

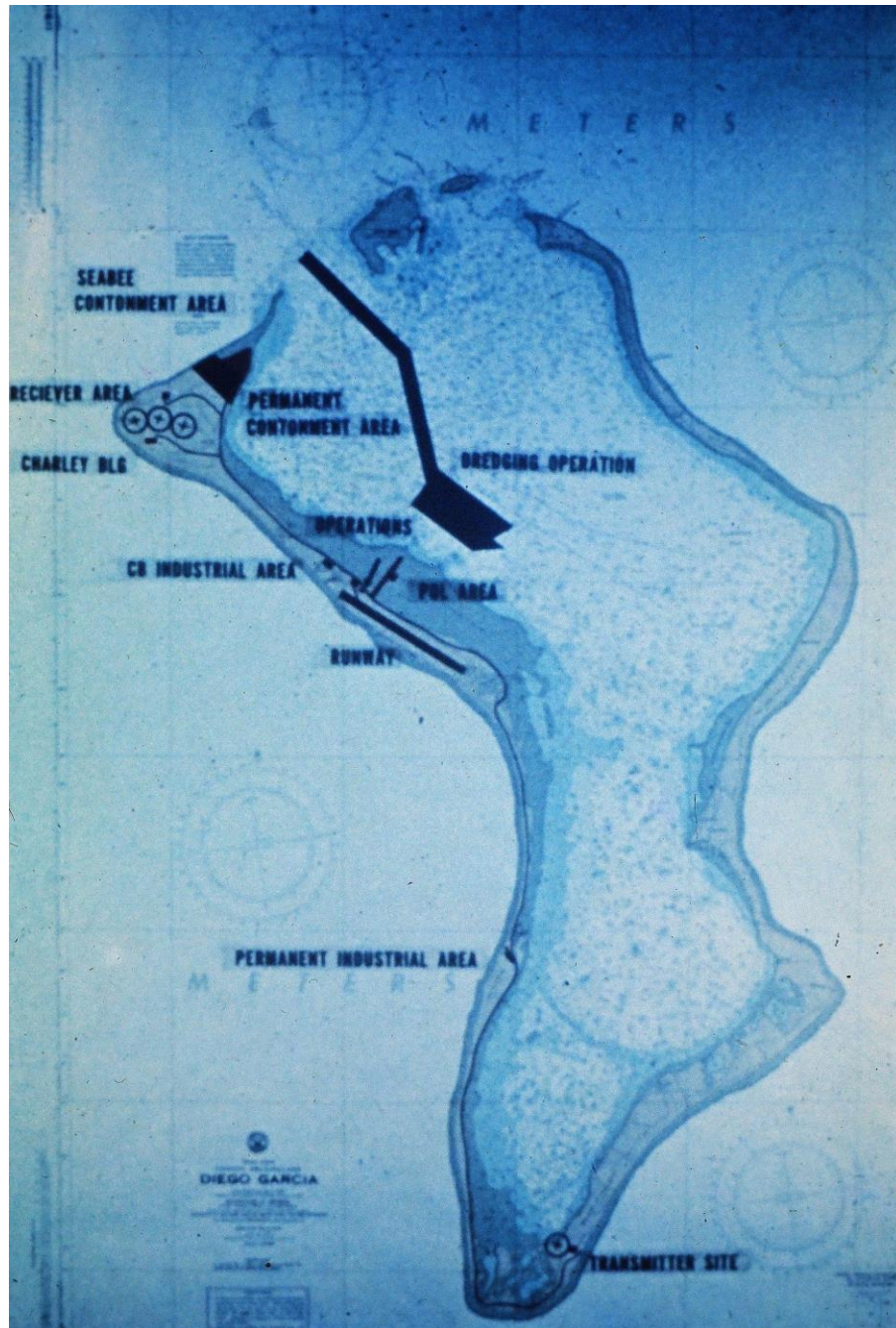
Seabees Built a Base on Diego Garcia, British Indian Ocean Territory

This Presentation Shows the Most Significant Projects of NMCB 62
And Detachments of Other Seabee Battalions
Deployed to Diego Garcia in 1977



Construction on Diego Garcia BIOT





Diego Garcia is one of the Chagos Islands. When it became a British territory, it was populated by people brought in from the Seychelles and other islands, who operated plantations growing and exporting copra.

The island is located due south of India, and is situated about 7 degrees south of the Equator.

It was made available to the United States by Britain, under an agreement whereby a permanent base would be built to contribute to maritime security in that part of the world.

The Seabees were assigned the task of building the base, and initially all work was done by them, with incidental contributions by contractor organizations.

The naval base's facilities were built on the western side of the island as shown on this drawing.

The Cantonment Area was built on the northwestern tip of the coral atoll.

The photos following this drawing will show the major facilities built by NMCB 62 and other Seabee units during their 1977 deployments.

NMCB 62's Commanding Officer was Commander Chuck Fegley. The Executive Officer was Lieutenant Commander Paul Chapla, who was succeeded by Lieutenant Commander Tony Corcoran.

The Operations Officers who directed the construction were Lieutenant Commander John Milkintas, succeeded in May 1977 by Lieutenant Jim Rispoli, who was "frocked" to the grade of Lieutenant Commander later on during the deployment.



The Construction Projects

- The following projects were in various stages of construction, or not yet begun, when NMCB 62 deployed to Diego Garcia in 1977.
- Most of the projects described in the following photos were being built by the Seabees of NMCB 62, the “Minutemen” Battalion.
- Several Detachments of other Seabee Battalions, whose main bodies were deployed to other locations in Europe and worldwide, had major projects on Diego Garcia during this time. Those Battalions’ Detachments and their projects are included in this summary of Seabee work on Diego Garcia in 1977.
- All told, there were approximately 1000 Seabees in these units on Diego Garcia in 1977; that number was in addition to the “permanent party” assigned to the Naval Support Facility there at the time.



A permanent water treatment plant and distribution system was the single major utilities project.

The next few photos show the Seabees building these facilities.

The project was called “Final Water Project” and included a compound with Concrete Masonry Unit (aka Concrete Blocks) buildings, and reinforced concrete water tanks.







NMCB 62 had five companies: Alpha Company was the heavy equipment company; Bravo Company was the utilities company; Charlie and Delta Companies were the “builder” companies; HQ Company was the fifth.

The Final Water Project was built under the direction of Lieutenant Commander Don Keith, Bravo Company commander, shown here during his “off time” examining the work.



A progress photo of the water plant compound with buildings and tanks.

The project included installation of 13 new water wells into the freshwater “lens” on the island, and over 5000 feet of underground piping.



