



Radio Active Times, Issue 15, July 2026

The official newsletter of the Handiham Radio Club. Issue 15, July 2026.

Greetings from the Editor

Well, it is finally out! After some delays due to the extreme heat, the July issue of the Radio Active Times is here. I hope this issue encourages you to get Radio Active.

Mélanie Carriveau, KN4ZSY, Editor in Chief

Contributions Wanted

If you have something related to ham radio or technology that you want to share with the club, please submit it to our Editor in Chief, Mélanie Carriveau, KN4ZSY. There is no deadline for submissions, and the submission guidelines are quite flexible.

HRC Daily Net Statistics: Second Quarter Summary

By Jerry Maccoux, W0UH, Net Manager

The second quarter began April 1, 2026, and ended June 30, 2026.

Second quarter 2026 by month

Month	Check-ins	Average per net
April	612	22.67
May	538	21.52
June	585	22.5
Second quarter total	1,735 (monthly average 578.3)	22.24

- The week with the fewest check-ins since January 1, 2026, was May 18–22, with 123 stations, an average of 20.5.
- The week with the most check-ins in the second quarter was June 22–26, with 150 stations, an average of 25.
- The weekly average for the second quarter was 133.5.
- The second quarter total is a slight increase over the first quarter's 1,718.

Statistics of note

- On April 23, Peter Atkinson, WX9IDX, snagged 30 checked-in stations.
- June 30 marked our 26th week with more than 122 check-ins.
- We have logged 15 consecutive months with more than 100 check-ins every week.

Be sure to drop in at 11:00 AM Central time, Monday through Friday, and at 7:00 PM Central time on Wednesday nights, for our nets:

- EchoLink: node 490506
- AllStar: node 2627
- DMR: talkgroup TGIF, TG 3141

Please note the change to our preferred EchoLink and AllStar node numbers. The EchoLink HANDIHAM conference server (node 494492) and AllStar node 473670 will still be active, but we will no longer mention them in our net preamble. For better reliability, please start using the new node numbers.

New Members

The following people have recently joined the club:

- Wayne Scott (no call yet)
- John Lipsey (no call yet)
- Carlos Montas, KQ4IKN
- Robert Carter, NC5R

Welcome to all our new members!

Have you earned your ticket, upgraded, or gotten a new call sign? Have you moved, or changed your phone number or email address? If so, please let the Handiham Program staff know by emailing handiham@allina.com.

Thank you,

Lucinda Moody, AB8WF, Handiham Program Coordinator, and Melissa Brown, Handiham Program Administrator

Talking Ham: Half-Wave Dipole

A **half-wave dipole** is a basic antenna used by radio amateurs. It is a length of wire or tubing, opened and fed at the center. The whole antenna is half a wavelength long at the desired operating frequency.

Article 1: Famous Hams – Tim Allen, KK6OTD

Adapted from the Wikipedia article "Tim Allen," used under the Creative Commons Attribution-ShareAlike license.

Timothy Alan Dick, known professionally as Tim Allen, was born in Denver, Colorado, on June 13, 1953. He is the third of six children of Martha Katherine (née Fox), a community-service worker, and Gerald M. Dick, a real estate agent. His father died in a car accident in November 1964, hit by a drunk driver, when Allen was 11. Two years later his mother married her high school sweetheart, a business executive, and moved with her six children to Birmingham, Michigan, to join her new husband and his three children. Allen has said the move meant going from "being in a cool group at one school to being at the bottom of the social hierarchy at another."

Allen attended Seaholm High School in Birmingham, where he took theater and music classes, leading to his love of classical piano. He attended Central Michigan University before transferring to Western Michigan University in 1974, where he worked at the student radio station, WIDR. In 1976 he earned a Bachelor of Science in communications, specializing in radio and television production, with a split minor in philosophy and design.

