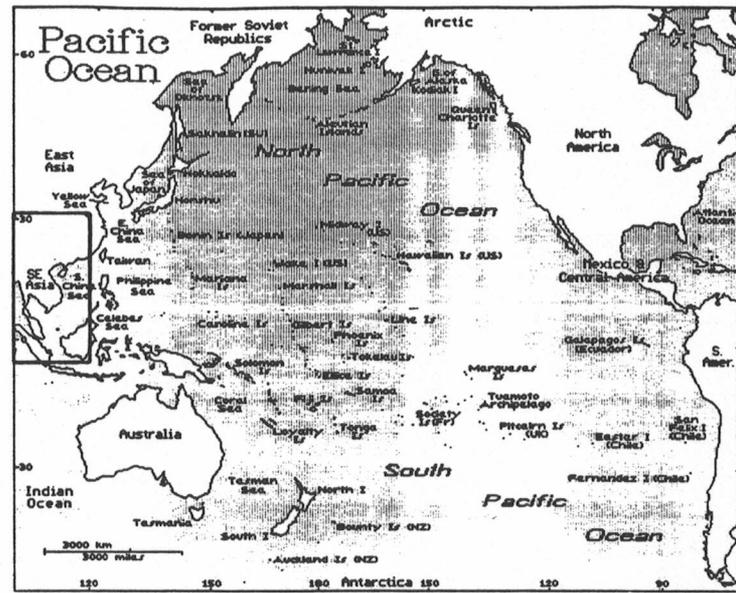
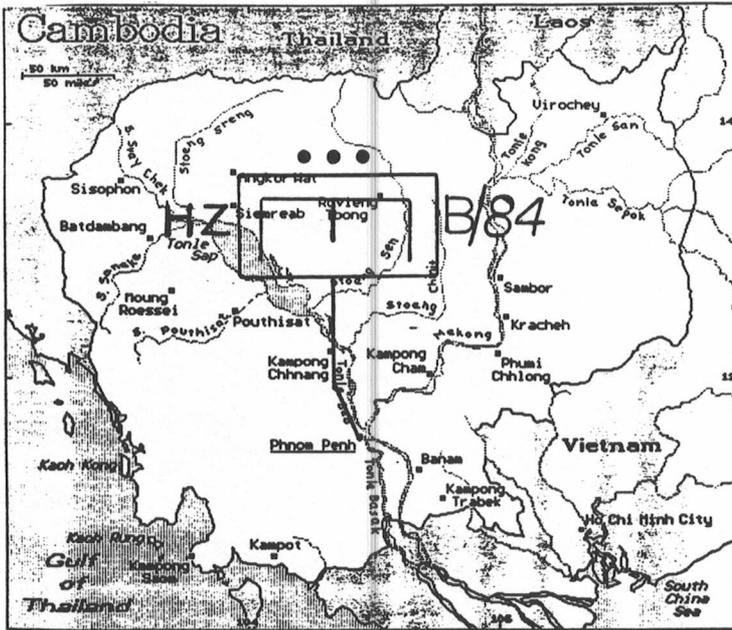




# MISSION TITLE: BAKER CARABAO I



**UNIT:** Horizontal Platoon, B Co, 84th Engineer Battalion (C)(H) (15 Soldiers)

**MISSION SITE:** Phnom Penh, Cambodia

**DESCRIPTION:** Exercise Baker Carabao I was a short term "quick fix" exercise designed to demonstrate U.S. resolve to support Cambodian efforts in the repair of its shattered road system. The focus of the exercise was the donation of 36 pieces of Humanitarian Assistance Program Excess Property (heavy road construction equipment), and a training package that would train the Royal Cambodian Armed Forces (RCAF) on the proper use and maintenance of the equipment. All training and construction took place in and around Phnom Penh.

**START DATE:** 15 July 1994

**COMPLETION DATE:** 26 Sep 1994

**ESTIMATED COST:** \$350,000 (CINC Initiative Funds)

**REMARKS:** This was the first deployment of U.S. conventional forces to Cambodia since the Vietnam conflict. Internal discontent currently exists in Cambodia and security was given special attention.



TYPICAL ROAD WITH ITS MIX OF MODERN AND TRADITIONAL TRAFFIC



RECEIVING HUMANITARIAN ASSISTANCE EQUIPMENT  
EXCESS PROPERTY (HAP-EP) FROM A BARGE AT THE PHNOM PENH PORT



MISSION OIC AND ROYAL CAMBODIAN GENERAL OFFICER DISCUSS SECURITY OF THE HAP-EP EQUIPMENT



U.S. SOLDIERS CONDUCT TRAIN -THE-TRAINER EXERCISE



RCAF SOLDIERS USE TWO TRACKED SCOOP LOADERS IN UNISON TO REMOVE A STOCKPILE



RCAF SOLDIERS LOADING A SOVIET DUMP TRUCK USING HIS U.S. ARMY TRAINED SKILLS AND U.S. SCOOP LOADERS

BAKER CARABAO 1, CAMBODIA 94

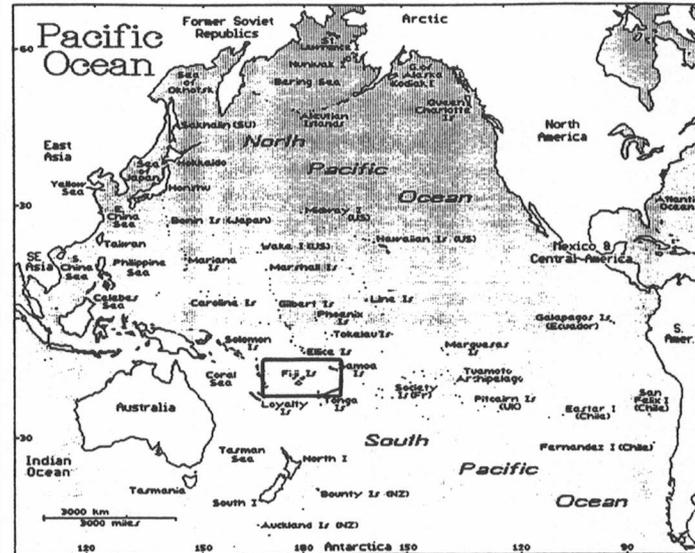
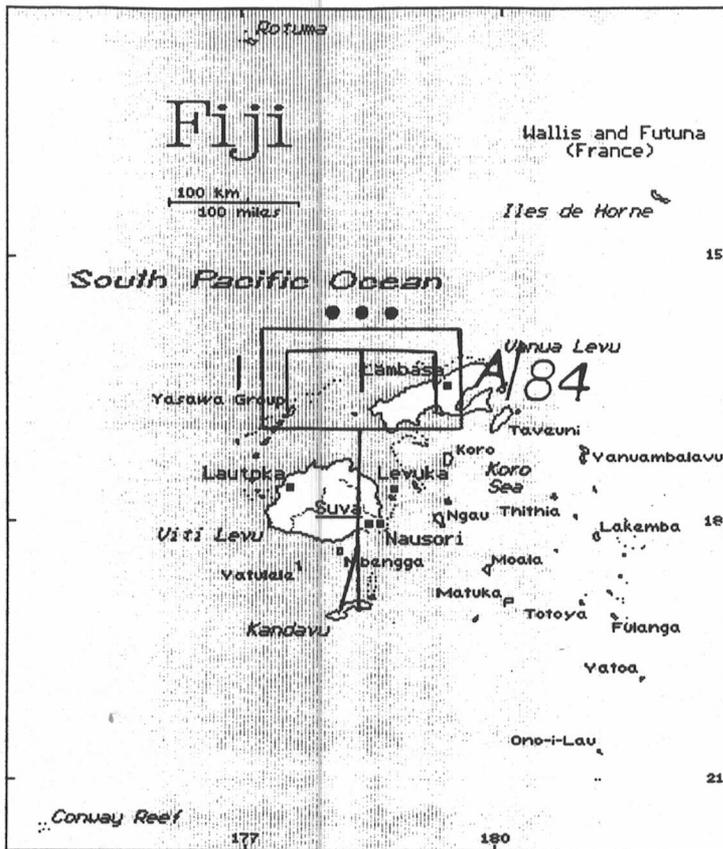


ROAD BEFORE START OF WORK ON PHASE II



TRAINING COMPLETED, ROAD 98% COMPLETE FOR CAMBODIANS TO FINISH

# MISSION TITLE: EXERCISE BAKER POWER II



**UNIT:** 1st Platoon, A Co, 84th Engineer Battalion(C)(H) (15 Soldiers)

**MISSION SITE:** Vunisea and Kadavu Coro, Kadavu Island, Republic of Fiji

**DESCRIPTION:** At Vunisea installed one hydroelectric turbine, replaced the existing penstock, constructed a wood house for the turbine, and constructed 2 timber footbridges with concrete footers and abutments. At Kadavu Coro built a concrete masonry block addition to the existing powerhouse, and expanded the power grid to include neighboring schools, hospitals, and the airport.

**START DATE:** 8 Aug 1994

**COMPLETION DATE:** 15 Oct 1994

**ESTIMATED COST:** \$157,000.00 (USARPAC Expanded Relations Program)  
\$105,000 (TITLE 10)

**REMARKS:** Joint training exercise with the 249th Engineer Battalion (Prime Power) and the Fijian Military Forces at two separate sites, one extremely remote and undeveloped and one military outpost. Conditions and facilities were primitive, with no roads available, and transportation limited. Marine airlift provided transportation to Fiji and return to Hawaii.

BAKER POWER II

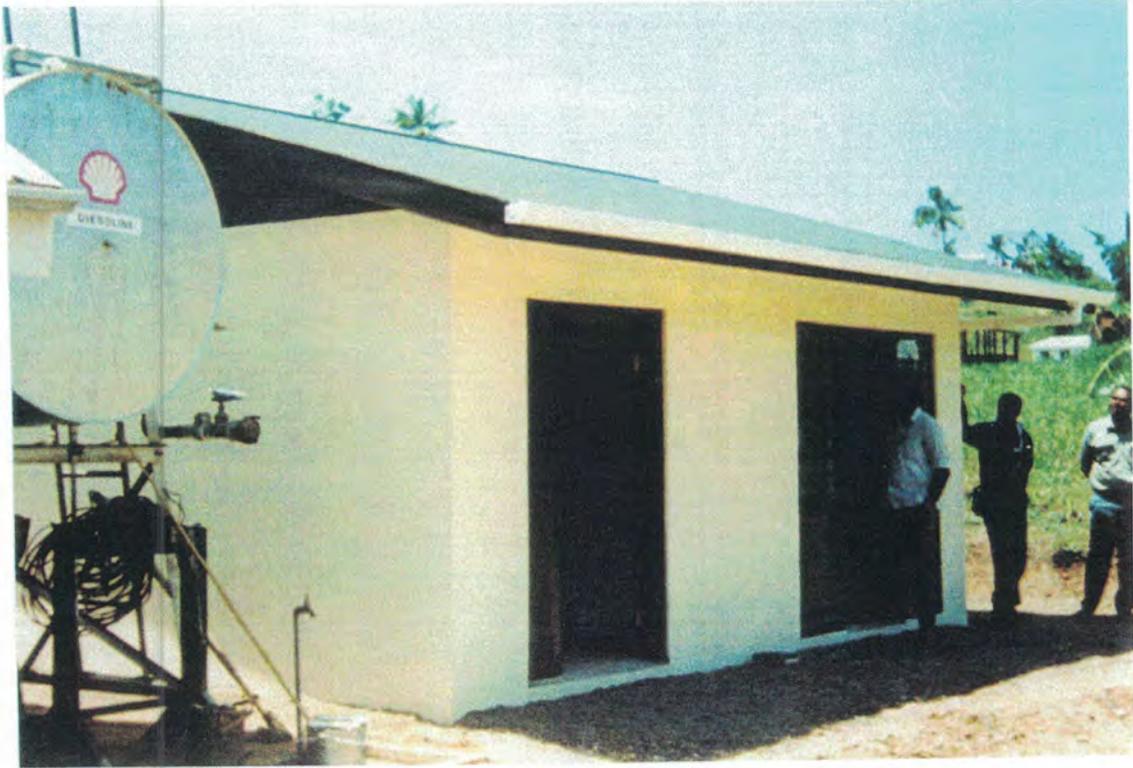


U.S. AND FIJIAN SOLDIERS WORK TOGETHER

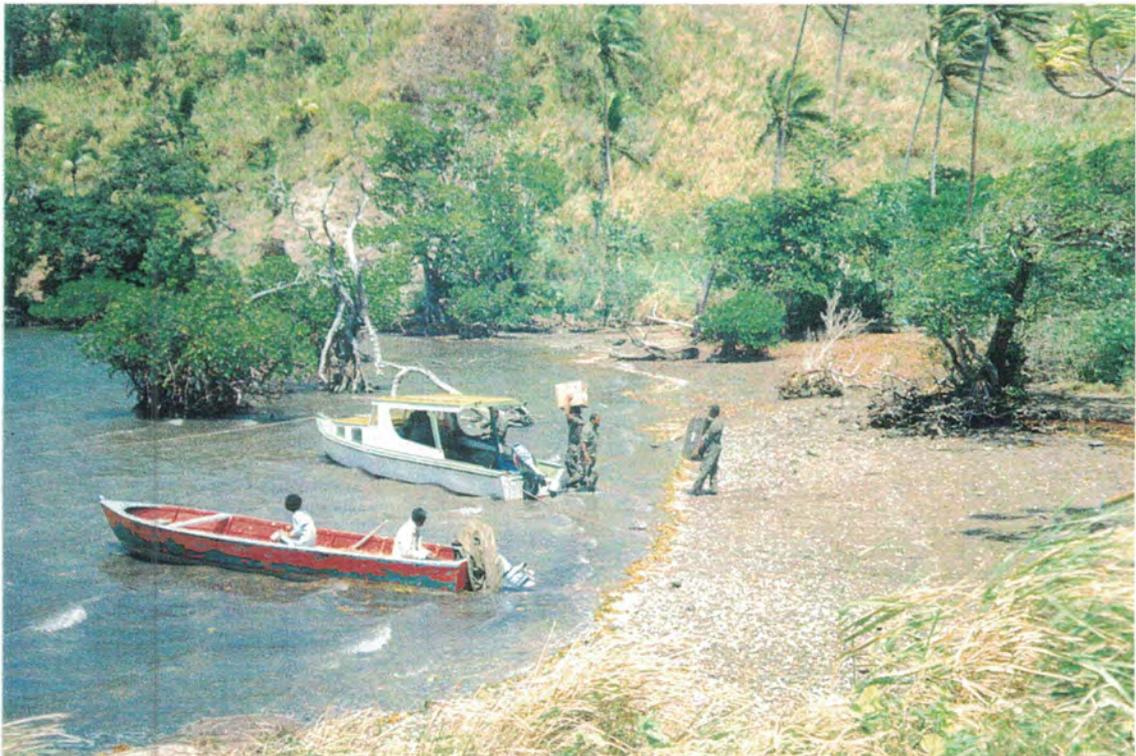


CONSTRUCTION OF OFFICE AND STORAGE ROOM FOR GENERATOR OPERATORS

BAKER POWER II



COMPLETED OFFICE AND STORAGE ROOM



PRIMARY MODE OF TRANSPORTATION FOR PERSONNEL, SAND, GRAVEL AND SUPPLIES

BAKER POWER II



COMPLETED BRIDGE

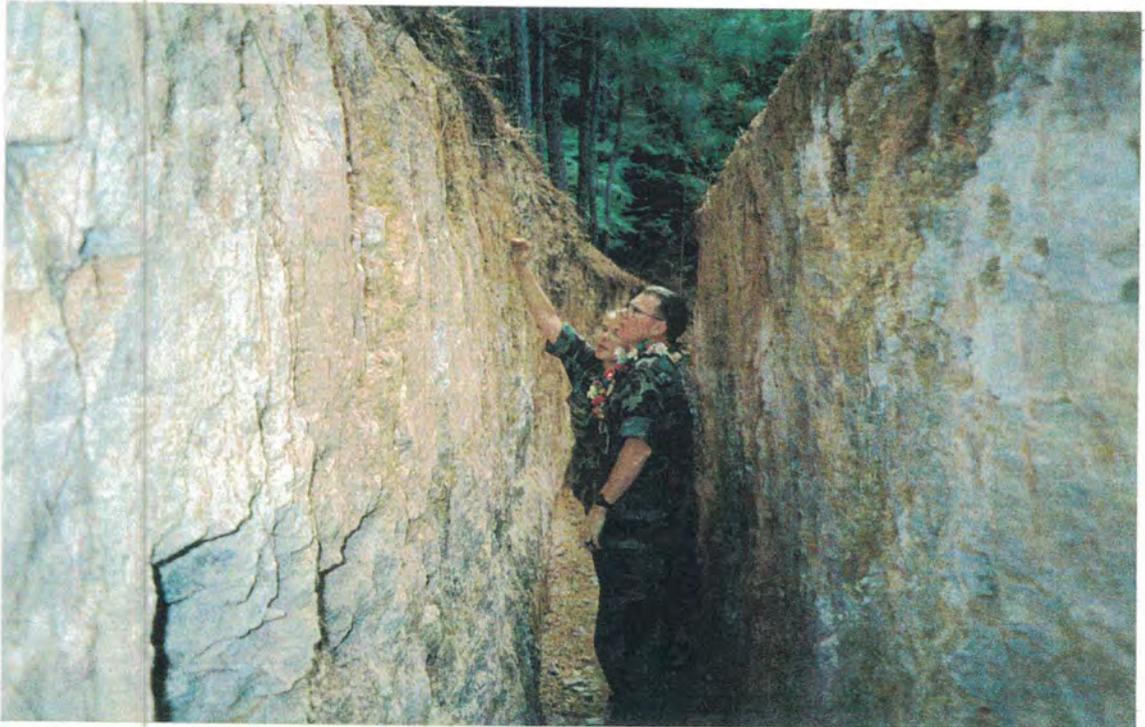


DEDICATION AND OPENING OF ONE OF TWO 100 FOOT LONG FOOT BRIDGES  
CONSTRUCTED

BAKER POWER II



MANUALLY DIGGING THE PENSTOCK TRENCH



BATTALION COMMANDER INSPECTING THE WORK DURING COMMAND VISIT  
(LOCAL CUSTOMS RESTRICTED THE WEAR OF HATS)

