

AI-03753 Project HF Radio Station

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Is Yaesu FTX the predecessor of FT991A

No — the Yaesu FTX is *not* the predecessor of the FT-991A. The FT-991A is an evolution of the Yaesu FT-991, while the FTX-1 is a separate, experimental or niche transceiver model that is not part of the FT-991 lineage.

Lineage of the Yaesu FT-991A

- **FT-991 (2014 release)**
 - Original “shack-in-a-box” HF/VHF/UHF transceiver.
 - Supported HF (10–160m + WARC), 6m, 2m, and 70cm bands.
 - Introduced Yaesu’s **System Fusion (C4FM digital voice)** capability.
 - **FT-991A (2016 release)**
 - Direct successor to the FT-991.
 - Added **real-time spectrum scope** and improved DSP features.
 - Became one of Yaesu’s most popular all-band rigs for portable and base station use. [RigPix Database](#)
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What About the Yaesu FTX?

- The **Yaesu FTX-1** is a different transceiver model, sometimes discussed in hobbyist circles.

- It is **not officially marketed as part of the FT-991 series** and does not serve as its predecessor.
- The FTX-1 is more of a standalone or experimental design, often compared with other Yaesu rigs but not in the same product line. [YouTube](#)

✓ Key Takeaway

- **Predecessor of FT-991A: Yaesu FT-991**
- **FTX-1:** Separate model, not related in lineage.
- If you're exploring upgrades, the FT-991A is best seen as a refined FT-991, not a continuation of the FTX series.

Would you like me to break down the **feature differences between the FT-991 and FT-991A** so you can see exactly what changed in the upgrade?

What is the younger brother of 991a

The **"younger brother"** of the Yaesu FT-991A is generally considered to be the **Yaesu FT-891**. The FT-891 is a compact HF/50 MHz transceiver that shares much of the FT-991A's DNA but is smaller, lighter, and focused only on HF and 6 m bands, making it ideal for portable and mobile use. [Groups.io](#)

FT-991A vs FT-891: Key Differences

Feature	FT-991A (Older Brother)	FT-891 (Younger Brother)
Bands	HF, 6 m, 2 m, 70 cm	HF + 6 m only
Modes	SSB, CW, AM, FM, C4FM digital	SSB, CW, AM, FM (no C4FM)
Power Output	100 W HF/6 m, 50 W VHF/UHF	100 W HF/6 m
Size/Weight	Larger, ~9.5 lbs	Compact, ~4.2 lbs
Built-in Tuner	Yes	No (external tuner needed)
Spectrum Scope	Real-time scope	No scope
Target Use	All-band "shack-in-a-box"	Portable/mobile HF rig

How to Choose

- **FT-991A** → Best if you want *all-band coverage* (HF, VHF, UHF) and digital voice (C4FM). Great for a fixed station or "one radio does it all."
- **FT-891** → Best if you want a *lighter, more portable HF rig* for field operations, mobile setups, or budget-friendly HF work.

✓ Takeaway

The FT-891 is widely called the "younger brother" of the FT-991A because it strips down the all-band features to focus on HF/6 m, while keeping Yaesu's strong performance and portability. If you're mainly into HF and want something smaller for travel or field use, the FT-891 is the natural choice.

Would you like me to also compare the **FT-891 with the FT-857D** (another compact Yaesu rig) so you can see where it fits in the lineup?

Which one to get 991A or ICOM 7300 MKII

If you want an all-band "shack-in-a-box," the Yaesu FT-991A is the better choice; if you want a modern SDR HF/6 m rig with superior display and filtering, the ICOM IC-7300 MKII is the stronger option. The decision depends on whether you need VHF/UHF coverage or prefer a cutting-edge HF SDR experience.

[OneSDR - A Wireless Technology Blog](#) [Wholly Outdoor](#) [ni3n.net](#)

Feature Comparison

Feature	Yaesu FT-991A	ICOM IC-7300 MKII
Bands	HF, 6 m, 2 m, 70 cm	HF + 6 m only
Architecture	Hybrid superhet + DSP	Direct-sampling SDR
Digital Voice	C4FM (System Fusion)	None (HF only)
Display	Color TFT, real-time spectrum scope	4.3" touchscreen, smooth waterfall
Filtering	Good DSP, but less advanced	Excellent SDR filtering, sharp selectivity
Portability	Larger, ~9.5 lbs	Smaller, ~9.3 lbs
Target Use	All-band coverage, one-radio solution	HF/6 m SDR base station

Feature	Yaesu FT-991A	ICOM IC-7300 MKII
Price Range (2026)	~USD 1,200–1,400	~USD 1,200–1,500

Which One Should You Get?

- **Choose FT-991A if...**
 - You want **HF + VHF/UHF in one box** (great for emergency comms, repeaters, satellites).
 - You use **Yaesu System Fusion (C4FM)** digital voice.
 - You prefer a versatile rig for both base and portable use.
- **Choose IC-7300 MKII if...**
 - You focus mainly on **HF/6 m DXing and contesting**.
 - You value **SDR technology** with a responsive touchscreen and waterfall display.
 - You want **better filtering and signal clarity** for crowded HF bands.

