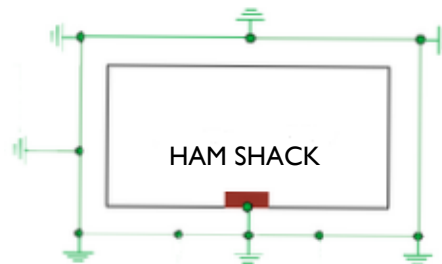
Here you can use stranded or braid wire. #12 is fine. Most of this is for ‘shunt’ protection, giving the lightning surge current a shorter path to ground.

An additional aid is to also provide series protection, making a longer path for the surge to reach the equipment. This is done by forming coils, the intent of which is to act as chokes, and/or by adding ferrite

chokes. The goal is to lower the impedance to ground and raise it to the equipment.

Consider a Buried Ground Ring

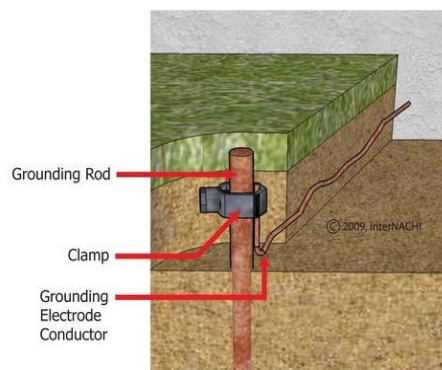
A buried ground ring around the building is excellent, but can be very difficult with existing structures.



Sketch of a buried ground ring

Use 8' copper clad steel ground rods every 8-15 feet and at the corners, and #4 or better solid copper wire buried 6" or more (never use stranded or braided wire outside).

Use quality clamps – no Zinc, steel, or ‘pot metal’ items. Avoid dissimilar metals outside.



Sketch of a buried ground rod

Ground Loops

Avoid any vertical ground loops exterior to the single point ground buss. These can act as transformers, often conducting the surge into the shack. This usually occurs when tower and building grounds are bonded together.

Most industry sources recommend that the tower and building ground systems NOT be bonded together, as the ground's resistance dissipates energy. This view may now be changing. Motorola R56 now does bond them together.

Each installation will require its own design. Existing buildings may require compromise.

Station Ground Buss

The station ground buss should be solid copper for the best performance.

Buy a large enough buss so it is not outgrown over time. The Harger brand works well and is affordable. (Sources: HRO, Georgia Copper). Two #4 solid copper wires or strap equivalents should be run from the ground buss to the outside ground ring. This tends to cancel inductance.

ESD Devices

Electro-Static Discharge dissipaters are not recommended. Do not buy expensive surge protectors – more of the inexpensive units spread around on different circuits will perform better.

The 90% Rule

There is a 90% rule to lightning protection – each step you take in the process will divert 90% of the strike current. Three steps will get the lightning surge down to about 70 amps and that is sustainable.

Spend time planning and not on fancy protection equipment.

Greg, KB4VVE

Needed: Treasure Coast Ham Doctors



Treasure Coast Ham News staff often receives requests for assistance for a variety of radio re-

lated issues.

The subject of these requests run the gauntlet, ranging from new licensee requests for assistance selecting and programming handheld transceivers, to experienced hams who relocate to our area and are requesting assistance with antenna choices, particularly in gated communities. We reply to these requests and

questions as best we can. If a question is beyond our knowledge base we attempt to forward it to a product expert for a reply.

To make knowledge easier to share with hams experiencing challenges, we want to develop a list of "experts" in various subjects that the ham community can reach out to directly for assistance.

Our intent is to develop a comprehensive list of subject matter experts (or Elmers as they are known in the ham community) and publish the list in a future issue of **Treasure Coast Ham News**. When we get our web site up and running we

will also include the list there. For starters, here are some topics for which Elmers are needed: HF, mobile & handheld radio selection, antennas & antenna tuners, amplifiers, DMR, code plugs and Chinese radios.

If you are willing to become a *Treasure Coast Ham Doctor* for a particular ham related subject, please let us know be sending an email to tchamnews@gmail.com. Be sure to identify the topic or topics you can help with.

"TC Ham News is emailed to over 200 local hams and shared with a number more."

Many of our readers have knowledge that can help others, so please send that email."

