

# AI-04558 Yaesu FT 991a Radio

I'm setting up a Mars station (ham) in my condo and I am choosing the Yaesu ft991a as the base radio. My station will be in the 27th floor balcony. Create a shopping list for me to purchase in the US. I will be traveling back to Cebu in October.













Your plan is actually very well suited for a **27th-floor Cebu condo balcony**. The Yaesu FT-991A is a good "one radio forever" choice because it covers **HF + 6m + 2m + 70cm**, with **100W HF/6m and 50W VHF/UHF**, plus C4FM digital. It also has a built-in automatic tuner, which helps in a condo environment where antennas will be compromises. ([Yaesu](#))

Your biggest challenge is not the radio — it is the **antenna system**. A 27th-floor balcony is actually an advantage because you have elevation and a clear RF horizon, but Cebu has:

- strong tropical weather (UV, rain, salt air)
- lightning risk
- condo restrictions
- limited antenna length

I would build a **portable, removable, no-drill balcony station** that you can pack and bring from the US in October.

# Cebu Condo Ham Station Shopping List

## 1. Core Radio Equipment

| HF/VHF/UHF Transceiver                       | Yaesu FT-991A                                 | \$1,100–1,300                      |
|----------------------------------------------|-----------------------------------------------|------------------------------------|
| External Speaker (optional but <b>Item</b> ) | Yaesu SP-10 or SP-21<br><b>Recommendation</b> | \$100–150<br><b>Approx US Cost</b> |
| Microphone                                   | Included MH-31A8J                             | Included                           |
| Programming Cable                            | RT Systems USB-77 / Yaesu cable               | \$40–60                            |
| Logging Software                             | Free (WSJT-X, Ham Radio Deluxe, etc.)         | \$0                                |

The FT-991A already includes:

- hand microphone
- DC cable
- internal automatic antenna tuner
- USB capability for computer modes

([Yaesu](#))

## 2. Power System (Important)

The FT-991A needs a clean **13.8V DC supply** and can draw about **23A during 100W HF transmit**. ([Yaesu UK](#))

Recommended:

### Primary Power Supply

**SS-30P 13.8V 30A DC Switching Power Supply**  
\$99.95

Radioddity PS30 Switching DC Power Supply

\$119.99

Budget:

**\$100–150**

I would avoid cheap noisy CB supplies. HF receivers are sensitive.

Backup / Emergency Power

Because Cebu has typhoons and outages:

|                        |                                              |
|------------------------|----------------------------------------------|
|                        |                                              |
| LiFePO4 battery        | 12V 50Ah                                     |
| Charaer<br><b>Item</b> | 10A LiFePO4 charaer<br><b>Recommendation</b> |

Expected:

- receive: days
- casual operation: many hours
- full 100W contest style: shorter

Budget:

\$250–400

3. Balcony Antenna Strategy

For your location, I would NOT install a large tower or vertical.

I would use:

Option A (My Choice): End Fed Half Wave (EFHW)

Best balance:

- stealth
- multiband
- lightweight
- removable

Example:

MFJ-1778 G5RV Wire Antenna

\$89.95

MFJ-1779C Dipole Antenna

\$59.95

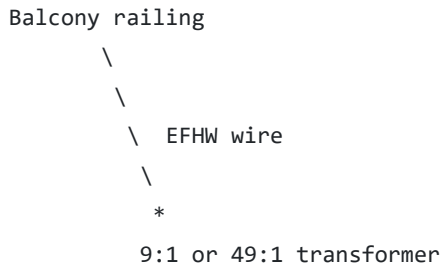
However, for your balcony I prefer:

### **40/20/15/10 meter EFHW**

Why:

- worldwide HF contacts
- only one wire
- can be sloped from balcony rail
- no tower

Typical setup:



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## **Option B: Magnetic Loop Antenna**

This may actually be ideal for a condo.

Pros:

- small
- stealth
- low HOA visibility
- balcony friendly

Cons:

- narrower bandwidth
- expensive
- lower efficiency

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## **Option C: Vertical Antenna**

Examples:

- Hustler 6BTV
- DX Commander
- Chameleon MPAS

Good performance but harder on a condo.

