Task Force 13 Meeting Cleveland, Ohio May 25 and 26, 2011

Task Force members who participated in the Wednesday morning session of the AFB20 meeting received updates on roadside safety related research from various organizations, including the following from NCHRP:

Update on NCHRP Projects: Chuck Niessner of NCHRP

Three new projects have been approved for FY2012. Completed 1 this year, and 17 are currently underway. The active and recently completed projects below have a live link in the e-version of these minutes. Some newer efforts do not yet have a live link.

Three new projects approved by the AASHTO Standing Committee on Research are:

12-90 "Guidelines for Designing and Shielding Bridge Piers"

17-55 "Guidelines for slope traversability"

17-61 "Effect of Work Zones on Crash Risks and guidance on Countermeasures."

Most of the following active projects may be viewed on the NCRHP website:

NCHRP 16-05 Guidelines for Cost-Effective Safety Treatments of Roadside Ditches
Preparing interim report.

NCHRP 17-11(02) Development of Clear Recovery Area Guidelines

Currently resolving issues with database.

NCHRP 17-43 Long-Term Roadside Crash Data Collection Program

The work plan has been approved.

NCHRP 17-44 Factors Contributing to Median Encroachments and Cross-Median Crashes
Interim report approved.

NCHRP 17-54 Consideration of Roadside Features in the Highway Safety Manual

Develop more quantitative data and crash modification factors to use in the HSM. Work plan submitted

NCHRP 22-12(03) Recommended Guidelines for the Selection of Test Levels 2 Through 5 Bridge Rails

Executing work plan.

NCHRP 22-14(03) Evaluation of Existing Roadside Safety Hardware Using Updated Criteria

The research has been completed Published as RRD 349. Additional funding for testing cable barriers in median ditches was approved under NCHRP 22-14(4)

NCHRP 22-20(02) Design Guidelines for TL-3 through TL-5 Roadside Barrier Systems Placed on Mechanically Stabilized Earth (MSE) Retaining Walls

This project is for design forces, not warrants. Concrete barrier is placed directly on top of the wall and a moment slab is used to deal with forces. Conducting simulations on TL3 to TL5 on MSE walls

NCHRP 22-21 Median Cross-Section Design for Rural Divided Highways

Final report been submitted

NCHRP 22-22 Placement of Traffic Barriers on Roadside and Median Slopes

Interim report submitted.

NCHRP 22-23 Criteria for Restoration of Longitudinal Barriers

Completed as NCHRP Report 656

NCHRP 22-24 Guidelines for Verification and Validation of Crash Simulations Used in Roadside Safety Applications

Final report completed.

NCHRP 22-Development of Guidance for the Selection, Use, and Maintenance of Cable Barrier Systems

Completed draft barrier placement guidelines. There will be a workshop to review the guidelines.

NCHRP 22-26 Factors Related to Serious Injury and Fatal Motorcycle Crashes with Traffic Barriers

Interim report approved by project panel. Collecting case studies. Getting details from trauma centers on extent of injuries.

NCHRP 22-27 Roadside Safety Analysis Program (RSAP) Update

Executing approved work plan. Workshop on new RSAP in January 2012

NCHRP 22-28 Criteria for Restoration of Longitudinal Barriers, Phase II

Proposals received.

NCHRP 22-29 Performance of Longitudinal Barriers on Curved, Superelevated Roadway Sections

Editor's note: Contract with George Washington University was signed on June 6th.

Task Force 13 To Do List:

Send note to membership on the process and tools needed to access drawings and make comments.

Send PDF of drawing review log in process to membership.

All members should sign up for a Working Group.

Ask TCRS to review our website.

Are disclaimers needed on our drawings? Get AASHTO on board.

Non proprietary systems and parts should have full details, proprietary products are just general illustrations.

Wednesday, May 25 - Start of Task Force 13 meeting

John Durkos welcomed members at 1:11. Task Force 13 has a whole different mission and function from AFB 20. What is Task Force 13? If you are here, you are a member. No dues. No secret handshakes. The Task Force is an organization representing industry, academia, highway agencies, safety experts and others interested in promoting highway safety and hardware standardization. We do ask for volunteers to help us do what we do.

Thanks to Dan Gross and Michael Bline of Ohio DOT who helped with the meeting organization and logistics. Thanks to Gregg Frederick and Keith Fulton for assistance with registrations. Lots of behind the scenes activity that go on to put on these meetings and it is very helpful to know how many people we will have in attendance. We do strongly encourage early registration. Group Dinner at 6:30 at Pickwick and Frolic, buffet and Hilarities Comedy Club. Thanks also to Nick Artimovich for his (prolific) minutes.

