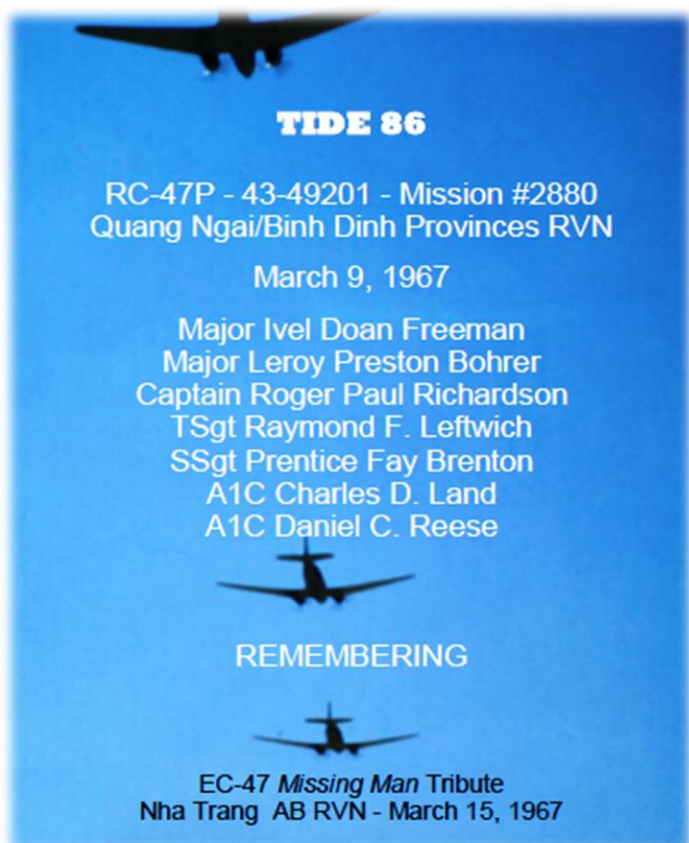


The Loss of TIDE 86



Fifty years ago, on March 9, 1967, an RC-47 of the 361st Reconnaissance Squadron (Recon Sqdn) based at Nha Trang Airport, Republic of Vietnam, took off at 1:55 pm local time on a routine seven-hour airborne radio direction finding (ARDF) mission in Binh Dinh Province, about 125 air miles north of Nha Trang. Aboard the Gooney Bird, tactical callsign TIDE 86, were four 361st Recon Sqdn personnel and three backenders from Detachment 1, 6994th Security Squadron. When the aircraft failed to return to Nha Trang as scheduled around 9:00 pm, a “communications search” was initiated—the mission might have diverted to an alternate field without being able to notify Nha Trang. When this search proved negative, the aircraft and crew were declared missing about 11:30 pm.

Low ceilings and poor visibility in and near the mission area, a zone encompassing some 5,600 square miles, kept initial search efforts grounded. Two days later, at around 8:10 AM on March 11, an O-1 Bird Dog FAC spotted the wreckage. A USAF Air Force Accident & Security Team was airlifted to the crash site by UH-1F helicopter after the site was secured by an infantry company of the 1st Air Cavalry Division. The USAF recovery team consisted of the 361st Recon Sqdn Operations Officer, the 460th Tactical Reconnaissance Wing Flight Safety Officer and Flight Surgeon, and two NCOs from Det. 1, 6994th Security Squadron: TSgt Thomas Echols (Operations) and TSgt Donald A. “Bernie” Bernard (Maintenance).

The team remained on the ground for an hour and twenty minutes. The recovered remains of the crewmembers were taken to the 8th Field Hospital at Nha Trang. Also recovered were a portion of the navigator’s work chart and sections of printer tapes showing the position of the aircraft (as determined by the Doppler) and the relative bearings of targets being worked at the time. Fragments of target activity logs and ARDF operator notes were also salvaged. There are pages and pages of reports describing what happened—or what might have happened—after TIDE 86’s routine departure, but the most specific details are included in the classified operational reports generated by Detachment 12, 38th Aerospace Recovery and Rescue Squadron (ARRS) and the 361st Recon Sqdn after the aircraft was reported overdue. Detachment 1, 6994th Security Squadron personnel provided ARDF data recovered at the crash site which was used to expand upon the 361st Recon Sqdn summary report dated March 13, 1967. This and subsequent reports were manually typewritten, following a set format. These reports also include raw data provided in a free-flowing, somewhat non-standard format. Depending on the report, local or “Zulu” (GMT) time may appear. The remainder of this narrative has been pieced together from the data on those printer tapes and operator comments as noted in the reports described above. All times cited in the various reports have been converted to local (Nha Trang) time (GMT+8 hrs) in 12-hour clock format.

