

Saturday morning fun: “fat” MW DXing with the MFJ-1886

[28 Replies](#)

By Jock Elliott, KB2GOM

It was a reader, Mario Filippi, who set me on this path. He posted a comment that said, in part: “An interesting place to DX would be the segment between 1500 – 1590 kc’s where there are a number of news stations, one being federal news on 1500.”

Huh, I thought, federal news? I wonder if I can hear that. So I hooked up [the MFJ 1886 Receive Loop Antenna](#) to my Grundig Satellit 800 receiver and tuned to 1500. With the 800’s whip antenna, I heard mostly static; switching to the 50-foot indoor room loop, pretty much the same; same thing with the 1886 with the amplifier turned off. But turn the 1886’s amplifier on, and it was like getting slammed against the wall by the schoolyard bully: LISTEN TO ME! A big, fat, S9 signal, sounding like WGY 810 just a few miles from me. Wow, I thought, this loop can really pull out a signal.

A little research revealed, as nearly as I can tell, that Federal News 1500 is in Washington, DC, over 300 miles from me. Over the next few days I would occasionally check on Federal News 1500 using the 1886 loop, and typically it was loud and clear here in Troy, NY.

Hidden behind a curtain, the 3-foot aluminum loop of the MFJ 1886 works well for MW DXing.

Early this morning, Jan. 28, 2023, a thought crept into my brain: how many big, fat, MW signals could I detect with the combo of the Satellite 800 and the MFJ 1886 loop antenna? (Bear in mind that my 1886 rests flat against a window and is NOT rotatable in its current configuration.) Here’s the log, with station IDs when I could get them.

<u>Time</u>	<u>Frequency</u>	<u>Station</u>
1100Z	1520	WWKB Buffalo
1102Z	1530	Milwaukee? Sports, Australian open
1106Z	1540	CHIN Toronto, old time radio programs
1112Z	1560	religious music
1115Z	1660	orchestral music, Strauss waltzes
1118Z	540	middle eastern music
1121Z	660	WFAN, NYC
1124Z	700	WLW, Cincinnati

1127Z	710	WOR, the Voice of New York
1129Z	730	French language, Canada mentioned
1132Z	750	WSB, Atlanta
1134Z	770	WABC, NYC
1135Z	790	ortho doctor show
1138Z	860	French language, Canada mentioned
1140Z	880	WCBS, NYC
1142Z	1010	WINS, NYC
1144Z	1020	Talk
1146Z	1030	WBZ, Boston
1148Z	1050	WEPN, ESPN radio, New York
1149Z	1060	KYW, Philadelphia, PA
1153Z	1090	WBAL, Baltimore
1154Z	1110	WBT Charlotte, NC

Bottom line: it was immense fun, tuning around for “fat” MW stations in the early AM. Periodically I checked the other antennas as I traversed the band, but universally the MFJ 1886 was better at pulling them in.

Fat station DX? You bet! Try it; you’ll like it!

Configuring the “News Cruiser” for your emergency radio

[15 Replies](#)

By Jock Elliott, KB2GOM

Rob, W4ZNG, endured three weeks without electricity on the Mississippi Gulf Coast as a result of Hurricane Katrina.

When he and I spoke about his experience (and what any one of us might want in our “fertilizer hits the fan” radio kit), he mentioned that during Katrina, all of the local broadcasters were wiped out. There was a local low-power FM broadcaster who got permission to increase power to 1,000 watts and was broadcasting where to get food and water. There was a New Orleans AM station that was on the air, but all of its coverage was “New Orleans-centric.” After a few days, some local FM broadcasters, working together, cobbled together a station that they put on the air and began broadcasting news. Rob also began DXing AM stations at night to get additional news.

Hold that thought for a moment.

A few weeks ago, Andy, W2SRA, pops up on [the Radio Monitoring Net](#) (which I run on Tuesday nights) with a list of “Rolling News” medium wave stations that can be heard at least some of the time from my location in the Capital District of New York State. Rolling news stations broadcast news ‘round the clock.

The list includes:

- 780, WBM, Chicago, IL
- 1010, WINS, New York City
- 1030, WBZ, Boston, MA
- 1060, KYW, Philadelphia, PA
- 1090, WBAL, Baltimore, MD
- 1130, WBBR, New York City
- 1500, WFED, Washington, DC

When I saw that list, I thought “This is a pretty good resource.”

