SQUELCH TALES

Newsletter from the Merrymeeting Amateur Radio Association for November 2026

LOCAL HAMS INVITED TO ATTEND CERT BASIC ACADMEMY

Sagadahoc County Emergency Management Agency (SCEMA) will be hosting A Community Emergency Response Team (CERT) Basic Academy from November 4–6, 2026, at the Sagadahoc County Courthouse.

Training will be held each day from 9:00 a.m. to approximately 4:00 p.m. Please note that we may finish earlier than 4:00 p.m. on some days, depending on the training schedule and class progress.

If you are interested in attending the upcoming CERT Basic Academy, please complete the Google Form below to register:
https://forms.gle/VkyzmkWKacrimJ5R7

This is a great opportunity to learn valuable skills that can help you prepare for emergencies, assist your community, and become involved with the Sagadahoc County CERT program.

If you have any questions or concerns regarding the academy, please don't hesitate to reach out.

We look forward to seeing you in November!

Best Regards,
Ashley Day
Deputy Director
Sagadahoc County Emergency Management Agency (SCEMA)
Sagadahoc County Board of Health (BOH)
Sagadahoc County Local Emergency Planning Committee (LEPC)



GENERAL LICENSE CLASS BEING OFFERED

Provided by K3YH via K1JAK

Ready to take your amateur radio journey to the next level? The ARCNEM General Class License Course is scheduled to begin on Tuesday, November 10, 2026 and run thru January 5, 2027 (9 sessions).

Classes are sponsored by the National Electronics Museum.

Upgrading from Technician to General is the single biggest leap you can make in amateur radio, granting you access to the High Frequency (HF) bands.

Why Upgrade? ---- The Power of HF Privileges While Technician privileges keep you mostly local on VHF/UHF, a General Class license unlocks over 80% of the amateur radio spectrum. With HF privileges, you can:

*** Communicate Worldwide: Bounce signals off the ionosphere to talk across continents and oceans without relying on internet-linked repeaters or infrastructure.**

*** Master the Solar Cycle: Experience the thrill of peak solar activity on the 10, 15, and 20-meter bands, where even low-power (QRP) stations can achieve global reach.**

*** Activate Parks on the Air (POTA): Take your station into the great outdoors! General HF privileges allow you to easily hunt or activate state and national parks, a massive and highly active global community.**

*** Chase DX & Awards: Participate in international contesting, hunt rare DX stations, and work toward prestigious milestones like DXCC (DX Century Club) and Worked All States (WAS).**

*** Explore Diverse Modes: Dive deep into long-distance single sideband (SSB) voice, traditional CW (Morse code), and advanced digital weak-signal modes like FT8.**

*** Enhance Emergency Capabilities: Provide resilient, long-range emergency communications that can bridge gaps across states and countries when local infrastructure fails.**

Course Schedule & Details

*** Start Date: Tuesday, November 10, 2026**

*** Format: Weekly 3-hour sessions held on Tuesday evenings at 6:30 PM Eastern Time**

*** Platform: Online via Zoom (links will be sent to registered participants)**

*** All sessions will be recorded and available on YouTube**

How to Register:

Contact Tom K3YH at

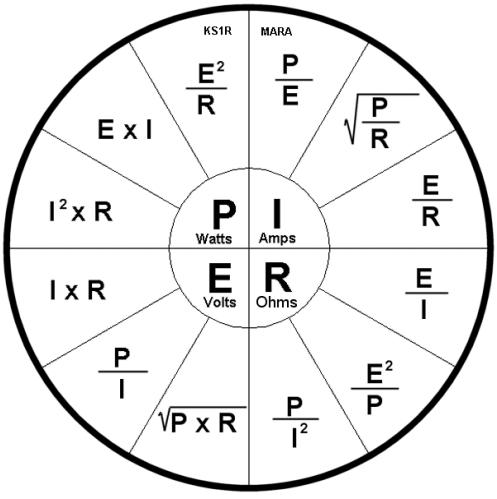
tom.christovich@gmail.com

Don't let your amateur radio journey stop at the local repeater. Join us starting November 10 and unlock the true, global potential of your station.

