

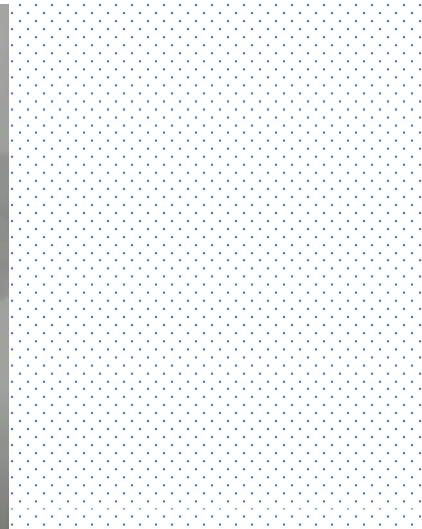
Antarctic Aviation

(An NZ connected view)

Garry Law

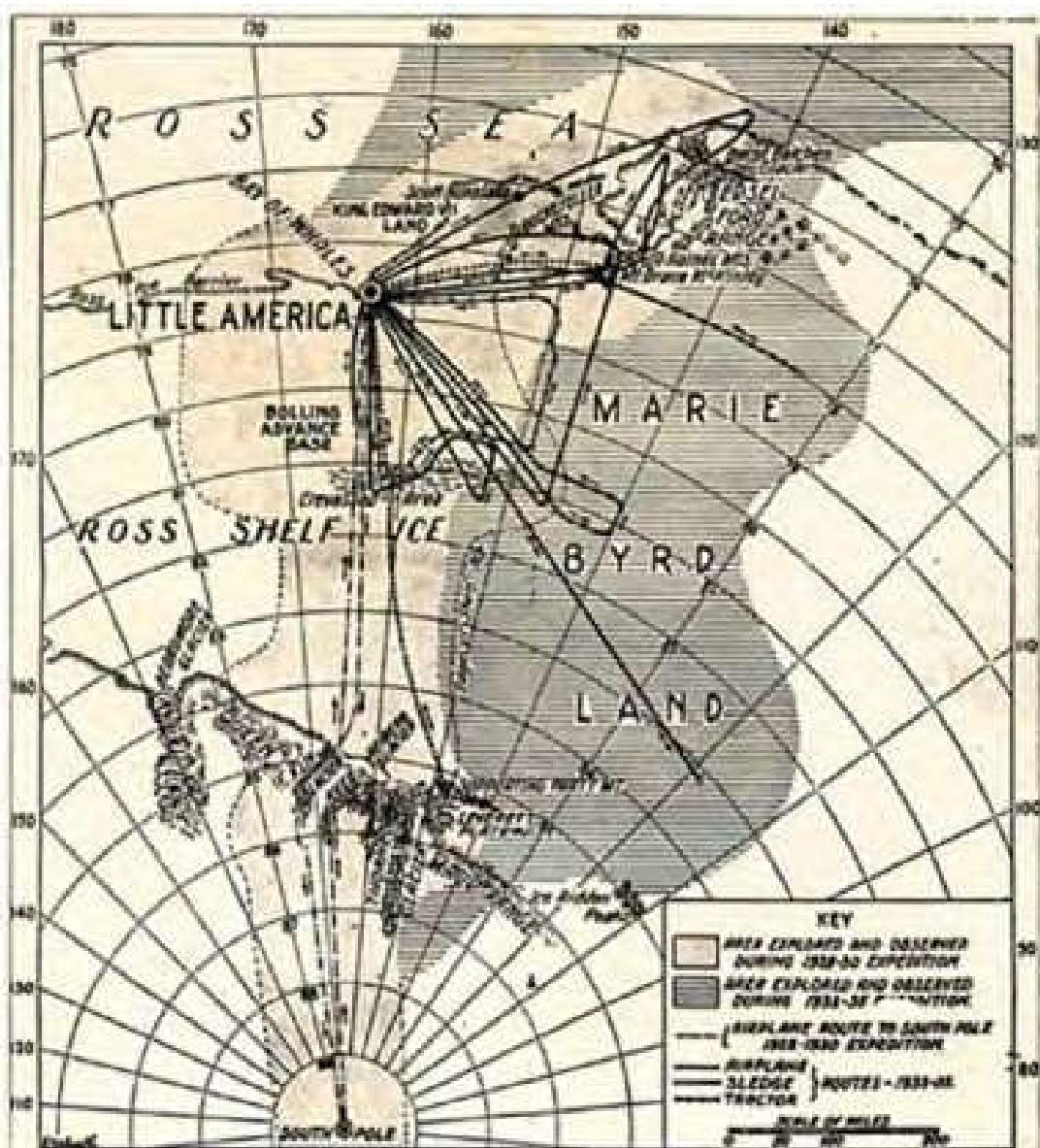
Events and NZ Connections

Byrd Expedition 1928-30	First US polar flying 1929. Little America I Base in Bay of Whales. South Pole overflight Fokker Super Universal <i>Virginia</i> wreck. Destroyed by wind on ground Rockefeller Range, March 1929.
Byrd Expedition 1933-35	Ships staged via Wellington and Port Chalmers and wintered-over in NZ. Little America II. First inland base established.
Ellsworth Expedition 1933-34	1st attempt to fly across Antarctica. Abandoned in Bay of Whales when the aircraft was damaged. <i>Wyatt Earp</i> through Port Chalmers outward and over-winter.
Ellsworth Expedition 1934-35	Second attempt at flight from the Antarctic Peninsula. It was due to end at Little America but never got started. Left from Port Chalmers to Little America.
Ellsworth Expedition 1935-36	Successful flight in Northrop Gamma <i>Polar Star</i> to (empty) Little America base. RSS <i>Discovery</i> II through Dunedin on recovery expedition.
