

## WORKSHOP REGISTRATION

If you wish to attend the workshop, please fill in the following information and fax or preferably email it to the contact address below, before November 14th. Attendance is free of charge, and includes lectures, live displays, and lunch. Further information on the location and agenda will be provided before the workshop.

<b>ARTIMA WORKSHOP REGISTRATON</b>	NAME:	SURNAME:
	TITLE, FUNCTION:	
	INSTITUTION:	
	DEPARTMENT:	
	ADDRESS:	
	POSTCODE:	CITY:
	COUNTRY:	FAX:
	TEL:	
	EMAIL:	
	Date and Signature:	

### CONTACT ADDRESS:

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## ANNOUNCEMENT

**AERnova**

Proudly invites you to assist to the

## THEMATIC WORKSHOP ON THE FP6 PROJECT



## Aircraft Reliability Through Intelligent Materials Application.



Project funded by the European Community under  
the Sixth Framework Programme (2002-2006).

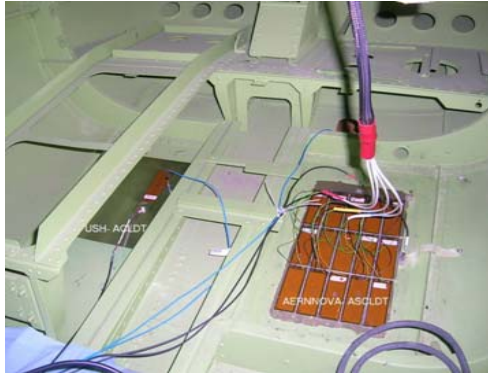
Contract nr: **AST3-CT-2004-502725**

Friday, November 23rd 2007.

Parque Tecnológico de Álava.  
Vitoria, Spain

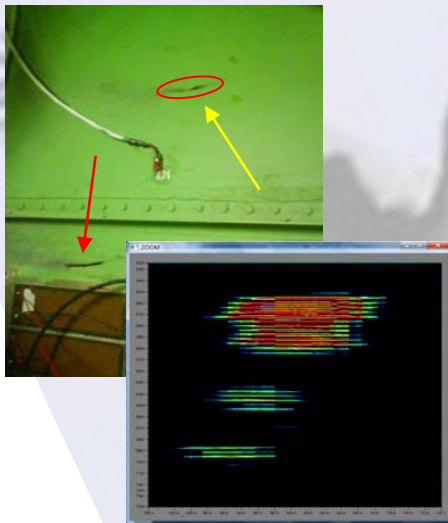
## THE ARTIMA PROJECT

For the last three years, twelve European organizations have been in this Specially Targeted Research Program within the 6th Framework Programme to achieve a leap **improvement in aircraft reliability through the application of smart materials.** These materials are considered ideal to both reduce the probability of failure through vibration control and to detect in time the defects that have already occurred.



Vibration damping treatments applied to a corporate jet

Real time Structural Health Monitoring (SHM) will not only improve the overall safety, but will also make it possible to replace Corrective or Preventive maintenance with much more efficient Predictive or Proactive maintenance procedures, thus **reducing operation cost.** Similarly, vibrations and noise levels will be significantly reduced by the use of smart actuators, which involve no moving parts, they can provide distributed actuation, and they can be **integrated into metallic and composite structures with ease.**



Damage monitoring on a metallic fuselage

The ARTIMA project has taken

advantage of the wide knowledge accumulated over the last two decades by its participating organizations of development of smart materials and their applications.

The most promising methods have been tested on **large-scale specimens, including rotor blades, composite control surfaces, an active UAV wing, and a metallic corporate jet fuselage,** apart from representative laboratory specimens.

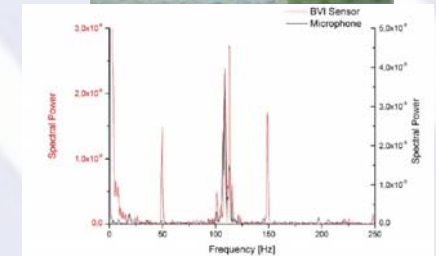
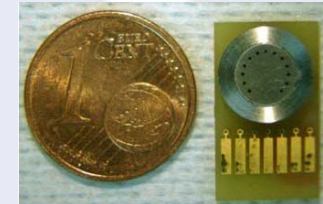
## PROJECT PARTNERS

Project goals were achieved thanks to the fruitful network consisting of several manufacturing companies, research institutes and universities, led by **AERNnova** (Spain). These were **DLR, Eurocopter** and **EADS** (Germany), the **FOI** (Sweden), **IFFM** (Poland), **IST** (Portugal), **Tecnatom** and **UPM** (Spain), and **USHF** (UK).

## THE DISSEMINATION WORKSHOP

The one-day workshop will give a broad idea of the state of the art in SHM and Vibration control methods, covering the advances reached within the project in the fields of numerical simulation, laboratory work, full-scale structure instrumentation, and real-world applications.

It will be held at the Technological Park close to the monumental city of Vitoria, in Northern Spain, what is itself a reason to attend the workshop.



Blade Induced Vortex sensor and its response, compared to a microphone