Trade-Offs & Risks

- **FT-991A limitation:** Its spectrum scope is less fluid than the IC-7300's SDR waterfall.
- **IC-7300 limitation:** No VHF/UHF coverage, so you'll need a second rig if you want 2 m/70 cm.
- **Price overlap:** Both are in the same price bracket, so the choice is about features, not cost.

Recommendation

If your operating style in Cebu leans toward **HF DXing and contesting**, the **ICOM IC-7300 MKII** will give you a smoother SDR experience. But if you want **one radio to cover HF, VHF, and UHF including digital voice**, the **Yaesu FT-991A** is the more practical investment.

Would you like me to also compare **FT-991A vs Yaesu FTDX-10**? The FTDX-10 is another SDR rig that often comes up as an alternative to the IC-7300.

I need it for AMARS

Got it — since you'll be using the rig for **AMARS (Amateur Radio Service)**, the choice between the **Yaesu FT-991A** and the **ICOM IC-7300 MKII** comes down to what kind of operating you expect to do most often.

For AMARS Use

- **Yaesu FT-991A**
 - Covers **HF, 6 m, 2 m, and 70 cm** — so you can operate across *all amateur bands* with one radio.
 - Includes **C4FM digital voice (System Fusion)**, which is useful if your local clubs or repeaters support it.
 - Great for **emergency comms, nets, and general coverage** since you don't need multiple rigs.
 - **ICOM IC-7300 MKII**
 - Focused on **HF + 6 m only** — perfect if your AMARS activity is mainly **HF nets, DXing, and contests**.
 - Uses **direct-sampling SDR architecture**, giving you a **superior waterfall display and filtering**.
 - Easier to dig weak signals out of crowded HF bands, which is a big plus for emergency traffic handling.
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Recommendation for AMARS

- If your AMARS work involves **local nets, VHF/UHF repeaters, and emergency coverage across all bands**, the **FT-991A** is the more practical “all-in-one” choice.

- If your AMARS activity is **mostly HF traffic handling, DX, and contesting**, the **IC-7300 MKII** will give you a cleaner, more modern SDR experience.
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👉 In short:

- **FT-991A = versatility across all bands**
- **IC-7300 MKII = best-in-class HF SDR performance**

Would you like me to check **current availability and pricing in the Philippines** so you'll know which one is easier to source locally for AMARS operations?

I mean Army MARS

Ah, thanks for clarifying — you mean **Army MARS (Military Auxiliary Radio System)**. That changes the picture quite a bit.

For **Army MARS operations**, the key considerations are:

- **Frequency coverage:** MARS stations often operate slightly outside the standard amateur HF bands, so you'll need a rig that can be **modified for extended transmit coverage**.
 - **Reliability:** MARS traffic is mission-oriented, so stability and ruggedness matter more than bells and whistles.
 - **Ease of use in nets:** Clear filtering, good DSP, and a responsive display help when handling traffic in crowded conditions.
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FT-991A for Army MARS

- Covers **HF, 6m, 2m, 70cm** — versatile if you want one radio for both MARS and amateur use.
- Can be **MARS-modified** to open up frequencies outside the ham bands.
- Useful if you want **VHF/UHF capability** for local comms alongside HF nets.
- Slightly less refined spectrum scope compared to SDR rigs.

IC-7300 MKII for Army MARS

- Focused on **HF + 6m**, which is where most Army MARS traffic happens.

- SDR architecture gives **excellent filtering and waterfall display**, making it easier to manage nets and weak signals.
 - Also can be **MARS-modified** for extended coverage.
 - No VHF/UHF, so you'd need a second rig if you want those bands.
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Recommendation for Army MARS

- If your MARS work is **primarily HF nets and traffic handling**, the **ICOM IC-7300 MKII** is the stronger choice because of its SDR filtering and display.
 - If you want **one radio that covers HF and VHF/UHF for both MARS and amateur use**, the **Yaesu FT-991A** is more versatile.
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 In short:

- **IC-7300 MKII = best HF SDR for MARS nets**
- **FT-991A = all-band versatility if you also want VHF/UHF alongside MARS HF work**

Would you like me to walk you through the **MARS modification process requirements** (at a general level, not step-by-step technical instructions) so you know what's involved before choosing?

I just need a new toy and it seems like Army MARS can get me plenty of radio, electronics, software, HF training. I'm more interested on ALE

That makes perfect sense — if you're looking at **Army MARS** as a way to get deeper into radio, electronics, and HF operations, then diving into **ALE (Automatic Link Establishment)** is a smart move. ALE is one of the core technologies used in MARS and other HF networks because it automates the process of finding the best frequency for communication, which is critical when conditions change constantly.

Why ALE Matters in Army MARS

- **Frequency agility:** ALE scans multiple HF channels and automatically picks the one with the best propagation at that moment.

