

# Amateur Television Journal

**September, 2025**  
**issue #193**

**BATVC web site: [www.kh6htv.com](http://www.kh6htv.com)**

**ATN web site: [www.atn-tv.com](http://www.atn-tv.com)**



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**DVB-T MODE -NEW DATV DIGITAL ATV 1.2 GHz ALEXANDRO -IT9FKD ,  
FIRST DVB-T ITALY-GREECE , 10-8-2025**

**580 km 23cm DVB-T**

Frans 0 ON4VVV reports ---- The following You Tube link allows you to watch a 23 cm, DVB-T connection between Greece and Sicily by Stavros SV1EBS and Andrea IT9FKD, spanning a distance of 580 km. For a moving image bandwidth of only 250kHz, the received quality is surprisingly good.  
<https://www.youtube.com/watch?v=sHrt58Fao64&t=33s>

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**6 Meters DATV:** Frans, ONVVV, also reports on how to make 6 m, DATV contacts ---

I've compiled a list of email addresses for OM's in Belgium, the Netherlands, Southern Italy, Sicily, and Greece, all equipped for D-ATV transmission and/or reception on 6m. The goal is to send everyone an email alert when there's enough Sporadic E available to make D-ATV contacts from North to South and vice versa. If you're unavailable at that time for whatever reason, that's no problem, but you'll at least have had the opportunity to make some fantastic DX contacts. Interested? Please send me your email address to be added to the list.

What also works is to occasionally check <http://dxalert.pe1itr.com/dxspots-latest-datv50.htm> , an initiative of Rob PE1ITR, or <https://hf.dxview.org/> , both of which will show exactly when the conditions are favourable, then try to make an appointment via the DX-SPOT or one of the ZELLO ATV channels and with a little bit of luck: "bingo".

The sporadic E peak season is traditionally active from May to August, with an additional peak at the end of June. However, beautiful openings can also occur outside this period, even in winter. The phenomenon is caused by sporadic and completely unpredictable local concentrations of ionized air in the E layer, which reflect radio waves at frequencies of 10m, 6m, or even 2m back to Earth, primarily during the daytime afternoon, but also exceptionally at night.

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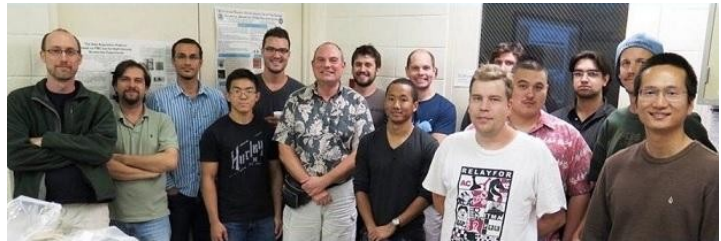
**ATV CONTEST:** On August 16th and 17th, VERON organized another D-ATV narrow band contest on the 6m, 2m, and 70cm frequency bands. You can still see the fantastic results on the BATC DX-SPOT by clicking through to "last month" at the top of the "last 24h" section. Some of the more diligent participants included: Jeff, F5RZC, -- Come, ON7MOR, --- Reinhard, DL5FBN, --- Rob, PE1ITR, --- Jack, PA0BOJ, --- Poli, PA3BYV, --- Jaap, PA0T, and Gerard, PE1BBI

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San Francisco team



Island of Hawaii team

We are a growing team of science, engineering and fabrication professionals as well as Amateur Radio, a team of 146 total with ages 17 to 72. The ITG-SOC project is progressing towards flight readiness, focusing on hardware testing, vibration isolation, and photon counting detectors, with a commitment to operational readiness

73 de Mario, KD6ILO

## Crossband FM ATV on ICOM IC-905

Though not ideal, I figured out a way to configure and operate in-band and cross-band FM ATV on all of the 23 cm through 10 GHz bands. I couldn't test it on 10 GHz because I don't have that module (yet).