To follow the actual (and speculated) flight path of Tide 86 from beginning to end requires an understanding of geographical locations provided in (a) conventional latitude and longitude (Lat/Long) format, (b) the Universal Transverse Mercator (UTM) grid system, and (c) the military’s Tactical Air Navigation system (TACAN.)

At 2:16 pm, twenty-one minutes after take-off, Port Call Control & Reporting Center (CRC) radar at Nha Trang showed TIDE 86 headed northbound on a radial of 022° at 36 nautical miles (nm). The mission was handed off to Peacock CRC (Pleiku) which made the last contact with TIDE 86 at 2:25 pm. At that time, the aircraft was on the 130° radial for 102 nm off Pleiku TACAN channel 53, still headed north along the coastline. Both positions reported by the CRCs show the aircraft in a normal flight pattern north towards Qui Nhon and the assigned frag area, centered at UTM coordinates BR6085.

Approximately one hour into the flight (2:50 pm), the navigator probably completed a Doppler calibration set (“Dop set”) over the Qui Nhon TACAN, about 90 air miles due north of Nha Trang and still roughly 35 nm south of the frag point. Recovered printer tapes showed that the ARDF operator “locked on” target Alpha at 3:26 pm, followed by Bravo at 3:46 pm, but apparently neither target was fixed. Target Charlie was worked beginning at 3:48pm, resulting in a fix at 3:56 pm. The aircraft standoff range to Charlie was less than 15 nm. No printer tapes were recovered for targets Delta and Echo, but Foxtrot was fixed at 4:53 pm, with the aircraft standoff range about 6 nm. The last target, Golf, was initially locked on at 5:30 pm, with the last line of position (LOP) and subsequent fix being made about 30 minutes later. The fix point was over water, about 8 nm off shore. In accordance with Market Time operating procedures, the crew probably headed overwater to attempt a visual sighting of the transmitting vessel.

Based on printer tapes and recovered operator comments, the 1967 report writers concluded that the aircraft was in the vicinity of the target Golf fix point (G-5) at 6:13 pm. (This writer assumes that the G-5 identification means there were at least 5 LOPs used to triangulate the target Golf fix.) The validity of G-5 is critical because this fix location is used as a reference point (like a TACAN transmitter location) for determining subsequent aircraft positions during the seven minutes that elapsed between TIDE 86’s departure from the G-5 fix point vicinity (6:13 pm) and 6:20 pm, the time showing on an aircraft clock found in the wreckage.

The 361st Recon Sqdn summary report offers this supposition: After fixing target Golf and performing, or attempting to perform, visual reconnaissance of the target vessel until around 6:13pm, TIDE 86 turned directly to shore to “shoot” a Dop set on a prominent area landmark. This Dop set point was projected to be 250° at 10 nm from G-5. (Google Maps places that marker almost exactly in the middle of a road/railroad intersection.) This presumed Dop set point was then used as a reference point for locating the crash site, but the radial and distance measurements as reported more closely match the fix point for target Foxtrot than the actual crash site. Finally, the reports list four separate crash site coordinates. The Det 12, 38th ARRS report citing the Lat/Long location reported by the O-1 FAC exactly matches the UTM coordinates in the 361st Recon Sqdn report. The UTM coordinates reported in the Jan-Jun 1967 Detachment 1, 6994th Security Squadron history plot on the map about 300 meters from the FAC-reported location. The 6994th Security Squadron history for Jan-Jun 1967 references UTM coordinates that plot about 10 nm due north of the other reported coordinates. (Click [HERE](#) for the 361st Recon Sqdn and other referenced reports.)

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Tom Echols participated in a USAFSS headquarters debriefing soon after returning from the crash site, but has remained silent about that episode since. As part of this 50th Anniversary tribute to TIDE 86 and those crewmembers lost, Chief Master Sergeant (retired) Echols has written a new personal accounting of the Accident & Security Team experiences. His story will be the feature article in the next EC-47 History Site Newsletter, slated for release in mid-March 2017. We are indebted to Chief Echols and hope his thoughts and recollections will help all of us better remember the 361st Recon Sqdn and Det 1, 6994th Security Squadron crewmembers that “gave their all” 50 years ago this month.



TIDE 86 took off from Nha Trang at 1:55pm. They seemed to have a quiet mission (the ARDF operators worked 6 targets) until locking on to Target Golf. This was an overwater (Maritime Target) and they probably went to try and get a visual according to normal procedures. Follow their flight in the neon green markers until they probably shoot down at 6:20pm. This was the time displayed on a wreckage clock.