BAKER POWER II

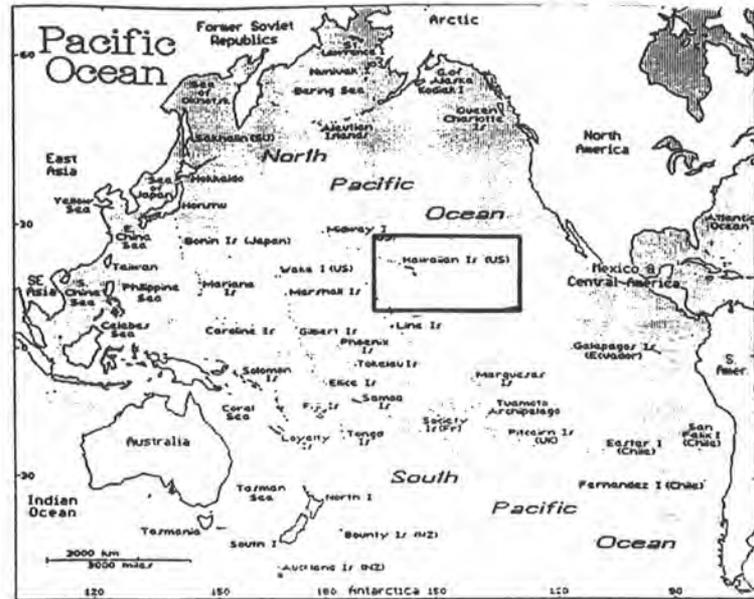
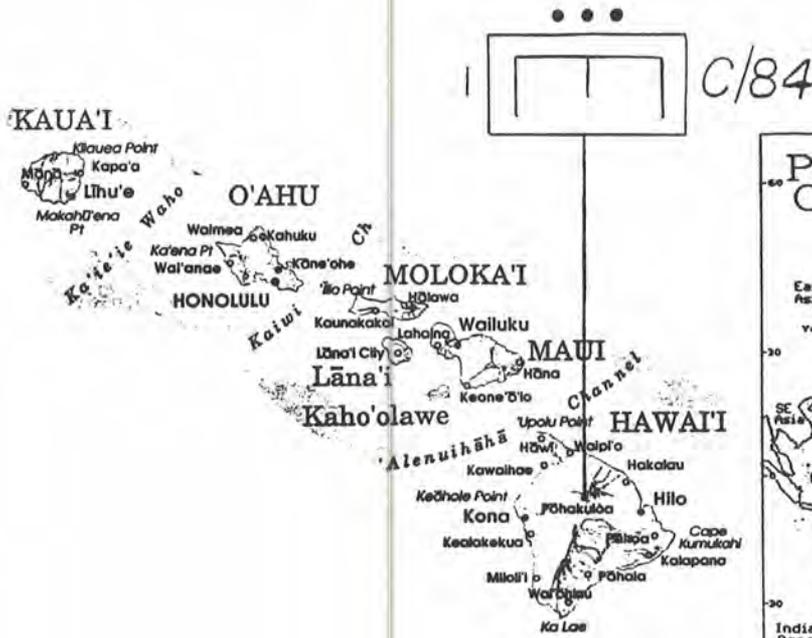


DAMMING STREAM AND INSTALLING INLET TO 8" PENSTOCK



TURBINE SHED - NOTE 8" OUTLET

# MISSION TITLE: CRASH/RESCUE STATION PHASE III



**UNIT:** 1st Platoon, C Company, 84th Engineer Battalion (C)(H)  
[29 Engineers]

**MISSION SITE:** Bradshaw Army Airfield, Pohakalua Training Area (PTA), Big Island of Hawaii

**DESCRIPTION:** This was the interior phase of a 120 ft x 50 ft Crash/Rescue Station constructed of a corrugated metal and steel I beam exterior. Construction consisted of 15 rooms to include; 6 dorms, latrine, kitchen communications, dayroom, and several offices. Additionally a 20ft x 48ft sewage leach field was installed.

**START DATE:** 29 Jan 1994

**COMPLETION DATE:** 24 Feb 1994

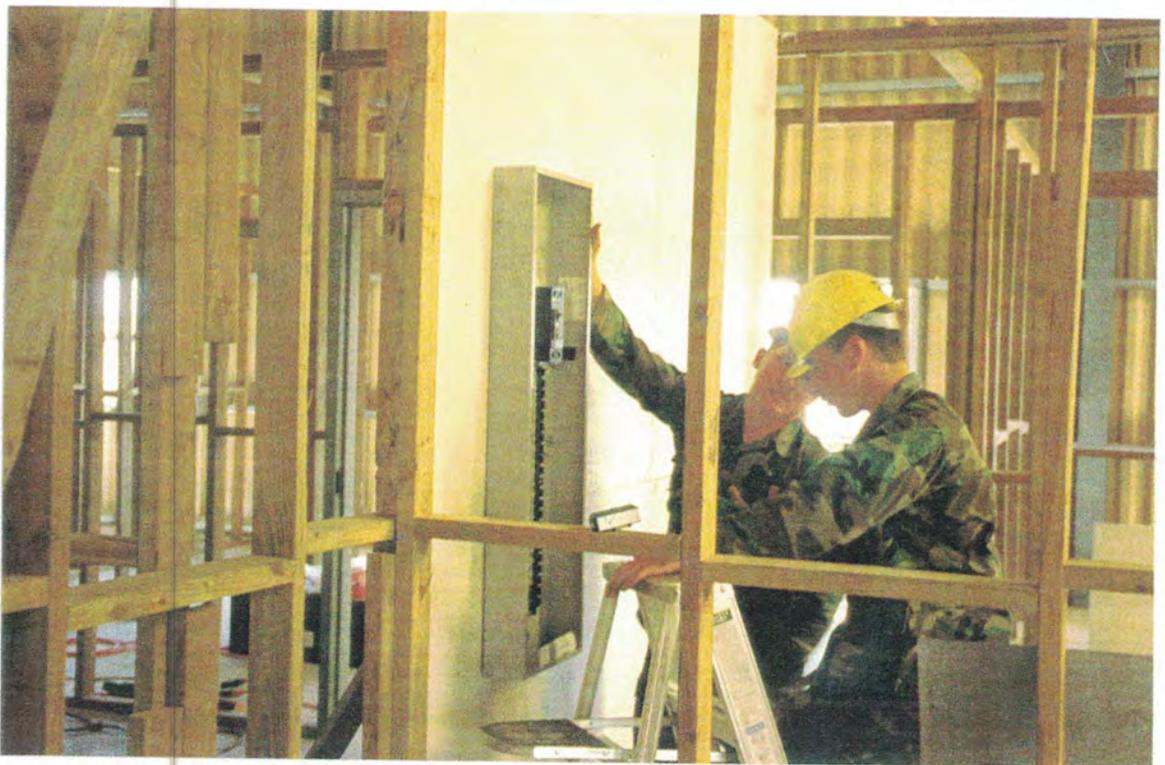
**ESTIMATED COST:** \$278,000

**REMARKS:** The Crash/Rescue Station is one of the larger troop construction missions done by the 84th Engineer Battalion. Constructed over a three year time frame; Bravo Company constructed the concrete slab in 1992, the exterior shell in 1993, and Charlie Company completed the interior in 1994.

PTA CRASH/RESCUE STATION PHASE III



CARPENTERS INSTALLING THE CEILING JOISTS

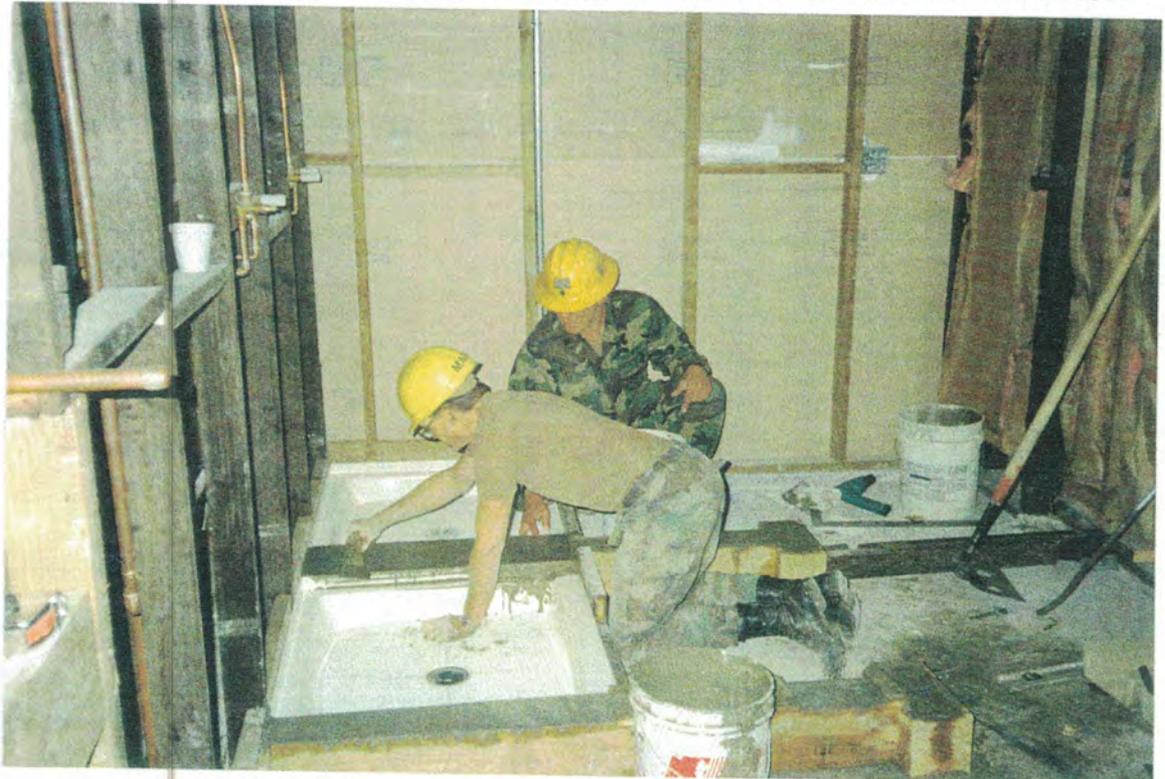


NCO TRAINING A SOLDIER TO INSTALL AN ELECTRICAL PANEL BOX

PTA CRASH/RESCUE STATION PHASE III

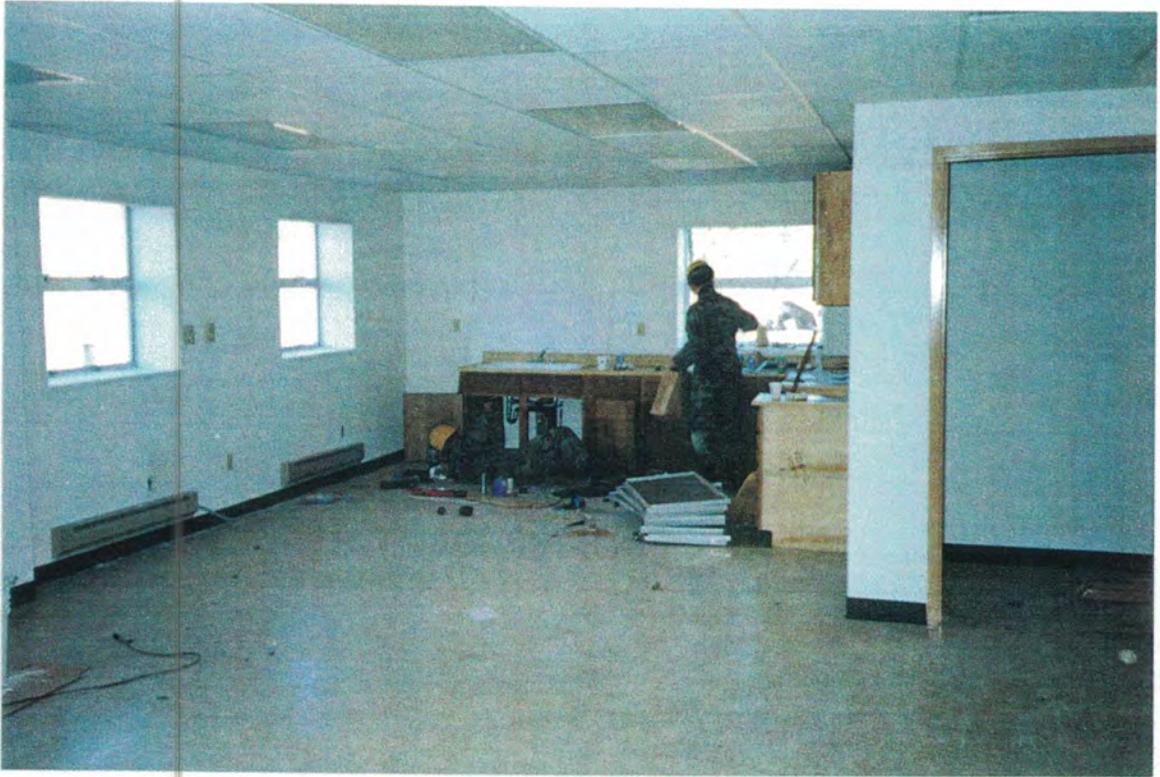


INSTALLING THE ELECTRICAL WIRE IN THE CRASH/RESCUE STATION

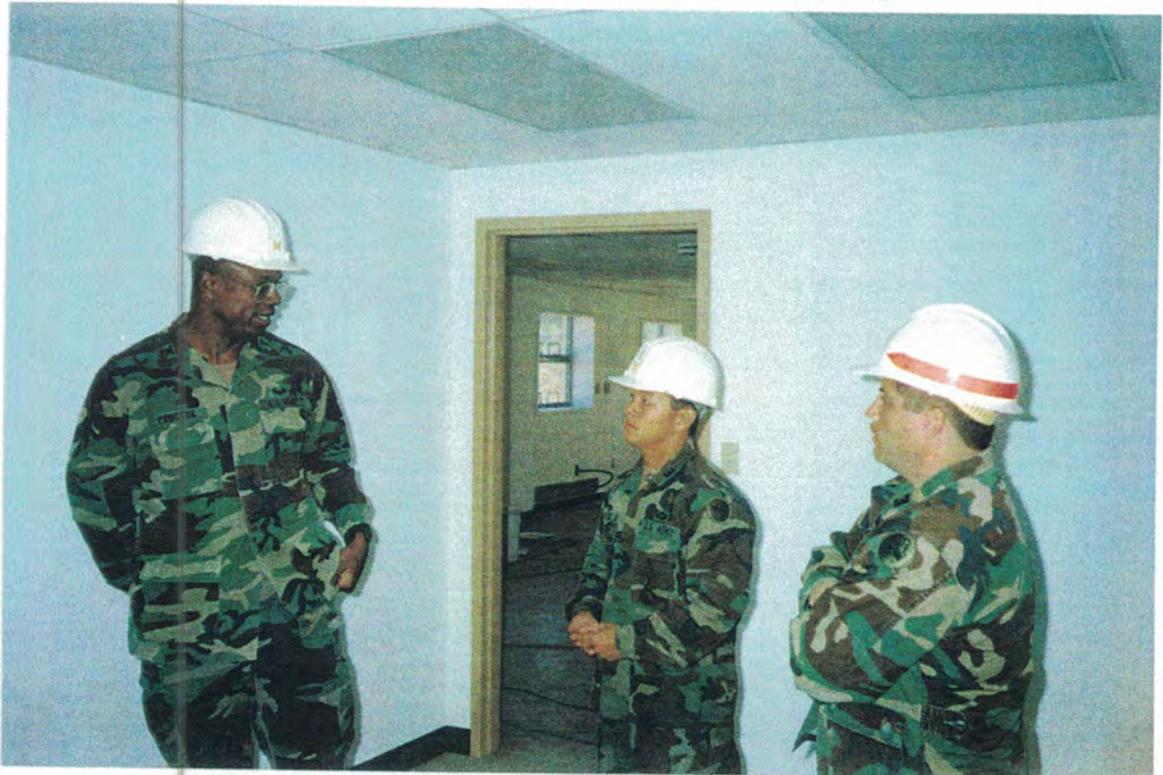


PLACING CONCRETE FOR SHOWER PARTITION BASES

PTA CRASH/RESCUE STATION PHASE III



INSTALLING THE KITCHEN PLUMBING



GROUP COMMANDER INSPECTS A FINISHED OFFICE ROOM

PTA CRASH/RESCUE STATION PHASE III

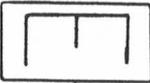


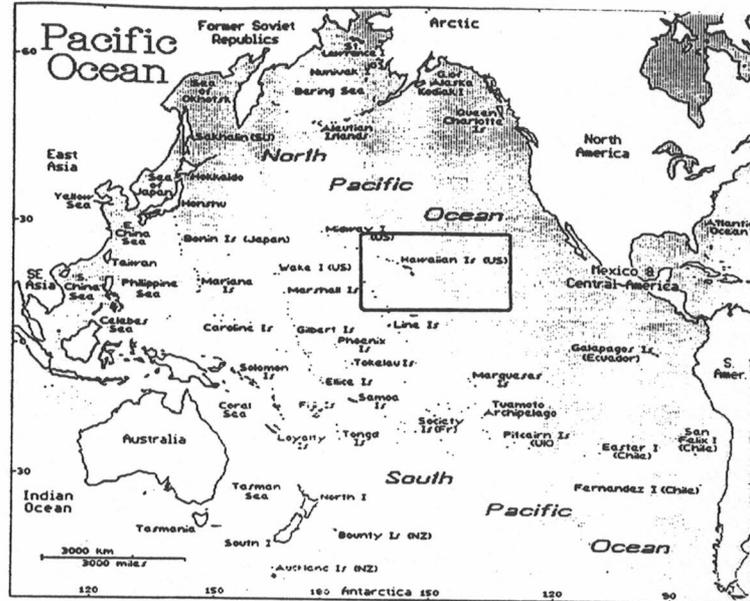
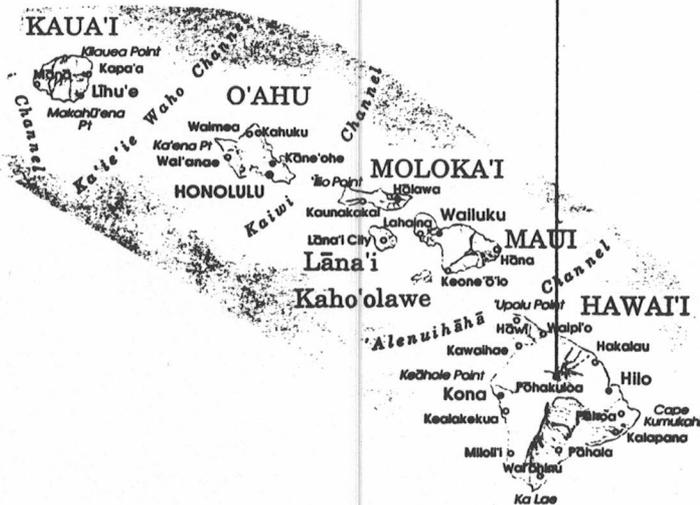
WORKING TO GET THE CORRECT SLOPE ON THE 48 FOOT LONG LEACH FIELD



FINAL VIEW OVERLOOKING THE COMPLETED LEACH FIELD

**MISSION TITLE: POHAKALUA TRAINING AREA ROAD AND RANGE UPGRADE**

HZ  C/84



**UNIT:** Horizontal Platoon, C Company , 84th Engineer Battalion (C)(H)  
[25 Engineers]

**MISSION SITE:** Ahi and Mikilua Roads, Lightning Trail, Range 1,4,5,7,10, and 17 upgrades; Pohakalua Training Area (PTA), Big Island of Hawaii

**DESCRIPTION:** Re-cindered surface and travelway of 10 km of road and built 1.5 km of roads; broke up and spread 11 acres of lava rock on the Live Fire Assault Course due to the large rocks causing soldiers injuries; constructed a 50 m x 50 m square bermed area 10 ft high with a 1 to 1 slope for a storage area; shaped, resurfaced, compacted, and spread cinder over loose rock on multiple access roads and parking lots. Built Forward Area Ammunition and Refueling Point (FAARP).

