//MASSILLON AMATEUR RADIO CLUB
MARC- Serving the local community since 1927

Volume 70 Issue 2 **FEEDBACK** February 2025

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Winter FD at the new W8NP Club Station!

By Don Rankl, N8IVJ

Amateur Radio Alive & Thriving In STARK County !

Annual Winter Field Day Event - Brought out the BEST!

All 3 amateur radio clubs of Stark County (Alliance Amateur Radio Club, Canton Amateur Radio Club - W8AL & The Massillon Amateur Radio Club - W8NP) put in their best efforts during this weekend's "Winter Field Day"!"

Each club participated and accomplished a common goal of improvement, outreach and enjoyment of one of the best and most exciting hobbies on the planet.

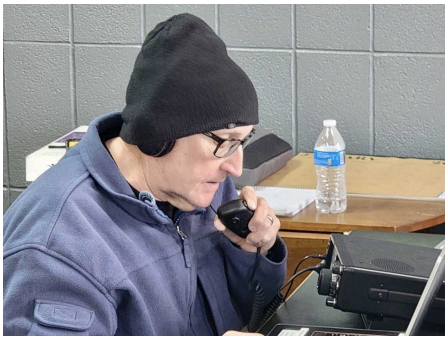
While each organization has its very own unique and cherished style and history, there is no doubt that when the chips are down, that amateurs in all of Stark County will always work together for the betterment of our communities in every way possible. Winter Field Day is the perfect display of this situation.

Who hasn't heard or said, "Hey, I just worked Canton"

(or Alliance or Massillon) while downing your 10th cup of charred coffee during the middle of the night?

Each and every one of us can celebrate being a part of this very special "club" of some of the finest and brightest folks.

Folks who we are honored to call FRIENDS!



Randy Phelps, KD8JN just "killing it " on 40!

MARC did it's part to join the party this weekend. There were so many to thank for making this a successful event for our organization. We are beyond humbled to have participated in Winter Field Day from our brand new location!

Quite a few visitors passed thru our doors, and many new connections were made. Two new students were added to the MARC Technician class coming up in February, bringing the total to 12!

16 different operators picked up a microphone or pounded away on a CW key during WFD. The laughter of nearly a dozen young children and teens filled the hallways!

We appreciate everyone who chose to spend a part of their weekend with MARC. Make sure to give Ryan Brown (KE8SDQ) an extra pat on the back!

Ryan was this year's WFD Chairman. Job Well Done !

Today, 2/5, Starts Technician License Class

The Massillon Amateur Radio Club will offer a ***Ham Radio introductory level training course*** for those wanting to get their entry level (Technician) FCC Amateur Radio License.

Classes will start on Wednesday **February 5**, **2025**, and will be held at the St. Paul Church Educational Center, 127 Cherry Rd. NE, Massillon, OH 44646.

There will be up to 8 classes, depending on progress. The class is free.

The ***ARRL Ham Radio License Manual, 5th Edition*** will be used for the classes. The manuals will be available at the first session for the ***discounted price*** of $20.

If you are interested in becoming part of this great hobby, contact Fred Reed REEDFL@SSSNET.COM or at 330-830-0250. It is recommended to enroll early so we can order the proper number of manuals.

Below- It's Fred, KD8SMO!

Appreciation Banquet Big Success!

By Gerry Sorensen, KG8RRY

For the second year in a row our club gathered at The

legends of Massillon clubhouse for our Annual Appreciation Banquet. Even though it was a typical Ohio January night it was warm and inviting inside.

The annual event has been a MARC tradition for years, although our leadership has changed it's emphasis just a bit. As our President Don Rankl, N8IVJ, has pointed out our successes as a club are based more on group, as opposed to individual, effort.

This year's event was again scripted by MARC Vice-President Ryan Brown, KE8SDQ. The menu featured beef, pork, and, as a welcome surprise, seafood. I overheard several club members discussing what a nice addition the choice of seafood was to this year's offerings.

Brent Gribble, N8BAG, former club trustee said, “I think it was great! I don't think the (individual) awards are really necessary, and the video presentation was outstanding!” Brent is seen above swearing in our 2025 Club Officers and new Trustee.

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Current ARRL Hamfests!

