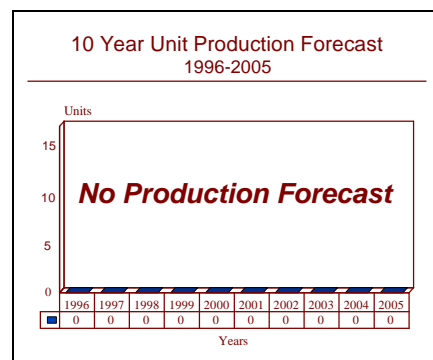


# Fort Victoria Class - Archived 8/97

## Outlook

- Two ships in service
- Simplified version proposed as OI replacement
- Construction stopped at existing levels
- To be replaced by larger and less expensive design



## Orientation

**Description.** Fleet replenishment ship to support fleet task forces with fuel, aviation fuel, spare parts, food, and ammunition.

### Sponsor

Ministry of Defence (Procurement Executive)  
 CB/Admin 3  
 St. Georges Ct  
 14 New Oxford St  
 London WC1A 1EJ  
 United Kingdom

### Platform

#### Ship

A387 *Fort Victoria*  
 A388 *Fort George*

#### Builder

Harland & Wolff  
 Swan Hunter

### Contractors

Harland & Wolff Shipyards  
 Belfast  
 United Kingdom

**Licensee.** No production licenses have been granted.

**Status.** In service.

**Total Produced.** Two ships of this class are in service.

#### Ordered

9/1988  
 3/1989

#### In Service

6/1994  
 3/1993

**Application.** The fleet replenishment ship is an under way replenishment (UNREP) ship designed to provide fuel, aviation gas, ammunition, and consumable stores to other ships in a task force.

**Price Range.** The unit cost of *RFA Fort George* is US\$225 million; *RFA Fort Victoria* will cost US\$325 million.

## Technical Data

### Characteristics

Speed: 20 kts  
 Range: 12,000 nm  
 Crew: 102 Royal Fleet Auxiliary, 154 Royal Navy

<b>Dimensions</b>	<b><u>Metric</u></b>	<b><u>US</u></b>
Length:	203.5 m	667.6 ft
Beam:	28.5 m	93.5 ft
Draft:	9.8 m	32.2 ft
Displacement, full load:		32,550 tons
Cargo:	12,505 m <sup>3</sup> liquids; 6,234 m <sup>3</sup> munition, dry stores, etc.	
<b>Armament</b>	<b><u>Type</u></b>	<b><u>Quantity</u></b>
Guns:	30 mm DS-30B AA	4
Lasers:	Outfit DEC(2)	2
Aircraft:	Sea King helicopters	3
<b>Electronics</b>	<b><u>Type</u></b>	<b><u>Quantity</u></b>
Radars:		
Air/surface search	Type 996	1
Navigation	Type 1007	1
	Racal-Decca Type 1226	2
Electronic warfare:		
ESM:	Outfit UAG	1
Decoy launchers:	Outfit DLB	4
	Type 182 towed torpedo decoy	2
Satellite comms:	SCOT for Skynet IV	2
<b>Propulsion</b>	<b><u>Type</u></b>	<b><u>Quantity</u></b>
Main Propulsion:	Crossley-Pielstick	
	16 PC2.6 V400	2
Auxiliary	Diesel generators	6
Propellers	Fixed pitch	2

**Design Features.** The Fort Victoria class under way replenishment ships combine all logistic support functions in one ship, allowing a more rapid resupply of ships in a task force, with all needs being met during one alongside period, instead of having several replenishment ships (oiler, cargo ship, ammunition ship) come alongside in sequence.

The ships are provided with one 25-ton, two ten-ton and two five-ton electric cranes with one of the ten-ton cranes being rigged to handle an additional refueling station. Extensive repair and maintenance facilities are provided for Sea King and Lynx helicopters and for Sea Harrier aircraft. The ships were originally to have been equipped with six 1,600 kW electrical generators powered by Ruston 8RKC diesels; instead they were fitted with six 650 kW MB404E alternators powered by Cummings KTA386I diesels.

