The challenge:
The FUELTRAX® client operating an offshore supply vessel wanted to find ways to reduce costs on standard operations. Dynamic positioning (DP) accounted for 21% of the client’s entire fuel use in one year for a fleet operating in the Gulf of Mexico. The challenge was to improve efficiencies on the top 80% of a year’s fuel spend.

The solution:
With FUELTRAX on-board, the client was able to analyze its fuel data specifically for DP operations, and identify the most efficient operating procedures. The client then applied these operating procedures to multiple vessels to replicate results. With gains made, a new way of working was implemented across the entire fleet.

The process:
FUELTRAX, which monitors, measures and records fuel use, was used to analyze DP mode operating data. The client trialed the use of two, rather than four, engines when operating at specific times in DP mode. FUELTRAX determined the efficiency driver, providing fuel data to make a comparison between two engines versus four engines in DP mode, to define the most efficient DP operations.

The fuel use of a single vessel was examined, establishing that in two-engine DP, 311 gallons of fuel were saved over 10 hours; a 31.10 gph reduction, representing 35% total savings. Applying these results fleet-wide, there was an average saving of 36 gph when using two engines rather than four engines in DP, which produced 37% total savings in annual DP operations.

The results:
The client used FUELTRAX to monitor fuel use, while reducing DP operations from four to two engines. Analysis of fuel use, provided by FUELTRAX, revealed projected maximum attainable savings of 7.2% on total annual fuel spend.

The benefits:
Using FUELTRAX, it was determined that DP mode operations accounted for a significant portion of the annual fuel spend. The client was able to determine further operational changes that could reduce total annual fuel spend by improving efficiency in this operating mode.

With DP mode consisting of 22.2% of the annual fuel spend, the savings in this operational mode increase as more captains are trained with the new procedures. It is recommended that two-engine DP mode should only be employed when the captain and the operations team agree it is safe.