



THE ATMOSPHERIC REENTRY ASSOCIATION

Presents the

# 2<sup>ND</sup> INTERNATIONAL ARA DAYS "10 YEARS AFTER ARD"

21-23 October, 2008  
Arcachon – France

CALL FOR PAPERS

*Dear Friends and Colleagues,*

**1998, October 21.**

*1000 miles North East of Marquisian Islands Archipelago.*

*Our crew onboard the French Navy tug "REVI" is tired and passably ill after those too many days at sea, but feels a mix of emotion and pride when the boat approaches the ESA Atmospheric Reentry Demonstrator safely floating in Pacific Ocean: European Industries have just proven their capabilities in the field of return from orbit, through the first European guided and controlled reentry of an heavy Apollo class vehicle. Post flight analysis of the Aerospatiale built capsule will confirm the ARD excellent flight conditions, from jettisoning by Ariane 503 on a suborbital hypersonic trajectory till final splashdown.*

*This mastery acquired through a quick and intensive 4 years development programme in full European cooperation is blazing the trail towards new space applications.*

*With a concrete flight experience rather than paper studies, a generation of European engineers are trained and ready to face new challenges, from manned orbital flight to reusable launchers and planetary exploration.*

10 years after this first succesful flight, it is my pleasure as chairman of the **Atmospheric Reentry Association** to invite you to participate to the

**2<sup>nd</sup> International ARA Days: "10 years after ARD"**

that will be held **21-23 October, 2008** in the sunny town of Arcachon, France.

Mitigated programmes evolutions have occured in Europe since ARD first and unique flight.

European efforts towards a Crew Transfer Vehicle, being a capsule or X-38 derived lifting body, have ceased. German Astra and Phoenix programmes were not followed. Many demonstration proposals and roadmaps were made by industrialists and poorly followed.

However, atmospheric reentry as a discipline remains very present in 2008.

Being non exhaustive, we might mention that reentry is at the heart of US return to Moon initiative, with the developement of the ORION capsule. It is still present

for LEO logistics, as COTS initiative shows. It is a determining discipline for international cooperation, with a possible SRR of russo-european CSTS mid 08. China is mastering manned flight and russian-european continuing its ambitious endeavour. Japan and India are on track. And mastering reentry remains a key for planetary exploration. In 2008, we are looking forward to applauding a successful reentry and retro rocketed Martian soft landing of the US Phoenix probe. In 2008, we will contemplate the progress of European Exomars project. We are also looking forward to positive decisions on the European demonstrator IXV, with a successful SRR leading to a 2012 flight. We will be interested in the development of the Italian USV programme, the German Shefex programme, and ESA preliminary demonstrators (Expert, ...).

Some weeks prior to the ESA Council at Ministerial level, the conference will gather delegates from all the community: national and supra-national agencies, customers and decision makers, prime

industrialists and subcontractors, engineers, technologists and scientists, european and non-european. Outstanding papers will be presented in plenary and parallel sessions, but time will be also reserved for networking and always fruitful exchanges.

I encourage you to be an active participant in this Conference by responding to this Call for Papers. If you know of others who could contribute valuable insights to conference attendees, please don't hesita-

te to forward this Call for Papers to them ! I am looking forward to meeting you again for 3 outstanding days in Arcachon, with in addition this year a friendly celebration of ARD birthday !

*Thierry Leveugle*  
*President, the Atmospheric Reentry*  
*Association*  
*Vice-President, Astrium Space*  
*Transportation*

## Call for papers

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**Authors are invited to submit papers covering subjects such as:**

- Atmospheric Entry Programs/Systems/ Missions
- Lessons learned from previous development and/or flight experience
- New Re-entry Vehicles design and developments
- Entry vehicles system design
- Development and qualification logic
- Re-entry and landing concepts for experimental/operational Systems
- Advanced techniques and technologies to be mastered for Re-entry Vehicles
- History of Re-entry Vehicles/Systems

**When making a submission, please do so with the understanding you are making a statement of your intentions to participate in and be available to the Conference.**

Authors should submit before **March 15, 2008**

- An abstract describing the topic and interest of the presentation (300-500 words), saved as a Word document (.doc). Significant aspect of the work to

be presented shall be highlighted. The abstracts should be sufficient to enable reviewers to determine quality, scope, significance and current completion status of the information that will be submitted in the final paper.

- Title of the conference, Prime author, Co-authors and companies, coordinates (complete mailing address, phone and fax numbers, E-mail address) of the prime author. **These documents should be sent to:**

**AVANTAGE AQUITAINE**  
42, rue de Tausia  
33800 Bordeaux – France  
E-mail: [avantage-aquitaine@wanadoo.fr](mailto:avantage-aquitaine@wanadoo.fr)

### **KEY DATES**

Deadline for abstracts submission : **March 15<sup>th</sup>, 2008**

Paper acceptance notification to authors : **April 15<sup>th</sup>, 2008**

Distribution of final programme and registration form : **June 1<sup>st</sup>, 2008**



# 2<sup>ND</sup> INTERNATIONAL ARA DAYS "10 YEARS AFTER ARD"

Bordeaux

Arcachon

## GENERAL LOCATION

Palais des Congrès d'Arcachon  
Boulevard Veyrier Montagnères  
33120 Arcachon – FRANCE  
(3/4 hour drive from Bordeaux  
International Airport)

## LANGUAGE

Papers will be presented in English.  
Simultaneous translation facilities  
will not be available.

## SECRETARIAT



All correspondance and  
inquiries should be sent to  
the conference secretariat.

Avantage Aquitaine – 42, rue de Tauzia  
33800 Bordeaux – France  
Tel/voice box: + 33 (0)6 81 42 23 95  
Fax: + 33 (0)5 57 70 21 22  
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