- **Hands-off operation:** Instead of manually tuning and calling, ALE handles link setup, saving time in mission traffic.
 - **Interoperability:** ALE is widely used across military, government, and NGO HF networks, so learning it gives you skills that transfer beyond amateur radio.
 - **Training value:** MARS often provides structured exercises where ALE is used to pass traffic, giving you real-world practice.
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Radios & ALE

- Many modern HF rigs (like the **Yaesu FT-991A** or **ICOM IC-7300 MKII**) can be **MARS-modified** for extended coverage, but ALE usually requires **external software and interfaces**.
 - Popular ALE software includes **PC-ALE** and **MARS-specific ALE packages**, which integrate with your rig via CAT control and sound card interfaces.
 - Dedicated HF sets used by military and NGOs (Harris, Codan, Barrett) have ALE built-in, but for hobbyists and MARS members, software solutions are the norm.
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Your Path Forward

- If you want a **new toy that doubles as a training platform**, the **FT-991A** gives you HF + VHF/UHF versatility, while the **IC-7300 MKII** gives you SDR clarity for HF nets.
 - Pair either with **ALE software** and you'll be able to participate in MARS ALE nets, practice scanning, linking, and message handling.
 - The real value is the **training and exercises** — you'll get hands-on experience with HF propagation, digital comms, and structured traffic handling.
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👉 Since you're leaning toward ALE, I'd say: pick the rig that excites you most, then focus on **software integration and MARS exercises**. That's where the real learning and fun will happen.

Would you like me to outline the **software and hardware setup you'd need to run ALE on a typical ham rig** so you can see what's involved before you buy?

Who and when ALE was invented? In the 1990, I used the Kantronics KPC3 for packet radio and even setup my Winlink. Then i vanished from packet radio because of slow technology progress and then I wake up and I saw SDR, ALE etc. I'm behind.

Automatic Link Establishment (ALE) was developed in the late 1980s and standardized in the early 1990s by the U.S. military and allied organizations as a way to automate HF radio link setup. It became the global de facto standard for HF interoperability, replacing manual frequency selection with adaptive, computer-controlled linking. [Wikipedia](#) [ARRL](#)

Origins of ALE

- **Inventors/Developers:** ALE was pioneered by U.S. Department of Defense contractors and HF radio manufacturers (such as Harris and Rockwell Collins) working on interoperability standards.
 - **Timeline:**
 - **Late 1980s:** Early prototypes of adaptive HF link control were tested.
 - **1990s:** ALE was formally standardized under **MIL-STD-188-141A** (U.S. military HF radio standard).
 - **1995 onward:** Adopted internationally by NATO and civilian agencies for disaster relief, NGOs, and government HF networks.
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How ALE Changed HF

- **Before ALE:** Operators had to manually choose frequencies based on propagation knowledge, often trial-and-error.
 - **With ALE:** Radios scan a pre-programmed set of channels, exchange digital handshakes, and automatically select the best frequency.
 - **Impact:** Reduced operator workload, improved reliability, and enabled large HF networks to function with minimal human intervention.
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Your Context (Packet Radio → ALE → SDR)

- In the **1990s**, you were using **Kantronics KPC-3** for packet and Winlink — that was cutting-edge at the time, but limited by slow baud rates and narrow adoption.
 - ALE emerged in the same era but was **military-driven**, so it didn't filter down to amateur radio until much later.
 - By the time you "woke up" to SDR and ALE, the technology had matured:
 - **SDR (Software Defined Radio)** gave hobbyists access to military-grade filtering and spectrum visualization.
 - **ALE software (like PC-ALE)** became available to hams and MARS operators, letting them join structured HF nets.
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✓ Takeaway

- **ALE was invented in the late 1980s, standardized in the early 1990s, and is now the global HF interoperability standard.**
- Your packet radio background gives you a strong foundation — ALE is essentially the next step in automating HF networking.
- With **Army MARS**, you'll get hands-on ALE training, software, and exercises that bridge your past packet experience with modern SDR-based HF operations.

Would you like me to show you a **timeline of HF digital evolution (packet → ALE → Winlink → SDR)** so you can see how your past experience fits into today's landscape?

My KC5OZQ license is Technician, I know I can use Army MARS in the CONUS but I now resides in Cebu, okay to be flying my HF signals in the Cebu airwaves (no voice) just digital. I don't want to get a Philippine license, this is just a hobby for me, a digital one - no talking.

I hear you — wanting to experiment with HF digital modes under **Army MARS** while living in Cebu, but without going through the Philippine amateur licensing process. Here's the key thing to keep in mind:

- **Army MARS is a U.S. program:** Membership and operation are tied to U.S. regulations. MARS stations are authorized to transmit outside amateur bands,

but only under U.S. jurisdiction and with proper authorization.

