

Unconfirmed Meeting Minutes
ANSI/RESNA Working Group on Wheelchairs and Transportation
(WC/19 - SOWHAT)

June 25/26, 1999
 Hyatt Regency, Long Beach
 Long Beach, California

1) Introductions, roll call, distribution/identification of documents

Roll call was circulated and participants introduced themselves. Previous minutes were not available to provide the last document number. A listing of the documents distributed both prior to, and at the last meeting and their associated numbers follows. Additionally documents, which have been generated or received by the SOWHAT secretary and chair have also been assigned official TW document numbers and recorded in the listing below. Copies of these documents can be obtained from either Larry Schneider or Douglas Hobson on request.

TW60	Unconfirmed Minutes SOWHAT meeting-Indianapolis-11/2/97
TW61	L. Schneider memo dated 11/10/97 summarizing results of discussions at Indianapolis meeting of four unresolved issues.
TW62a	Memo dated 11/17/97 from Guido Baten of Belgian Road Safety Inst to L. Schneider
TW62b	Memo dated 11/26.97 from L. Schneider to Guido Baten
TW63	Memo from Ray Lee to L. Schneider dated 2/3/99 re shoulder belt end fittings
TW64	4 th -year fund-raising memos from L. Schneider to various
TW65	Memo dated 2/12/98 from J. Zaworski to D. Hobson regarding Universal Interface for Docking Securemntn Systems (UIWDS)
TW66	Memo dated 4/22/98 from Peter Axelson to Gina Bertocci requesting inclusion of the universal interface for wheelchair securement with the scope of ANSI/RESNA WC-19
TW67	Memos dated 6//24/99 from D. Hobson and L. Schneider to SOWHAT participants with latest version of WC/19 inviting further comment on WC/19
TW68	Memo dated 7/31/98 from Jeffrey Dolezal to D. Hobson with comments on WC-19 draft
TW69	Memo dated 8/24/98 from L. Schneider to Research Committee with comments on WC-19 draft
TW70	Summary of comments received on WC/19 from 6//24/98 mailing and Editorial Group responses and decisions
TW71	Memo dated 10/28/98 from L. Schneider to selected wheelchair companies regarding vote and comments on October draft of WC-19, and response form
TW72	Memo dated 12/22/98 from D. Hobson to J. Dolezal responding to letter of 7/31/98
TW73	Preballot memo dated 2/18/99 from L. Schneider to SOWHAT participants with Preballot Response form and latest draft of WC/19
TW74	Unconfirmed minutes of March 6/7 meeting of WGMV in Orlando, FL
TW75	Memo dated 4/16/99 from D. Hobson to SOWHAT participants with WC/19 update, notice of next meeting, preliminary agenda, and response for per interest in future SOWHAT activities
TW76	Memo dated 5/27/99 from L. Schneider to SOWHAT participants with summary of Preballot comments and invitation to change preballot vote with response form
TW77	Memo dated 6/1/99 from G. Bertocci to Jean Minkel requesting permission to re-organization request so that working group on W/C seating in motor vehicles (WGMV) is a breakout group in SOWHAT

The working group approved the previous Indianapolis minutes as distributed (TW-60).

A roll call was distributed and is included as Attachment A.

Special Announcement:

Peter Axelson (Chair, Technical Guidelines Committee) announced that Douglas Hobson will be resigning as Chair after this meeting and that Larry Schneider has accepted the appointment as the new Chair of the working group. The group thanked Doug for providing the leadership and dedication to the SOWHAT effort. Doug will continue to participate in SOWHAT activities.

Congratulations Larry!. We look forward to your continuing leadership.

2) Goals for meeting

This meeting will focus on resolving any remaining WC/19 issues along with defining the new work item goals and plans for the group.

3) Finalize meeting agenda

The group approved the agenda as presented.

4) Administrative matters

4.1 Budget update/Funding Initiatives

Approximately \$350,000 was provided and used to fund this standard development effort. Larry Schneider indicated that funding provided by GLCTTR would no longer be available to the University of Michigan after the current or 4th year. A minimal amount of funds remain in the SOWHAT budget at this time. Larry indicated that he is expecting a \$14,000 grant from NHTSA to help complete the guidelines document. Additional funding should be pursued to help complete the guideline document and address future work items.

4.2 Activities of the research group

Doug explained that the research group was formed by the Universities of Michigan, Pittsburgh, and Virginia. Anyone wishing to participate in future research efforts should indicate their interest. Larry Schneider provided a recap of current frontal impact testing of wheelchairs using procedures provided in Annex A of the standard.

4.3 Electronic document distribution

A new list serve will be established and supported by the University of Pittsburgh to enhance standard development activities. A web site will also contain all minutes along with electronically provided working documents. Meeting announcements will also be posted at the website. All participants indicated that they have email/web access. The URL for all the website is: www.rerc.upmc.edu, then follow the links to SOWHAT.

5) Status of related work

5.1 SAE update

The final SAE J2249 WTORS standard is available from SAE. The final draft working group document is available on the same Pitt website. The guidelines document for J2249 is nearing completion and is posted in draft form on the same Pitt website. Larry provided an overview of the document and indicated that a section on test methods should also be added. This document provides the rationale behind the standard. Doug requested that the participants review and comment on this document. It was also suggested that a summary of this document be formatted for a journal publication.

