

# ACCIDENT ARCHEOLOGY

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I would never have believed that working as a shovel hand for the Smithsonian on an archeological survey would ever help me in aircraft accident investigation. I was wrong. In four hundred and fifty five accidents, I have twice utilized standard archeological methods in the field, and several times at the salvage area. In every case, it has been to correct the loss of evidence caused by sloppy preservation of evidence or previous investigators' blunders.

The usual scenario is some ham-hocked investigator pries open an avionics box or light bulb casing, eyeballs the evidence, then discards it, having made an unscientific determination. Preserving best evidence was never an N.T.S.B. strong point or goal. An investigator is left with a major decision. Do you trust the reported findings of the N.T.S.B. and the manufacturers' representatives who have been allowed on the scene? Since the legal investigation is about fault, responsibility and money damages more than about air safety a prudent investigator will take no wooden nickels, especially when the parts are suspect as being causative. I learned to build screening boxes from Dr. Warren Caldwell.

Go to your local lumber yard and purchase three 8 ft. Cedar two by fours and cut them into 4 equal sections. Slightly less than 2 ft sections. Nail them into rectangular boxes. (Put the ends inside so you end with dimensions of 2 ft on one side and two ft 3 1/2 inches long.). Then go to a hardware store and buy rolls of screening about 1/2 inch, 1/4, inch and 1/8 inch slightly larger than house screen. Staple these to each box and trim sharp edges.

At the scene, stack the boxes large wire on top upon two concrete blocks. Now sift debris, dirt and ashes through this arrangement. I guarantee you will find lost bulbs, transistors resistors and the like without overly costly effort. That is if the

evidence has not been spoiled. At a salvage yard and at fire scenes there are always piles of dust and debris that seemingly is handled by broom and shovel. This should be screened. Even the pile of dust that has fallen through the screens should be raked out and visually checked before relegating to sacks of worthless debris.

A small box (small screen size) is helpful at home as well. I once found a diamond from a ring that was swept up by the vacuum cleaner, and another time I retrieved a jeweled pendant that was eaten by our dog. (Without getting my hands dirty)

Videotaping such an archeological process will convince any judge or jury that you went to every effort to find evidence. That you used more than due diligence in your search. You can often find archeology students in master's programs who will work at reasonable rates, and they can testify as to the scientific methods utilized. At times this can be effective. In massive cases, it may well be effort well spent.

Many times at the scene of general aviation accidents, a great deal of material is left behind. In some remote areas most is not retrieved. Sometimes parts are thrown in a scrap pile after they are looked at. These are fertile hunting grounds for such artifacts as bulbs and computer parts and chips. These may turn out to be the equivalent of forensic cache pits and the archeological discipline is well utilized here.