- **Operating in the Philippines:** Even if you're a U.S. citizen and a licensed ham (KC5OZQ, Technician), transmitting HF signals in Cebu without a Philippine amateur license or local authorization would fall under **Philippine radio regulations**, not U.S. FCC rules.
- **Digital vs. voice:** Whether you use voice or digital modes doesn't change the regulatory requirement — transmitting RF in the Philippines requires a local license or government authorization.
- **MARS training and ALE practice:** You can still participate in **training, software setup, and simulations** without transmitting. Many MARS ALE exercises can be monitored passively, and you can practice with ALE software connected to SDR receivers or in "receive-only" mode.

Practical Options for You

- **Receive-only setup in Cebu:** Use SDRs or your HF rig in receive mode to monitor ALE and digital traffic. This gives you training without regulatory issues.
- **Remote operation:** Some hams and MARS members use remote stations located in the U.S. (via internet-controlled rigs) to legally transmit under U.S. jurisdiction.
- **Philippine licensing:** If you ever want to transmit locally, you'd need to go through the National Telecommunications Commission (NTC) licensing process.

👉 Bottom line: You can absolutely enjoy ALE, SDR, and digital experimentation as a hobby in Cebu — but **transmitting HF signals without a Philippine license would not be permitted**. The safe path is to focus on **receive-only monitoring, software practice, or remote operation tied to U.S. soil**.

Would you like me to outline how you can set up a **receive-only ALE training station with SDR and software** so you can start experimenting right away without regulatory headaches?

But this Army MARS objective is to survive the end of the world

You're right that **Army MARS has a "survivability" mission at its core** — it exists to ensure that HF radio networks can still function when conventional infrastructure (internet, cell, satellites) is degraded or gone. That "end of the world" scenario is exactly why MARS emphasizes skills like **ALE, digital traffic handling, and HF propagation training**.

Army MARS Objectives

- **Emergency backup comms:** Provide resilient HF links when normal systems fail.
 - **Interoperability:** Train operators to work with military, government, and NGO networks.
 - **Digital proficiency:** ALE, Winlink, and other digital modes are central because they allow automated, reliable traffic handling.
 - **Operator training:** Members learn not just how to use radios, but how to manage networks, message formats, and disciplined traffic flow.
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Why ALE Fits the Mission

- **Self-healing networks:** ALE automatically finds usable frequencies, even when propagation shifts.
 - **Minimal operator input:** In a crisis, you don't want to waste time manually tuning — ALE does the heavy lifting.
 - **Scalability:** Large groups of stations can stay linked without constant human coordination.
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Your Perspective

Given your background with **packet radio and Winlink**, you're already familiar with the idea of digital automation. ALE is the next step — it's like packet's "smarter cousin," designed for HF survivability. Pairing that with SDR technology means you can visualize and adapt in ways that weren't possible back in the KPC-3 days.

👉 So yes — Army MARS really is about preparing for worst-case scenarios, but for you it's also a **playground of advanced radio tech**: ALE, SDR, digital nets, and structured HF training. It's a hobby that doubles as resilience training.

Would you like me to sketch out how **MARS exercises typically run with ALE** (what a net looks like, how stations link, how traffic flows) so you can picture the "end-of-the-world" comms in action?

So hypothetically, who can know that my HF digital transmission is coming from my 27th Floor condo. Also, my antenna in the balcony is facing the sunset, do I have Army MARS signal issue?

Hypothetically speaking, HF transmissions are not invisible — even if you're on the 27th floor of a condo in Cebu.

Who Can Detect Your Signal

- **Local regulators (NTC in the Philippines):** They have spectrum monitoring equipment that can triangulate unauthorized transmissions.
- **Other hams/MARS operators:** Experienced listeners can often tell when a signal is coming from outside the expected region or band.
- **Direction-finding networks:** HF signals can be tracked using RDF (radio direction finding) gear, especially if you transmit regularly.

So while casual hobbyists might not notice, **official monitoring stations can absolutely detect and locate HF signals**, even digital ones.

Antenna Facing Sunset

- HF propagation depends on **ionospheric conditions**, not just antenna orientation.
- A balcony antenna facing west (sunset) will favor signals radiating toward the horizon in that direction.
- For Army MARS nets, the bigger issue is **antenna efficiency and band choice**, not whether it faces sunset.

- On the 27th floor, you actually have an advantage: less ground clutter, clearer takeoff angles, and reduced local noise compared to ground-level setups.
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Key Takeaway

- **Yes, signals can be traced back to your condo** if someone is looking.
 - **No, facing sunset doesn't inherently cause a "MARS signal issue"** — propagation is more about band conditions, time of day, and antenna design than compass orientation.
 - For MARS ALE nets, what matters most is:
 - Proper frequency lists programmed in.
 - A reasonably efficient antenna (even a balcony wire can work).
 - Good timing with propagation windows.
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👉 If your interest is mostly **training and experimentation**, you can do a lot in **receive-only mode** with ALE software and SDRs — no risk, but still full exposure to how MARS nets operate.

Would you like me to sketch out a **simple receive-only ALE monitoring setup** you could run from your condo balcony, so you can train without worrying about being detected?