Massillon Amateur Radio Club

MASSILLON ARC 2023 HAMFEST AT MAPS

W8NP.net

04/05/2025 - Cuyahoga Falls Amateur Radio Club 69th Hamfest

Location: Cuyahoga Falls , OH

Type: ARRL Hamfest

Sponsor: Cuyahoga Falls Amateur Radio Club, Inc.

Website https://www.cfarc-hamfest.org

Learn More

ARRL Special Service Club

Note- *MARC is an ARRL Special Service Club.*

We are a club that goes above and beyond for our community.

Special Service Clubs are the leaders in the amateur radio community and provide classes, training, public outreach.

We pursue technical projects and community operating events. A **New Chapter for MARC**

MARC - Locked & Loaded for 2025

There are so many great things happening in the life of MARC at the moment, we can't keep track of it all.
Ya'll just keep showing up. Showing up to help, showing up to learn, showing up to teach, and showing up to enjoy the awesome journey MARC has embarked upon in 2025.

From a tremendous showing at the annual Appreciation Dinner to the ongoing transformation of the club shack, to a record number of students attending our Technician License Class, members have shown us their very best in just the first few weeks of the year.

Don't miss a second of the excitement. There's never a bad time to pop-in for a visit to one of our regular events or activities.

We hope you find something new to enhance amateur radio in your life each time. We look forward to seeing you.

73
Don Rankl – N8IVJ

MARC's own John Crilly, W8TD, has been away teaching classes on cruises, as is his habit in the winter months!

Next Club Meeting

The February club meeting is the Appreciation Banquet and will be held Saturday, Fed 7th, 2025 at 7:30pm.

All are invited!

The World of FT-8

Dan Wolfe,

KN4FYR

W8NP HQ

St. Paul's Ed Center

Doors Open At 6:45 pm

Everyone is invited, even if you have no amateur radio license. Bring a friend!

127 Cherry NE

Massillon, OH 44646

See you there!

West Stark Info Net

by Evan, KE8IDH, Net Mgr.

Any new operators wanting to give being a net controller a try please contact Evan Rankl KE8IDH 330-880-6764.

We are always seeking new Net controllers even if you haven't done it before or want to learn.

You can do it as little or as much as you want without being on a permanent list.

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MARC Club Net Manager- Evan Rankl, KE8IDH

Stark County DMR Net- Held on Monday evenings at 7:30 pm on the W8NP repeaters located in Massillon and Alliance Talk Group 313989 Time slot 1.

Statewide DMR Net- Held on Monday evenings at 8:30 pm using the statewide Talk Group 3139.

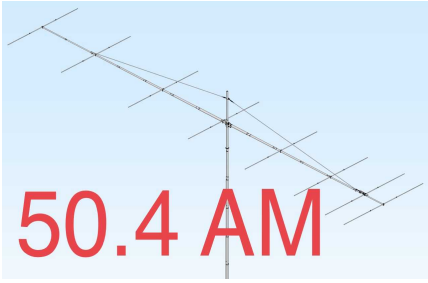
Stark County ARES Net - Held on Tuesday evenings at 7:00 pm on the N8ATZ repeater 147.120 MHz with a pl of 110.9

Alliance Amateur Radio Club Net - Held on Thursday evenings at 9 pm on the W8LKY Repeater 145.370 MHz with a pl of 110.9

West Stark Info Net- Held every Friday evening on the W8NP Repeater 147.180 MHz with a pl of 110.9 except the first Friday of the month which is club meeting night for the Massillon Amateur Radio Club.

Massillon 80 Meter CW Net- Held Sundays evenings at 8:00 pm on 3.5995 MHz

If you are outside the range of our MARC repeater you can listen to our signal on Broadcastify.



NET Daily at 7pm- 50.4 MHz, AM Mode/ Horizontal Polarization

FrankenGonset!

by Fred Reed, KD8SMO

Hams are unusual people, but we all know that. Sometimes they can get off on a tangent, and do things that the ordinary person might think odd.

A few months ago, one of us came across an old Gonset G-50 that had been seriously ravaged. The main transformer was shorted, and the main transmit switch was literally gone, nothing but bare wires hanging out.

Several parts were missing, nothing but the bare ends of component leads that had been cut off. The old Ham looked it over, and felt remorse that such an iconic old rig was looking at the junk pile.

