

Aircraft Accident Investigations: Training Investigators

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The investigation of aviation incidents and accidents is today recognized as a fundamentally important element of improving safety. Those responsible for investigations have come to be considered as key partners throughout the aviation industry and there is an increasing need for well trained and qualified accident investigators. Accident investigators have become detectives in the aviation industry where investigations have become both an art and a science. On the technical side, laboratory testing of materials, failure modes, sample analysis, photogrammetry and more are all scientific processes that provide useable data. The lab will help reveal *what* happened to the aircraft but not necessarily the *why* the accident happened. To discover the *why*, today's investigators must also integrate the human side or human factors (HF) with the technically focused investigations led by operations and maintenance. The integration of HF and the science or technical aspects into an effective investigation is not an intuitive process and is the result of training and experienced investigators. There are considerable challenges to the investigator in air accident investigations, but the critical element for success is a sound training program with elements of how to conduct the investigation, use of investigative tools, integration of human factors, analysis of technical and operational aspects, and the writing of a concise and illuminating report. This presentation is about some concepts and approaches to effective training for accident investigators.