**START DATE:** 31 Jan 1994

**COMPLETION DATE:** 22 Feb 1994

**ESTIMATED COST:** \$ 53,359

**REMARKS:** Much of this work was done to prevent soldier injury on the ranges and to upgrade the existing roads and parking lots.

PTA ROAD AND RANGE UPGRADE



PUSH LOADING ROCK INTO SCRAPERS WITH DOZERS



DOZER COMPACTING THE BERMS OF FOWARD AREA AMMUNITION AND REFUELING POINT STORAGE AREA IN LAVA FIELD

PTA ROAD AND RANGE UPGRADE



LOADING A 5 TON DUMP TRUCK AT BORROW PIT

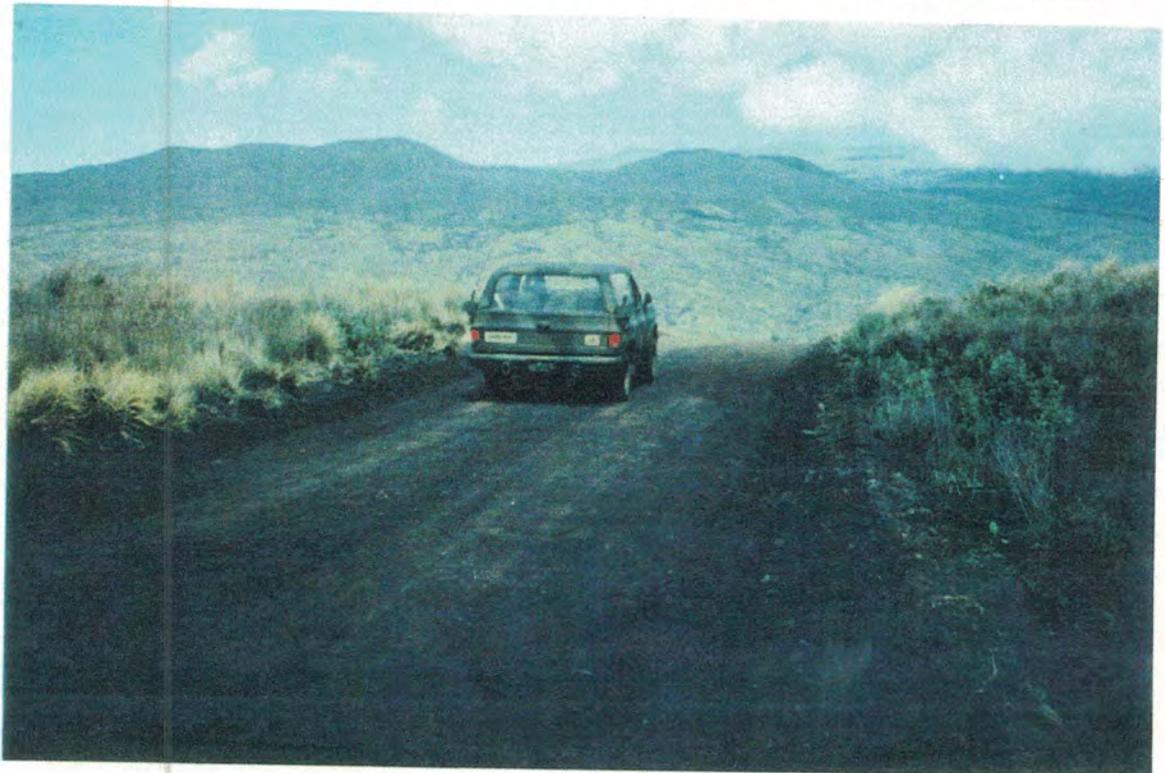


BORROW PIT OPERATIONS AT PTA

PTA ROAD AND RANGE UPGRADE

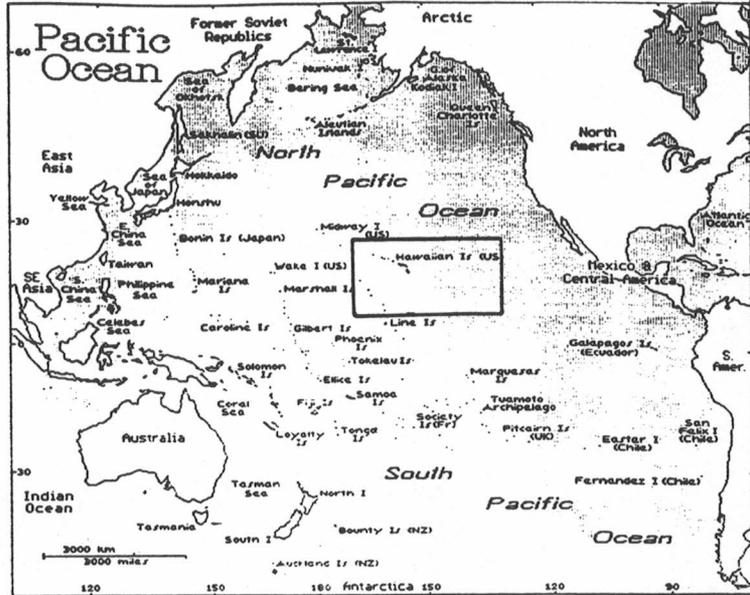
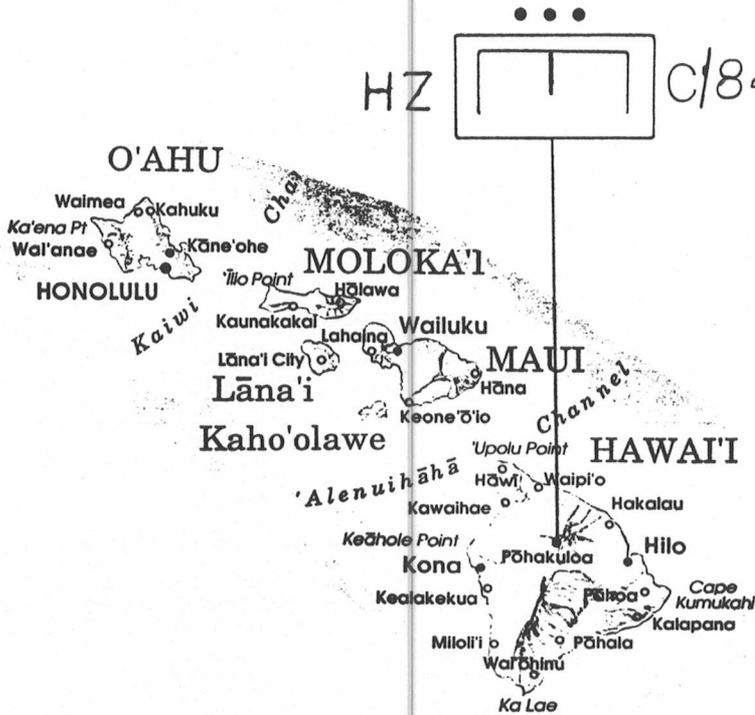


AHI ROAD SEVERELY RUTTED AND COVERED WITH LARGE ROCKS



AHI ROAD AFTER CONSTRUCTION

# MISSION TITLE: MO'OKINI CULVERT UPGRADE



**UNIT:** Horizontal Platoon, C Company, 84th Engineer Battalion (C)(H)  
[5 Engineers]

**MISSION SITE:** Mo'okini Heiau, Hawaii

**DESCRIPTION:** Removed the crumbling head and exit walls, extended 60 inch culvert by 10 feet on each side. Rebuilt headwalls and exit walls.

**START DATE:** 31 Jan 1994

**COMPLETION DATE:** 8 Feb 1994

**COST:** Funded by Mo'okini Luakini Foundation

**REMARKS:** This was a Domestic Action Project. The existing culvert was deteriorating to the point of making the road hazardous to travel on. Large boulders from the area were moved and placed to construct the head and exit

# MO'OKINI CULVERT UPGRADE

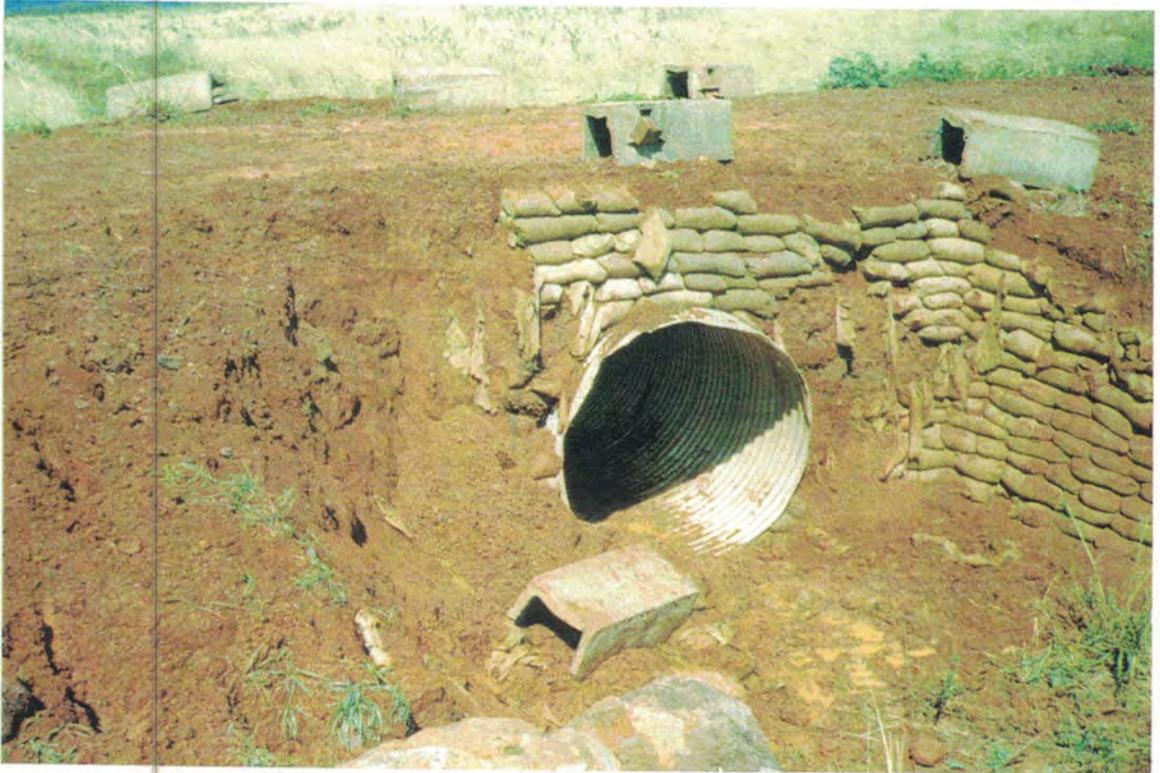


PLACING THE 10 FOOT SECTION OF 60" CULVERT



4" TO 6" LIFTS WERE HAND COMPACTED AROUND THE CULVERT

## MO'OKINI CULVERT UPGRADE

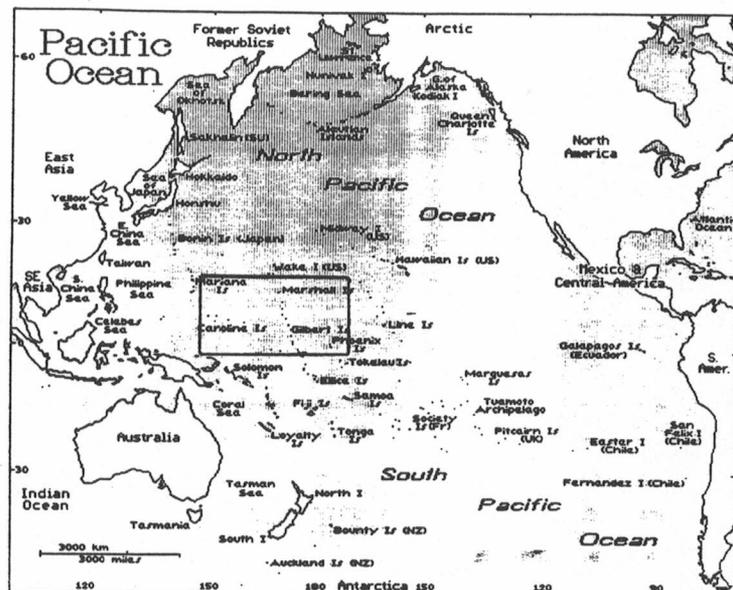
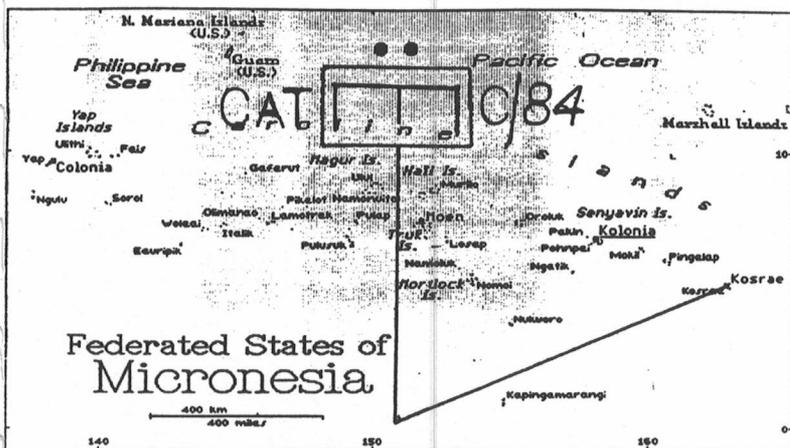


HEADWALL BEFORE, WITH AN 8 FOOT ROAD WIDTH



HEADWALL AFTER, WITH A 15 FOOT ROAD WIDTH

# MISSION TITLE: CIVIC ACTION TEAM 84-45



**UNIT:** CAT 84-45, C Co, 84th Engineer Battalion(C)(H) (14 Soldiers)

**MISSION SITE:** Kosrae, Federated States of Micronesia

**DESCRIPTION:** The Civic Action Team (CAT) deployed to Kosrae for 6 months. The team completed construction missions, medical civic action programs, a formal job trainee program and a community relations program. Some of the missions are described below.

**START DATE:** 4 March 1994

**COMPLETION DATE:** 20 August 1994

**ESTIMATED COST:** Funded by the Federated States of Micronesia and the United States

**REMARKS:** The team consisted of 12 Active Duty soldiers augmented by two Reserve medics. The team upgraded a farm road, prepared a site for construction of a tennis court, constructed a stairway on a government office building, continued construction of a major water line system, completed 15 technical assist projects and 3 major camp improvement projects. Several Plumbing Assistance and Medical Assistance Programs were performed throughout the deployment. This site is permanently manned with new teams rotating in every six months.