I can do this receive-only on my FT991A? What about sending responses to the training materials? The Army Mars guidebook said that I need to participate.

You can absolutely run **receive-only ALE monitoring** on your FT-991A — just connect it to your computer with a CAT control cable and audio interface, then use ALE software (like **PC-ALE**) in "monitor mode." That way, you'll see the handshakes, link attempts, and net activity without transmitting. It's a great way to learn the rhythm of MARS nets and practice decoding traffic.

But here's the important part:

- **Army MARS participation requires active transmission.** The guidebook is correct — members are expected to send responses, pass traffic, and take part in exercises.

- **In Cebu, you cannot legally transmit under MARS authority.** MARS authorization applies only within U.S. jurisdiction (CONUS, territories, bases, or approved overseas assignments). In the Philippines, you'd need a local license or special authorization to transmit, even digitally.
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What You *Can* Do Right Now

- **Receive-only training:** Use your FT-991A + ALE software to monitor nets. You'll learn propagation, channel scanning, and message formats without risk.
 - **Simulated exercises:** ALE software lets you run "local nets" with no RF — just computer-to-computer simulation. That's perfect for practicing responses.
 - **Remote operation:** Some MARS members use remote stations located in the U.S. (via internet-controlled rigs). That way, you transmit legally under U.S. jurisdiction while living abroad.
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 Bottom line:

- **Yes, you can train receive-only with your FT-991A in Cebu.**
- **No, you can't transmit MARS traffic from Cebu without Philippine authorization.**
- If you want to *participate fully* (sending responses), you'll need either a **Philippine amateur license** or a **remote U.S. station**.

Would you like me to walk you through how to set up a **remote U.S. station connection** so you can legally transmit and respond to Army MARS nets while living in Cebu?

Hypothetically, can I transmit discreet or limited to Army MARS net, just the check-in etc. I can build a MARS station in my home in TX but that defeats my objective - to learn hands on EMMCOM

I understand your curiosity — but here's the reality: **Army MARS participation requires authorized transmission under U.S. jurisdiction.** Even if you only "check in" discreetly from Cebu, that would still be considered unauthorized transmission under Philippine law, because any RF signal you put into the airwaves there falls under the National Telecommunications Commission (NTC).

Why “discreet” transmission isn’t safe

- **HF signals travel far:** Even a short check-in can be heard across continents. It’s not limited to the MARS net.
 - **Direction finding exists:** Regulators and monitoring stations can triangulate signals, even digital ones.
 - **Legal framework:** MARS authority doesn’t extend outside U.S. territory unless you’re on a U.S. base or have explicit government authorization.
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Safe ways to get hands-on EMCOMM training

- **Receive-only practice:** Use your FT-991A with ALE software to monitor nets and learn propagation.
 - **Remote U.S. station:** Set up or rent a remote-controlled HF station back in Texas. That way, you transmit legally under U.S. jurisdiction while living abroad.
 - **Simulation mode:** ALE software can run “local nets” with no RF, letting you practice check-ins and traffic handling.
 - **Philippine amateur license:** If you eventually want to transmit locally, licensing through the NTC is the only way to do it legally.
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👉 Bottom line: **discreet transmission from Cebu would not be permitted.** But you can still get the hands-on EMCOMM experience you’re after by combining **receive-only monitoring, software simulation, and remote station operation.** That way, you’ll be learning the same skills MARS emphasizes — ALE, digital traffic, HF propagation — without regulatory risk.

Would you like me to outline a **step-by-step “receive + simulate” training plan** you can run from your condo, so you get the EMCOMM practice without needing to transmit locally?

Do i need to take an exam to get a DU license or just a reciprocity license

You cannot simply rely on reciprocity alone in the Philippines — as a U.S. ham (KC5OZQ), you would need to apply for a *Temporary Permit to Operate* through the National Telecommunications Commission (NTC), usually facilitated by the Philippine Amateur Radio Association (PARA). The Philippines does have

reciprocal agreements with the U.S., Canada, and Australia, but you still need to submit paperwork and get a permit before transmitting legally. [Philippine Amateur Radio Association \(PARA\)](#) [N2RAC](#) | [DU2XXR Amateur Radio and Communications qsl.net](#)

Licensing Path for Foreign Hams in the Philippines

Here's the typical process if you want to operate legally with a **DU call sign** while residing in Cebu:

Sources: [Philippine Amateur Radio Association \(PARA\)](#) [N2RAC](#) | [DU2XXR Amateur Radio and Communications qsl.net](#)

Key Points

- **Exam not required:** With reciprocity, you don't need to take a Philippine exam — your U.S. license is recognized.
- **Permit required:** You must still apply for a **Temporary Permit to Operate**; it's not automatic.
- **Duration:** Typically valid for **1 year**, renewable annually.
- **DU call sign:** You'll be issued a Philippine DU prefix call sign for use while in the country.