Allen started his career as a comedian in 1975, when, on a dare from a friend, he took part in a comedy night at Mark Ridley's Comedy Castle in Royal Oak, a Detroit suburb. In Detroit he began to gain recognition through local TV commercials and cable comedy shows. In 1981 he moved to Los Angeles and became a regular performer at The Comedy Store, performing stand-up on late-night talk shows and specials. His film debut was as a baggage handler in *Tropical Snow* (1988).

Allen rose to fame with the sitcom *Home Improvement* (1991–1999), playing Tim "The Tool Man" Taylor, the father of three boys; much of the show was based on his stand-up act. In November 1994, within one week, he starred in the top-grossing film, Disney's *The Santa Clause*,

topped the New York Times bestseller list with his book *Don't Stand Too Close to a Naked Man*, and appeared in the top-rated TV series, *Home Improvement*. He won a Golden Globe Award for the role in 1995.

In 1995 Allen voiced Buzz Lightyear in Pixar's blockbuster *Toy Story*, returning for *Toy Story 2* (1999), *Toy Story 3* (2010), *Toy Story 4* (2019) and *Toy Story 5* (2026). His other films include *Jungle 2 Jungle* (1997), the sci-fi parody *Galaxy Quest* (1999), *The Santa Clause 2* (2002), *Christmas with the Kranks* (2004), *Zoom*, *The Shaggy Dog* and *The Santa Clause 3* (2006), David Mamet's *Redbelt* (2008), his first dramatic role, and *Crazy on the Outside* (2010), his directorial debut. In 1998 Western Michigan University awarded him an honorary fine arts degree and its Distinguished Alumni Award. He has narrated the "Pure Michigan" tourism commercials, which began airing nationally in 2009.

Allen returned to ABC with the sitcom *Last Man Standing* (2011–2021), playing Mike Baxter, a conservative father in a house full of women, loosely based on his own life. In the show, Mike Baxter is a ham radio operator, and as a result of playing the character, Allen earned a Technician Class license with the call sign KK6OTD. The show was canceled by ABC in May 2017 but picked up by Fox in 2018, ending in May 2021 after nine seasons.

More recently, Allen reprised the role of Scott Calvin in the Disney+ series *The Santa Clauses* (2022), co-hosted the History Channel series *More Power with Richard Karn* (2022), and in January 2025 began starring in the ABC sitcom *Shifting Gears* as Matt, a stubborn, widowed owner of a classic car restoration shop. Allen also supports efforts to reduce homelessness. He is a car enthusiast who raced in endurance events for Saleen in the 1990s, including the 24 Hours of Daytona, and keeps a car collection in Southern California.

Monthly Contest Spotlight

By Tom Behler, KB8TYJ

Even though July and August are relatively slow months on the contest calendar, there are still some fun contests to enjoy, especially the North American CW and SSB Summer QSO Parties, on the weekends of August 1–2 and 15–16. I recommend them because they are very friendly and use a very simple exchange: just call sign, name, and state or province. You may recall that we tried a Handiham team effort for the SSB version of this contest last January. Unfortunately, I won't be available to coordinate one for the August 15–16 SSB contest, but I hope to be available for the next North American QSO Party SSB contest in January 2027.

Below are some more contests from mid-July to mid-August that might interest you. Once again, this is only a small sampling, covering the contests I know best. I encourage you to visit the [WA7BNM Contest Calendar](#) for the complete listing. If you have worked a contest that isn't listed here and want to tell us about it, get in touch with me, and I'll gladly include your thoughts in a future spotlight. I'm always interested in contest stories and operating tips.

- **[Alabama QSO Party](#)**: 1500 UTC July 25 to 0300 UTC July 26.
- **[North American QSO Party, CW](#)**: 1800 UTC August 1 to 0559 UTC August 2.
- **[Maryland-DC QSO Party](#)**: 1400 UTC August 8 to 0400 UTC August 9.
- **[Kentucky State Parks on the Air](#)**: 1400–2200 UTC August 8.
- **[North American QSO Party, SSB](#)**: 1800 UTC August 15 to 0559 UTC August 16.

Article 2: Slow-Scan Television

Adapted from the Wikipedia article "Slow-scan television," used under the Creative Commons Attribution-ShareAlike license.