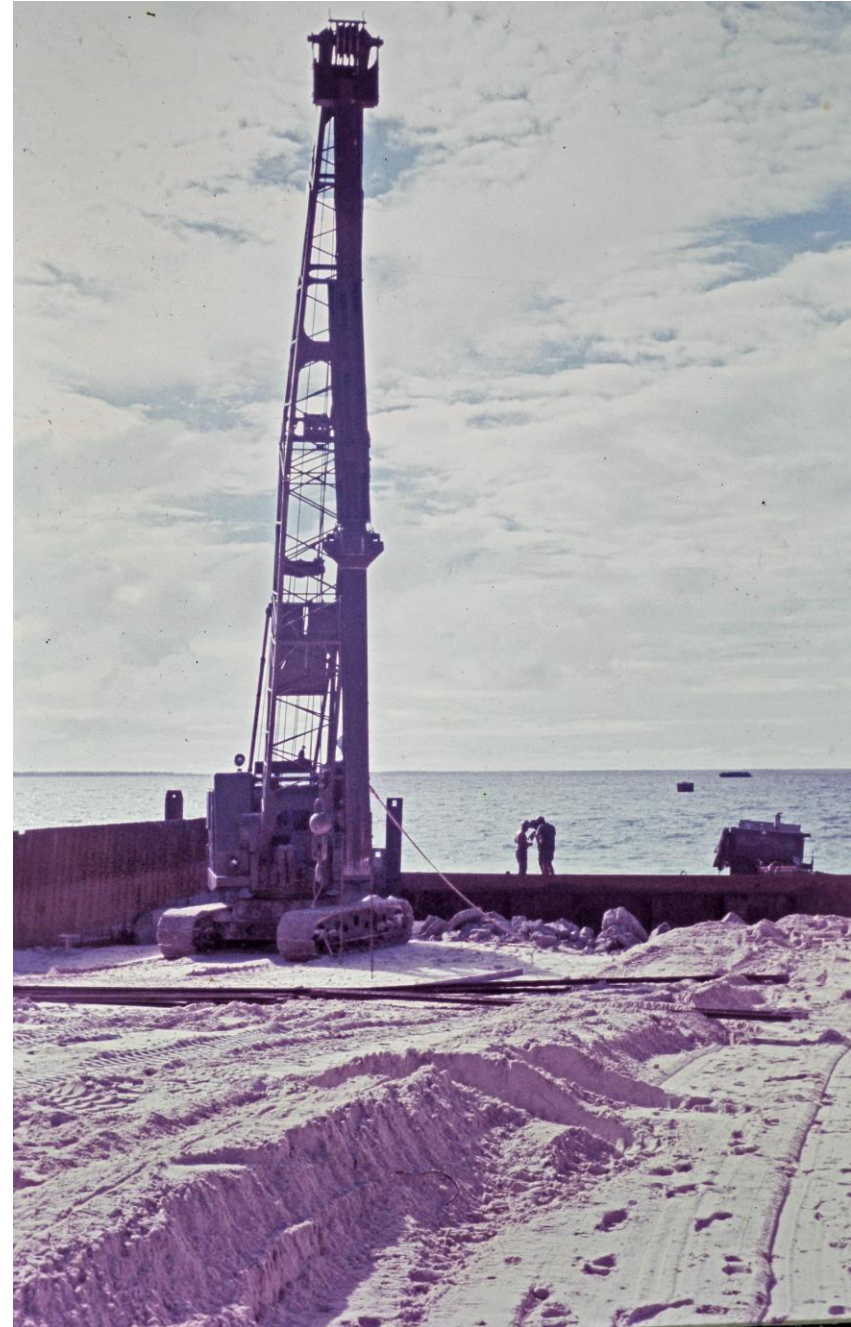
Trench for a segment of the underground piping for the water lines.

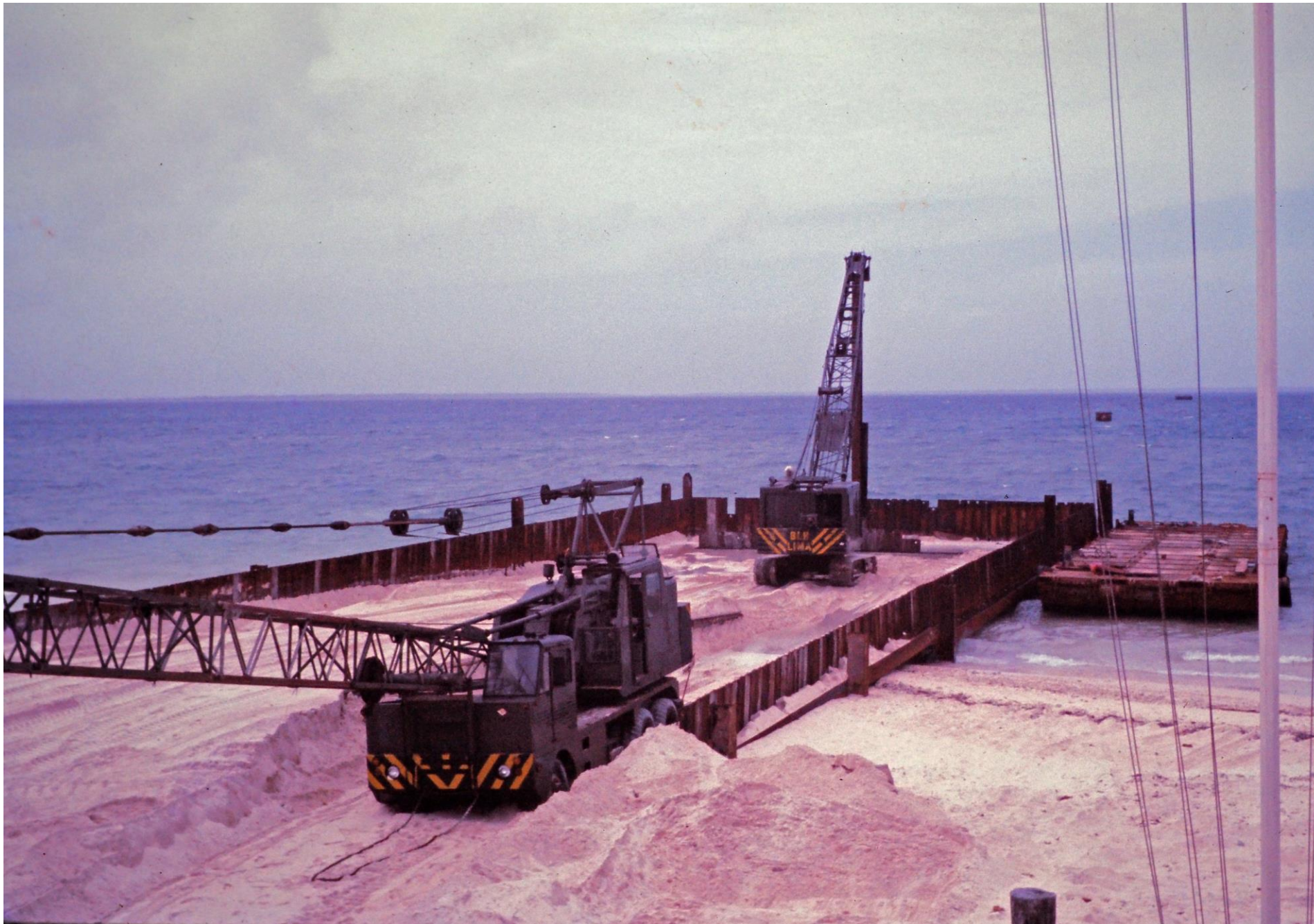
One of the projects was a “Sand Pier.”

It was called a sand pier because the pier was built using sheet piles to form the shape of the pier, and then the area was filled with sand.

The only building materials available on the island were natural sand, and as we will see a bit later, coral blasted from the lagoon used as aggregate, and water.

The next few photos show the progression of the sand pier. In this photo, the sheet piling is being driven.





Sheet Piling
nearing
completion.



This pier was intended for use of the harbormaster's small boats.

Those boats were previously anchored in the lagoon, making maintenance more difficult.

The
permanent
Dining Hall.

Each battalion
picks up their
projects in
various stages
of completion
from the prior
battalion.

NMCB 62
worked on the
interior of this
facility as
shown in the
following
photos.