73,

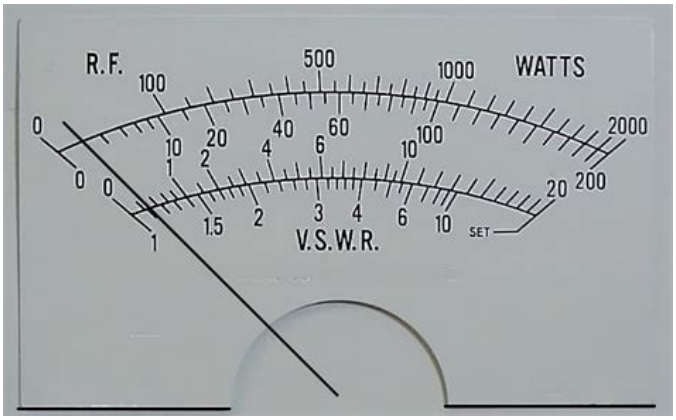
Tom K3YH

OHMS LAW



AND DON'T YOU FORGET IT!

Don’t go hyper over SWR!



By W1ZE with help from AI

Standing Wave Ratio and RF power loss, what really happens?

In radio-frequency systems, SWR does not directly measure power loss. It tells you how badly the load, usually an antenna, is impedance-matched to the transmission line.

When the antenna impedance doesn't match the feed line's characteristic impedance, some of the RF power traveling toward the antenna is reflected back toward the transmitter.

The important distinction is:

- **Reflected power is power sent back toward the transmitter.**
- **Dissipated power is power actually converted into heat or otherwise lost in cables, connectors, components, or the antenna.**
- **Radiated power is power the antenna converts into electromagnetic waves.**

A high SWR means more reflected power, but it does not automatically mean all that power is lost as heat.

How much RF power is reflected at different SWR levels?

Assuming the power is measured as forward power at the load reference plane:

SWR	Power reflected	load power	Mismatch
1.0:1	0%	100%	0.0 db
1.5:1	4%	96%	0.18db
2.0:1	11.1%	88.9%	0.51db
3.0:1	25%	75%	1.25db
4.0:1	36%	64%	1.94db
5.0:1	44.4%	55.6%	5.55db

These are calculated from the reflection coefficient equations.

Example: If 100 watts of forward RF power reaches a load at 2:1 SWR, approximately 11.1 watts is reflected and 88.9 watts is accepted by the load, assuming the stated reference plane and power-wave conditions.

But here's the critical point: 88.9 watts accepted by an antenna does not mean 88.9 watts radiated. Antenna efficiency and feed-line losses still matter.

The real-world problem: coaxial cable loss

High SWR can cause additional loss in a real transmission line because the standing-wave pattern changes the voltage and current along the cable. The additional loss depends on cable attenuation, length, frequency, load impedance, and where the mismatch occurs.

A antenna tuner (transmatch) at the transmitter can make the radio see a good

SWR while the coax between the tuner and antenna still operates at a high SWR. The radio's SWR reading alone therefore cannot tell you the total system loss.

Most amateur radio transceivers can still preform nice with a SWR of 3:1, however many of todays transceivers start to throttel back output power starting at abour 2:1 so as not to overheat the internal amplifing devices.

So now you know.



MARA TO SETUP A SPECIAL EVENT STATION AT POPHAM COLONY SITE

Mark your calendars, Flair night at Popham village in Phippsburg will co-insides with the anniversary celebration of Popham Colony that will take place on August 20th next year (2027). We have been in contact with the group at Popham that sponsors it so we can coordinate setting up a POTA Special Event Station.

We am looking for a couple of people to be on the Flair Committee to help make this event happen. If interested, please send an email to Tom Mixon, WA1PJS at tom@tommixon.com or cell him at 850-814-0616.





