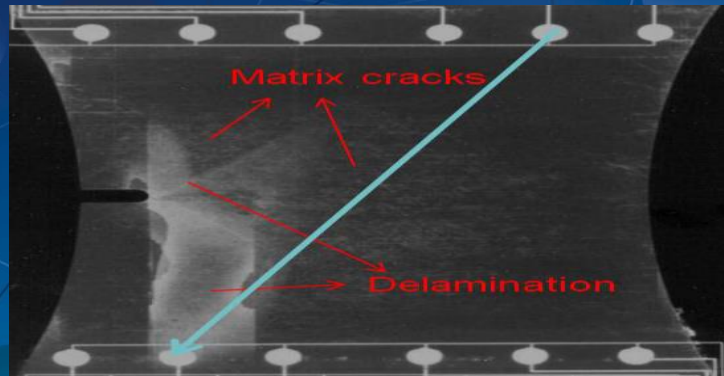


# Sensor Technology (TechVision)

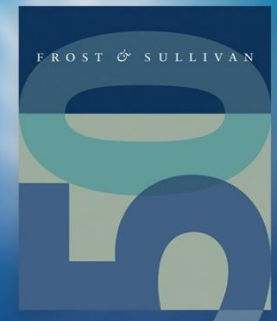


## Structural Health Monitoring

Sensors Poised to Impact Structural Health Monitoring

D727-TV

January 8, 2016



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# Sensor Technology Innovations in Structural Health Monitoring

# Wireless Sensing System for Structural Health Monitoring

*Lord MicroStrain – Provides and develops sensing systems for Aerospace Applications*

## Tech. Profile

Wireless solution permits scalable sensing at a fraction of the size. Integration of different sensing technologies in one platform enhances the monitoring capability by offering data -rich information about the structure. ...

## Innovation Attributes

Low-power wireless sensors can use ambient energy harvesting from strain, vibration or temperature ...

## Competing Aspects

- Scalable wireless sensor network
- Easy to Integrate
- Ease in data processing
- Eliminates heavy wiring

## Market Entry Strategies

Lord MicroStrain has collaborated with Curtiss-Wright Corp. to develop wireless sensing solutions for ...



## Impact & Opportunities

### Product Portfolio

- ✓ Wireless sensing system for rotorcraft health monitoring and high-speed trains
- ✓ ...

### Market Opportunity

The presence of several sensing solutions in one single platform saves space in different applications, including aircraft and bridge health monitoring and enables opportunities in various market segments such as

- ✓

### Technology Convergence

The wireless sensing solution is a combination of both software and hardware.

# Strategic Perspectives

# Strategic Insights

## Drivers

- ✓ Aging Infrastructure
- ✓ Low Downtime
- ✓

## Restraints

- ✗ High initial investment
- ✗ Integration of Systems
- ✗

## R&D Focus Areas

- Smart Structures and Materials
- Multifunctional Composite Material
- 

## Funding



- Funding support by government and venture capitalists is expected to accelerate the commercialization of prototypes and products. Technology developers would be able to bring innovative ideas to the market with financial support.
- 

## The 2020 Scenario

- Proper functioning of sensors throughout the operating period is confirmed through self-diagnostic features. It is important to incorporate self-diagnostics into the sensors because current systems may not differentiate between signal changes due to sensor failures from changes caused by damage.
-

# Appendix