ANNOUNCEMENT

SYMPOSIUM ON HIGH-PERFORMANCE COMPUTING FOR FLIGHT VEHICLES

Sheraton National Hotel,
Washington, DC
7–9 December 1992

Co-sponsored by University of Virginia,
George Washington University and
National Aeronautics and Space Administration

with the co-operation of
The American Society of Mechanical Engineers,
The Air Force Office of Scientific Research and
Defense Advanced Research Projects Agency

The two and a half day symposium will bring together leading experts in the areas of computational structural mechanics, computational fluid dynamics, computational control and high-performance computer technology. In addition to the regular sessions, a hardware/software exhibit is planned. Topics covered in the symposium include:

- Technology forecast for high-performance computing and future computing environment
- Distributed heterogeneous multicomputers
- Intelligent computational modules
- Parallel processing in fluid mechanics and structures calculations
- Mechanistic base for constitutive relations
- Simulation of local phenomena in fluids and solids
- Reacting equilibrium and nonequilibrium thermodynamics
- Advances in discretization techniques (finite elements, spectral methods and boundary elements)
- Validation of numerical simulations

- Computational models for material processing and response
- Probabilistic modeling of structures and fluids
- Adaptive, hybrid methods and hierarchical modeling approaches
- Mesh and model generation techniques
- Computational issues for smart/intelligent material systems and structures
- Stability and bifurcation problems
- Turbulence modeling
- Multibody dynamics
- Compressible, incompressible, transonic and reacting flows
- Advanced visualization techniques
- Multidisciplinary interactions and computations (structures/controls/aerodynamics/electromagnetics)

Authors should submit five copies of an extended abstract of about 1,000 words including sample figures prior to 4 November 1991. Notification of acceptance will be given by 6 January 1992. Five copies of the final manuscript, complete with original drawings or glossy prints will be due by 29 May 1992. A volume of proceedings will be published before the meeting. For information please contact:

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