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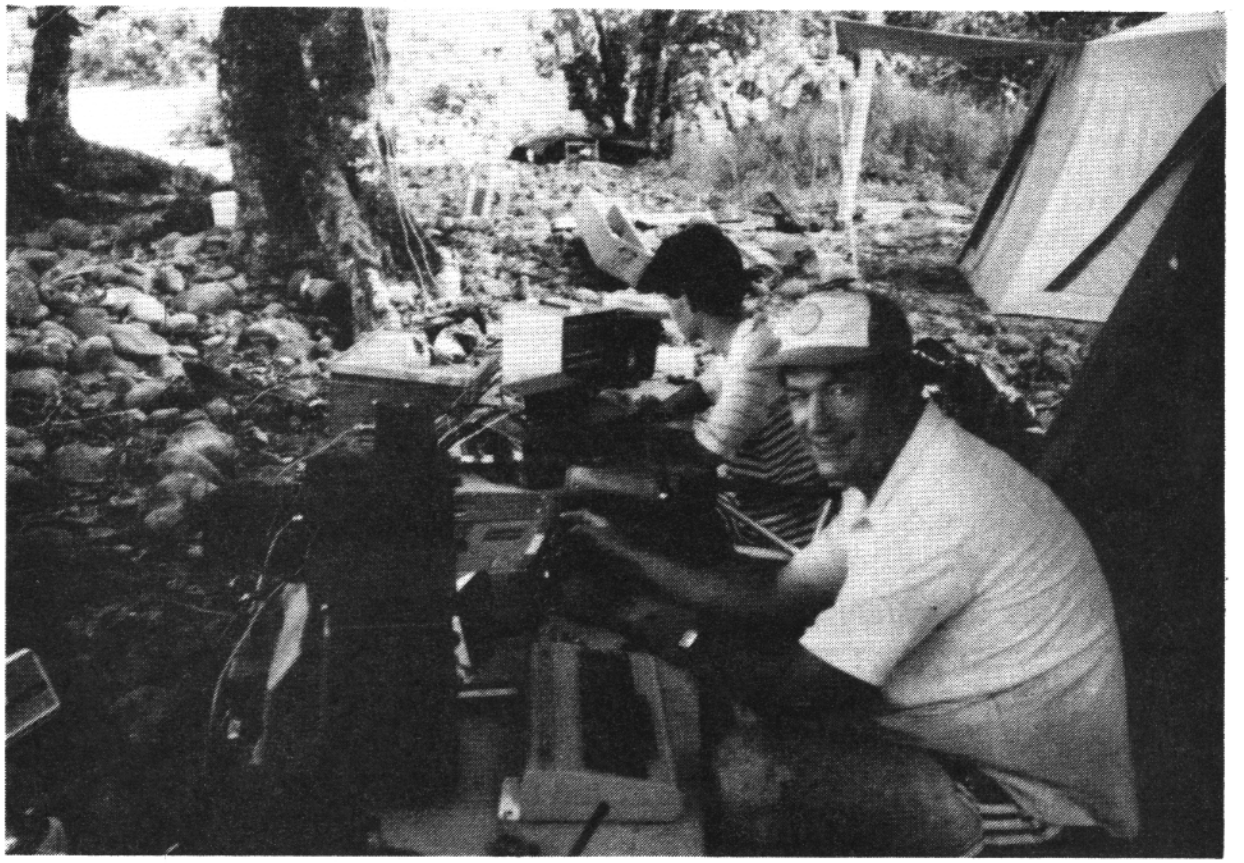

DXPEDITION TO COCOS ISLAND.PICTURED IN FOREGROUND IS SIGURD KOBERG TI2SK AND JAVIER PRADA, TI2FPE IN BACKGROUND. SEE PAGE 5 FOR STORY

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TI9TTY, FIRST RTTY/AMTOR DXPEDITION TO COCOS ISLAND
BY James A. Sladek, WB4UBD

Cocos Island, a solitary island in untraveled seas, is located 320 miles off the Pacific coast of Costa Rica. Of the principal Eastern Tropical Pacific islands, (Cocos, Clipperton, Malpelo and Galapagos), it is the only one that supports a tropical rain forest by receiving about 180 inches of rain per year. THe isolated conditions of Cocos Island provide for a unique natural laboratory for scientific studies in areas such as evolutionary biology. Because of its uniqueness and value to science, Costa Rica, exercising complete sovereignty over the island, has declared it a protected National Park.

Cocos Island is also known for the legends of extraordinary treasure hidden by buccaneers who sailed the seas of the new world. Modern historians have surmised that Cocos was visited as early as 1684 by a privateer named Edward Davis who hid booty captured in raids on Spanish ships along the Pacific coast. About 130 years later Benito Bonito, another pirate, arrived with an estimated eleven million dollars of booty taken from Spanish troops in Mexico. Stories also hold that the MARY DEAR, commanded by Captain Thompson, was chartered to deliver to Panama, the treasures of Spanish Colonists in Peru who where threatened by revolutionaries. This trip, by way of Cocos, deposited over three hundred million dollars in treasure on the island. All these riches hidden in the tropical jungles of Cocos Island have so far eluded 160 years of organized expeditions in search of them.

The island's twenty square miles is mostly rough mountainous terrain covered by nearly impenetrable jungle growth with the highest point (nearly 2,000 feet above sea level) located on the western side of Cocos Island. The island is usually covered by a thick layer of fog and the story is told that because of this, during the Second World War, a U.S. Navy submarine search plane crashed into this unexpected mountain in the middle of the Pacific Ocean. With steep cliffs, some as high as 600 feet, access to the island is difficult and limited to the northern end where Chatham Bay and Wafer Bay are located.

