

NATIONAL TRANSPORTATION SAFETY BOARD

Office of Aviation Safety
Washington, D.C. 20594

November 23, 2010

OPERATIONS GROUP FACTUAL REPORT

ADDENDUM 1: INTERVIEW OF THE PILOT'S WIFE

A. ACCIDENT

Location: Aleknagik, Alaska
Date: August 9, 2010
Time: About 1442 Alaska daylight time (ADT)¹
Airplane: de Havilland DHC-3T airplane, N455A
NTSB Number: ANC10MA068

B. OPERATIONS GROUP MEMBER

Malcolm Brenner, Ph.D.
Human Performance Investigator
National Transportation Safety Board

C. SUMMARY

On August 9, 2010, about 1442 Alaska daylight time (ADT), a single engine, turbine-powered, amphibious float-equipped de Havilland DHC-3T airplane, N455A, impacted mountainous tree-covered terrain about 10 miles northeast of Aleknagik, Alaska. Of the nine people aboard, the airline transport pilot and four passengers died at the scene, and four passengers sustained serious injuries. The airplane sustained substantial damage. The flight was operated by General Communication, Incorporated (GCI), Anchorage, Alaska, under the provisions of 14 *Code of Federal Regulations* (CFR) Part 91. The flight originated at a GCI-owned remote fishing lodge on the southwest shoreline of

¹ All times are Alaska Daylight Time based on a 24-hour clock, unless otherwise noted. Actual time of accident is approximate.

Lake Nerka about 1427 and was en route to a remote sport fishing camp on the banks of the Nushagak River, about 52 miles southeast of the GCI lodge. At the time of the accident, marginal visual meteorological conditions were reported at the Dillingham Airport, about 18 miles south of the accident site; however, the weather conditions at the accident site at that time are not known. No flight plan was filed.

D. DETAILS OF THE INVESTIGATION

Operations Group members helped coordinate two interviews with the pilot's wife, Ms. Terri Smith, held on August 14 and October 18, 2010 by investigation team members. Attached are interview summaries for the information provided by Ms. Smith as well as by Steve Dodge and Melanie Malone, who accompanied her at the respective interviews.

FIRST INTERVIEW SUMMARY

Interview: Terri Smith
Wife of pilot
Represented By: Steve Dodge
Childhood friend of pilot/family attorney
Date: August 14, 2010
Time: Noon ADT
Location: Hilton Hotel, Anchorage Alaska
Present: Malcolm Brenner, Elias Kontanis, NTSB
Vicky Anderson, FAA

Ms. Smith was jointly interviewed with Mr. Dodge, who accompanied her as family friend/attorney but also provided observations based on his long acquaintance with the pilot. The summarized information is reported below along with which person provided it, as follows:

According to Ms. Smith, her husband ("Terry") telephoned her just before departing on the accident trip about 1300-1400. He said that he had decided not to fly a trip that morning but that visibility had since improved and it looked like they would be able to go flying that afternoon. He sounded happy. He was doing what he loved and enjoyed flying the airplane. He never mentioned Mr. Sean O'Keefe or any other passengers during his conversation. He spoke of his "friendship with the airplane." He spent a lot of time around Garrett engines and truly loved them.

Ms. Smith indicated that her husband had been at the lodge for several days by himself and telephoned her regularly, normally in the morning and evening. She was unaware of his activities at the lodge between flights but speculated that he was talking, sleeping and probably explaining things to people. The lodge was just a restful place and he was a pretty happy camper. Ms. Smith indicated that flying always came first for her husband. He absolutely socialized with clients, but was not an avid fisherman. He fished because he was there with the clients, but not necessarily by choice.

Terry was more of an evening person and was never shy on sleep. He woke up sharp, was "on" all the time, and got along well with sleep his whole life. When flying the line for Alaska Airlines, he did whatever he needed to obtain sufficient sleep. When he did not have work demands, he would go to bed between 2200 to 2300, and sleep until 1000 or 1100 the following morning. He napped as much as anyone and never had problems with insomnia. Sometimes he would make it a

game to be the first one in bed in the evening. Mr. Dodge added that his friends knew not to telephone the pilot ("Terry") before 1000.

Ms. Smith stated that she and the Terry married in 1991. They initially met outside Anchorage International Airport, after a trip to Korea taken by Ms. Smith. Ms. Smith accidentally got into Terry's car, thinking it was familiar. They started a conversation, but did not see each other again for several years. They became re-acquainted at an aviation safety seminar. They each have two children from prior marriages who all range in age from 25 to 36 years. Ms. Smith has two grandchildren, while Mr. Smith has three. The families live in the Anchorage area. Mr. Smith's daughter and son are pilots, as is Ms. Smith. Mr. and Ms. Smith are rated in, and co-own a Grumman Albatross.