US Antarctic Service 1939-41	Byrd in command. Western base in the Bay of Whales, Little America III. Departed Wellington. Military operation, Byrd in nominal command. Little America IV on Ross Ice Shelf.
High Jump 1946-47	US Coast Guard icebreaker <i>Northwind</i> called at Port Chalmers in 1947 and while there a Sikorski HNS-1 from the ship made the first helicopter flight in New Zealand.
Windmill 1947-48	
USS Atka reconnaissance 1954	Inspected Little America IV base at Bay of Whales.
Deep Freeze I	1955-56 Established McMurdo Base. First flights into Antarctica - from NZ
Deep Freeze II	1956-57 Polar and Byrd Bases established. First polar landing, R4D <i>Que Sera Sera</i> , October 31 1956 Scott Base established.
Deep Freeze III	1957-58 British Trans Antarctic Expedition (TAE), International Geophysical Year (IGY)
Deep Freeze IV	1958-59



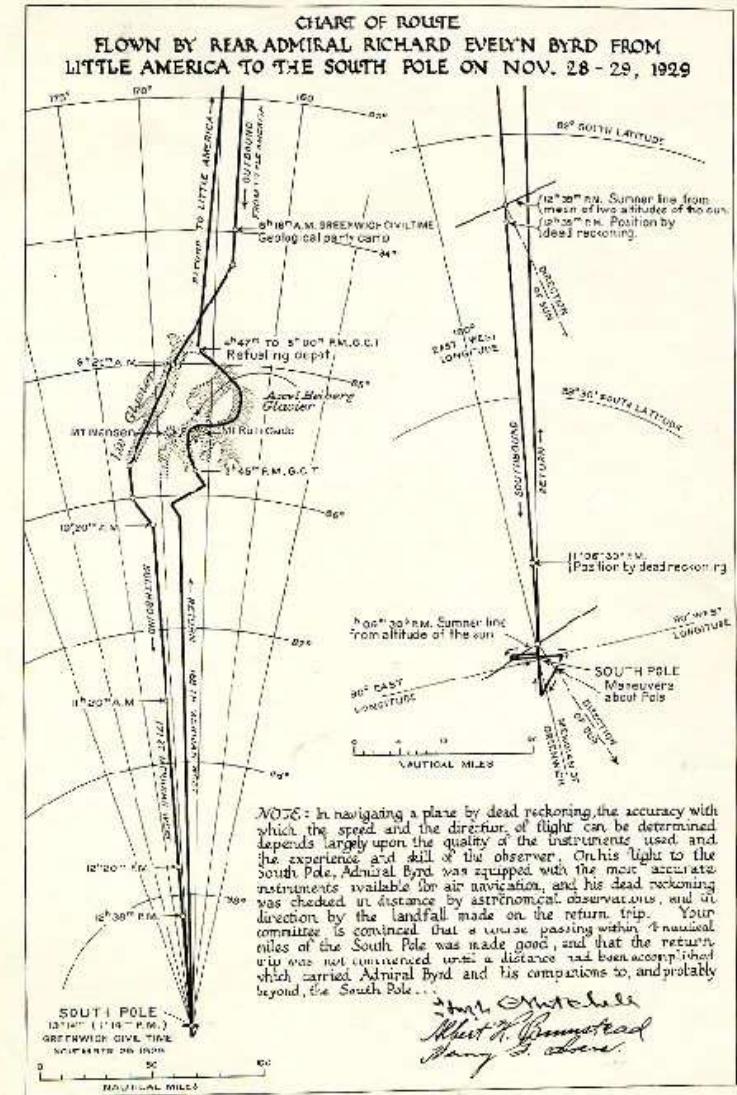
Byrd Expedition 1928-30
Fokker Super Universal *Virginia*
One of three aircraft

