S.A.F.E. Structure Designs Provides Unique Solutions for US Army Corps at Shenango River Dam in P.A.

S.A.F.E. Structure Designs is proud to announce the completion of another unique project. With the help of Noble Supply & Logistics providing rapid contracting solutions for their customer, S.A.F.E. was awarded a competitive United States Army Corps contract to design, engineer, manufacture and install a custom stairway for the Shenango River Dam in Hermitage, PA. S.A.F.E. regularly provides custom maintenance equipment and stands for helicopter and fixed-wing operations requiring a safe and efficient method for mechanics to access all areas of an aircraft. The ability to find solutions for any type of aircraft or hangar often leads to unusual engineering projects outside of aviation.

The distinctive requirements of the Shenango River Dam Bridge seemed an almost impossible task to keep within a reasonable budget. This challenge was accepted by S.A.F.E. The stairway spans 55 feet from the top of an embankment down to the riverbed in order to provide safe access to the shoreline downstream of the Dam. The unstable embankment provided unique challenges that did not allow for a center support. S.A.F.E. provided engineers specializing in geology, civil and structural engineering from the local area. Massive concrete pads measuring over 25 feet deep and 8 feet wide hold the stairs solidly in place. At the base, a concrete pad with steel rods was driven deep into the rock bed to hold the 10,600 lb stairway.

We accept many challenges from aircraft operators to provide special fall protection systems and platforms. This project was an exciting challenge that tested our creativity in a unusual way.” said Johnny Buscema, CEO of S.A.F.E. “The stairs were welded as one sold piece and required a 100,000 lb crane to lift it into place. With our experience in the aviation industry, we considering utilizing a helicopter to perform the install, however, the project did not have the budget so we resorted to the crane. The crane had to be disassembled, transported and reassembled on location because it was too heavy to cross a small steel local bridge. We are proud to accomplish within budget what some say can’t be done.”

S.A.F.E. will be hosting a virtual Aviation Maintenance Safety Symposium at Airbus in September. The details will be available shortly. The Symposium will provide safety information, resources, solutions and networking opportunities for mechanics.
S.A.F.E. Structure Designs is the global leader in maintenance support equipment that strives to put safety first, S.A.F.E. listens to the needs of the maintenance teams and designs custom equipment to the exact specifications that consider realistic ergonomic factors as well as efficiency. S.A.F.E provides the answers to the unique challenges of working on complex aircraft and other special projects.