Terry was a talker, and would love to discuss whatever was on his mind, but usually the conversation revolved around airplanes. He enjoyed speaking about airplanes, looking at airplanes on the internet, and attending/participating in aviation safety seminars. Regarding previous aviation emergencies, Terry had many safety stories from seminars. According to Ms. Smith, he was involved in two prior aircraft accidents. Several years ago, while flying in New Zealand, he experienced an engine failure in a Piper Cub. He landed the aircraft without further incident. He also had an accident in a Cessna 185 many years before. Mr. Dodge added that a few weeks ago, Mr. Smith experienced a dual engine failure in a Grumman Widgeon that he was helping to ferry with the owner following maintenance work. He landed the aircraft onto a dirt road in California without further incident. Mr. Dodge believes that the engine failure occurred because of a faulty valve that dumped oil overboard through a faulty propeller governor.

Senator Ted Stevens had previously flown with Terry, approximately 3-4 years prior, and had gone flying in their Albatross. Terry received a card from Senator Stevens, and the Senator expressed an interest in having Terry fly for him, but Senator Stevens was not a close personal friend. Ms. Smith also flew with Senator Stevens years ago.

Mr. Dodge (who now lived in Texas) said that he would give Terry's contact information to any friends who visited Alaska and that Terry would take them flying. Terry treated everyone with equal importance and celebrity was not a big thing. He had flown President Ford, Senator Dingle (who was close to Terry's father), and FAA Administrator Marian Blakey (whom he took on an air tour of Mt. McKinley).

Ms. Smith characterized Terry's health as good/excellent, with no major changes to his health in the past six months. He was very health conscious, ate well, and walked the dog for exercise. He did not drink coffee; smoke cigarettes or marijuana; take aspirin, Advil, or any prescription medications. He drank an occasional glass of wine, but never drank excessively. He did not suffer from headaches or any other ailments. He wore glasses, and always carried them with him, but could still do things without them. Mr. Smith was an advocate of raising

the mandatory flight crew retirement age above 60 years, as long as the pilot was healthy.

Mr. Smith suffered from a stroke several years ago. He underwent many MRI's and CAT scans. According to Ms. Smith, there were no residual effects and no subtle changes in mood or behavior.

Mr. Dodge stated that he was truly stunned by how completely Terry recovered from his stroke. After the stroke, Terry's speech was a little halting, the meter was not him, but he understood meaning. But on July 31, 2010, when Mr. Dodge spoke with him by telephone (see below), it sounded like Terry and there was not a moment that Mr. Dodge remembered the stroke. Terry got his pilot license back after two years and got the Class 1 medical for himself. Mr. Dodge flew with him in the Albatross that first summer after Terry regained his license. Mr. Dodge said he would have recognized even a minor deviation.

Ms. Smith said that both she and Terry had been preparing for retirement. There were no stresses in Terry's life. The marriage was good. Terry was very social, and they had just dressed up the house for visitors. Ms. Smith and Terry were planning a trip to Ireland in the next few weeks to celebrate his retirement. Her husband's mood was very happy. They had no financial worries and no major changes in finances in the past six months.

According to Ms. Smith, the most significant personal issue faced recently by the family was the crash of a C-17 on July 28, 2010, resulting in the death of Terry's son-in-law ("Aaron"), a pilot on-board the aircraft. Terry was very close to his son-in-law, but "he did not have an over-the-top reaction" to his death. When Terry returned to the lodge just after the accident, it was therapeutic.

Mr. Dodge stated that he discussed the C-17 accident with Terry several days after it happened during a telephone conversation of approximately two hours duration on Saturday, July 31. While upset, Terry took a very analytical approach to the accident, discussing the maneuvers associated with the accident sequence. The conversation eventually turned to flying and their past shared experiences and by the end Terry was laughing. Terry was able to talk objectively about the C-17, simulators, and Aaron. He was not in despair, although he loved Aaron and Aaron was the father of his grandchildren.

Both Ms. Smith and Mr. Dodge were baffled by the accident and could not imagine a situation that would have placed the aircraft at that accident location given the intended destination. Ms. Smith had herself visited the lodge several times, and her husband had a long history of flying in the accident area and would not have felt out of his element. He "had a map of Alaska in his head" and was characterized by both Ms. Smith and Mr. Dodge as having a photographic memory and "remarkable retention and recall." Ms. Smith also stated that "Terry was not a magenta line kind of guy."