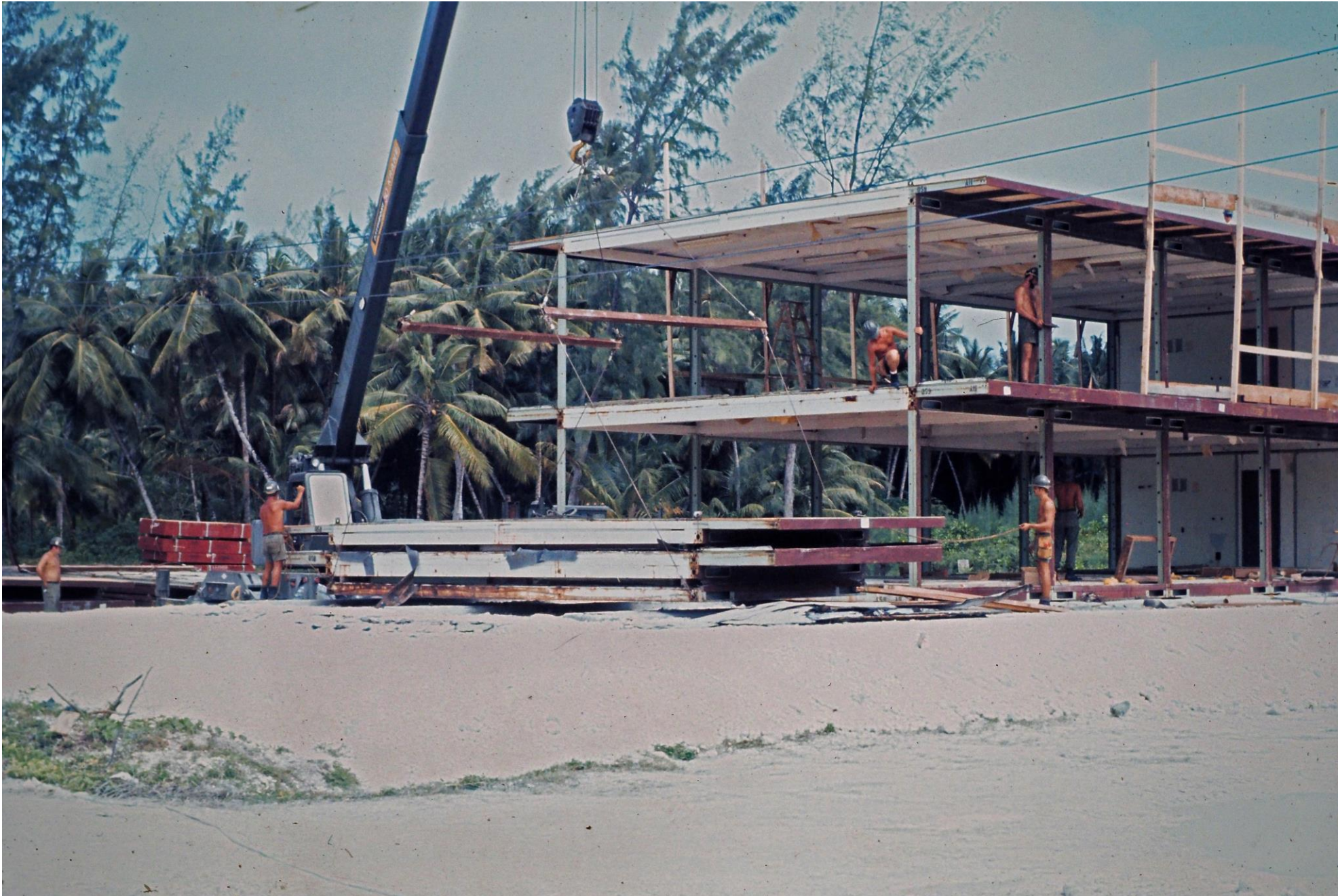




NMCB 62 was able to bring this project to completion.

Here the facility is in operation.

This was a significant morale booster, since most "expeditionary" facilities were not air conditioned.



An 80-man barracks to increase permanent party billeting space, was built of modular components.

The building had been previously erected in Thailand. It was disassembled there, and shipped to Diego Garcia.

The Seabees first built the foundations, did the site work and utilities, and then erected the building.



The building
nearing
completion.

NMCB 62 worked on several permanent dormitories.

The construction method was “tilt up” construction, where concrete for the vertical structural walls was placed horizontally, one wall on top of another. The following photos will show this.

Here we see forms for one of the concrete grade beams being built.





Grade beams and reinforcing steel or “rebar” ready for the structural walls.



Concrete walls, later to be lifted vertically, will be placed one on top of the other, with a bond-breaking material sprayed on each prior to the next one being placed.

Preparing to lift the first wall from its horizontal position, to vertical.





A construction operation done with great care.

Here is a wall being raised from horizontal to vertical.

The following photos will show the sequence.











NMCB 62 worked on several of these “tilt up” structures concurrently, and turned the project over to the relieving battalion, NMCB 74, with all 18 tilt-up walls in place for the first building.



Another project using pre-fabricated structures was this development of 75 “Porta-Camps” to replace the non-airconditioned SEA huts that were the Seabee barracks up until this time.

These were intended to house six to eight Seabees per building.





NMCB 62 worked on the mid to final stages of completion for a permanent building, the Enlisted Club.







By the conclusion of NMCB 62's deployment, the Enlisted Club was fully outfitted and ready to welcome its first guests.

