

ALL IDAHO AMATEUR RADIO OPERATORS

ARRL NEWSLETTER

July & August 2024

ANYTHING AMATEUR RADIO

Polly Smith KG7DPO Idaho ARRL Public Information Coordinator (PIC)



Idaho ARRL “One-stop” email address for ALL Idaho Amateur Radio Operators.

ALLIDAHOHAMS@gmail.com

Please send your news, events, activities, and pictures.

Be sure to include recent Silent Keys (SKs)

Do you have questions or comments? Send them.

welcome
AUGUST



August is the eighth month of the year and has 31 days. It is a wonderful month for star gazing with the Perseid Meteor shower that peaks between the 11th and 13th.



RATPAC live sessions are on summer break until September. In the meantime, you can watch almost 400 recorded videos at <http://tiny.cc/ratpac-list>.

RATPAC did a presentation featuring Joe Rudi NK7U in 2021 that can be seen at:

<https://youtu.be/6oeKJloKOQs>

Some may also know Rudi from his professional baseball days in the '70's with the Oakland A's



[NK7U](#)



<https://us02web.zoom.us/j/2128884758?pwd=RG94eEY2L3FiMEg0U3ZiWmhXaEdwdz09>

Meeting ID: 212 888 4758

Passcode: RATPAC

Watch previous sessions on YouTube: www.youtube.com/c/RATPAC

Check out the list of upcoming and past sessions at

Tiny.cc/ratpac_list

Or view just EmComm-related sessions at

Tiny.cc/rpem

RATPAC offers free online presentations via Zoom for clubs upon request. Submit request, date & time to

Ratpac.plan@gmail.com



By Dr. Willie L. Baber, wj9b
wlbaber@bellsouth.net
24741 Middleton Road
Middleton, Idaho 83644

A Look Back: One Radio Amateur's Story

"As I look at my Amateur Radio history, it is about how amateur radio provided a starting point in my life where the technologies involved opened my thinking, which in turn opened many new, unique and unexpected opportunities in my life" --Jim Hall, W4TVI.

PART 1:

Before I set foot into Jim Hall's radio shack (W4TVI) I had known him for several years. He and his wife Myrtle attend monthly radio club socials, where I met them after I moved to Boise, Idaho in 2012. Jim, born in 1936, is an electronics engineer, who retired from Hewlett-Packard.

As I entered the one-room shack, completely self-contained with an attached one-car garage, I immediately perceived the depth and longevity of Jim's radio and engineering mindset: a lifetime of systems thinking evident in how the shack itself is laid out. The left side contains floor-to-ceiling shelves of "stuff," the parts department of analog radio---but over a lifetime. For example, Jim explained his collection of meters displayed on one shelf; "they were so expensive when I was in high school, I could not afford one, so later I couldn't pass up good deals." A lab bench dominates the right side of the room, stacked with HP test equipment. I was visiting Jim to purchase his Steppir IR antenna; he connected the antenna to the input of an HP spectrum analyzer. Sweeping each of the Steppir's amateur bands, 14 MHz to 50 MHz, Jim proclaimed: "See, it works."

The room is partitioned by a long table. It contains soldering equipment and provides space to design and build projects. To the rear of the room is a closet with shelves filled with manuals or other documentation; and to the left of the closet, on the wall, part bins are mounted, extensively labeled to identify small electronic parts. Heavy equipment is located in the garage, such as a bandsaw and lathe. Jim's radio equipment, an Elecraft K3/P3/KPA500, and a Collins 75A4, are tucked away in the front part of the room, inconspicuously, I thought.

Wouldn't it be interesting for anyone to know a few basic details about how Jim arrived at this level of involvement with the electromagnetic spectrum, professionally, and as W4TVI?

Three inspiring moments of youth: 1948-1951

At the age of 11 years old, Jim found himself with feelings of isolation, a self-acknowledged introvert. He was the youngest of three children, but considerably younger. Jim's older siblings were adults living in other states while other families in rural Virginia lived miles apart. Jim's father worked in agriculture, as an extension specialist; one of the few college-educated persons in the area. Jim declared an interest in becoming a forest ranger, the nearest college-level occupation he could imagine that was *not* agriculture, but similar to it.