HAM DOCTOR NEEDED

Attention Treasure Coast Hams

Is anyone familiar with PRIAM Technologies UC7000-A Six Bay Rapid Charger? Does anyone perhaps have a schematic for this charger? A local HOA emergency response team's charger is not working and they would like to get it fixed.

If you are familiar with this charger or can provide a schematic, please contact Bob, AI4RB, at: brownpsl@comcast.net or 772-201-5485.

*** If you have a ham problem, please email tchamnews@gmail.com. ***

Ham Radio Trivia

Answer to last month's question:

In the July newsletter we asked you to choose which famous politician, who was once an unsuccessful candidate for President of the United States, held an active amateur radio operator license at the time of his run for the presidency? Your choices were:

- A. Hubert Humphrey
- B. Barry Goldwater
- C. Michael Dukakis
- D. George Wallace

The correct answer is: **B, Barry Goldwater.**

(Goldwater, K7UGA, ran as a Republican in 1964 and lost the election to Lyndon Johnson.)

September Trivia Challenge

For this month's trivia challenge it's time to once again hit the books. Try your hand at this question taken directly from the Technician Class License Exam Question Pool.

Question T3C05

Which of the following effects might cause radio signals to be heard despite obstructions between the transmitting and receiving stations?

- A. Knife-edge diffraction
- B. Faraday rotation
- C. Quantum tunneling
- D. Doppler shift

And just in case you think that question was too easy, try this one from the Amateur Extra Class License Exam Question Pool.

Question E1C09

What is the highest modulation index permitted at the highest modulation frequency for angle modulation below 29.0 MHz?

- A. 0.5
- B. 1.0
- C. 2.0
- D. 3.0

Answers to both questions will be revealed in the next issue. In case you can't wait that long, the complete question pools and answers are available at www.ncvec.org.

"Brush up on your radio knowledge and skills."

New Radio System Leads to Capture of Burglars

The following is a true story. It is followed by some commentary.

Burglar Alarm

When a burglar alarm activated on the morning of November 1 at 3:20 AM, the Chicago police department was alerted to the incident and used their new radio system to dispatch patrol cars to the scene.

Arriving on location, police fired a single shot while apprehending 2 burglars attempting to flee the premises from the front. Three more were subsequently apprehended attempting to flee out the back.

Explosives were found near the safe,

leading police to believe the safe was their intended target.

Commentary

Knowing the focus of **Treasure Coast Ham News** is all things radio, you are probably wondering about the significance of this story?

Being a radio person, perhaps the first thought that came into your mind was that Chicago must have recently upgraded their radio technology.

Or maybe they commissioned a new 800 MHz trunked system. Or perhaps they upgraded to digital voice, or enabled encryption.

Sorry, but none of these guesses are correct. You see, the incident happened on November 1, 1930, and Chicago Police had only recently commissioned their first radio dispatch system. And for the curious, the incident happened at the premises of Star Cleaners & Dyers on Western Avenue.

(This article is a summary of a story that appeared in **The Transmitter**, volume 2 number 11, dated November, 1930. **The Transmitter** was a monthly publication of American District Telegraph Company, which we know today as ADT Security Systems.) Do you have an interesting story involving radio? If so, consider sharing it. Send your story to: tchamnews@gmail.com.

Short Takes

EI8IC Ham Radio Resources

Here is a web site offering innovative mapping and logging tools that serious operators may find useful: [EI8IC's Ham Radio Resources Website](#)

US Space Command

The new SPACE COMMAND branch of the military is coming to life. A military asset using call sign Tiger-Ace was heard calling Space Command on 11.175 MHz USB. The call was heard on 8/15/20 at around 3:17 PM. This is the first report we've heard that used the tactical call SPACE COMMAND.

FOR SALE BY LOCAL HAM



Alpha 374A Amplifier in good condition. The amplifier

has been modified by N4UQ, Dick Byrd and has 3-8874 tubes instead of the standard 2 tubes. It was also modified by N4UQ with a grid protection circuit. It operates on all bands 160-10 with the exception of 12 meters by design. It produces 1.5KW out with about 50W drive. This is for pickup only in Port St. Lucie, FL. \$1,700 or best offer. Contact Jim wb2rem@verizon.net for more information.

