#### **Flower Power**

The Flower class corvettes will be remembered for playing a major role in the Battle of the Atlantic during WWII. These ships were used in the anti-submarine role against the U-Boats. They were hurriedly built, armed with obsolescent weapons and were outclassed by pre-war sloops and wartime frigates. In January 1939 a meeting took place between the Admiralty and Smith's Docks to discuss the design of a new A/S escort vessel. After dismissing enlarged trawler designs as too slow, it was agreed that Smith's recently built whaler *Southern Pride* offered the best design. However, some alterations were necessary and the original details were as follows:

Displacement: 940 tons (standard), 1170 tons (full load)

Length: 205 feet (oa) Armament: 1 x 4in BL Mk IX

2 x Twin Lewis .303 MGs

2 Depth-charge throwers (25 Dcs)

Machinery: Single screw 4 cylinder vertical triple-expansion

2750 ihp = 16 kts

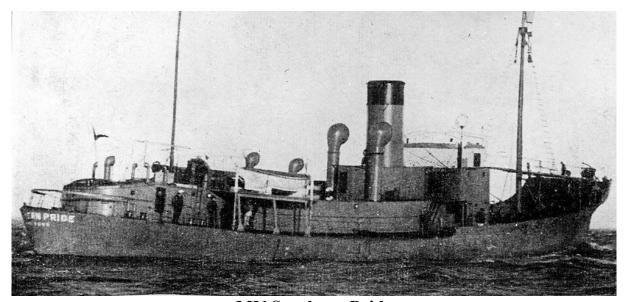
Complement: 47

Fuel: 200 tons oil

Endurance: 4000 miles at 12 kts

Electronics: Wireless – 1 x Type TW12B

Radar – SW1C Asdic – Type 123A



**MV Southern Pride** 

There were two distinct groups of vessels in this class: the *original Flower-class*, 225 vessels ordered during the 1939 and 1940 building programs; and the *modified Flower-class*, which followed with a further 69 vessels ordered from 1940 onward. The modified Flowers were slightly larger and somewhat better armed.

The original Flowers had the standard RN layout, consisting of a raised forecastle, a well deck, then the bridge or wheelhouse, and a continuous deck running aft. The crew quarters were in the foc'sle while the galley was at the rear, making for poor messing arrangements. They had a mast located immediately forward of the bridge, a notable exception to naval practice at that time.

The modified Flowers saw the forecastle extended aft past the bridge to the aft end of the funnel, a variation known as the "long forecastle" design. Apart from providing a very useful space where the whole crew could gather out of the weather, the added weight improved the ships' stability and speed and was retroactively applied to a number of the original Flower-class vessels during the mid and latter years of the war. The mast was returned to the normal position immediately aft of the bridge. However, this does not seem to have been done in all of the modified builds or conversions of the original vessels. A cruiser stern finished the appearance for all vessels in the class.

#### General characteristics of the Modified vessels

Displacement: 1,015 long tons (1,031 t; 1,137 short tons)

Length: 208 ft o/a
Beam: 33 ft
Draught: 11 ft

• single shaft

Propulsion: • 2 × water tube boilers

• 1 × 4-cylinder triple-expansion reciprocating steam engine

• 2,750 ihp

Speed: 16 knots

Range: 3,500 nautical miles at 12 knots

Complement: 90

Armament:

Electronics: • 1 × Type 271 SW2C radar

• 1 × Type 144 sonar

• 1 × 4 inch BL Mk.IX single gun

• 1 × 2-pounder. Mk.VIII single "pom-pom" AA gun

• 2 × 20 mm Oerlikon single

• 1 × Hedgehog A/S mortar

• 4 × Mk.II depth charge throwers

• 2 depth charge rails with 72 depth charges

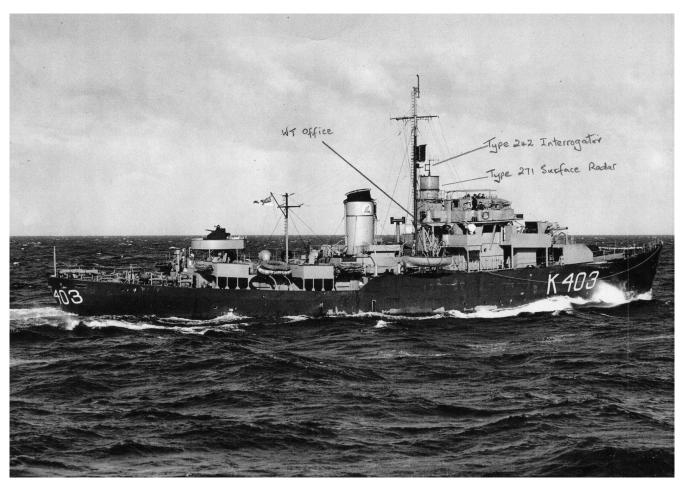
In 1943, New Zealand was looking for more escort ships and the Royal Navy offered *Arbutus* and her sister ship *Arabis* as a gift which was gratefully accepted. After commissioning, both ships had the 2 pounder removed and an extra six 20mm Oerlikons added. The Type 242 Interrogator was also added and sited on top of the plexidome which housed the Type 271 radar. The MF DF aerial S19 for the FM12 was installed in front of the bridge.

