



3D Metrology in Transportation Safety Investigation

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Taiwan Transportation Safety Board (TTSB) is an independent organization with investigating major transportation occurrence in Taiwan. Base on the Aviation Safety Council, TTSB takes responsibility for major accidents of aviation, marine, rail and highway, and to determine the probable cause of the accidents and issues safety recommendations aimed at preventing future accidents.

On-site and the Wreckage

When a major accident occurs, investigators need to survey and record all factual evidence in the crash site as soon as possible, we develop 3D scanning technology into site survey, such as using a 3D laser scanner to manage the site or large-scale objects, afterwards create 3D model from scan data, and comprise terrain data to precisely reconstruct the crash site in our 3D GIS system.



Engineering Investigation

Besides, the scan data can be transformed into STL, that would be compared with its CAD or the normal sample to see the deformation, furthermore it can be reversed into solid model that analyze the distribution of stresses for validating the sequences of failure of using the Finite Element Analysis(FEA).