Then a day ago, something clicked, the lightbulb went on, and I realized: “This is exactly the list of stations that I would want if I were in the same situation as Rob after Katrina, where my local stations were dark, and I wanted to know what was going on! I named the list: the News Cruiser.

So, in the predawn hours, I decided to put the News Cruiser list to the test. I plugged the frequencies into several of my radios, and here is what I found. With the CCrane Skywave SSB 2, the signals ranged from copyable with noise to marginal to uncopiable, depending on the station. With the CCrane CCRadio SolarBT the results were better, but often tough to copy. Neither of these radios has the ability to connect to a medium wave loop antenna through a direct wired connection, although they can be inductively coupled to a loop such as the Terk AM Advantage.

The CCrane 2E, a much bigger radio with a much bigger internal ferrite bar antenna, produced markedly improved results. All three of these radios can be powered by off-the-shelf AA or D cells, which I considered to be an advantage during an emergency.

Two other radios, the Qodosen DX-286 and the Deepelec DP-666, which are powered by rechargeable batteries, acquitted themselves quite well when hardwired to the Terk AM Advantage loop antenna, but I prefer radios that can accept off-the-shelf commercial batteries.

If you live in North America, you can create your own News Cruiser list for your emergency radio by consulting <https://radio-locator.com/> and using the search function to find stations that broadcast in the “News” format.

Once you have assembled your list, test it out with the radio you would grab in an emergency and see how well they perform. You might find the perfect combination that you like or you might discover that there is some room for improvement.

In any event, I heartily recommend that every household has an emergency radio that can be easily deployed to discover essential information when the fertilizer hits the fan. The point is to discover what works for you and to discover it *before* it is needed.

Further, I would very much like to know what works for you no matter where in the world you are located. Let me know in the comments below.

When the lights go out: The Essential Listening Post – Part II

By Jock Elliott, KB2GOM

What's the most valuable commodity in an emergency? Information.

Without information, it is very difficult to make decisions of what actions you should – or shouldn't – take. Fortunately, as swling.com readers know, radio can come to your rescue.

As an example, I offer for your approval this minor incident that happened just a few mornings ago.

At 4:30 am, I awoke. That's not particularly unusual; I get up early lots of mornings to run [the Commuter Assistance Network](#) on ham radio.

What made this morning unusual were the things I couldn't see: the digital clock across the room, the tiny LED lamp that illuminates the way to the bathroom in the middle of the night. They were both dark. In fact, the only light that I could see was the LED from the uninterruptable power supply for the computer in the next room. It was pulsing, indicating the power from the mains was out.

With the help of a flashlight kept within easy reach of the bed, I made my way downstairs. A peek out the windows revealed the surrounding area was dark; no lights in local houses, no street lights. A house across the ravine behind my house had a single light, but it had the bright white look of an emergency lantern. So this outage was wider spread than just the lane where I live. But how widespread was it? In early February in upstate New York, it's winter; temperature about 6 degrees Fahrenheit on this particular morning. The thermostat on the wall has already dropped below where the furnace should have kicked on. With no electricity; no furnace.

With no house power, I had no internet, so I couldn't look things up to find out why there was no house power. Because we use Voice Over Internet Protocol (VOIP), with no internet, no house phone.

Now, I know what you're thinking: *“Well, dummy, fire up your smart phone, and in a few moments you'll have your answers.”*

To that I say: *“Not so fast there, pardner.”*

I consulted with a ham radio friend who makes his living in the commercial radio business. He consults with many companies, including cell phone companies, so he knows what he is talking about.

It turns out there are three things that could render your smart phone useless.

The first is whether your local cell tower(s) have battery back-up. Most do, but how many hours the batteries will run the cell tower can vary widely from just a couple of hours to perhaps eight. Depending upon when the power went out, you may or may not be able to connect.

The second is that many cell phone towers themselves connect to the rest of the network through wire or fiber optic cable. If a vehicle has taken down a pole, or a falling tree has taken down a cable, the network may be disrupted.

Finally, if there is high demand for your local cell phone tower, you may not be able to make a connection. My commercial radio “guru” relates that he went to an event at a local community college. There is a cell tower right on the property, but he had great difficulty connecting simply because so many people were trying to use the tower.

During emergencies, cell phone networks frequently go into gridlock because of high demand, so it’s a good idea to have other means of gathering information. An interesting aside: some years ago, I heard a presentation from one of the hospital administrators who was in New Orleans during Hurricane Katrina. They were unable to make voice phone calls, but apparently they could sometimes send and receive text messages.