(1926 Byrd had supposedly
flown to the North Pole
1927 had flown Atlantic)



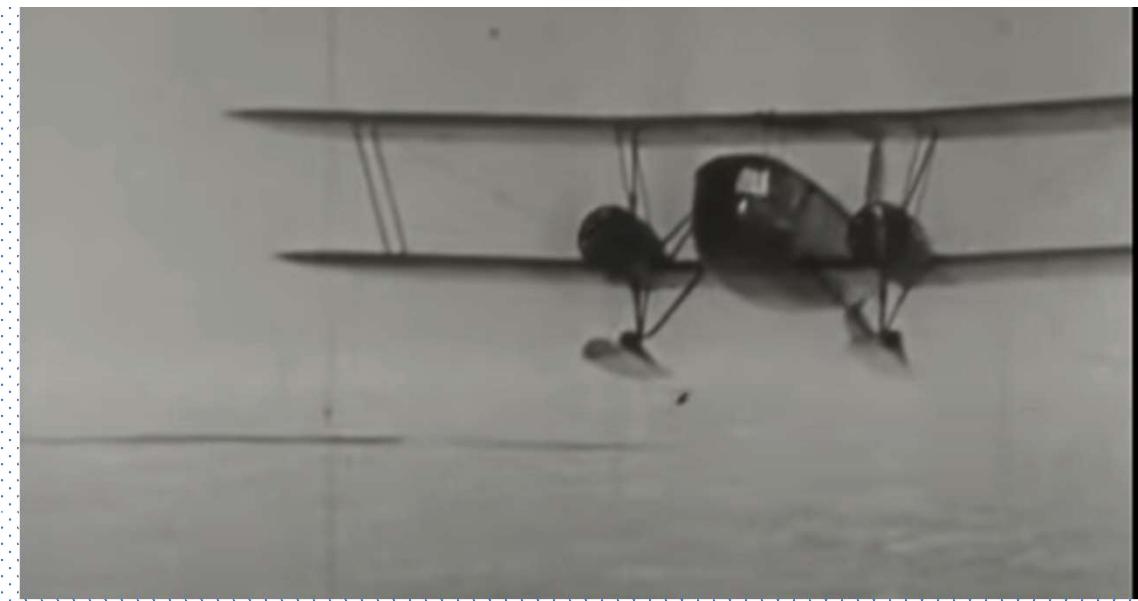


Ford Tri-Motor Flight to
South Pole 1929





Loading supplies for the second Byrd Antarctic Expedition, Pipitea Wharf, Wellington, 1933



Byrd Expedition 1933-35

Curtiss-Wright Condor *WILLIAM HORLICK*

Built snow slab hangers

1928-30 Aircraft
with the 1933-35
additions





Northrop Gamma Polar Star, first flight across Antarctica,
Lincoln Ellsworth and Herbert Hollick-Kenyon (pilot) 1935.

Deep Freeze I

In 1955 US Navy's icebreaker, *USS Glacier*, left New Zealand to prepare the ice runway for the aircraft. Six other navy vessels left on 16 December to take up pre-assigned positions over the 3860-km route between Campbell Island and Antarctica. These 'picket ships' assisted with radio communications and weather reports during the initial flights, but were also there to assist in search and rescue should it be required. Search and rescue personnel in Wellington were on standby to alert an RNZAF Sunderland flying boat specially stationed at Bluff.

The ships were mostly Dunedin based. Thirteen rotated through the role.

RNZN ships sometimes assisted when there were emergency flights.



USS Brough 1951



R5D (=DC4)



R4D (= DC3)
First to land at the Pole

Deep Freeze II



Navy P2V Neptune

Deep Freeze



Air Force C-124 Globemaster



1956: On board Endeavor was the expedition Auster aircraft. Also on board was a crated DHC Beaver. A wing of the Auster was damaged when leaving Lyttleton (it overhung the side of the ship) and Endeavour diverted to Dunedin to offload the wing for repair.

I saw the ship and the plane there as an 11 year old. The Beaver crate was converted into a hangar at Scott Base.

