

Sparks

W9OG



Serving the Tri-State for 70 years

Monthly Newsletter of the Tri-State Amateur Radio Society

October 2017- Issue No. 10

TARS Website: <http://www.w9og.net> Club repeaters: 146.79 and 147.15

Say "Hello" at the weekly Tri-State Emergency Net, 8:00pm Wednesdays on 146.79

Please feel to submit articles or suggestions to

Editor: SPARKS@w9og.net



President's Corner:

The election of office and board members is closing fast! Elections will be held during our November meeting and there is still time if you want to nominate yourself or another member for a position. Please contact Herb KB9MZH, Mark KC9TYA or Len N9QVQ for further information. As we voted at our meeting last month, the Christmas Party/meeting will be held at the Log Inn on the second Thursday of February (2/8/2018). As a Public Service Announcement, please remember that, while members are encouraged to bring their spouses, this dinner is not advised to be substitute for Valentine's Day. We are closer to ordering club T-shirts and hope to get a design, cost and order form completed soon. Winter Field Day is January 27th so be planning on what gear and food to bring. Present plans are to return to Wesselman's Park.

Dave KC9UVG for world traveling Chris N9JCA

Looking for active members

A new e-mail reflector has been set up for any member wanting to have input and be in on discussions for club activities and planning.

To sign up, go to http://w9og.net/mailman/listinfo/tars_workgroup_w9og.net



One man's opinion

Normally in this column I write about ham radio issues, or various changes proposed for the ham bands. However, I am going to pause this month and tell you about two fine gentlemen of the air ways we have lost in just a few months.



Dave Vogel, WA9C was a gentlemen, a fine person and he loved this hobby. I often would see his face light up when a new comer would want to operate the GOTA station on Field Day. That was his crowning achievement, he

did enjoy it very much. Our relationship in Ham Radio goes back a few years, one night at club meeting we started to recall memories from those by gone times when Dave was stationed in Alaska. Dave was sure he had worked me, so I went home found his QSL card from Alaska and sent him a copy of it. Dave was using the call KL7ITG and I found two contacts dating back to 1977 and 1978, one for CW and the other for SSB both were on 15 meters, a time when that band was open for many hours and provided thousands of DX contacts.

That was indeed a cherished moment in Ham Radio, as of this date of 2017 those contacts are 40 years old, yet those memories of the contacts are still vivid in my mind. Just think, at the time we were working each other, this old man was thirty-six years old, no health issues, my how time changes things.

Dave, may you rest in peace.



Dave Wood, W9AJR we go back many years as well. Dave like me was a CW op. We would often catch each other on 20 meter CW chasing DX. Dave, for several years was associated with WJPS 1330 "Tiger Radio".

I chose Television and spent over 20 years at WEVV-TV, we often would chat about the broadcast profession, or normal days and those days when everything went downhill. I do recall calling Dave one day on the phone. I had driven back to Henderson from Louisville, I left my home town at ten PM their time nine PM local time. Much to my surprise I could hear WJPS coming in loud and clear once I got close to Fort Knox. You see in those days I 64 did not exist, I was forced to take Highway 60 all the way to Henderson.

Now hearing WJPS radio that far on the night time pattern was not right, we discussed this on the phone, so I decided to listen next week since I had another trip to Louisville. To make a long story short, it seems that one tower of the three tower system WJPS was using shorted out due to lightning. The former engineer falsified the station logs and did not record the problem. WJPS started receiving complaints from other stations in the country who were also on 1330 KHz. The FCC got involved and some fines resulted, well the former engineer was fired.

After this problem was corrected Dave started talking to me about a job, I might have taken it had they been able to offer me more money than I was being paid at the time. However, that was not to be and I stayed where I was, at that time I was employed with WEHT and remained there for ten years. The last time I saw Dave was one day we were chatting on two meter simplex, Dave told me he was having trouble with his T2X rotor. I have the same model and I offered him my spare system I keep stored in the garage. In a short time Dave and

his wife Susie appeared in my driveway, he picked up the system and headed home. Yes, he found the problem it was the starter capacitor in the control box, a simple fix, I had helped him again. The next day he brought back my spare T2X and control box, we both felt very good we were able to isolate the problem.

