National Science Foundation
Office of Polar Programs

September 7, 2023

To Whom it May Concern:

The National Science Foundation (NSF) requests a one-time, one-year Renewal of an Incidental Harassment Authorization (IHA) issued on December 14, 2022, for "*Low-Energy Marine Geophysical Surveys by RVIB Nathaniel B. Palmer in the Ross Sea, Antarctica, Austral Summer 2022/2023*." Attached are the IHA Application, IHA, Biological Opinion, and NMFS approved Protected Species Observer (PSO) report for that cruise.

The purpose of the cruise was to collect low energy 2D seismic reflection data, along with oceanographic and sediment samples to understand if, how, when, and why the Ross Ice Shelf unpinned from the Ross Bank in the recent geologic past. The cruise included two main components, surveys of the Drygalski Trough Area and surveys of the Ross Bank Area.

Due to logistical challenges, the original cruise was not successfully completed. There was a delay in leaving New Zealand due to cruise members testing positive for COVID and an enforced quarantine was put into place until cruise members tested negative. As a consequence, only the surveys within the Ross Bank Area occurred and activities within the Drygalski Trough Area were deferred.

NSF proposes to complete the project by conducting the research surveys in the Drygalski Trough Area, with a departure from Lyttleton, New Zealand on February 3, 2024, and ending at McMurdo Station, Antarctica on February 23, 2024.

The requested Renewal would cover a subset of the activities, the Drygalski Trough Area Surveys, which were described in the original IHA Application and for which take was authorized in the initial IHA. The research activities proposed to be conducted again in the Drygalski Trough Area in 2024 would be identical to the activities analyzed for the original IHA for the Drygalski Trough Surveys (i.e., minus the Ross Bank surveys), including the same location, same equipment, same manner of conducting activities, same timing (austral summer), same total duration/amount (i.e., 11 days of transit, 9 days of seismic surveys, and 1 day of OBS deployment/retrieval). The analyses, mitigation and monitoring requirements would remain the same and NSF would contract PSOs in alignment with last year's cruise and requirements of the IHA and Biological Opinion. The take estimates would not be anticipated to exceed those issued in the original IHA or the levels estimated for the Drygalski Trough Area, given only that part of the original plan would be pursued in 2024. Please refer to the IHA Application, Appendix D, Table D-2 for the type and amount of take anticipated to be caused by the remaining work.

The PSO report shows that the monitoring results do not indicate impacts of a scale or nature that were not previously analyzed or authorized.

NSF believes an IHA Renewal would allow for completion of the originally proposed survey activities and meets the Renewal conditions identified in the issued IHA. Please let me know as soon as possible if you have any questions regarding this request and availability to discuss and confirm the next steps for obtaining a Renewal IHA.

Sincerely,

Polly A Penhale

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