Follow this procedure that is conceptually described on pages 4-11 and 4-12 in the IC-905 BASIC MANUAL...



1. Set up the TX band, mode and frequency on VFO A, for example, 2441.5 MHz ATV
2. Turn Split Mode on
3. Set up the RX band, mode and frequency on VFO B, for example, 5910 MHz ATV
4. Lock the VFO frequencies and Split by pressing the SPEECH button for 1 second.
5. Press PTT to TX on one frequency and release PTT to RX on the other. If you want to reverse TX and RX frequencies, initially select the opposite VFO.

This works with all bands and all frequency splits. However, there doesn't seem to be a way to save the configuration in Memory for easy recall. Fortunately, the configuration is saved if you power off the unit and turn it back on.

The Memory feature can store and recall offsets in the same band up to 9.999 MHz, but that isn't adequate for most of our ATV offsets.

Well... At least the IC-905 can do what I need it to do. I love this radio!

Regards, Rod Fritz, WB9KMO, Mesa, AZ, ATN-AZ President

# BLACK CLOUD RAINS on W0BTW

Remember Joe Btfsplk, in the old Al Capp comic strip "Li'l Abner"? Well hapless Joe Btfsplk was the world's worst JINX. He brought misfortune to everyone anywhere near him.

Well, we think Joe must have made a visit to Boulder and NCAR where our W0BTW - ATV repeater resides. W0BTW has been off the air for a while here in late August, early September for multiple equipment failures.

The first to fail was the HDMI switch / quad processor box. We first made a trip to the repeater site to jerk the controller box from the repeater and simply patched the 23cm receiver directly to the 70cm transmitter with no controller. Then on the next week's ATV net, the 70cm transmitter failed with very low rf output. Still put



*Joe, W0BTW*

out a weak, but useable DVB-T signal, but most folks were unable to receive it. Thus, another trip to the repeater site. This time we pulled the complete repeater.

Bill, AB0MY, our Arduino expert, took the controller home to pound some respect into it. He scared the HDMI switch enough that he got it up and working again properly. He also made some changes in his Arduino controller code.

Jim, KH6HTV, took the complete repeater rack to his home QTH for de-bugging. That was where he discovered the 70cm transmitter issue was with the RF linear power amplifier. Per our records, it has been in continuous service in the repeater since 2016. He pulled the defective amplifier and replaced it with a brand new, KH6HTV model 70-9B, 10 Watt amplifier.

On Friday, Sept. 5th, Jim and Don returned the repaired repeater to NCAR. AB0MY and K0HEH provided 23cm test signals while they were at the repeater site to verify all was working well again. Later, N0YE and WA0TQG tested the 3cm and 70cm inputs to verify that they also are working correctly.



**WOBTB Details:** **Inputs:** 23 cm Primary (CCARC co-ordinated) + 70 cm & 3 cm secondary all digital using European Broadcast TV standard, DVB-T with standard 6 MHz wide TV channels. Frequencies listed are the center frequency of the TV channel.  
23 cm = 1243 MHz (primary), 70 cm = 441 MHz & 3 cm = 10.380 GHz  
**Outputs:** 70 cm Primary (CCARC co-ordinated), Channel 57 -- 423 MHz with 6 MHz BW, DVB-T  
Also, secondary analog, NTSC, FM-TV output on 5.905 GHz (24/7 microwave beacon).  
Operational details in AN-51d Technical details in AN-53d. Available at:  
<https://kh6htv.com/application-notes/>

**WOBTB ATV Net:** We hold a social ATV net on Thursday afternoon at 3 pm local Mountain time (22:00 UTC). The net typically runs for 1 to 1 1/2 hours. ATV nets are streamed live using the British Amateur TV Club's server, via: <https://batc.org.uk/live/> Select *ab0my or n0ye*. We use the Boulder ARES (BCARES) 2 meter FM voice repeater for intercom. 146.760 MHz ( -600 kHz, 100 Hz PL tone required to access).