“That old rig has lived for 60 years, through thick and thin, it doesn’t deserve to die in a junk pile”, thought the old Ham. “I’ll make it live again.”

There were so many parts missing, and so many things

that needed patched together that the Frankenstein monster came to mind. A thing patched together from lots of unrelated parts. Thus the moniker Frankenstein Gonset came to be, soon shortened to FrankenGonset. Now the pile of parts had a name.

Any thoughts of trying to put it back to its original condition went out the window. Being a Nerd, as well as a Ham, the aim was just to make it work.

After almost a month and a half of changing circuits, adding things that Gonset never dreamed of, adding fans to keep it cool and burning up a sizable quantity of solder, it came time to see if it was alive. Unlike the Frankenstein, there was no lightning storm to supply the life giving energy, it would have to do just to plug it into the wall socket and see what happens.

There was some concern that there might be lightning of a sort if something shorted out. After a few false starts, the little tubes began to glow, the speaker started to buzz, and it was ALIVE!

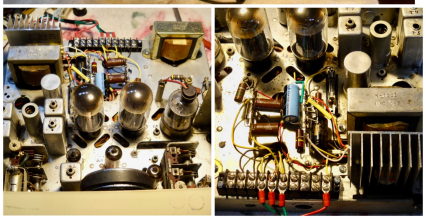
The 6 meter AM daily net on 50.4 was tuned in, and everyone reported that FrankenGonset sounded pretty good.

What's the point of this story?

Well, Ham Radio is a lot of different things to different people. Some of them just want to get on the air and talk to other hams. Some are interested in contesting, to see how many different contacts they can make, or how many different countries they can log. And some of them like to build and repair things.

The sight of seeing an old rig light up and come to life is their reward. It's a great hobby, with room for all kinds of people fascinated with sending radio waves out, just to hear somebody respond.

Or maybe save an old rig from going to the dump.



Photos by Fred Reed, KD8SMO

Regarding the 6 meter net-

You are invited to join us. Modern radios are just as acceptable as vintage tube gear.

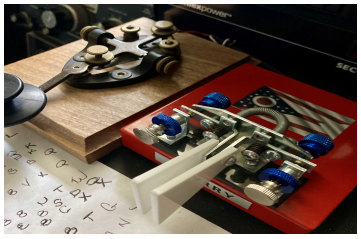
You will find a welcoming, friendly atmosphere. All skill levels are appreciated and you will be taught radio theory, skills and history just by your presence

Club News

CW Net

The MRN CW Net can be heard at 8pm Sunday evenings at **3.599.5 MHz.**

Net Control is W8AU. This is a **slow speed net** and all are invited!



VE Testing Sessions

Our VE Testing group met on January 11th. Sadly, Mother Nature didn't cooperate and we were sent snow and bitterly cold temperatures.

So we will re-group and give it another try in March on the 8th. Spread the word !

Here are our 2025 dates:

March 8
May 10
July 12
September 13

All testing sessions will be held at St. Paul's Lutheran Church, 127 Cherry Rd NE, Massillon, OH, 44646.

Doors open at 8:30am and testing gets underway at 9.

73,
Rex, NX8G

Rex is the Stark County VE coordinator. If you are interested in testing he may be reached at:: nx8g.01@gmail.com.

Exam Requirements

All Candidates

- The exam fee is $15.00 cash or check made payable to ARRL-VEC.
- If the candidate is under 18 years old the exam fee is $5.00.
- A photo ID is required to be shown.
- An email address is required.

First time applicants

- Must obtain an FCC Registration Number (FRN) before taking exam
- An FRN can be obtained at https://apps.fcc.gov/cores/
- Upon receipt of the successful application the FCC will bill the applicant $35.00 via email. The applicant will have 10 calendar days to pay the fee. This does not apply to upgrades.

If the applicant is under 18 years of age the ARRL will reimburse the $35.00 after receipt of a completed reimbursement form.

Candidates testing for an upgrade must provide a copy of your existing license to be turned in with your application

January Meeting Minutes

No business meeting was held in January, Instead we all got together at The Legends of Massillon for our annual Club Appreciation Day.

