A MARITIME HULL LOSS

A tale of two ships – and some bad decisions... A A A

THE TWO SHIPS:

MS Schepelsturm MS Gotland II

Supporting the German Antarctic North Victoria Land Expeditions (GANOVEX) 1 and 2 (1979/80 and 1980/81 respectively).



BGR: Die Bundesanstalt für Geowissenschaften und Rohstoffe - Hannover

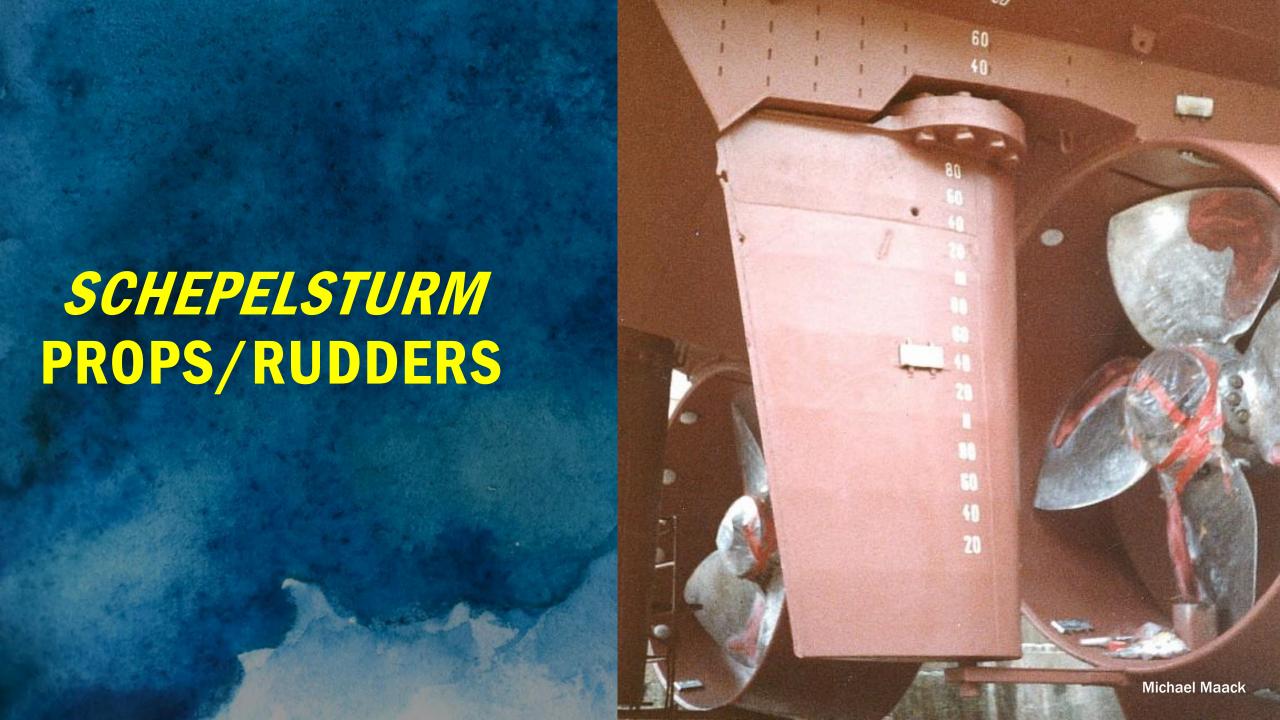






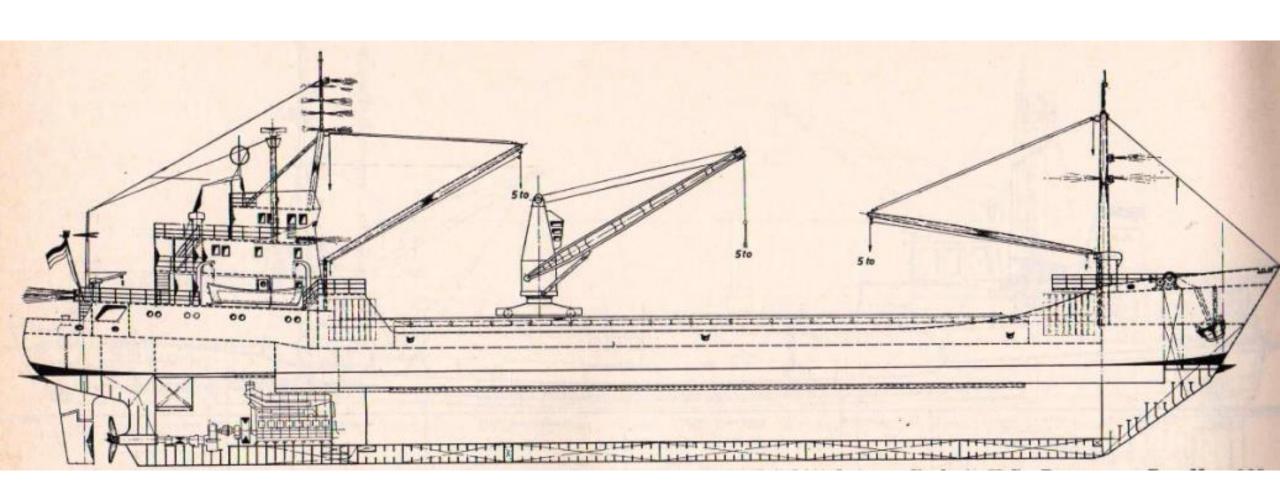
SCHEPELSTURM SPECS

- OSA 13000 class tug/supply vessel.
- Overall L 70 m; 1540 dwt.
- 2 x 9460 hp main engines; 600 hp
 → bow thruster.
- ❖ 2 x KaMeWa controllable/reversible ducted props.
- Max cruise 15 kt (reaches in own length).
- German Lloyd Ice Class E3 (then) certainly E3 by current standards, based on proven performance.



MS Gotland II began life as MS Annemarie Schulte,

Launched 29 June 1971

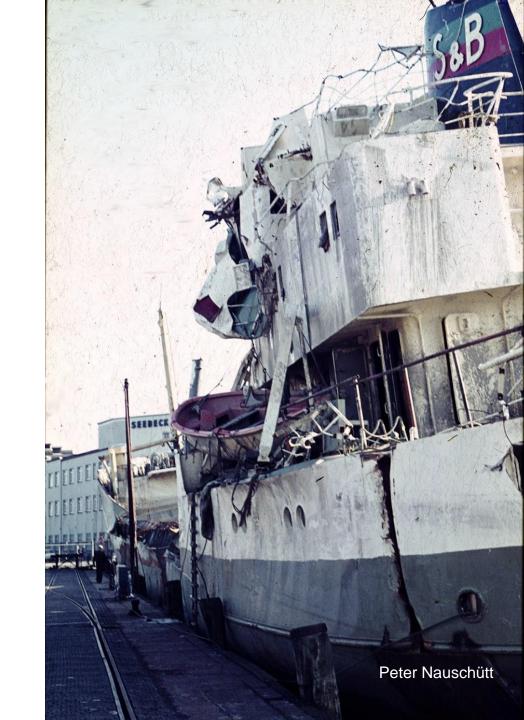




Insurance total loss, but salvaged, repaired and recommissioned as *Gotland II*.

Hull lengthened by inserting a new 7 m section during repair.

Purchased and operated by Günther Schulz Schulauer Schiffahrtskontor, Hamburg.



GOTLAND II SPECS

- Basically, a Baltic freighter.
- Overall length 84.5 m; 3218 dwt.
- ❖ 1 x 2672 hp main engine.
- Single screw, fixed pitch, reverse by stopping engine and restarting in reverse. Not shrouded or protected.
- Max cruise 13 kt.
- German Lloyd Ice Class E3 (then) possibly only E1 by today's standards.
- Anecdotal evidence suggests max 4/8 of 12-inch Baltic ice.

GERMAN LLOYD ICE CLASS E3

Equivalent to Finnish-Swedish Ice Class Rules 2008 class 1A: ships with such structure, engine output and other properties that they are capable of navigating in difficult ice conditions, with the assistance of icebreakers when necessary, maximum level ice thickness 0.8 m (which the Gotland II manifestly could not achieve).

