AN UNUSUAL SET

Tony Helm, G4BCX, has responded to queries from Tom, GW3LJS and other members of the AM net with brief details of his unusual Nato set, the GRC-19. The GRC (Ground Radio Complete) - 19 consists of the T-195 transmitter and R-392 receiver.

Tactical deployment:	tank battalion, H.F., Rear link, high power.
End users:	Armies of the USA, Belgium, Holland and Germany.
Manufacturer:	Collins Radio, through sub-contractors for both Tx and Rx.
Derivation:	the T-195 Tx is derived from the ART-13. Operating frequency is manually selected and locked: all further tuning and loading functions are then entirely automatic by a motor driven system. The whole is contained within a rugged green box.
	The R-392 is a simplified version of the R-390A, minus the filters, i.e. it has a limited selectivity choice. It runs from 24 volts only, i.e. the valves have a 24 volt HT rail. It was then shoe-horned into a relatively small green box <i>[relative to the rather massive R-390A! – Ed]</i>
Frequency coverage:	Tx: 1.5 – 20 MHz.
	Rx: 0.5 – 30 MHz.
Power output:	(no low power selection) max into a dipole, 100W CW, 60W AM.
Supply voltage:	22 – 30 volts DC. (Optimum is 28.5 volts).
Supply current:	Send: 44 amps, starting surge: 250 amps.
	Receive: 9 amps.
Weight:	253.5 lbs (115Kgs).

[Tony has a very fine example of the GRC-19. The system has many unusual features and is most impressive, with several motors whirring away to auto-tune the Tx, and a very powerful and noisy blower system to keep it cool. -Ed]



The T-195 transmitter – note the absence of multiple tuning controls due to the auto-tune system