Slow-scan television (SSTV) is a way of sending and receiving still pictures by radio, in black and white or color, used mainly by amateur radio operators. A literal term for it is narrowband television. Analog broadcast TV needs channels at least 6 MHz wide because it sends 25 or 30 frames per second, but SSTV usually takes no more than 3 kHz of bandwidth. It is a much slower method, taking from about eight seconds to a couple of minutes to send one image, depending on the mode. Because SSTV uses voice frequencies, hams use it on HF, VHF and UHF.

History

The concept of SSTV was introduced by Copthorne Macdonald in 1957–58. He built the first SSTV system using an electrostatic monitor and a vidicon tube, deciding that 120 lines of about 120 pixels each were enough to send a black-and-white still picture within a 3 kHz telephone channel. The first live tests were on the 11-meter ham band, which was later given to the CB service in the US. In the 1970s, hams invented two kinds of paper printout receivers. Commercial systems began appearing in the US in 1970, after the FCC legalized SSTV for Advanced-level amateurs in 1968.

SSTV originally required quite a bit of specialized equipment: usually a scanner or camera, a modem to create and receive the characteristic audio howl, and a cathode-ray tube from a surplus radar set, whose "long persistence" phosphors kept a picture visible for about ten seconds. The modem converted picture signals to audio tones between 1,200 and 2,300 Hz, and back again, and the audio was connected to a receiver and transmitter. Since the early 1990s, modern systems use a personal computer and special software instead of most of the custom equipment: the sound card acts as the modem, the screen shows the output, and a digital camera or digital photos provide the input.

How it works

Like the similar radiofax mode, SSTV is an analog signal. It uses frequency modulation, in which each brightness level in the image gets a different audio frequency: the frequency shifts up for brighter pixels and down for darker ones. Color is achieved by sending the brightness of each color component, usually red, green and blue, separately. The signal can be fed into an SSB transmitter.

There are a number of transmission modes, but the most common are Martin M1, popular in Europe, and Scottie S1, used mostly in the USA. With these, one image takes 114 seconds (M1) or 110 seconds (S1). Some black-and-white modes take only 8 seconds.

A calibration header is sent before the image: a 300-millisecond leader tone at 1,900 Hz, a 10-millisecond break at 1,200 Hz, another 300-millisecond leader tone at 1,900 Hz, then a digital VIS (vertical interval signaling) code identifying the mode. The VIS code uses 30-millisecond bits: a start bit at 1,200 Hz, 7 data bits (least significant bit first; 1,100 Hz for 1 and 1,300 Hz for 0), an even parity bit, and a stop bit at 1,200 Hz. For example, the decimal numbers 44 or 32 mean Martin M1, and 60 means Scottie S1.

A transmission is made of horizontal lines scanned from left to right, with the color components sent separately one after another. Color encoding and order vary between modes. Most modes use RGB color; some are black and white, sending only one channel; and others use a YC model of luminance (Y) and chrominance (R-Y and B-Y). The modulating frequency ranges from 1,500 to 2,300 Hz, matching the brightness of the color component. Because the modulation is analog, the horizontal resolution, often given as 256 or 320 pixels, can be sampled at any rate. The image aspect ratio is conventionally 4:3. Lines usually end with a 5-millisecond horizontal sync pulse at 1,200 Hz after all the color components are sent; in some modes the sync pulse is in the middle of the line.

Space exploration and SSTV

SSTV was used to send images of the far side of the Moon from Luna 3. The first space television system, called Seliger-Tral-D, was used aboard Vostok. Based on an earlier videophone project, it used two cameras with persistent LI-23 iconoscope tubes and sent 10 frames per second at 100 lines per frame. It was tested on the 1960 Vostok capsule launches, including Sputnik 5, carrying the space dogs Belka and Strelka (whose images are often mistaken for Laika), and on Yuri Gagarin's 1961 flight on Vostok 1, the first human in space. Vostok 2 and later flights used an improved 400-line system called Topaz, and a second-generation system, Krechet, with docking views and overlaid docking data, was introduced after 1975.