AASHTO Roadside Design Guide 4th Edition is to be introduced in July and its primary mode will be web-based, even though a hard copy will be available. TF-13's efforts are critical for the RDG as our links provide latest info to the Guide's information.

After individual introductions, Co-Chair Gregg Fredrick of the Wyoming DOT welcomed all participants from researches, to manufacturers, to state DOT people who implement the hardware. Why Cleveland? First, the Indians have the best record in baseball [Secretary's note: that did not impress the Boston Red Sox on Tuesday and Wednesday's games]. Jesse Owens

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grew up in Cleveland. In 1879 Cleveland was the first city to be lit with electricity. First city with a traffic light.

Frederick also sent around a sign-up sheet for Professional Development Hours (a relatively conservative four hours was determined based on the direct hours of presentation. Certificates were available to members at the end of the meeting.)

Highway fatalities have dropped significantly in the last few years as miles driven have increased. This says we are doing a lot to improve safety. As we move towards zero deaths and a Decade of Action, we and AFB20 can be leaders in highway safety.

Artimovich recounted the Subcommittee minutes from Kansas City in September 2010. Dinitz moved to approve, Durkos seconded. (These minutes may be seen on line at http://www.aashtotf13.org/pdf/TaskForce13MinutesKansasCity.pdf)

Subcommittee Activities:

Subcommittee #1 Publications Maintenance

Barrier Subcommittee Co-Chair Will Longstreet went through the Task Force 13 website that was live on-line and projected in front of the membership. We have been working closely with TTI in developing the website and the drawing review process. Members should get Adobe X reader downloaded free from the Adobe website. This will allow you to download drawings and add comments to them. New RDG will be in electronic format this summer. Longstreet linked to the website itself. Site is completely searchable. Members can create their own username and password. Please do not use any aliases as we need to contact members regarding their comments. Each chapter of the RDG has a link to their respective Task Force 13 guide. Trying to keep it simple for people who haven't been to the site before. All our guides are linked on our website home page.

Bob Takach then described the designator nomenclature. Information is keyed by "designators" for each drawing system or component. System drawings begin with an "S" designator, and a second letter which refers to usage, third letter to material. Generic systems include drawings for each component. Proprietary systems do not.

Fredrick explained TF home page and links to our publications.

Eric Lowrey asked how drawings get their "final approval" to be posted as such. Longstreet noted this is covered in our Standard Operating Procedure and requires approval by the subcommittees. The drawings are then are moved to "ready" status. Although TF13 and FHWA would like to have TF13 drawings submitted as part of the FHWA review package, it is not mandatory. Petitioner may provide that drawing whenever they wish to submit their product for inclusion on the TF13 site.

Affiliated Committee Activity Reports

AASHTO SCOBS: Keith Fulton of the Wyoming DOT reported on the AASHTO Subcommittee on Bridges and Structures meeting that was held on May 16-20 in Norfolk VA. At the Technical Committee T7 Guardrail and Bridge Railings session Paul Fossier gave an update on NCHRP Project 22-12(3) "Recommended Guidelines for the Selection of Test Levels 2 Through 5 Bridge Rails." William Williams talked about MASH tested bridge rails, and Dr. Justin Ocel of FHWA gave presentation on weathering steel guardrail.

At the T12 meeting on Signs Luminaires Traffic Signals there were presentations on NCHRP 10-70, Hybrid Laser Arc Welding, TRB AFF10(1) activities. NCHRP 10-74; NCHRP 10-80 update of Sign and Luminaries Specs according to LRFD.

ATSSA: Blake Balzart discussed Extension of Safetea-Lu through this September. The Department of Transportation's fiscal 2012 budget included significant increases in highway funding. ATSSA has been active on Capitol Hill to promote reauthorization. Members are encouraged to visit ATSSA's site and send messages to their senators and representative on this issue. Balzart told about his visit to DC for the ATSSA fly in to meet his senator. Referred to SAIC's report on HSIP improvements and the reduction in fatalities. ATSSA training has reached nearly 48,000 students with their WZ courses. Outlined ATSSA certification program for guardrail installers as well as designers and spec writers. ATSSA pioneered Toward Zero Deaths. ATSSA midyear meeting will be in Louisville KY on August 24 and 25. For more info contact Donna Clark at donna.clark@atssa.com

