Humanetics Innovative Solutions Inc. Tel: +1 734 451 7878 Fax: +1 734 451 9549 47460 Galleon Drive Plymouth, MI 48170 USA

www.humaneticsatd.com

ATD Harmonization Meeting - ATD Brand Consolidation Task Group

MEETING MINUTES November 23, 2010 8:00am- 12:00pm EST

USCAR offices in Southfield, Michigan

Attachments: ATD Brand Integration Process Slides

ATD Type Harmonization Excel Sheet

Attendees:

In Person:

Jack Jensen (General Motors)

Steve Rouhana (Ford)

Michael Jarouche (Humanetics)

Paul Depinet (Humanetics) Michael Beebe (Humanetics)

Joe Bastian (Humanetics)

Mark Brown (Humanetics)

Via WebEx:

Brian Grenke (Chrysler)

Marvin Hatchett (IIHS)

Hollie Pietsch (Ford)

Hiroyuki Asada (Mitsubishi)

Akihiko Akiyama (Honda)

James Elroy (EuroNCAP)

Mitsutoshi Masuda (Toyota)

Philipp Wernicke (BMW)

Bruce Donelly (VRTC)

Joe McFadden (VRTC)

Yoshihiro Yazawa (Nissan)

Klaus Bortenschlager (PDB) Suzanne Tylko (TC)

N. Rangarajan (GESAC)

Yuji Okuda (Humanetics)

Background

Currently FTSS and Denton are two brands of anthropomorphic test devices, (ATDs or crash test dummies) manufactured for the most commonly used and regulated models. The global community of users has expressed the desire to harmonize these two brands to create a single line-up of consistent production ATDs.

The two manufactures of these brands, FTSS and Denton have merged to form a single organization, Humanetics Innovative Solutions. This merger provides the ideal opportunity for the harmonization of the dummy brands with the help and input of the global user base.

Introductions

Introductions of members in person and via GotoMeeting and WebEx were initiated.

Agenda Review

Jack Jensen of General Motors, organizer and chair of this first introductory meeting, provided the accompanying attachments for the Brand Integration Process. The presented slides include the proposed voting process, roster of voting and non-voting participants, the harmonization process, possible outcome and recommendation choices, and a schedule of future task item ATD's.



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To begin, the purpose of this group was outlined. Jack's initial definition and justification of the task group had been stated in the original meeting announcement as follows:

"This task group will be asked to make technical recommendations towards the consolidation of current brands ATDs and ATD parts. The group is not intended to recommend a particular ATD manufacturer, but rather make technical recommendations regarding commonizing brands within a manufacturer. There is benefit to the auto industry – both those who manufacture vehicles as well as those who evaluate vehicles to eliminate dummy to dummy variations and crash test to crash test variations."

Jack explained that this task group will make customer recommendations to *Humanetics*, the manufacturer of these two brands of ATD's, and not provide legal or regulatory solicitations. The group also agreed there would be no recommended changes to documents such as PADI manuals, regulated drawings, or written legal regulations.

The discussion continued with questions relating to how we should document the group's ATD recommendations. Along with meeting minutes, Excel sheet sign-offs with notes was suggested and agreed upon. Mike Beebe of *Humanetics* also proposed setting phase-in periods once the group's work has been completed.

A discussion of the process strategy for the future meetings ensued. Ancillary topics that should be considered when selecting a brand or component include manufacturing efficiency, cost, and material resources. Hollie Pietsch from *Ford* also suggested adding criteria for test performance; how easily or readily a part will pass a verification test, and where within the corridors the part typically falls. Suzanne Tylko from *TC* then questioned if we would conduct our own independent testing series to determine and confirm test performance, and who would pay for such testing. It was decided that we would hold a few more meetings before deciding if a testing program was needed, and that first priority would be given to those decisions that do not require additional testing.

The nature of the final recommendations was also questioned by Joe McFadden of *VRTC*. Would we end up with a mixed bag of parts; single dummies consisting of both brand components? Jack voiced that his first choice of outcome would be an agreed upon common brand ATD, head to toe, instead of mixing part brands. But the final decision will be based on the needs and consensus of the group after analyzing each ATD. Jack's process chart has four possible outcomes listed: recommend *FTSS* brand, recommend *Denton* brand, recommend the continued manufacturing of both brands, or make no recommendation.

Tri-Chair and Voting Review

Several changes were requested to the proposed roster of participants. Bruce Donelly asked that Joe McFadden be appointed the representative for *VRTC*. M. Van Ratigan also appointed James Elroy to represent *EuroNCAP*. A discussion and request by the group also ended with the agreement that *Humanetics* would solicit a representative from *Hyundai Motor Co*. to join the roster and provide Korean input. *Hyundai* was suggested based on the level of expertise they could bring to the table from their region.

A lengthy discussion followed regarding voting privileges and the appointing of tri-chairs. Jack's original purpose of the tri-chair appointees was to resolve voting deadlocks or non-decisions. The chairs would consist of regional OEM organizations such as *OSRP*, *ACEA*, and *JAMA*. A fourth chair was suggested to represent other non-OEM groups that may have valuable input and research to contribute.



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Unfortunately, no organized non-OEM group exists that would meet the same criteria or consistent organizational requirements, so the suggestion provided no agreed upon solution.

After more discussion, the group decided that the best way to proceed with voting was to use a two-thirds quorum and eliminate the use of tri-chairs. At least one half of voting members must be present in person, via *WebEx* or call-in to hold a vote. Proxy voting appointees will be accepted. *VRTC* and *TC* declined their voting privileges based on a possible conflict of interest with their representation of legal interests. They will continue to provide input and participate in the meetings and discussions.

Review of future meeting processes

The list of required information needed to make decisions was discussed. An Excel file with tabbed sheets for each dummy containing tables of key ATD components was provided as a discussion starting point. These components are basic parts that are molded, tested, or both.

A standard check list of questions for review at each meeting will also be required for consistency. Participants should begin organizing their sources of expertise; i.e. research, lab, and technician experience to help determine topics. Members should also be ready to discuss their brand specific inventory and performance characteristics for each of their dummies. Jack and *Humanetics* will help facilitate the creation of the checklist and the included items will be discussed further in the next meeting.

Some additional topics that should promote further discussion were also suggested. Suzanne Tylko proposed looking at the vintage of parts within a particular brand and how to address variances within each brand. Cost and production requirements may need to be addressed on a case by case basis. Paul Depinet and Joe Bastian agreed they could provide CAD drawings and models when necessary. Joe McFadden commented that *VRTC* could not discuss cost or supplier recommendations within this venue.

Humanetics agreed to provide distribution and feedback resources via bulletins and publications on the corporate website.

Schedule

The desire of this group is to complete the tasks at hand by the end of 2011. It was agreed upon that only automotive dummies would be discussed and an attempt to confine the discussion to one four hour meeting per ATD was desirable. The 50th percentile would be an exception with two meetings reserved and the 10YO and Crabi will have a combined meeting. We should also make an attempt to verify the particular dummy models each member organization uses to ensure we have enough expertise represented for each type.

The schedule was agreed upon as follows:

January 13th – HYIII 95th Large Male
February 10th / March 10th – HYIII 50th Male
April 14th – EuroSID 2
May 12th – 5th Small Female
June 9th – HYIII 6YO Child
July 14th – HYIII 3YO Child
Aug 11th – HYIII 10YO / CRABI
Sept 8th – SID
Oct 13th - FMH / Misc.

Meetings will be held the 2nd Thursday of each month. Locations to be determined.

*The next meeting is January 13th, 6am EST at the *Humanetics* headquarters in Plymouth, MI USA.



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