

**Minutes of the Spring 2001 Meeting of the AASHTO/AGC/ARTBA
TASK FORCE 13
Sarasota Florida, April 26 and 27, 2001**

Thursday April 26

Chairman Arthur Dinitz welcomed the attendees to Sarasota and to Task Force 13. He reiterated our charge to issue guidance that promotes the standardization of hardware on roads and bridges. He noted that we are expanding our area of interest to other modes of transportation and welcomed the participation by a representative of the American Railway Engineering and Maintenance of Way Association (AREMA.)

Safety is one of our principal concerns. Dinitz related some recent accident statistics and noted that, for the first time in recent history, the traffic fatality rate has increased this year because of the reduction in vehicle miles traveled. This reinforces the need for a “quantum leap” in highway safety as discussed last Fall in Jackson Hole.

Dinitz reported that he had not been successful in acquiring additional funds from AASHTO for publishing our documents. He noted that others, including one of our own subcommittees, have succeeded in obtaining needed funds through soliciting interest in pooled-fund studies.

Dinitz announced that he is now the Vice Chair of the ASCE Highway Innovative Technology Evaluation Center (HITEC). At a recent meeting, FHWA’s Denny Judicki stated that FHWA’s research budget is expected to increase by at least 20 percent. He also noted that FHWA has reorganized pooled fund studies.

That may mean things are looking up regarding funding of our publications. Tony Kane, formerly Executive Director of FHWA, is now a Deputy Director of AASHTO. Kane is expected to be more interested in publishing our guides rather than see them be delayed until they can be part of a revenue generating product. Task Force 13 now has an internet domain name, www.aashtotf13.org, that we will be able to use once our publications are ready for distribution.

Dinitz praised TF13 members for their spirit of volunteerism and noted that as the task force has relied on volunteers it will continue to do so. He specifically recommended that each subcommittee establish a publications work group that can shepherd the documents through the process.

Secretary Nick Artimovich briefed the Task Force on the subcommittee activity from the Fall 2000 meeting in Jackson Hole, Wyoming.

Subcommittee Meetings

Nancy Berry began this meeting’s subcommittee activities with a discussion of the Publications Subcommittee’s efforts. She provided a handout which covered:

1. Current status.
2. Items needed from each subcommittee
3. Recommended approach to tackle work at hand.
4. How to proceed when hard copy original is ready.
5. Recommendation for standardizing publication format.
6. Additional actions the Publications subcommittee can perform.

(I can fax a copy of this two-page handout to any TF member who needs a copy. Just email me your fax # at my address on the cover letter.)

Nancy also proposed a survey of the states to learn how our publications can be presented in the most useful format. Questions would elicit preferences for Hard Copy or Electronic / On-Line publication, Metric / English units, and solicit photographs and volunteers to assist in the process.

Dinitz noted that not only government and industry people use our documents, but consultants are major users, too. TF-13 ought to look towards standardizing the format in which such documents are made available to the highway community. As the originator of the Internet service "Transpo-Link" Dinitz has noted an amazing diversity of formats among industry users. Each TF-13 subcommittee ought to gather the information Nancy seeks for their own planned publications and submit it to her before the Portsmouth meeting in the Fall of 2001.

Dinitz again called for suggestions from the assembled members regarding funding for our publication efforts. Each document can cost upwards of \$300,000.00. Dinitz believes the Task Force should get some of the new money that will be available from FHWA.

Breakout Sessions

Notes from the breakout sessions are attached.

Marketing Committee

The Marketing Committee is always looking to increase representation from states and consultants.

Committee on New Areas of Standardization

The Rail-Highway Crossing Hardware Subcommittee will continue to aim towards a "resource guide" with coordination with AREMA.

Affiliated Committee Reports

AASHTO Bridge:

Pat Collins reported that the AASHTO Bridge Committee, Technical Committee T-12 on pole structures, is meeting in May in Seattle. The T-12 publication "Standard Specifications for Structural Supports for Highway Signs, Luminaires, and Traffic Signals" has been distributed (as of May 18, 2001) and T-12 was planning to discuss proposed revisions to that new document. T-12 is considering a meeting in the Fall to discuss implementation of the new edition of the standard, and "expression of interest" forms were distributed. TF-13 members may contact Artimovich for a copy.