NACE: John Durkos summarized the NACE presentation made earlier by David Brand of Madison Co., an elected Ohio County Engineer. Rural counties are the bottom of the food chain for highway funding. Tony Giancola is retiring from NACE leadership. A joint NACE-ATSSA booklet "Low Cost Safety Solutions" was very popular among county engineers. This will be updated in 2012. Noted Rural Highway Safety Clearinghouse through the U of Minnesota. Counties might have few resources but do try to keep up and make improvements. Mentioned MinnDOT state-aid program to assist counties with highway funding, and NACE hopes to advocate this to other states. Safety on a road can dramatically decrease for the driver just because at a specific location (county line, township limits) it goes from state ownership to county responsibility. This can lead to crashes.

Gregg Frederick offered to make a presentation on Wyoming's low volume road program. DOT partnered with others to reduce statutory 65mph speed on un-marked roads down to 55, and residential roads to 35 mph.

<u>TRB AFB20</u>: For info on AFB20 Activities please see the TRB AFB20 GOOGLE site: https://sites.google.com/site/trbcommitteeafb20/

All presentations will be posted to UNL's FTP site, a link to which is posted on Google site.

Special Subcommittees

Marketing: From Rick Mauer

Subject: Special Subcommittee Marking Report - Minutes 5-25-11 We had some great feedback on features to include in the Newsletter:

- Use links directly to the TF13 Registration and Agenda instead of having the info directly in the document
- Continue with the WHERE ARE THEY NOW section
- Next issue should feature
 - o New Roadside Design Guide
 - o Link / instructions to the review of hardware
 - o How to submit hardware into our guides
- Email addresses that should be added to our Distribution List
 - o AASHTO State Contacts
 - o State Publication person or who ever does that at each DOT
 - o LTAP
 - o Manufactures who offer training
 - o Pooled Funded States
- Link to the FHWA (Nick's website)

http://safety.fhwa.dot.gov/roadway_dept/policy_guide/road_hardware

• PE continuing education hours available for attending for TF13

Does Donna Clark have a state DOT mailing list we can take advantage of? Mauer will check. Dinitz says we can get this from ATSSA.

<u>New Standardization Areas</u>. Durkos noted that Marvin Philips discussed the variety of steel tubes that are being specified and wanted to work towards standardization. Have not heard more from that effort, but that is an example of what the TF can look into.

Discussed the need for standardization of terminals for guardrail systems that have splices that are <u>not</u> located at the posts. The MGS barrier is used by Washington, Illinois, and Iowa exclusively. WI, TX, DE are looking into going to MGS-only, with others considering it. May have ten to 12 states using the MGS by the end of 2012. There is a question about connecting terminals to the splice-not-at-post system. What should the lengths of the first two w-beam panels be? Questions arise when connecting to LON barrier or to GR/BR transitions. MWRSF is still considering this with the pooled fund states. If terminal extrudes 50 feet, then should the design require a minimum of 50 feet of w-beam before connecting to a transition? This should

not be a problem if the LON is properly designed as you will use much more w-beam than is needed for terminal operation.

A poll of the members asked: How many think first panel should be 12 foot 6 for end anchor panel? 18 raised their hands. How many support 15 foot 7 1/2? none

End panel should stay at 12 foot 6 so that all these special end anchor panels should be consistent.

Should terminals be longer than 50 feet or shorter? Longer 53 1 1/2? Most agreed that the special fabrication needed for the first rail in the barrier would be easier to standardize if everyone specified its length at 12' 6".

FHWA Update: Artimovich gave a presentation on some recent activities of FHWA Office of Safety. In addition to the 5/17/2010 memo on the installation height of new guardrail they are working on a memo on what to do with guardrail that is already in place within the limits of a resurfacing project. Since the draft 2011 RDG says that a w-beam with a top height (after resurfacing) of 26 ½ inches would be acceptable to leave in place, FHWA will likely adopt this number. FHWA is also in the process of digitizing all of the Acceptance Letter files covering Report 350 and MASH hardware. These files will be archived by the National Crash Analysis Center and be available to the public. A copyright notice will be included as appropriate to warn against additional duplication of any reports or films that the owner has copyrighted. Will Longstreet followed and discussed the 20-7 proposal for updating the generic barrier products shown in the 1995 TF13 Guardrail Hardware Guide. The 20-7 proposal did not make the final cut for current funding. It will be resubmitted next year. Many new systems were added to the online Guide, but a complete review of the older drawings is still in order.

