

GMTIB – Professional UAV- / drone-based bridge inspection

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Bridge inspection per UAV / Drone: The specialised boutique consulting firm Guido Morgenthal Technologien im Bauwesen (GMTIB) using the AscTec Falcon 8 to inspect the Anna-Ebert-Bridge in Magdeburg, Germany.

Photo: Christina Bendigs (Volksstimme.de)

Structural engineering meets high-tech UAV / drone

Of course our customers know the efficiency and further unmatched characteristics of our professional unmanned sensing flight platform AscTec Falcon 8. Yet the public tend to believe not in the beneficial opportunities of UAV / drone technology. Even engineers and experts from diverse branches tend to not truly believe in today's advanced potentials for professional use. Indeed doubters

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should convince themselves and test the quality and reliability of flight systems like the AscTec Falcon 8 through an individual, self-controlled test flight.

UAV- / Drone-based bridge inspection – between water, piers & deck

Surface damages like cracks and spalling can only be detected from close distances. For that purpose inspectors of construction need to work right at the bridge, which is expensive and risky. Often inspectors get support by industrial climbers, via hubs, scaffold, crane or boat to access remote and critical spots. Every structural analysis thus is very time-consuming and generates significant financial and human costs. The Anna-Ebert-Bridge was inspected from a two-man team. Norman Hallermann and Christian Ahrend as pilot and co-pilot were able to survey and inspect the complete bridge within few hours. They flew the UAV / drone in about 5 metres distance to the object. Over two years the Bauhaus University Weimar tested the AscTec Falcon 8 for that application. Numerous constructions have been surveyed and inspected successfully. As a consequence [Guido Morgenthal Technologien im Bauwesen](#) has been founded to serve the high demand for UAV- / drone-based structural analysis.

A civil UAV / drone like the AscTec Falcon 8 as unmanned measuring instrument providing high definition video, stills and thermal imagery data could change the game for construction industries. It could be used for universal employment: From surveying land in construction planning, to onsite documentation, building inspection and frequent monitoring of real estate or structural inspections for repair and maintenance work, for heritage monument energy efficiency control... For construction industries UAVs / drones like the AscTec Falcon 8 would emerge as highly efficient inspection tool.

Find details about the UAV- / drone-based operation from GMTIB here:

- http://www.volksstimme.de/aboservice/volksstimme.de_newsletter/1469718_Alte-Dame-steht-im-Visier-moderner-Technik.html
- PDF: http://www.magdeburg-tourist.de/media/custom/37_15843_1.PDF?1430812072

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