

Motorola Radios

My introduction to Motorola two-way radios came when I was working as a forest fire fighter in the BC Interior. As an initial attack crewman I'd often be on standby in the evenings and on weekends and be expected to respond to a fire on a moment's notice. We were issued portable radios so that we could be contacted if we were in town somewhere when a fire was reported. These were Motorola PT 300 models, which were referred to as "lunch pail" radios as they did look very much like lunch pails, and were fairly heavy as they contained eleven D cells.



MOTOROLA PT300

They were also quite bulky, and whenever several of us were sitting in the local pub waiting for lightning to hit a tree and provide us with some overtime there'd be not much room on the table for beer glasses. Not that we could afford many of those, as standby rate was a third of our meager hourly rate, and we'd calculated that we were often drinking our pay faster than it was accumulating.

Whenever we were fighting fire we found the PT 300 to be more of a nuisance than an asset, as you needed one hand to carry it, and we were

packing enough gear as it was. When you're dragging around a few hundred feet of wet fire hose or hauling a fire pump and fuel container up a mountainside you don't feel like lugging a radio along as well. This meant it would often be left sitting on a stump or next to a catguard, and as the case of the radio was made of green plastic which blended in nicely with the surrounding vegetation, radios sometimes got mislaid. Occasionally one would get destroyed when a fire took off suddenly or a tree was accidentally felled right on top of it.

Eventually the surviving lunch pail radios were phased out and replaced by smaller units that could be carried on the belt - the Motorola MH 70. The ones we were using still only had two channels, but they made life much more convenient as we could have them with us at all times when working on a fire.



MOTOROLA MH70

They took up less room on the table in the pub also, and were very waterproof, as we discovered whenever beer was accidentally spilled on one. They were resistant to other liquids also; as I discovered the day I wasn't able to get out of the way in time when an air tanker was dropping a load of retardant on a fire. Both my radio and I received a coating of Phoschek, which is a thick

slippery red liquid that doesn't taste too good. The radio worked fine once I'd scraped off the worst of the mess and found the PTT button.

The MH 70 proved to be a very tough radio the day I was riding as a passenger on a Caterpillar D6 bulldozer. The ground we were travelling over was extremely rough and we were being bounced around quite a bit, so much so that my radio fell out of its pouch and landed on the tracks. By the time I could get the operator to stop we'd already run over it and I expected the worst. To my surprise, when I dug it out of the ground it had been embedded in I found that it was undamaged and still working perfectly.

There were limits to the survivability of Motorola portables though, and I found out during a slash burning operation that the MX 350 wasn't fireproof.



MX350S Military & NYPD MX340

I'd been clambering through heavy logging slash with a drip torch, lighting as I went, when I fell over and the radio came out of its pouch since the retaining strap was broken. I tried to find it amongst the branches and other debris, but the fires I'd lit were starting to spread, and my escape route was about

to be cut off, so I didn't have much time to search. If I'd stayed a bit longer I might have found the radio, but wouldn't have made it out in time. It was a tough decision, as the MX 350 was a very expensive radio back then, and to this day I feel bad about it burning up, as that was the only thing I'd ever lost during the twenty five years I spent working in the woods.

I went back the next day and discovered the charred remains of the radio, which I carefully collected and placed in a box to take back to the company. This way they'd know that the radio had really been destroyed, and wasn't sitting in some pawnshop somewhere. I handed the box to the purchasing manager and asked him if he could send my portable to the repair shop, as it didn't seem to be receiving very well. Can't remember what his reply was.

My MX350 went everywhere when I was on standby – it went to all the best parties; and a lot of the worst ones as well. Now and then I'd find that I was unable to leave a party when it was over due to lack of motor coordination, and would have to search the place for my radio once I'd finally woken up in an unfamiliar environment. I came up with a routine to make it easier – when I arrived at a party I'd leave my radio and truck keys inside one of my boots near the front door. That way all I had to do was find my way to the door in the morning and I'd be all set.

We had Motorola Mocom 70 radios installed in the company pickup trucks, and these were equally tough when it came to surviving abuse. I put on a lot of miles every year driving on poorly maintained logging roads, which put a lot of strain on my truck and everything within it. The radio was screwed to the

wall of the cab, behind the seat, and I never thought much about it until the day I hit a particularly deep pothole and the radio tore loose from the wall, taking some small pieces of cab with it. The radio still worked, so I left it where it was for a week or two until I got fed up with all the road dust that was entering through the holes in the cab and had it re-mounted after a small welding repair.

Antennas didn't stand up too well either, as in those days we had 5/8 wave Larsens mounted on the truck roofs. Overhanging branches took their toll, and on one occasion after trying to reach town by radio unsuccessfully I stopped to see if the antenna connection had shaken loose from the radio, as it sometimes did. It was secure, so the next thing I checked was the antenna, discovering that the whip was now only 1/8 of an inch long. The rest was probably lying in the road a few miles back, but I never found it.

The ultimate testimonial to the robustness of the Mocom 70 has to be the unit that was installed on a Caterpillar D7 bulldozer that we had building fireguard and scarifying steep logged-over ground. The radio was bolted to the inside of the protective canopy with a piece of rubber acting as a shock absorber. The operator wore headphones so he could monitor the radio while he was working, which made for a safer operation, as prior to this, the standard method for getting an operator's attention was to approach the bulldozer from the rear and throw a chunk of wood at the back of the canopy.

Scarifying on very rough ground was very hard on this machine, so much so in fact that eventually its hard bar snapped.

A hard bar is a specially toughened steel bar that connects the two swing frames, and according to the local Finning dealer, they'd never heard of anyone breaking one before. The radio survived all the shaking and jarring without damage however, although now and then a crystal would come out of its socket and have to be pushed back in. I bet a modern synthesized radio wouldn't stand up as well.

In later years newer Motorola handheld radios came into use on the fire line,



such as the Expo model, (*seen at left*) which was smaller and lighter than the radios we'd been carrying up to that point. I tried using an Expo, but went back to the MX 350, partly because by then I was so used to wearing one that I

couldn't balance quite as well when walking across slippery logs if I was wearing a small radio on my right hand side.

The other problem with light-weight radios is that you don't always notice if they accidentally fall off your belt. We had one get burned up in this way, but it wasn't me that did it on this occasion. Fortunately it had been borrowed from the plywood plant, so they had to fill in the requisition forms for a replacement.

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