Executive Board Meeting

In attendance were: Fredrick, Durkos, Longstreet, Bligh, Lechtenberg, Chiu, Patterson, Mauer, Dinitz, Takach, Artimovich

Need for new subcommittee co chairs: Mike Stenko may not be able to continue as industry cochair of SubCom# 5. Greg Frederick is also busy with WyDot activities to continue as co-chair.

Drainage Hardware: Subcommittee meetings are not well attended. Co-chair Patterson asked that #4 be moved to 12:30 pm and we agreed. Editor's note: After the meeting, Kevin Kenerson with Campbell-ERS volunteered to co-chair with Chuck Patterson. TF13 accepted his gracious offer.

Durkos noted that our former webmaster, Wes Duffard, is no longer with TTI. Thomas Motyka will be TTI contact and will be the other co-chair with Mark Bloschock.

Kurt Brauner's funding got pulled at the last minute and will participate in the Bridge Railing subcommittee meeting by teleconference.

Longstreet suggested we have a webconference on teaching the membership drawing updates. We may need to require drawing reviews in order to register. There are far too many drawings to review to try to get it done during a meeting.

Future meeting locations. Grave concerns about passports and other travel complications surrounding a trip to Canada for next AFB20/TF13 meeting. Looks like Omaha, and Tampa are the two leading candidates. Will still check with FDOT Charles Boyd to see if he can help with AV, etc.

Durkos, Should we ask someone from TCRS to comment on our website? Longstreet noted that we asked Cota to look it over. At KC we got comments as to what they wanted, but there's no reason not to ask them to look at our site.

Longstreet set out signup sheets for Drawing Review Groups. This should be added to membership sign up on website as well. He also recommended that members can use Adobe connect for participating in upcoming meetings.

Bligh noted that the Barrier guide is unique. Other guides have different submission and review processes. Do not need Adobe X to review the BridgeRail guide. Durkos noted we need to bring new TTI person up to speed on this. The Bridge Railing/Transitions guide is still on Mac Ray's site but his contracts are over.

Durkos noted Bligh was instrumental in bringing Wes Duffard to our attention. He was our liaison to the TTI IT group. Cassandra, who manages the division where Wes worked and where Thomas works will have Bligh work with Thomas to bring him up to speed as TF13 webmaster.

Frederick has 20+ names for PE cert. [Your secretary has already drafted the Registration Form for the South Dakota meeting, and a check-off block has been added for those who want a CEU certificate at the conclusion of the meeting.] CEUs could be a topic for Mauer's newsletter.

Thursday, May 26, 2011

Durkos stressed how important it is for everyone to get involved in the on-line review of their subcommittees pages / drawings. The TTI contract has been extended by 2 years, and our webmaster Wes Duffard has been replaced by Thomas Motyka. The Roadside Design Guide will be linked to our pages and RDG users will expect to see the latest available details.

Subcommittee Meetings

Subcommittee #2 Barrier Hardware

Reviewed mission statement, enumerated the drawings reviewed last time, and the ones that were approved for moving to the Ready file. Intent is to get the on-line review process moving so that members can take one or two hours between meetings and make their comments on the drawings through Adobe X.

Longstreet demonstrated the drawing review process using SWC17. Karla Lechtenberg noted the revisions she had made to the drawing. We spoke with Kurt Brauner of LA DOTD and Thomas Motyka of TTI via speakerphone. We want to see a good comment list to the right hand side of the drawing review page. There is a lot to learn, but it doesn't take long to get up to speed and become able to comment on the drawings using Adobe Connect (as long as you have the free Adobe X reader downloaded on your computer.)

There was discussion about the level of detail that these drawings should show. Should there be a disclaimer that refers the user back to the manufacturer? Historically, generic, non proprietary systems and parts have full details; proprietary products are just general illustrations, generally an isometric drawing. We should have a policy on how much detail is needed to add a drawing to the guide. Many states use the exact details of generic components in the guide for their standards.

Durkos noted that Thomas was still on line. We asked him to put together a PDF of how to log onto the Adobe drawing process. Artimovich will distribute with minutes.

Longstreet suggested we have a couple of Adobe Connect sessions in June to review drawings.