Stress Relief

The stress created by the COVID-19 crisis continues to impact our daily lives. So in an effort to lessen the stress a bit this month's humor will feature a couple of jokes loosely related to radio. Enjoy them.

Joke #1 - Radio to the Rescue

Ralph was towing his boat home from a fishing trip in Jamaica Bay when his car broke down. He didn't have his cell phone with him, but he thought maybe he might be able to raise someone on his marine radio to call for roadside assistance. He climbed into his boat, clicked on the radio and called, "Mayday, Mayday."

A Coast Guard officer came on and said, "State your location." Ralph replied, "I-95, two miles south of Cranston."

After a very long pause, the officer asked, "How fast were you going when you reached shore?"

Joke #2 - Rookie police officer's first radio call

A rookie police officer was assigned

to ride in a cruiser with an experienced partner. A call came over the car's radio telling them to disperse some people who were loitering.

The officers drove to the street and observed a small crowd standing on a corner. The rookie rolled down his window and shouted, "Let's get off the corner."

No one moved, so he barked again, "Let's get off the corner! Do it now!" Intimidated, the people began to leave, casting puzzled glances in the officer's direction.

Proud of his first official act, the young policeman turned to his partner and asked, "Well, how did I do?" "Pretty good," replied the veteran, "especially since this is a bus stop."

Heard any good jokes involving radio? Share them with the ham community. Send your jokes or other humor ideas to:

tchamnews@gmail.com.

(Jokes are from ajokaday.com)



Ramblings of an Antenna Alchemist

With our seventh issue of Treasure Coast Ham News we are introducing a new continuing column. We hope our readers will participate by submitting their practical experiences with antenna alchemy.

My interest in ham radio goes back as a 14 year old when I discovered QST in my junior high school library. Even though I understood very little about amateur radio, my interest was peaked. A couple of years later I took my Novice exam and obtained a license.

Getting my Novice station together was challenging as I was a high school student of limited means. The ham who gave me the Novice exam found me a crystal controlled Knight-kit T60 transmitter and a Heathkit Comanche receiver for \$50 dollars. I found an old ARRL handbook at a library used book sale and off I went investigating what type of antenna to use. I learned about wire antennas, verticals, and beams (YAGIs).

My parents were very supportive and let me “hang” a wire antenna on our house roof using wood poles at each end. Much later I learned about propagation and how my antenna was more of a cloud

burner on 40m, but it worked, giving me contacts as far away as Kent, Ohio. 15 meters was better. Why I asked? And I studied on.

While a communications technician in the Navy I used a circular disposed array antenna (CDAA). Not an antenna intended for hams, but I learned about directors and reflectors and day, evening and night propagation.

The late 70s thru the mid-80s was my commercial antennas time. I tried wires, verticals and beams (YAGIs). I was a CW geek, so almost any type of antenna worked.

In 1986 I met two hams, W4SS(sk) and W4PHL(sk). They would change my perspective of antennas forever. I can remember spending many lunches with them talking about propagation, feed lines and types of antennas. Even though I was living in a deed restricted community, their ideas and suggestions on how to make that environment work have stayed with me.

I also had an opportunity to meet Ted Hart, W5QJR at the Melbourne hamfest. He introduced me to magnetic loop antennas. We talked at great length. Magnetic loops are a part of my antenna farm to this day.

Many a Saturday I would be

in my garage doing antenna experimentation. One design that worked well was a 20m helical vertical antenna, ground mounted in my backyard. My strict homeowners association never knew it was there.

About the same time I started subscribing to **Antennex** magazine. Each issue was full of practical antenna info. I also discovered L.B. Cebik, W4RNL (sk). His theoretical and practical knowledge of antennas was amazing.

Fast forward almost 30 years and I am still experimenting with antennas. I can't go to a home improvement store's plumbing section or Bass Pro's fishing section without dreaming about how I could make new antennas.

Hand in hand with antenna experimentation is modeling. I acquired EZNEC and after reading the ARRL articles I started using it to test antenna designs. Recently, based on Harold, N3UY's recommendation, I acquired a NanoVNA.

