Radio role of the Ferret

Looking at radios in the Ferret as a whole, the fit is role-specific which means that you need to define what your vehicle is representing and then look at the way it would be kitted out to achieve that. At shows and rallies, Landrovers are seen with all sorts of radio kit hanging off them. Soft-skin Landrovers were usually for transport. The CO and RSM would generally have FFR Landrovers, since they had to communicate with HQ.

Armour is different for two reasons. The first is that they are a deployable asset and need to be controlled by HQ. The second is that they operate in groups in a hostile environment so peer-to-peer communications is important. To this end most armoured vehicles are capable of carrying two radio sets for their own use. They usually rely on VHF as that is more reliable over the distances needed which are between the squadron; from the squadron to Squadron HQ and for rebroadcast purposes. Because weight is not an issue - most armoured vehicles use 2x VRC-353 sets. These are capable of a reasonable distance, draw power straight from the vehicle and integrate into the crew harness very easily.

The PRC-351 is designed to be portable and carried at platoon level. It covers the same frequencies as the VRC-353 but has only a 4 watt output whereas the 353 has 50 watts. You can add a 20 watt amplifier to the PRC-351, and in that configuration as a PRC-352 it is used with an external antenna (the Ground Spike Antenna / Elevated Ground Spike Antenna) in a semi fixed role (platoon HQ). The 352 cannot be used as a portable radio with the amplifier connected, as the whips are not compatible and it can cause RF injury to the porter.

So going back to the Ferret: the only time that a PRC-351 would be fitted in a Ferret would be when there is a possibility of dismounted use. There is no great operational advantage in replacing the 353 with a 351 *per se* as it would be replacing a 50 watt set with a 4 watt set, or (as a 352) 20 watt with the amp. To achieve that fit you would also need to add a DCCU (28v battery charger) as well as an initiate box to connect it to the harness. For a radio harness diagram for these two radios in the Ferret, see here.

(My thanks to Richard for these notes)