(Note: apparently different from classifications effective in 1979-80)

Although Schepelsturm was classified E3, an identical sister ship MS Verdertor underwent trials in the Arctic. Reportedly "... performed well in all types of ice pack, easily handling floes of around 3 m (10 ft) thickness and reaching speeds of up to 8.5 knots in solid ice of up to 0.8 m (2.6 ft) thickness. Trials confirmed that, through ramming, passage could be achieved in solid ice up to 1.3 m (4 ft) thick." (Temp range -2 to -23C)

Unknown if Ice Class was subsequently revised upward.



"One of the (4) largest and most powerful supply vessels in the world"

DCW Magazine, December 1980



SCHEPELSTURM 1979-80

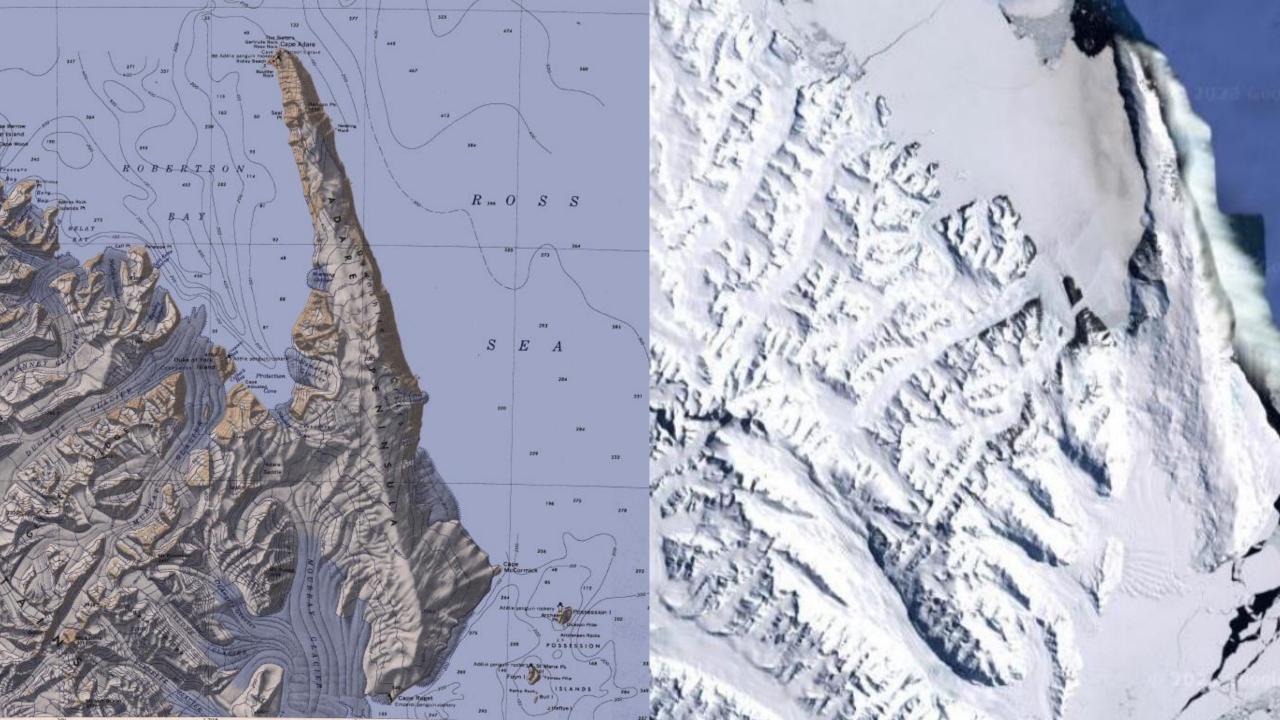
- ❖ Departed Timaru S 44.4°, E 171.3° @ 2130 6 Dec.
- Crossed Antarctic Circle (S 66.56°) 0430 11 Dec.
- **❖** No significant ice encountered, no slowing down.
- Hove to near Cape Hallett (S 72.2°) 12 Dec; 1680 NM; flying ops. commenced next day.
- * Moved to Colbeck Bay 14 Dec (about 90 NM).
- Ops interrupted by major windstorm 19-21 Dec.