So where do we go with this column? That is up to you. I am sure there are many antenna alchemists out there. Here's an opportunity to share your antenna alchemy. Send stories to tchamnews@gmail.com. 73



DX News

(Extracted from the weekly **ARRL DX Newsletter** and other sources.)

DX OPPORTUNITIES

CAMBODIA, XU7. Tad, JA1DFK is active as XU7AKU or XU7AKV from Phnom Penh. Activity on 160 to 6 meters using mostly CW and SSB, with some digital. QSL direct to JA1DXA.

EASTER ISLAND, XR0. Hans-Martin, DK2HM will be QRV as XR0YHM from August 27 to September 7. Activity is holiday style on 80 to 10 meters using SSB & the digital modes.

EASTER ISLAND, XR0. A Polish team active as XR0YSP from September 15 to 30. Activity on 160 to 10 meters using CW, SSB & FT8.

CHATHAM ISLANDS, ZL7. Stuart, ZL3STU has moved to Canterbury on the Chatham Islands (OC-038) with call sign ZL7STU. He is on 80-6 meters using SSB & FT8. QSL for both calls via M0OXO.

ANTARCTICA. Alexander, RX3ABI is QRV as RI1ANM from the Mirny Antarctica Base Station, IOTA AN-016, until early 2021. Activity limited to his spare time on various HF bands, likely 40 and 20 meters using FT8, 0200 to 1530z.

CORSICA, TK. Max, DL8UW is QRV as TK4VQO from Olmeto. Expects to be there for the next few years. Activity is on 160 to 6 meters using CW and SSB.

SPECIAL EVENT STATIONS

GREECE, SV. SV1AHH & SV1GGF will be QRV as SX1AFM from September 1 to 30, celebrating the 70 years of the Hellenic Air Force History Museum. Will be on 80 to 6 using all modes. QSL via qrz.com information.

CHILE, CB33. Members of the Radio Club Eternautas (CE3ETR) are active as CB33M until October 13. Activity commemorates the 10th anniversary of the August 2010 landslide in a mine in the northern part of Chile where 33 miners were trapped for 3 months until their rescue was carried out. Operations will be on 80 meters through 70 cm using CW, SSB & digital modes FT8/FT4, JS8, RTTY, PSK31 and SSTV. QSL via PO BOX 12096, Santiago, Chile.

DENMARK, OZ. OZ200EM until the end of year, is honoring the memory of Hans Christian Orsted, who discovered the principle of electromagnetism 200 years ago. QSL via OZ1ACB.

UK, Various. Royal Signals Amateur Radio Society will be QRV with special event call GB100RS from June 28 to the end of October to mark the society's 100th anniversary.

INDIA, VU. VU2TUO is QRV with special call AT2ARA until September 23 during the COVID-19 pandemic.

INDONESIA, YB. 8A343CJR is active to draw attention to the 343rd anniversary of the Cianjur District on Java.

HONG KONG, VR. Members of Hong Kong Amateur Radio Transmitting Society (HARTS) are active with special call sign VR2HK9O in celebration of the

90th anniversary of their Society. Operations on 20 meter SSB. QSL via VR2HK direct or by the Bureau.

JAPAN, JA. Yoneyama HF Club (JR0YHF) is operating special event station 8J0K in celebration of the 80th anniversary of Kashiwazaki city in Niigata Japan. They will be QRV until March 31, 2021, on 1.8 MHz through 5.7 GHz.

CZECH REPUBLIC, OK. OL700DKA, OL700CO & OL700LTV are QRV during 2020 to commemorate 700 years since the first written mention of the town of Dobruska. Activity is on the HF bands.

