

The development of dynamic positioning (DP) systems has grown over the past 35 years, with reliable and robust methods of positioning essential for safe vessel operations at offshore installations.

This growth has in turn stimulated the development of DP position measurement sensors which have become more sophisticated as technology has allowed. The International Marine Contractors Association (IMCA) has just published “Guidance on RADIUS Relative Positioning System” (IMCA M 224) describing the RADIUS microwave radar system.

“This new document is produced by IMCA as an aid to members and others using position reference systems and forms part of a series of documents on the available systems,” explains IMCA’s Technical Director, Jane Bugler. “In common with some previous documents on position reference systems, it has been prepared in the major part by the manufacturer of the system, in this case Kongsberg Seatex.

“Of course the growth in the use of DP has been accompanied by the development of internationally recognised rules and standards against which DP vessels are designed, constructed and operated,” she adds. “These include International Maritime Organization Maritime Safety Committee (IMO MSC) Circular 645 – ‘Guidelines for vessels with dynamic positioning systems’; DP rules of the main classification societies, IMCA M 103 ‘Guidelines for the design and operation of dynamically positioned vessels’; and guidelines for DP capable offshore supply vessels (OSVs) IMCA M 182 ‘International guidelines for the safe operation of dynamically positioned offshore supply vessels’.”

About RADIUS

RADIUS, which utilises radar principles, has been developed for applications in need of a robust and reliable relative positioning system. Many applications can benefit from RADIUS in operations, as there are different types of retro reflective transponders and different types of installation of the sensor heads (interrogators). Furthermore, the RADIUS system is a solid state system – there are no motors, stabilised platforms or other moving parts – so the maintenance cost is low