Getting back to my small lights-out incident, I was in the actual act of firing up a radio to check out what local broadcasters on the AM (medium wave) band had to say, when the lights came on, the furnace started, and internet and phone service were restored. My greatest inconvenience was having to reset a couple of digital clocks.

But it raised a serious question: *what should be your essential listening post if the lights go out, the fertilizer hits the ventilation equipment?*

First and foremost, a battery-powered radio capable of receiving your local broadcasters. You need to know – or find out – which ones have back-up power so they can keep transmitting. Knowing that will do two things for you: first, tuning in to a station with back-up power will hopefully get you the information you need, and second, if stations that don’t have back-up power are off the air, that will give you an indication of how widespread the power outage is.

Knowing the extent of the blackout can be important. A couple of decades ago, on an August afternoon, my better half and I took our young son to a local park where there was a water fountain that the kids could run through. When we got home later, the power was out. I saw the neighbor standing in her yard and asked if she had reported the outage. “No point,” she said. “Why?” I asked. “Because the lights are out from Canada to Virginia.” Oh.

In addition to knowing which stations are likely to be on the air, it’s also good to know which local stations have news staff that are likely to collect and broadcast information that is needed during an emergency.

Second, if you live in the United States or Canada, you need a weather radio. Every state in the Union has bad weather of one sort or another . . . and some of them can kill you. NOAA weather radio is an

excellent source of information. It's free, and it does a fine job of delivering weather-related info in a concise and useful format.

Third, it would be very useful to have a scanner or ham radio capable of receiving your local 2 meter repeaters. This could be an additional source of useful information in a crisis.

So, are there any radios that I would recommend for "The Essential Listening Post" when the lights go out?

Yes, there are.

The C.Crane CCRadio 2E

First on my list would be the [C.Crane CCRadio 2E](#) (or [CCRadio3](#)). It receives AM, FM, NOAA Weather Band with Weather Alert and the 2-Meter Ham Band. It will run on house power or, if the lights are out, over 200 hours on batteries. By all accounts, it offers excellent performance on AM and FM, and it is one of the most sensitive NOAA weather radio receivers I have tested. I bought one and can heartily recommend it.

CC Skywave SSB

The [CCrane Skywave SSB](#) receives AM, FM, NOAA Weather band plus Alert, Shortwave (1711-29.999MHz) with SSB, VHF Aviation Band. It doesn't receive the 2 meter ham band, but it will receive hams on HF frequencies, which might come in handy in an emergency. It is not quite as sensitive as the C.Crane 2E on NOAA weather frequencies, but, [as I reported last year](#) it was the most sensitive NOAA weather radio receiver I took to Sodus, NY. It is very small and portable and will run for over 50 hours on batteries. I bought one and can heartily recommend it.

The Eton FRX3+

The [Eton FRX3+](#) is an interesting alternative for a "when the lights go out" radio. This battery-powered radio receives AM, FM, and NOAA weather radio with alert. It has a couple of LED lights for navigating in the dark and can be charged by a built-in solar panel, hand-crank, or USB cable, and can even be used to charge your cell phone. Eton Corp. sent me one of these, and I find that it offers worthy performance on AM and FM, and excellent sensitivity on NOAA weather radio. Recommended.

In the future, I hope to offer some additional useful information about NOAA weather radio as well as a comparison of different ways to receive NOAA weather radio, including dedicated weather radio, consumer radio, scanner, and ham handi-talkie.

-Jock Elliott

Checking out the CCRadio SolarBT

[13 Replies](#)

By Jock Elliott, KB2GOM

The syllables coming through the headphones were unknown to me. Clearly it was a language, but not one that I knew. So I logged it: 2/18/24, 1101Z, 1660 kHz, unknown language, orchestral music. (I later found out it was a Korean language station from New Jersey.) Then I moved on down the band.

Next stop: 1650 kHz, male voice French. Then: 1630 kHz, pop music, followed by “Arabic sounding music” on 1610 kHz, and so on down the medium wave band. It was a pre-dawn morning, and I have had a great deal of fun, creeping along in 1 kHz increments using the 2.5 kHz bandwidth, turning the radio from side to side in my hand, trying to tease out distant stations, and hoping to hear my first transatlantic DX.

In my lap was a radio that very much resembles a brick, but a very elegant *designer* brick. In the words of the instruction manual: “The CCRadio Solar is likely the first emergency radio that doesn’t look like one.” The folks at CCrane sent me one for review without charge.

