

“Optimizing” McMurdo Station: Proposed Follow up to the OAC Resupply Subcommittee Recommendations

The OAC Resupply Subcommittee report recommended NSF investigate, “...(1) moving applicable support services to New Zealand, (2) using support groups whose operational mode requires minimum on-Continent personnel and limited during-season rotations, (3) keeping days on-Continent per science team member to those required for the immediate mission.” These recommendations are consistent with policy direction that the NSF should support in Antarctica only those activities that can be best or only supported in Antarctica.

To investigate opportunities to reduce on-ice activities and personnel, PRSS proposes a multi-phase approach. Based on discussions with the subcommittee, PRSS will organize a workshop of representatives from the science and operational communities to discuss issues that will help to frame the context in which optimization of McMurdo Station operations could be done. Issues to discuss may include (but would not be limited to):

- Developing a consensus on the “appropriate” level of service for on-ice activities,
- Gathering ideas for suggested areas for change within current and potential future activities;
- Discussing the current and future needs of the research community to develop a short and long term support strategy.

The primary output of the workshop would be a statement on service levels, support strategies, and questions and issues that need to be considered in working to develop a long term strategy. This output would then form the basis for an in-depth analysis of USAP operations (likely to be performed by an external consultant) that will thoroughly review how to achieve more efficient operations by reducing, consolidating or moving activities off-ice in accordance with the Subcommittee’s recommendation. This review would seek to:

- Identify every organization on the Ice.
- Identify every function performed by the organizations, along with the cost of the function in terms of people, food, fuel, materials, etc.
- For each function identified, determine if it has to be performed at all.
- For each function that must be performed, determine whether it is best performed in Antarctica or off-continent.
- For each function that has to be performed but does not have to be performed in Antarctica, identify where could it be done, and the associated costs/benefits of moving the function to an alternate location.
- For all functions moved out of Antarctica, determine any additional costs in terms of airlift, sealift or communications required.

The assumption is that this analysis would compare the savings realized from not hiring people, not deploying people, not feeding and housing them and keeping them warm (for example) to the

costs and impacts of performing the function elsewhere; for example, would time zone differences create a requirement for shift work and, therefore, additional supervisory personnel; what effect would NZ labor laws and rates, and exchange rates, have on the operation; and what would be the impact of 40- versus 54-hour work weeks.