I had heard Dave was having serious health issues, I was so surprised to read of his passing in the last issue of SPARKS sure wish someone from TARS would have given me a call about both.

Again, Dave W9AJR we bid you final 73's and we old CW men sign SK after the final message is sent. A final 73 and SK old friend, Rest in peace!

With that my friends this is "One Man's Opinion"
Bill K4LRX



Eat'n Before the Meet'n

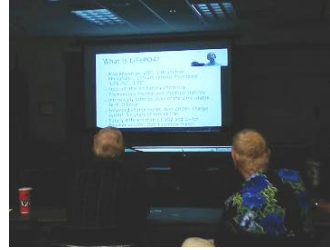
October 12th Eating Before the Meeting will be at [CiCi's Pizza 101 North Green River Road](#), located just north of the Lloyd Expressway next to Burlington Coat Factory before the regular TARS club meeting.

Drop by for food, socializing, "story tell'n" and whatever else comes to mind. Join the group at 5:30, or whenever you can make it. Check in on 146.79 if you need directions or just bored on your drive in. Everyone is welcome to join us.

If you have any suggestions on where you would like for us to meet, contact: [Herb Alvey KB9MZH](#) c:812.499.3729



Have you attended a meeting lately?



You could have been a winner of a brand new dual band HT at the September meeting. 25 people signed the attendance log.

Number picked for the attendance prize.... **26!**
That should have been YOU!



Other than missing out on attendance prizes, just think of all the fun, comradery and knowledge you have been missing.

Arduino antenna analyzer and kit building, Bioenno Power LiFePO4 batteries, 2m J pole antenna and radio programming just in the last few months.



A Call for Candidates

It's time to be thinking about who will be officers of TARS in 2018. Members in good standing for at least one year are encouraged to step forward and place your name into consideration for one of the Club's offices for the year. Contact the Nominating Committee or submit your name during Oct. club meeting.

The committee:

[Herb Alvey KB9MZH](#) c: 812.499.3729 (Chairman)

[Mark Thienes KC9TYA](#) c: 812.453.0317

[Len Schmitt N9QVQ](#) 812.963.0027

will be contacting members and encourage you to place your names on the ballot. Offices up for election are President, Vice President, Secretary, Treasurer and 3 Board of Director positions.

The election committee will prepare ballots to be included with November SPARKS, with the election taking place at the November meeting.



Meeting Presentations

Thanks for everyone filling out the questionnaire in September for what your interests are for future presentations at our monthly meetings. I hope to compile your answers in a future meeting to show what topics interest the club the most.

For October, our topic is Go Kits. All members are invited to bring their Go-kits to the meeting for a show-and-tell on your project. In a few minutes or so, let the group know **Why** you chose this kit,

What problems did you tackle during its construction and **How** has it fit your needs. If you started it all over today, **What** would you change? If you don't have a completed Go-kit, maybe you have a project you have been working on that you would like to share. Stuck on a problem you do not know how to solve? Maybe one of the members has been there and can offer assistance. Don't have a Go-kit or a work in progress but still want to participate, let us know your favorite piece of test equipment.

In the next few months the topics are:

October – Go kits

November - Glen Kissel – USI Professor on the USI CubeSat program

December – Open

January – Auction

February – Dinner and a meeting

[Dave Sandine](#) KC9UVG

Club Shirts

At the September meeting members discussed ordering shirts with the TARS logo and your call and first name. Several members asked about the possibility of polo shirts rather than the t-shirts.

