Controlled Flight into Terrain

The Story of Navy 67260, January 9th, 1955

The passage of fifty six years can obscure a story like a thick veil, but in the case of Navy 67260 we have the official Navy record, as well as a single eye witness to the beginning of the flight, to help us sort out what happened.

The Players:

The Aircraft: The aircraft was a Navy SNB-4, what we call a "Beech 18" in the civilian world. Each branch of the military services had it's own designation for this type aircraft, all of which were later re-designated C-45. The aircraft had twin, 450 hp radial engines and a tail wheel, and carried two pilots along with accommodations for 6 passengers.

The People: The crew consisted of the pilot, Lt. Marshal Harlow Hand and the co-pilot, Lt. Lasley Kirk Lacewell. The flight was carrying one passenger, Haskel Lewis Keichbach, who was a sailor assigned to a ship docked in Los Angeles.

The Mission: This flight was a routine night proficiency flight. The pilot and co-pilot were stationed at the Monterey Line School, a position which did not involve flying. As Naval Aviators they were required to fly periodically to maintain their flight proficiency. Certain of their flights were required to be night flights, and this was one of their required night, cross country flights.

The Witness: The co-pilot's wife is the witness we have to the start of the flight.

Before The Flight:

The co-pilot and his family had an early supper and he called the weather service to check on the prospects for making the evening's flight. The co-pilot's wife remembers that he asked that she and the children accompany him to the airfield that evening, explaining that the weather report called for icing conditions and since the aircraft he was scheduled to copilot did not have de-icing equipment they surely would not make the flight. Upon arriving at the Monterey Naval Air Station, her husband left her and the children waiting in the car while he went into the flight operations office to check on the status of the flight.

After some time, her husband returned to the car and told her that it turned out that the aircraft did in fact have the deicing equipment, and that the pilot had elected to make the flight. If he was still apprehensive about the flight, he did not show it. He was a Naval Aviator, he had his orders, and he was would follow them. She and her husband quickly made plans to have a neighbor watch the children when she returned to pick him up after the flight. He expected to return about midnight. Her husband kissed her and each of the children, and watched as they drove away.

The Flight:

The flight was scheduled for takeoff at 18:30 on the evening of January 9th, 1955, from the Monterey Auxiliary Air Station, now designated "Monterey Peninsula (MRY)" and was scheduled to fly direct to the Salinas NDB, which was located where the Salinas VORTAC is today, and then follow Victor 27, now designated Victor 25, southeast to Santa Barbara. At Santa Barbara, the flight was to meet the "Amber 8" airway, which today is an extension of Victor 25, and follow it to the Riverside NDB, which was located 8 miles east of today's RAL VORTAC, passing over LAX and several fan markers enroute. At Riverside, the flight was to turn left to a course of 324 degrees, fly approximately 5 miles to intercept the Norton AFB NDB approach course and then make a 90 degree turn to the right to land at Norton. Norton AFB is now designated "San Bernardino International (SBD)".

Norton AFB was located at the foot of the San Bernardino Mountain range, which runs southeast to northwest on a bearing of approximately 300 degrees, so the aircraft flying on it's course of 324 degrees would converge with the mountain range about 20 miles north of it's destination if it failed to turn on schedule.

The pilot had over 4000 hours of flight experience, had served as an Instrument Instructor at his previous base and was currently an Instrument Check Pilot at the Monterey Naval Air Station. He also held a "Special Instrument Rating", what the Navy pilots called a "green card", allowing him to approve his own flight plans without the concurrence of the base operations officer.

The co-pilot had over 1500 hours of flight experience, most of that in multi-engine aircraft, and was designated "Patrol Plane Commander" in the PBM-5 type multi-engine seaplane. He had recently completed transitional training to single engine jet fighter type aircraft.

Neither of the pilots had any mountain flying experience, and this would turn out to be an important factor in the decisions made that night.

The first indication we have that the flight might not be routine was when the co-pilot told his wife that the flight would probably not take off because of icing conditions along it's route.

The pilot checked the NOTAMs for the flight and was informed that the instrument landing beacon at Norton Air Force Base was in service but identified as unreliable during night time hours. The weather at their destination was expected to be broken to overcast between 4300 and 5000 feet with 10 miles visibility below the overcast in rain and snow showers.

The official report of the accident includes the statement that:

Lt. Hand signified by signature that he "had read all pertinent NOTAMS and had in his possession all necessary charts and route information to make a safe flight".

In a normal situation, the unreliable navigation beacon would have been a prohibiting factor and would have caused the flight to be canceled without comment. With this beacon unusable the pilots had no way to identify their destination. This was, however, not a normal situation. The pilot had made arrangements to meet a friend, a fellow naval aviator, at the Norton Air Force Base, and he wasn't going to cancel his arrangements. Since the radio beacon at Norton was unreliable, it was obvious that the aircraft would not be able to make an instrument approach to its destination. We can only guess that Lt. Hand assumed that they would be able to approach Norton in visual flight conditions. The fact that the pilot held a "green card" allowed him to override the advice of the flight operations officer and approve his own flight plans regardless of the conditions. He did just that, and filed the flight plan.