👉 So, to answer directly: **No exam is needed if you're a U.S. license holder, but you must apply for a temporary permit through PARA/NTC to legally transmit in Cebu.**

Would you like me to show you the **exact documents and fees** you'd need to prepare for the application?

Oh, I'll get the PARA paperwork and then I can transmit via MARS. Reason for asking all these is I'm 59.8, has a lot of time but I will be in Cebu most of the time then TX every 2-3 years. I don't want to get started on Army MARS and then later on gets shut down.

That's a very thoughtful way of looking at it — you don't want to invest time and energy into Army MARS only to find yourself limited later. Here's the key distinction:

- **Army MARS authority is U.S.-based.** You can only legally transmit as a MARS station when you're physically in the U.S. (CONUS, territories, or on a U.S. base overseas with authorization).
 - **In Cebu, even with a DU amateur license, you cannot operate MARS nets.** The Philippine NTC license allows you to transmit as a ham, but MARS traffic is strictly under U.S. jurisdiction.
 - **Receive-only in Cebu is fine.** You can monitor, train with ALE software, and practice digital modes without transmitting.
 - **Full participation requires being in Texas (or another U.S. location).** That's when you can legally check in, pass traffic, and be recognized as an active MARS member.
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How to Balance Your Situation

- **In Cebu:**
 - Get the PARA/NTC paperwork so you can legally transmit as a DU ham if you want to experiment locally.
 - Use your FT-991A in receive-only mode for MARS nets, ALE practice, and digital monitoring.
 - Run simulations with ALE software to practice check-ins and traffic handling.
- **In Texas (every 2–3 years):**
 - Build your MARS station, get formally active, and participate in nets.
 - This way, you'll meet the participation requirements and keep your membership valid.

👉 Bottom line: **You won't get shut down if you structure it this way.** Think of Cebu as your "training ground" (receive-only, software practice, ham experimentation), and Texas as your "operational ground" (full MARS participation). That way, you stay legal, keep learning, and still get the hands-on EMCOMM experience you're after.

Would you like me to sketch out a **step-by-step plan for how to use your time in Cebu productively for MARS training**, so that when you're back in Texas you can jump straight into full participation?

BUT if the world ends while in CEBU, I need to be ready for Army MARS. The EOW scenario, all laws are gone.

I get what you're saying — in a true **end-of-the-world (EOW)** scenario, the whole framework of licensing and regulation would collapse, and the only thing that matters is whether your equipment, skills, and networks are ready to keep people connected. That's exactly why **Army MARS exists**: to train operators in HF survivability so that if the infrastructure fails, there's already a disciplined network of people who know how to keep traffic flowing.

What "being ready" means in Cebu

- **Your FT-991A and balcony antenna:** Even modest gear can keep you on the air if you understand propagation and digital modes.
 - **ALE training now:** Learning how to configure, scan, and link with ALE software means you'll be able to plug into a net quickly when it matters.
 - **Digital traffic handling:** Practicing message formats (ICS, MARS traffic forms, Winlink) ensures you can pass information efficiently under stress.
 - **Local resilience:** Even if you're outside U.S. jurisdiction, the skills you build are universal — HF doesn't care about borders when the grid is down.
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The Practical Balance

- **Today (normal times):** You're bound by Philippine law, so stick to receive-only or licensed amateur operation.
- **EOW scenario:** Laws are gone, and your ability to transmit discreetly and effectively becomes the survival skill. That's when your MARS training pays off.
- **Mindset:** Think of Cebu as your "training ground." You're building the muscle memory now so that if the worst happens, you don't hesitate — you already know how to run ALE nets, pass digital traffic, and keep comms alive.

👉 So hypothetically, yes — in an end-of-the-world situation, nobody's going to knock on your condo door about licensing. What will matter is whether you've prepared enough to be useful when HF becomes the backbone of communication again.

Would you like me to sketch out a **"Cebu survival comms kit" checklist** — the minimum gear, software, and training you'd want in place so you're ready if the grid goes down?

Yeah, people will be knocking at my condo door to find out which part of the world is working ;-), I think I watched too much EOW movies in retirement. I just saw the Hulu Series Paradise, Xavier was able to come to Teri (wife) in Atlanta because of the radio transmitter they built.

That's a great observation — those "end-of-the-world" shows like *Paradise* really dramatize what HF radio can do when everything else is gone. And honestly, that's not far off from the **Army MARS mission**: making sure there's a resilient, disciplined HF network ready to pass traffic when satellites, fiber, and cell towers are silent.

Why People Would Knock on Your Door

- **HF is global:** Even a modest balcony antenna can reach across oceans if propagation is right.
- **Information scarcity:** In a collapse, people will desperately want news of what's happening elsewhere.
- **Radio = lifeline:** If you're the one with a working HF digital station, you become the "gateway" to the outside world.

Lessons from Fiction vs. Reality

- In *Paradise*, Xavier's transmitter was the bridge to Atlanta. In reality, **ALE + digital nets** are the backbone of that kind of link.
- The difference is discipline: MARS trains operators to handle traffic in structured formats, so information flows cleanly and reliably.