Ms. Smith indicated that she had about 1,500 hours pilot time from flying in the Alaska bush with Terry. She said he would not have landed at the accident site to escape weather. There was a lot of low terrain, and he would always turn toward lower ground and land. He was very logical and would always have a heading in his head to escape problems ahead. He would have been on instruments and would not have intentionally flown into clouds. Mr. Dodge stated that Terry would not have hesitated to lower flaps in restricted visibility or turbulence to slow down the airplane. It would be instinctive. In a cloud he could perform a 180 degree turn, but Terry would have done this before entering the cloud. A CFIT accident would be unthinkable for Terry and completely out of his lifelong character.

Ms. Smith and Mr. Dodge characterized Mr. Smith as a cautious pilot, who was always thinking ahead of the airplane. He was “not stupid” and “not a cowboy.” He wanted to do an excellent flight but was “not out to impress anyone.” They also indicated that he did not respond to pressure to fly. He had passed on a trip that morning due to inadequate visibility. He flew like he talked and did not make many mistakes.

Mr. Dodge provided information about Terry’s background in aviation. Terry’s father managed the Alaska State Fish and Wildlife Service for 40 years and regularly took his son on flights around the state for wildlife surveys and other purposes. They flew in Goose Beavers, 180’s, and Cubs. They once flew on a walrus survey in the Bering Sea. Terry’s grade school teacher telephoned his mother to complain that “your son tells wild stories about polar bears” and “says he flies an airplane on instruments.” The mother replied that of course her son flew on instruments since he was too small to see out.

Mr. Dodge, who was the same age as Terry and grew up nearby, was himself a pilot and aeronautical engineer as well as lawyer. He said that he knew Terry from when they were both 12 years old and that they were best friends for 50 years and did many things together. They learned to fly at the same time, spending days at the Grasshopper Valley airport together. As teenagers, they took trips by airplane together. They liked to fly and camp at a remote area shown as “unexplored” on the aeronautical charts, which was a green valley near an ice field with short grass landing strips. Mr. Dodge’s father, an airline pilot, owned a Widgeon airplane. He provided the airplane to Terry, on condition that Terry take regular lessons, and Terry loved flying the airplane. Mr. Dodge came along on the lessons. Later, when Mr. Dodge managed a Part 135 airline operation in Alaska, Terry was always available to help.

Terry earned a mechanic’s license (A+P) and engineering degree from the Northrop Institute of Technology. Terry’s knowledge of systems and engines was unmatched. He never forgot a number, and could talk enthusiastically about something as simple as a horseshoe bend.

Terry intended to work in wildlife aviation but ended up as airline pilot. He flew for ERA Airlines, then Aeroam (Teamster's Union), then was searching for a new job due to a management change. Mr. Dodge suggested talking with the Alaska Airlines Chief Pilot. Terry was shy about this but the airline was thrilled and hired him. At the airline, he flew the line but also taught extensively. He loved something about each destination on his bid schedule.

According to Ms. Smith, Terry began working for Conoco/Phillips as Manager of Alaska Shared Services after he left Alaska Airlines. Conoco/Phillips was having trouble with their jet service to the North Slope as a result of an unfavorable safety audit, according to the Ms. Smith, and brought Terry in to rework the operation. Terry did not like the idea of a desk job but did have an opportunity to fly. He fixed the problem, bringing in B-737-700's to upgrade the fleet, and after two years the company had a good audit and he left.

Ms. Smith stated that Terry accepted the job with GCI because he liked very much flying the Otter and he liked GCI and the beautiful area. He had flown for them in the past on a week-to-week basis. He had also flown for several nearby lodges and conducted bird surveys so he was familiar with the area.

SECOND INTERVIEW SUMMARY

Interview: Terri Smith
Wife of pilot
Accompanied by Melanie Malone
Daughter of pilot
Date: October 18, 2010
Time: 1000 ADT
Location: Hilton Hotel, Anchorage Alaska
Present: Malcolm Brenner, Tom Little, Mitch Garber, Clint Johnson
NTSB

Ms. Smith was re-interviewed at NTSB request. She was accompanied by Ms. Malone, the pilot's daughter, who provided additional information. The information provided by Ms. Smith follows, with additional information by Ms. Malone summarized at the end.