KOSRAE CAT TEAM (84-45)



U.S. SOLDIER AND 3 TRAINEES REPAIR GRADER TIRE

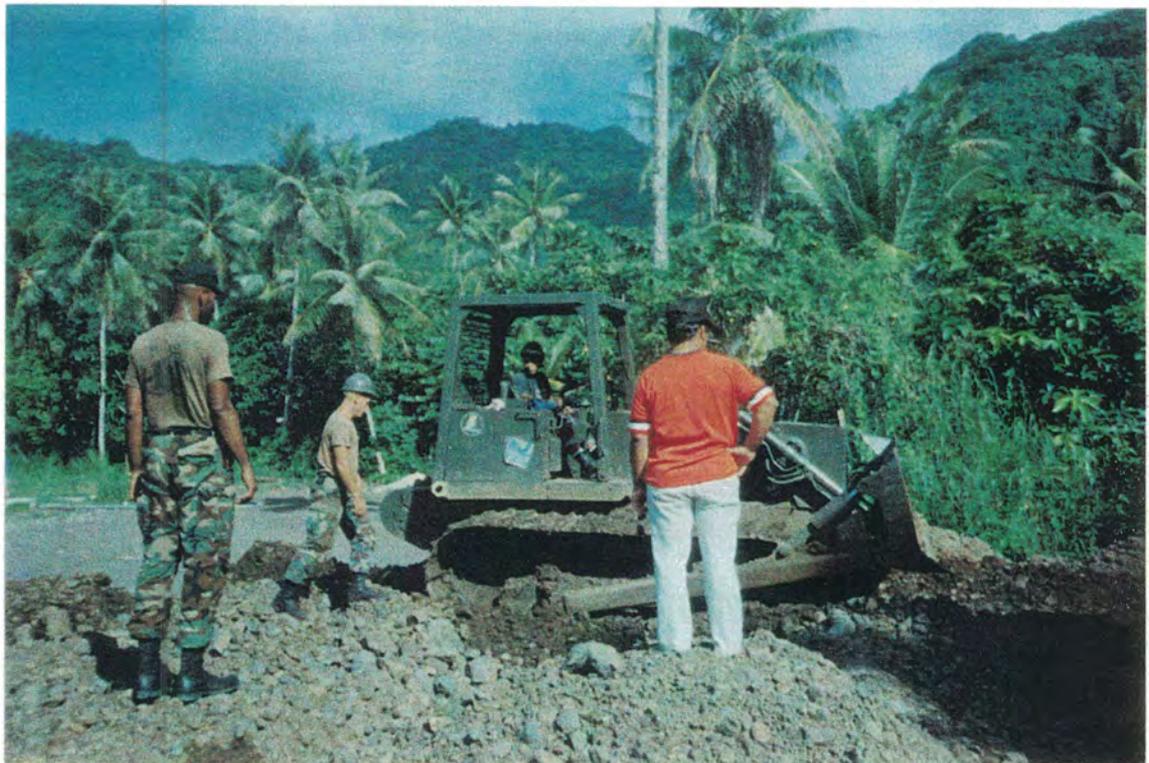


SOLDIER AND TRAINEE PERFORM PMCS ON BULLDOZER

KOSRAE CAT TEAM (84-45)



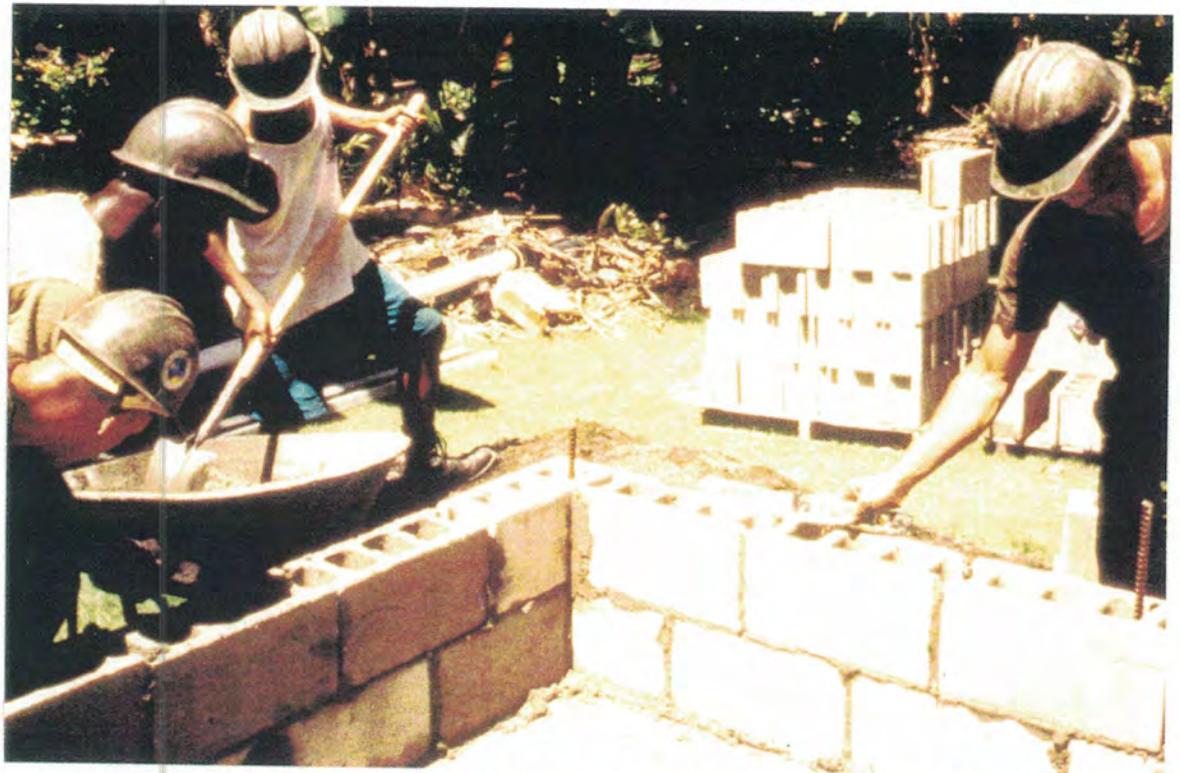
LAYING GRAVEL IN TECHNICAL ASSIST MISSION AT HIGH SCHOOL GYMNASIUM



SUPERVISED TRAINEE BEGINNING GROUND WORK FOR TENNIS COURT



SOLDIERS AND APPRENTICES CONSTRUCTING STAIRWAY FOR  
GOVERNMENT OFFICE BUILDING



LAYING BLOCK WHILE CONSTRUCTING A FEMALE LATRINE

KOSRAE CAT TEAM (84-45)

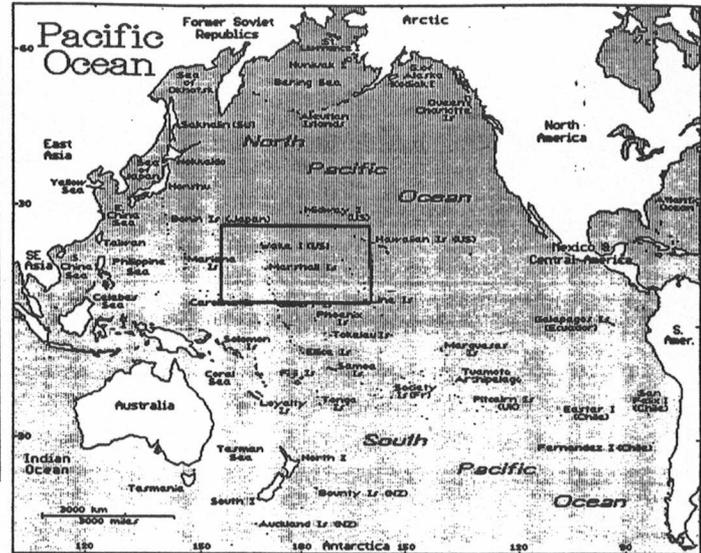
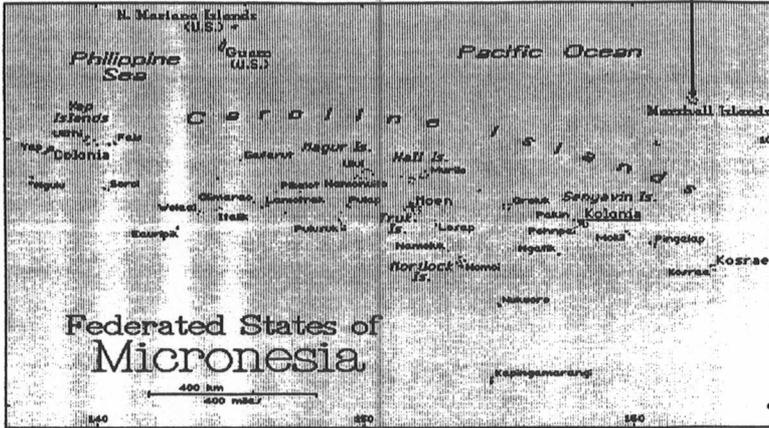
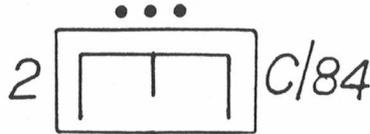


CAT SOLDIERS PARTICIPATE IN WEEKLY BALL GAMES WITH LOCALS



CAT COMMANDER HOLDING MONTHLY MEETING WITH LOCAL MAYORS

# MISSION TITLE: KWAJALEIN 94, MACY'S WEST



**UNIT:** 2nd Platoon, C Co, 84th Engineer Battalion (C)(H) (35 Soldiers)

**MISSION SITE:** United States Army Kwajalein Atoll (USAKA), Republic of the Marshall Islands

**DESCRIPTION:** The platoon deployed to Kwajalein Atoll to construct a 103'x38' concrete masonry block retail facility from the ground up. The construction included the placement of the footers, pad, 13 courses of CMU block, installation of electrical and plumbing fixtures, metalwork and finished interior work for seven rooms.

**START DATE:** 14 Jun 1994

**COMPLETION DATE:** 12 Aug 1994

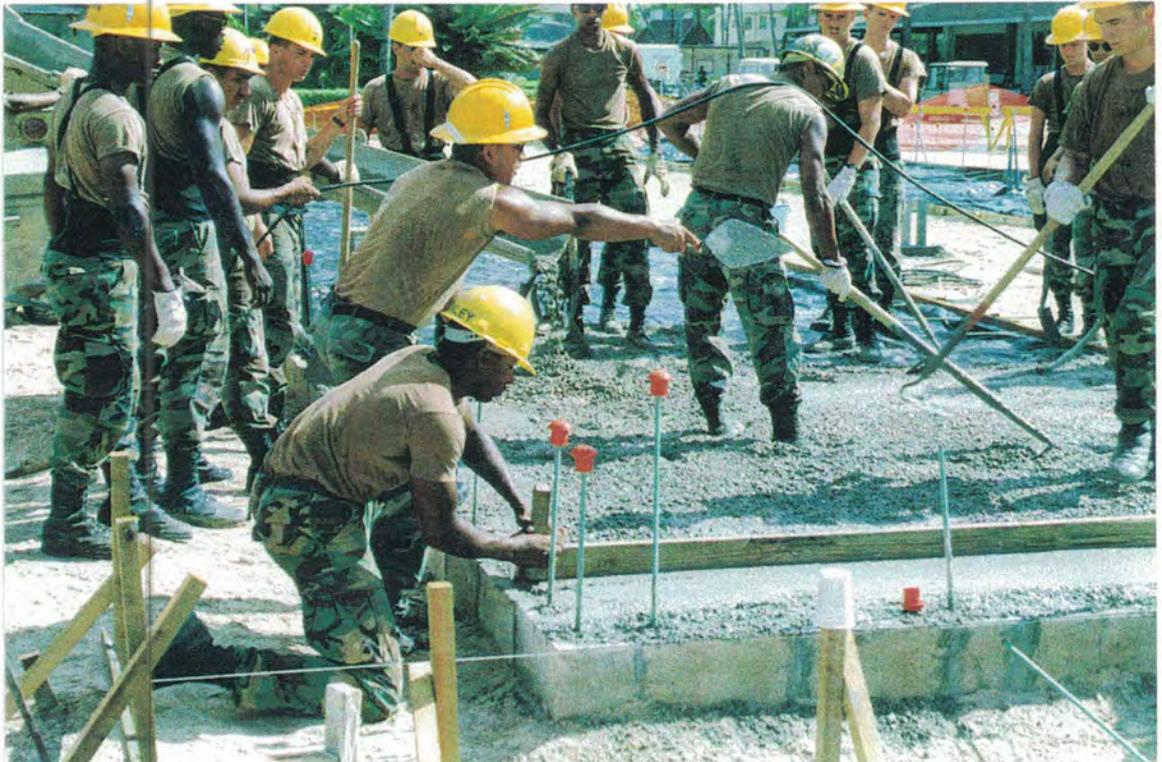
**ESTIMATED COST:** \$295,000 (USAKA Funded)

**REMARKS:** The soldiers learned valuable trades to include metal working, finished interior work, and carpet laying, which are not normally done by soldiers. The close interaction with USAKA personnel and the use of Kwajalein's facilities contributed to a great finished product.