Al KA9PHZ is going to try and have samples for us to see at the October meeting with prices. It looked like we had enough people interested to complete an order, just need to finalize what shirt everyone would prefer and the price. The decision will most likely be made at the October meeting. If you have any questions or comments contact:

Steve Wilzbacher K4SAW@twc.com

Vanderburgh Co. ARES/RACES

In an emergency would you know what to do? If communications are out where would you tune? Have you had any training in assisting with EMA, Red Cross or Salvation Army? The way to learn is by joining and participating in your local ARES/RACES group.



The next Vanderburgh county ARES/RACES meeting October 19th, 7:00 pm at the VC West side EMA Training Center (WEMA) [1430 Harmony Way](#). Anyone interested in emergency communications is invited.

Chris Lantaff KE9YK

Vanderburgh Co RACES Officer

in82races@gmail.com c: 812.453.1972

Tri-State Emergency Net

8:00 p.m. Wednesday nights on 146.79 pl 88.5

If you haven't checked into the **Tri-State Emergency Net**, please take a few minutes at 8:00 p.m.

Wednesday evenings on 146.79 and get updated on what is happening, the latest club information, calendar of upcoming events, topics of general interest and from time to time good old-fashioned rag chewing.

Net Operator schedule

October

| | |
|----|--------|
| 4 | KC9UVG |
| 11 | WB9KQF |
| 18 | KC9TYA |
| 25 | KB9YWQ |

November

| | |
|----|--------|
| 1 | KC9UVG |
| 8 | N9QVQ |
| 15 | KC9TYA |
| 22 | KB9YWQ |
| 29 | WB9KQF |

VE Testing



Test dates: 2017

| | | |
|-------|----------------|---------------|
| 1/28 | 2/25 | 3/25 |
| 4/29 | 5/27 | 6-none |
| 7/29 | 8/26 | 9/30 |
| 10/28 | 11-none | 12/30 |

All ARRL examination sessions will be held at the Evansville Chapter of the American Red Cross. The ARC is located at 29 S. Stockwell Road, at the intersection of Stockwell Road and Lloyd Expressway. Sessions start promptly at **9:00 AM**, Evansville time.

For more info contact:

[John VanVorst N9OL](mailto:John.VanVorst@arrl.org) c: 812.305.4100



Save the Dates

Winter Field Day January 27, 28.

TARS Banquet February 8th 6:00 pm (tentatively)

Watch for more information in coming months.

HAMFEST Calendar

10/07/2017 | [56th Hoosier Hills Hamfest](http://www.w9qyq.org/hamfest)

Location: Mitchell, IN

Sponsor: Hoosier Hills Ham Club

Website: <http://www.w9qyq.org/hamfest>

[Learn More](#)

10/07/2017 | [Vette City Hamfest](http://www.kcarconline.com)

Location: Bowling Green, KY

Sponsor: Kentucky Colonels Amateur Radio Club

Website: <http://kcarconline.com>

[Learn More](#)

For Sale

Station Equipment for Sale!

I am listing the station equipment of a local Silent Key, Dave Wood W9AJR. Many of you knew Dave, he was a long time member of our Ham Radio community. His widow would like to sell his equipment. I have listed the items below and posted a few pics. This equipment has been sitting unused for a while so the pics show a little dust, but the gear is in good shape. Please get with me if you are interested, and pass this info along to others. Let me know if you have questions or want to make an offer! [John VanVorst N9OL](mailto:John.VanVorst@arrl.org) 812.305.4100.