Side trip to McMurdo (24 Dec – 4 Jan) for helicopter repairs and medevac.

ealand

2,000.00 kr

191,600'E

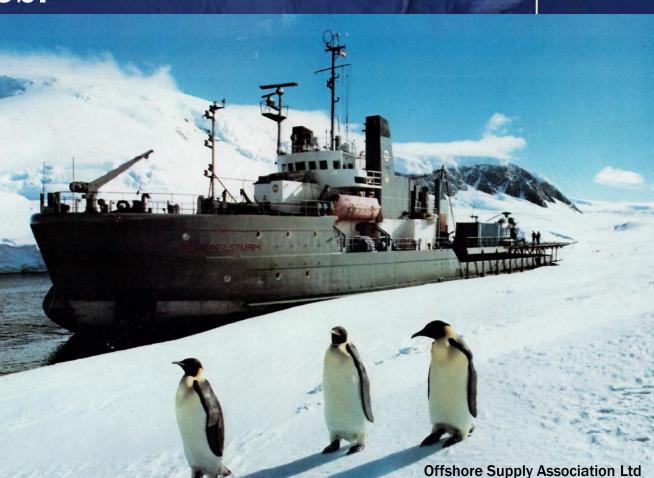


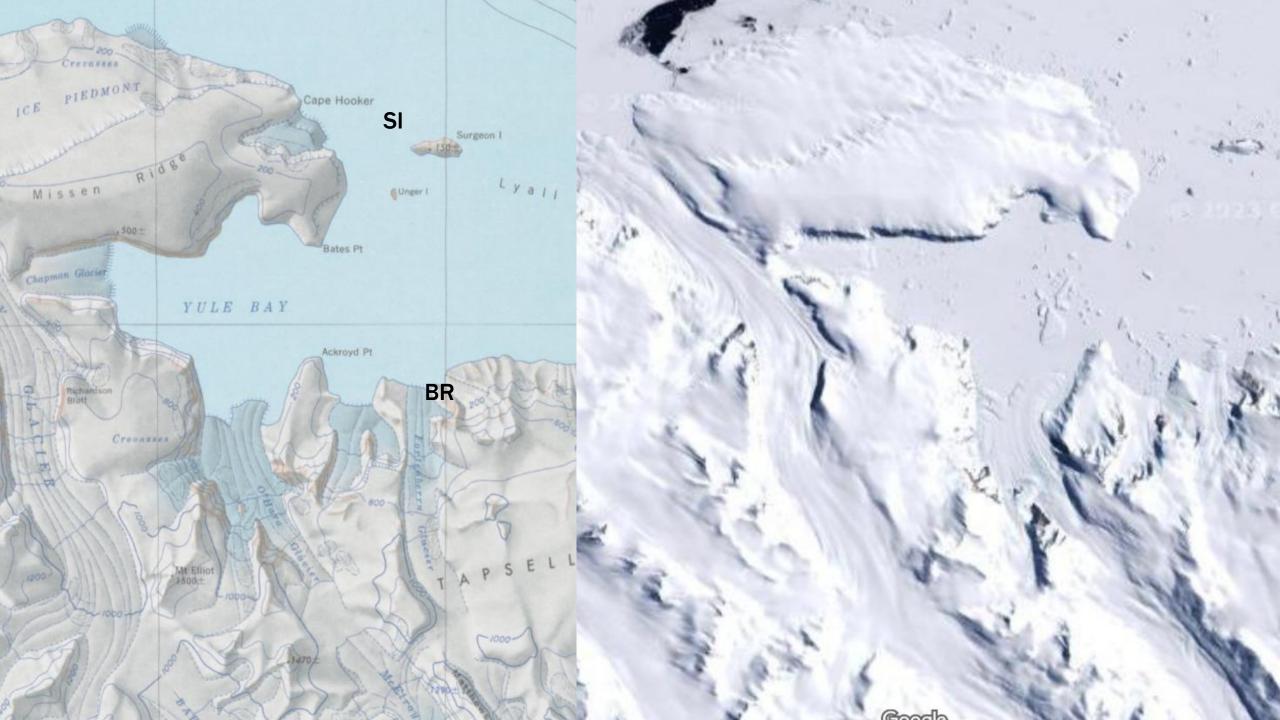


SCHEPELSTURM 1979-80 (Cont.)