In the summer following his stroke, Ms. Smith's husband ("Terry") did about 70 hours of flying in the Albatross accompanied by her and additional pilots. Terry sometimes sat in the left seat, often sat in the right seat, and sometimes sat in back. He also flew the GCI Otter (not as the pilot-in-command), and did bi-annuals and 2 or 3 checkouts during that time period. People often asked him to fly with them.

She and her husband met in 1991 and married in 1993. She was a pilot, raised around airplanes, and was instrument-rated prior to the marriage. She is currently a commercial/instrument/multi-engine pilot with an Albatross rating. Ms. Smith had logged about 1,800 hours flight hours on paper and actually had a bit more.

They flew frequently in the Dillingham area during summers, where they went fishing. They flew there in the 182, Turbine Goose, and Albatross airplanes.

On the accident day, she spoke with her husband and he also left a message on her telephone answering machine. In the telephone conversation, he said that they passed on flying a morning trip to the fish camp. He was going for lunch, and said that he was going to hang his clothes out to dry that night since it was wet out there at the lodge. She was pleased with how happy and relaxed he seemed. He seemed to be having a great time. He enjoyed flying the Otter at

the lodge although he would not have wanted to be a full time pilot. Terry later left a telephone message, about twenty minutes before he departed on the accident flight, and sounded great. He liked to call her.

There was a period of about two years following the stroke when he was without pilot medical certification and, during this time, his job was management at Conoco-Phillips and he was busy. He put the Boeing 737-700 on line. He would love to have flown during this time, and talked about flying especially since he loved the 737-200.

His separation from Conoco was very amicable with all his immediate co-workers, but he never got along with his supervisor in Texas. Terry always said what he thought and was used to being well respected, but his supervisor Doug was not on the same page. Doug worked for an oil company while Terry ran an airline. Doug hired Terry, and said that he should have known that Terry would be difficult to supervise just like he sounded at the job interview. The Conoco operations program had received a lot of criticism before Terry joined it, following an unfavorable report and some incidents, and the company had to determine whether or not to continue it. Terry was hired to improve it, and he received many thanks from the crews.

Even without an FAA license, Terry was flying almost continuously. People called to have Terry fly with them. They owned a PA-18 airplane in New Zealand, where they tried to visit every year and where Terry also flew. Terry maintained a pilot medical license in New Zealand and took his physicals down there. He may not have advised New Zealand authorities about his stroke.

When Terry was tired he went to bed. He liked to sleep. He slept until late into the morning. He sometimes snored, but not all the time. His snoring was not very loud, more like congestion. The snoring did not keep her awake. Asked whether Terry ever stopped breathing during his sleep, Ms. Smith indicated that she did not know but she did recall wondering if he ever did. She had heard sounds like he had temporarily stopped breathing, although not nightly. Ms. Smith noted that she fell asleep rapidly herself, but that she had heard Terry make sounds as though he had temporarily stopped breathing. His father, who had also suffered strokes, also made sounds like this.

Regarding sleep practices, Terry always slept on his back. He did not toss and turn very much during his sleep. He did not kick in his sleep. He never fell out of bed when asleep, and did not have incontinence except during the stroke. He did sometimes twitch or jerk in his sleep, and then would continue sleeping like nothing happened. He did twist in his sleep, with a startle response like a dog or baby. It was like a start and was not continuous. This happened not all night, and not every night, but it did not surprise her. He had these twitches both before and after the stroke. His sleep did not change after the stroke although,

immediately after the stroke, Terry required more sleep. Then, later, his sleep returned to normal.

Terry did not use Viagra before his stroke or at any other time. He did not suffer from headaches; they were very unusual.

She and Terry did fly with FAA Administrator Marion Blakey. Ms. Smith travelled to Juneau as a pilot representative, met Administrator Blakey, and mentioned that they could take her flying. The next day, they took Administrator Blakey and her press representative flying in the Goose to Seward, maybe Denali. They flew around glaciers and landed in water. This occurred soon after Ms. Blakey became FAA Administrator. She was delightful.

Terry never met Dr. Willis Simmons prior to trying to get his medical certificate reinstated. Terry applied after one year and had an interview with Dr. Simmons at his FAA office. Because his stroke had an unknown etiology, Terry was required to wait an extra year.

Terry's family had a history of strokes. His father suffered several strokes that were quite debilitating, one of which required surgery. As a result, the father suffered aphasia and had to learn to read/talk again. But the father continued to fly very well as a pilot and flew with Ms. Smith. He was unable to talk on the radio but his stick and rudder skills were great. Terry's uncle was believed to have died from a stroke in 1964 when he was about 40 years old. More than one aunt had strokes in their 60's to 70's. She thought the uncle had a hemorrhage stroke but it was not definitive; she did not know about the strokes suffered by the aunts.