SubComm #3 Bridge Railings and Transitions

Roger Bligh reviewed the on line bridge rail guide, including search criteria, required system attributes, and designator rules. The four existing working groups (concrete bridge rails, steel bridge rails, other bridge rails, and transitions) were reviewed. Additional volunteers were solicited for each working groups. Bligh went through the review process for on-line guides that utilize dynamic page generation. This process is different from the Barrier guide that has static, detailed drawing pages. Bligh proposed the development of an automated submittal process that

automatically generates a designator for the system. Such a system may be adaptable for use with the other on-line guides. He will work with the executive committee through the TTI contract for web development and support to pursue this idea. It was noted that the different levels of approval status in the guide need to be revised. There is no AASHTO approval. It was suggested that a statement be added to the guide indicating that the deck structure needs to be evaluated for compatibility with a given rail system.

Karla Lechtenberg reported progress on the review of bridge rails by the "Other Bridge Rails" working group on behalf of Ron Faller who is the working group leader. The "Other Bridge Rails" working group is responsible for reviewing rails systems fabricated from materials other than steel and concrete (e.g., aluminum, timber, etc.). Several systems were discussed and two were voted accepted by the subcommittee for formal incorporation into the guide. Other systems required further revision and will be presented again for vote at the next meeting. Review efforts are also underway by the other working groups, and the subcommittee hopes to be able to accept many more systems into the guide at the next meeting.

SubComm #4 Drainage

Chuck Patterson. Doubled attendance to 2. Working on a survey to state Hydraulics engineers to see if there is interest in an updated guide. Stormwater management, stormwater quality, trash racks are just some of the topics that are not yet covered by the guide. Also need to consider the impact of LRFD methodology for underground structures. Goal to have the survey done by next meeting.

SubComm #5 Sign and Luminaire Supports Chuck Plaxico discussed the on line luminaire guide. Programming to be done by end of Sept. Still need other mfgr's info including drawings and photos to populate the database. Plaxico is working on user's guide to help as there are numerous poles, mast arms, etc. Looking to have a webinar with T12 to get some input into the Guide. Almost ready to turn this info over to TTI from Mac Ray's site. http://guides.roadsafellc.com

SubComm #6 Work Zone Hardware

Ken Smith related the subcommittee's discussion of labeling of crash cushions in work zones, which is an ongoing project. Guidelines were handed out and comments requested. Agreed to do a literature search as to how state DOTs are handling PCBs to see if worn barrier segments are useable or not. Hope to develop a universal guide on barrier usage.

Kelsey Chiu submitted the following minutes:

- 1. Introductions
- 2. Kelsey (KARCO) summarized Kansas City meeting
 - a. Accelerometer mounting
 - b. Numerical data set

- 3. Lance (TTI) presented the Mission Statement
- 4. ISO 17025 and interlab comparisons, lab collaborations
- Lance wants to focus ILC's and get a clearer focus going forward by creating a multi year plan
- 6. Future ILC discussions
 - a. Rate transducer data (Euler angles),
 - b. Assurance of soil performance,
 - c. Measuring techniques
 - d. Vehicle CG talk of shipping a vehicle to test labs to measure with all the labs splitting cost to identify discrepancies
 - e. Discussion about auditors and uncertainties
 - f. David Whitesel (with CalTrans via conference call) mentioned ILC for usable data and beginning of event determination
 - g. Impact speed determination as an ILC
- 7. Accelerometer mounting
 - a. Karla (MwRSF) asked if there is a need to change accelerometer mountings. Can we identify if there is an issue.
 - i. Proposed standard mount for all labs will be addressed shortly.
- b. Comparison of numbers (probably impossible to determine), noise issues and filtering
- 8. Discussion of possible event comparison
 - a. Dropping a weight (impulse), using the same truck for a 5 mph as the cg comparison
- Kelsey presented possible accelerometer mounting solution based off of previous discussions in Kansas City
 - a. Dodge Ram example shown and discussed.
 - b. Review of labs mounting methods from Kansas City presentation.
- 10. Review of last data set ILC sent out May 2011.
 - Will wait for all contributors to get there results in since this was on short notice.
 Once all are in the results will be distributed by Kelsey to all interested parties.
- 11. Question of is there a problem addressed as an ILC
- 12. Road Trip to the truck possibly at E-Tech
 - a. Scope and work plan to circulate through, draw up formal plan to determine feasibility. Will be drawn up by Lance and Kelsey.
- 13. Cost estimate for truck shipping for CG with the truck ending up at E-Tech will be prepared by Lance and TTI
- 14. Long Term (2-4 year) plan for Inter Laboratory Comparison discussed and lead by Lance to address comments from his auditors that this was necessary.
 - a. Six potential ILC's identified that can be scheduled and planned.
 - i. Pickup accelerometer mounting and pendulum impact a central lab (E-TECH)
 - ii. CG determination (All labs, end at E-TECH)
 - iii. High speed video analysis (From KARCO)
 - iv. Static and Dynamic soil strength tests for MASH
 - v. Data Set
 - vi. Start Point and base line for data set
- 15. AASHTO TF 13 for link to ILC listing/history in main directory of MwRSF ftp.
 - a. Username: AASHTO
 - b. Password: mwrsf

