



NATIONAL SCIENCE FOUNDATION
2415 EISENHOWER AVENUE
ALEXANDRIA, VIRGINIA 22314

NSF 21-072

Frequently Asked Questions (FAQs) for the Palmer Pier Reconstruction

1. When will the pier at Palmer Station be rebuilt, and how long will it take?
2. Other areas and buildings at Palmer Station are also in need of upgrading. Why was the pier selected to be the first major construction project?
3. What science, if any, will be conducted out of Palmer Station during the construction season?
4. How will NSF support station-based science efforts during pier reconstruction?
5. How will this impact ship-based science during the 2021/22 season?
6. Will NSF continue to accept research proposals for fieldwork in the Western Antarctic Peninsula Region and Palmer Lab?
7. Will the new pier only support the ARSV Laurence M. Gould, or will it be able to support larger ships?
8. What benefits will the new pier bring to the Station?
9. Will the new pier replace the small boat ramp and area?
10. Who provided input into the pier planning and design?
11. What will the new pier look like?
12. How can I stay updated on the progress of the pier rebuild?

1. **When will the pier at Palmer Station be rebuilt, and how long will it take?**

The current plan is for the pier to be entirely rebuilt in the 2021/2022 Antarctic season, running from October 1, 2021, through September 30, 2022.

2. Other areas and buildings at Palmer Station are also in need of upgrading. Why was the pier selected to be the first major construction project?

The pier at Palmer Station was identified by the 2012 Antarctic Blue Ribbon Panel (BRP) as a critical, single-point-of-failure risk. The original pier was constructed in 1967. Despite regular repairs, the existing pier is well-beyond its service life and needs replacement. The new pier will allow larger ships direct access to Palmer Station and increases the capacity to land cargo and materials on the station. Subsequent construction and redevelopment projects to upgrade Palmer Station, in accordance with the updated Master Plan, will greatly benefit from the new pier.

3. What science, if any, will be conducted out of Palmer Station during the construction season?

Due to the degree of disruption that is to occur on station during construction, the number of construction personnel required, and the need to fully complete construction activities in one season, NSF is not able to safely support any on-station scientific personnel. In-situ instruments installed at or near the station will continue to operate throughout the individual science project's funded time period. Maintenance of these science systems will be performed by Leidos/ASC research associates.

4. How will NSF support station-based science efforts during pier reconstruction?

NSF intends to mitigate the impacts of construction on the research community to the greatest degree possible. To this end, NSF intends to have USAP vessels support research in the peninsula region during this period, to the extent possible and as schedules allow. Prior to the COVID-19 global pandemic, NSF had developed plans to support some "station-based" science efforts with the NBP serving as a "floating science platform" with potential RHIB and other small boat operations. However, with COVID-19 related quarantines and other emerging scientific obligations, any "station-based" science efforts will be extremely limited or impossible.

5. How will this impact ship-based science during the 2021/22 season?

Prior to the COVID-19 global pandemic, NSF had developed plans to support all previously funded ship-based research for the anticipated construction season. However, with COVID-19 impacting science planned for the 2020/21 season, NSF is currently assessing the ability to support previously-funded science for the 2021/22 season in conjunction with projects deferred during the 2020/21 season. Once a plan is formulated, we will use office hours to inform the community on levels of support for the 2020/21 season.

6. Will NSF continue to accept research proposals for fieldwork in the Western

Antarctic Peninsula Region and Palmer Lab?

Yes. NSF absolutely encourages new proposal submissions but recommends that submitters understand that field deployments may be delayed as we work through the deployments for existing funded projects that were deferred due to COVID-19.

7. Will the new pier only support the ARSV Laurence M. Gould, or will it be able to support larger ships?

The new pier will support larger vessels, including the RV/IB Nathaniel B. Palmer.

8. What benefits will the new pier bring to the Station?

The intent is to build a pier that will provide improved reliability and significantly reduce risk to station operations (considering this is the single point of access to the station), and increase the volume of material delivered and reduce the time to load/unload that material. The new pier will enhance and ease the flow of science support from larger vessels to smaller vessels, particularly for the station's rigid-hull inflatable boats (RHIBs), which will be able to load/unload and refuel while a ship is also tied up. Additional options such as controllable lighting on the pier, and navigation lighting, will also assist with nighttime operations, including cargo movements, and vessel arrivals and departures.

9. Will the new pier replace the small boat ramp and area?

No, the new pier will be adjacent to the small boat ramp and is not part of this project.

10. Who provided input into the pier planning and design?

There have been numerous workshops and meetings related to the development of a Master Plan for Palmer Station, which included planning for the new pier. These workshops included active members of the research community, technical consultants, engineers, research vessel operators, and Palmer Station supervisors and managers. A copy of the Master Plan can be found at <https://future.usap.gov/master-plan/palmer-master-plan/>. A conceptual design of the pier was completed in 2016. The final design must satisfy the identified requirements within the NSF budget. The final design has been a collaborative effort between NSF, Leidos (project management, station management, and science planners), the designer (R&M Consultants), and the Construction Manager (Pacific Pile & Marine).

11. What will the new pier look like?

NSF's Prime Contractor, Leidos, and the design firm R&M Consultants, Inc. have developed a conceptual design to allow for acquisition of an expert Construction

Manager (CM). The CM, Pacific Pile & Marine, will work collaboratively to complete a design within NSF's budget.

12. How can I stay updated on the progress of the pier rebuild?

Updates on pier planning and construction, including webcams during construction, will be provided at future.usap.gov and USAP.gov.