- **❖** Back in the Cape Adare area 4 Jan 80.
- Moved to Yule Bay area 8 Jan; mostly ice-free.
- **Stayed** in that area until 19 Feb.
- **❖** Departed for NZ on 20 Feb.
- Docked at Timaru on 25 Feb.









DRAMATIS PERSONAE







Capt UDO RIECK
Master Schepelsturm
& F/O Gotland II

Capt EWALD BRUNE
Master Gotland II

Dr FRANZ TESSENSOHN Expedition Leader

GOTLAND II 1980

- Sailed to Weddel Sea in 1980-81 season to establish a scientific base (Neumayer Station).
- In convoy with two gutsy ice-going ships.
- **❖** Got to within 90 NM of intended location ice impassable.
- ❖ Alternative site established 570 NM to north-east.
- Logistics officer from GANOVEX I assessed Gotland II performance adequate for 1981-82 expedition.
- BGR decided to use Gotland II the 'Pricebreaker' at DM9,500/day (as against Schepelsturm DM15,000/day)



Zealand

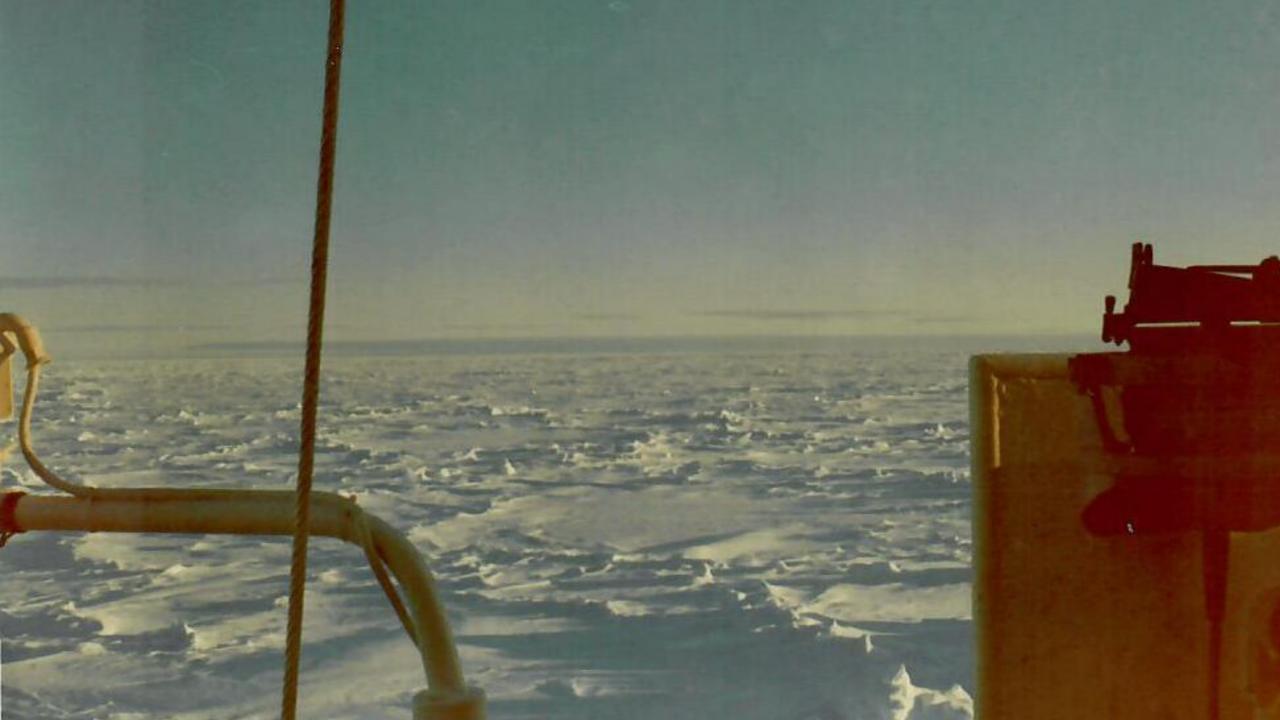
GOTLAND II 1981

