

# 977 HF Vehicle tracking system



- Accurately track and monitor vehicles and vessels over an HF radio network
- Independent of all other communications' networks
- Free to air - no call costs

The Barrett 977 HF tracking system is an automatic vehicle locating and tracking package which utilises the Navstar Global Positioning System (GPS) and an HF network consisting of a central control station and mobiles.

The 977 computer based tracking system, located at the control station, automatically polls vehicles or vessels within the HF network, retrieving their position using a standard Selcall format based on CCIR493-2. The position of the vehicle or vessel being tracked is then displayed on a computer based map.

The control station consists of a PC loaded with the Barrett 977 HF vehicle tracking software connected to a Barrett 2050 transceiver. Vehicles or vessels to be tracked are fitted with a Barrett 2050 transceiver equipped with a receiver.



## HF Radio Communications

# 977 HF Vehicle tracking system

### Features

Monitors, tracks, follows or finds vehicles on maps stored in the control station computer.

Reports alarm conditions immediately upon receiving a distress signal issued by any vehicle or vessel and automatically displays its location on the appropriate map.

Warns when vehicles or vessels approach a user defined exclusion zone.

Vehicle or vessel positions can be recorded for later playback and analysis.

Provision to read and update textual information about specific locations on the map (way points).

Way points are colour coded dots which are placed on the map by the user.

Provision to retrieve and store textual information about every vehicle or vessel in the fleet.

Displays the current mobile position as an icon, continuous track or a trail of points.

Telemetry displays the mobile Selcall number, speed, distance, calculated arrival time and bearing to a selected destination, which can be a location on the map or the location of another mobile.

Maps can be scanned by the customer using an A4 flat bed scanner and registered using the inbuilt registration system in the tracking software.

Displays distances in metres, kilometres or nautical miles. System accuracy in the order of 15 to 30 metres (when subject to the effects of selective availability 100 metres).

Transceiver function access which includes Pagecall, Statcall and the ability to control most main transceiver functions from the computer screen.

### System components

#### Central control station

Barrett 2050 Local control HF transceiver with RS-232 option for transceiver (BCO95003)

Barrett 2022 Power supply unit

Suitable control station antenna - (i.e. Barrett 912 Broadband antenna)

Barrett 977 Tracking package (which includes cables from computer to receiver)

Computer with a minimum hardware specification as follows:-

Intel Pentium, Intel Celeron or AMD Athlon processor

256 Mb of RAM

Windows XP operating system

1 serial communication port

1 parallel port or 1 USB port

SVGA (1024 x 768 x 256) graphics card

20 Gb HDD

Keyboard and Mouse

#### Vehicle equipment

Barrett 2050 Remote control HF transceiver

GPS receiver - either external using NMEA 0183 input on transceiver or using Barrett BCA90048 GPS receiver module

Barrett 2019 Automatic tuning mobile antenna

#### Vessels

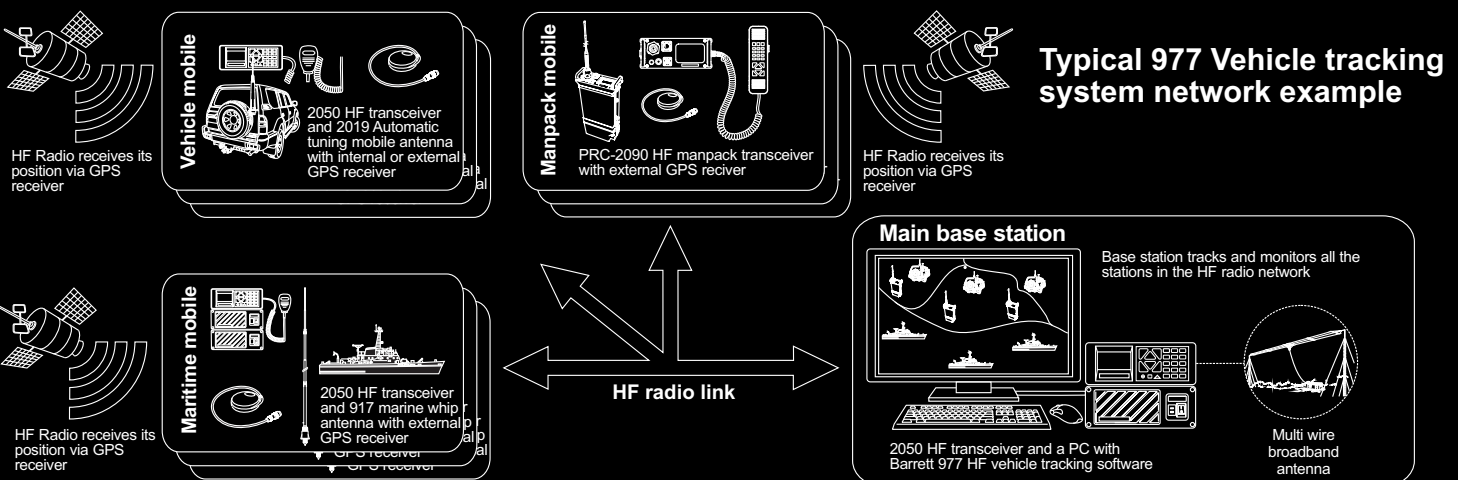
Barrett 2050 Local control HF transceiver

GPS receiver - either external using NMEA 0183 input on transceiver or using Barrett BCA90048 GPS receiver module

Barrett 911 Automatic antenna tuner

Suitable whip or long wire antenna

Barrett 2022 Power supply unit (if 13.8 V DC not available)



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