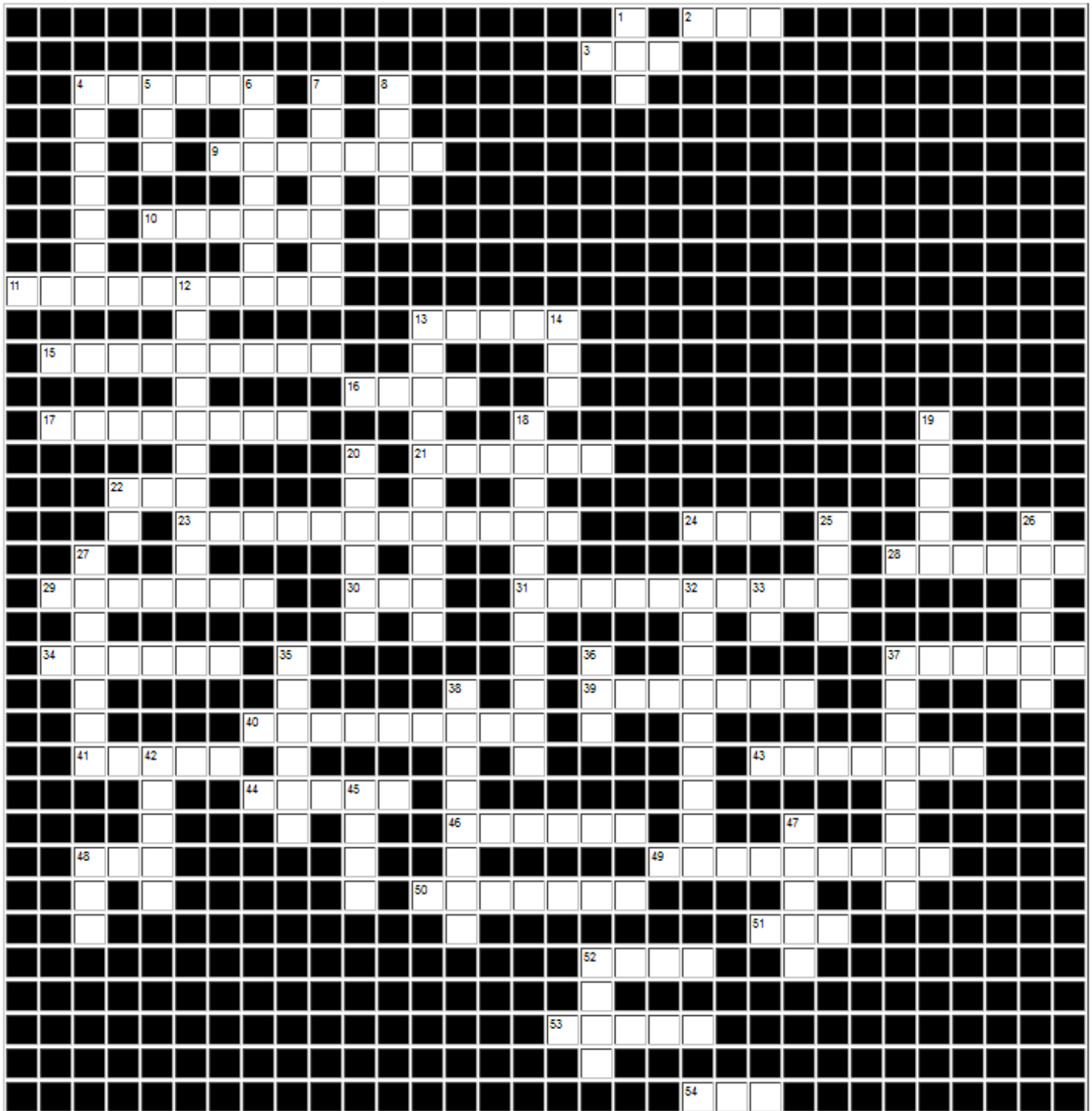
SOUTH AFRICA, ZS. Throughout 2020 ZS1820S will celebrate the arrival of the first British settlers at the South African Cape 200 years ago.

FUTURE DX OPPORTUNITIES

OGASAWARA, JDI. Makoto, JI5RPT will be active as JD1BLY from Chichijima Island (AS-031), October 3 to 6. Schedule may change depending on status of COVID-19. Activity on 630 to 6 meters using CW, SSB & digital modes (No 6 meter EME). Will focus on 630 meter band, 160 meter SSB, the RS-44 satellite and FT8 on the HF bands. 630 meter activity will be mainly on JT9. QSL via his home call sign.

BONAIRE, PJ4. PJ4TEN is a special event station during October for the 10th anniversary of 10-10-10, the date the Netherlands Antilles was dissolved and Bonaire became a special municipality of the Netherlands and a new DXCC entity. QSL via M0URX direct, OQRS, or LoTW.

