HISTORY OF SIGNALLING IN 100 OBJECTS
COUGAR NET RADIO

The secure UK/PRC-349, made by RACAL, replaced the non-secure PYE UHF Pocketfone 70 and the PYE Westminster W15 VHF radios that had been introduced in the 1970s. These Pye systems, as explained in a previous object article had suffered from being totally insecure and evidence had shown that all the Pye nets were being monitored constantly by the terrorist organisations.

COUGARNET had 3main frequency bands, which were 68-88MHz, 132-174MHz & 403-470MHz. The most important feature of this radio system was that it had built in encryption, using the BRIGHT chip. Owing to its frequency ranges it was largely able to be deployed taking advantage of the existing PYE radio masts in the province of Northern Ireland, but with some significant enhancements, especially in rural areas. The Cougar Radio Network not only replaced the urban PYE pocketfone 70 networks, but replaced the Larkspur combat net radios that were used in the countryside -in particular in the border areas. Thus, instead of having the traditional combat net radio system, the Cougar Radio network was province-wide providing a Prov-

ince Incident Net (PIN). Talk-through radio masts, erected on high spots, were all connected in a single network. It provided mobile access to the radio network wherever the user was; the ops rooms were therefore connected to the soldiers on the ground. The Cougar radio Base Station could be installed in the HQ or in a vehicle - see above. All sets automatically connected to the nearest

Talk-through and then used to send voice messages across the province. Each talk-through was connected to the two nearest talk-throughs creating an interconnected mesh around the province. When mobile users travelled too far away from the talk-through they were currently connected to, the system automatically switched to a different talk-through, thus ensuring connectivity across the province. In direct mode two or more radios could talk direct to each other – within range – removing unnecessary traffic from the Province Incident Network or the Province Admin Network. This mode was frequently used by the Royal Signals mast riggers for maintenance and network extension.