KWAJALEIN 94, MACY'S WEST

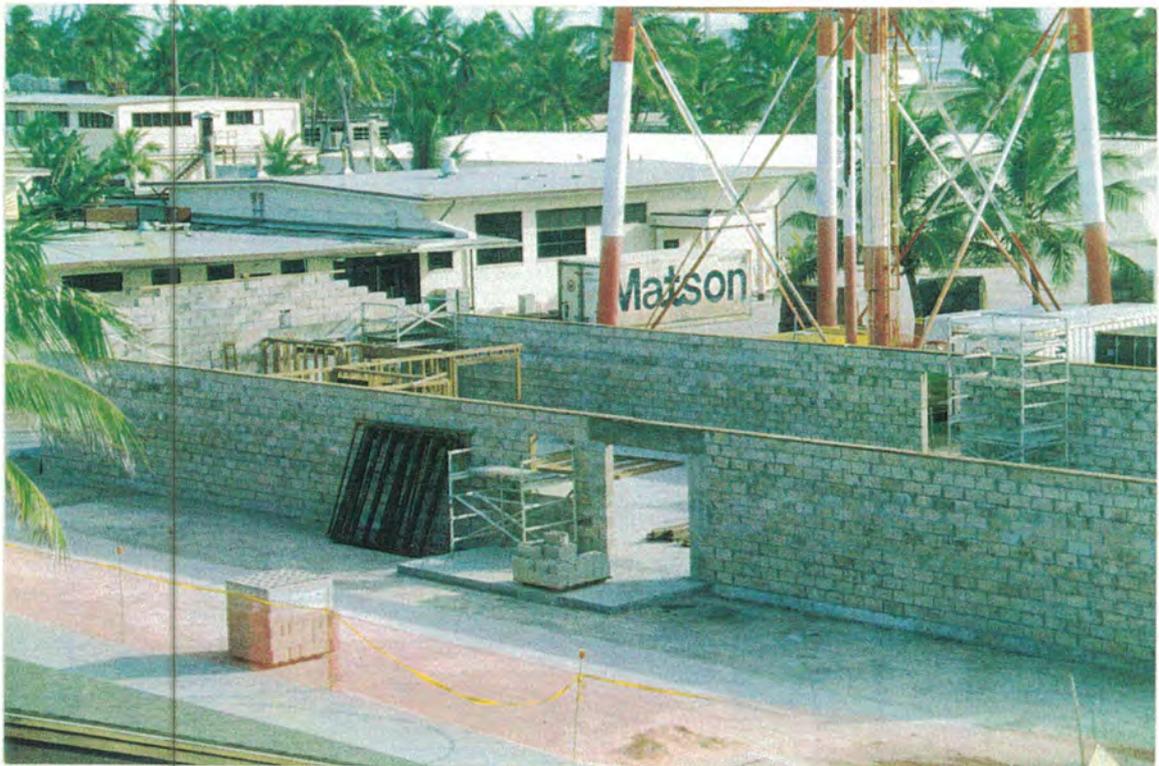


PLACING FORMWORK FOR 103' X 38' CONCRETE PAD



PLACING THE CONCRETE PAD

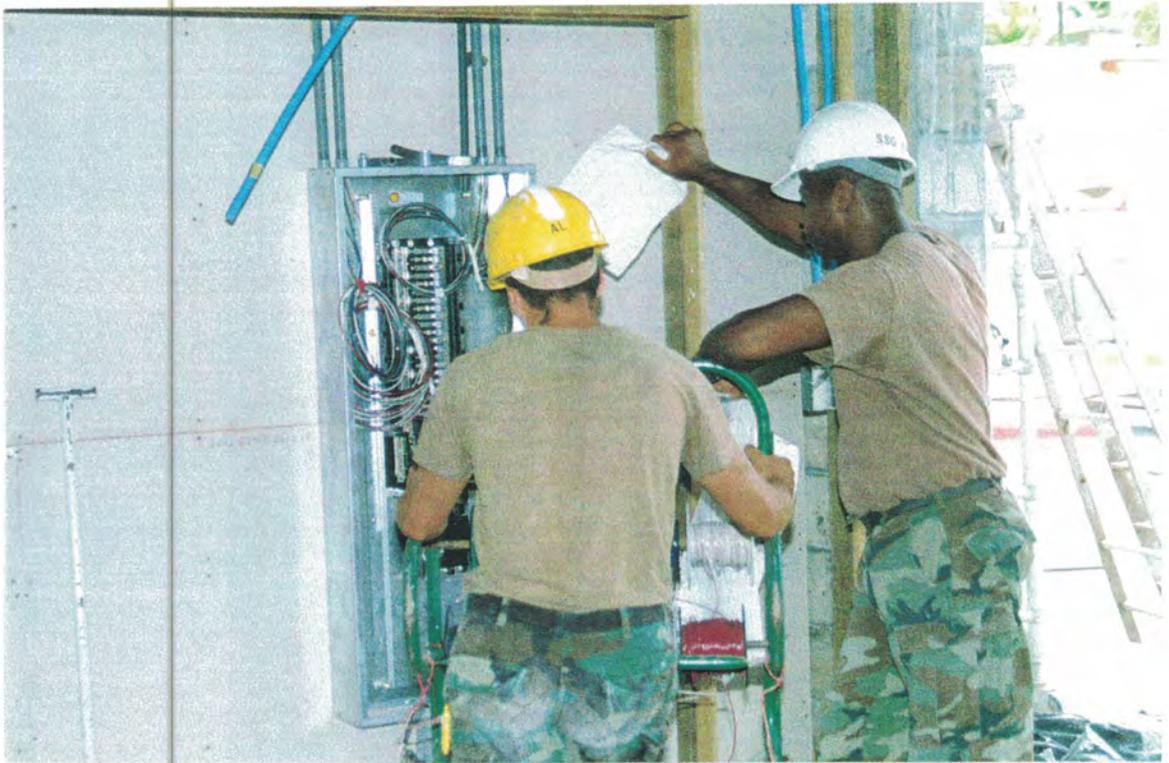
KWAJALEIN 94, MACY'S WEST



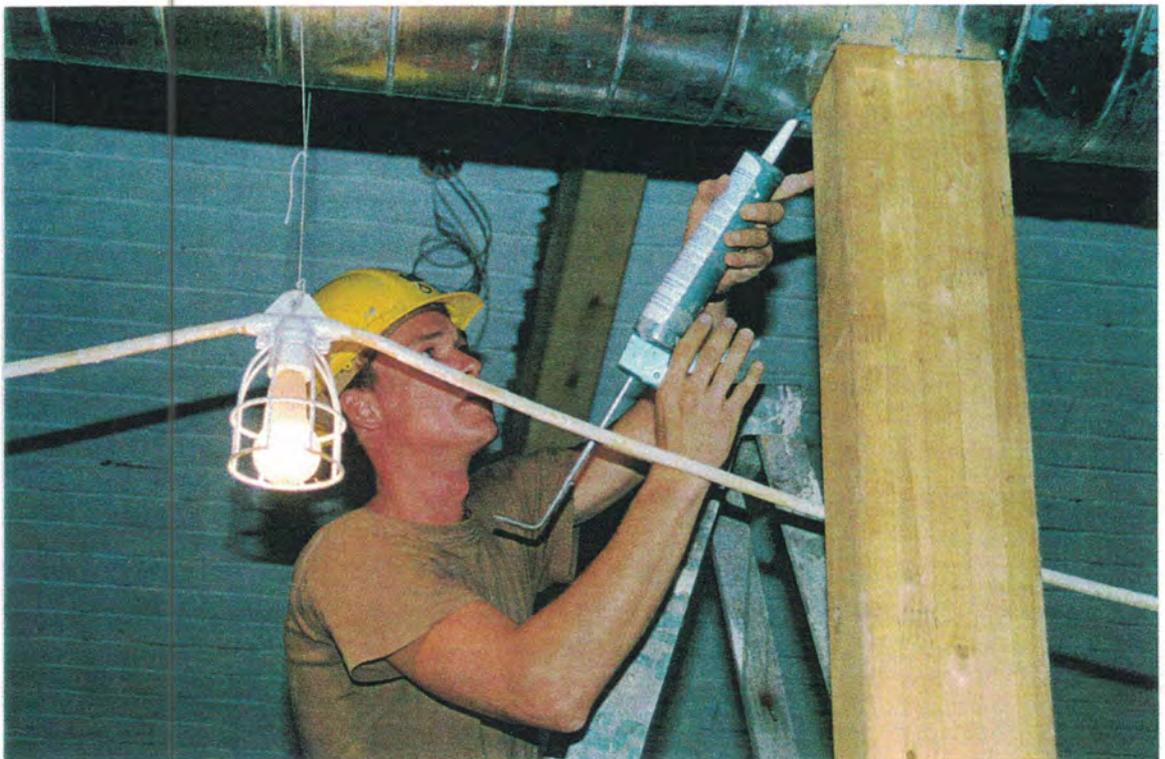
THE COMPLETED CMU WALL



U.S. SOLDIERS WORK AT SHINGLING THE ROOF

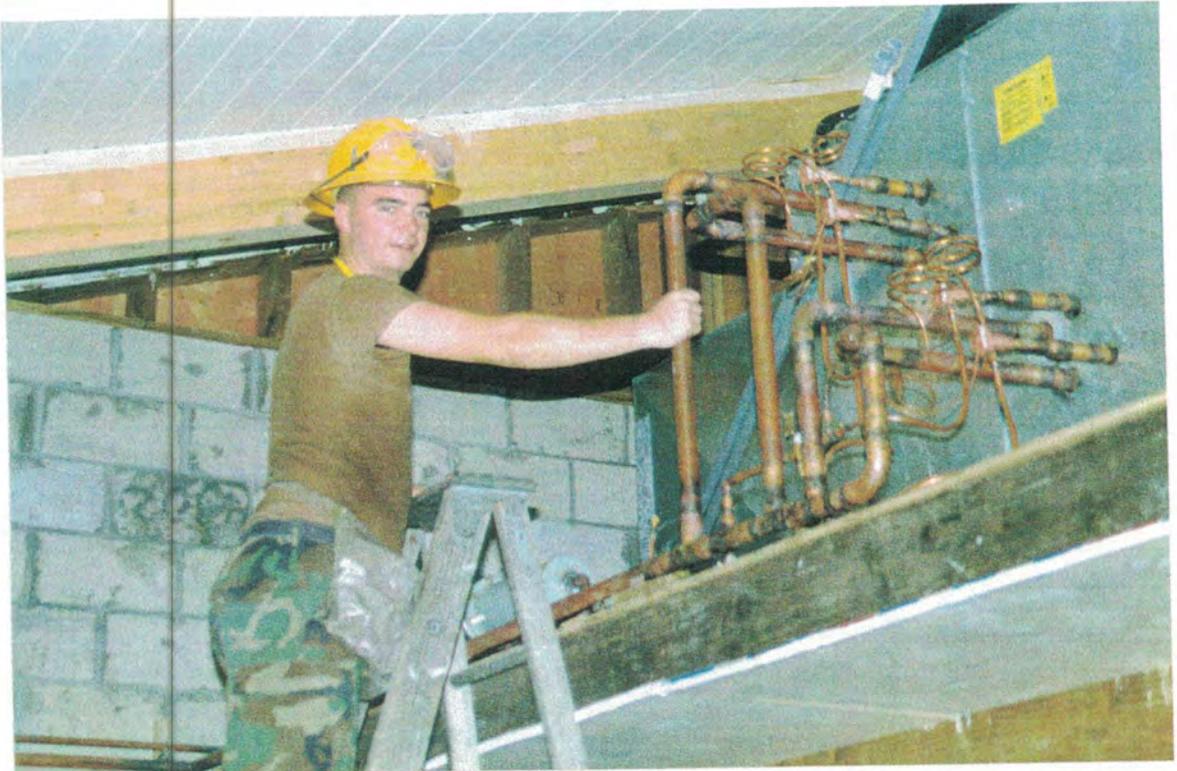


INSTALLATION OF THE THREE PHASE ELECTRICAL SYSTEM

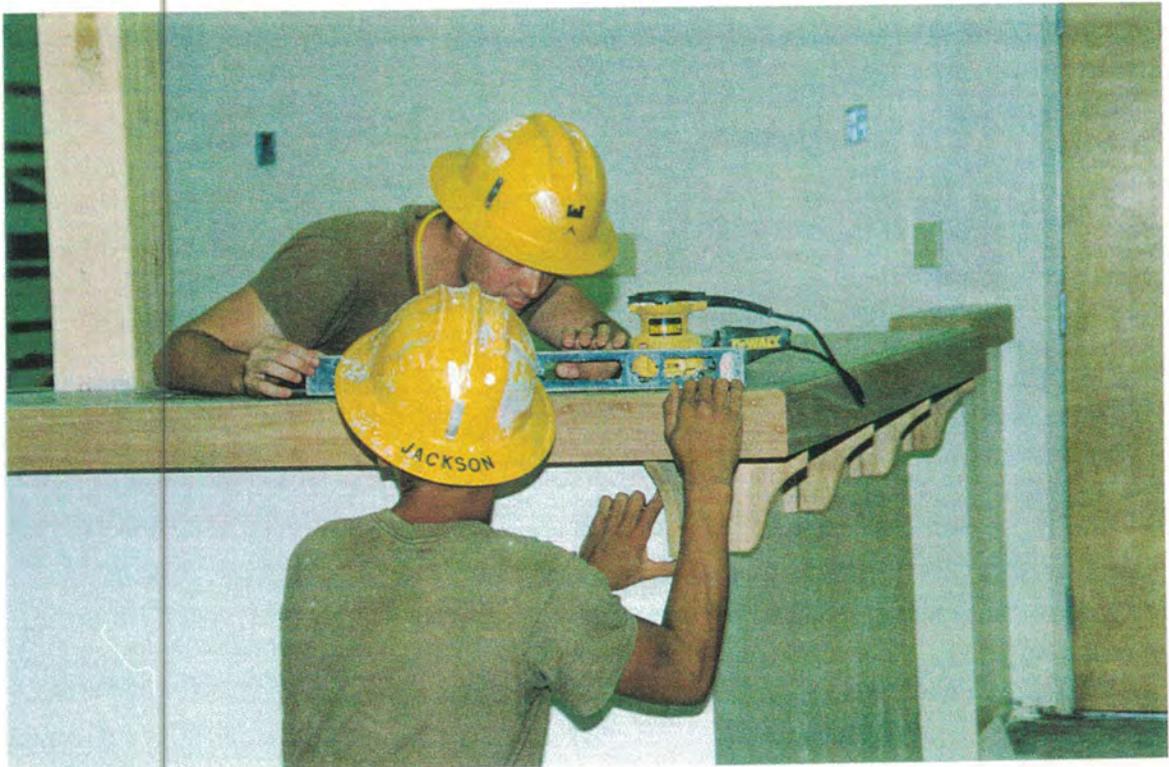


US. SOLDIER CAULKING THE AIR HANDLER DUCTWORK

KWAJALEIN 94, MACY'S WEST

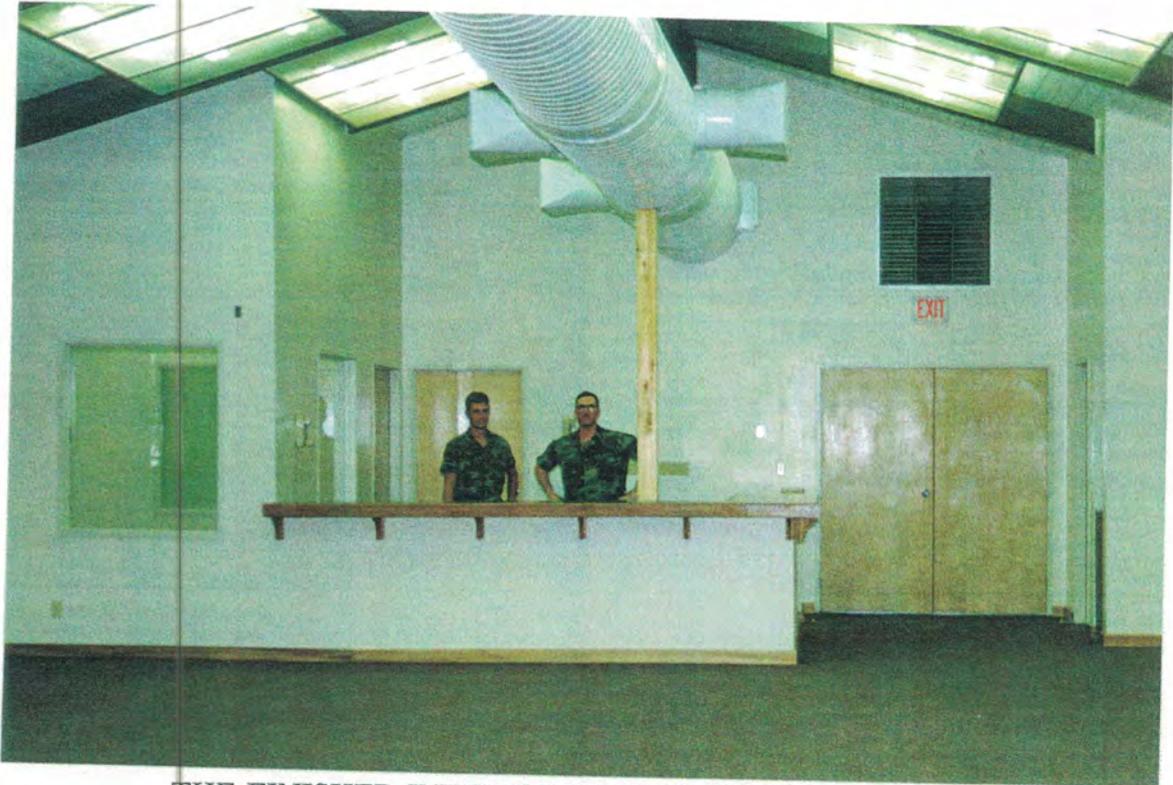


SOLDIER TESTING PRESSURE OF THE AIR HANDLER SYSTEM



U.S. SOLDIERS FINISH LEVELING THE COUNTERTOP THEY BUILT

KWAJALEIN 94, MACY'S WEST

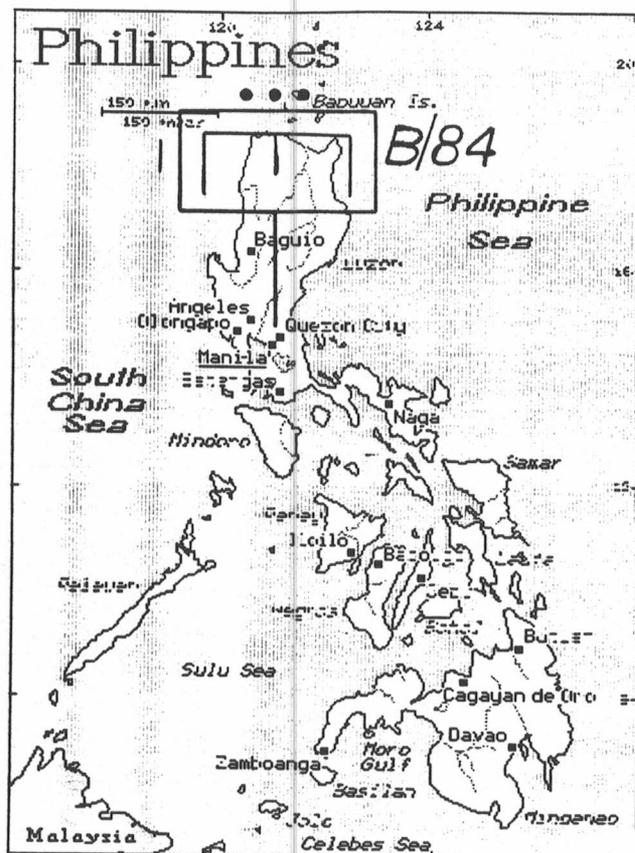


THE FINISHED INTERIOR MACY'S WEST, KWAJALEIN



MISSION COMPLETE, MACY'S WEST, USAKA

# MISSION TITLE: BALIKATAN 94



**UNIT:** 1st Platoon, B Company, 84th Engineer Battalion (C)(H)  
[25 Soldiers]

**MISSION SITE:** Biak Na Bato, Philippines

**DESCRIPTION:** Renovated a 20 ft x 80 ft three room elementary school; constructed a 66 ft x 80 ft multipurpose pavement, and constructed a 16 ft x 33 ft six room health center consisting of concrete masonry block with wooden trusses and corrugated metal roofing.

**START DATE:** 29 Oct 1994

**COMPLETION DATE:** 17 Nov 1994

**ESTIMATED COST:** \$28,000 (Title 10 Funds)

**REMARKS:** This was part of the JCS Exercise Balikatan in which construction was performed jointly with 29 soldiers of the 51st Engineer Brigade in the Philippines. U.S. soldiers had to travel from the base camp at Sibul Springs to the job site, Baik Na Bato approximately 50 minutes, each way, daily.

BALIKATAN 94 SCHOOL RENOVATION



PFC WOODS ASSISTS THE FILIPINO SOLDIERS IN EXCAVATING THE GROUND FOR THE SIDEWALK AND DRAINAGE DITCH



US AND FILIPINO SOLDIERS PLACE THE FIRST OF 55 SHEETS OF PLYWOOD FOR THE CEILING

BALIKATAN 94 SCHOOL RENOVATION



THE EXISTING 80FT X 20FT, ELEMENTARY SCHOOL



COMPLETED SCHOOL

BALIKATAN 94 HEALTH CENTER



SGT PRICE'S SQUAD SETS UP THE SIGHT LAYOUT FOR THE 33FT X 16FT HEALTH CENTER



SPC DIAZ LAYS A CMU BLOCK WALL

BALIKATAN 94 HEALTH CENTER



SPC DIAZ, SPC ORTIZ AND PFC LAYTON PLACE THE FACIA



COMPLETED HEALTH CENTER

BALIKATAN 94 MULTI PURPOSE PAD



FILIPINO HEAVY EQUIPMENT OPERATOR LEVELS THE BACKFILL AS US SOLDIERS CONSTRUCT FORMWORK FOR THE FIRST 33FT X 10FT PAD.

