Hyper-Fix - A Shore Based Radio Position Fixing System R.F. SHEPPERD, Racal-Decca Survey (M) Sdn. Bhd.

' Almost all offshore operations related to hydrocarbon exploration or development, demand an ability to establish horizontal position with great precision, typically ± 10 metres. Also, the system used must be able to provide fix coverage over a large area and provide fix data at an acceptable rate, typically once per second or better. The requirements tend to limit the type and number of systems available. In practice, the choice is limited to a radio aid, employing a chain of shore based radio transmitting stations, with an ability to 'see' over the horizon.

Recent system developments have concentrated on two objectives: maximising the area coverage provided by a single chain of stations, and maximising quality control for the system's end users. Quality control is the business of detecting and measuring inherent systematic errors, and of applying the appropriate corrections.

This paper shows how the Hyper-Fix system, which has been operational offshore Malaysia for the past year, achieves both objectives.