A similar concept, also called SSTV, was used on Faith 7, piloted by astronaut Gordon Cooper, and in the early years of NASA's Apollo program. The Faith 7 camera sent one frame every two seconds at 320 lines. Apollo TV cameras used SSTV to send images from inside Apollo 7, Apollo 8 and Apollo 9, as well as the Apollo 11 Lunar Module television from the Moon.

Special Notices

September meeting date

The Handiham Radio Club's September meeting will be moved to September 13, because the first Sunday of September falls on Labor Day weekend. The club bylaws automatically move our monthly meeting to the second Sunday when the first Sunday falls on a holiday weekend.

Radio Camp office hours

If you will be attending the 2026 Handiham Radio Camp in Minneapolis, September 9 through 16, you may have questions or special requests.

To make it easy to reach our amazing and incredible Handiham Program Coordinator, Lucinda Moody, AB8WF, she will hold Zoom office hours every couple of weeks, right up until the Saturday before camp starts. This is the time and place to ask questions, get information about camp, and make any special requests for the hotel. You can join as often as you like, and you are not required to attend any of them.

- Saturday, July 25, 2–4 PM Central Daylight Time
- Saturday, August 8, 2–4 PM CDT
- Saturday, August 22, 2–4 PM CDT
- Saturday, September 5, 2–4 PM CDT

The meeting link is in your welcome-to-camp email, or you can ask the Handiham Program office to email it to you again.

Calendar of Upcoming Events

July 2026

- **July 20–26**, 0000–2359 UTC: The Brickyard 400, race three. W9IMS, Indianapolis Motor Speedway ARC, Indianapolis, Indiana. Frequencies: 3.840, 7.245, 14.245, 18.140 MHz.
- **July 25**, 1300–2300 UTC: Minnesota Mosquito Challenge. W0ALX, Runestone ARC, Alexandria, Minnesota. Frequencies: 21.270, 14.230, 7.190 MHz.
- **Date not listed**: Carnation Festival special event. W8LKY, Alliance Amateur Radio Club, Alliance, Ohio. Frequencies: 7.050, 7.220, 14.050, 14.250 MHz.

August 2026

- **August 1**, 1100–1700 UTC: 1813 Battle of Fort Stephenson. W8B, W8NCK, Fremont, Ohio. Frequencies: 7.040, 7.265, 14.040, 14.265 MHz.

- **August 5–9**, 0000–2359 UTC: King Midget micro-car 80th anniversary. K8M, Athens County, Ohio, ARA, Athens, Ohio. Frequencies: 7.245, 14.245 MHz.
- **August 6–8**, 1600–2200 UTC: Mid America Threshing and Antique Tractor Show. W9T, Tipton County Indiana Amateur Radio Club, Tipton, Indiana. Frequencies: 7.225, 14.225, 21.325, 28.425 MHz.
- **August 7–23**, 1600–2359 UTC: Indiana State Fair. W9ISF, Indiana State Fair ARC, Indianapolis, Indiana. Frequencies: 7.240, 14.240, 21.300, 28.400 MHz.
- **August 7–10**, 0800–0759 UTC: Lee de Forest special operating event 2026. K6L, Lee DeForest Amateur Radio Club, Hemet, California. Frequencies: 7.238, 14.265, 18.125, 21.370 MHz.
- **August 8–14**, 0024–0004 UTC: Navajo Code Talkers Day. N7HG, Chinle, Arizona. Frequencies: 14.265, 7.265 MHz.
- **August 8–9**, 1300–0200 UTC: NOARC youth lighthouse activation. W8CSO, North Ottawa Amateur Radio Club, Grand Haven, Michigan. Frequencies: 14.060, 14.237, 7.225, 28.320 MHz.
- **August 8**, 1700–2359 UTC: Operation Paul Bunyan, 8-21-1976. NI6IW, USS Midway Museum Ship (CV-41), San Diego, California. Frequencies: 7.250, 14.320, 14.070 MHz; PSK31; D-STAR on Papa System repeaters.
- **August 9–15**, 1021–1021 UTC: Jackson County Fair. W8J, Cascades Amateur Radio Society, Jackson, Michigan. SSB, CW and FT8, about 35 kHz up from the bottom of the General Class bands.
- **August 15**, 0800–1300 UTC: 50th anniversary of the Middletown and Hummelstown Railroad. W3R, Central Pennsylvania Repeater Association, Middletown, Pennsylvania. Frequencies: 7.050, 7.190, 14.025, 14.260 MHz.
- **August 15–17**, 1800–0100 UTC: Deltana Fair special event station. KL7DRC, Delta Amateur Radio Club, Delta Junction, Alaska. Frequencies: 14.250, 14.320 MHz.