**Newsletter Details:** This newsletter was started in 2018 and originally published under the title "*Boulder Amateur Television Club - TV Repeater's REPEATER*" Starting with issue #166, July, 2024, we have changed the title to "*Amateur Television Journal*." This reflects the fact that it has grown from being simply a local club's newsletter to become the "de-facto" ATV newsletter for the USA and overseas hams. This is a free ATV newsletter distributed electronically via e-mail to ATV hams. The distribution list has now grown to over 800+, both in the USA and overseas. News and articles from other ATV groups are welcomed. Permission is granted to re-distribute it and also to re-print articles, as long as you acknowledge the source. All past issues are archived at: <https://kh6htv.com/newsletter/>

**ATV HAM ADS -- *Free* advertising space is offered here to ATV hams, ham clubs or ARES groups. List here amateur radio & TV gear**

**For Sale - or - Want to Buy**

*Boulder Amateur Radio Club (BARC)*

## ***BARCfest Hamfest***

**Ham Radio and Electronics**

***Sunday, October 5, 2025, 9 am to 1 pm***

**Boulder County Fairgrounds -- Exhibit Building**

(Just north of the Hover Rd. & Nelson Rd. intersection in Longmont, Colorado)

**Admission \$5 -- Under 18 Free with Paid Adult**

(Correct Change Appreciated to Avoid Delays at Door)

**Lots of Great Treasures**

**Home of the Gift Bag Door Prizes**

(Must be Present to Win)

**V.E. License Testing, 10 am**

Pre-registration strongly recommended -- walk-ins possible. Go to BARCfest session at [hamstudy.org](https://hamstudy.org)

Direct registration link: <https://ham.study/sessions/6730f7424bcc3a502914eaae/1>

For questions write to: [barc70@arrl.net](mailto:barc70@arrl.net)



Main Hamfest Doors Open to the Public at 9:00 am

Vendor Doors Open for Set-up at 7:30 am

For more information email to [DebbieBARC@gmail.com](mailto:DebbieBARC@gmail.com) or call Debbie (WB2DVT) 303-447-3183

Use this QR code for a detailed map of the Boulder County Fairgrounds.  
Our BARCfest will be in the exhibit building. If you can't scan this code, go to

<http://www.bouldercountyfairgrounds.org>





## 2025 Zero Retries Digital Conference ZRDC

Saturday, September 13, 2025

Edward Hansen Conference Center  
Everett, Washington

This one-day conference will feature and showcase technological innovations in Amateur Radio that is usually covered in Zero Retries newsletter. Presentations demonstrations and panel discussion topics to be included but not limited to:

- IP 400 Networking Project
- M17 Digital Voice/Data system (including demo with an M17 repeater)
- MMDVM-TNC data system (including demonstration of MMDVM-TNC via repeater)
- ARDEN, HanWAN and other Amateur Radio microwave

Ticket sales for ZRDC will be available shortly. Follow [www.zeroreties.org/p/conference](http://www.zeroreties.org/p/conference) for the latest information and ticket sales.

**Microwave Update 2025**  
October 17-18  
Tucson, Arizona

Don't miss this premier gathering  
for amateur microwave enthusiasts!

At the **Casino Del Sol**

**Grand Prize Raffle**  
Icom IC-905 + 10 GHz Module

**Activities**  
Tours  
Raffles  
Swap  
Tech Bench  
Presentations

**Major Sponsors**  
ICOM  
DX ENGINEERING  
HAM RADIO OUTLET  
DOWN EAST MICROWAVE  
DUBUS

[Microwaveupdate.org](http://Microwaveupdate.org)

The poster features a background image of the Casino Del Sol building in Tucson, Arizona, with mountains in the distance. In the foreground, there is a large satellite dish and an Icom IC-905 radio with a 10 GHz module. The radio's display shows a frequency of 5780.000.00. The poster also includes a list of activities, a list of major sponsors, and the website Microwaveupdate.org.