Amateur Radio Crossword Puzzle by Jeff, KA0UPA



It is easy for hams licensed for a long time to get behind on FCC Rules and Regulations, radio technology, antennas and propagation techniques. Try this crossword puzzle to test your knowledge.

CLUES ARE ON THE NEXT PAGE. (ANSWERS WILL BE POSTED IN THE NEXT ISSUE.)

- 2. An acronym. Occurs when an antenna is not matched to the transmitters.
- 3. An acronym. A thousand-million cycles per second.
- 4. A popular, easy to build antenna. May be horizontal or in a V-shape.
- 9. What V.E.'s or Volunteer Examiners do.
- 10. Current that only flows in one direction. All batteries produce this kind of current.
- 11. A tool used to measure ohms, volts, amperes and sometimes other things.
- 13. Used to extend an antenna's clearance above ground 'clutter' or obstructions. Usually permanent.
- 15. This component holds a temporary charge. Large values are polarity sensitive.
- 16. Cable consisting of a copper, center core and a silver outer conductive braid.
- 17. A popular multicolor LED consisting of three colors. Often RGB.
- 21. Must be mindful of this when working with or around high voltages or frequency.
- 22. An element of Morse code. Three times the length of a Dit (or a dot.)
- 23. Equipment used to display analog or digital signals in and X-Y graph like form. The X is time and Y is amplitude.
- 24. An acronym. A Q-code representing your operating location.
- 28. Connect batteries this way to increase voltage.
- 29. Hams often spend weekends away from their wives in pursuit of this.
- 30. An acronym. A form of communication using the moon as a satellite.
- 31. Refers to either a rule. Or, the ability to maintain a constant voltage or current level.
- 34. A battery of this component may hold it.
- 37. Operators using Amateur or Commercial frequencies without proper FCC licensing.
- 39. A popular vintage brand name of Amateur Radio equipment. Often fetching a pretty penny.
- 40. An instrument used to measure power.
- 41. The highest class Amateur Radio privilege class.
- 43. A voluntary Amateur Radio organization used to report weather conditions to the National Weather Service.
- 44. A kind of battery charged by the sun.
- 46. Used to send Morse code with horizontal movements of the hand/wrist.
- 48. An acronym. Used to acknowledge receipt or understanding of a message.
- 49. A rig capable of operating three modes.
- 50. A popular brand name for Amateur Radio equipment. Not made however, of wood.
- 51. An acronym. An efficient form of communication in HF Radio.
- 52. When wire is wound this way, it's referred to as such.
- 53. May be electromagnetic or magnetic. In magnets, it may be North or South in polarity. In radio, it may fluxuate.
- 54. An amateur radio field sport. Called _ _ _ hunting.

- 1. An acronym. Million of cycles per second.
- 4. This form of communications consisting of I's and O's.
- 5. Short name for a potentiometer or variable resistor.
- 6. A piece of an antenna as part of an array.
- 7. Used to swivel an antenna nearly 180 degrees in either direction.
- 8. Watch out for these when erecting antennas.
- 12. Converts sound into minute amounts of voltage.
- 13. An electronic component that can act either as a switch or an amplifier.
- 14. An acronym. Represents a form of interference.
- 18. Batteries hate this when it gets too low, electronics hates it when it gets too high.
- 19. Used to represent a repeating occurrence of something.
- 20. Removes an undesired frequency or level from a signal.
- 22. An acronym. Represents long distance communication.
- 25. A rather unreliable method of charging batteries.
- 26. Stations operated without the physical presence of an operator.
- 27. A name for a kind of early crystal radio used in the field by soldiers or covertly in prison.
- 32. Takes a small signal and increases it's level. Hopefully, without distortion.
- 33. An acronym. To represent microelectronic components. Package typically black with several L-shaped legs.
- 35. Sound signal for example, originate this way before they are encoded. Represents varying levels of voltage or current.
- 36. The Federal Agency that issues the rules and regulations by which hams must abide.
- 37. Connect batteries this way to increase current.
- 38. A tools use to remove the insulation on a wire.
- 42. The 'true' father of Radio i.e. *not* Marconi. A coil is named after him and he is the father of our A.C. power system.
- 45. An acronym. Represents the interests of Amateur Radio Operators.
- 47. Another foreign brand name of Amateur Radio Equipment.
- 48. Q-code used to broadcast to all amateurs. Also, the name of a popular Ham magazine.
- 52. Used to temporarily connect a wire to a conducting surface.