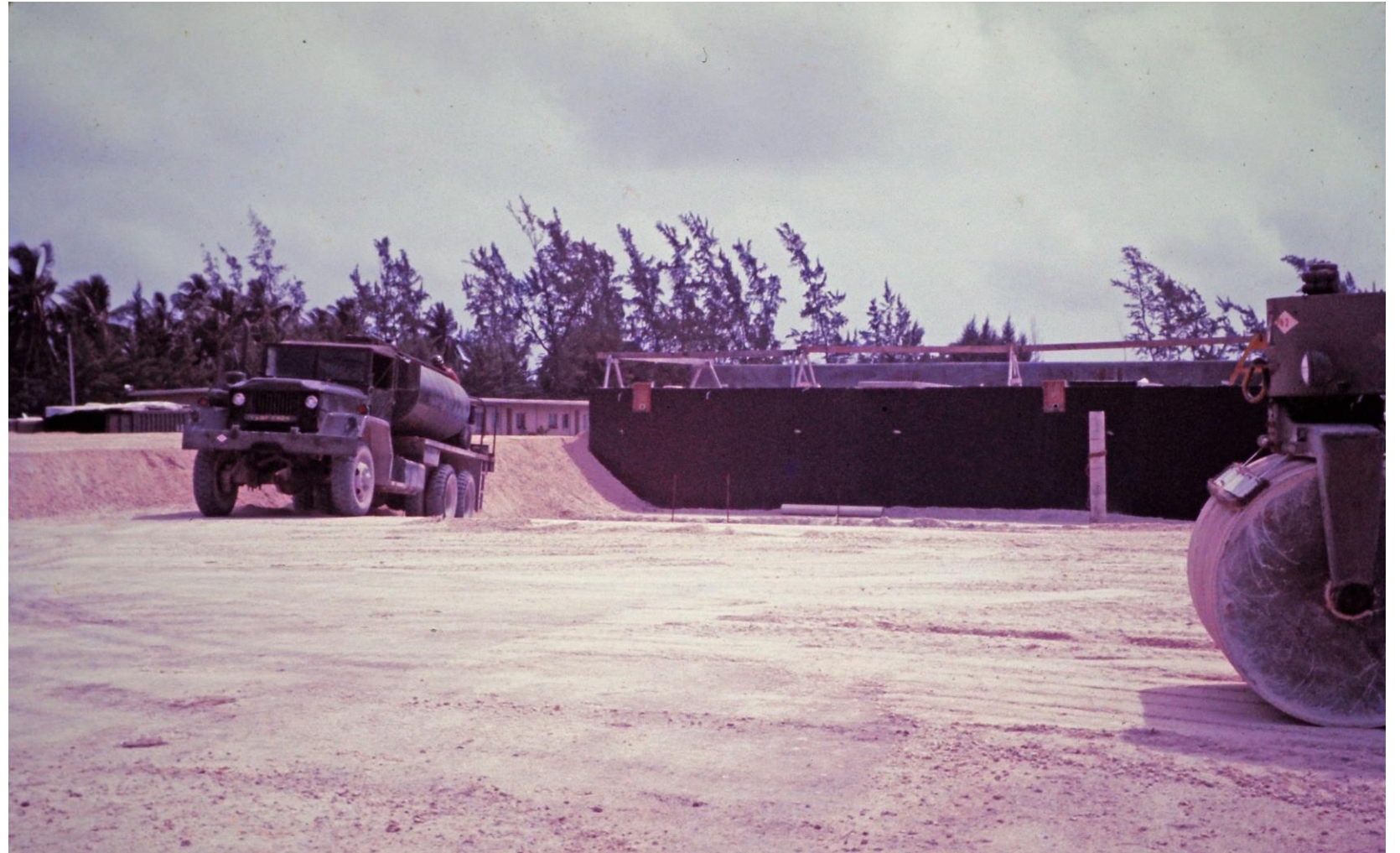


The Enlisted Club

A significant project started by NMCB 62 was a swimming pool for the island.

The project was challenging in that first the elevation of the top of the pool deck needed to be built of compacted fill material.

Once the top elevation was reached, then the pool was excavated in a very precise way to provide the graduated depth of the actual pool.

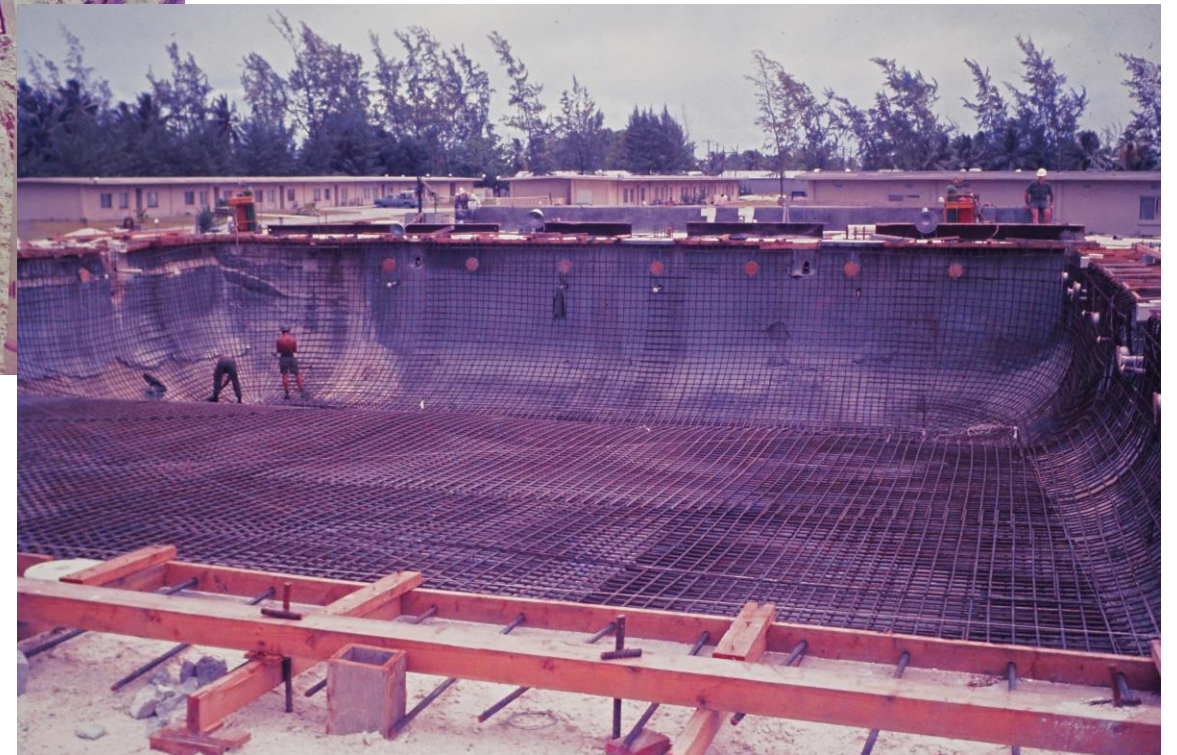




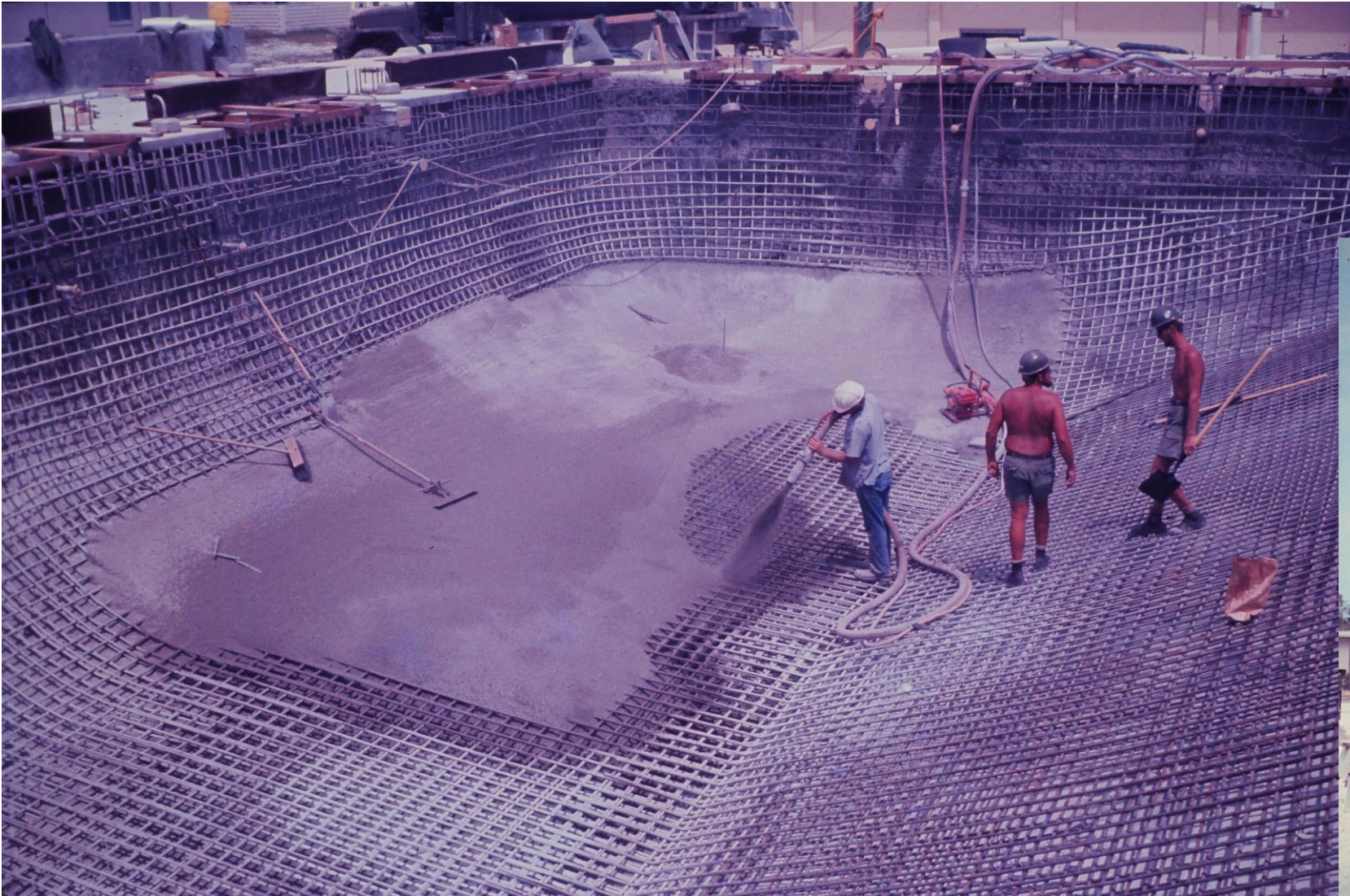
Pipes and electrical utilities were installed along with the structure itself.