Respectfully submitted,
-Gerald Sorensen, KG8RRY

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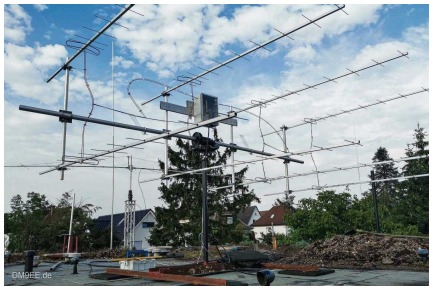
Will A Ham Radio Signal Bounced off Mars One Day?



Ham Radio Tech: Inexpensive Project Enclosures

By Ward Silver, N0AX

No matter what kind of operating you do, sooner or later you'll need a "gadget" that isn't readily available commercially.

Maybe you'll need a special switch or an interface between connector types or to a radio accessory port. After making one or two of these, you might develop a taste for homebrewing of the electronics variety! Many hams started small and wound up making equipment that rivals professional quality.

One thing you'll learn quickly, though, is that nice-looking metal enclosures are surprisingly expensive. Even small boxes can cost as much as the electronics inside them.

To keep the cost of building reasonable, I've learned to make use of less-expensive materials to make my own, particularly when building something for the first time or just trying out an idea. Low-cost materials encourage prototyping and trying out alternatives—you can then use the money saved on a better enclosure for the final version. Or you might find the inexpensive alternative to be a fine permanent solution.

Here are some tips and tricks that have served me well.

Basic Boxes

One of your most useful discoveries will be that specialty products sold for electronics are often quite a bit more expensive than a very similar product made and sold as consumer and commodity products. This is true for more than just metal boxes!

If you can use something made and sold by the zillion, you'll save a lot of money, especially if you are willing to accept a different shape or can modify a commercial product. For example, electric fence insulators and PVC pipe, or conduit fittings, are much cheaper than ceramic insulators!

My favorite source of project enclosures is products made for electrical wiring parts, especially the junction and switch boxes. You can see several examples in the photos below. The boxes are sturdy and cheap, and they are galvanized or plated. They make good shields since they are metal, which is extra important in the ham station where RF is present everywhere.

This photo is a great example in which I used an electrical box to make a message control box for a voice keyer. The box is a single-gang, four-inch-long, 2-1/8-inch-deep, new work utility box. ("New work" means that it's intended for new construction.) The top is a blank cover that I drilled out for four push button switches. A 3/8-inch conduit clamp secures the shielded multi-conductor cable. Total cost of all the metal parts was less than $5. (Image/Ward Silver, NØAX)

Most of these boxes have convenient holes for grounding and bonding connections. The boxes are inexpensive so if you make a mistake or decide to change a layout, you can start over very easily and cheaply. Ganged boxes can be joined together to make larger boxes. There are quite a variety of these metallic boxes available online or in the electrical section of your local hardware stores.

Electrical boxes have round "knockouts" for attaching conduit and cable clamps. There are three common sizes specified as "trade sizes" of 1/2, 3/4, and 1 inch. They mount in the body of the box with a small tab. Push on the knockout with a screwdriver to bend the tab, then flex it back and forth to break the knockout free. Threaded conduit clamps mount in the resulting hole. There are a large number of clamps and parts that mount in knockouts for different purposes.

Rubber grommets are available to avoid chafing a

cable.

The conduit clamp is threaded and mounts on the box with a large nut similar to a toothed lock washer. Tighten it by tapping on the nut's serrations with a screwdriver while holding the clamp with pliers. The clamp is flat-sided to capture electrical cable and is tightened with screws. The clamp will also capture the flat side that is present on most threaded RF connectors.

(Image/Ward Silver, NØAX)

(Image/Ward Silver, NØAX)

Smaller connectors, such as phono or phone plugs, will probably require a drilled hole or you can enlarge a pre-drilled hole. Another option is to use a pair of large flat washers to both fill the hole and hold a threaded connector.

If you are running coax or other shielded cable through the clamp, create a pigtail from the shield braid or wire that is long enough to wrap around one of the clamp screws. This allows you to make a good connection to the metal box.

