The innovative F5 concept, developed by BMT Defence Services and its sister company BMT Nigel Gee, forms the basis for a family of future warships that provide high deployment speed, flexibility, and the potential to swing rapidly between roles.

The F5 concept is founded on the patented pentamaran hullform, originally developed for modern fast and efficient commercial multi-hulled passenger ferries and container ships. The pentamaran combines a slender extended centre hull, stabilised by pairs of port and starboard outer hulls, to give a large and stable low drag hull form, as well as side protection and easy berthing.

The extended centre hull of the pentamaran, and the full breadth superstructure across the wide beam of the ship make the F5 an excellent weapons and sensors platform. It allows clear separation of topside sensors, such as a fixed four-face MPAR, and 64 VLS weapons silos in two modules fore and aft, as well as an electromagnetic rail gun, all with good arcs of fire.

Further spaces in the superstructure and below deck, allow the modular fitting of additional weapons and sensors to provide a rapid swing capability for changing missions; whilst the upper deck layout also allows safe and easy RAS evolutions when underway.

The F5 uses a novel COmbined Gas, electric and Gas (COGLAG) waterjet propulsion arrangement to provide low speed efficiency and excellent cruise and boost performance. This arrangement also offers the flexibility to segment the hangar to accommodate embarked military forces, deployable sensors, UAVs, UUVs and Special Forces craft. These can be deployed from the unusually wide flight deck, which has room for the operating footprint of Chinook sized helicopters.

Performance • Flexibility • Swing Capability
### Principal Particulars

<table>
<thead>
<tr>
<th>Specification</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Length overall</td>
<td>181.5m</td>
</tr>
<tr>
<td>Maximum beam</td>
<td>32.1m</td>
</tr>
<tr>
<td>Draught</td>
<td>6.3m</td>
</tr>
<tr>
<td>Displacement</td>
<td>6339 tonnes</td>
</tr>
<tr>
<td>Service Speed</td>
<td>35kt</td>
</tr>
<tr>
<td>Maximum Speed</td>
<td>45kt</td>
</tr>
<tr>
<td>Range</td>
<td>5500nm @ 35kt with one stop</td>
</tr>
<tr>
<td>Crew</td>
<td>105</td>
</tr>
</tbody>
</table>

### Payload
- 64 VLS Silo in 2 modules
- Fixed face multifunction phased array radar
- EM main Gun and sided MC Guns
- 2 x ILDS
- 2 x SCG
- Active Towed Array Sonar or SF delivery vehicle
- Retractable hull-mounted sonar
- CESM
- CEC
- 2 x Organic helicopter
- Chinook-capable flightdeck

### Propulsion and Capacity
- 1 x MT30 GT direct drive
- 2 x MT30 GTA (36MW)
- 2 x 32MW HTS motors
- 2 x 3MW auxiliary DGs
- 3 x 30MW water jets

### Fuel
- 1000 tonnes