5.2 ISO update

10542-Parts 1 (General) and 2 (Strap-type devices) are currently in the voting process. Parts 3 (docking systems), 4 (clamping systems) and 5 (special combinations) are underway and will take roughly two years for completion.

7176/19 has been sent for DIS-level voting. This document parallels the ANSI/RESNA WC/19 standard and reflects an excellent effort at harmonization between ISO and ANSI/RESNA.

5.3 CSA update

Z604, Transport Wheelchair, and Z605, WTORS, standards are currently being updated to harmonize better with WC/19 and SAE J2249.

5.4 RESNA Wheelchair Seating Systems used in Motor Vehicles (WGMV)

As requested by TGC, it more logical that the working group on seating systems for use in motor vehicles (WGMV) be managed by SOWHAT, rather than the Subcommittee on W/C Seating. This was accepted by SOWHAT and therefore a breakout group designated as WGMV has been formed to undertake this assignment. The group will be lead by Gina Bertocci. It was agreed that the WGMV should attempt to prepare a draft document for review at the next SOWHAT meeting. A list serve currently exists for WGMV and will be used to support the development of the seating in motor vehicles effort. It was agreed that the WGMV list serve should include ISO participants who are interested in this area.

The Coalition of Seating Manufacturers will also be approached for participation in the WGMV. Participation from clinicians is also desired and will be pursued.

5.5 University of Pittsburgh Universal Docking Hardware

Gina Bertocci provided an overview of the development work on the universal interface concept. A new work item has been approved by ANSI/RESNA. It was suggested that an industry summit meeting be conducted to discuss the universal interface design concepts. This summit should focus on wheelchair designers and could include consumers who are involved with wheelchair design. Separate meetings with wheelchair manufacturers could also be effective.

It was pointed out that a special wheelchair/docking system combination standard should be addressed to aid in driving the market. This would be an ANSI/RESNA equivalent of ISO special combination test procedure. Larry Schneider will prepare a draft of the special-combinations document. This will be Priority 2 for the working group. Miriam raised the concern that docking systems may not provide the same level of safety as 4-point tiedowns under various (side, rear, rollover) impact conditions. Foster, Keith, Maureen, Tom, Larry, Miriam, Linda and Gina expressed an interest in developing a universal interface. Doug will take the lead in this effort.

New Work Item Priority 2 = Development of a special wheelchair/securement system combinations standards document (Larry will prepare a draft for the next meeting)

New Work Item Priority 3 = Universal interface hardware

6) Status of WC/19

6.1 Update on WC/19 and pre-ballot votes and comments

It was noted that WC/19 is the first standards document that RESNA has developed in total (from scratch).

Document "Votes and Comments in Response to WC/19 Pre-ballot Mailing and Editorial Committee Responses":

This document reflects the comments and voting on a pre-ballot mailing of the document to all that have participated in our working group meetings. Larry Schneider highlighted comments from those that voted to disapprove the standard (PVA/Jeff Dolezal and Tom Adams/Cleveland Clinic) and associated actions related to each comment. Both Jeff and Tom have revised their votes based upon clarifications and/or changes. (Refer to document for details.) Only one negative vote remains; that of W. Kraft. This working group has previously addressed issues raised by W Kraft.

The final document will now be sent to the Technical Guidelines Chair for forwarding to the Subcommittee on Wheelchairs for balloting. The balloting comments will be tallied and must be reviewed and addressed by the working group. Approximately three months will be required to complete this process. A 2/3 positive vote is needed from at least 50% of the subcommittee to have an approved document. The document will be circulated with the pre-ballot comments. ANSI council must ultimately approve and adopt the document in order for this standard to be an official US standard.

Larry presented an overview of WC/19 and testing procedures contained in WC/19. The scope, general design requirements, specific design requirements related to securement points, performance requirements, testing procedures (frontal impact, accessibility of securement points and tiedown clear paths, wheelchair lateral stability, accommodation of vehicle mounted occupant restraints), and information requirements (identification and labeling, presale literature, user instructions, user warnings) were described.

Doug suggested that we use a subset of Larry's SOWHAT overview slide presentation to be posted to the web. It was also suggested that a brief one-page fact sheet be developed describing the essence of WC/19.

6.2 Implementation and Educational Issues

The National School Bus Guidelines Steering Committee is planning to adopt the approved WC/19 document. Jeff pointed out that Peter has prepared a booklet and a number of trade-journal articles related to wheelchair standards, which have been useful in disseminating information on wheelchair standards. Members of the research group have also presented the essence of this standard to various school transport and clinician groups. Doug suggested that a web-based slide series be assembled to disseminate standards' information. The development of videotape was also suggested as another option. Those interested in working on implementation and education activities should indicate so to Larry S.

7) Prioritization of Remaining Issues

The following priorities and associated task leaders were identified by the group:

- 1) After market seating systems-WGMV (Gina Bertocci)
- 2) Special combinations of wheelchair and securement systems-draft standard (Larry Schneider)
- 3) Universal interface specifications/meeting (Doug Hobson)
- 4) Restraint of smaller children < 22kg (Miriam Manary)

5) Side impact conditions

8) Next meeting dates/locations

Tentatively at ISS in Vancouver in Feb 2000 (probably on the 26th and 27th)