Chatham Bay is a protected bay on the northeast coast. It is the preferred location for anchoring, but has mountains and towering trees right off the beach and no more than 500 square feet of flat area. Wafer Bay is located about 6,000 feet west of Chatham Bay and offers no protection from high winds and seas, making it a less favorable anchorage. With several acres of flat land available, this site is where the National Park garrison for the island's only human inhabitants is found. This is also where most DXpeditions operate and an earlier group had erected a permanent eighty foot tower for this purpose.

During a visit to Norfolk in the summer of 1984, Sigurd Koberg (TI2SK) mentioned the possibility of taking a vacation trip to Cocos Island later that year. During the course of conversation that followed, the idea of the "first RTTY DXpedition to Cocos Island" was born. Later that year, after considering the island's rainy season and availabity of transportation, one of the more difficult problems, the DXpedition was officially scheduled for February 1985 combining the trip with members of Costa Rica's Amateur Fishing Club. In September with the agreement of Javier Prada (TI2FPE) to accompany Sigurd on the operation, the team was formed and final details worked out. Special authorization had to be obtained to operate using a single callsign for a team, since licenses issued in Costa Rica are normally issued to the individual and not to the station, a licensing procedure opposite to that used in the United States. In late November the callsign TI9TTY was assigned to the team of TI2SK and TI2FPE for the February operation.

Departure from Puntarenas on the Pacific coast of Costa Rica was scheduled for the night of February 8th at high tide, but necessary repairs to the boat's diesel generator delayed departure until the morning of the 10th. The thirty hour voyage was made in the SCORPION, a 58 foot Bertram sports cruiser out of the Cayman Islands, with the BARRACUDA and GEORGIANA in company. The weather was excellent with fair winds and smooth seas for the entire trip. Maritime mobile operations were attempted, but not continued due to interference with the satellite navigation equipment. Upon arrival at the island, the team found that an unexpected Amateur Radio operation had been established at the Wafer Bay site two days earlier. The decision was made to set up the station at the less desirable Chatham Bay site to avoid interference in this normally interference free environment.

In setting up camp at Chatham Bay, the grounds had to first be cleared. After ridding the area of trash and an amazing number of voracious red ants (warnings had been heeded and the team was properly equipped to combat them), two tents were assembled under the trees with a magnificent view overlooking the bay. One tent sheltered the equipment and operators while the second was used for relaxation. Primary power was provided by two Yamaha one-kilowatt generators located some 50 geet distant and run

alternately. A bank of three 180 AH batteries for power backup was placed next to the equipment tent. The entire area was lit with anti-mosquito light bulbs that proved to be quite successful in their task.

The most difficult and time consuming job was the setting up of the antenna system. Optimum antenna locations could not be obtained due to the protected status of Cocos Island which prevented clearing of trees. A Hy Gain TH3MK3 beam was erected in the only relatively clear area among the trees that would allow free rotation. Installation on a 30 foot mast was attempted but so much difficulty was encountered that it was left at 20 feet. A Hustler 6BTV trap vertical was installed standing on the base of a tree and rising above the tree-top with radials run through the branches of adjacent trees. A 40/80 meter dipole was suspended between two of the tallest trees in the immediate area.

Outside of common power sources and antennas, there were two separate radio stations set up. Sigurd's station consisted of a Kenwood TS-430S and a Commodore C64 microcomputer with the AEA CP-1/MBA-TOR terminal unit and software. Javier's station consisted of an Icom IC-751 transciever with a Microlog ATR-6800 RTTY/AMTOR terminal. A HAL Telereader 6850 was available as a backup terminal for either station.

After the nearly two days that it took to set up the station, TI9TTY was officially on the air at 2200Z on 12 February, 1985. The station was operated around the clock for the next two and a half days. Although the team was fortunate that there was only one day of rain in this tropical rain forest, extremely poor propagation conditions coupled with the physical location allowing a mountain-free opening only to the north and northeast resulted in many long periods of time during which there were no responses to CQs. AMTOR calls were attempted at various times but were met with little success. The operation netted 109 contacts distributed as follows:

AREA	RTTY	AMTOR
United States and Canada	76	1
Southwestern Europe	21	Ø
CaCaribbean and Central/South America	6	4
Australia	1	Ø

Ninety contacts were made on twenty meters with the remainder made on forty and eighty. Due to propagation conditions, ten and fifteen meter contacts were not attempted.

Because of the scheduled boat departure, TI9TTY ceased operation at 2100Z on February 15th. There was a bit of regret in breaking camp and later watching the outline of this "Treasure Island of the Pacific" fade in SCORPION's wake, but thoughts were on the unforgettable adventure of making TI9TTY, the first RTTY/AMTOR DXpedition to Cocos Island, a reality.

EPILOGUE: I talked to Sigurd just after he returned to the mainland, to see what he thought of DXpeditions since he is not a DXer (or perhaps I should say that he was not a DXer before this trip). He said he was disappointed that they were unable to get the number of contacts that he had anticipated, but he's ready to do it again - only this next time, for a couple of weeks. I guess that says it all.

I'd like to extend my personal thanks to Sigurd who was very generous to organize the DXpedition and spend his first vacation trip to Cocos Island behind the keyboard, to Javier for assisting Sigurd on the operation and to the many who sent their kind comments, and "a little extra to help" with their QSLs.

TI9TTY at Chatham Bay site. Sigurd to the right and Javier to the left.

Cocos Island of departure - in "SCORPION'S wake.