MFJ-495 Memory Keyer \$90

Icom IC-756 Pro II Transceiver \$900

Tokyo Hi-Power legal limit amp model HL-1.5KFx \$1,900

PalStar AT4K Antenna Tuner \$500

Icom IC-271H 2-meter all mode transceiver \$500

Icom SP-20 External Speaker \$140

GHD GD-507 Telegraph Key Iambic Paddles \$90

Vibroplex Original Standard CW Bug \$90

Straight Key on a nice brass base \$75



October Birthdays

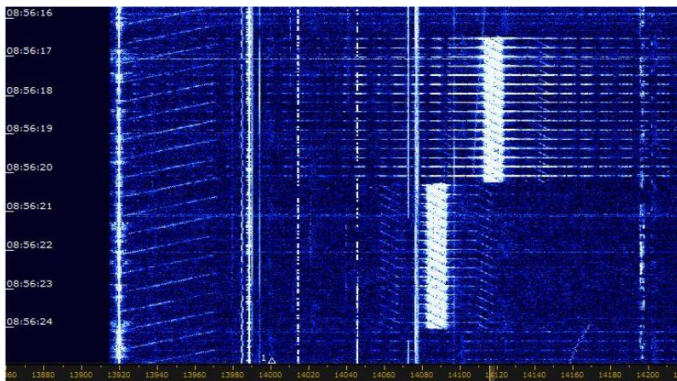
| | | |
|------------------|--------|------|
| Ed Folz | K9HVI | 6th |
| Miles Mann | KC9UOG | 20th |
| Chris Matthews | N9JCA | 23rd |
| Terry McCrarey | WB9KQF | 10th |
| Mark Thienes | KC9TYA | 11th |
| Josiah Washburne | KC9NPB | 18th |

★HAPPY★
BIRTHDAY!

Not All “Intruders” on Ham Bands are Illegal — But a Lot of Them Are

ARRL Letter 09/14/2017

The [monthly newsletter](#) of the International Amateur Radio Union Region 1 Monitoring Service (IARUMS) typically makes for some interesting reading. While the reports that come from more than 2 dozen contributors can be a bit visually dense, the content conveys the impression that there are myriad intruders on the Amateur Radio bands. However, not all of them are illegal, as IARUMS points out, but a lot of the signals heard are not supposed to be where they were monitored. The individual reports can be a bit humorous too.



A Chinese "foghorn" over-the-horizon radar on 20 meters. [Wolfgang Hodel, DK2OM, photo]

"Get the grub, and I'll talk to you later this evening," was a snippet of a conversation between two fishermen -- identified as Mick and Jack -- that an Irish Radio Transmitters Society (IRTS) monitor overheard on 3.570 MHz and reported to the IARUMS. The IRTS said the chatter was accompanied on both sides by "loud motor noise," and, if that were not sufficient detail, it pointed out that both men had Galway accents. Intruding signals from fishing crews throughout IARU Region 1 are commonplace.

More blatant are the repeat offenders, such as the "Chinese foghorn" heard by over-the-horizon (OTH) radars on several frequencies in the exclusive Amateur Radio 20-meter allocation, as well as on 15 and 40 meters. IARUMS Region 1 Coordinator Wolf Hadel, DK2OM, said the signals, 10 kHz wide and with 50 and 66.66 sweeps per second, transmit in burst mode and often jump frequencies.

Some signals from military stations on non-exclusive Amateur Radio allocations are legal. For example, the latest IARUMS newsletter cites the STANAG-4285 military signal that showed up for a few days in August on 5,361.8 kHz. The STANAG-4285 transmissions, coming from a Navy facility in Aarhus, quit on August 28. "Many thanks to the Danish Navy for leaving this frequency!" Hadel added, noting that the Danish Navy is a primary user, and "We have to respect primary users!"

Adding a little mystery and intrigue to the compilation was a report from a radio amateur in the UK citing a "female voice with encrypted messages" on 14.212 MHz, believed to originate with the Ukraine Foreign Intelligence Service in Rivne.

In the "miscellaneous or bad news" category were some repeat offenders, such as Radio Hargaysa in Somalia on 7,120.0 kHz; Radio Eritrea and white noise interference from Radio Ethiopia persisting on 7,140.0 kHz and 7,180 kHz; a third harmonic of



Radio Tajik on 4,765 kHz, showing up on 14,295.0 kHz; the Sound of Hope from Taiwan on 18,080 kHz; the Russian Navy's CW on 21,438.0 kHz, and Radio Iran "in burst mode" on 28,960.0 kHz daily. True intruders are those appearing on exclusive Amateur Radio frequency allocations. Some domestic Amateur Radio HF allocations outside Region 2 (the Americas), such as 7.200 to 7.300 MHz, are either shared with other services or not available to radio amateurs. Read [more](#).

