Call for Papers --TFAWS 03
Heat Transfer and CFD: Bridging the Gap for the Next Generation
August 18th to 22nd, 2003
Hosted by NASA Langley Research Center, in Hampton, Virginia

You are invited to submit papers for the Thermal & Fluids Analysis Workshop (TFAWS 2003). This workshop will include short courses of general interest in thermal and CFD, paper sessions on topics listed below, and hands-on training sessions in many thermal and fluid software packages. There will be numerous vendor demonstrations of new software and techniques. Experts will conduct seminars and lead discussions on special topics. Tours of NASA Langley Research Center will also be offered.

Paper sessions are as follows:

Paper Session	Chair	Phone	Send abstracts to
Thermal	Michael Lonergan KSC / Jim Yuko GRC (co-chairs)	321-867-7589 216-433-5646	Michael.J.Lonergan@nasa.gov or James.R.Yuko@nasa.gov
Interdisciplinary	Glenn Tsuyuki JPL	818-354-2955	Glenn.T.Tsuyuki@jpl.nasa.gov
Aerothermal/CFD	Peter Gnoffo LaRC		P.A.Gnoffo@larc.nasa.gov
Propulsion	Robert Garcia MSFC	256-544-4974	Roberto.Garcia-2@nasa.gov

Thermal session topics include:
- Thermal control, design, analysis and test; test correlation
- Aircraft and spacecraft, systems, and payloads (design or flight experience)
- Ground test, manufacturing processes and simulation

Interdisciplinary topics include:
- Multi-disciplinary analysis such as thermal/structural analysis interface
- Thermal/CFD and aeroheating/thermal integration, fluid/structure interaction
- Integrated analyses of chemical reactions, electromagnetic interactions, micromechanics, structural motion
- Automation of test correlation and analysis, method development

Aerothermal/CFD topics include:
- High-speed aeroheating on vehicles; aerodynamic heating during entry or testing; ablation / transpiration
- CFD analyses and methods; internal and external flow analysis and test
- Conjugate heat transfer
- Subsonic and transonic applications such as avionics cooling

Propulsion topics include:
- CFD developments and applications for propulsion; propulsion analysis tools
- Modeling or testing of propulsion elements, components or systems
- Design and development of: air breathing propulsion; solid, hybrid, and liquid systems and their components; and nuclear or other novel propulsion concepts
- Vehicle-propulsion integration
- Papers on analysis, testing, or novel design concepts for combustion devices are of special interest

Abstracts less than 1000 words should be sent to the contact listed above for each session by May 2, 2003, or may be sent to the TFAWS 03 chair at NASA Langley Research Center, Joseph.F.Gasbarre@nasa.gov.
If necessary, you may paper mail your abstract to:

Joe Gasbarre, MS 431, NASA Langley Research Center, Hampton, VA 23681
(757) 864-7035

Typically, 20-30 minutes will be allotted for each paper, five of which are devoted to questions from the audience. Longer time blocks may be requested by the author. It is intended that papers and seminars will be published in a proceedings on CD-ROM. Instructions for electronic submission of manuscripts will accompany acceptance of the abstract. More information on TFAWS can be found at http://www.tfaws03.org/, and general questions may be directed to the chair, Joe Gasbarre, listed above.

Important Dates in 2003		
Abstracts due **May 2**	**Acceptance notices sent** **May 16**	**Papers due (electronic format)** **July 21**