[The CCRadio SolarBT](#) measures 6 inches wide by 3 inches high by 2.5 inches deep and weighs just a bit over a pound with batteries installed. Most of the SolarBT’s case is white polymer, but the bottom, top, and sides are covered with a gray rubberized “skin.” The end effect is a solidly built unit that is pleasant to view, easy to handle, and won’t readily slide off a slippery surface.

The CCRadio SolarBT can receive AM (MW) band from 520 to 1710 kHz, FM from 87.5 to 108 MHz (76-108 MHz in expanded mode), and 7 NOAA Weather Radio channels from 162.400 MHz to 162.550 MHz. In addition, the SolarBT has a wealth of other interesting capabilities, and we will get to those in just a bit.

Clearly, the CCrane folks are serious about this radio’s emergency capabilities. There are *five* different ways of powering the SolarBT: (1) an 18650 Li-ion 3.7 volt rechargeable battery which provides around 50 hours of playing time (the manual advises fully charging the internal battery before use), (2) 3 AA batteries (not included, but good for about 40 hours of playing time. The manual warns: don’t use Lithium batteries), (3) a 110 mA solar panel (park the radio in a sunny window to keep it trickle charged), (4) a wind-up dynamo generator (300-500 mA at about two rotations per second. 90 seconds of winding will power the radio for 8-13 minutes or will charge your cell phone enough to make a few quick calls), or (5) a 5-volt DC, 1000 mA micro USB cable or optional AC adapter.

On the left of the front panel, you’ll find a 2-inch, 3-watt speaker. To the right of that is an LCD panel which serves as information central for the SolarBT. The display’s backlight will stay illuminated for about 10 seconds after each button press; you can set the light to stay on continuously if the SolarBT is plugged into continuous power. To the right of the display are a couple of up and down tuning buttons. Press quickly to advance to the next tuning increment. Press and hold to automatically tune to the next strong station. Hold continuously to cycle through the entire band.

Below the display are 5 memory station buttons that have some additional functions we'll get to in a while. To the right of the memory buttons is the volume knob.

The top of the radio is dominated by a solar panel that, if exposed to direct sunlight for 8 hours will provide 10 to 14 hours of playing time at medium volume. Surrounding the solar panel are 4 buttons: one for power, one for the flashlight, one for changing radio bands, and one for BlueTooth functions. At the extreme back edge of the top is a fold-out telescoping antenna for FM and weather band reception. Inside the case is 10-centimeter a ferrite bar antenna for AM reception (by comparison the ferrite bar inside a CCrane Skywave is 7 centimeters).

CCrane's attention to detail is evident: the button for the flashlight glows in the dark (very handy if you awake to find the power is out), and the instruction manual is very informative and well-written. In fact, it's been my experience that CCrane consistently delivers the best-written user manuals in the radio business. Well done!

On the left side of the case is the LED flashlight. On the right side is a soft rubber hatch that provides access to a jack for auxiliary input, a radio power/charging jack, a switch for selecting between the 3 AA batteries or the 18650 rechargeable battery, an earphone jack, and a standard USB port that can be used to charge your cell phone.



On the back of the SolarBT is the fold-out crank for the dynamo generator and a hatch for accessing the 3 AA batteries and the 18650 rechargeable battery. That's it.

Judicious pressing of the memory buttons provides access to the clock and alarm functions, to selecting 9 or 10 kHz AM band tuning steps, to designate clock or frequency while listening to the radio, to select 1 kHz running steps on the AM band, and to choose among 3 different bandwidths for the AM band: 6 kHz, 4 kHz, or 2.5 kHz. The manual will tell you how.

Yes, you say, but how does it perform? Bottom line: just great.

The SolarBT may be small, but, in my opinion, it punches above its weight and provides excellent sensitivity for its size on the AM, FM, and weather bands. You might buy it as an emergency radio, but my guess is that you will soon discover the joy of DXing with it.

I would be remiss if I didn't add the following. Normally, I "play radio" using headphones to help compensate for a hearing deficit. Lately, however, I have been listening to the NOAA Weather Radio on the CCRadio SolarBT through the speaker, and I have found that the sound coming through the speaker is very pleasing indeed.

A final note: I did not test any of the Bluetooth connectivity because at present I do not own any gadgets that would connect through Bluetooth.

Bottom line: I liked the CCRadio SolarBT a great deal and can happily recommend it. You might buy it as your emergency radio, but don't be surprised if you find yourself using it for general listening or for DXing distant stations.