Delegating Full Investigative Authority to a Foreign Agency

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On 28 May 2012 a Beechcraft V35B Bonanza (registration N6658R, serial number D-103232) was being operated under visual flight rules for the purposes of a biennial flight review in the vicinity of Warrenton, Virginia. The Beechcraft was in a shallow climb, headed southbound at 1604:45 Eastern Daylight Time, when it collided at approximately 1800 feet above sea level with a Piper PA-28-140 (registration N23SC, serial number 28-21217), which was also under visual flight rules and headed in a southeasterly direction. The Beechcraft broke up in flight and the pilot and flight instructor were fatally injured. There was a post-impact fire at the accident site of the Beechcraft. The pilot, sole occupant of the Piper, was able to conduct a forced landing in a pasture approximately 6 nautical miles south of the Warrenton-Fauquier Airport and sustained a minor injury.

The Piper was piloted a Federal Aviation Administration (FAA) employee and the Beechcraft was piloted by a National Transportation Safety Board (NTSB) employee. Given the unique circumstances surrounding the ownership and operation of the accident aircraft, the United States, as the State of Occurrence, and represented by the NTSB, delegated the investigation to Canada in accordance with paragraph 5.1 of the International Civil Aviation Organization (ICAO) Annex 13 to the Convention on International Civil Aviation (Annex 13). Transportation Safety Board of Canada (TSB) Occurrence Report A12H0001 refers. The NTSB file number is ERA12RA367AB.

This was the first instance of a foreign investigation agency conducting/leading an aviation safety investigation in the United States. Given the challenges of keeping trained investigators current (countries without a general aviation sector would not have a lot of opportunity to practice their skills as accidents in the airline industry are rare) and keeping costs down (current world economics are dictating that more has to be done with less), the sharing of investigative services between nations may be a viable option in the future.

This paper discusses the challenges that were experienced during the investigation, and some of the solutions that were put in place. These experiences would apply to countries that already have an ICAO-compliant independent safety investigation organization supported by legislation.

The following areas of investigation management will be discussed:

- Initial Responses of both agencies - no pre-established procedures
- Creation of a Memorandum of Understanding between the agencies
- Protocols at the accident site
- Interviews
- Next of kin communication
- Medical information, autopsy reports and toxicology reports
- Communication protocols between the various advisors to the Accredited Representative and the IIC
- Engineering reports and analysis
- Technical review meetings
- Media
- Draft report review and final report production
- Lessons Learned/Challenges and Solutions

It is hoped that the reader will come away with a set of guidelines in which to develop a procedure should they request the help of a foreign agency or be asked to lead an investigation on foreign soil.

Notification and Initial Response

After the request to delegate the investigation to Canada was accepted by the TSB Chair, the TSB manager responsible for international operations contacted the Director of the Office of Aviation Safety at the NTSB to discuss next steps. TSB management assembled a team of investigators that would travel to Warrenton for the field phase of the investigation.

On the morning following the occurrence, the TSB Operations Manager flew from Ottawa to Washington, where he was met by the original NTSB IIC, and the NTSB Eastern Regional Chief (See Appendix A – Initial Response Timeline). Together, they went to the Dulles FAA Flight Safety District Office (FSDO), where a conference call was set up with NTSB HQ in Washington. The TSB Operations Manager was thoroughly briefed on what had been done so far, and the investigation was functionally handed over to TSB.

The original NTSB IIC was appointed as the Annex 13 Accredited Representative for the United States to the TSB investigation. All parties were briefed that the Accredited Representative was to be the sole point of contact between the TSB and the NTSB and its Technical Advisors, including the FAA, for the purposes of the investigation. Other NTSB personnel and NTSB Board Members were not involved in any aspect of the investigation other than providing information requested by the TSB Investigator-In-Charge through the Accredited Representative. The Accredited Representative ensured that confidential information supplied to the TSB was clearly identified as such in order to assist the TSB in ensuring the confidential information was not released outside of the TSB.

Later that morning, the NTSB Accredited Representative and the TSB Operations Manager left to visit the accident sites, and there was significant further discussion and agreements made on how the field investigation would play out. The remainder of the day was spent documenting the occurrence sites, liaising with local authorities, and coordinating with insurance and recovery companies.

