

# TIGHAR TRACKS

November 2007



## SAVING A DEVASTATOR MAKING HISTORY



**A**lthough recently a bit overshadowed by the Niku V Expedition, progress on the Devastator Project has been equally exciting. In this issue of *TIGHAR Tracks* we'll review what we've accomplished, recognize the people who have made those accomplishments possible, and outline the next steps toward the recovery and preservation of a Douglas TBD-1 for the National Museum of Naval Aviation.



In 1997, the aviation historical community was startled to learn that a Douglas TBD-1 “Devastator” had been discovered on the floor of Jaluit lagoon in the Marshall Islands. In 2002, divers confirmed the location of a second TBD nearby. The two aircraft had been intentionally landed in the atoll’s lagoon on the morning of February 1, 1942 during the U.S. Navy’s first offensive action against Japanese installations. Unable to find the target and low on fuel, the pilots decided to put down in calm water near a small island rather than ditch in the open ocean. The planes’ crews were uninjured and subsequently captured. All six men returned to their families after the war. The two TBDs sank gently to the bottom and have remained there undisturbed for sixty-five years.

When it joined the fleet in 1936, the Devastator’s sleek monoplane design, all metal construction, 200 mph-plus speed, powered folding wings, and retractable landing gear heralded a new era in naval aircraft design. However, such was the rapid advance of aviation technology that by the outbreak of war in the Pacific a scant five years later, the Devastator was obsolete. TBDs, nonetheless, scored heavily against the Japanese at the Battle of the Coral Sea and, despite horrific losses, were instrumental in the American victory at Midway. Long recognized as a “crown jewel” of naval aviation, no example of the torpedo bomber that ushered in modern naval aviation and played a pivotal role in the opening battles of the Pacific war survives in any museum or collection worldwide.

## THEY SAID IT COULDN'T BE DONE

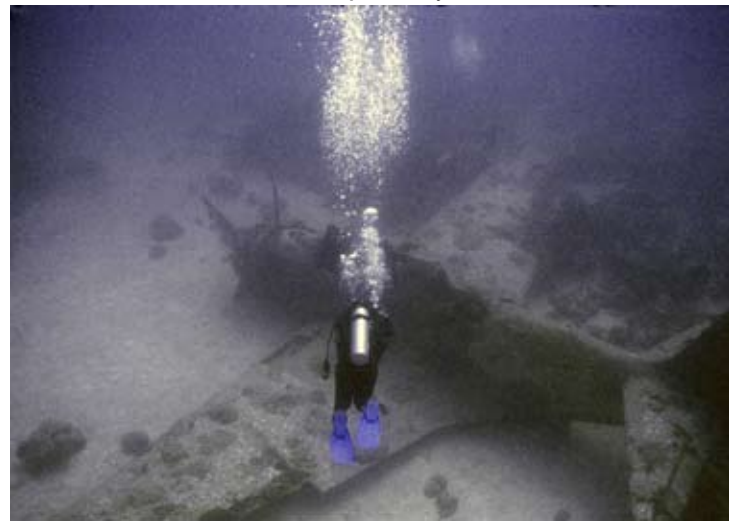
For several years, a Devastator resting in deep water off the coast of Florida was the subject of protracted legal contests between a private collector and the U.S. Navy. By the time the courts confirmed the Navy’s ownership of the aircraft, the wreck’s condition had deteriorated to the point that the high cost of a recovery operation was not justifiable.

The Devastators in the Marshalls, by contrast, are intact, lie in shallow water in a sheltered lagoon, and are in excellent condition. However, other factors made the Jaluit TBDs seem to be as inaccessible as the Florida wreck. Once again, ownership and regulatory issues made recovery seem unlikely. The aircraft rest within the borders of the Republic of the Marshall Islands (RMI) and are subject to the historic preservation laws of that country. Irrespective of questions about who owns the aircraft, any detailed evaluation of their condition, let alone recovery and export, requires compliance with RMI legislation and a



*TBD-1 Bu.No. 0298. At a depth of only 50 feet, the aircraft is clearly visible from the surface. TIGHAR photo by J. Hoover.*

*TBD-1 Bu.No. 1515 rests on a flat sandy surface at 125 feet. TIGHAR photo by J. Hoover.*



permit issued by the RMI Historic Preservation Office. No such permit had ever been issued with respect to an historic aircraft in the Marshall Islands.

Salvagers of historic aircraft from Pacific islands have often dealt with legal and diplomatic hurdles by simply ignoring them. The natural consequence of such piratical behavior has been a tightening of government restrictions and an atmosphere of distrust among local populations. Beyond RMI regulatory concerns, no recovery effort could realistically proceed without the assent and support of the citizens, landowners and traditional leaders of Jaluit Atoll who quite naturally assumed that any wreck that merited an expensive recovery effort must be worth a great deal of money.

But there were other requirements to be met by anyone hoping to save one of the Jaluit TBDS. A recovery project would have to deal not only with the Republic of the Marshall Islands, but also with the United States Navy. The Underwater Archaeology Branch of the Naval Historical Center in Washington,

DC requires that a permit be obtained prior to any interaction with sunken U.S. Navy ships or aircraft. No permit had ever been issued for the archaeological evaluation or recovery of a submerged Navy aircraft.