The volume of fill required was significant, and compaction was an important aspect.





Many Seabees of various trades were involved – the earthwork, the wet and dry utilities, the concrete work, and the reinforcing steel mat, all in preparation for application of “Guniting” by a specialty contractor on a fixed schedule.



Seabees supported the Guniting operation both in the pool, and also by operating the Guniting feed equipment shown to the right.



These views show the point at which nearly all the reinforcing steel is covered by the Gunitite.





NMCB 62's tasking was to complete the pool to the point of final grading, utilities lines installed, and Gunite complete.

Here is a sort of "pool party" to mark the completion of months of work on this major project.



Views of NMCB 62's work at turnover to NMCB 74.



NMCB 62's tasking also included other outdoor recreation facilities such as this complex of ball fields, volleyball courts and tennis courts.



Lighted Volleyball Courts

Lighted Tennis Courts





Lighted Baseball Fields

Most sports activities would be after dinner on work days, or weekends.

Because of the extreme heat and humidity, it was planned that the recreational facilities would have heavy use at night, thus the lighting.



One of the few building materials available on the island was coral, which became the aggregate for the massive amounts of concrete used in all the projects.

Coral was blasted from the bottom of the lagoon, which accomplished a dual purpose of deepening the lagoon to accommodate expected ships, both transient and moored.

NMCB 40's Detachment, with CWO Holder as OIC, performed this task.



The coral chunks taken from the lagoon, using drag lines, were transported to the Alfa Company yard.

There, the rock crusher, also operated by NMCB 40's Det, sized the coral to what was needed for the concrete mix.

Because of the saline content in porous coral, piles of coral were rinsed with water to leach out as much salt as possible.



Cement was brought to Diego Garcia in bulk cement carrier ships from Mombasa, Kenya.

The dry cement was “blown” ashore through a pipe system that went out to the mooring location.

Ships had to be carefully scheduled to bring cement, since the airfield paving project used significant amounts of cement for the slip-form concrete paving operation.



The cement was held in these silos which were used continuously to supply the wet batch plant.

The high humidity presented the challenge of formation of “clunkers” on the interior walls of the silos, due to the partial hydration of the cement.

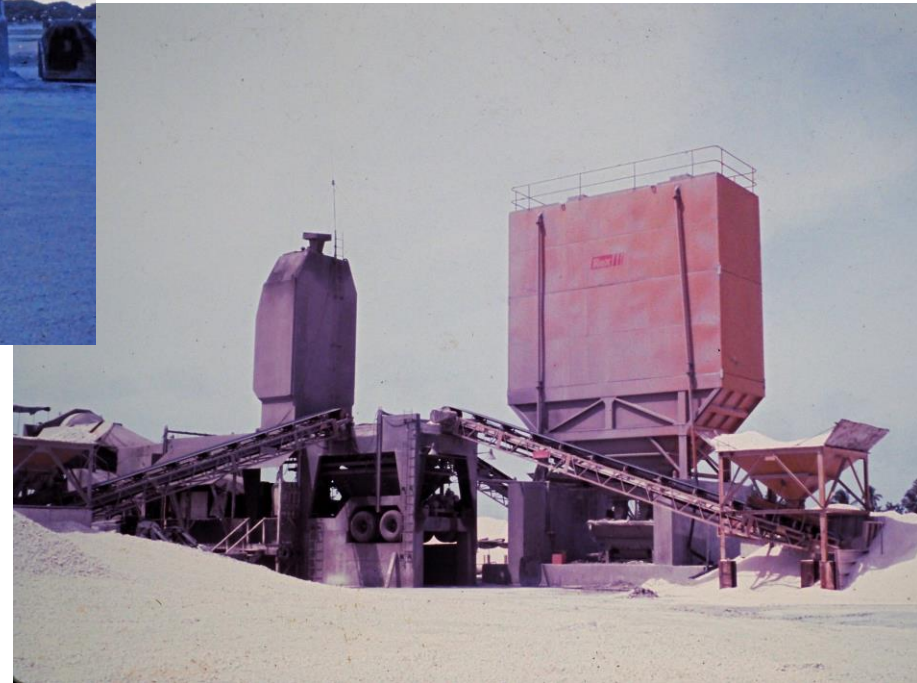
Frequent use of “det cord” to create small explosions inside, would break up these “clunkers.”

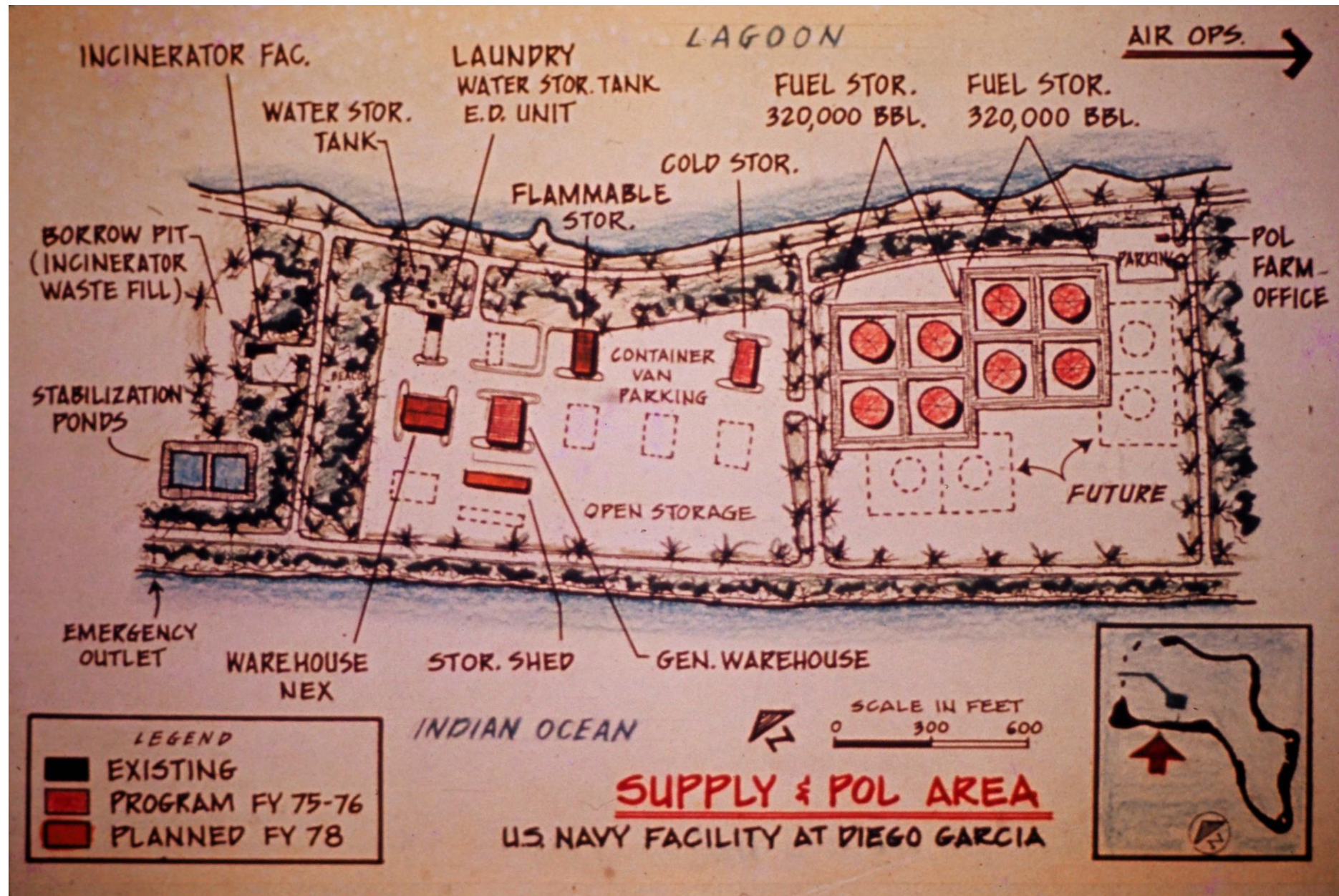
NMCB 62’s Seabees operated the silos and the concrete batch plant.