Another nice thing about electrical boxes is that they are heavier than a similarly-sized aluminum or plastic box. This helps keep them in place when cables are attached or if controls or switches mounted on them are used frequently. Rubber or plastic stick-on feet work as well on steel as on aluminum, but be sure to clean the surface first since there may be some lubricating residue left from the manufacturing process.

A caveat about using plastic enclosures—unshielded enclosures for RF projects can allow common-mode noise to get into feed lines. (Noise refers to any unwanted signal picked up on the outside of the shield.) Noise currents flow to the end of shield on the outside and then enter the cable as a differential-mode signal.

If you can't shield the enclosure, consider feed line chokes from ferrite cores on the cables to block the noise currents.

Surplus and Used Enclosures

An often-overlooked source of project materials is surplus, overstock, or used equipment. Popular online auction websites are a good place to find enclosures and other materials. Local sources include Craigslist and free "buy nothing" sites organized by location. You will also be able to find "service pulls," which are equipment and devices designated as past their service life. You may have to buy several to get the best price, so share the savings with friends!

Along with hamfests, flea markets, and garage sales often include electronic gear that can be stripped for parts and hardware, with the enclosure left to be reused. Equipment cabinets for outdoor use, like the fiberglass box I bought surplus, are usually weatherproof, too.

Data and cable TV service boxes are widely available as surplus and usually have a basic weather-resistant cable entry. They are mostly plastic and unshielded but make good protective enclosures for cable connections and smaller devices.

Obsolete instruments and equipment are usually constructed with solid, high-quality cabinets that cost a lot new. Panels and other metal parts can be cleaned in the

dishwasher. Disassembling this type of equipment is an education in how electronic devices are assembled and provides a lot of useful hardware.

Taking this stuff apart is a great project for beginning electronics and ham radio hobbyists to build expertise (and a junk box)!

Holes in used enclosures can be filled with metal “hole plugs” that snap in place. Large holes can be covered with a piece of unetched PC board material or scrap sheet metal to maintain shielding. Older outdoor enclosures, particularly fiberglass or plastic, should be painted with automotive primer to protect and seal the surface.

Food and Novelty Containers

A popular activity in the QRP community is to build gadgets in the snap-together tins that hold Altoid mints. After all, they say, if the mints themselves were “curiously strong,” then why not the signal from a transmitter built in the same container?

There are even prototyping kits based on the tins such as this product from QRPme.com.

Don’t expect heavy-duty use from these lightweight, nearly disposable items. They are often painted and need to be scraped or sanded to bare metal around connectors and any overlap joints you expect to act as shielding. There are a variety of sizes from postage stamp-sized to large cookie and chip tins. The metal is quite thin, so drill with caution or use a punch to avoid tearing the metal. People have come up with all kinds of projects for candy tins, such as this Instructables collection.

Not only candy tins are pressed into ham service. Even tuna fish cans get into the act, like the legendary “Tuna-Tin 2” 40 meter transmitter. You can read all about this Doug DeMaw, W1CER, creation from 1976 at DIYRadio. Cans make great sub-enclosures in larger projects, too.

(Image/DIYRadio)
Hobbies and Crafts

Finally, hobby, outdoor, and craft stores sell a wide variety of containers and boxes that can be used for electronics. Metal toolboxes make very nice enclosures for electronics, particularly portable or mobile radios, and can even serve as a ground plane for a mag-mount whip! They are often lockable as a bonus. Larger coolers can carry an entire station, may have wheels, and are almost always water-resistant.

Although they aren’t often used for projects, tackle boxes, compartmented trays, and storage boxes come in very handy.

I hope this article gives you the idea that useful materials are all around—not only for enclosures, but for hardware and accessories, too. Using inexpensive materials lowers the “barrier to entry” for building your own gear and will make you a more capable and flexible homebrewer.

Handiham Program

Editor's Note- When I first embraced ham radio I read an article about the Handihams program. Coming from a commercial radio background I saw a need my talents could help fill-- reading QST and other ham radio articles for special need ham operators.

Here is what we did in 2024-

Greetings to Everyone:

2024 has been a year of substantial growth for the Handiham Program, marked by significant accomplishments across various aspects of the Program. The increase in new members demonstrates the expanding reach and appeal of the Program, highlighting its ability to provide valuable resources

and support to people with disabilities participating in the amateur radio hobby. The addition of more virtual classes has helped increase accessibility for members, allowing them to participate from anywhere, while larger class sizes reflect growing demand for learning opportunities in the amateur radio hobby.