Start of NZ Antarctic Programme





1956 Auster NZ1707 on Tasman Glacier, 19 Aug 1956.

by Gary Danvers Collection

RNZAF Antarctic flight at peak strength. Ex TAE DHC Otter operated briefly - shipped back to NZ with the intention of future Antarctic operation but never happened.





DHC Beaver bought by public subscriptions
Key role in establishing supply bases for the TAE and
Hillary support party.





Later RNZAF





The C141 Starlifter was the mainstay of operations to the Ice Runway for many years. KC10 Extenders were regular supporters of C141 operations.

LC-130 Hercules with skis were then main local carriers once there.

The C-17 Globemaster III is the new beast of burden.





The C-5 Galaxy is an occasional visitor.



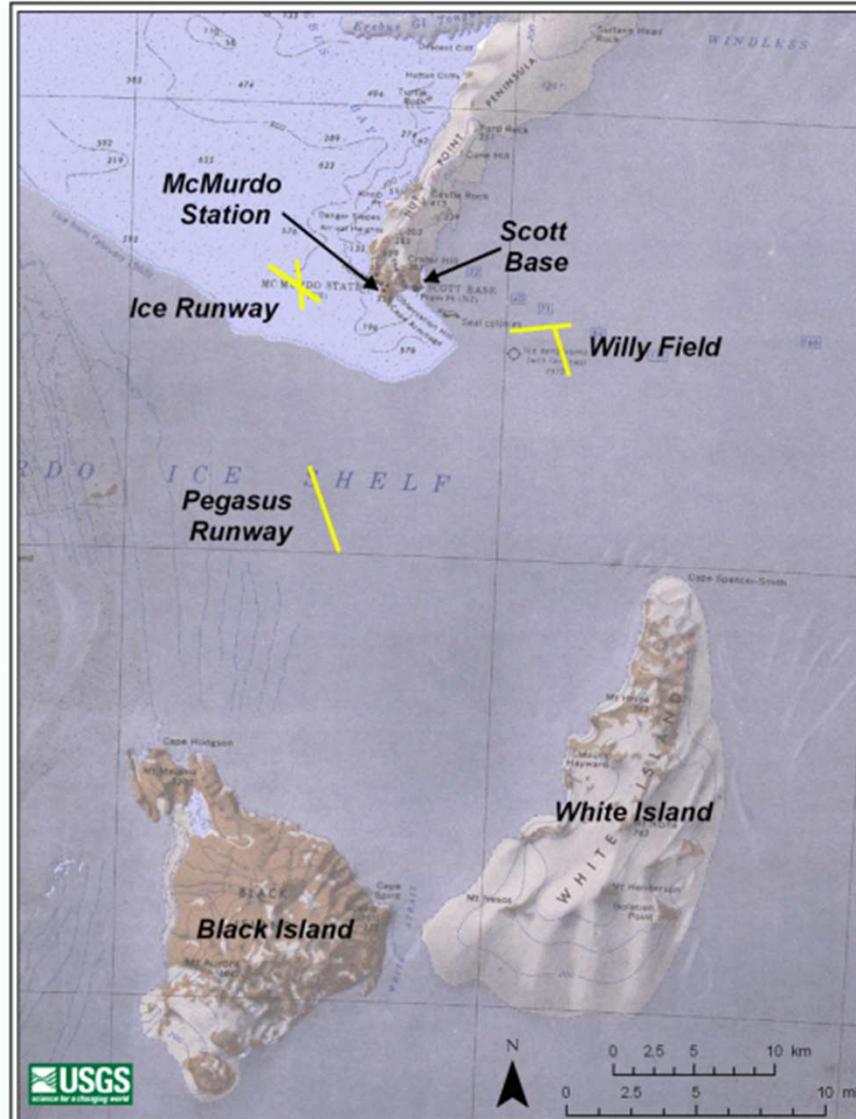
Several NZ based helicopter Cos. have provided support to NZ, US and other national and tourist programmes.

Rough Almanac - Scott Base

Long winter night sunset	about 25 April
Mid winter	21 June
Long winter night sunrise	21 August (but Scott Base is in the shadow of Mt Erebus for about two weeks)
First flight	Early October
Continuous daylight start	October 25
Sea ice Runway last use	Early December
Sea ice break up	Late December, early January
Mid-Summer	21 December
Last regular flight	Late February
Continuous daylight end	February 15

Runways

- Ice Runway (ICAO: NZIR) – Sea ice – seasonal till near break up. Wheeled aircraft
- Williams Field (Willy Field) (NZWD) Ross Shelf. Snow runway. Ski aircraft
- Phoenix Airfield (NZFX) Ross Shelf. compacted snow runway which replaced Pegasus Field (NZPG) in 2017. Wheeled aircraft.