The Rex Sr Batch Plant was operated continuously to provide wet mixed concrete for the biggest consumer of concrete – NMCB 5's Detachment doing the slip-form runway extension.

Many other projects used the concrete, notably the tilt-up barracks project shown previously.





The Fuel Tank Farm project would provide storage for fuel and jet fuel.



The construction sequence was site grading, placement of concrete base pad and sumps, and tank foundation; lastly, an “oiled-sand” layer covered the concrete base pad for each tank.

A specialty contractor on a pre-arranged schedule came to Diego Garcia to do the erection of the fuel tanks.



NMCB 62's Seabees built the concrete base pads and the support foundation for each of the tanks in the tank farm.





Seabees place the reinforced concrete circular tank foundations.



NMCB 62 provided manpower and equipment support to complete this essential fuel farm facility.







A major project was the expansion of the airfield including extending the runway to enable long range aircraft and the SR-71 to use the airfield.

The runway extension was a combined effort:

- NMCB 40's Det blasting and harvesting coral, and operating the rock crusher
- NMCB 62's Seabees operating the cement silos, and concrete batch plant
- NMCB 62's Seabees doing "soil-cement" base course prep for ----
- NMCB 5's Det doing the slip-form paving operation.

The extensive work on the airfield was done while the airfield was fully operational.

A significant expansion of the concrete parking apron was completed by NMCB 62's Seabees, utilizing conventionally placed and finished concrete.

It was necessary at times for the Seabees to pause construction on both the runway extension, and the parking apron expansion, as actual landings and take-offs of aircraft occurred.