James (Jim) and Myrtle Hall, January, 2022 [Willie Baber, WJ9B, photo]

An introvert does not easily befriend others in school. However, the school provided access to a library. Jim found entertainment in books; he was not at all interested in the family's AM broadcast radio. But one day, while in the library, Jim stumbled upon a book about Thomas Edison. Edison, of course, is famous for inventions, including the incandescent electric light, the phonograph, and telegraphy, not to mention thousands of patents. Jim admired Edison's application of experimental knowledge to radio and related inventions, such as telegraphy. This was Jim's first inspirational moment.

Reinforcement of Jim's discovery of Thomas Edison came in the form of an Allied Radio catalog, and the "10 in one kit." This kit allowed Jim to construct ten different electrical circuits; each time he disassembled the components and reassembled them into a different circuit. Jim raised some concern among neighbors when he connected a milliwatt AM transmitter to an antenna long enough to broadcast himself into AM radios miles away.

What, exactly, does a telegrapher do, Jim wondered. There was an elderly telegrapher of American Morse nearby who answered some of Jim's questions. American Morse was still used as a code, but it was different from the International Morse code, more widely used. Another telegrapher lived 30 miles away, Benny Ginther. Benny, W4LGT, held an amateur radio license, so he also knew International Morse code. On a Saturday morning Jim and his father made the trip to visit Benny. Jim observed his first amateur radio station, an impressive system centered around a Hammarlund HQ 129x receiver. Inspiration! Benny handed an 807 transmitting tube to Jim encouraging him to get a license, build a transmitter, and a larger communications system.

A third inspiration emerged when Jim's older sister, visiting from out of state, brought with her an AM, FM, and Shortwave radio; later Jim's sister surprised him with a Hallicrafters S-38 receiver as a Christmas gift, in 1949. The S-38 had a BFO; Jim could hear the tones of CW transmissions but he was unable to decode CW transmissions. However, he listened to AM transmissions in the 80-meter amateur band.



Hallicrafter s-38 and homebrew 1950s technology; 83 rectifier, 6v6 oscillator, and 3 tube regen receiver, plus a modern audio filter [Willie Baber, WJ9B, photo]

Problem-solving

In order to build and use an amateur radio communications system of his own, Jim needed to solve a few problems! (1) He needed to learn international Morse code, (2) construct a CW transmitter, (3) connect, and switch, his receiver and transmitter to a suitable antenna, and (4) acquire an amateur radio license. Where does one start? Well, he purchased the 1950 ARRL handbook, expensive at \$2, and the 1951 license manual at 50 cents. The license manual included study questions for the new novice license, requiring only 5 wpm International Morse code ability. Using a rented Instructograph, Jim taught himself how to copy and send Morse code. And he managed to obtain the parts to build the CW transmitter described on page 173 of the 1950 ARRL Handbook. The same Handbook provided instructions on how to build and connect an antenna and operate a communications system. Finally, in the summer of 1951, Jim traveled to the FCC office in Washington, D.C. to take the novice exam; a trip combined with a family visit to Maryland, where his sister lived. All four problems were solved; he was 14 years old.

On December 21, 1951, Jim called two fellow radio operators at 1602Z and 1614Z, W4TXM and WN4TVM, respectively. Neither station responded. So, at 1619z Jim called CQ for the first time on 3.7

Mhz. WN4TVM, in Raleigh, NC (also Jim), responded. Their QSO was terminated at 1702Z. Of course, many more QSOs followed throughout Jim's high school years. However, Jim's on-the-air time was split with time needed to make improvements to his original single-tube transmitter; a 6V6 to 6L6 two-stage transmitter, an 807 final using the tube Benny gave to him, and other improvements to drive a powerful 813 final amplifier.