The surge in activity within the Handiham Radio Club, coupled with a noticeable rise in daily net activity indicates that members are actively engaging with one another and strengthening their skills. This thriving community has fostered collaboration, learning, and deeper connections among members, empowering them to continue growing their knowledge of amateur radio and related technologies.

We started January with the second semester of the virtual General Class license class, which focused on the new pool of questions that took effect in July 2023. At the same time, we were preparing for another round of elections in the Handiham Radio Club, an exciting moment to bring fresh leadership and new ideas into the club. Speaking of the club and its growth, we were thrilled to see that membership had already grown significantly, from 71 members in early 2023 to over 100 members by January 2024.

In February, we kicked off the second semester of the virtual Advanced Morse Code class, where we worked closely with students to help them gain confidence in making on-air code contacts. This class was an excellent opportunity for our students to refine their skills and build their proficiency in Morse code. Additionally, we began working on scholarship applications for the 2024 Radio Camp. While February may seem early to be thinking about a September event, we know how quickly time passes, and getting a head start ensures everything runs smoothly.

In March, we were excited to welcome Melissa as our new Handiham Program Administrative Assistant. Her addition to the team has already made a significant impact, and we are thrilled to have her on board. Melissa brings enthusiasm to the role, helping as the first point of contact for members and others who reach out to the Handiham Program.

In April, we wrapped up both virtual classes, marking a successful semester of learning and growth. By May, the excitement shifted to Xenia, Ohio, for Dayton Hamvention, where we debuted a new display that significantly boosted traffic to our booth. Arriving a day early allowed us to meet with other vendors and test out new equipment for Radio Camp, as well as collaborate with HamSci on a plan to teach local blind students using the Handiham Technician Class curriculum. We also had the wonderful opportunity to meet with ARDC representatives, who have been incredibly generous in supporting the Handiham Program and Radio Camp.

Throughout the summer months, we stayed busy with applications and finalizing plans for our second hotel-based Radio Camp, which included an even busier schedule than the previous year. In early September, campers and volunteers began arriving from all over the US, and we were thrilled to have a larger meeting space to accommodate everyone. The expanded space gave everyone more room to work on projects, troubleshoot, and enjoy time together. The camp offered a wide range of classes, from weather spotting for the visually impaired to antenna theory and construction. We were also privileged to host

our second combined in-person and virtual Handiham Radio Club meeting, which saw record attendance!

Just five days after Radio Camp wrapped up, we kicked off a new virtual Basic Morse

Code class. We had two motivated students in this class, both eager to make on-air

QSOs, and we celebrated its successful completion last week. A week after Radio Camp ended, we began a 30-week Extra Class license class that dives deep into electronics and engineering theory. With eight enthusiastic students, it's been a fun journey so far!

Given the demand, we also added a virtual Technician Class in mid-October. This 24week course is currently in its 7th week, with eleven students, and one is already planning to take her exam before the end of the year—excited to get on the air!

November proved to be an especially busy month with three concurrent classes, marking the most classes we have ever run simultaneously. And now, as we close out 2024, the Handiham Radio Club has reached a milestone of 158 members, and we have welcomed 65 first-time Handiham Program members this year alone! We are proud of everything we've accomplished together!

I would like to extend a special thank you to our many volunteers and supporters who make all our services for Handiham Program members possible. Part of what makes the Handiham Program so special is that many of our volunteers and supporters are also members. Your dedication, time, and generosity are the backbone of our success. Without your unwavering support, none of the progress we have made in 2024 would be achievable. You play a crucial role in helping our members thrive, and we are deeply grateful for everything you do. Thank you for your continued commitment to empowering others and helping us build an inclusive, vibrant ham radio community.

Overall, 2024 has been a year of achievement and expansion for the Handiham Program, setting a solid foundation for continued success in the future. From all of us, Merry Christmas and Happy New Year!

73,

Lucinda AB8WF

Visit the MARC website at:

https://www.W8NP.net

If you have any news for the FEEDBACK please email us at:
club@w8np.net

Massillon Amateur Radio Club
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