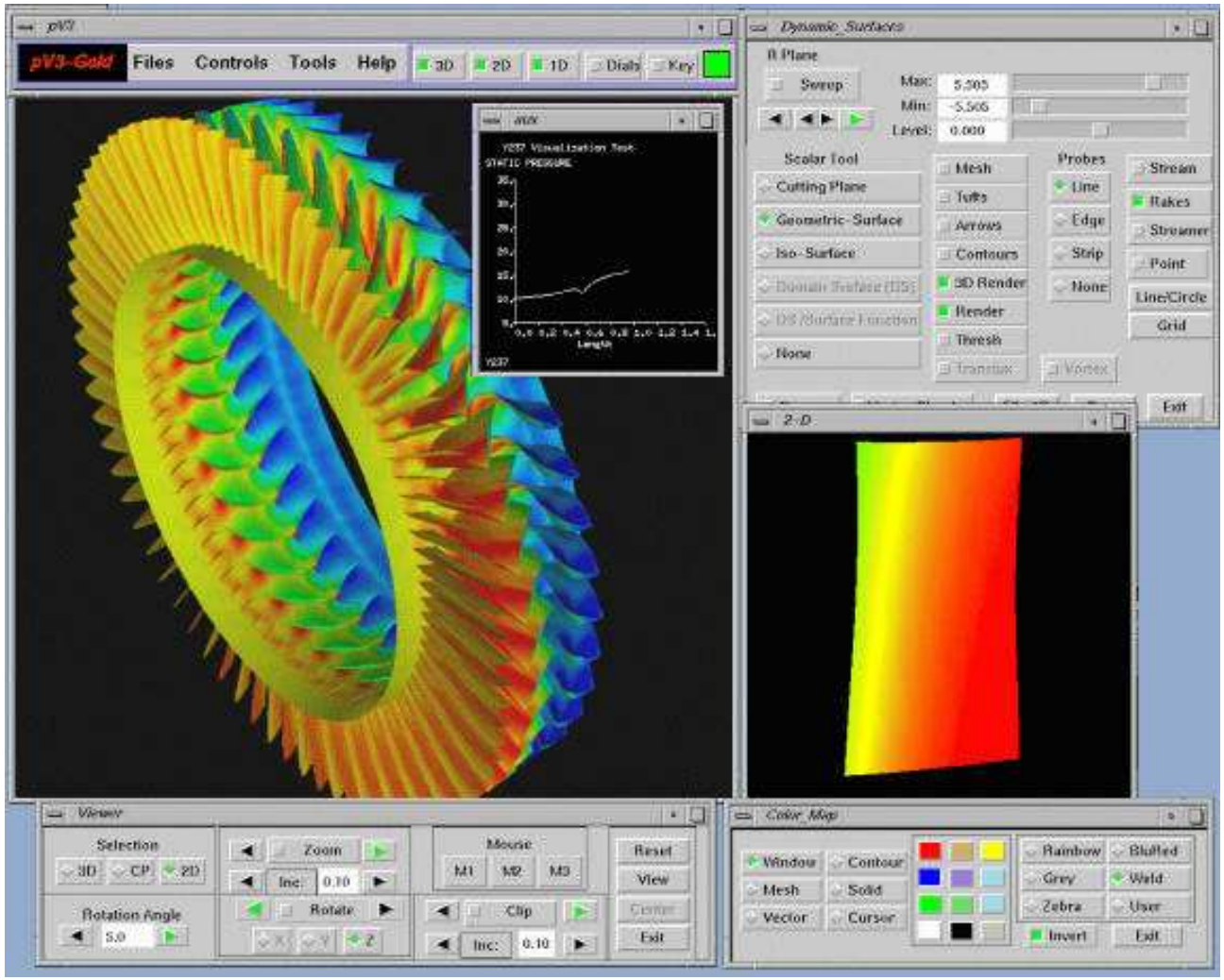
Aerospace Industry

Quote from a senior aerospace engineer at a leading aerospace company:

...we at industry are very desperate in having a fast convergent code that can solve real problems... The state-of-the-art 3D Navier-Stokes code takes in the order of 200 hours C90 time for solving one case of a high-lift application. This is *way too high,* considering we'd like to have a whole design cycle within five days...

Affordable High Performance Computing Cooperative Agreement- UTRC



Affordable High Performance Computing Cooperative Agreement

http://danville.res.utc.com/AHPCP/movie.htm

United Technologies Research Center is developing a multi-cluster environment focused on the simulation of a high-pressure compressor. The goal is to achieve overnight turnaround.

- Job migration & dynamic job sched. 12/31/96
- HP Distributed File System 3/31/97
- Multi-cluster scheduling across WANs 6/30/97
- Full system demo. 9/30/97

Aerospace Industry

- **McDonnell Douglas**
  - Extensive usage of workstation clusters, coarse grain parallelism, 100's of workstations
- **Boeing**
  - Some usage of NAS cluster (Davinci), little inhouse capability
- **Northrop Grumman**
  - Workstation cluster usage increasing, coarse grain parallelism