Still, in high school, Jim experienced two practical outcomes from his early interest in, and knowledge of, amateur radio. First, working at a TV and radio repair shop, he acquired part-time employment and on-the-job training in radio electronics. To Jim's surprise, his radio interest had a practical side; an income! He purchased radio parts to build increasingly powerful amateur radio transmitters. Secondly, Jim befriended a fellow high school student, Carl Ebhardt, who soon became a radio enthusiast and W4HJZ. Upon graduation, Carl and Jim were admitted to North Carolina State College's BSEE (Electrical Engineering) program; they graduated together too.

While Jim considers himself an introvert, even today, as a young man he felt less awkward whenever social interaction involved some type of practical or technical goal or problem to be solved. For example, as members of the Old Dominion Amateur Radio Club of Halifax County, VA, Jim and Carl helped to organize ARRL field day, in 1954. Club members made 380 contacts using Jim's call sign, W4TVI. Jim was the Club's unofficial leader, working with others to set up the emergency-powered radio station. The operating position was assembled under a tent. Jim also provided guidance to others in the Club unfamiliar with field day technical tasks, or operating skills.

Radio Communications R&D

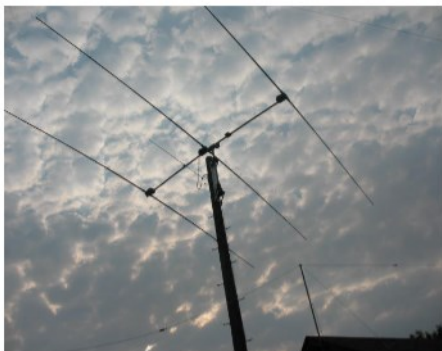
Admitted in 1955, Jim felt at home in NC State's electrical engineering program. Few students seemed to know what electrical engineering was all about. But some students, like Carl, Jim knew through amateur radio. Less cosmopolitan than others, Jim admitted that the hands-on building of an amateur radio station was how he eventually learned about the BS degree in electrical engineering.

By 1955 rudimentary transistors were just becoming available, commercially. Jim's professors didn't know much about transistors and lectured on the most esoteric, high-level solid-state physics of such devices. This information was "useless," Jim thought. Similarly, he found himself less interested in the physics of electromagnetism, such as Maxwell's equations, and more interested in applied theory that was useful in solving present-day (1950s) challenges in radio communication.

After receiving the BSEE degree from North Carolina State College in 1959, Jim went to work for General Electric (GE) Communications Products Division in Lynchburg, Virginia. One event greatly impacted Jim's life while working at GE. He met Myrtle. She worked in GE's drafting department. Jim became adept at finding reasons to wander past the drafting department. They were married in 1964. Otherwise, as an engineer, Jim was responsible for designing major transistorized subsystems for GE's solid-state point-to-point microwave systems; and later, related technology such as high-power microwave oscillators and frequency control devices.



Years later Jim built this replica of his first cw transmitter, as described in the 1950 ARRL Handbook [Willie Baber, WJ9B, photo]



Jim's three element Steppir IR at 35 feet. The rotor and mast mount were home fabricated to an abandoned utility pole [Willie Baber, wj9b, photo].

While working at GE, Jim and another amateur radio friend (W4SYW) established a two-man radio club. They built a high-power, hilltop radio station for VHF and UHF communications. Jim also found time to contribute to amateur radio literature. For example, an understanding of noise figures was fundamental to achieving high performance in microwave systems. In the October 1964 issue of QST, Jim contributed the article entitled: “The Effect of Converter Gain on Receiver Noise Figure.”

Years of design work contributed to Jim’s MS degree in physics, in 1971. While his degree was awarded by Lynchburg College, GE’s advanced engineers provided specialized training in microwave devices and advanced circuit design through the College. A year later, in 1972, Jim received a job offer from Hewlett-Packard (HP). In contrast to his years at GE, Jim’s move to HP resulted in an exact opposite situation compared to his expectations, but by hindsight only.

