**WAQTC QAC COMMITTEE MEETING MINUTES**

**LEADER:** Garth Newman, ITD  
**RECORDER:** Desna Bergold  
**DATE:** July 18 - 22, 2011  
**LOCATION:** Billings, Montana

**MEMBERS PRESENT:**  
Garth Newman, ITD  
Sean Parker, ODOT  
Amy Rico, UDOT for Tyson Vorwaller  
Linda Hughes, WSDOT  
Greg Christensen, AKDOT & PF  
Alan Hotchkiss, CDOT  
Misty Miner, MDT

**MEMBERS ABSENT:**  
Brian Legan, NMDOT  
Ryan Hixson, WFL-HD

**MEETING ITEMS:**

1. Executive committee assignments:  
   a. Determine objectives of the written exams to put before the Executive Committee  
   b. Develop a 4th Qualification Exam for each materials discipline  
   c. Develop 3-5 New Questions Per Year, Per Module  
   d. Develop Electronic Question Database – Randomly Generate Questions  
   e. Evaluate training materials every 5-years for content  
   f. QAC winter meeting: Reno  
   g. Ideas for Research for AASHTO SOM

2. Items from Teleconference  
   a. Newsletter topics  
   b. AKDOT Training for Examiners  
   c. Performance Exam Questionnaire answers  
   d. Oral Performance Exams – what to keep  
   e. Alaska training modules/new aggregate PowerPoint