What's going on with VHF/UHF Chinese Radios?

Why do some recent VHF/UHF Chinese radios not work properly, can't be programmed with a computer, or out and out fail? Let's do a little Asian review.

Asia sees an opportunity

Remember when America had ham radio manufacturers including the venerable Heathkit? Remember the early Asian radios? At that time Asia's technology sector was looking for new opportunities, and America looked very promising.

Was it their plan to kill our domestic radio market? Probably not. But many American firms reacted too late. Over time Asian radios became reliable and were a good value. That is until the Chinese decided to dominate our domestic VHF/UHF radio market.

China makes their entry

Historically, China played the long game but quickly learned American's are different. We have an unquenchable and immediate thirst for new technology. Hams even more so.

Whereas other Asian's saw quality most important, not so for the Chinese. They saw an opening to market inexpensive, mass produced VHF/UHF commercial radios. They knew American's love a bargain.

The Chinese have a robust offshore technology "acquisition" effort. The key for them is to get their hands on radio technology. It's only a guess, but many think they reverse engineered Japanese and American

radios. Other effort included seeking offshore employees of radio manufacturers in an effort to gain knowledge and expertise. China has only begun to respect patents.

When it came to manufacturing, the established Chinese electronics factories are very modern. Most had ISO 9000 quality certification. While not an absolute, Chinese radio manufacturers that had ISO 9000 certification were producing products that were of good quality and received FCC type acceptance, usually Part 90.

Chinese radios today

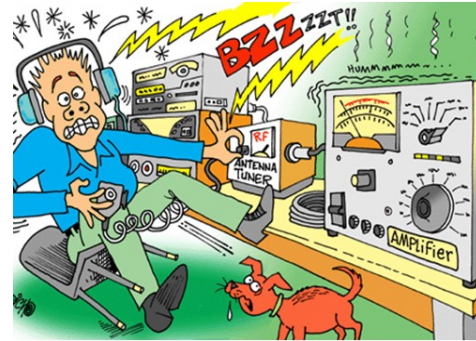
So why are there now problems with Chinese radios? Baofeng is an example of both good and not so good. The early radios worked well, but later radios had problems with firmware and programming. This may be a result of knock-off or unauthorized copying of technology. Unfortunately, China does little to go after these companies. We also have a problem with U.S. Customs. Going after fake Rolex watches, handbags, etc. seems to be their priority. The FCC and their policing, well let's not go there.

So, the next time you see a cheap Chinese handheld or mobile radio for sale, be careful, very careful. Don't buy solely on price. Check out suppliers. Ask around. Use the Internet to research issues. Bad copies of well known ham brands are arriving on our shores daily. You may be better off with ICOM, Kenwood, Yaesu or Alinco radios. You know them! 73

Cartoon Challenge

Last Month's Cartoon Challenge

Last issue we provided the cartoon image shown below and asked you to make us laugh by providing a caption for the cartoon.



Here in no particular order are our favorite captions:

Radio operator: "The XYL is really going to be angry. I've singed the cuffs of another shirt."

XYL (in another room) shouting: "What are you doing? The bulb in the living room lamp just launched itself like a rocket!"

The dog is thinking: "He did it again! By now he should know not to use a 20 amp fuse to replace a 5 amp!"

Another dog thought: "No wonder he calls himself an Amateur!"

The editors like to reserve the last couple of pages of *Treasure Coast Ham News* for the readers. With your help these pages will include:

For Sale Section – Have something to sell or trade? Send us a description and/or picture to have it listed in this section. Looking to buy something? Provide a description and we will print it.

QSL Card Section – Many hams enjoy viewing QSL cards, especially those with colorful pictures. Send us scans of your favorite QSL cards. Maybe the first card you ever received. Or perhaps your favorite card, or your personal card. We will include some in each issue as space permits.

These are your pages. Help make them a success by submitting your photos, For Sale listings and QSL cards to tchamnews@gmail.com.

We will close this issue with a few QSL cards on the next page. Watch for our next issue in early October.