- Advice from shipping experts in Germany was that Gotland should not go to Antarctica unaccompanied.
- ❖ Advice not heeded. Maybe expected 79-80 conditions.
- ❖ Sailed from Wellington (S 41.27°) on 14 Nov 81.
- Encountered dense pack-ice 'well north' of Antarctic Circle on 21 Nov 81.
- **❖** Landfall (Adare Peninsula) 2345 on 10 Dec 81.
- Flight ops to inland camps began in earnest next day.









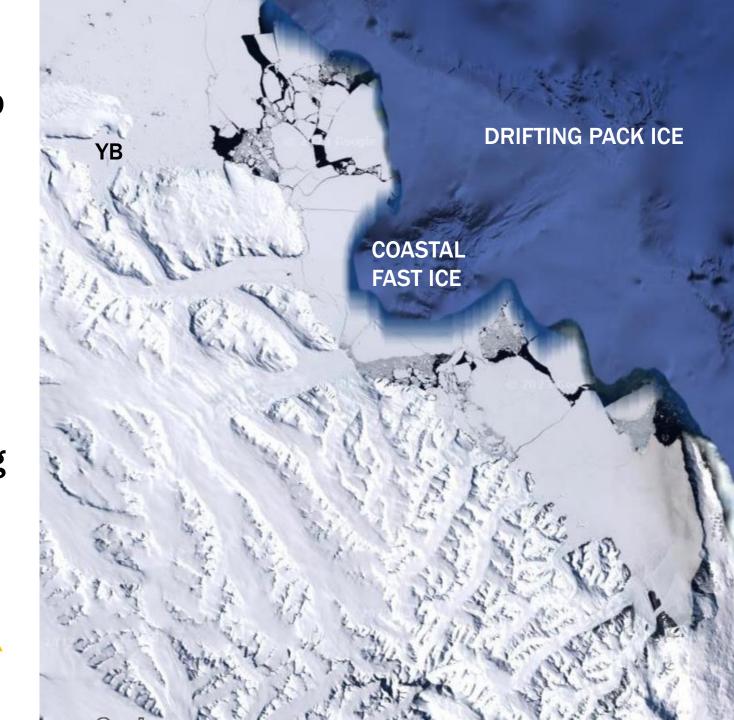




16 December: ship sailed NW up an open-water lead (about 3 NM wide) that appeared overnight.

Orange line shows approximate extent of open water; red dot is about where ship stopped.

Capt Rieck advocated continuing to where large areas of open water were present – overruled by Capt Brune and expedition leader, Dr Tessensohn.

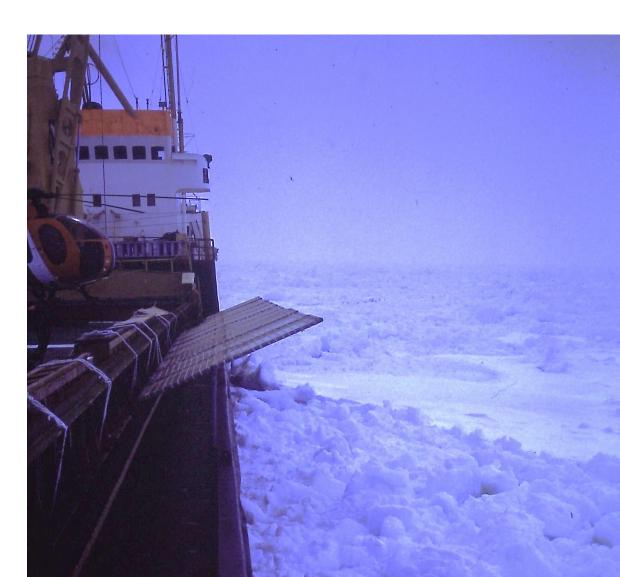






Overnight 16/17 December, the loose pack ice closes in by wind and tide against the fast ice – *Gotland* is trapped.



