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**For Immediate Release** 

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**Corps of Engineers Instrumental in Successful Engineer Week** 

Palau Compact Road Presentation Draws Big Crowd

By Honolulu District Public Affairs

(HONOLULU, HI - NR 12-07) Over 250 members of Hawaii's engineering community gathered at the Hale Koa Hotel Feb. 20, for a luncheon to kick-off Engineers Week, which ran from Feb. 18 to 24.

Jointly hosted by the Honolulu Post of the Society of American Military

Engineers (SAME) and the Hawaii Council of Engineering Societies (HCES) the

luncheon featured Alex Morrison of the Corps of Engineers, Honolulu District as the keynote speaker.

Morrison serves as the Corps' resident (chief) engineer in the Republic of Palau and gave a presentation on the "Challenges of the Palau Compact Road."

According to Morrison, the road being built in Palau under Corps of Engineers' supervision is badly needed and is changing the island nation's future for the better.

# 2-2-2 ENGINEER WEEK

Palau, liberated by American forces in World War II, is the westernmost of Micronesia's Caroline Islands and a former U.S. Territory. Palau became independent in 1994 after signing a "compact of free association" with the United States.

According to Morrison, one of the key provisions of the Compact was that the United States would build a 53-mile-long paved road on Babeldaob, the largest of Palau's more than 300 islands.

"Even though it is larger than all the other Palau islands combined, Babeldaob had almost no paved roads," he said. "It was impossible to drive from north to south if there had been any rain at all, and if you could drive, it was an eight to 10-hour trek - so most of the travel around the island was by boat."

The Department of the Interior "hired" the Corps of Engineers to manage the road's design and construction. Four Honolulu-based architectural-engineering firms collaborated on the design between 1994 and 1998 and the construction contract was awarded to Korea's Daewoo Corp. in 1999. Work began that year, and is scheduled for completion this summer.

Building the road has presented a number of challenges, Morrison said, starting with the island itself.

# 3-3-3 ENGINEER WEEK

"Palau is not as mountainous as, say, Hawaii. But it is hilly, with very steep terrain features," he said. "It's heavily vegetated, and because it's located in the tropics, rainfall is common and often heavy. There are numerous streams and rivers in all parts of the island which further complicates the challenges of the project."

Another very real concern, Morrison said, was the significant amount of World War II ordnance still on the island.

"There was a lot of fighting here during the war and since this job started we've picked up more than 5,000 pieces of ordnance," he said.

Once the jungle was cleared and any ordnance was removed, the alignment was graded and the construction crews begin what Morrison called a "cut and fill" operation.

"That's basically where you cut the hills down and fill the valleys up," he said.

"We've also had to deal with some 400 stream crossings, so there are a lot of drainage issues to deal with."

Seven major bridges had to be built along the road's route, Morrison said. Two cross ocean inlets and the others cross streams or rivers.

Given the extent of the construction and the pristine land and coastal environment, the Corps has been careful to enforce strict environmental standards.

# 4-4-4 ENGINEER WEEK

"In terms of environmental planning and impacts, this road is being built to the same standards we would use if we were building it in California or Kansas," Morrison said. "The U.S. Environmental Protection Agency, the U.S. Fish and Wildlife Service and the National Marine Fisheries Service were all involved in the design phase, and their involvement has continued during the construction phase."

That same care and concern has gone into every aspect of the project, Morrison said.

"Everyone involved with this takes great pride in it, both because we want to build the best road possible and because we are working against some tremendous odds," he said. "From an engineering and construction standpoint, this is as challenging as a road project could possibly be."

While the road isn't yet complete, most of it is already in use, Morrison said.

"You can drive the entire route now, most of the distance on pavement with some small sections still on dirt, but you can drive the entire 53 miles. And the journey that used to take an entire day, now takes two hours," he said.

"And that's one of the reasons why I find this project so fascinating. This road will give the people of Palau a level of access to their own land that they've never before had," he added. "This road will fundamentally change Palau's future and I appreciate the chance to be part of such an important effort."

The members of Hawaii's engineering community who met at the Hale Koa were impressed with Morrison's presentation.

# 5-5-5 ENGINEER WEEK

"Fascinating account of a difficult project," said Dr. Amarjit Singh, professor of Engineering at the University of Hawaii at Manoa. "Engineers Week is a great opportunity to showcase the accomplishments of engineers such as the Palau Road Project."

Founded in 1951 by the National Society of Professional Engineers, Engineers Week, which ran from Feb. 19 to 24, exists to increase public awareness and appreciation of the engineering profession. Engineers Week is always the week in February that encompasses George Washington's actual birthday – February 22.

The Honolulu District of the Corps of Engineers was very active in this year's activities including:

- Hosting an 84th Engineer Battalion Officer Professional Development Program on
  February 2, about the District's Hydrant Fuel project at Hickam AFB. Ed Yago,
  Acting Resident Engineer, briefed the project to the officers and Maj. Robert
  Kroning, Deputy District Engineer and Todd Barnes, Chief of Engineering &
  Construction, also answered questions about the project.
- Providing an exhibit at Kahala Mall as part of Engineers Week celebrations planned by the Hawaii Council of Engineering Societies.
- Participating in a proclamation signing ceremony with Honolulu Mayor Mufi
   Hannemann's in his office on February 2, declaring the week of February 19 24,
   2007 as Engineers Week.

# 6-6-6 ENGINEER WEEK

- Participating in a proclamation signing ceremony with Hawaii Gov. Linda Lingle in her office on Feb. 8 declaring the week of February 19 – 24 as Engineers Week in the State of Hawaii.
- Local celebrations for Engineers Week ended in a banquet on Feb. 24, where annual awards for the Lifetime Achievement Award, Engineer of the Year Award, Young Engineer of the Year Award, and the Student of the Year Award from the University of Hawaii were presented to Mr. Ken Hayashida, P.E; Ms. Cathy Leong, P.E.; and Ms. Christy Kaneshiro respectively.

Todd Barnes, Chief of Engineering & Construction, Honolulu District, and his staff orchestrated the District's activities during Engineers Week along with his other role as chairman of the Hawaii Council of Engineer Societies (HCES).