Editorial: Be Civil and Respectful

ARES E-Letter for July 19, 2017

On the way home from the Spring 2017 West Central Florida Section ARES Meeting, I was running my handheld radio on APRS as a mobile tracker. I received the following text message from someone: "Hey dummy, program your radio correctly." Apparently someone did not like a parameter that was set on my radio and took exception to it. The question I asked myself after the comment had disturbed me was the following: What if I had been a new amateur licensee? If so, I might have become discouraged and bitter as a result of that comment. I might have quit.

There is a lesson to be learned from this incident. We in the amateur community should *always* be civil to one another. This does not mean you cannot disagree, but you can state your disagreement *and* remain respectful/civil about it. It does not offend me if someone does not agree with what I say or what I do, if it is in a civil manner. Lack of civility is sadly a sign of the times we live in. Far too often today when one states their viewpoint, even when they state it with civility, it is met with rudeness or even with a vitriolic response. In Amateur Radio we should be the exception to this trend and be civil to one another both on the air and in person, as an example to our peers and to the next generation. Another lesson to be learned here is to be aware that sometimes operators have either technical issues with their equipment or procedures (AC hum on the microphone, cracking sounds, wrong parameters programmed on digital modes, improper operating procedure, etc.). It is okay to

point an issue out to them if you know what the problem is, but remember to be civil about it, in a positive, helpful way. A new amateur may not have learned all of the proper procedures yet. Talk to them in a respectful manner, preferably off the air. In the case of most people, if you approach them with a modest and humble attitude, they will listen to what you have to say. If I have a problem, I would want someone to tell me, because I may not know about it.

One more lesson: We all have our favorite modes of operation and parts of the service we enjoy more than others. Don't put down or demean another amateur's interests. It's okay to invite other hams to join your part of the hobby but if they say no, don't feel slighted. They might on the other hand say yes, but you will not know until you ask. Also, if someone tells you about their favorite mode, take the time to listen. You may decide it is not of interest to you and say "No thank you" and that is perfectly okay. But on the other hand you may say "yes."

The Amateur's Code was written by Paul Segal, W9EEA, in 1928 after another time in which Amateur Radio had a tumultuous period before regulations fully took effect in the mid 1920's. The Fourth point in the code says: "*FRIENDLY with slow and patient operation when requested, friendly advice and counsel to the beginner, kindly assistance, co-operation and consideration for the interests of others. These are the hallmarks of the amateur spirit*". For the full text of the code, please see <http://www.qcwa.org/amateur-code.htm> -- Darrell Davis, KT4WX, ARRL West Central Florida Section Manager, reprinted from The WCF Presser and West Central Florida Section News

FCC Opens 630- and 2200-Meter Bands; Stations Must Notify UTC Before Operating

ARRL Letter 9/21/17

The FCC has announced that the Office of Management and Budget has approved, for 3 years, the information-collection requirement of the Commission's March 29 *Report and Order (R&O)* that spelled out Amateur Radio service rules

for the two new bands -- 630 meters (472-479 kHz) and 2200 meters (135.7-137.8 kHz). Notice of the action appeared in the September 15 edition of the *Federal Register*. Before using either band, stations must [notify](#) the Utilities Technology Council ([UTC](#))

that they plan to do so. If UTC does not respond within 30 days, they may commence operation.

On March 27, 2017, the FCC adopted the 2012 World Radiocommunication

Conference (WRC-12) implementation *Report and Order* ([ET Docket 15-99](#)), amending its Amateur Radio rules to -- in the FCC's words -- "provide for frequency-sharing requirements" in the two bands. Section 97.313(g)(2) of the new rules requires that, prior to starting operation in either band, radio amateurs must notify UTC that they intend to operate by submitting their call signs, the intended band(s) of operation, and the coordinates of their antenna's fixed location. The new rules do not permit any mobile operation.