- 16. Nick Artimovich of FHWA asked about ISO 17025 accreditation and each labs status of MASH in their scopes of accreditation.
 - a. The majority of the labs have MASH already added to their scopes. KARCO, TRC and CalTrans do not have it in their scope yet.

SubComm #7 Certification of Test Facilities

Developed a list of future ILCs

Technical Presentations

Lance Bullard Texas Transportation Institute showed crash tests of the following devices:

- Median Barrier Gate, passed pickup tests at center and CIP.
- Pan Form Bridge Rail Retrofit bolted thru deck. TL 4 Concrete bridge rail at 36 inches.
- MASH TL-3 guardrail similar to MGS with 8 inch blocks.
- NTTA low mounted DO NOT ENTER sign. Passed with small car.
- T101 bridgerail at 27" which failed testing with the pickup.
- Downstream cable anchor end test with 1100C.

Karla Lechtenberg MWRSF showed the following tests:

- Hi tension cable in 4:1 V ditch. Non prop, used anywhere in ditch . 45" top, 13.5" bottom, equal spacing. Ubolts allow release, 1/4" diam A449. 46-foot wide ditch.
- MGS without blockouts.
- Universal steel posts for use with bullnose. Use fracturing bolt on base welded to post. Pickup deflected CL of bullnose the same dist as wood posts.

Nick Frommelt Cartegraph Sign inventory systems. Computerized inventory system to track labor, equipment, and materials to streamline workflow. Asset management to reduce costs, lower liability, and comply with Fed Regulations. Can predict deterioration of sign face and sheeting over the years. Use barcoding to assist data management. http://www.cartegraph.com/index.php/solutions/signview

<u>Lou Peeples, Camcode</u> Safety Hardware Inventory. Sign tracking hardware-barcode tags. MetalPhoto photosensitive anodized aluminum. http://www.camcod.com

<u>Dr. Stephen Duffy, Cleveland State University Transportation Center.</u> Mission is to increase safety in highway construction work zones. Focus on Human factors research, smart work zone technologies. Have enhanced the civil engineering curriculum in the NE Ohio area in conjunction with U of Akron and the Youngstown State University. http://www.csuohio.edu/engineering/utc

Gary Lallo Hill & Smith Test Level 4 Bridge Railing Hill and Smith. VGAN 300 Varley & Gulliver. Has received an FHWA Acceptance Letter. 3'-6" height to top of rail. Used in the Mideast, can be imported into USA because it is non ferrous. http://www.v-and-g.co.uk

<u>PPG Industrial Coatings</u>. John Zbiegien and Tom Scherr spoke on on Zinc Rich coatings and electrocoatings. Thin coatings of zinc rich material are less than one mil. Can be covered with powder coat or electrocoatings.

http://www.ppg.com/coatings/industrial/technologiesproducts/Pages/default.aspx

Artar asked if the lifespan is comparable to 30-50 year lifespan seen by galvanized guardrail? Testing of acrylic products is underway right now.

<u>Art Dinitz, Transpo Industries.</u> Countered a statement regarding a 'failure' of a double notch Transpo coupling. Passed actual 820C 100km/hr testing.

Final Wrap up:

Our Fall 2011 meeting will be held in Rapid City SD. The contract has been signed and the TF-13 meeting will be held September 12th and 13th. (The TCRS meeting will be held the 14th through 16th.) The hotel is the Alex Johnson (Rapid City, SD) (1-800-888-ALEX (2539)) with a room rate of \$99 (tax and fees not included). Rooms are reserved under AASHTO. Rooms need to be reserved by July 25th to get the \$99 rate.

Spring Meeting will be in this format, probably with AFB20 again. International travel concerns pretty much rules out Montreal.

Please send comments/corrections/additions and subcommittee minutes to me at nick.artimovich@dot.gov Thank you.