Jim jumped at the opportunity to join HP’s Microwave Division in Palo Alto, CA. Initially, Jim’s work at HP was as he anticipated it; he designed a thin-film integrated circuit 2.6 GHz receiver for NASA’s experimental satellite TV system. However, Jim’s subsequent projects involved technical leadership of other engineers in addition to hands-on design of HP’s 8660C Microwave Synthesizer, and R&D investigations of digital vector signal generator technology. Working as a technical leader of a *small* design team on a given project was not, in Jim’s mind, management. Also, design teams at HP were not strictly hierarchical but relatively informal, known as the “HP way.” By 1976 HP wanted Jim to move to HP Boise and manage, outright, the development of HP’s first laser printer, the HP 2680A.



Jim’s collection of meters, most of them measure current [Willie Baber, WJ9B, photo].

An Engineers’ Engineer

In Jim’s words, he “backed into management” not really noticing it. His personality was compatible with the HP way; he inserted himself into the design team as a co-member of the team. But doing this evolved into an explicit supervisory role because the team size grew to 25 engineers. Still, Jim perceived his role as just another design objective: to articulate the larger systems perspective embedded within the various subsystems’ design, components, and objectives required for a successful laser printer system. The printer, four years later and selling for \$115K per unit, outperformed other laser printers costing as much as

\$500K. Unfortunately, the HP 2680A was too expensive to be successful in a mid-range computer market.

HP 2680A was a major technical achievement, nonetheless. It was composed of 10,000 parts and delivered unprecedented print speed, features, and reliability. HP 2680A also taught Jim and the design team a tremendous amount about software and various electronic subsystems required for a successful laser printer. HP then combined this expertise with the mechanical and manufacturing expertise of a Japanese manufacturer (Canon) to co-produce, in 1984, the hugely successful HP LaserJet “Classic” selling for \$3,500. This was followed by a series of increasingly affordable and market-successful HP LaserJet printers.

The immense success of the HP LaserJet shifted Jim from technical manager of one R&D design team to higher, and higher levels of management. By 1997 Jim was R&D manager for all LaserJet printers but without any direct R&D involvement! He retired just three years later, in 2000.

Management involving the large 2680A R&D team descended into Jim's family life. Jim and his wife Myrtle, a wonderful hostess, held many socials in their home helping the R&D members bind into a very close team on both the design and personal levels, in the HP Way. And, of course, Jim and Myrtle raised two children, Julie and Jim, Jr. Julie is a very successful financial advisor, and Dr. Jim Hall, Jr., is VP of Artificial Intelligence (AI) semiconductor design. Julie and her husband Jamey have a son Jason, who is studying Marine Biology in college. Jim Jr. and his wife Melinda have two children, Sarah, BS Math, and Rachel studying anthropology and foreign service. Jim and his family relaxed by spending weekends at their cabin in the Idaho mountains: hiking, playing in the river, watching wildlife, listening to the wind in the trees, and occasionally Jim would get on the air.



Jim's grandkids knew where to find him [Willie Baber, WJ9B, photo]

Once retired, Jim discovered again how wonderful it is to have a good ham station, and to do "hands-on" R&D. His retirement years were dedicated to radio communications R&D, incorporating mostly used HP test equipment. As one example of contemporary (2004) radio technology, Jim designed (with Barrett, N7MTZ), built, and published in QEX September/October 2004: 3), "A Pocket APRS Transmitter," complete with block diagrams, schematic, and parts list. This construction article was also

described in the October issue of QST (2004:40), the only dual QEX/QST publication in QST history. Jim designed a wide range of electronic projects including a high-intensity LED bicycle headlight (with son, Jim, Jr), a two-way 432Mhz link for remotely controlling his ham station, and an infrared beam security system.

Located on Dr. Jim, Jr. and Melinda's property, which was sold, Jim had to disassemble his ham station and R&D lab in 2021. As I helped Jim disassemble his lab and radio station, I observed a lifetime of passion for radio communications technology, including Jim's own "look back." He reconstructed his 6V6 novice transmitter, recovered through eBay the very first QSL card posted in 1952, and built another iteration of 1950s communications technology with parts he still had on hand (see photos)

Conclusion:

Jim's youthful discovery of telegraphy and amateur radio resulted in much more than a hobby! But, as a "hobby," today's youth find TikTok or Instagram more effective as communications systems even as radio communication lies dormant in the background. Is amateur radio a hobby only, about to disappear, or is it a technology?