"Amateur stations will be permitted to commence operations after a 30-day period, unless UTC notifies the station that its fixed location is located within 1 kilometer of Power Line Carrier (PLC) systems operating on the same or overlapping frequencies," the FCC said. PLC systems are unlicensed. "This notification process will ensure that amateur stations seeking to operate [on 630 or 2200 meters] are located beyond a minimum separation distance from PLC transmission lines, which will help ensure the compatibility and coexistence of amateur and PLC operations, and promote shared use of the bands."

ARRL 630-Meter Experiment Coordinator Fritz Raab, W1FR, advised radio amateurs who anticipate using

either band to read the *Federal Register* posting "to understand frequencies, power limitations, and



operating modes permitted." xperimental Group participant Ed Cole, KL7UW, has been operating as WD2XSH/45 with 100 W into a 43 × 122-foot base-loaded inverted L, achieving about 3 W ERP. In a message to the Topband Reflector, Eric Tichansky, NO3M, noted that during his operations as part of the ARRL Experimental Group and with his own FCC Part 5 Experimental license, he enjoyed "many cross-country QSOs at QRP power levels" using a 67-foot top-loaded vertical that shares the radial field for his 160-meter antenna. The [Antennas by N6LF](#) website offers more information.

JOTA 2017

Organizers Urge Scout Stations to Register Now
The ARRL Letter for September 21, 2017

Scouting's Jamboree on the Air/Jamboree on the Internet (JOTA/JOTI) event takes place over the October 20-22 weekend, and organizers are urging Scout stations planning to participate to [register](#) now. The world JOTA-JOTI team has activated its online sign-up system.

"Our number one message at this time is to register their station and get ready for [JOTA](#)," JOTA Coordinator Jim Wilson, K5ND, told ARRL. "It's time for Scout groups to bring together their open action items -- ordering patches, printing handouts, gathering equipment, reminding staff members, verifying location, and getting the word out to the Scouts to be prepared for a fabulous experience talking with other Scouts across the country and hopefully around the world."

JOTA is the world's largest Scouting event, held annually over the third full weekend in October, and Scouts of any age can participate -- from Cub Scouts to Boy Scouts and Venturers, male and female. During JOTA, Amateur Radio links Scouts with other Scouts and hams, locally and worldwide. Since the first JOTA in 1958, millions of Scouts have met each other through this event to exchange ideas and share experiences via ham radio. Many



contacts made during JOTA have resulted in enduring friendships and connections.

According to the World Scout Bureau, the 2016 JOTA had nearly 1.3 million Scout participants from more than 30,000 locations, and reached 156 countries.

The World JOTA-JOTI team has published a [Participant's Guide](#) to help Scouts to get on the air and the internet for the largest Scouting event in the world. They've also published a brief history of the [60 years of Jamboree on the Air](#) as well as the [Top 10 Challenges and Activities in 2016](#) that might provide ideas for your event this year.

An [online scheduling tool](#) is available too.

For participating via *EchoLink*, two conference nodes now have been designated for Scout contacts -- *JOTA-365* (node 480809) and *JAMBO* (node 832996). Visit the K2BSA Radio Scouting page for [more information](#) on frequencies, including D-STAR, DMR, and IRLP.

[Editor Note: If you have kids, grandkids, neighborhood kids involved in Scouting this is a good way to introduce a younger generation to Ham Radio.]

Secretary Report

September 7, 2017 Board meeting

The meeting was called to order at 7 pm.

Introductions were made.

The secretaries was called for and was read. The report was accepted as read.

The treasurer report was called for and was accepted as read.

The floor was opened for discussion about this years election or officers for the upcoming year.

The chairman of the committee, Herb, kb9mzh, informed the board that almost all of the positions were slated with a few exceptions. A ballot will be published in sparks in October and November.

