Plan for Comparing Head Restraint Probes

April 14, 2011
Goal: do limited testing to see if there is a basis for choosing the large vs small probe for head restraint testing

Current advantages:
- Large probe closely mimics loading conditions seen in car seat sled testing
- Small probe is easier to use due to fewer changeovers

Final Choice
Probe Comparison Plan

- Test 2 PDB dummies
- Test several dummies in Huron
- Get probe to Japan to evaluate large probe test
Test 2 PDB dummies

► Cooperative effort with PDB
► Using two dummies from ESV paper that showed differences

► Goals
  – Determine if new tests can detect differences
  – Determine if new tests can be used to fix differences
Plan

- PDB tests both dummies in Sports Seat to see if differences still exist
- HIS Europe runs all new tests on both dummies to see if differences can be detected
- HIS Europe adjusts/repairs dummies according to new tests
- PDB re-runs both dummies in Sports Seat to see if differences have been fixed
Test Several Dummies in Huron

► All dummies coming through the Huron lab through May will be tested with both probes
  – Data will be overlaid and examined
  – At least 3 re-cert dummies will be tested
Get Probe to Japan

► Plan to install large probe in HIS Japan lab mid-May
  – Work with JASIC to evaluate both probes
Final Choice

► Choose probe at June meeting based on
  – Data available
  – Best engineering judgement