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DAMAGE AREA MONITOR FOR AIRCRAFT FUSELAGE STRUCTURE

<u>DAM-AFS SYSTEM for ON-LINE MONITORING OF CRACKS AND</u> STRUCTURAL DAMAGE FOR AIRCRAFT FUSELAGE

DESCRIPTION

DAM-AFS is an on-line monitoring system to monitor cracks and structural damage in AIRCRAFT FUSELAGE structures with a capability of remote monitoring/control via modem and audio alert system. Our on-line monitoring system has a control box (client) to be mounted on the structure of the aircraft fuselage with a remote computer acting as a host (server) through a modem. The control box and remote computer can be configured in a master/slave operation. The sensors are mounted on the aircraft structure at strategic points either temporarily or permanently and the co-ax cables/leads led to this control box. The remote computer is a lunch box industrial computer.

The hardware for **DAM-AFS** can be later used to do location with the additional upgrade of the location algorithms at extra cost. The sensors can be mounted when the aircraft is in use. The power to our control box (115V ac OR 220 V ac) can be provided from a local supply site power outlets or suitable power supplies on board the aircraft.

DAM-AFS system is only an on-line system for monitoring the detection of cracks. It does not perform location analysis of the cracks and structural failure. The location of cracks for a six-channel DAM-AFS system can be done with our software **HMSGHAT2000** or **WTDDI2000**. This will also do a linear, 2-D or 3-D location. Also, the **DAM-AFS** system, which is only for detection purposes, will also alert the operator of the existence of a CRACK.

Other means of remote control can be effected via cellular modem connections to the remote control box as well.

The delivery time for such a system **DAM-AFS** is less than sixty days.

DDI is a certified Defense Contractor and has a registered Cage Code with the Defense Logistics Agency of USA.

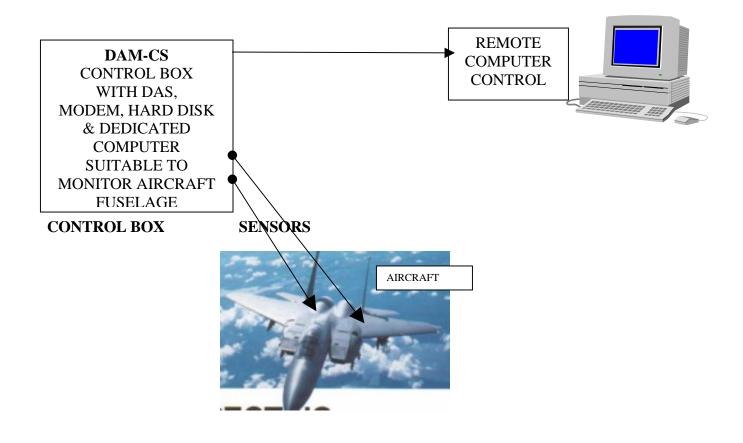


Fig. 1 Block diagram of DAM-AFS