The QSL cards below show what can be done with minimal antennas, low power, and FT-8. Don't let your radio and antenna situation be an impediment. Get on the air and enjoy the hobby!

ITU ZONE 17 GREETINGS FROM ICELAND CQ ZONE 40
 „THE LAND OF ICE AND FIRE“

TF5B

Akureyri QTH LOC. IP05WQ IOTA EU-021 DIG 3711 10-X #3714
 Brynjólfur Jónsson, Engimýri 8, IS-600 Akureyri, Iceland



To: W4RJP This confirms our 2-way FT8 QSO
 Date: June 30, 2020 Time: 07:16 UTC
 Band: 40M UR Sigs: -15
 FT8 Rcvd: -17

FT8DMC SPECIAL EVENT STATION
ZW8FTDMC
 Brasil
 QSL Manager PP2CS

Confirming QSO with				
Date	UTC	MHz	2-way	RST

Dear YL/OM, thank you for the QSO(s). A number of Special Event Stations have been on the air during the FT8DMC activity weeks. All stations signed the FT8DMC or FTDMC suffix, referring to the anniversary of the FT8 Digital Mode Club. An FT8DMC Anniversary Award will be available. By working the FT8DMC and FTDMC stations, points can be collected for various levels of the Award. Hope to see you again next year, 73!

Anniversary www.ft8dmc.eu
 FT8DMC founded 12th July 2017

To: AI4RB This confirms our 2-way FT8 QSO
 Date: July 10, 2020 Time: 21:32 UTC
 Band: 17M UR Sigs: -14

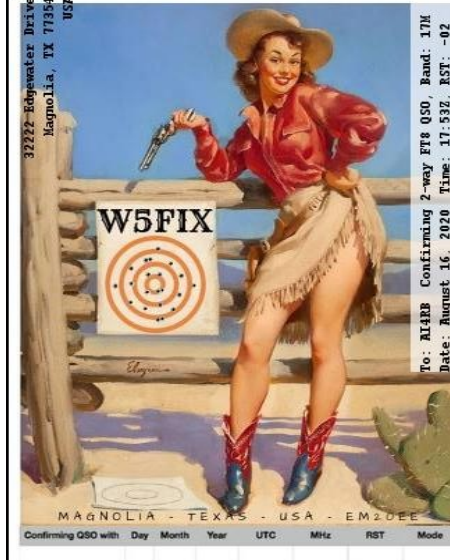
WB5JJJ

George Cotton
 PO Box 1025
 Russellville, AR 72811
 POPE County - EM35kg
 USA



To: W4RJP This confirms our 2-way FT8 QSO
 Date: August 10, 2020 Time: 13:15 UTC
 Band: 40M UR Sigs: -19

32222 Edgewater Drive
 Magnolia, TX 77354
 USA



To: AI4RB Confirming 2-way FT8 QSO, Band: 17M
 Date: August 16, 2020 Time: 17:53Z, RST: -02

MAGNOLIA - TEXAS - USA - EM20EE

Confirming QSO with Day Month Year UTC MHz RST Mode

VA1RJR

Randall Reid
 1810 Crowell Rd, East Lawrencetown
 Nova Scotia B2Z 1N7, CANADA
 Loc: FN84hp, ITU:9, CQ:5
 IOTA: N/A-126
 IC-7300, 80m window



To: W4RJP This confirms our 2-way FT8 QSO
 Date: August 12, 2020 Time: 08:11 UTC
 Band: 40M UR Sigs: -17

AMATEUR RADIO STATION



F5JUS

Bernard FIRMIGNAC Rodelle - FRANCE -
 Loc : JN14HM

To: AI4RB This confirms our 2-way FT8 QSO
 Date: August 18, 2020 Time: 21:09 UTC
 Band: 17M UR Sigs: -05

QSL cards are an important part of Amateur Radio. TCHamNews wants to publish QSL cards received by our local amateur radio community. If you have a QSL card you want to see published, please send a scanned image (jpeg) to TCHamNews@gmail.com. We will include it in an upcoming issue.
 (If you send us a paper card, we will scan it and send the original back to you.)

TREASURE COAST HAM NEWS
 IS PUBLISHED BY
 B & B PARTNERS

WE CAN BE REACHED AT:
TCHAMNEWS@GMAIL.COM

