

Camera Systems Rapidly Scan Large Structures



Langley Research Center

**MISTRAS Group Inc.
Princeton Junction, NJ**

NASA Technology

- ◆ Aging aircraft are being kept in service longer than their intended lifespans, and NASA was looking for new technology to assess aircraft structural integrity.
- ◆ NASA developed line scanning thermography (LST), whereby an infrared camera creates heat-based images that reveal areas of damage.



Technology Transfer

- ◆ MISTRAS acquired ThermTech Services Inc., the company that had originally licensed the LST technology, and integrated LST into its business portfolio.
- ◆ Defects in a structure are more easily discerned using thermography than with acoustic emission and ultrasonic tests, tools previously used by the company.

Benefits

- ◆ Because of LST's ability to cover a lot of area quickly, ships, boilers in power stations, and large equipment can be analyzed very quickly.
- ◆ On aircraft the technology is able to spot structural failures before it's too late, thereby eliminating the high prices and other losses associated with catastrophic failures.