The floor was then opened for discussion about the club party. It was decided to bring the log inn up at the regular meeting as the location for the party. It was also decided to tell the group that the member portion of the price will now be twelve dollars.

The discussion was then opened for the field day and Indiana qso party entries for the 30 contacts for the chance to win a new boafeng.

The next topic was to club tee shirts. It was to be brought to the next general monthly meeting.

The discussion on the topic of dmr was again tabled.

The topic of the Red Cross scanner was tabled again because of the uncertainty of the county's choice of a new dispatch system.

The thing on the agenda was about programs for the rest of the year. Several ideas were given.

A motion to adjourn was entertained and seconded. The meeting was adjourned.

Don Land, TARS Secretary kb9ywq

September 14, 2017 General Meeting

The meeting was called to order by president n9jca, Chris. Introductions were made. The secretary report was called for and given. It was accepted as read.

The treasurer report was called for and given. It too was accepted as read.

The president called for a report of the election committee. Herb, kb9mzh, reported that nominations for several of the positions had been slated. There are still a few positions that need nominees.

The discussion then went to the club Christmas party. The log inn was chosen again this year by a majority vote. It was decided to again have the party in February. It was also decided that the attendees will pay twelve dollars as their portion of the cost this year.

Discussion was then opened as to the award for the most qsos made during the indiana qso party and field day combined. Those eligible had to make at least one qso during each event with a total of thirty needed to be made to receive the prize of a new boafeng hand held.

After that the discussion went to Steve, k4saw, and Al, ka9phz, as to the tee shirts for the club. An order form is going to be generated and distributed in the monthly newsletter. The topic of dmr radio

was brought to the group once again and was once more tabled for the time being.

The purchase of a scanner for the Red Cross was tabled until we can accumulate more information as to what system Vanderburgh County will be switching to.

Discussion was given as to the programs for the club for the rest of the year. Several promising ideas were brought to the table by vice president Dave, kc9uvg.

A motion to adjourn was made and seconded.

The meeting was adjourned.

Donald Land, KB9YWQ TARS secretary

Treasurer Report

Budget:

August 2017 (prepared 9/5/2017)

Opening Balance: \$4,107.67

Receipts:

| | |
|----------------------|----------|
| VE Room Rental | \$14.00 |
| Memberships | \$50.00 |
| Alinco Raffel | \$115.00 |
| Total Receipts --->> | \$179.00 |

Expenditures:

| | |
|------------------------------|------------|
| Yaesu DR-2X Repeater Upgrade | (\$500.00) |
| Total Expenditures--->> | (\$500.00) |

Ending Balance: \$3,786.67

Red Cross Fund: \$959.07

Total Income From Alinco Raffle: \$220.00

Jeff Holt AA9WJ

TARS Treasurer



A special **THANK YOU** to **Donut Bank** for the donuts provided at the September TARS club meeting.

TARS is an [ARRL](#) affiliated club

ARRL [Indiana Section](#)

Section Manager: Brent Walls N9BA bwalls@arrl.org



TARS mailing address:

TARS

P.O. Box 4521

Evansville, IN 47724

Don't forget to check out our web page www.w9og.net

Facebook Group

<https://www.facebook.com/groups/TARSw9og>

TARS E-mail: info@w9og.net

2017 Club Officers and Board members

President [Chris Matthews N9JCA](#) 812.205.6490

Vice President [Dave Sandine KC9UVG](#)

Treasurer [Jeff Holt AA9WJ](#) 812.858.2968

Secretary [Don Land KB9YWQ](#)

Board of Directors

[Bob Pointer N9XAW](#) 812.425.2118 (2016-2017)

[Mark Thienes KC9TYA](#) 812.963.6455 (2016-2017)

[Dave Julian WB9YIG](#) (2016-2017)

[Raymond Edge W9KHP](#) (2017-18)

[Rick Jackson K9EXY](#) (2017-18)

[Max Wilkinson KD9ABT](#) (2017-18)