ATSSA

John Durkos noted that ATSSA met in Ft. Lauderdale in February 2001. Implementation of NCHRP Report 350 tested work zone traffic control devices and temporary barriers were the subject of breakout sessions at that convention.

AASHTO / AGC / ARTBA Joint Committee

Dinitz had no news as there have been no meetings of the Joint Committee since the last time we met in Jackson Hole. The Joint Committee will meet again in August 2001.

New Business

Suggestions for the Spring 2002 meeting were solicited. Members are still welcome to forward suggestions to Art, Pat, or Nick. It is imperative that the suggested site include a willing TF-13 or AASHTO Task Force for Roadside Safety member willing to handle local coordination.

Tuesday, April 27

Dinitz called for volunteers to work on funding projects. He asked for experts on the various sources of funding and suggested Artimovich and Taylor for FHWA funding, and Pat Collins for pooled-fund efforts. We also need representatives from the highway Industry and Universities.

Our next meeting will be October 1 and 2 in Portsmouth, New Hampshire. As this will be just 10 days from peak fall foliage, be sure to reserve your rooms early. The group rates are available for the evenings of Sunday, Sept 30 and Monday, October 1.

Update on Relevant NCHRP Projects

Chuck Niessner, the new NCHRP manager in charge of roadside safety projects, briefed us on the following studies, all of which may be viewed on the TRB Website:

<http://www4.nas.edu/trb/crp.nsf/NCHRP+projects>

- 15-22 Safety Consequences of Flexibility in Highway Design
- 17-10(2) Structural Supports for Highway Signs, Luminaires and Traffic Signals
- 17-11 Determination of Safe / Cost Effective Roadside Slopes and Associated Clear Distances
- 17-13 Strategic Plan for Improving Roadside Safety
- 17-22 Identification of Vehicular Impact Conditions Associated with Serious Ran-Off-Road Accidents
- 22-09 Improved Procedures for Cost-Effectiveness Analysis of Roadside Safety Features.
- 22-11 Evaluation of Roadside Features to Accommodate Vans, Mini-Vans, Pickup Trucks, and 4-Wheel Drive Vehicles.
- 22-12 Guidelines for the Selection, Installations, and Maintenance of Highway Projects
- 22-13 and 22-13 (2) Performance of Roadside Barriers
- 22-14 Improvement of the Procedures for Safety Performance Evaluation of Roadside Features
- 22-15 Improving the Compatibility of Vehicles and Roadside Safety Hardware
- 22-16 Development of and Improved Roadside Barrier System
- 22-17 Recommended Guidelines for Curbs and Curb-Barrier Combinations
- 22-18 Work Zone Traffic Control Devices
- 17-24 Use of Event Data Recorder Technology for Highway Crash Data Analysis
- 22-19 Aesthetic Design for Concrete Safety Barriers

Contingency: Problem 2002-C-28 Development of Designs and Guidelines for Safe and Aesthetic Urban Roadside Treatments

Problem 2002-C-11 Rational Analysis and Design of Railing systems Mounted on the Top of Retaining Walls Subjected to Different Levels of Impact Loading.

Technical Presentations

Ron Faller/Jim Holloway of the Midwest Roadside Safety Facility showed a video of "Recent crash testing on bridge railings/barriers/wz devices and other misc. research"

Dean Alberson of TTI also showed video of recent research, including PennDot's portable concrete barrier using a shear plate connection, and Washington State DOTs pin-and-loop design.

Hossein Ghara of the Louisiana DOTD gave a PowerPoint presentation on "Mechanically Stabilized earth walls and their prequalification process in Louisiana" including interesting photos of failed walls and proposed spec changes to avoid future problems.

Len Meczkowski of the FHWA Turner Fairbank Research Center showed a video illustrating the use of Finite Element Modeling of Portable Concrete Barriers by the National Crash Analysis Center. Barriers modeled include the Indiana Pin & Loop with spacers, the Pennsylvania PCB with steel shear plates, and the Ohio PCB.

