Organizing committee

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Dr. Nicholas Lawson – Cranfield University
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Contact

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How to reach us?[1]

By train and bus

The ICE (Intercity Express) operates several times each hour from/to Hannover and from/to Kassel/Frankfurt. From/to Munich, the ICE operates hourly. DLR Göttingen can be reached by walking in approximately 20 minutes from the train station, or, alternatively, you can take a taxi from the station.

By car

From the autobahn exit 'Göttingen', please follow Kasseler Landstrasse, Groner Landstrasse, Bürgerstrasse and Bunsenstrasse. From autobahn exit 'Dreieck Göttingen-Nord', please follow Hannoversche Strasse, Weender Landstrasse, Berliner Strasse, Bürgerstrasse and then Bunsenstasse.

By airplane

Please plan to arrive at Hannover airport or Frankfurt/Main airport; then follow the directions above.

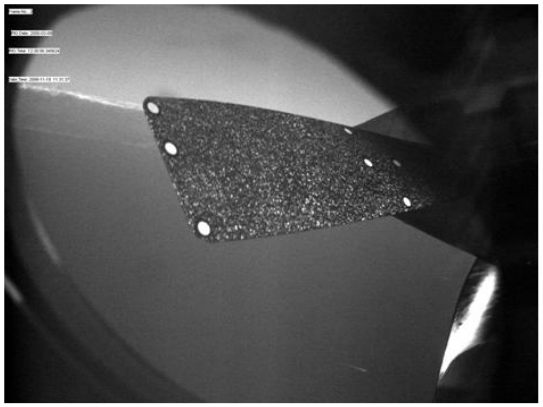
[1] This information you can also find on the DLR website www.dlr.de

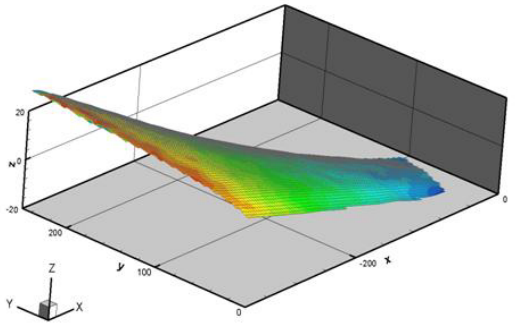
AIM
SPECIFIC TARGETED RESEARCH OR INNOVATION PROJECT
Priority 4: AERONAUTICS AND SPACE Contract no.: 030827
Advanced In-Flight Measurement Techniques

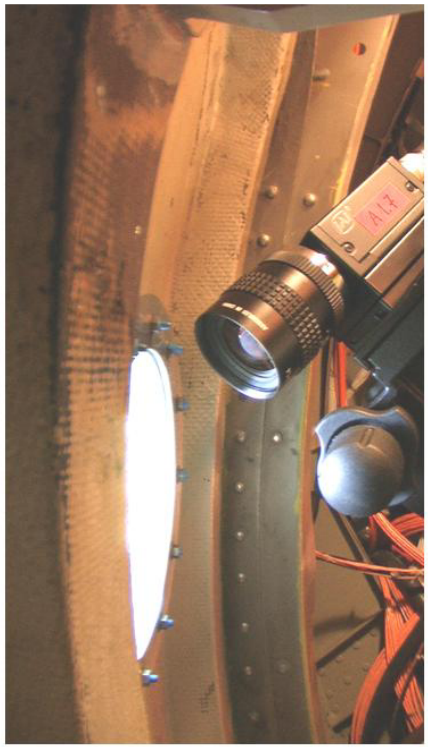
AIM

Advanced In-flight Measurement Techniques

FINAL WORKSHOP







27th – 28th of October 2009
DLR – Göttingen
Germany

AIM
Advanced In-Flight Measurement Techniques

General

The EC-funded project "AIM – Advanced In-flight measurement techniques" intends to make advanced non-intrusive measurement techniques available for time- and cost-effective industrial flight testing as well as for research in-flight testing. In the consortium of AIM 10 partners from aircraft industries, airport services and research organisations located in 7 countries work closely together to achieve the goals of the project. These partners are: Piaggio Aero Industries (I), Eurocopter France (F), Eurocopter Deutschland (D), Airbus France (F), DLR (D), ONERA (F), NLR (NL), EVEKTOR (CZ), Flughafen Braunschweig Wolfsburg GmbH (D), Cranfield University (GB), MPEI-Technical University (RUS).
During the 3 year life span of AIM advanced optical measurement techniques have been further developed such that they can be applied to flight tests to provide comprehensive spatial information on various important parameters such as wing and propeller deformation, thermal loads on the structure of helicopters, the planar pressure distribution on a wing, density gradients in strong vortices generated by airplanes and helicopters and velocity flow fields near airplanes and helicopters.

Scope

The workshop will give the opportunity to present a synopsis of the main results achieved during the 3 years of AIM and will be a forum to discuss the needs and possible means of further flight testing activities. Therefore two or three invited lecturers in the field of flight testing and optical measurement techniques will give a presentation at the final workshop. Additionally, overview presentations for each of the application topics listed below will be given by the partners of the AIM consortium and by other prominent scientists. Corresponding full papers will also be provided. In order to obtain a complete overview of recent developments and needs for advanced in-flight testing you are invited to submit your own paper and present it during the workshop. It is planned to review all presented papers and include a selection in a Springer book, which is intended to be a guide on the application of advanced optical measurement techniques for future flight testing. Furthermore this book shall represent a conclusion and a final report of the AIM project itself and shall be a handy guide for engineers in the field of experimental methods and flight testing in facing the challenges to be met in the future development of highly accurate non-intrusive in-flight measurements. Furthermore a following special feature of the Journal of Measurement Science and Technology is planned containing a selection of the presented topics and thus will provide a reference to this book.

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Organisation

The AIM final workshop will be held over two days. During six main sessions the AIM programme itself, the applied measurement techniques e.g. for non-intrusive measurements of structural deformations, flow fields, pressure distribution and other demanding tasks will be presented. The following topics will be represented:

Topics

- Wing deformation measurements
- Propeller deformation studies
- Measurements on flying helicopters
- Surface flow measurements
- High lift flow structures
- Industrial flight testing
- Certification issues
- Flight test beds

Workshop website

http://aim.dlr.de

Registration

Registration must be carried out on the workshop organisation website. All details are given there. The registration fee covers the two days of the workshop, including lunch, refreshments, a dinner on one evening and a copy of the AIM book or the final report. The registration fee[2] is 300 € for participants (students 150 €) who are not registered members of the AIM consortium. The fee for participation is free of VAT as far as the German Umsatzsteuergesetz (UStG) is concerned. The organizers reserve the right to cancel the workshop in case of insufficient registration. A cancelation fee of 100 € will be charged from registered persons who cancel their participation after 1st of October 2009.

Dates and Deadlines

1st of August 2009 – Deadline for abstract submission (abstract should not exceed one page)
End of August 2009 – Notification to authors
1st of October 2009 – Deadline for paper submission

[2] For registration before 31st of August 2009 the fee will be reduced to 200 € (students 100 €).

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