- **August 15**, 1000–2030 UTC: Fire Island Lighthouse (NA026). W2GSB, Great South Bay Amateur Radio Club, Babylon, New York. Frequencies: 14.245, 28.500, 21.325, 7.275 MHz.
- **August 15**, 1400–2100 UTC: Port Clinton Lighthouse activation. W8GNM/8, Port Clinton Lighthouse Conservancy, Port Clinton, Ohio. Frequencies: 7.225, 14.313, 21.350, 28.600 MHz.
- **August 15**, 1400–2200 UTC: Steamboat Nannie Byers disaster of 1866. N9B, Clifty Amateur Radio Society (W9EFU), Madison, Indiana. Frequencies: 28.328, 14.325, 7.250 MHz; FT8 on 20 and 10 meters.
- **August 22**, 1330–2100 UTC: NS Savannah maiden voyage anniversary. K3S, Nuclear Ship Savannah ARC, Port of Baltimore, Maryland. Bands: 40, 20, 17, 15 and 10 meters.
- **August 23**, 1700–2100 UTC: Green Valley Amateur Radio Club 47th anniversary. WE7GV, Green Valley Amateur Radio Club, Sahuarita, Arizona. Frequencies: 14.242, 14.246, 14.248 MHz.
- **August 29 – September 12**, 1300–2300 UTC: Auburn Cord Duesenberg Festival special event station. K9A, Northeastern Indiana Amateur Radio Association, Auburn, Indiana. Frequencies: 7.180, 14.250, 28.350 MHz.
- **August 29 – September 7**, 0000–2359 UTC: Buhl Farm Park Celebration. W3LIF, Mercer County Amateur Radio Club, Hermitage, Pennsylvania. Frequencies: 7.185, 7.074 MHz.
- **August 29 – September 2**, 0000–2359 UTC: Commemoration of the end of WWII. W5J, Meridian Amateur Radio Club, Meridian, Mississippi. Frequency: 14.230 MHz.
- **August 29–30**, 1200–0200 UTC: The Myers family, Levittown civil rights, August 1957. W3M, Penn Wireless Association, Feasterville-Treose, Pennsylvania. Frequencies: 7.200, 14.250, 18.135 MHz; 146.79 MHz repeater (−0.6 MHz offset, PL 131.8 Hz).
- **August 29–30**, 1018–1018 UTC: The Battle of Brooklyn at the Old Stone House. W1B, Kings County Radio Club, Brooklyn, New York. Frequency: 14.270 MHz.

Handiham Radio Club Board, July 2026

- President: Jerry Maccoux, W0UH
- Vice President: Tom Behler, KB8TYJ
- Secretary: Mélanie Carriveau, KN4ZSY
- Treasurer and Handiham Program representative: Lucinda Moody, AB8WF
- Immediate Past President: Linda Reeder, N7HVF
- Technology Committee Chair: John Glass, NU6P
- Outreach Committee Chair: Peter Atkinson, WX9IDX
- First Member at Large: Darrell Horst, KM6KFW
- Second Member at Large: Christoph Bungard, DF9WM

To reach the club or any board member, please contact the Handiham Radio Club through the Handiham Program.

Published by the Handiham Radio Club. Read this and other issues online at <https://handiham.net/radio-active-times/>