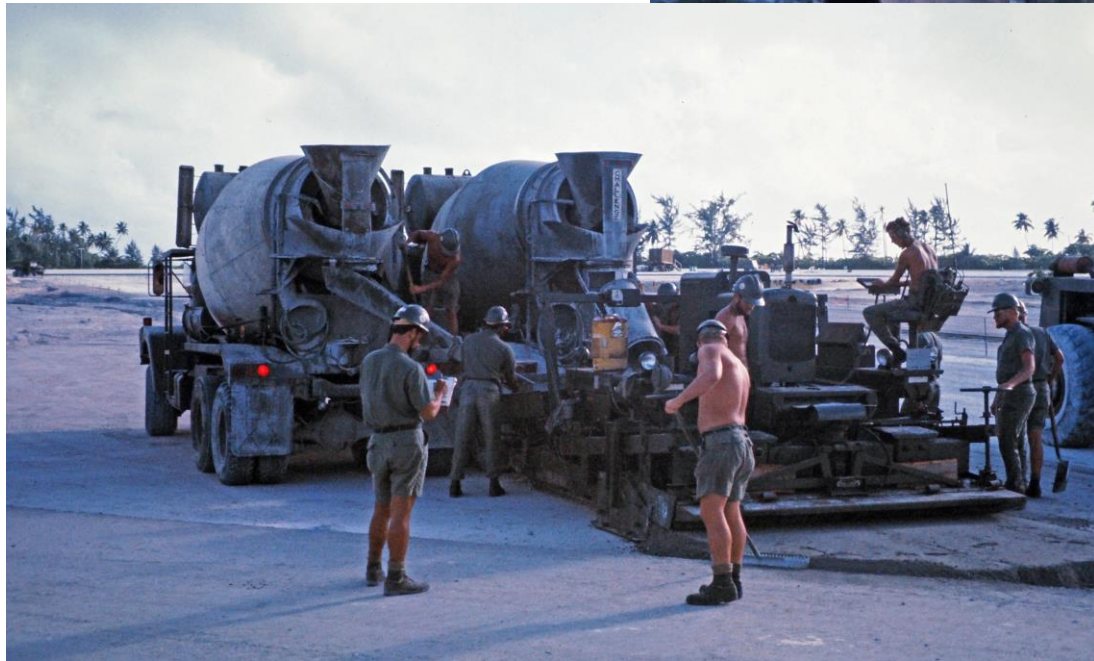


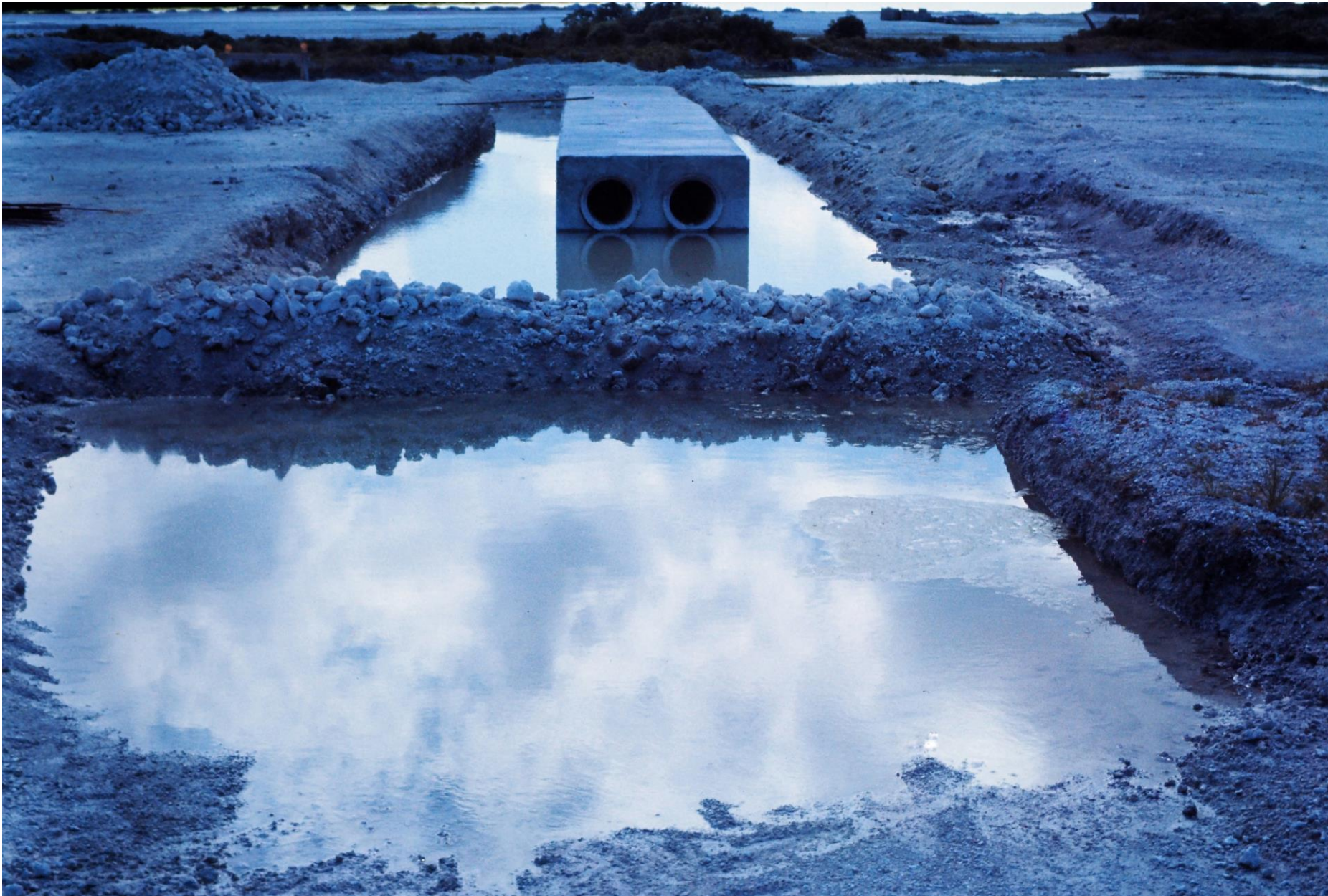


Major site prep was involved with the soil cement project done by NMCB 62's Seabees.



Conventional concrete placement and finishing was done by NMCB 62's Seabees, for both the parking apron expansion, and the blast zone of the runway extension.





Construction included essential drainage structures, runway and threshold light fixtures, and electrical circuitry.

NMCB 62's Seabees installed all the lighting conduit, circuitry and fixtures, leaving the actual connections to be done by the relieving battalion.



Much had to be done to make the site ready for the slip-form paving operation.





NMCB 5's Det was previously trained to do the entire slip-form paving operation.

The volume of concrete used daily was the main driver in scheduling for the bulk carrier cement ships.





NMCB 5's Det had 60 Seabees, with LT Ed Kaniecki as OIC. The project included an expansion of the aircraft parking apron as well as the runway extension. This was only the second time in the history of the Seabees that such an extensive airfield construction project was done.

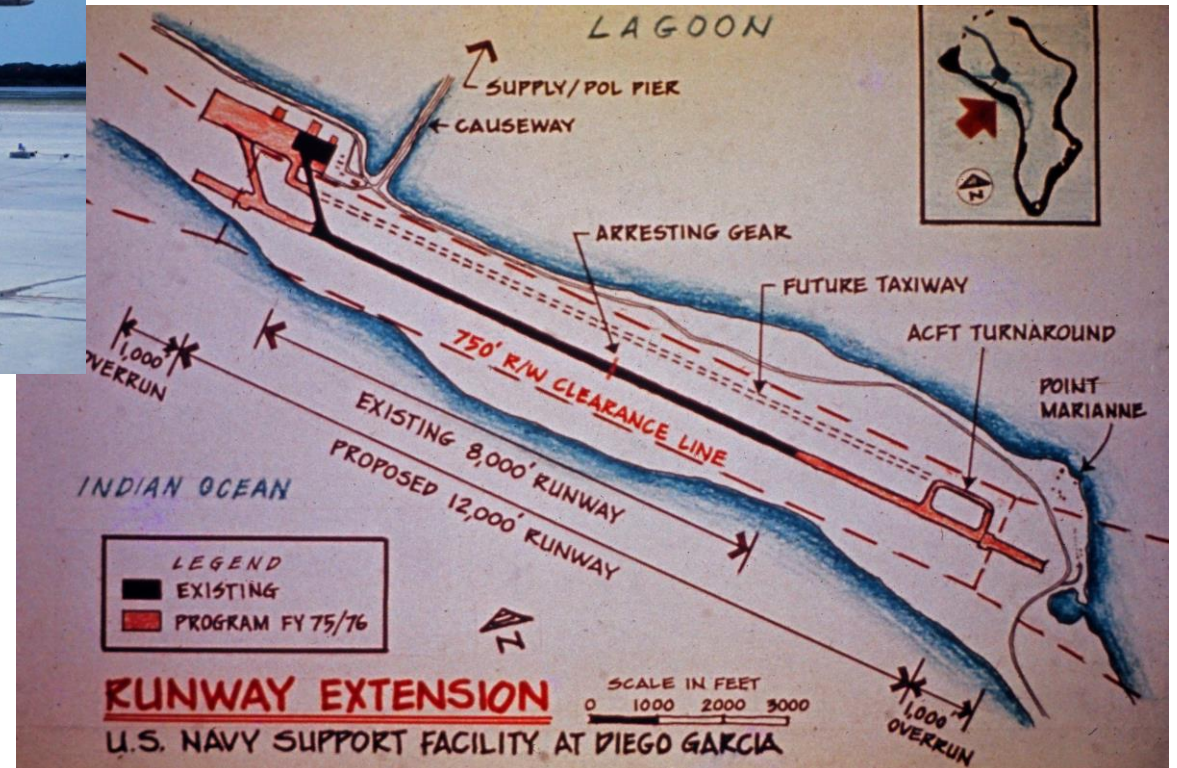


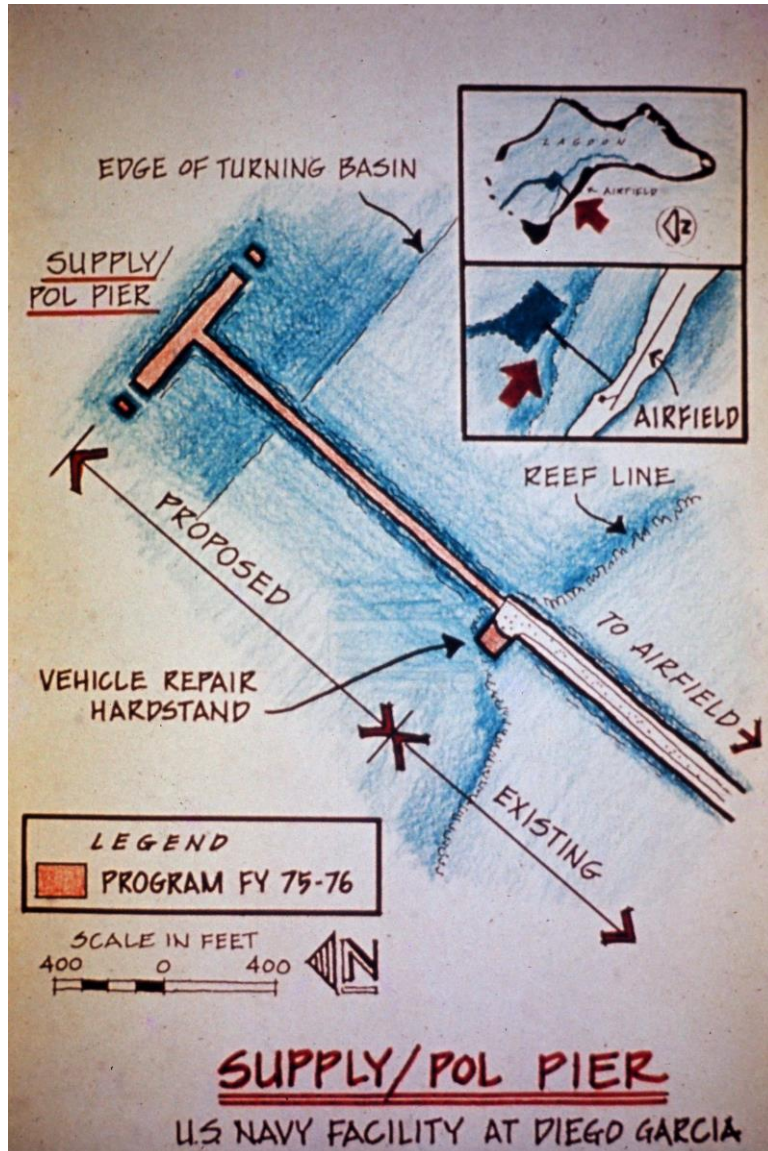


NMCB 5's Det had all the training and skills to operate the specialty equipment, place the rebar, place the concrete, finish the concrete surface, and properly cure the concrete.