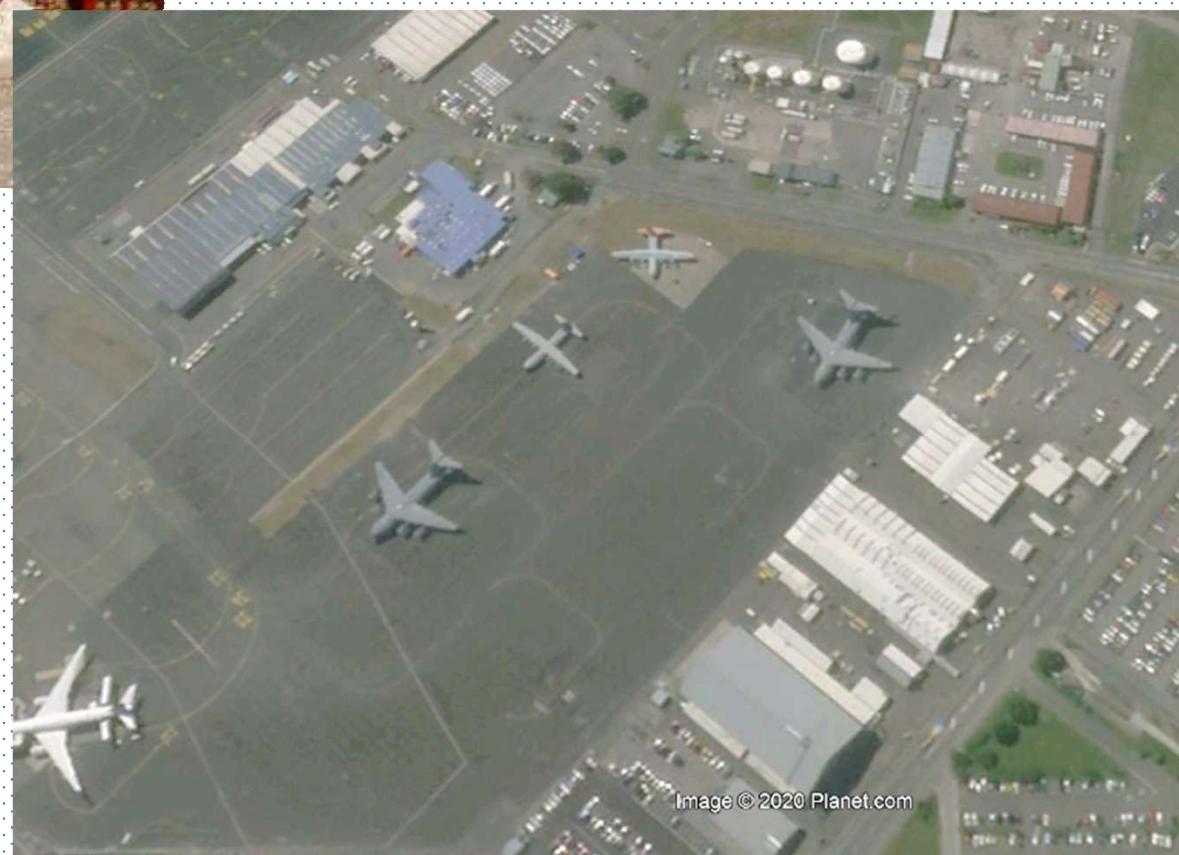




Williams Field

Historic pics on Google Earth

- Up to four Hercules
- Up to three Globemasters
- 747s – Cross Pacific crew?



Christchurch Airport



Northrop Gamma *Polar Star*
National Air and Space Museum
Washington



R4D-5L Skytrain *Que Sera Sera*
National Naval Aviation Museum
Pensacola

Preserved Aircraft



Ford 4AT-B Tri-Motor Airplane, *Floyd Bennett*
Byrd Expedition 1928-30
Henry Ford Museum, Dearborn



Auster T.7C
New Zealand Air Force Museum
Wigram



Fairchild FC-2W2 *Stars and Stripes*
Byrd Expedition 1928-30
Smithsonian Institution (In storage)

LC-47H Permanent loan from the US Government to the City of Christchurch to honour the relationship between Christchurch and the US Antarctic Programme.
Ferrymead Heritage Park



End

(The US and NZ concentration here ignores the aviation exploits of others.
The Australian aviation efforts were just as early as the US)