**Operational Characteristics.** There are two replenishment-at-sea (RAS) stations with constant tension rigs per side. The ship can transfer fuel from two stations on the port side (this is probably because the Type 23 Frigate can only take on fuel on the starboard side). In addition the ships have the ability to refuel aft and take on fuel forward. A ship can carry 12,000 cubic meters of liquid cargo, including distillate fuel oil, aviation fuel, diesel fuel, and fresh water. The 6,000 cubic meters of solid cargo includes munitions, food, and general supplies. The hangar can store three EH-101 or Sea King helicopters, and the flight deck has two landing spots. The ship carries a full range of ASW munitions for the helicopters.

## Variants/Upgrades

The two existing ships were to have been followed by a simplified version lacking missile armament. These two ships were canceled and the first pair completed to the simplified standard.

The Fort Victoria class were to have been followed by a class of six downsized derivatives intended to replace the fleet tankers of the Leaf class. These ships are no longer programmed.

A new class of fleet replenishment ships will be built to replace the existing Ol class fleet tankers. One option for this was a further simplified version of the Fort class. Feasibility studies for these ships took place during 1994-95, and funding for initial design was provided in 1996. By that time, they had evolved into a significantly

different design, trading 2 knots speed for greatly increased cargo capacity. Emphasis in the new design has been placed on economy of operation and cost-effectiveness. As such, they differ dramatically from the Fort Victoria class and will be the subject of a new report.

## Program Review

**Background.** The requirement for the Fort Victoria class AORs was formulated in the late 1970s as part of a fundamental reappraisal of British naval strategy. During this period it became apparent that a major threat to the UK in the event of a general European conflict would be cruise missiles fired against military and industrial targets from submarines offshore. In order to provide defenses against these attacks, it was necessary to extend ASW operations far to the North, into the Greenland Sea. This requirement drove the evolution of the Type 23 frigate from a small coastal corvette into the highly capable ASW ship now entering service. The AORs needed to accompany these frigates would be exposed to severe risk and therefore needed to be provided with their own capable defenses. In addition, they required the ability to provide maintenance for the helicopters on the frigates and to supply all the necessities for prolonged operations in hostile waters.

This design was finalized in the 1979-81 period. Contrary to popular belief, the Falklands Campaign did not influence the program or the priority assigned to it. An initial design contract was given to Swan Hunter Shipyards in late 1982. The project was formally announced in June 1984, and the Royal Navy requested bids from industry at that time. Swan Hunter continued design studies through 1984 and 1985, while several other companies prepared alternate designs.

The Royal Navy's requirements called for a ship with a large hangar and helicopter support capability, a point defense missile system and a fully integrated command system, allowing the ship to operate with an ASW hunter-killer group. The Royal Navy planned a decision on the ship's final design by late 1985, but this was delayed pending several design changes. The UK MoD awarded a contract worth about US\$180 million to Harland & Wolff Shipyards on April 23, 1986, for the first ship of the class. This contract award caused a major political scandal when it was discovered that the US\$45 million price differential between the Swan Hunter and Harland and Wolff bids was the direct result of a US\$60 million subsidy from the British Government. The ship's keel was laid down in April 1988.

In December 1987, the MoD announced that it was placing an order with Swan Hunter for the second Fort

Victoria class ship, and that the ship would be named *RFA Fort George*. Reports indicate that the order went to Swan Hunter for economic and political reasons, since that yard had very few ships on its order bill and was in danger of being closed down for lack of work. Construction of the *Fort George* began in late 1988. The original schedule called for ordering the third and fourth ships between 1989 and 1991. These plans were subsequently canceled.