Late that evening, the IIC and technical investigator arrived from Canada, after which the team debriefed and planned the next day's activities.

Memorandum of Understanding

A special MOU was created between the agencies to set forth the intention of the TSB to conduct an investigation into the accident in order to make findings as to the causes and contributing factors and identify safety deficiencies.

The MOU identified that the respective agencies would be bound by the standards in ICAO Annex 13, and that the investigation would be conducted in accordance with the CTAISB Act, and TSB Regulations, policies and practices.

Additional areas covered by the MOU:

- Communications/Media
- Liability
- Termination
- Term of the MOU
- Disclaimer

Protocols at Accident Site

Given the similar operating principles of both agencies, initial activities at the accident site (prior to creation of the MOU) were agreed to by both TSB and NTSB investigators that attended the site.

Both agencies subscribe to the guidance material and investigation techniques documented by ICAO. Having common work practices resulted in easy agreement on how to preserve and document the wreckage.

Because the accident was on US soil and the NTSB was the recognized agency, it was easier for the NTSB investigator to liaise with local law enforcement to facilitate locating all the wreckage, obtaining witness statements gathered by law enforcement and providing site security at both accident locations.

After the MOU was signed, work continued as per ICAO guidelines with the ultimate decisions being made by the TSB IIC. To ensure a timely collection of data, NTSB investigators, through the Accredited Representative, were directed by the TSB IIC to

collect data under the NTSB regulations and the use of their powers.

Interviews

The TSB Act identifies statements as being privileged information. As such, it is TSB policy that no one is allowed to attend an interview except for TSB investigators, the interviewee and one person chosen by the interviewee. The chosen person is there to provide personal/emotional support to the interviewee and is not allowed to interfere in anyway with the interview process. The statements collected during this process are protected and privileged under the TSB Act and are not releasable.

There are differences in how the NTSB and TSB approach witness interviews, and protect the information gathered. Therefore, a detailed briefing was held between the TSB IIC and the FAA ATC management and the FAA controller association representatives to ensure that they fully understood these differences. Taking the time to adequately brief the FAA/association on this matter ensured that the interviews conducted with FAA Air Traffic Controllers went well and that the interviewees were comfortable with what TSB protocols.

Unfortunately these protections did not reassure the Piper pilot, as he declined to participate in an interview with TSB investigators. In Canada, TSB investigators have the power to compel witnesses under the Canadian Transportation Accident Investigation and Safety Board Act; however, being on U.S. soil, the Act has no authority. The Piper pilot was within his rights to refuse to be interviewed, and the only statement provided to the investigation was one given to State Police.

Communication with Family Members, Loved Ones and Survivors (NOK)

The primary goal when working with NOK is prompt accurate dissemination of information to the families. It was initially felt that they would best be served by communicating with the NTSB as it was a familiar agency to them. This worked well for the first 8 weeks of the investigation. A few months after the accident, direct communication between the NOK and the TSB IIC commenced.

It was made clear to the NOK that they had the option to communicate with either agency; whichever they felt most comfortable with. The TSB IIC and the NTSB Family Liaison worked closely to ensure that each contact with NOK was made known to ensure a consistent response to the NOK from either the TSB or NTSB. The TSB IIC briefed the NTSB Family Liaison on what information was to be released.

Medical Information, Autopsy Reports and Toxicology Reports

With the TSB as the lead agency, the release of sensitive information from the United States to a foreign country required specific steps to ensure that the information was reviewed by competent people and remained confidential.

The TSB Human Performance specialist on the investigative team hired medical doctors to review the pilot medical files, autopsy and toxicology results. The surviving pilot's FAA medical file was reviewed and contents were shared with the TSB IIC, but the actual medical file did not leave the FAA as per U.S. law.

The Civil Aerospace Medical Institute (CAMI) conducted the toxicology on samples retrieved from the descendants and the surviving pilot. For accidents on Canadian soil, the TSB has dealt directly with CAMI. In this occurrence, coordination for the testing and results went through the Accredited Representative.