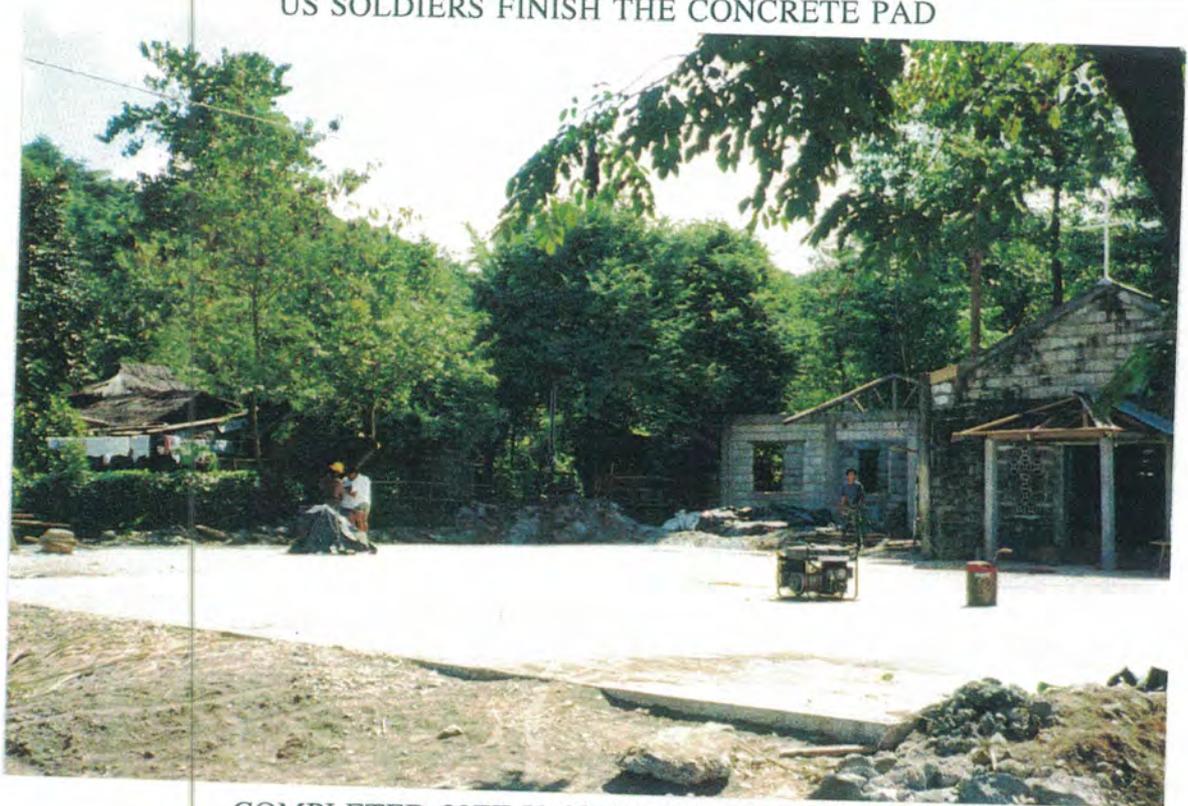


JOINT EFFORT MIXING AND PLACING CONCRETE

BALIKATAN 94 MULTI PURPOSE PAD

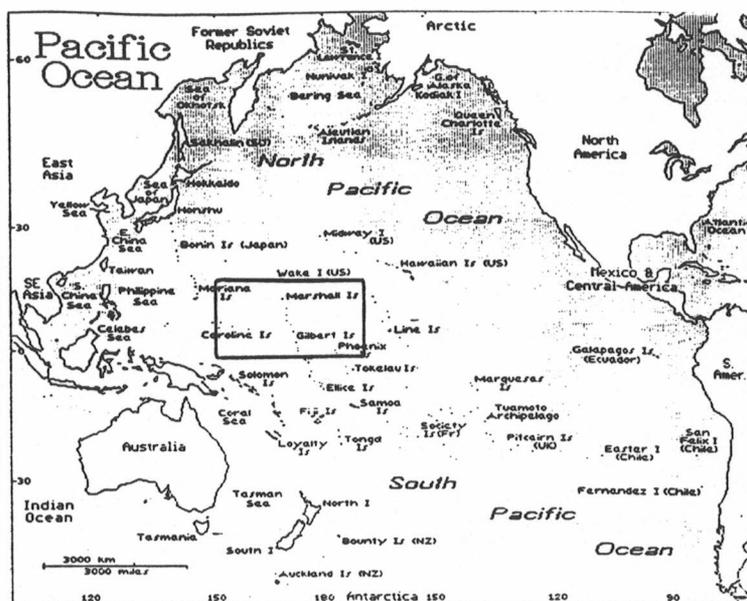
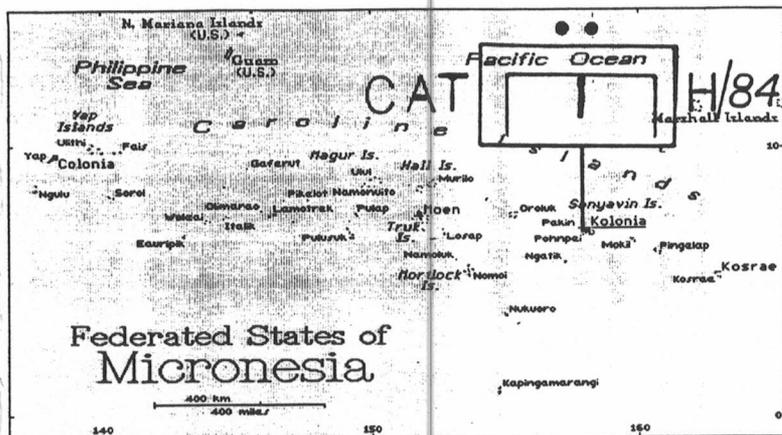


US SOLDIERS FINISH THE CONCRETE PAD



COMPLETED 80FT X 66FT MULTIPURPOSE PAD

# MISSION TITLE: CIVIC ACTION TEAM 84-46



**UNIT:** CAT 84-46, HSC, 84th Engineer Battalion(C)(H) (15 Soldiers)

**MISSION SITE:** Pohnpei, Federated States of Micronesia

**DESCRIPTION:** A Civic Action Team (CAT) deploys to a remote island 3200 miles from Hawaii for 6 months. While there the missions are coordinated with local leaders based on their needs and availability of materials. Some of the missions are described below.

**START DATE:** 14 May 1994

**COMPLETION DATE:** 9 November 1994

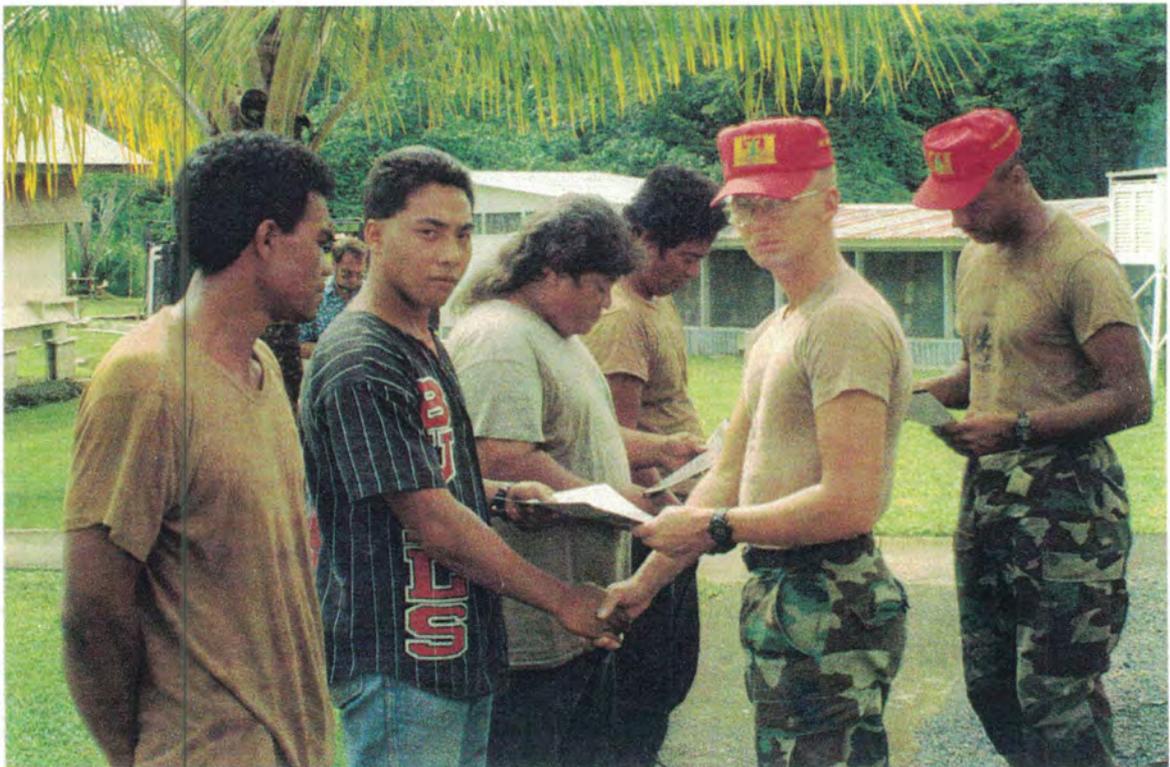
**ESTIMATED COST:** Funded by the Federated States of Micronesia and the United States

**REMARKS:** Thirteen U.S. soldier's from 84th Engineer Battalion augmented with an additional 2 Reserve medics worked over thirty construction missions. Eleven were in areas such as water catchments, roads and parking lots. 21 MEDCAP visits were conducted, treating 1300 patients. 19 three day basic First Aid/CPR and hygiene classes were given. Community relations were enhanced by showing over 63 movies to 5600 local personnel.

POHNPEI CAT TEAM (84-46) APPRENTICESHIP PROGRAM



CAT MEMBERS TRAINING 2 EQUIPMENT MECHANIC APPRENTICES



GRADUATION DAY FOR APPRENTICESHIP PROGRAM TRAINEES

POHNPEI CAT TEAM (84-46) VERTICAL



MIXING & PLACING CONCRETE FOR WATER CATCHMENT PADS



ONE OF EIGHT COMPLETED PADS

POHNPEI CAT TEAM (84-46) HORIZONTAL



LUHOHK ROAD BEFORE CONSTRUCTION BEGAN



LUHOHK ROAD COMPLETED, 4M TRAVEL WAY x 1500M LENGTH

POHNPEI CAT TEAM (84-46) COMMUNITY RELATIONS



VOLLEYBALL GAME IN CAMP KITTI WITH LOCAL CHILDREN



SHOWING MOVIES TO CHILDREN, OVER 63 MOVIES TO 5600 LOCALS

POHNPEI CAT TEAM (84-46)

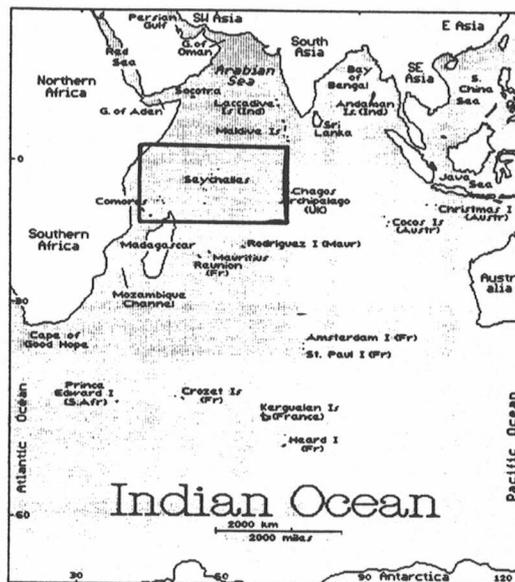
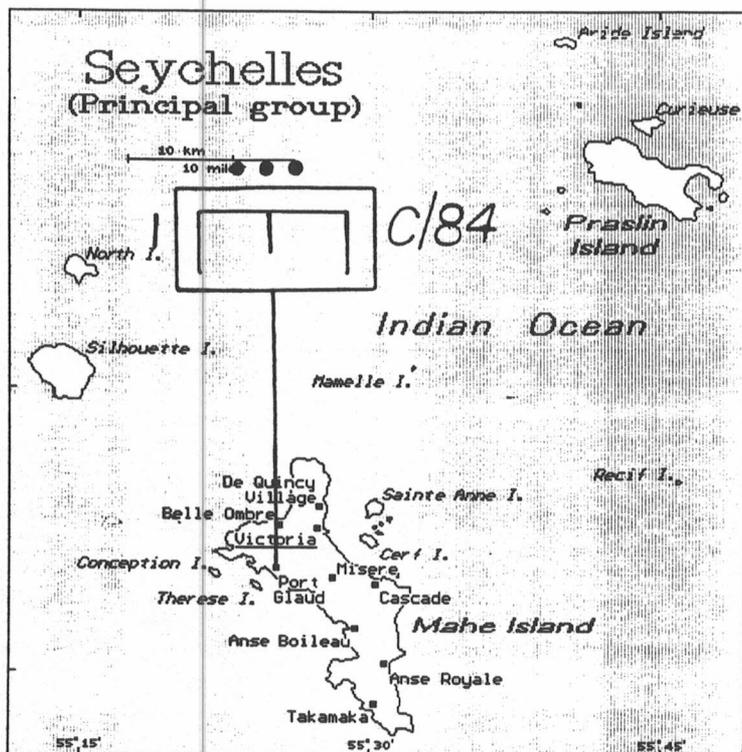


LOADING 1 OF 47 JUNK CARS FOR ENVIRONMENTAL CLEANUP



MEDCAP MISSION, 1LT NAIL (USAR) ON WAY TO VILLAGE TO TREAT LOCALS

# MISSION TITLE: EXERCISE BAKER SEASHELL



**UNIT:** 1st Plt, C Co, 84th Engineer Battalion (C)(H) (14 Soldiers)

**MISSION SITE:** Port Glaud, Seychelles

**DESCRIPTION:** Joint effort by the Seychelles Army and the U.S. Army to construct a four room extension to the Port Glaud Health Center. The extension consisted of a 31 ft x 23 ft concrete slab floor, concrete masonry block exterior and interior walls, and a 3 ft x 10 ft retaining wall.

**START DATE:** 12 Aug 1994

**COMPLETION DATE:** 16 Sep 1994

**ESTIMATED COST:** \$220,000 (USARPAC Expanded Relations Program)  
\$18,000 [ACA] (African Civic Action Funds)

**REMARKS:** This was the first joint Army construction with Seychelles. U.S. Army soldiers were not allowed to wear uniforms.