The runway was lengthened from 8,000 ft to 12,000 ft, the standard length for long distance aircraft to support the future mission of the Naval Facility on Diego Garcia. The expansion of the aircraft parking apron is also shown on the map.





The final project presented here is the POL Fuel Pier and Causeway, which would be used by ships bringing fuel and jet fuel to the Naval Facility. The blasting and harvesting of coral deepened the lagoon to allow these ships to berth at the pier.





This major project was constructed by the Seabees of NMCB 4's Detachment, with LT Rick Dempsey as Officer in Charge.



Managing such a large number of projects, with the importance of considering material availability, specific Seabee trades needed on each project at specific times, and satisfying other demands such as base operations, logistics evolutions, medical needs and so forth, presented a significant challenge.

Seabees and their specific skills were a given, and it was important for both progress, and morale, to have the right men assigned to each project at the right time.

NMCB 62's Assistant Ops Officer, LTJG Rich McAfee, mastered a basic stand alone mini-computer, and was able to generate resource loaded schedules in three "levels." Level 1 was the top level, the "master schedule" of all the projects, Level 2 showed the work assigned to the various Companies, and the detailed Level 3 was used by the Company Commanders and Project CPOs.



LTJG McAfee is seen here, briefing Commander, Seabee Battalions Pacific, RADM Neil W. Clements, during his assessment visit to Diego Garcia.



Logistics and resupply are critical when working on a remote island.

Periodically, the ship **TRANSCOLORADO** brought supplies, construction material, and other essentials to sustain the Naval Support Facility's operations and the Seabees' construction projects.

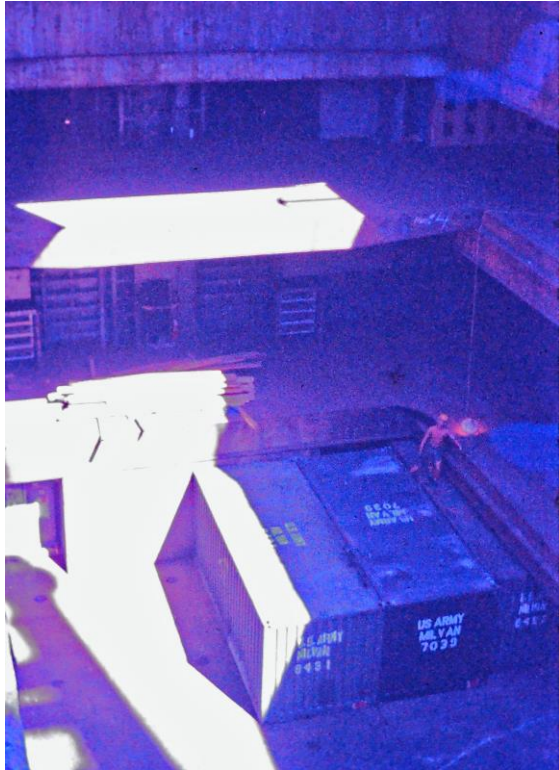
Other than water, sand and aggregate from coral, everything was brought in by ship or by aircraft.

Seabees became stevedores to unload the ship and transport the goods to shore. Each time, this was a seven-to-eight-day evolution.



Each offload and transfer to shore required extensive coordination. Pallets and cargo containers were lifted from the hold using ship's cranes.





From ship to barge, and then to shore for further transport to final location.



NMCB 62's Alpha Company's Seabees, ably commanded by LT Ray Pylant, maintained and operated the huge suite of construction and support equipment seen throughout the project photos presented here.

The largest of the five companies comprising the Battalion, they provided essential equipment functions.





MRS and Terex
Scrapers moved
untold tons of earth.



And they operated the concrete batch plant, the dump trucks and concrete trucks that supported all the Seabees on the island, not only NMCB 62.



Acknowledgements

- What has been constructed on this remote and strategically important island, was done by thousands of Seabees over the years.
- These photos show only one deployment period of NMCB 62's Seabees and Detachments from other Seabee Battalions.
- In all of this, Seabees were our most important asset.
- Those who led these devoted Seabees were Navy CEC Officers, and Senior Enlisted personnel who brought their years of experience to motivate and guide the Seabees and the construction projects on the island.

Acknowledgements

- Here is a list of those CEC officers, and key Senior Enlisted Seabees:
 - Commander Charles E. (Chuck) Fegley III, Commanding Officer, NMCB 62
 - Lieutenant Commander Paul Chapla, Executive Officer, succeeded by
 - Lieutenant Commander Tony Corcoran
 - Lieutenant Commander John Milkintas, Operations Officer (S-3), succeeded by
 - Lieutenant Commander Jim Rispoli
 - Lieutenant Commander Don Keith, Bravo Company Commander
 - Lieutenant Ray Pylant, Alpha Company Commander
 - Lieutenant Junior Grade John Crosby, Charlie Company Commander
 - Lieutenant Jerry Hill, Delta Company Commander
 - Lieutenant Junior Grade Rich McAfee, Assistant Operations Officer

Acknowledgements

- Here is a list of those CEC officers, and key Senior Enlisted Seabees:
 - Utilitiesman Master Chief (UTCM) Bill Sweeney, Command Master Chief
 - Constructionman Master Chief (CUCM) John Johnson, Operations Master Chief
 - Other CEC Officers in the NMCB 62 Wardroom:

Lieutenant Scott Cleveland	Lieutenant Don Cosgrove
Lieutenant Junior Grade Don McLaughlin	Ensign Geoff Nichols
Ensign Brian Silas	Ensign Ben Whatley
Lieutenant Junior Grade Paul Stasiewicz	Ensign Joe Cuccu
Chief Warrant Officer 2 Delmar “Del” Herron	
 - And Other Naval Officers included our Chaplain, LCDR A.B. Pepper; our Supply Officer (S-4), LCDR Tom Bauman, succeeded by LT Larry Lindsay; our Medical Doctor, LT Robert Bruce, succeeded by LT Rob Bonner; our Dental Officer, LT Doug Bramwell; our Admin/Personnel Officer (S-1), CWO2 Bert Freed; and our Plans and Training Officer (S-2), LTJG Tom Doyle. In addition, LCDR B.E. Clark, RN, was the “British Representative.”
- Other Key CEC Officers on Diego Garcia:
 - Captain Phil Oliver, Commodore, 30th Naval Construction Regiment (forward) succeeded by
 - Captain Jack Weis, Commodore, 30th Naval Construction Regiment (forward) and their staff
 - Lieutenant Commander Bill Hilderbrand, Resident Officer in Charge of Construction, PACDIV, and his staff



A photo copied from the
NMCB 62 1977 Cruise Book

The author of this
presentation, LT (later LCDR)
Jim Rispoli, Operations
Officer,

And LTJG Rich McAfee,
Assistant Operations Officer
and master of a new thing
called a computer, used for
management of our projects
on Diego Garcia.



This concludes the presentation of the major projects conducted by NMCB 62, the Minuteman Battalion, along with the Detachments of other Battalions,

deployed to Diego Garcia, British Indian Ocean Territory, in 1977.

For this deployment, NMCB 62 and its Seabees were awarded the Combat E "Best of Type" in the Atlantic Fleet, and the Peltier Award as top NMCB for that year.

The Naval Support Facility Diego Garcia is a fully functioning base, the foundation for which from the very beginning was built by Seabees!

Can Do!