Mark Bloschock of the Texas DOT and Charles Boyd of the Florida DOT discussed design and crash Testing of bridge mounted sound walls

Jim Kennedy of Battelle Labs spoke about ITS Technologies and Utility Safety including dynamic signage and the use of integrated technologies to alert drivers to unusually hazardous utility poles by using UV paint or by putting transmitters on hazardous poles.

John LaTurner of E-Tech Testing Services gave a detailed presentation on Measurement Uncertainty in Full Scale Crash Testing. Each measurement taken has uncertainty, and when you consider how many measurements are taken of the vehicle, test article, etc, the total uncertainty can be very significant. John proposed that measurement uncertainty be standardized in line with Crash Test Lab Accreditation Procedures.

Nick Artimovich of FHWA presented a video for Charlie McDevitt of FHWA / TFHRC on the subject of recent crash tests into bridge railing transitions.

John Durkos of Road Systems introduced A New Median Guardrail Terminal which consists of two FLEAT terminals offset longitudinally from one another.

Jeff Shewmaker of Safe Technologies, Inc. showed Recent Testing of Barrier Systems, Inc., products, and gave us an accreditation update on his facility.

Carl Macchietto of Valmont Industries discussed the Fatigue Strength of Gusset and Socket Welded Connections on traffic signal mast arm poles. There is a problem in that socket connections are rated lower, yet the gusset connections failed dynamic testing much earlier. This is likely due to the concentration of the loads at the point where the top of the gusset plate meets the pole. Valmont's research should lead to a change in the standards for designing such connections.

Executive Board Meeting : Wednesday, April 25 2001

Members in attendance:

Art Dinitz
Nick Artimovich
Ron Faller
Harry Taylor
John Durkos
Nancy Berry
Mark Bloschock
Dean Alberson

The following topics were discussed:

1. Chairman Dinitz announced that the Fall 2001 meeting in Portsmouth, New Hampshire, would be his last as chair of Task Force 13. He will establish a nominating committee to find an interested industry person with experience with TF-13 who can take over.
 - 1a. John Durkos indicated that Dick Albin will leave as co-chair of the Barrier committee and that a replacement is needed. Ron Faller has replaced Mac Ray as co-chair of the Accreditation committee.
2. Location of next spring's meeting is yet to be selected. Suggestions would be appreciated. Places mentioned included Santa Fe NM, Austin TX, Scottsdale AZ, Vail CO, Denver CO, San Francisco CA, Sacramento CA,.
3. Dinitz has been asked to be vice-chair of ASCE's HI-Tec program. At a recent meeting, FHWA's Denny Judicki stated that FHWA's research budget is expected to increase by at least 20 percent. He also noted that FHWA has reorganized pooled fund studies. Sonny Mays Schust is still focusing on revenue generators like the AASHTO Materials publications, leaving Joint Committee Task Forces with little hope.
4. The AASHTO / AGC / ARTBA Joint Committee will write AASHTO regarding funding for Task Force Publications, however TF-13 needs to develop a plan and budget for our publications. An RFP should be prepared to spell out what we need. Various potential sources of funding were discussed including pooled fund studies and solicitation from consultants. Manufacturers should be approached for funding to help with publications that include proprietary products.
5. Durkos noted that his committee is rehashing the same material as there is no money available for them to move forward. He also proposed that each subcommittee have working groups to deal with formats, metric conversions, etc. Dinitz agreed that common formats were important, and that all publications should be on the same format for ease of use on the Internet.
6. Questions on publication standards such as metric v English, MicroStation v AutoCAD, etc. need to be settled. A survey of the states by the publications committee should be used to develop answers to these and other questions. Dinitz noted that formats that are useable to the states and the consultants are critical for our documents. Dinitz requested that each subcommittee send a copy of their latest publication (s) to Nancy Berry for her use in discussing / coordinating formats.

7 It was questioned whether the publications should only include hardware that has received an FHWA letter of acceptance. At a minimum, hardware not having an FHWA letter should be set apart from the rest.

8. Bridge railings require such detail that a complete guide would not be possible. Perhaps a document listing state DOT contact people for each bridge railing should be made available. There would also be a need for a section on aesthetic bridge railings.