BAKER SEASHELL, HEALTH CENTER

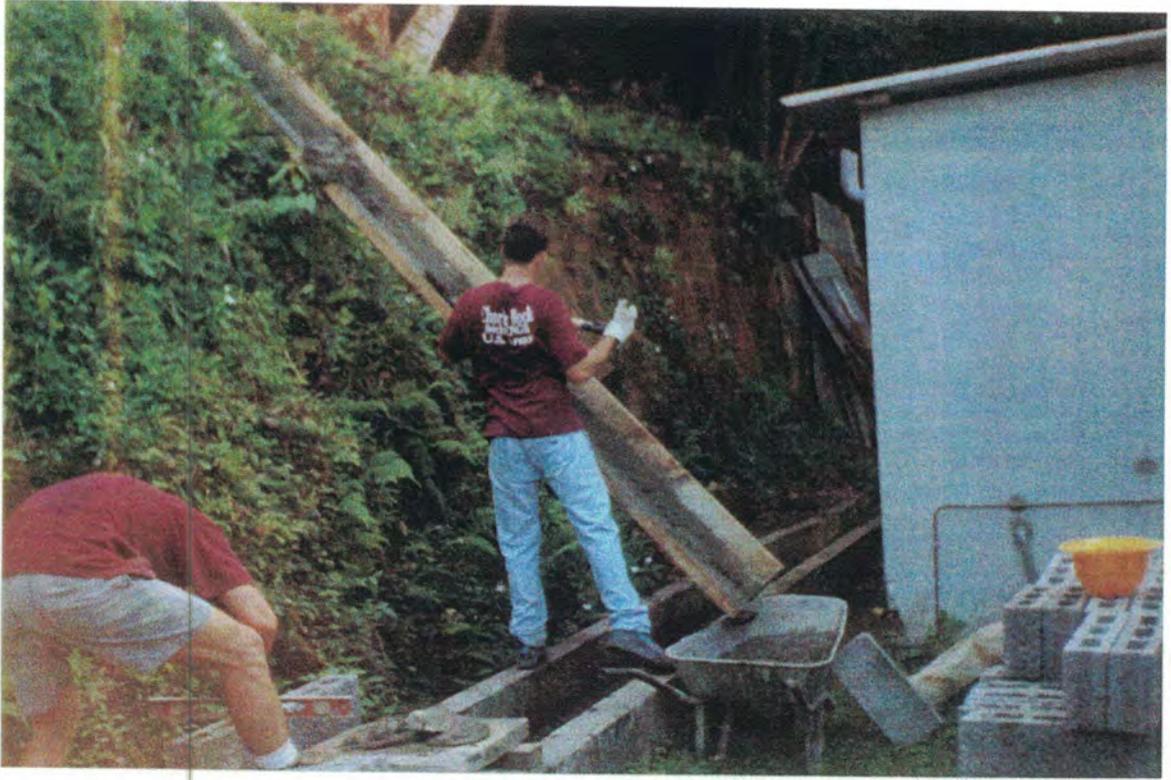


SITE CONDITION UPON ARRIVAL



SPC URBAN COMPACTING BASE

BAKER SEASHELL, HEALTH CENTER

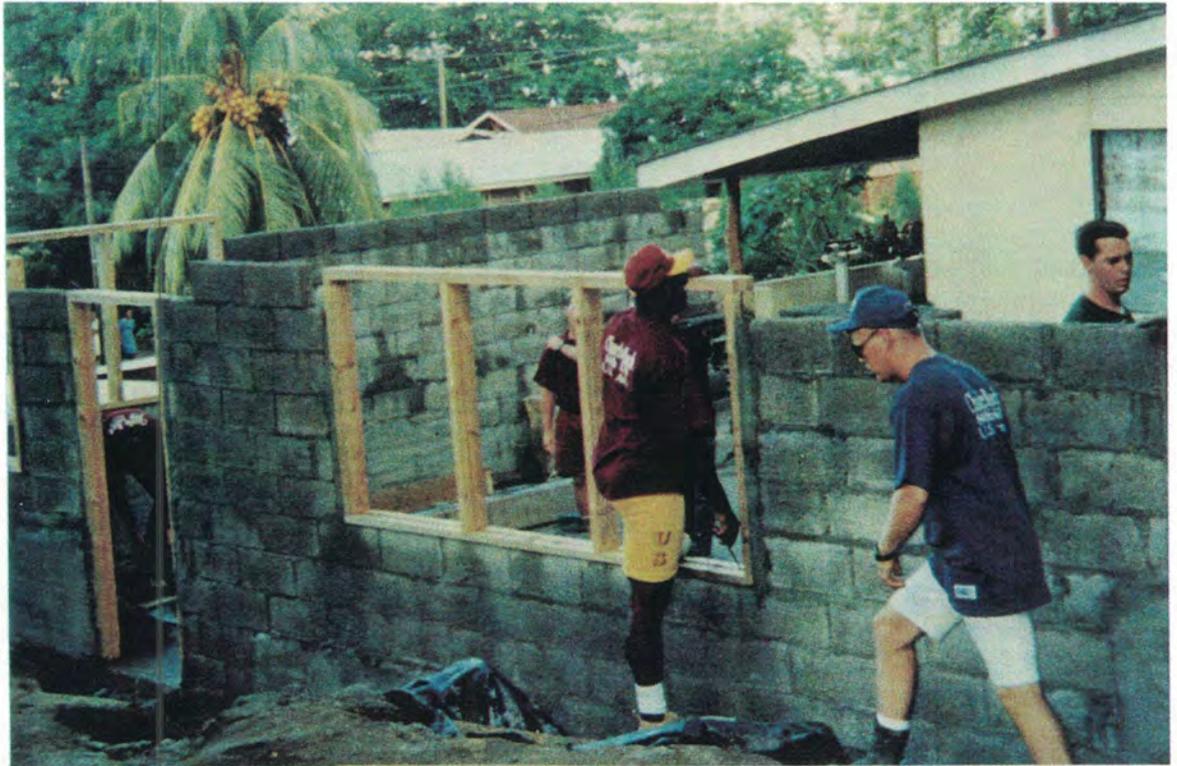


MORTAR AND BLOCK CHUTE FOR BUILDING RETAINING WALL



RETAINING WALL GOING UP

BAKER SEASHELL, HEALTH CENTER

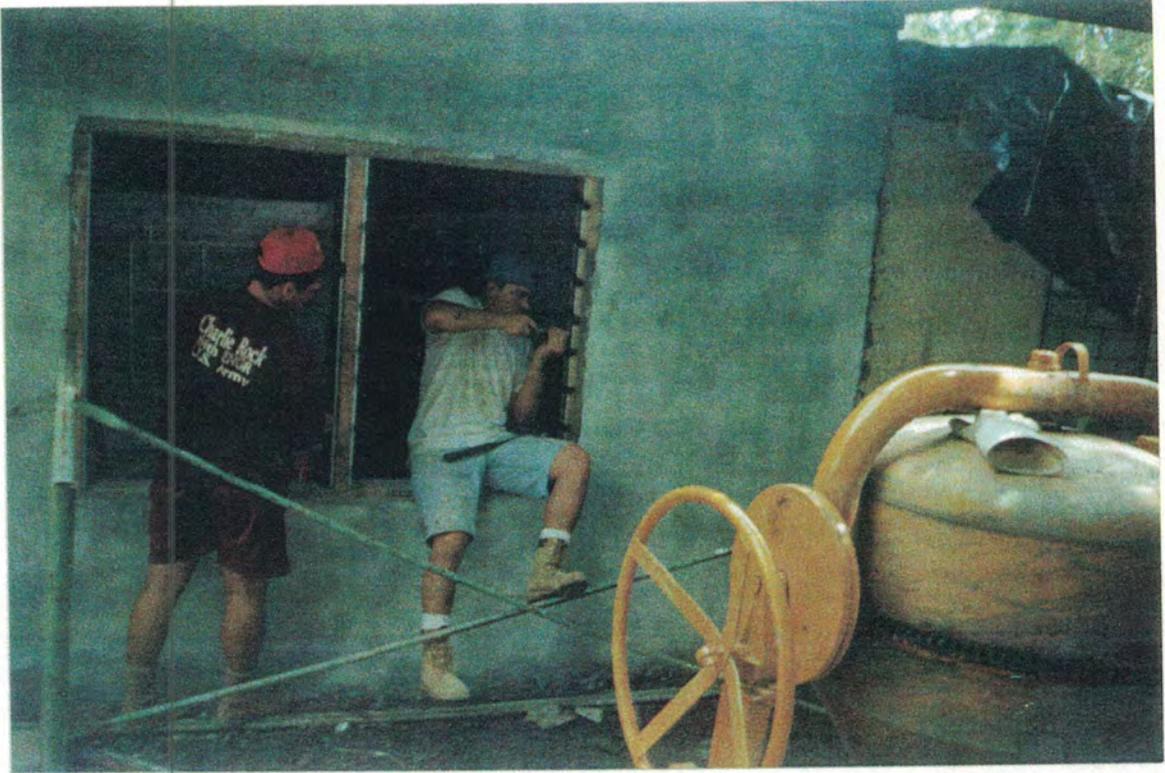


FRAMING WINDOWS



EMPLACING LINTELS

BAKER SEASHELL, HEALTH CENTER

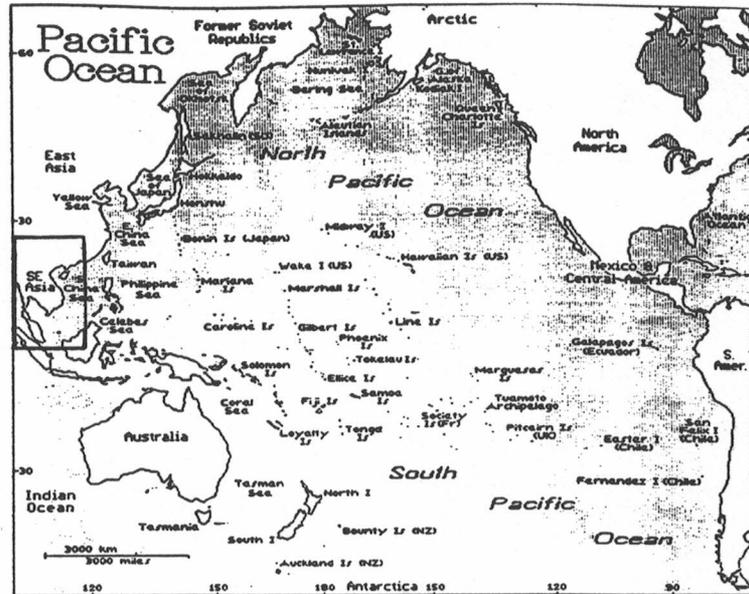


INSTALLING THE WINDOW LOUVER FRAMES PRIOR TO PAINTING



MISSION COMPLETE

# MISSION TITLE: COBRA GOLD 94 SITE I



**UNIT:** 1ST Plt, B Co, 84th Engineer Battalion (C)(H)  
(32 Soldiers)

**MISSION SITE:** Soi 7, Sai 4, Sai Lopburi, Thailand

**DESCRIPTION:** Constructed a 40 ft x 105 ft five room Multipurpose Auditorium made of steel trusses, concrete, brick, and concrete block. The structure consists of a 26 ft X 26 ft stage, three offices and a 5 ft X 300 ft sidewalk.

**START DATE:** 1 May 1994

**COMPLETION DATE:** 24 May 1994

**ESTIMATED COST:** \$30,000 (Title 10 Funds)

**REMARKS:** JCS Exercise Cobra Gold where Thai soldiers assisted with the construction. Site I was approximately 30 miles from the Cobra Gold base camp in Lopburi. The auditorium will be used for school functions and offices for the existing school.

COBRA GOLD 94, SITE 1: SCHOOL AUDITORIUM



SITE FOR THE AUDITORIUM THE DAY THE U.S. ENGINEERS ARRIVED



U.S. AND THAI SOLDIERS REMOVING THE ELABORATE FORMWORK

COBRA GOLD 94, SITE 1: SCHOOL AUDITORIUM



THREE INTEGRATED THAI - U.S CREWS BUILD THE WALLS IN 100 DEGREE HEAT



PLACING CONCRETE FOR STAGE IN FRONT OF THE AUDITORIUM

COBRA GOLD 94, SITE 1: SCHOOL AUDITORIUM



THAI AND U.S. SOLDIERS MANUALLY ERECTING THE STEEL RAFTERS



PLACING VENTILATION BLOCKS ON TOP OF THE WALLS

COBRA GOLD 94, SITE 1: SCHOOL AUDITORIUM

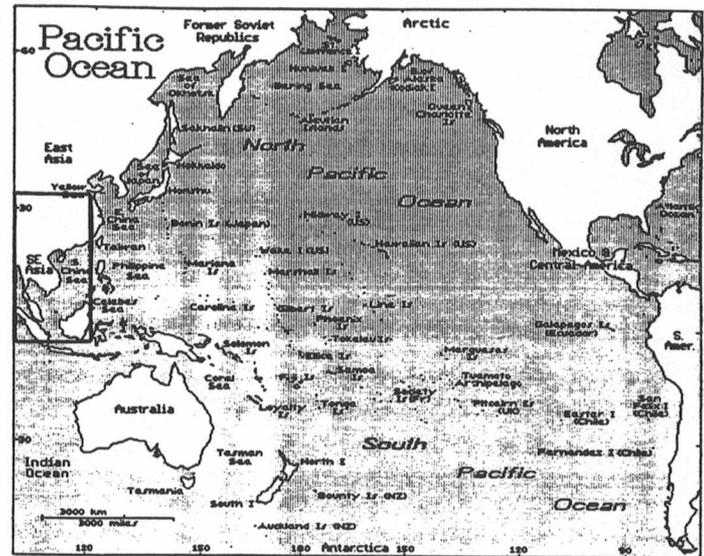
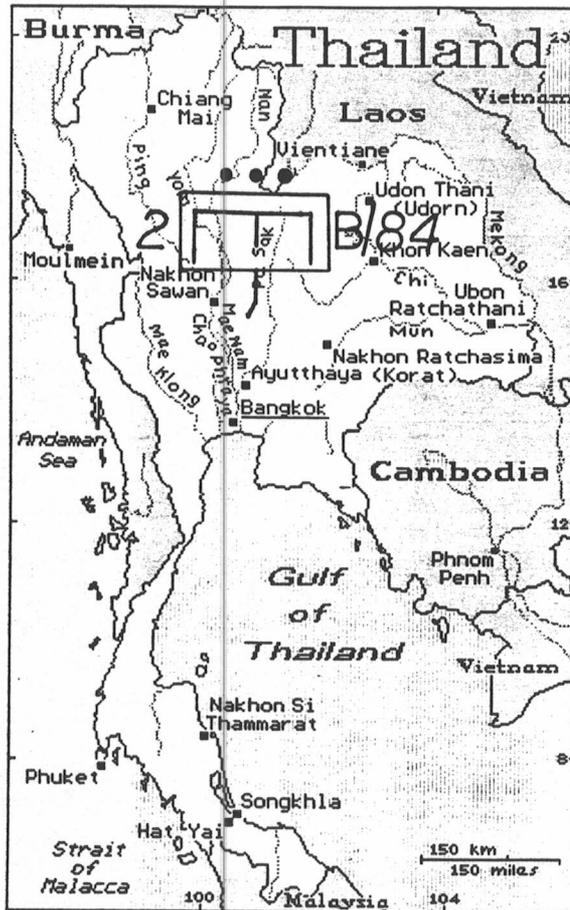


U.S. SOLDIERS INSTALLING FLORESCENT LIGHT FIXTURES



THE COMPLETED AUDITORIUM READY FOR THE SCHOOL TO USE

## MISSION TITLE: COBRA GOLD 94 SITE II



**UNIT:** 2nd Plt, B Co, 84th Engineer Battalion (C)(H)  
(18 Soldiers)

**MISSION SITE:** Bonam, Thailand

**DESCRIPTION:** 8.5m x 27m three room school constructed of concrete masonry block with steel trusses and tile roofing. Over 100 students attend this school.

**START DATE:** 2 May 1994

**COMPLETION DATE:** 24 May 1994

**ESTIMATED COST:** \$24,000 (Title 10 Funds)

**REMARKS:** Ten Thai soldiers and approximately 15 local villagers contributed to construction. Site II was approximately 80 miles from the Cobra Gold base camp in Lopburi.

COBRA GOLD 94, SITE 2: SCHOOL



SITE FOR THE NEW THREE ROOM SCHOOL



A JOINT EFFORT WAS NEEDED TO MIX THE CONCRETE BY HAND

COBRA GOLD 94, SITE 2: SCHOOL

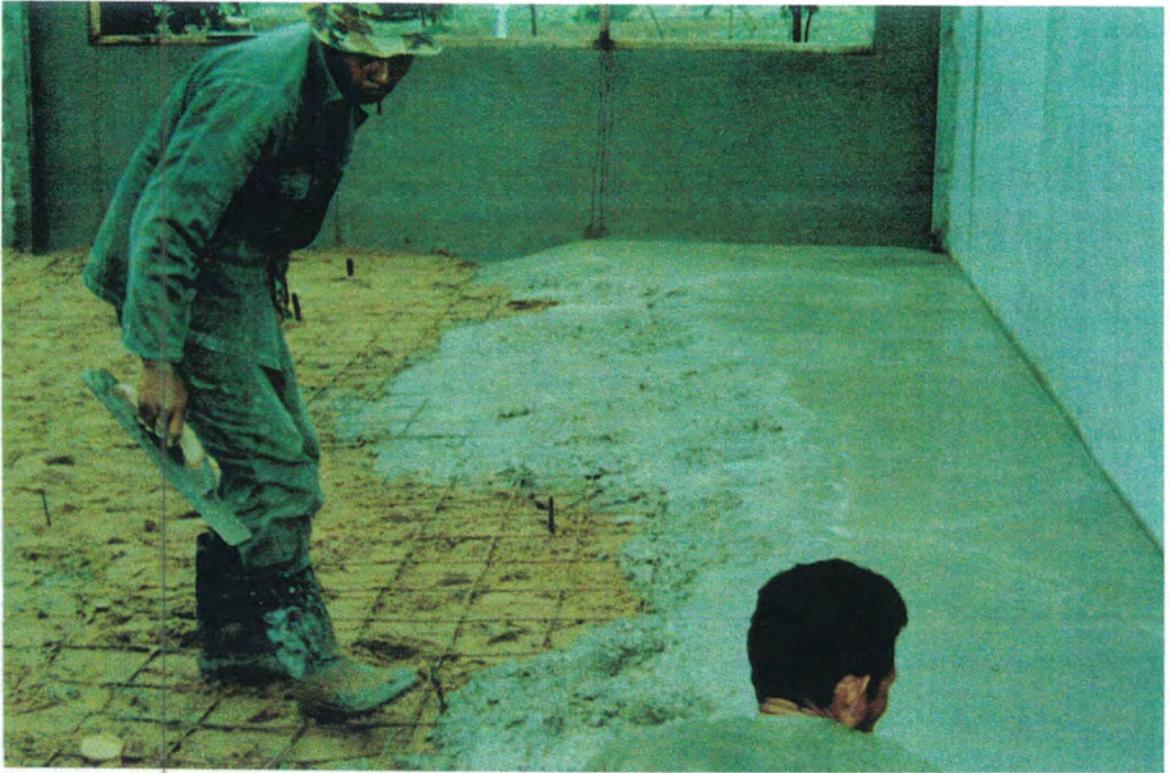


THAI AND U.S. SOLDIERS WORKING TOGETHER TO GET THE FIRST COURSE OF BLOCK STRAIGHT



CONSTRUCTION OF FORMWORK FOR THE HORIZONTAL COLUMNS

COBRA GOLD 94, SITE 2: SCHOOL



THAI 1SG DEMONSTRATES HIS METHOD OF PLACING A CONCRETE PAD

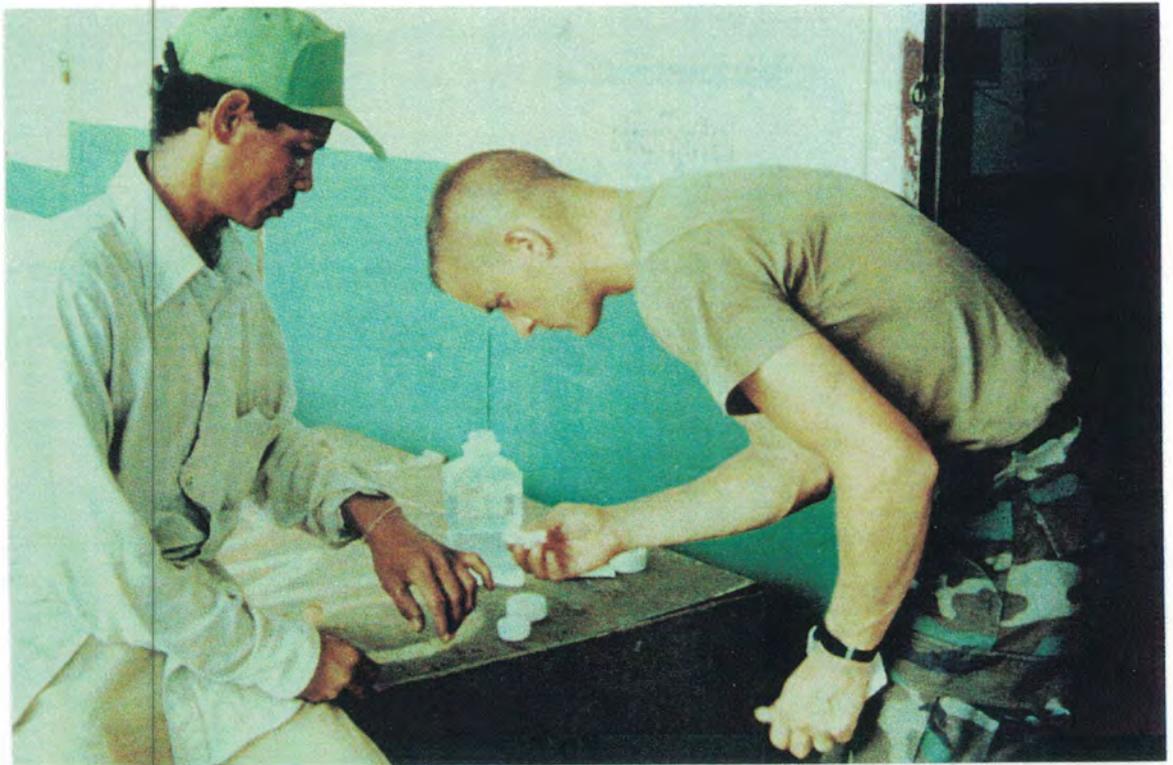


SOLDIERS APPLYING STUCCO TO THE WALLS OF THE SCHOOL

COBRA GOLD 94, SITE 2: SCHOOL

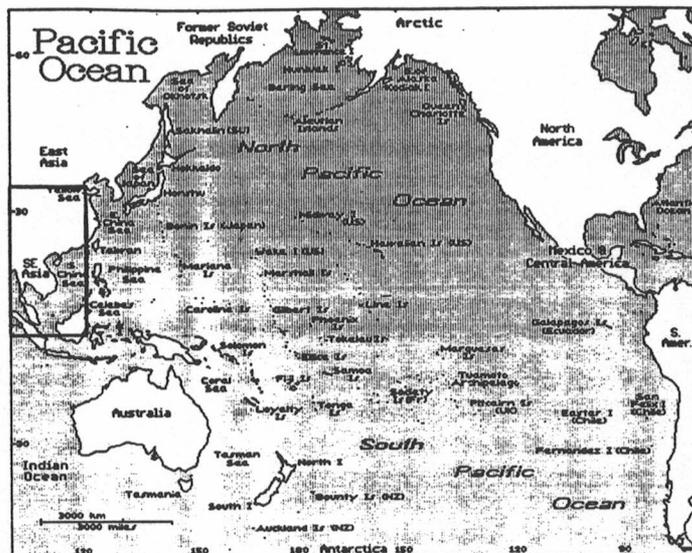
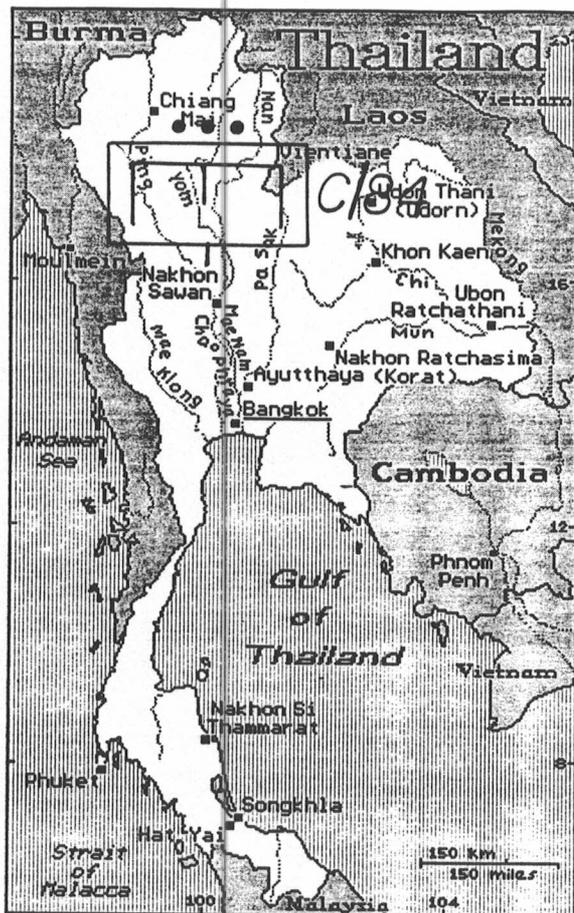


THE COMPLETED SCHOOL BUILDING



U.S. MEDIC TREATING A CUT ON A THAI VILLAGER

## MISSION TITLE: COBRA GOLD 94 SITE III



**UNIT:** Provisional Platoon, C Co, 84th Engineer Battalion (20 Soldiers)

**MISSION SITE:** Ban Wan Chang, Thailand

**DESCRIPTION:** Complete construction of a 40 foot water tower of stock zinc coated pipe with a 10,000 liter storage capacity and an electric pump. Also constructed a playground that consisted of a swing set, parallel bars and balance beam; and a 30' loud speaker tower.