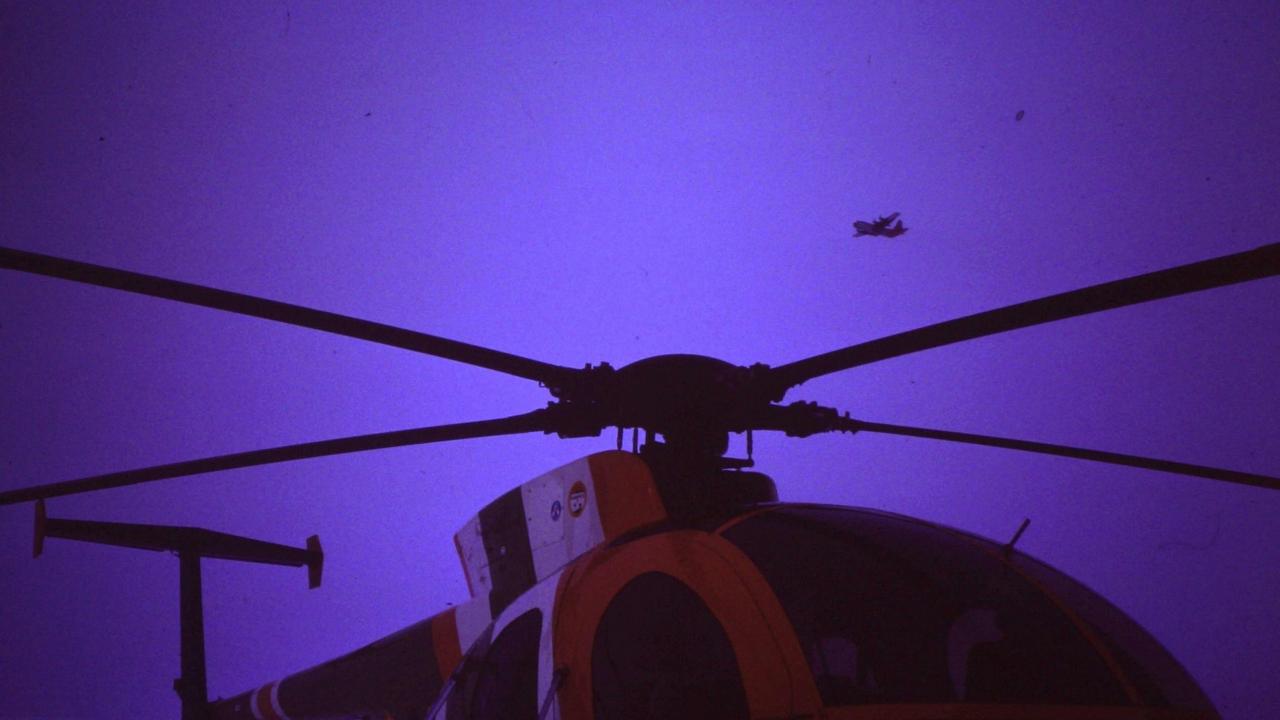


Sequence of events

- 17 Dec, morning: ship is being carried along ice edge by NW-going current; attempts to moor against fast ice unsuccessful. Prop blocked in by ice; ship powerless, a change from gutless.
- Early afternoon: crew member working in hold notices damage occurring to starboard side of hull – advises Captain Rieck.
- Leak detected; non-essential personnel flown ashore (3 helos) to Surgeon Island; later moved to Birthday Ridge camp.
- Ship crew attempting to uncover leak unsuccessful.
- **❖ MAYDAY** message acknowledged by McMurdo.

