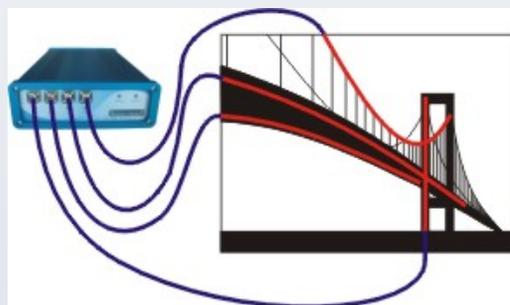
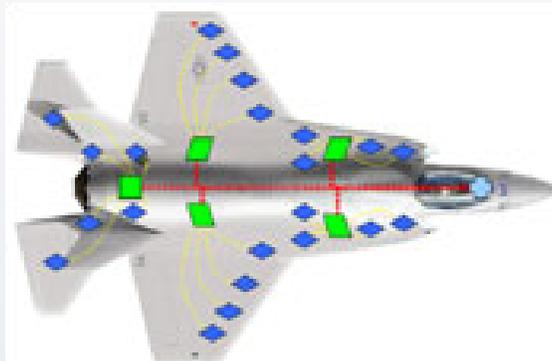




AMMTIAC Publishes a Unique Resource to Monitor the "Health" of Warfighter Assets

AMMTIAC is pleased to announce the release of its newest publication: Structural Health Monitoring – A State of the Art Review. This publication is a first-of-its-kind reference, providing the DoD's nondestructive evaluation specialists and system maintainers with the latest technical information on this emerging technology that they may employ in the sustainment of weapons systems and, infrastructure.

As the nation's defense assets are being pressed into service for increasingly longer service lives, it is more crucial than ever that these systems remain as robust as possible against the forces, natural and manmade, that accelerate their decay and obsolescence. To ensure this result, systems are routinely taken out of service for periodic inspection to detect the onset of fatigue, corrosion, and other forms of structural damage, and to repair them when found. This approach, while effective, is also quite costly and reduces overall readiness by rendering the system unavailable. A more effective approach is to equip systems to monitor their own structural "health," and notify maintainers when they actually needed repair. This concept is known as Structural Health Monitoring (SHM).



SHM has become increasingly important as an additional component of overall Nondestructive Evaluation (NDE) programs and is now being used in a variety of applications including spacecraft components, bridges, and aircraft. SHM already enjoys a strong community of interest within the Army, Navy, and Air Force; and is now drawing increasing attention among other federal agencies - the Federal Aviation Administration (FAA), NASA, and the Department of Transportation (DOT). SHM sensors are capable of detecting many types of damage at any location in a large structure. Examples include the detection of delaminations in composite aerospace structures, localized corrosion in petrochemical plants and malicious penetrations of shipping containers.

While there are several definitions of SHM, depending on the application, a broad one is that SHM includes all monitoring aspects related by means of embedded or attached sensors with a minimum manual intervention, to monitor the structural integrity of the structure to damages, loads, or other conditions having a direct influence on the structure. To date, SHM sensors have been used to detect structural damage by fatigue, corrosion, impacts, excessive loads, and other conditions.

To order this product, please visit:

<http://ammtiac.alionscience.com/shmreport>

