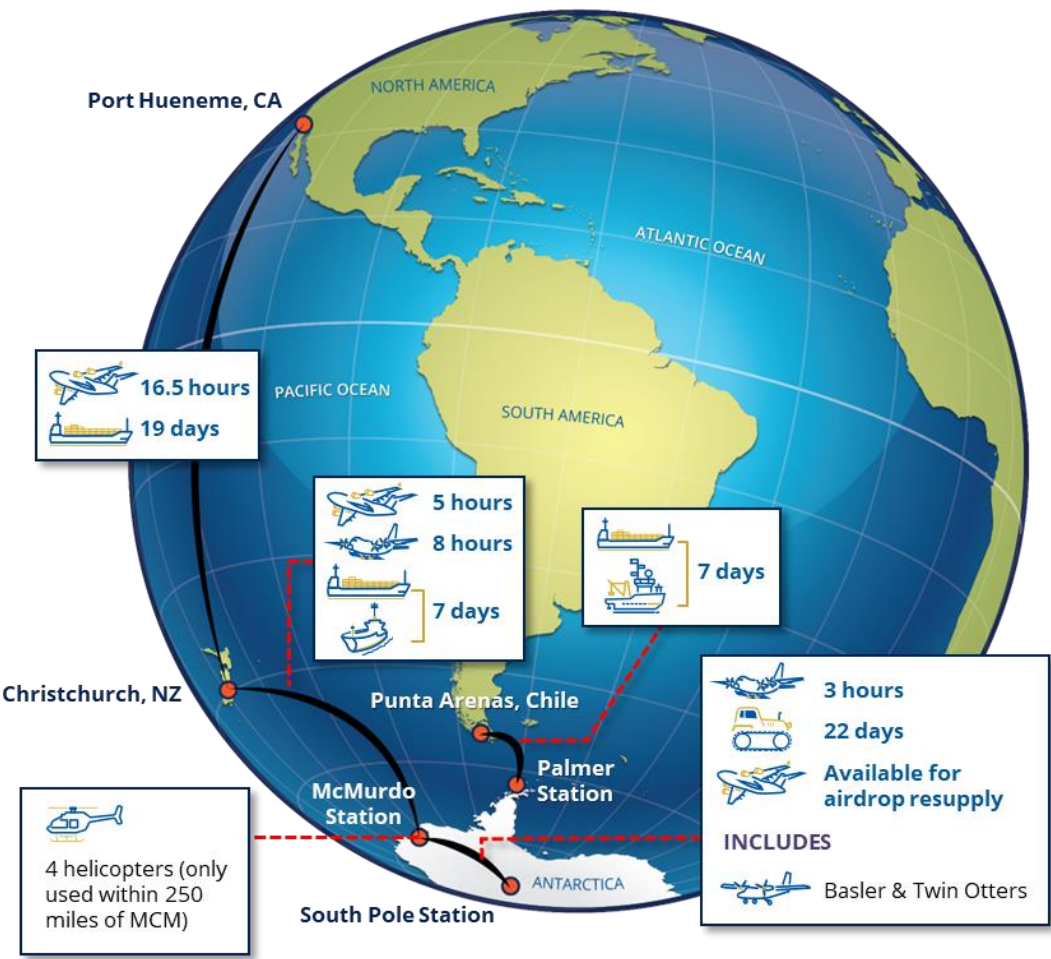


USAP LOGISTICS CHAIN



2500 passengers/year move between Christchurch and McMurdo

Ice pier is used for vessel operations at McMurdo

~400 passengers each summer move between McMurdo and South Pole

Avg. ~9M lbs/year offloaded at McMurdo

3 trips to South Pole per summer season delivering about **140-170K gallons of fuel/trip**

2 runways are used for airlift at McMurdo – Phoenix and Williams (ski aircraft only at Williams) airfields, Phoenix is maintained to be operational year-round, if needed

2.5M lbs/year between Christchurch and McMurdo

Winter flights to/from McMurdo occur each August (3-5 missions)
March-September is considered Winter and there are no planned flights in out of South Pole during that time....and very few in/out of McMurdo

1.8M lbs/year of cargo moves via commercial air/commercial surface from Port Hueneme to Christchurch

Summer "Season" starts in October and runs through February each year

- Air Force C-17
- Cargo vessel
- LC-130
- Tanker
- Traverse
- Fixed-wing aircraft
- Helicopter
- Research vessel

USAP PARTNERS FOR TRANSPORTATION AND LOGISTICS

1. U.S. Air Force (airlift)
2. U.S. Navy (stevedore operations)
3. U.S. Army (modular causeway if ice pier fails)
4. New Zealand Defense Force (ground distribution at McMurdo, airport ops in Christchurch and 757/C-130 airlift support)
5. Italian Air Force (C-130 airlift support)
6. Antarctic Support contract (Leidos)
7. Military Sealift Command
8. Air New Zealand (Commercial Air Cargo to NZ)
9. Various commercial shipping operators (Commercial Surface Cargo to NZ)
10. Kenn Borek Air
11. Air Center Helicopters Inc.
12. U.S. Navy Naval Information Warfare Center (all weather forecasting and air traffic control)