

Ross Sea Operational Considerations

General Considerations

- The Ross Sea is a unique environment and involves more substantial operational challenges than operating on the Peninsula
 due to:
 - The location is extremely remote (5-7 days from either New Zealand or Tasmania)
 - During the Southern Ocean crossing vessels are highly exposed during the 1500nm transit. Southern Ocean weather can be extreme; winds of 100kts + and sea states of 20+m
 - The entrance to the Ross Sea is ice dependent the Ross Sea pack ice typically does not open until mid-January.
 - There is extreme variability between seasons due to the higher latitudes (10 degrees higher than the Peninsula). Major storms can materialize in any month. Summer is considered mid-Jan to late-Feb.
 - High latitudes give colder temperatures, 24/7 light and shorter season that the Peninsula.
 - Rescue or medical assistance is at least several days away.
 - Any request for assistance from a National Program will have implications for future tourism in the Ross Sea. Vessel coordination is not only between IAATO vessels but also with NAP logistics (including resupplies and flights)
 - Regular Ship Scheduler timings/placement may not work There may be times when you have to wait 24 hours for the right conditions to carry out operations
 - It is strongly recommended Captains and/or Ice Pilots possess Ross Sea Experience; It is strongly recommended that at least 50% of the expedition team have previous Ross Sea Experience.

Observer Requirements

- Expect to have an Observer from the NZ Government onboard a Ship Rep as they are called. At times these Observers may
 be combined with DOC observer.
- Expect to have an Observer from New Zealand Department of Conservation (DOC) onboard, if you are planning on going to the NZ Sub-Antarctic Islands.
 - Do note that visits to the NZ Sub Antarctic Islands require special permits from DOC, and numbers are limited. Permits require a long lead time (6+ months). For commercial operations the operator will need to become a concessionaire.
 - It is possible the DOC and Ship Rep observer may be combined.

Station Visits

- For the 2022-23 season Station Visits are not permitted (as of September 26, 2022)
- When near any bases or active airspace, it will be important that all helicopters and RPAS operations are coordinated with Base Ops (Base Communications information will be provided closer to the season).



Hut Visits

- Huts require special permission/authorization to visit, as well as a key to access the huts.
- Some huts are in special visitor areas of Antarctic Specially Protected Areas, and require further permissions.
- Important to take into account huts have limited numbers allowed inside and cycling a full ship through does take time in a
 volatile environment.
- Huts have limited numbers for both Government and Non-Government Operators which need to be taken into account.
 - For this season, the NZ Government, NZ Environment, and Heritage Trust will continue to monitor numbers, but no further actions will be in place.

Medical Screening and Medical Evacuation

- For Ross Sea voyages, enhanced/in-depth medical screening is essential to mitigate the risk of medical issues at high latitudes (Time to rescue can be over a week). It is highly recommended that a doctor (emergency physician) be added to the expedition team. Larger vessels (150+) pax should carry two physicians to enable 24/7 care of a critical patient.
- It is important IAATO Operators continue to be as self-sufficient as possible, this includes working with each other for
 possible support during medical evacuations.
- If a medical evacuation is deemed necessary, **DO NOT** call the bases, the first point of contact will be RCC New Zealand and they will help coordinate.
- To obtain as prompt an evacuation as possible, it is important to have all the necessary insurance paperwork at hand
 Evacuation Insurance is a MUST in the Ross Sea.
- Important to note that the best/only course of action may be to head back to New Zealand or Australia.

Tools for the season

- Special concerns/timetables to be considered for McMurdo Sound due to base logistics/resupply. Information from COMNAP, USAP, ANZ, and RCCNZ and will be supplied in due course.
- Special Ross Sea EMER so vessels are aware when other IAATO vessels are in the area and can try to work together if needed.
- Pre-season mentoring/discussions with Captains, ELs, Staff, Decision Makers in the company to better prepare all for the realities of the Ross Sea.