Communication Between IIC and Accredited Representative and Advisors

The MOU clearly spelled out the function of the Accredited Representative and how information was to flow from the advisors to the Accredited Representative and the TSB IIC. The FAA ATC component to the occurrence required advisors from both the FAA and the ATC controller's association. At no time did these advisors communicate directly with the TSB IIC. All exchanges of information went through the Accredited Representative.

This protocol ensured that no sensitive information was mishandled and that the role and function of the Accredited Representative was in accordance with ICAO Annex 13.

Engineering Reports and Analysis

The investigation had to determine an approximate field of view that each aircraft would have had. The NTSB had recently obtained a Faro 3D scanner and it was felt that this equipment would work well in determining the field of view from each aircraft. The process was conducted by the NTSB with TSB Lab personnel participating.

The data created by the NTSB was utilized in a TSB Engineering report on what the field of view may have been. An additional analysis of the techniques used by the NTSB was completed by the TSB Engineering Lab.

To ensure independence, all work was coordinated by the TSB and vetted by the TSB. There were no independent reports issued by NTSB Engineering group.

Technical Review Meeting

To ensure that the NTSB and their advisors were clear on the information that the TSB had collected and analyzed, a technical review meeting was held approximately 6 months after the accident. The meeting was held at NTSB headquarters to ensure that the largest number of participants could attend. Factual information, emergent safety issues and next steps were discussed at the meeting.

Media

All communications relevant to the occurrence were handled by the TSB. No press releases were done by the NTSB except for an initial statement by the NTSB Chair soon after the accident declaring that the TSB of Canada would be conducting the investigation. Any requests received by the NTSB communications group were redirected to the TSB Communications department. All media events and products surrounding the release of the final report were also handled by the TSB.

Draft Report Review

In accordance with the MOU, the TSB performed the confidential draft review process in accordance with TSB policies and procedures. In addition to the Accredited Representative commenting on the draft report in accordance with ICAO Annex 13, draft reports were made available to those persons who would be affected by the report. In this accident, the NOK of the pilot and instructor from the Beech aircraft, the surviving Piper pilot and the two involved FAA air traffic controllers were given the opportunity to comment on the draft.

The FAA's comments, were incorporated into the Accredited Representative's comments.

Summary

Excellent communication skills, an MOU and ICAO standards; these three components were the cornerstones to the successful management of an aircraft accident in a context that had never been done.

The Accredited Representative and TSB IIC were in constant communication, both electronically and verbally. No assumptions were made and no decisions were made in isolation. The convenience of modern communication tools allowed a seamless and timely exchange of information, ideas and concerns. Coupled with good communication skills was the maturity of all parties involved to put the integrity of the investigation first and foremost. Advancing transportation safety through investigation requires products that are accurate, logical and reputable. Without a transparent and independent investigation process, these goals cannot be met.

The MOU served as an anchor to the investigation to ensure that all parties involved understood their roles and responsibilities. Coupled with the standards set forth by ICAO, both agencies were able to work towards a common goal with common work practices. These commonalities reduced the potential for conflict and disagreement to a negligible factor.

Appendix A – Initial Response Timeline

28 May

- (1605) accident happens
- State police on scene
- NTSB investigator arrives on scene of both accidents
- TSB notification
- (2000) TSB team assembled
- NTSB delegates to TSB
- (2230) NTSB leaves scene

29 May

- (0700) TSB Operations Manager arrives in Washington
- TSB/NTSB/FAA meeting to discuss TSB leading investigation
- TSB Operations Manager on scene with NTSB assisting with local authorities and salvage company
- (1630) draft MOU circulating amongst NTSB and TSB HQ Senior Management and Chairs
- NTSB press release on delegation to TSB and creation of MOU, the press found out about the MOU before the NTSB and TSB investigators on the scene, TSB investigator on site gave a briefing to the press
- (2330) the rest of TSB team (IIC and technical investigator) arrives in Warrenton

30 May

- (0800) TSB IIC team and NTSB meeting
- (1130) arrive on scenes
- (1500) TSB press briefing