Ms. Smith said that she advised Terry's physicians about the family history of strokes, but they assured her that there was nothing hereditary about Terry's condition. The physician in charge initially, as well as the next physician, did an MRI. She was adamant that she had the key to the stroke through the family history, but the physicians said no. No physician ever reviewed the family records.

Asked whether Terry experienced memory problems as a result of the stroke, Ms. Smith said that he was an entertaining story teller and his stories changed a little. But she never witnessed any situation in which he forgot an individual or event. He remembered everything.

Asked whether Terry experienced episodes in which he had trouble focusing attention, she said that he did immediately following his stroke. The episodes lasted for seconds. This happened only in the first few months following the stroke and did not really happen later. She was watching him closely. She was not sure he would ever fly again following his stroke, but he always thought that he would.

Asked whether Terry experienced physical coordination/motility problems as a result of the stroke, she indicated that he did not.

Asked whether Terry had a facial twitch, Ms. Smith indicated that his left eye twitched. This twitch began two to three months prior to the stroke and continued after it. A neurologist assured her that it was unrelated to the stroke. It occurred fairly often and bothered him, occurring about twice per hour. It was not constant, not a flutter, and never closed the eye. It was more pronounced and frequent when he was stressed. She got used to the twitch but a stranger would notice it. Several doctors recommended an application of Botox near the eye. The doctors said it was just a twitch, unrelated to the stroke, and that sometimes this just happened. She thought it might be related but, honestly, the doctors got tired of hearing her medical opinion.

Asked whether Terry ever ground his teeth, she indicated that he did not. He did not have a mouth guard.

Terry began driving a car within a couple weeks after the stroke and was a danger. He was a little slower, not as with it, and not quick to respond. He drove slowly, about 30 mph. One month after the stroke, he was pulled over by a police officer who thought incorrectly that he was inebriated. Ms. Smith said he got her attention a few times with inadequate driving. She actually called the DMV shortly after he resumed driving and was told that he could drive again if he felt like it. According to Ms. Smith, the DMV indicated that there was no regulation to report the stroke and, following the stroke, there were no tests done to allow him to resume driving. She thought he should have waited a few more weeks before driving but said that, after two to three months, he stopped scaring her.

Terry also continued flying through this time period. They took the Luscomb to a lake and he performed the landing. Ms. Smith said that his skill was not bad and that he did not scare her at all. It was frustrating for him not to have his license.

Asked about the witness statement by Norm Lagasse, that Terry exhibited memory problems in his flying, Ms. Smith said that she also saw that after the stroke. For the first few months, he made mistakes like not pulling back the mixture. Then the problem seemed to correct itself.

Asked about the witness statement by Virgil Peachy that Terry exhibited unusual preparation and emotion on the accident morning, Ms. Smith stated that Virgil visited her after the accident, expressed his concerns, and told her that he mentioned these concerns to the NTSB. She indicated that it was difficult to judge the validity of Virgil's concerns since he was under emotional duress and there might be pilot explanations for his observations.

Terry was always late in the morning. An 0830 start was early for him, and you did not push him this early or he would just slow down. He normally went to bed between 2200-2300 and would get up in the morning when the telephone rang. He ran his office from the bed in the morning. Recently, perhaps June 2010, he began going to bed earlier. Prior to that, he had normally gone to bed between 2300 to midnight.

Melanie Malone added the following information:

Her father taught her to fly. He stressed the need to always think ahead, and have a plan for a way out. She completed a private pilot license in college, completed her CFI rating with her husband Aaron, and now has about 300 hours flight time. She renewed her license several times, and flew with her father, but did not return seriously to aviation after she had children.

She talked with her father at the recent memorial for Aaron (who died in an airplane accident), but did not know whether he telephoned her from the lodge. Ms. Smith ("Terri") said he seemed relaxed up at the lodge.

Her grandfather (Terry's father) was overweight, smoked, and ate unhealthy food so she always thought it was Grandpa's life style that might have precipitated his stroke. His first stroke occurred in Christmas 1982, when he was 71 years old. He "blew a line." He had two bleeds and a couple small strokes. Grandpa was one of 11 children in his family and several of the brothers/sisters suffered strokes.

She did not notice memory changes in her father after his stroke. He seemed more emotional and more in tune with her kids. Before the stroke, he had been all work. After it, he was more sensitive as though he was more appreciative of the value of life. They talked more, and she did not see big changes in her father as a result of the stroke. Regarding his driving, he was a slow driver before.