



11th Int'l LS-DYNA Users Conference
Training Courses
Wednesday & Thursday,
June 09-10, 2010

Occupant Modeling, Regulations & Safety Ratings, Dummies & Barriers

A) The Basic Model of the Occupant inside the Vehicle (Frontal)

- How to Position the H-III Dummy Model in a Vehicle Environment
- How to Route a Seatbelt over the Dummy and the intricacies of the Seatbelt Model. How to apply "contact" with the Dummy.
- The simple Vehicle Model for Frontal Occupant Analysis and its intricacies. How to apply Pitch, Drop and Yaw. How to apply "contact".
- How to apply pulse to the Dummy
- How to run the combined model

B) How to Quickly Modify Existing Models

- How to reposition the Dummy for small movements in H-Point and Pelvic Angle, without rerouting the Seatbelts.
- How to modify an existing fully running model and change it into one that represents a completely different vehicle, in a different design location, thus reducing modeling time.

C) Overview of the Current Rules and Regulations

- FMVSS (USA) and CMVSS (Canada)
- US NCAP and IIHS Offset Deformable Barrier
- European Regulatory and Euro-NCAP

D) Other Topics

- Overview of other LSTC Anthropomorphic Models
- Overview of LSTC Barrier Models

E) Discussion of Other Important Items (if time permits)

- The Steering Column Model
- The basic Airbag Model (using *Airbag_Hybrid)
- The basic Particle Method for Airbag Modeling (in brief)