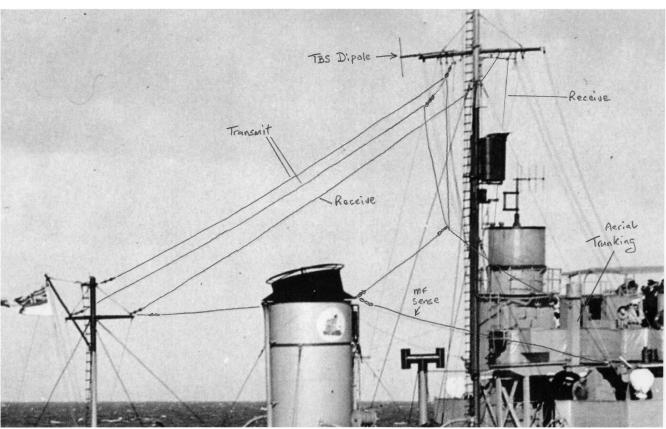
A	В	C	D	E	F	G
Arabis	George Brown & Co.,Greenock		28/10/43	16/3/44	1948	Formerly HMS <i>Arabis</i> . Transferred to RNZN on 16 March 1944. Returned to RN in 1948.
Arbutus	George Brown & Co.,Greenock	03/05/43	26/1/44	05/07/44	1948	Formerly HMS <i>Arbutus</i> . Transferred to RNZN on 5 July 1944. Returned to RN in 1948.

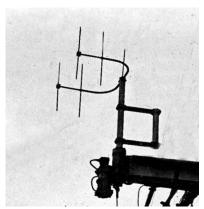
- A Ship
- B Builder
- C Laid down
- D Launched
- E-Commissioned
- F Paid off
- G-Fate



The Type 271 platform was sited off centre to port







Type 242 Interrogator

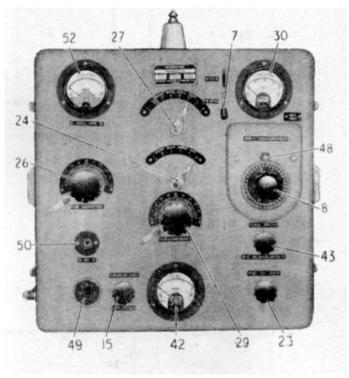


Type 271 Surface Radar

## **Wireless Equipment**

### MF/HF

1 x TW12B comprised the transmitter TW12 and the receiver 394E. Frequency range – 375 – 500 kHz 1200 – 3000 kHz



**TW12** 



Receiver 394E

# 1 x TV5 – Frequency range 3 – 10 MHz. Receiver 1.3 – 21 MHz



VHF – 1 x TBS8 60-80MHz 50 Watts CW/MCW/AM – TBS commonly known as Talk By Ship.



### MF DF

 $1\ x\ FM12\ Receiver\ FMB\ 42-1060\ kHz.\ S19\ Bellini\ Tosi\ loops\ with\ wire\ sense$  aerial.



Details of the two RNZN Flower class corvettes can be read on the RNZN Naval Museum website here <a href="http://navymuseum.co.nz/hmnzs-arabis-flower-class-">http://navymuseum.co.nz/hmnzs-arabis-flower-class-</a> corvette/ and here http://navymuseum.co.nz/hmnzs-arbutus-flower-class-corvette/.

Over 6,000 RNZN/RNZNR/RNZNVR officers and men served with the Royal Navy during World War Two. With regard to the Flower Class corvettes, one ship deserves a mention – HMS Crocus (K49).

	Communaci		
1	Lt.Cdr. Edward Wheeler, RNR	14 Aug 1940	26 Jan 1942
2	T/Lt. John Ferdinand Holm, RNZNR	26 Jan 1942	3 Oct 1943
3	T/A/Lt.Cdr. Alan Rochfort Mackay, RNZNVR	3 Oct 1943	21 Sep 1944
4	T/Lt. David Gordon White, RNVR	21 Sep	mid 1945

### **Notable events involving** *Crocus* **include:**

Commander

### 22 Aug 1942

HMS Crocus (T/Lt. J.F. Holm, RNZNR) picks up 21 survivors from the British merchant ship Vimeira that was torpedoed and sunk by German U-boat U-109 on 11 August about 450 nautical miles south-west of the Cape Verde Islands in position 10°03'N, 28°55'W.

1944

#### 6 Oct 1942

The British corvette HMS Crocus on 6 Oct, 1942 fought an epic battle with German U-boat U-333. The U-boat lost 3 men dead and several men wounded, including the commander, Peter Erich Cremer. The boat was heavily damaged and limped back to base.

#### 28 Oct 1942

The British merchant ship *Nagpore* is torpedoed and sunk north-west of the Canary Islands in position 31°30'N, 19°35'W by German U-boat U-509. HMS Crocus (T/Lt. J.F. Holm, RNZNR) later picks up 34 survivors.

HMS Crocus was incorrectly reported to play the part of HMS Compass Rose during the film "The Cruel Sea". The ship in the film was HMS *Coreopsis* (K32) but the pennant number was that of HMS Crocus K49.