By mid-1990, the *RFA Fort Victoria* was 22 months behind schedule and more than US\$90 million over budget. On September 6, 1990, IRA terrorists planted a large bomb in the engine room of *Fort Victoria* which inflicted severe damage and further delayed construction. While wreckage from the explosion was being cleared, deficiencies in the machinery control system were discovered, causing yet further delays. By this time, *Fort Victoria* was regarded throughout the Royal Navy as being a jinxed ship, and the initial sea trials were regarded with great trepidation. These expectations proved to be completely justified. Immediately on starting sea trials in December 1991, the ship suffered very severe machinery problems and had to be towed into Troon Dockyard with clutch malfunctions. In July 1992, Harland and Wolff awarded Cammell Laird a contract for correcting the deficiencies and making final adjustments.

These repairs took almost two years to complete. In April 1993, *Fort Victoria* was towed from Cammell Laird to the Fleet Maintenance and Repair Organization at Portsmouth for final completion. The much-delayed ship finally restarted its sea trials at the beginning of May 1993. Meanwhile, the Swan Hunter yard delivered *RFA Fort George*, to the Royal Navy on January 9, 1993. The sea trials went smoothly and without any problems, the ship being accepted into service on its completion on April 30, 1993. Shortly afterwards, on May 13, 1993, an acute shortage of additional work forced the Swan Hunter Shipyard management to place the company in receivership.

During May 1992, the UK MoD released an advance notice of invitations to tender for the construction of a class of fleet replenishment vessels to replace the aging Ol class of 36,000-ton fleet tankers. Feasibility studies were started in September 1993 with a preferred option being a much-simplified derivative of the Fort Victoria class

without the heavy defensive armament or comprehensive command system.

In late 1993, the UK Ministry of Defense stated that, in view of the changing international and operational circumstances, the heavy defensive armament and elaborate command control facilities built into the Fort class would no longer be required. Accordingly, the Outfit DNA command systems being built for these ships were canceled and the components used for Type 23 frigate systems. The plan to install VL-Seawolf was also canceled. In effect, the ships were reduced to the much simpler armament standards of the proposed OI class replacements.

The OI replacement program was formally started in early 1994 with the feasibility studies completing in late 1995. The design requirement is to replace the existing fleet tankers *RFA Olna*, *RFA Olmeda* and *RFA Olwen*. These 36,000 ton (full load) tankers were built in 1965 and are steam-turbine powered. The replacement program envisages the construction of two larger ships with a speed of 18 knots and utilizing diesel-electric propulsion. They will be equipped with replenishment equipment to the same standard as the Fort Victoria class. Armament will be restricted to two Phalanx Mark 15 guns.

## Funding

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This program is funded by the MoD for the Royal Navy.

## Recent Contracts

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No recent contracts have been awarded.

## Timetable

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	1983	MoD/Swan Hunter conducted preliminary design studies
Jun	1984	MoD announced new replenishment ship program
Oct	1985	Final design chosen
Apr	1986	First ship, <i>RFA Fort Victoria</i> , ordered
Dec	1987	Second ship, <i>RFA Fort George</i> , ordered
	1990	<i>Fort Victoria</i> launched
Apr	1993	<i>Fort George</i> commissioned

## Worldwide Distribution

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**United Kingdom.** (2 ships built)

## Forecast Rationale

The concept of the heavily armed and extremely sophisticated Fort Victoria class AORs was a holdover from an outdated strategic rationale. Designed to support operations in the face of intense opposition, their very high cost could not be justified in the current environment. A less expensive design will be developed for future construction. This will leave the Fort Victoria class as something of an expensive anomaly.

The program for new replenishment fleet oilers has now been launched, which envisages the construction of two ships with orders being placed in late 1996 or early 1997, for completion by the year 2000. These ships will not have the compromises visible in the design and layout of the Fort Victoria class, and will be significantly more cost-effective. The design of these new ships has evolved into a separate entity from the Fort Victoria class, therefore they have been deleted from the forecast.

## Ten-Year Outlook

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No production is forecast.

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