Jim's story allows us to see that technology is not only the thing produced, such as an HP 2680A printer, or a home-made radio. Technology is better understood as the various components and processes associated with how a thing is conceived, designed, and produced, as well as why people use the thing produced. When we celebrate in QST the older radios of the past we are lifting up the thing produced. But when we tell the (untold) life stories of aging radio amateurs, from various walks of life, we expose the pleasures, and sometimes disappointments, of radio technology as an experience.

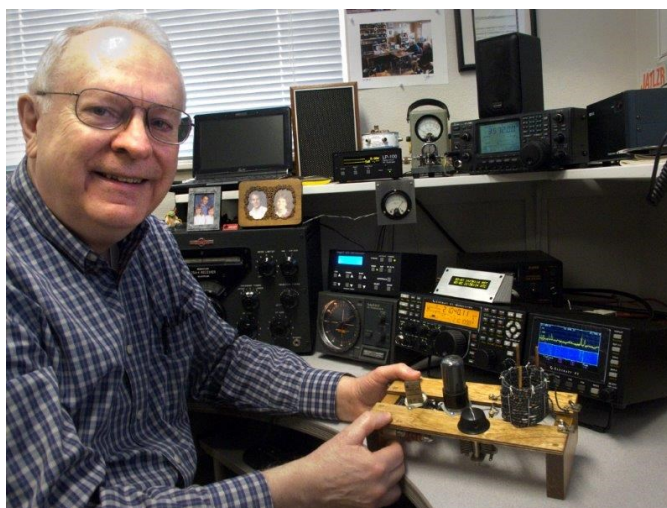
Imagine QST as a growing repository of such stories while aging amateur radio operators can still share them. Instead of photographs of old radios, written about largely without a lived context, we



An original WN4TVI qsl card sent to W4OYL in December of 1951; Jim found this card on Ebay [Willie Baber, wj9b, photo].

would have first-hand descriptions of what technology is, how it has been used, and how technology (modern-day technology included) relates to amateur radio. This could inspire younger people--or even people yet to be born--who may discover QST, amateur radio, and the broader technologies associated with life itself.

About the author: [WJ9B](#)



Notes

David Packard, *The HP Way: How Bill Hewlett and I Built Our Company*, HarperCollins book, 1995.

See <https://hpmemoryproject.org> for a detailed non-technical history of the HP LaserJet printer, by Jim Hall, W4TVI. See *Hewlett-Packard Journal*, June 1982 (Volume 33:6) for a detailed compilation of the people who designed the HP 2680A printer, and their various technical contributions; the lead article is by Jim.

Dr. Willie L. Baber, wj9b (Will), is a CW contester, CWops Northwest ambassador, and former CWA instructor. Will is the author of "Simple, Bandswitching Receiver Design (QST, December, 1979). He is also an applied cultural anthropologist, PhD., Stanford University (1979), and retired University of Florida.

Field Day 2024 Spotlight

Sent in by David Immel KE4EW

Jason KJ7HUX, Dave KE4EW, Kristen KA7EYX, and Amanda KK7NAE



Idaho ARRL “One-stop” email address for **ALL**
Idaho Amateur Radio Operators.

ALLIDAHOHAMS@gmail.com

Please send your news, events, activities, and pictures.

Be sure to include recent Silent Keys (SKs)

Do you have questions or comments? Send them.

Do you have an Idaho based Net?
Drop an email to
ALLIDAHOHAMS@gmail.com
with the day, time, and time zone,
please.
Idaho has two time zones!