**START DATE:** 27 April 1994

**COMPLETION DATE:** 22 May 1994

**ESTIMATED COST:** \$8,900 (Title 10 Funds)

**REMARKS:** The facilities were constructed for the Ban Wan Chang school and a village, and will service approximately 300 elementary school students and 100 homes. The work was a joint effort between U.S. soldiers, Thai soldiers, and local villagers.

COBRA GOLD 94, SITE 3: WATER TOWER



A LARGE AMOUNT OF REBAR WAS USED TO STRENGTHEN THE FOOTERS



THE PREFABRICATED SIDES OF THE TOWER WERE SET UP SAFELY WITH MULTIPLE GUIDE ROPES AND 2" x 4" BRACING

COBRA GOLD 94, SITE 3: WATER TOWER



ONE OF THE THREE WELDING TEAMS PREFABRICATES A PIECE OF THE CRADLE ON THE GROUND



THE FIRST OF FOUR FIBERGLASS WATER TANKS IS HOISTED

COBRA GOLD 94, SITE 3: WATER TOWER



A QUARTER MILE OF PIPE IS INSTALLED CONNECTING THE SCHOOL FACILITIES AND THE WATER TOWER



COMPLETED WATER TOWER

COBRA GOLD 94, SITE 3: WATER TOWER



COMPLETED WATER TOWER RISING ABOVE THE TREES ON THE DAY OF THE TURN-OVER CEREMONY



THE TURN OVER CEREMONY FOR THE BAN WAN CHANG SCHOOL WATER TOWER

COBRA GOLD 94, SITE 3: WATER TOWER

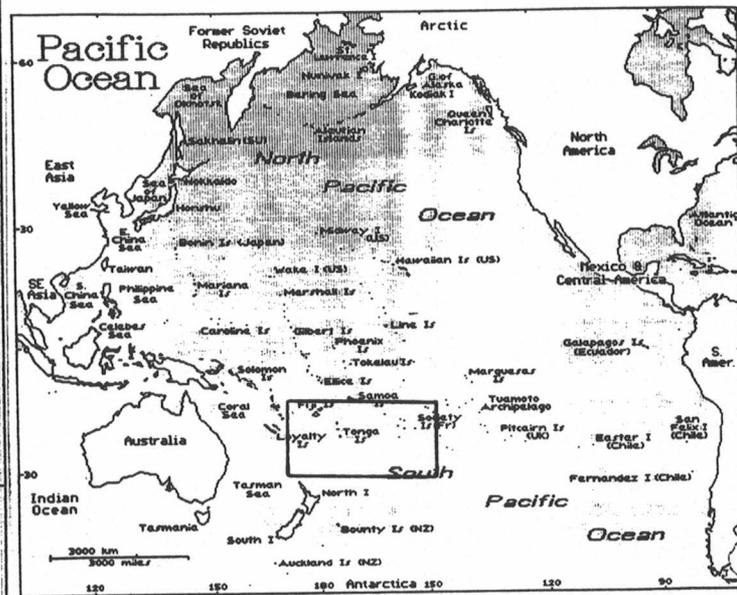
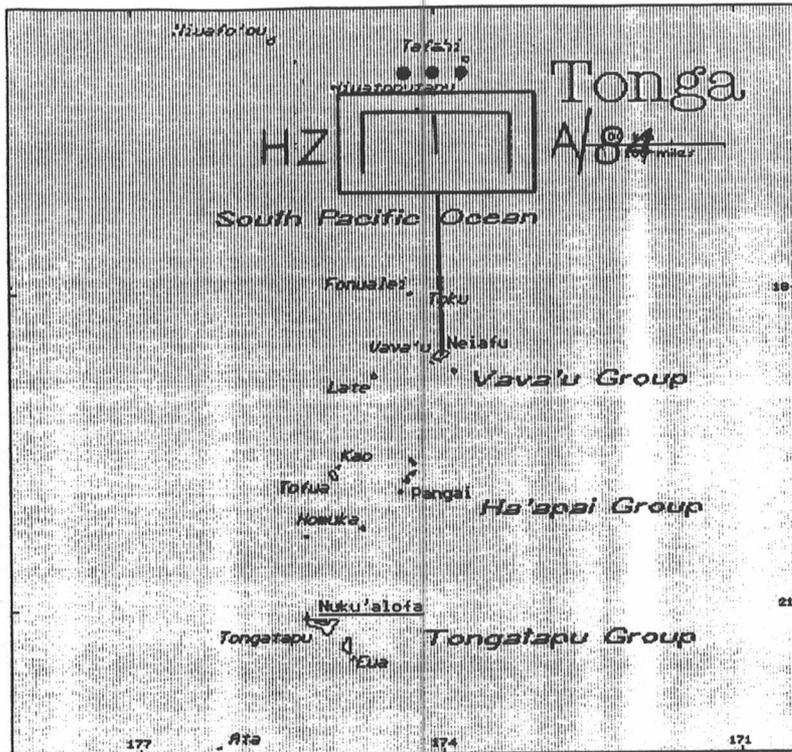


U.S. MEDIC ATTENDING TO ONE OF THE OVER 250 LOCAL THAI PEOPLE HE TREATED



WORKING LATE TO COMPLETE THE SWING SET FOR THE CHILDREN

# MISSION TITLE: BAKER VAVA'U



**UNIT:** Horizontal Platoon, A Co, 84th Engineer Battalion (C)(H) (15 Soldiers)

**MISSION SITE:** Vava'u, Kingdom of Tonga

**DESCRIPTION:** Upgraded 5km of coral road, expanded travel way to nine meters and placed three culverts. Expanded 250 meter causeway from one lane to two, including three 3m x 2m concrete culverts.

**START DATE:** 2 Aug 1994

**COMPLETION DATE:** 27 Sep 1994

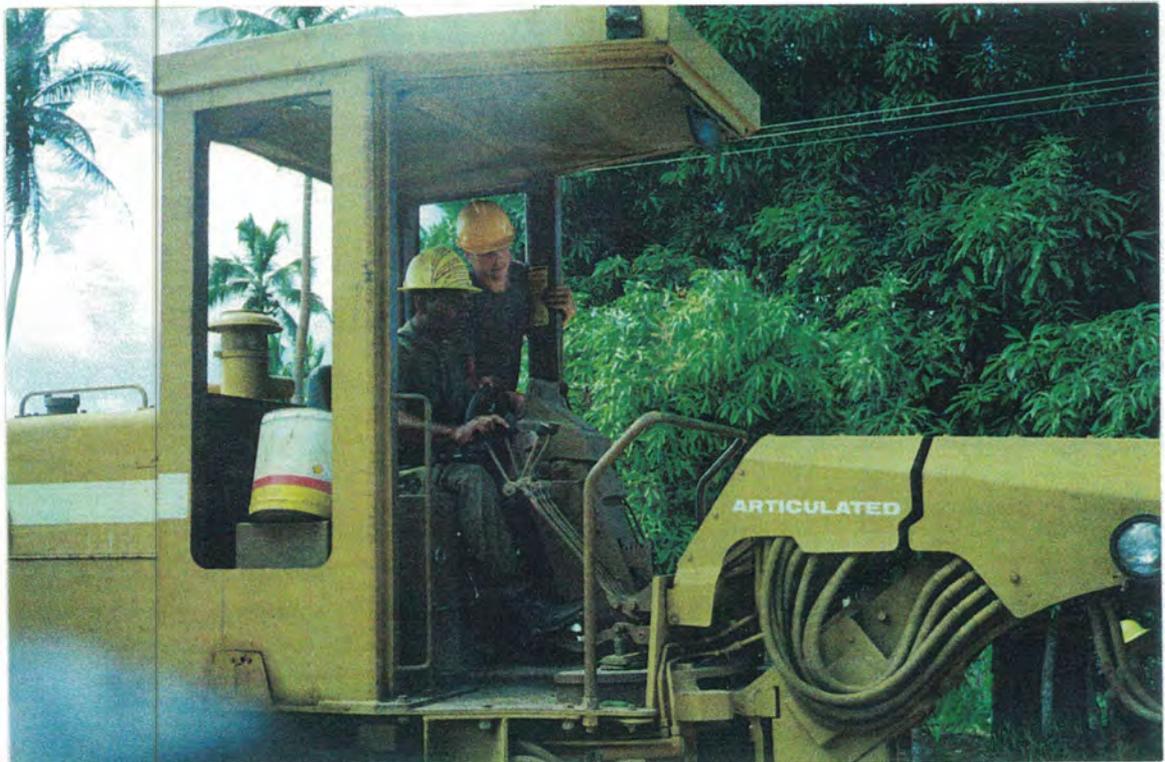
**ESTIMATED COST:** \$118,000 (USARPAC Expanded Relations Program)

**REMARKS:** 15 soldiers (11 Engineers, 1 Survey/Soils Specialist, 1 Medic, 1 Physicians's Assistant and 1 Mechanic) deployed. No U.S. Army equipment was used. The team used limited Tonga Defense Services (TDS) equipment along with civilian contracted equipment to train twelve TDS soldiers on equipment operations, maintenance, and horizontal construction principles. Training was successful as the U.S. and TDS soldiers completed the road ahead of schedule.

BAKER VAVA'U ROAD UPGRADE



U.S. SOLDIER REDEFINES A DITCH LINE



U.S. SOLDIER TRAINING A TDS SOLDIER ON A GRADER

BAKER VAVA'U ROAD UPGRADE



EXCAVATING FOR A CULVERT, SURVEYORS ENSURE  
THE PROPER GRADE IS MAINTAINED



QUARRY USED TO OBTAIN THE LARGE QUANTITY OF FILL

BAKER VAVA'U ROAD UPGRADE

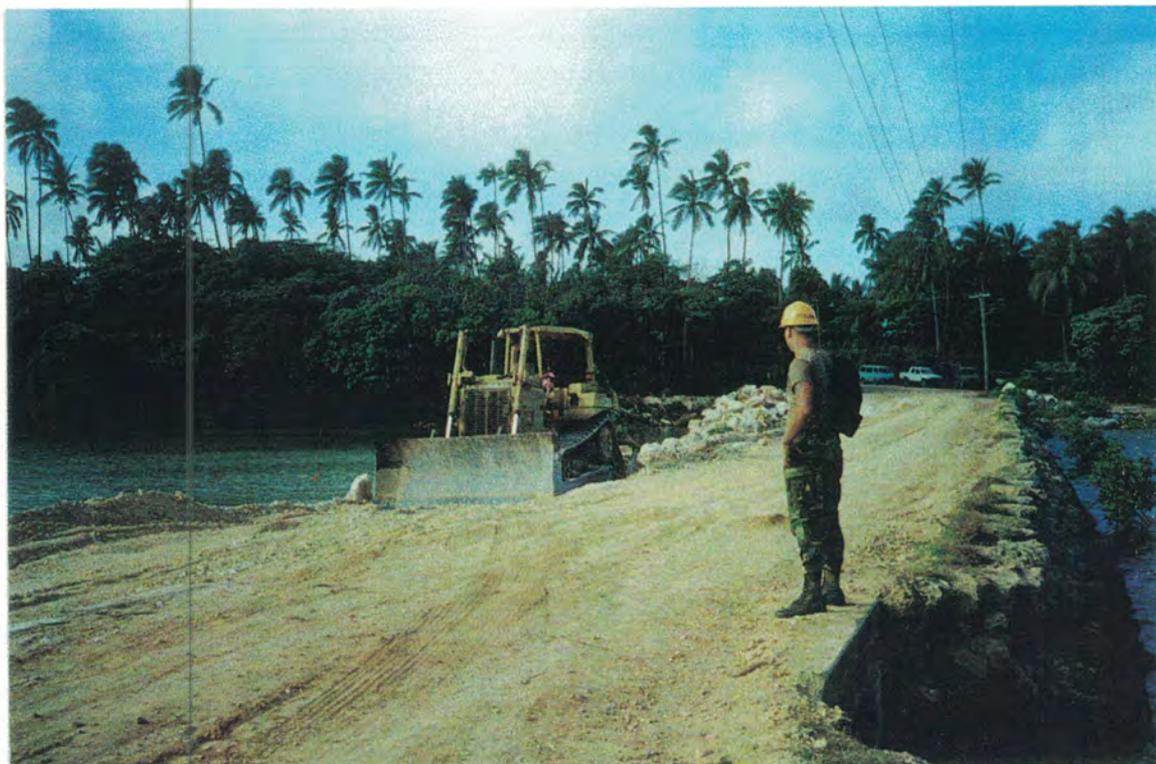


JOINT EFFORT TO REMOVE ROCKS FROM THE ROAD FILL



COMPLETED UPGRADE OF THE CORAL ROAD, BAKER VAVA'U  
MULTIPLE GUIDE ROPES AND 2" x 4" BRACING

BAKER VAVA'U CAUSEWAY CONSTRUCTION



CONSTRUCTION OF THE 250 M CAUSEWAY BY TDS SOLDIERS



NEWLY TRAINED TDS SOLDIER COMPACTS CAUSEWAY ON A VIBRATORY ROLLER

BAKER VAVA'U CAUSEWAY CONSTRUCTION



TDS SOLDIERS PLACE FORMWORK FOR A CAUSEWAY CULVERT

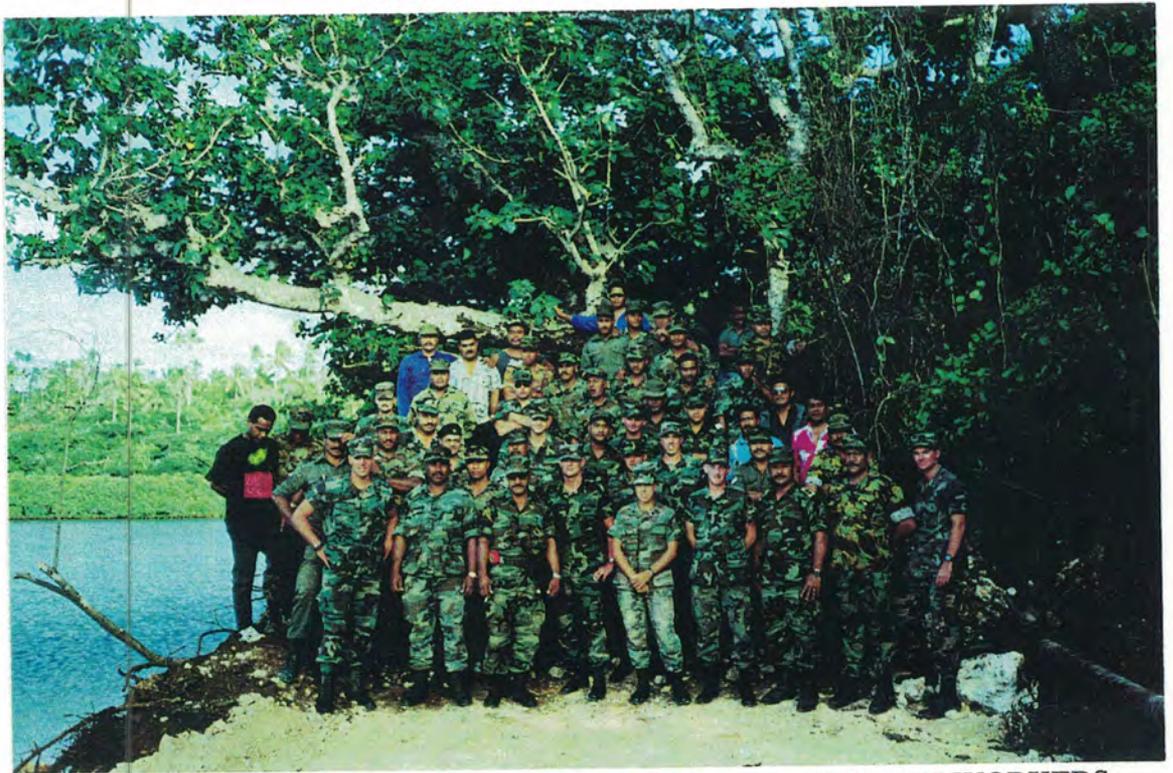


COMPLETED 16'x10'x6' CULVERT

BAKER VAVA'U CAUSEWAY CONSTRUCTION



COMPLETED CAUSEWAY



GROUP PHOTO OF U.S. AND TDS SOLDIERS AND CIVILIAN WORKERS