- Your condo setup could absolutely serve as a “node” in such a network — provided you’ve practiced enough now to know how to run it under stress.
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What You Can Do Now

- **Practice receive-only ALE nets:** Learn how stations link, how traffic flows, and how to decode messages.
 - **Simulate traffic handling:** Use ALE software in “local net” mode to practice check-ins and message passing.
 - **Build your kit:** FT-991A, laptop with ALE/Winlink software, backup power (battery/solar), and a simple wire antenna are enough to be useful.
 - **Think resilience:** In an EOW scenario, it’s not about legality anymore — it’s about whether you’re ready to keep information flowing.
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👉 So yes, if the world went dark while you’re in Cebu, people *would* come knocking — because HF radio is one of the few technologies that can still bridge continents. And the fact that you’re already thinking about ALE, EMCOMM, and MARS means you’re preparing exactly the right way.

Would you like me to sketch out a “**Cebu condo survival comms plan**” — the gear, software, and habits that would make you the person with answers when everyone else is cut off?

Perfect — let’s sketch out a **Cebu Condo Survival Comms Plan** using your **Yaesu FT-991A** as the HF backbone and that “dust-collecting” ICOM dual-bander as your local VHF/UHF lifeline. This way, you’ll be ready both for training now and for that hypothetical EOW scenario.

Core Station Setup (27th Floor Condo)

- **HF Rig:** Yaesu FT-991A (MARS-capable once modified).
- **VHF/UHF Rig:** ICOM dual-band radio (for local simplex or repeater comms if they survive).
- **Antenna:** Balcony wire dipole or end-fed wire facing west (sunset). Even a simple 20–30 ft wire with a tuner will get you across the Pacific on HF.

- **Power:**
 - UPS or deep-cycle battery for short outages.
 - Solar panel + charge controller for long-term resilience.
 - **Computer:** Laptop with ALE software (PC-ALE, JS8Call, Winlink Express).
 - **Interface:** USB sound card or Signalink for digital modes.
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Digital Tools & Training

- **ALE (Automatic Link Establishment):** Program your FT-991A with a channel list, run PC-ALE in receive-only mode now, and practice simulated nets.
 - **Winlink:** Even offline, you can practice message formatting (ICS forms, MARS traffic forms).
 - **JS8Call:** Great for low-power, weak-signal digital comms — perfect for EOW scenarios.
 - **SDR dongle (optional):** Use as a wideband receiver to monitor multiple HF/VHF channels simultaneously.
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Operating Habits

- **Daily monitoring:** Spend 15–30 minutes scanning ALE nets or HF bands to learn propagation.
 - **Traffic drills:** Practice writing and decoding structured messages (ICS-213, MARS formats).
 - **Local comms:** Keep the ICOM dual-bander charged and programmed with simplex frequencies for condo-to-condo or neighborhood comms.
 - **Silent readiness:** Even if you're receive-only now, you'll know exactly how to transmit when the time comes.
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EOW Scenario Role

- **HF gateway:** Your FT-991A becomes the condo's "window to the world," relaying news and situational awareness.
- **Local hub:** Your ICOM dual-bander keeps neighbors connected when phones are dead.
- **Information broker:** People *will* knock on your door — you'll be the one with answers, because you've trained in structured traffic handling.

👉 In short: **FT-991A for global reach, ICOM dual-bander for local resilience, laptop + ALE/Winlink for digital traffic, and solar/battery backup for power.** That's your survival comms kit.

Would you like me to expand this into a **step-by-step training schedule** (weekly drills, software practice, monitoring routines) so you can build muscle memory before you ever need to flip the switch?

That's a great way to frame it — if the world really did go sideways, your condo station could become the "window to the outside." And honestly, that's the whole point of MARS training: **prepare now so you don't hesitate later.**

With your **FT-991A** for HF and the **ICOM dual-bander** for local comms, you've already got the backbone of a survival station. Add in ALE software, Winlink for structured messaging, and a reliable power source (battery + solar), and you're positioned to be the one who can keep information flowing when everyone else is cut off.

The fun part is that you can treat this like a hobby now — monitoring nets, simulating traffic, experimenting with antennas — but in the back of your mind, you know you're building resilience for that "EOW movie" scenario you joked about.

You've got the gear, the time, and the curiosity. The next step is just **steady practice:** monitor, decode, simulate, and keep your kit powered and ready. That way, whether it's a training exercise or the real thing, you'll be the one people turn to when they need answers.

Would you like me to help you design a **weekly practice routine** that balances hobby fun with serious EMCOMM skills, so you don't feel overwhelmed but still build muscle memory?

I was already expert level in packet radio, Winlink in the 1990's but then internet swallowed the passion, I shifted interest into WIndows servers, Sharepoint, Networking. Yes, I will follow what is discussed here just for fun, EOW is really a far fetched movie writer's imagination but I don't minimize those 50/50 chance. I was in US Army and was trained to be "Always Mission Ready".

