CGNS Steering Committee Meeting Minutes 24 June 2003

7:00 PM Eastern Daylight Time Orlando, Florida (in conjunction with AIAA meeting)

- 1. This general informational meeting and discussion was called to order at 7:05 PM. There were 8 attendees, listed in Attachment 1.
- 2. This was not an official steering committee meeting, so minutes from the last telecon were not reviewed or approved.
- 3. Current status of CGNS and outstanding issues (PDF, 15 slides, 201K) was presented by Rumsey
- 4. Discussion of current issues:
 - (a) HDF-5
 - i. AEDC is actively evaluating and working with Poinot's HDF-5 prototype (summer intern Brian Pittman).
 - ii. Poinot has also expressed an interest in bringing it to completion at some time in the future.
 - iii. Question raised: what will happen to existing CGNS files that use ADF? Will the MLL automatically switch them over? Or will an explicit translation step be necessary? Will HDF-5 implementation be a new Version (3.0)? Will the MLL be able to read CGNSLibraryVersion_t node if it is an HDF file (i.e., how will the MLL software detect that the file is HDF-5 as opposed to ADF)?
 - (b) UserDefined extension no issues.
 - (c) BCDataSet extension will this proposal work for unstructured datasets also?
 - (d) CGNSVersion
 - i. The CGNSLibraryVersion automatically gets altered (updated) by MLL when it opens an older file (Q: is this true when going from V1 to V2?).
 - ii. Should there be a CGNSVersion number (under base) that NEVER changes? This would indicate what version was used to write the particular base kind of a way to document the dataset. But this gets confusing if V2 is ADF and V3 is HDF-5. Do we really want to keep a file with part ADF and part HDF-5? This does not seem like a good idea.
 - $(e) \ {\tt GridLocation=FaceCenter} \ in \ {\tt ZoneGridConnectivity}.$
 - i. This issue is for unstructured grids that connect multiple zones.
 - ii. Seems reasonable to allow this, but will this work for non-point-matched connectivity?
 - (f) General issues:
 - i. Confusion among attendees as to if/how CGNS allows face-based info for unstructured to be stored (Partial answer: CGNS easily allows for defining face elements, e.g. for use to define BCs at faces rather than at vertices. See section 2.2.1 in the *User's Guide to CGNS*.)
 - ii. We probably need to review and update the Charter; some of it is outdated.

Attachment 1: Attendees

Dan Dominik Boeing

Bill Jones NASA Langley Steve Karman UT Chattanooga

Mori Mani Boeing Chris Nelson AEDC