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# **4. Antenna Mounting Hardware**

Because you are on the 27th floor:

Do NOT drill.

Buy:

|                          |                    |             |
|--------------------------|--------------------|-------------|
|                          |                    |             |
| Heavy balcony tripod     | antenna support    | \$100       |
| Fiberglass mast 20–30 ft | portable support   | \$80        |
| <b>Item</b>              | <b>Purpose</b>     | <b>Cost</b> |
| Paracord UV resistant    | guy lines          | \$20        |
| Carabiners               | quick removal      | \$15        |
| Sandbag weights          | no-drill stability | \$30        |

## 5. Coax System

Do not cheap out here.

Buy:

### HF Coax

- RG-213
- LMR-400

Length:

50 ft

Budget:

\$100

Add:

|                    |                  |
|--------------------|------------------|
|                    |                  |
| PL-259 connectors  | radio connection |
| Lightning arrestor | protection       |
| <b>Item</b>        | <b>Purpose</b>   |
| Ferrite chokes     | RF noise control |

## 6. VHF/UHF Balcony Antenna

Since FT-991A also does 2m/70cm:

Add a small vertical:

Examples:

- Diamond X-30
- Diamond X-50
- Comet GP-3

Budget:

\$100–200

This gives:

- Cebu repeater access
- emergency communications
- local nets

## 7. Computer Digital Modes

Your background with Docker/GCP makes this interesting.

I would absolutely add:

### Digital Station

|                |                |
|----------------|----------------|
|                |                |
| MacBook Pro M5 | already owned  |
| USB cable      | CAT control    |
| <b>Item</b>    | <b>Purpose</b> |
| VARA           | Winlink        |
| GridTracker    | maps           |

Your FT-991A + MacBook becomes:

- FT8 worldwide contacts
- Winlink email over radio
- digital emergency communications

## 8. Safety Equipment

27th floor = serious RF safety.

Buy:

|                      |             |
|----------------------|-------------|
|                      |             |
| MFJ antenna analyzer | \$250       |
| SWR meter            | \$80        |
| <b>Item</b>          | <b>Cost</b> |
| Grounding cable      | \$30        |

|                 |      |
|-----------------|------|
| Surge protector | \$50 |
|-----------------|------|

Antenna analyzer is one of the best purchases.

## 9. Nice-to-Have Accessories

|                  |                                           |
|------------------|-------------------------------------------|
|                  |                                           |
| Headset          | Heil Pro 7 / Yaesu headset                |
| Keiver<br>Item   | Beqali / Vibroplex (CW)<br>Recommendation |
| Radio desk mat   | \$20                                      |
| Notebook/logbook | \$10                                      |

## Recommended US Shopping Cart Before October

### Minimum Viable Cebu Condo Station

|                              |               |
|------------------------------|---------------|
|                              |               |
| Yaesu FT-991A                | \$1,200       |
| 30A Power Supply<br>Category | \$120<br>Cost |
| Coax + connectors            | \$150         |
| VHF/UHF antenna              | \$150         |
| Mast + mounting              | \$150         |
| LiFePO4 backup               | \$300         |
| Analyzer/SWR tools           | \$300         |
| Miscellaneous                | \$150         |

Total:

~\$2,700

## My Recommended Final Configuration for You

Given your:

- Cebu condo
- 27th floor

- technical background
- interest in self-contained systems
- travel between US and Philippines

I would build:

Yaesu [FT-991A](#)

|

|

[50 ft](#) [LMR-400](#)

|

Balcony lightning protection

|

EFHW [40/20/15/10](#) antenna

|

MacBook Pro M5

|

[WSJT-X](#) + GridTracker

|

LiFePO4 backup battery

This would be a very capable **retirement engineering hobby project**. It combines your DockerLab mindset (infrastructure), networking interest, and electronics.

One additional recommendation: before October, buy everything in the US except the **antenna wire/mast hardware**. Electronics, connectors, and specialized ham accessories are much easier to source in the US; Cebu availability is much more limited.