



The Canton Engine



“I have taken some pictures and airlifted an engine that appeared to be a 1340 from the coral beach of Gardner Island.”

This sentence was part of an email message which greeted us immediately upon our return from the Niku III Expedition in late March. Sent by a man who teaches aviation maintenance at a California community college, it went on to explain when, how and why the recovery was made. We immediately contacted the individual and found him to be friendly and helpful. He told us that the engine had been “airlifted” by helicopter to Canton Island, about 200 miles northeast of Nikumaroro. The “pictures” referred to are 8mm home movie films. We soon made arrangements for a TIGHAR researcher to interview him on videotape and view the films. We also began an investigation into the informant’s credibility and started checking the verifiable parts of the story he told. After six months of investigation, the bottom line is that there is every reason to suspect that one of the engines from the Earhart aircraft is now on Canton Island.

Because Canton is readily accessible by air (the island has a 6,000 foot paved runway), we are not releasing the informant’s name nor the engine’s alleged specific location. If the engine is there, it should be recovered according to accepted archaeological standards.

We are, however, making the story public in the hope of attracting support for an on-site investigation and, if warranted, recovery. Here is what we have learned.

A Credible Informant

The informant is 54 years old, married with two children and has lived in the same house since 1970. He has taught aviation maintenance at the same school for the past 24 years and is now the head of his department. He has provided his information to TIGHAR freely and with no desire for publicity or payment. He has become a TIGHAR member and has been active in helping us verify the various parts of his story.

A Secret Project

In 1970 he was working as a mechanic for a helicopter operation in California when the firm went bankrupt. With a young family and a mortgage, he needed to find work.

That same year, the USAF’s Space and Missile Test Center was activated at Vandenberg AFB, California, and a test program was inaugurated which would use the Phoenix Islands (uninhabited since 1963) as a

target area for ICBMs. Temporary radar towers were erected on Canton, Hull, and Enderbury Islands to track the incoming missiles. Environmental surveys were carried out on other islands of the group including Sydney, Gardner, McKean, and Birnie. Three Sikorsky HH-3 helicopters supported these operations from the test program’s base at Canton, the largest atoll of the Phoenix Group. The helicopters were flown and maintained by civilian contract pilots and mechanics. Several employees of the defunct California helicopter company were hired for this work, including TIGHAR’s informant. He spent a total of four months at Canton Island in late 1970/early 1971.

Canton Island had been a major American base during World War II. After the war, its 6,000 foot, paved runway became a refueling stop for American and British trans-Pacific airline travel, but the advent of nonstop jet service in the mid-1960s caused the



island to be abandoned. During the missile test program the island was inhabited by approxi-

mately 300 men, mostly civilian contract employees with a few USAF personnel. The civilian helicopter crews enjoyed a great deal of freedom and the work of supporting the test program was often boring. The informant’s home movies show daily life on Canton and many scenes of helicopter airlift operations to outlying islands. Although he is quite sure that he filmed the events described below, he has been unable to locate that particular reel.

A 9 Cylinder, Single Row Radial

One day while flying low over one of the Phoenix Islands, he spotted what looked like an old radial aircraft engine awash on the reef flat not far from the beach at the western end of the atoll. Although the informant’s original message to TIGHAR said that the engine had been recovered from Gardner Island (now Nikumaroro), subsequent interviews and interrogation make it clear that he is not at all sure at which island the engine was found. That it was one of the Phoenix Group is certain. Other aspects of his recollections indicate that it was probably either Sydney, Hull or Gardner. Wherever he

was, he called the object to the pilot's attention and asked him to land on the beach. Being in no particular hurry, the pilot consented and the informant waded out through the knee-deep water to inspect the object. Seeing that it was a nine cylinder, single row, radial engine, the informant decided to bring it back to Canton as a curiosity. Attaching a cable from the helicopter, they picked up the engine and flew it home as a sling load. For approximately the next two weeks, the informant poked at the engine in his spare time. He was puzzled by the fact that the beat-up and badly corroded engine appeared to be either a Pratt & Whitney R985 or R1340, both of which types seemed far too small to have been on any airplane that could reach such a remote place as the Phoenix Islands. At this time, according to the informant, he had never heard of Amelia Earhart.

Eventually word came down that there was to be an inspection of the missile test facility by an Air Force general and, in cleaning up the maintenance area, the informant removed the engine to a remote location on Canton Island where, as far as he knows, it remains to this day. A former co-worker remembers that the informant had an old radial engine at Canton and that he later hauled it away.

Since the end of the test program in 1979, the island has seen almost no activity. A review of official records made available to TIGHAR by the U.S. Air Force details various environmental cleanup measures implemented when the project was shut down, but indicates that the area where the engine was allegedly deposited was not disturbed. The runway remains serviceable and jet fuel is available. Canton Island is now part of the nation of Kiribati. At present, a few families live there to make weather observations and maintain the aviation fuel farm in anticipation of future airline service.

The Right Engine?

TIGHAR research has shown the informant's initial impression to be correct. Although the P&W R985 and R1340 are still probably the most common radial engines in the world, no aircraft that operated in the Central Pacific before, during or since World War II used either type of engine, with three exceptions.

- ❁ The three Vought O3U-3 Corsair floatplanes launched from the battleship USS Colorado to search for Amelia Earhart in 1937 were powered by the P&W R1340. None of those aircraft was lost.
- ❁ The Vought OS2U Kingfisher carried on American cruisers and battleships during World War II was powered by the P&W R985, but none are known to have been in the Phoenix Islands area, let alone lost there.
- ❁ The only aircraft equipped with such engines and known to have been lost in the area is Earhart's

Lockheed 10E Special which carried two Pratt & Whitney R1340 S3H1s, serial numbers 6149 and 6150.

Not The Wright Engine

Could the informant have mistaken some other nine cylinder, single row radial for a P&W? The only candidate would be the Wright R1820 used on PBYS, C-47s and B-17s (among others). These engines develop twice the horsepower of the 985 or 1340 and are physically much larger. The informant, when asked to consider the possibility, is adamant that he would have known the difference. Even so, no aircraft equipped with the Wright R1820 is known to have been lost at any of the outlying Phoenix Islands.

Identifying The Engine

If there is a Pratt & Whitney R1340 on Canton Island, could expert analysis determine if it was from the Earhart aircraft? If the data plate is present and legible under the layers of rust and corrosion, identification would be easy. However, even without a data plate, positive identification of one of Earhart's engines may also be possible. The crankshafts and cams of R1340s have serial numbers and these components are protected deep within the engine. Pratt & Whitney maintains an excellent company archive and it should be possible, with their cooperation, to match the components to the production period and even the individual engine.

If the engine is there and turns out to be Earhart's we still won't know for sure which island it came from. Such a discovery would, however, effectively eliminate the theory that the aircraft went down at sea. By proving that Earhart and Noonan met their end at one of the islands of the Phoenix Group, the engine would lend significant support to the mounting evidence that Nikumaroro is that island.

Flying Down to Canton

To investigate this fascinating lead we'll need an aircraft capable of making the 2,000 mile flight from Hawaii to Canton. It should be a turbine aircraft because only Jet A is available on the island. The aircraft should carry a scientific team of at least six people and must have a door large enough to accommodate the dimensions of an R1340 (51.6 inches by 43.01 inches) and be able to handle the engine's 865 pound weight. While we're in the neighborhood, we'd want to overfly Nikumaroro and get the detailed aerial photography we've always wanted.