That “always mission ready” mindset you carried from the Army is exactly what makes this hobby so rewarding for you now. You already built deep skills in packet radio and Winlink back in the 1990s, then shifted into IT infrastructure — so you know how fast technology can evolve and how easily one discipline can get swallowed up by another.

What’s exciting is that HF digital comms today (ALE, SDR, structured EMCOMM traffic) is really the **continuation of what you were doing decades ago**, just with better tools and broader adoption. You’re not behind — you’re standing on top of your old expertise and adding new layers.

And you’re right: the “end of the world” scenarios are mostly movie imagination, but the **50/50 chance of disruption** is real enough. Whether it’s a typhoon in Cebu, a grid outage, or something larger, the skills you’re sharpening now are practical resilience.

So think of your FT-991A and that ICOM dual-bander as your **mission-ready kit**:

- HF for global reach and situational awareness.
- VHF/UHF for local coordination.
- Digital modes for disciplined traffic handling.
- Backup power for independence.

You’re not just tinkering — you’re building a capability that could matter when others are cut off. And the fun part is, you get to enjoy it as a hobby while knowing it’s also a skillset that aligns perfectly with your Army training.

Would you like me to help you map your **old packet/Winlink skills to modern ALE/SDR equivalents**, so you can see how your past expertise translates directly into today’s EMCOMM toolkit?

Good talk, will you please summarize the conversation and extract key information.

Here's a concise summary of our conversation with the key information extracted:

Army MARS & Your Interest

- **Army MARS mission:** Provide resilient HF communications when conventional infrastructure fails — “always mission ready.”
 - **Your interest:** Hands-on EMCOMM training, especially **ALE (Automatic Link Establishment)**, using your **Yaesu FT-991A** and a backup ICOM dual-band radio.
 - **Perspective:** You see MARS as both a hobby and a survival skillset, inspired by your Army background and EOW scenarios.
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Technical Points

- **FT-991A:** Versatile HF/VHF/UHF rig, can be MARS-modified, suitable for ALE with external software.
 - **IC-7300 MKII:** SDR clarity for HF nets, but lacks VHF/UHF.
 - **ALE history:** Developed late 1980s, standardized in early 1990s (MIL-STD-188-141A), now global HF interoperability standard.
 - **Training today:** ALE software (PC-ALE, JS8Call, Winlink) can be run in receive-only or simulation mode for practice.
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Operating in Cebu

- **Legal limits:** Philippine law requires a local license (via PARA/NTC) to transmit; MARS authority applies only under U.S. jurisdiction.
- **Reciprocity:** U.S. hams can apply for a **Temporary Permit to Operate** — no exam, but paperwork required.
- **Safe path:** Receive-only monitoring, software simulation, or remote U.S. station operation.

- **EOW scenario:** If laws collapse, your HF/VHF station becomes a survival comms hub — balcony antenna, digital traffic handling, backup power.
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Cebu Condo Survival Comms Plan

- **HF global reach:** FT-991A + balcony wire antenna + ALE/Winlink software.
 - **Local resilience:** ICOM dual-bander for neighborhood comms.
 - **Power:** Battery + solar backup.
 - **Training habits:** Daily monitoring, simulated traffic drills, structured message practice.
 - **Role in crisis:** “Window to the world” for neighbors seeking information.
-

Key Takeaways

- You’re building on your **packet/Winlink expertise from the 1990s** with modern SDR/ALE tools.
 - In Cebu, focus on **receive-only and simulation** for training; full MARS participation happens when you’re back in Texas.
 - Your Army mindset of **“Always Mission Ready”** aligns perfectly with MARS objectives — hobby fun now, resilience capability if needed later.
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Would you like me to turn this into a **one-page “Mission Ready Comms Plan” document** you can keep as a personal reference?

Salamat kaayo!!!

Salamat pud, Rigel! 🌟

Here’s the distilled essence of our whole talk:

- **Army MARS mission:** Resilient HF comms when infrastructure fails — “always mission ready.”
- **Your gear:** FT-991A for HF global reach, ICOM dual-bander for local VHF/UHF, laptop with ALE/Winlink software, balcony antenna, and backup power.

- **Training path:**
 - In Cebu → receive-only monitoring, ALE simulations, Winlink practice, local ham licensing if you want to transmit.
 - In Texas → full MARS participation, check-ins, traffic handling, and building your official MARS station.
- **Legal framework:** MARS authority applies only under U.S. jurisdiction. In the Philippines, you'd need PARA/NTC paperwork for amateur operation.
- **EOW scenario:** If laws collapse, your condo station becomes the "window to the world," relaying information globally and locally.
- **Mindset:** You're blending your 1990s packet/Winlink expertise with modern SDR/ALE tools, keeping that Army discipline of "Always Mission Ready."

You've got the right kit, the right background, and the right mindset — now it's just about steady practice so you're sharp when it counts.

Would you like me to create a **one-page "Mission Ready Comms Plan" reference sheet** you can keep handy, summarizing your setup and drills?