With upon reviewing the flight plan the flight operations officer called the pilot over to his desk and pointed out that the flight would be extremely hazardous because the navigation beacon at Norton Air Force Base was unreliable. The pilot thanked the flight operations officer for his advice and reiterated that he would be making the flight on his own authority.

As the pilots prepared for the flight a young sailor, Haskel Lewis Keichbach, approached tem and asked to ride along in order to rejoin his ship, which was docked in Los Angeles. Lt. Hand agreed to take the sailor along for the flight to Norton.

At 1834 the twin radial engines roared to life as the pilot started his takeoff roll on runway 10, 20 seconds later the aircraft's tail lifted and the aircraft climbed off of the runway and turned to a course of 053 degrees to intercept Victor 25 at the Salinas NDB.

At 1854 the flight reported:

"Navy 67260, 11,000, passing Salinas, estimating Paso Robles at 1920, Santa Barbara next"

At 1928 the flight reported passing Paso Robles and 6 minutes later, at 1934, the pilot called traffic control again:

"Navy 67260, we're picking up some moderate rime icing at 11,000 and requesting lower."

Santa Barbara control responded immediately and cleared the flight to descend to 10,000 feet. This altitude change was apparently sufficient to get out of the icing conditions, as the pilots made no further requests to descend.

The flight progressed normally at 10,000 feet, passing Santa Barbara and joining Amber 8 at 2039 and reporting over Malibu intersection (now designated Exert) at 2054.

At 2054 the flight reported:

"Navy 67260 passing LAX at 10,000, estimating La Habra at 2104, Riverside next."

At 2059, Los Angeles radio called Navy 67260, cleared the flight to descend to 6,000 feet and directed the pilots to report passing each thousand foot level. The pilot reported leaving 10,000 feet at 2059, reported passing each successive thousand foot level, and reported reaching 6,000 feet at 2103. At 2110, the pilot was directed to contact Ontario radio for further clearance.

At 2112, the flight received the following clearance from Ontario radio: "Navy 67260, cleared for standard ADF approach to Norton AFB, initial approach from 6,000 feet, report leaving 6,000 and 5,000 feet. Be advised that the Norton NDB and the Ontario outer compass locator are reported to be unreliable."

At 2116, the flight passed Riverside range on a course of 090 degrees and turned left to a course of 324 degrees, making the following report to Ontario radio: "Navy 67260 over Riverside at 6,000, estimating Norton at 2120."

This was the last communication accomplished by the flight. From this point on, we can only speculate as to exactly what happened.

The Norton tower log indicates that Navy 67260 was heard calling at 2124, but communication could not be established.

It can be assumed that the pilots passed the Norton NDB at 2120, as predicted, but that they did not turn because they did not receive the beacon signal.

The pilots had just made a course change of 126 degrees as well as a descent of one thousand feet, so we can assume that when their navigational receiver did not indicate the passage of Norton at 2120 the simply maintained their course, thinking that the wind speed and direction may have changed.

Their next indication of their actual location would have been passage over the Fontana fan marker, and at that point the pilots would have realized instantly that they had passed Norton by 8 miles. Inexplicably, the pilots flew straight ahead another 7 miles before beginning a turn to the right to try again to locate Norton AFB. This turn ended in a collision on a ridge near Cajon Mountain at an altitude of 4,800.

The navigation radios were found tuned to Riverside radio (388 kcs) and Long Beach radio (233 kcs), indicating that the pilots were trying to triangulate their position at the moment of impact.

The fact that the Navy chart binder was found with the pilot leads us to believe that the co-pilot was flying the aircraft at the time of impact, and that the pilot was trying to determine their location.

The fact that the aircraft collided with the mountain in a climbing attitude and at 4,800 feet indicates that the pilots had descended from their last reported altitude of 6,000 feet to 5,000 and possibly 4,000 feet before realizing that they had passed Norton.

Aircraft was found after a four day search, and all three occupants had perished.

The Official Report:

The official Navy report ended with this conclusion and these recommendations:

Conclusion.

The Board concludes that navigational piloting error is the underlying cause of this fatal accident. Contributory factors stem from the lack of thorough pre-flight and sound enroute flight planning in the following areas:

- 1. Due appreciation of physical terrain hazards in the areas surrounding the terminal.
- 2. Local terrain influences modifying terminal weather depicted in sequence reports.
- *3.* Adequate evaluation of reported unreliable radio aids.
- 4. Requirement for timed precision approach procedures and full utilization of all radio equipment available.

Recommendations.

- 1. Strict adherence to instrument procedures on instrument approach clearance during partial VFR weather conditions remains a mandatory requirement for all pilots.
- 2. Pilots, particularly those with flying experience limited to the East Coast, should give special notice to terrain conditions when planning flights and flying in mountainous areas.
- 3. The Navy Beechcraft aircraft should have a second navigation receiver installed and be painted for better visibility.

By: John Kirk Lacewell January 9th, 2011