Sequence of events (continued)

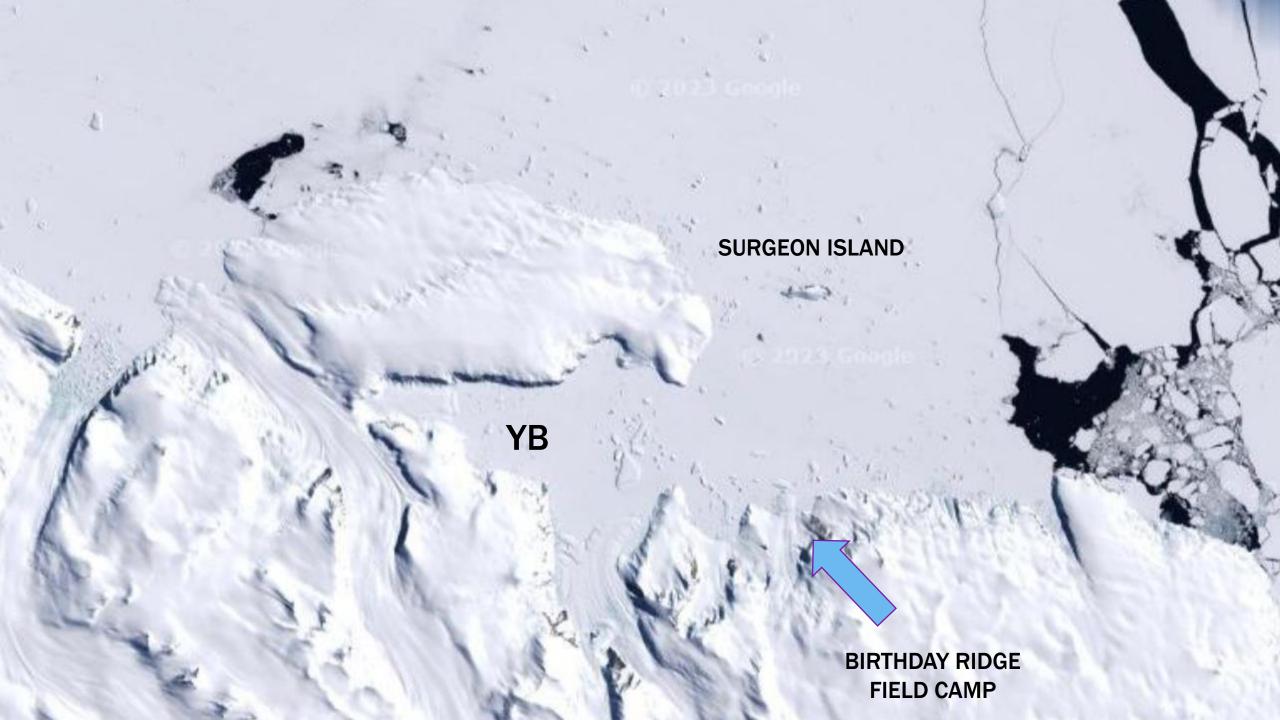
- ❖ 18 Dec, morning: US Navy C-130 drops gasoline-powered pumps which prove too heavy for the Hughes 500Ds to lift onto deck.
- Crew continues trying to locate leak; attempt eventually abandoned.
- Mid-afternoon. Captain declares ship beyond salvation and orders evacuation. Remaining personnel flown ashore.
- Later recce flight with captain sees top of radio mast disappearing amid floating drums, life rafts and other flotsam.













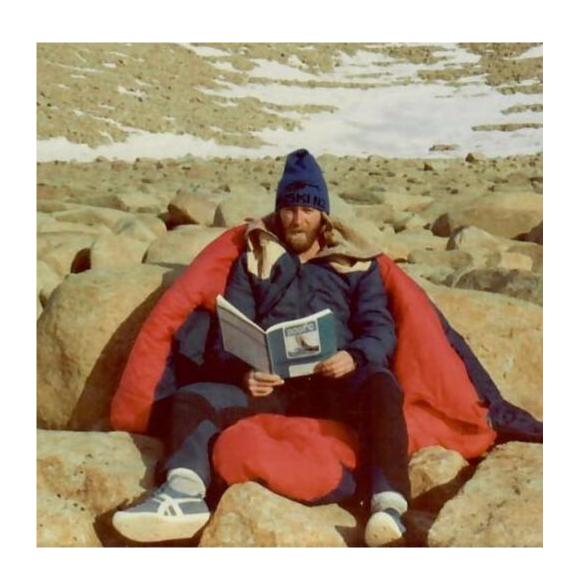












LAST WORD ON THE EXPEDITION

"Oh well, it's all water over the bridge"

Gary Ball, 1981

But Wait....