Idaho State ARES Nets
Thursdays - Spring/Summer
Phone: MDT 0830/2030 - PDT 0730/1930
Digital: MDT 2100 - PDT 2000

Clearwater Valley Amateur Radio Club

Sundays

PDT 7:00 PM 146.7600 Tone 1318

PDT 7:30 PM 145.4900 (no tone)

3 Rivers Amateur Radio Club

Tuesdays

PDT 6:30 PM 145.62 88.5

Followed by Simplex Net 145.54

Info3riversarc@gmail.com

Magic Valley/Twin Falls Amateur Radio Club

Tuesdays

CST 7 PM 146.76 Mhz Tone 88.5

Questions—Lee at lee@leeandjeanne.com



iHeartCraftyThings.com

Camas Prairie Amateur Radio Club

Tuesdays

7:30 PM 145.68 100 MHz

Summer Projects for the Camas Prairie Amateur Radio Club, based in the Grangeville, Idaho, area installed a repeater on Iron Mountain to extend coverage in the Elk City, Dixie, and the backcountry that has spotty to no coverage.

This repeater is solar powered with battery backup. The snow pack can cover the roofs in this remote location.



Share with us what your club's projects are!

Global Radio Email

Idaho Winlink Net for 2023

–Don Gardner W7PJ, Idaho SEC

We began taking Winlink seriously in December 2022. Two years later, by the end of 2023, we had 112 participants who checked in 2,062 times throughout the year.

Each month, we assign different tasks to the participants, such as using various ICS and Winlink forms.

For the latest on Winlink net go to
<https://winlinkofidaho.blogspot.com/>

Soon we will have Idaho-specific ICS forms to use.

To make this activity more engaging and enjoyable, we have a special event called **Winlink Wednesdays of Idaho Net Century Club** for participants who have checked in 100 times are awarded a certificate of achievement.

Join the Net:

<https://winlinkofidaho.blogspot.com/>



WINLINK

GLOBAL RADIO EMAIL

[Winlink Express](#) | [Winlink Global Radio Email](#)

Join the Net

[Winlinkofidaho.blogspot.com](https://winlinkofidaho.blogspot.com/)

Is Your Club Wanting To Become an ARRL Sanctioned Hamfest or Convention?

Check out these links!

Please refer your club to this on-line guide:

<http://www.arrl.org/files/file/Hamfest/ARRL%20Hamfest%20and%20Convention%20Guidelines.pdf>

The ARRL Convention and Hamfest Planner is the most comprehensive guide that I know of, and a link to this pdf document can be found on the ARRL Web's site at the bottom of the page that discusses how to "Become an ARRL Sanctioned Hamfest or Convention."

<http://www.arrl.org/arrl-sanctioned-events>

It's very good to know that KARS is already approved to host the ARRL Idaho State Convention on August 3. <http://www.arrl.org/hamfests/2024-kars-arrl-idaho-state-convention>

If there are questions or clarifications that are needed about the information in this booklet or elsewhere about hosting a convention, please let me know. I will be happy to try to provide answers and updates.

Best wishes to KARS and to you as you prepare for a great ARRL Idaho State Convention.

73,

Steve Ewald, WV1X
Field Organization Supervisor

ARRL The National Association for Amateur Radio®
860-594-0265
sewald@arrl.org

ARRL Idaho State Convention And KARS Hamfest 2024



2130 N Meyer Road, Post Falls, ID

08/03/24, 8AM – 3PM

Tailgaters Arrive 7AM, Visitors Arrive 8AM, Sales Begin 9AM

\$5 per Visitor, \$10 per Tailgate (includes entry)

Kids under 18 free

Raffle tickets \$1, or 6 for \$5

Grand Prize tickets \$5

Breakfast and Lunch Available

Club Resale Table and Program Your Radio Table

Commercial Vendors

Many Raffle Prizes

Grand Prize: ICOM 7300 HF Transceiver

Contact Persons

Jay Bremner (KK7BVY) – (208) 640-4878

Ed Stuckey (AI7H) – (208) 699-7743

Visit us on *K7ID.ORG*

Talk-In: 146.98 Mhz, PL 127.3

2024 Events

Email to have yours
listed



ARRL Idaho State Convention

August 3, 2024 2130 N Meyer Road

Post Falls

Outdoor venue

Host: Kootenai Amateur Radio Society



15th Annual Tailgate Swap Meet Mini-Cassia Amateur Radio Club, Inc.