## CLEARING HURDLES

It was in the face of these challenges that TIGHAR launched the Devastator Project in 2003. Four years and half a million dollars later, most of the hurdles have been cleared and recovery is now more a matter of “when” than of “if.”

Through scrupulous adherence to the country’s historic preservation laws, TIGHAR enjoys an excellent working relationship with the RMI government. We have had no problem obtaining the necessary permits from the Historic Preservation Office.



The skipper of USS Safeguard (ARS -50), LCDR Doyle Hodges, and TIGHAR’s Ric Gillespie, chat with His Excellency Kessaly Note, President of the Republic of the Marshall Islands, at a reception welcoming the TIGHAR/USN team to Majuro. TIGHAR photo by R. Matthews.

TIGHAR has also won the confidence and respect of the people of Jaluit through no-strings-attached community assistance. We’ve delivered over a ton of educational supplies to Jaluit schools with the help of our sponsor FedEx. TIGHAR also funded and helped design the atoll’s Koba Maron



(“Joining Together”) memorial at the mass grave of nearly one hundred Marshallese killed in a World War II bombing raid.

On this side of the Pacific, we’ve worked closely with the Naval Historical Center’s Underwater Archaeology Branch and with Texas A&M University’s Institute of Nautical Archaeology to find the much-needed answers to questions about how to conserve an aircraft that has spent over half a century submerged in salt water. TIGHAR’s assessment of the TBDs in 2004 pointed up the need for a detailed engineering survey and the collection of sample material for scientific testing. In 2006 we applied for and received the first “Permit for Non-Intrusive Archaeological Research on U.S. Navy Cultural Resources” ever granted for the investigation of historic aircraft.

The survey, carried out by a TIGHAR team working side-by-side with Navy divers from USS Safeguard (ARS 50), was another historic first. The Diving & Salvage Officer who led the USN team determined that the deeper of the two TBDs is an excellent candidate for recovery. Sample material collected during the operation is now undergoing a variety of tests and is yielding valuable information that will help us confront the problem of corrosion not only in this but in other historic aircraft.

It would be nice if good intentions and hard work were enough to save a Devastator but, like just about everything else, it also takes funding. The project would not be where it is today were it not for the vision and generosity of the people who have put their money where their heart is. TIGHAR is deeply grateful to the following foundations and individuals for their support of the project.

- The Edward E. and Marie L. Matthews Foundation
- The Naval Aviation Museum Foundation
- The John D. Schumann Foundation
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- William Rocco
- Art Carty
- Richard B. Gifford
- Robert Hanrahan
- Jack Korsten
- Russell E. Matthews
- Dave Morris
- Anthony Paen, Jr.
- Richard J. Reynolds
- Robert & Amy Spaeth

TIGHAR “Minister of Foreign Affairs” Col. Van Hunn congratulates Jaluit Construction Supervisor Odar Lani at the dedication of the Koba Maron Memorial. TIGHAR photo by V. Hunn.



*The TIGHAR/USN Evaluation Expedition Team. Extreme left, Institute of Nautical Archeology conservator Peter Fix. Kneeling, front row, l. to r.: TIGHAR diver Tony Paine, Naval Historical Center archaeologist Dr. Bob Neyland, TIGHAR diver Dr. Dan Lann. Holding Explorer's Club flag: TIGHAR diver Van Hunn and TIGHAR diver Russ Matthews. Blue shirts: U.S. Navy divers of USS Safeguard. Extreme right; TIGHAR diver Brian Kirk. TIGHAR photo by R. Matthews.*

## THE NEXT STEPS

### LAB WORK AND DIPLOMACY

The results of the testing now being done on the sample material collected last year will enable TIGHAR, the Naval Historical Center, and the National Museum of Naval Aviation to formulate a recovery and conservation plan for the aircraft. While those practical matters are being addressed, it is essential that we maintain our good relationship with the RMI government and the good people of Jaluit. That means sending TIGHAR's "Minister of Foreign Affairs" Col. Van Hunn, USAF (ret.) on another good will visit to the Marshalls.

### HIC DRACONIS

"Here be dragons" is how ancient cartographers marked areas on nautical charts where no reliable information was available. The most current charts of Jaluit lagoon are based on data collected by the Japanese in 1928 and, even so, only the eastern part of the lagoon was surveyed. The western reaches, where the TBD



recovery operation will take place, have never been mapped. During the 2006 Evaluation Expedition, USS *Safeguard* did not venture into the lagoon but stood off the atoll's western side.

Before a recovery can take place, or even be planned in detail, a safe route must be surveyed from the main lagoon passage to the wreck site. There's a possibility that the work can be included in a Navy mapping project using LIDAR (Light Detection And Ranging) airborne laser technology. Otherwise, we'll do it from a boat using state-of-the-art bathymetry sonar.

The cost of the actual recovery/transportation operation will depend, to a large extent, upon to what degree USN assets can be brought to bear as part of training operations. Conservation costs will be dictated by the results of the materials testing now underway and decisions about the techniques and technologies to be used once the aircraft is recovered. What is certain is that the project can only move into these final phases with the continued financial support of the TIGHAR membership.