## BENEFITS FROM THE USE of INVESTIGATIVE CHECKLISTS

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Sam Taylor, One of the United States Air Forces most revered and feared Aviation Accident investigator once told me.

"Pappy do not take any hasty wooden nickels...they do not spend well at the inquiry ... and remember this out here where hurt happens...Just cuz our government tries to tell you its so...that don't make it true."

Sam Taylor was correct...and I learned from him that my investigations were just beginning as the government was finishing their reports.

There are several Methods a litigator may choose to investigate an accident. He should be warned in advance that any method other than complete investigation would usually result in bad results for the client. In many instances, the accident investigation done by the government is either incomplete or wrong, as examples:

- 1. A Dec 11, 1970 Cessna 337 accident was put down as pilot error and a blood alcohol reading sufficient to cause impairment was recorded. Later it was shown that the blood alcohol reading was in total error and it was removed...There was plenty of evidence that the error was "design induced"
- 2. In another accident it was called pilot error as a tired pilot flew into the ground while flying a early morning I.L.S. approach. It was deemed pilot error. By investigation, it was found that two television stations were off the air. They were broadcasting a standard test pattern. These` two patterns would effect. This variety of I.L.S. receiver. The result was a fly down fly right signal. Still later filters were added to the I.L.S. receiver system so it could not be interfered with.
- 3. A General Aviation aircraft catches fire because a E.L.T. antennae shorted the battery. The conclusion was maintenance error. The report was totally devoid of questions like why did the planes interior burn like a World War II negative.
- 4. A Navy T-28 comes apart in mid air. The Navy said pilot error for entering a thunderstorm area. The airplane is not equipped with weather radar nor did the pilot get vectors from ground radar to avoid imbedded storms. What the Navy report failed to include was that the Air Force had strengthened the tail and the Navy had not.
- 5. In another series of cases, the N.T.S.B. has failed to identify flutter accidents. This is because the average N.T.S.B. investigator does not have the capability to identify the fingerprints of flutter.
- 6. An F-16 crashes and the Air Force says pilot error and possible incapacitation due to

misuse of the medicine Bactrim. The Air Force made no uses of the information that every flight instrument in the airplane was lying to him in a failed condition. A.D.I., H.U.D., standby A.D.I., H,S.I. and the actual inertial navigation platform. Only after they were forced to reconvene the board did they conclude a mechanical problem with the aircraft.

7. A DC-8 crashes and the N.T.S.B. concludes pilot error and poor cockpit resource management. Interestingly, this finding was announced in Toledo papers even before the wreckage was cleared. When analyzed the finding was so in error that it relied on impossible physics and aerodynamics. The N.T.S.B. relied on a computer and failed to test their theory either in a simulator or in a real airplane. The number of wrong or incomplete conclusions attributable to the N.T.S.B. is great, the number of incomplete investigations is greater. It is not an indictment of the system, but rather a warning to the litigator that the government's investigation may be flawed.

So how is an investigator to determine the validity and completeness of the investigation done by the government?

FIRST: Read it and see what the conclusions are.

**SECOND**: determine what was happening on board the aircraft at the beginning of the incident.

THIRD: Determine what variety of accident it was.

**Fourth:** Determine what may have contributed to the cause.

Having made these determinations it is time to go to the master investigation checklist and determine what needs to be accomplished beyond that done by the government. Simplifying the checklist is a simple procedure of reading through it and deleting portions that obviously do not apply. From what is left of the checklist, a investigation should be initiated. It is far better to do a too thorough investigation utilizing a philosophy of checking everything and eliminating cause potentials. If this method is followed, the investigator comes to only one or a few possible causes. It verifies that nothing has been overlooked, and the veracity and completeness of an investigation is more difficult to impeach. (This method is time consuming and expensive), but well worth it in it's results. An accident investigation by the government may indeed be complete and accurate. When this occurs the investigators, job is simplified and much of the investigators checklist may be omitted.

## THE USE of INVESTIGATIVE CHECKLISTS.

An Investigator will find these checklists are helpful in insuring a investigation is complete. An experienced investigator will know almost immediately which lists may be omitted and which followed based on the type and variety of accident. For instance if the weather is uniformly good and the accident occurred in daylight there is little need for a weather follow up checklist. The most amateur can determine that weather was not a factor. The converse is true when weather is suspected. When the weather is bad then it again is obvious. When the weather is marginal, then I suggest an investigation to determine exactly what the conditions were.

An attorney will find the checklists helpful for many reasons:

- 1. Ask your own expert investigator, whether he considered all the various factors. When your own investigator says these checklist items were not considered ask him why they were deemed inappropriate or unnecessary. Thus, you will learn your own case and simultaneously learn why other scenarios are incorrect.
- 2. A checklist is utilized to find out the depth the opposition has gone to in their investigation of the accident.
- 3. The checklist and the section on obtaining data can be used to word production discovery.
- 4. The checklist can help in F.O.I.A. requests.