Saturday, August 17, 2024

9:00 AM-1:00 PM

Minidoka County Fairgrounds
085 East Baseline Road Highway 25
Rupert, Idaho

For further info:
Kevan KD7IYA 208 431-8802 // voqtak6057@gmail.com

ARRL Library Book Set

The ARRL Library Book Set includes the most popular ARRL publications, and is intended for ARRL Affiliated Clubs and members who wish to gift or donate a set to a local library, school, or classroom. The set is available at a special price of \$250 (includes US ground shipping).

The Set Includes These Books (subject to availability when ordering):

- The ARRL Handbook for Radio Communications (softcover)
- The ARRL Antenna Book for Radio Communications (softcover)
- The ARRL Operating Manual for Radio Amateurs
- The ARRL Ham Radio License Manual
- The ARRL General Class License Manual
- The ARRL Extra Class License Manual
- Understanding Basic Electronics
- Basic Antennas – Understanding Practical Antennas and Designs
- Your First Amateur Radio HF Station
- Get On the Air with HF Digital
- FCC Rules & Regulations for the Amateur Radio Service

DONATE BOOKS FOR...

**LIBRARIES • SCHOOLS AND CLASSROOMS • COLLEGES AND UNIVERSITIES
• STUDENT RADIO CLUBS • STEM OUTREACH • MAKER AND HACKER SPACES**

Terms: Orders must be pre-paid and must include the name of the library, school, or institution intended to receive the library book set. Editions sent will be those available at the time the order is received. Publications and prices are subject to change without notice. Applies to orders purchased directly from ARRL:

ARRL

Publication Sales Department

225 Main Street, Newington, CT 06111-1400

Phone Toll-Free (US) 1-888-277-5289; pubsales@arrl.org

For more information | www.arrl.org/Library-Book-Set



form rev. 2/2024

<http://www.arrl.org/amateur-radio-grants>



From the desk of Kelly Klaas K7SU

Need help getting your Club organized. Here is the information on the Ham Club Online web site. This is a site where you can get your club organized.

<https://www.hamclubonline.com/>



Final Comment

Finally, as with any newsletter, we need your contributions, your Idaho related articles, your photographs.

Please submit your Idaho news to ALLIDAHOHAMS@gmail.com

The next page is contact information for the Idaho ARRL Leadership



To read past newsletters:

<https://www.idahoarrl.info/Newsletter.html>

Idaho ARRL website [Idaho ARRL](#)

Idaho ARRL Leadership Contacts:

Idaho ARRL Section Manager (SM)

Dan Marler, K7REX arrl.idaho@gmail.com

Idaho Assistant Section Managers (ASM)

Butch Hoseley, KD7RMB Elmore County kd7rmb@yahoo.com

Rob Blout KA7ERV, Boise/Valley County ka7erv@gmail.com

Kelly Klaas K7SU, Twin Falls kelly@K7SU.com

Don Lynn ND7L, Nampa Don_Lynn@pacbell.net

Bob Minton NU7L, Boise nu7l.idaho@gmail.com

Mike Brown, N7ID, Moscow/Troy area N7ID@outlook.com

John Ailport, K7BSV, Sandport john.ailport13@gmail.com

Idaho Section Emergency Coordinator (SEC)

Don Gardner, W7PJ W7PJ@parnasas.com

Idaho Assistant Section Emergency Coordinator (ASEC)

Rob Blout, KA7ERV ka7erv@gmail.com

Idaho ARRL Affiliated Club Coordinator (ACC)

Rich Casper, WB7ML idahoanghost@gmail.com

Idaho ARRL Public Information Coordinator (PIC)

Polly Smith, KG7DPO KG7DPO@gmail.com

Idaho ARRL Technical Specialist (TS)

Rick Briggs, KL7BR kl7br@yahoo.com

Doug Nielson, N7DN, n7dn@arrl.net

Don Cargill, K7DRC cargilldon@gmail.com