3. Reformatted manuals

4. Manual Updates  
   a. AgTT  
      i. ITD now only allows the mechanical method, can the others be removed?  
   b. CTT  
   c. AsTT  
      i. TM 8 – WsDOT is going to backscatter with a thin lift gauge.  
   d. EbTT
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| Executive Committee assignments – Objective of the exams – Open-book v closed book | Objective: ‘The written exam is to determine familiarity and basic knowledge of how to perform the procedure. This is the gate-keeper to the performance exam that demonstrates knowledge of the procedure.’  
Based on the studies ‘open and closed’ exams provide the same retention. The QAC has decided the closed-book written exams meet the exam objective and would prefer to leave it closed-book. See paper supplied by Linda Hughes, WsDOT, attached. ‘On%20Open-Book%20Exams[1]’  
*Exams will remain ‘closed-book.’* | |
| Executive Committee assignments – Develop 3-5 New Questions Per Year, Per Module | New questions will be developed from the AASHTO revisions for the pool and to develop an exam for the re-qualifications.  
*Reviewed ‘exam 4’ and will incorporate some questions into existing exams.* | |
| Develop Electronic Question Database – Randomly Generate Questions | Alan Hotchkiss, CDOT, brought up issues that stem from dependence on electronics. Going to electronic testing encourages just ‘coming up with the answer’ and does not address the process, i.e. calculations, drawing curves, recognizing erroneous results. Possibly still go that direction with some modifications to questions and implementation. Benefit: Calculation questions could have input (Fill in the Blank) instead of multiple choice.  
*Under consideration.* | |
| Evaluate training materials every 5-years for modality | Is the delivery system of the training materials continuing to meet the Mission?  
Content is updated yearly. This discussion should address the delivery of the materials and the format of the materials. Should there still be the various forms of the FOP’s? | |
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<td></td>
<td>Each department representative was polled:</td>
<td>Garth - immediate response to just short form use</td>
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<td>Greg Christensen, AkDOT, Alaska only uses short-form only</td>
<td>Desna</td>
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<td>Misty Miner, MDT, would be fine with just the short form but would like the Instructor notes incorporated into the PowerPoint notes</td>
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<td>Linda Hughes, WsDOT would be fine with just the short form but would like the Instructor notes incorporated into the PowerPoint notes</td>
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<td></td>
<td>Alan Hotchkiss, CDOT using the short form may be beneficial for review</td>
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<td>Sean Parker, ODOT does not use the Instructor’s Manual, would be fine with just the short form but would like the Instructor notes incorporated into the PowerPoint notes</td>
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<td></td>
<td>Garth Newman, ITD, would be fine with just the short form but would like the Instructor notes incorporated into the PowerPoint notes but will discuss the issue with his trainer’s. He also would use an exercise book.</td>
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<td>Amy Rico, UDOT, uses the Student Manual, also will discuss with the trainers. Possibly at some point move to Short Form FOPs and PowerPoint w/ Instructor notes. Each state will develop an exercise book based on their forms. A document needs to be created to layout the problems with an ‘add form here’ note.</td>
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<td>The Instructor’s Manual will not be included in this year’s training packet, the Misty has already incorporated the Instructor boxes into the PowerPoint, Misty has given this to Desna for review and current updates.</td>
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<td>Volumetrics Module</td>
<td>What’s the goal? “At the end of this training the participant will be able to demonstrate what?” Is this program going to cover field volumetrics or should it also include significant portions of design?</td>
<td>Linda, Garth, Brian</td>
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<td>The states that currently have a program will provide them to Desna who will compile them for the Executive Committee sub-committee. CDOT, UDOT, MDT, and ODOT have supplied their materials; still need ITD, WsDOT, and NMDOT. Discuss with the Executive Committee.</td>
<td>Desna</td>
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<td>Oral Performance Exams – what to keep</td>
<td>The group feels that the oral Performance exams are a necessary reinforcement of the sampling procedures as it is one third of a variability triangle: sampling, testing, &amp; material. The exception is the elimination of the Performance exam for FOP for T 40. <em>Keep oral performance exam for all sampling methods except T 40.</em>&lt;br&gt; <em>Remove T 40 performance exam.</em></td>
<td>Desna</td>
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<td>Manual updates:</td>
<td><strong>Aggregate</strong></td>
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<tr>
<td>T 2</td>
<td>Editorial</td>
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<tr>
<td>T 248</td>
<td>Formatting</td>
<td></td>
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<td>T 255</td>
<td>Removed thermometer from apparatus, other editorial.</td>
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<td>T 27/T 11</td>
<td>Greg provided AkDOT Method C calculation material, all agreed it would work. Desna will incorporate it into T 27/T 11 and send out for review.&lt;br&gt; <em>Use AkDOT Method C calculation and examples in the current update.</em></td>
<td>Desna</td>
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<tr>
<td>T 335</td>
<td>Editorial</td>
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<td>T 176</td>
<td>Editorial</td>
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<td>Embankment/In-place Density</td>
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<tr>
<td>T 255/T 265</td>
<td>Removed thermometer from apparatus. Other editorial.</td>
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<tr>
<td>T 99/T 180</td>
<td>Added language to assist in identifying starting point:&lt;br&gt; ‘For many materials this condition can be identified by forming a cast by hand.’&lt;br&gt; Included in Performance Exam checklist.</td>
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<tr>
<td>T 272</td>
<td>Minor editorial</td>
<td></td>
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<tr>
<td>T 85</td>
<td>No revisions</td>
<td></td>
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<tr>
<td>T 224</td>
<td>Minor editorial. Fixed D₄ calculation.</td>
<td></td>
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<tr>
<td>Use of Curves</td>
<td>No revisions</td>
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<td>T 310</td>
<td>FOP – no revision</td>
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<td>Performance exam checklist – editorial</td>
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<td>TM 8</td>
<td>No revisions</td>
<td>Garth Desna</td>
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<td>WAQTC TM 11 should be included in the In-place Density module for reference.</td>
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<td>Garth will provide the original documents for Desna to include.</td>
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<td>Asphalt</td>
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<td>T 168</td>
<td>No changes</td>
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<td>R 47</td>
<td>Note 2 incorporated into step 9b.</td>
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<td>T 308</td>
<td>Note 3 removed. Note 9 incorporated into the body. Other editorial.</td>
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<td>T 209</td>
<td>Grayed area of Table 2 that corresponds with temperature range that does not need to</td>
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<td>be corrected. Other editorial.</td>
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<td>T 166/T 275</td>
<td>Revisions: Added reference to TM 11. Added language concerning placing in the water</td>
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<td></td>
<td>bath:</td>
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<td>‘Immerse the specimen shaking to remove the air bubbles. Place the specimen</td>
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<td>on its side in the suspension apparatus. Leave it immersed for 4 ±1 minutes.’</td>
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<td>Performance Exam: removed Methods B, C/B, D and E. Added language above</td>
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<td>Discussion:</td>
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<td>Should T 275 be removed from the FOP? It appears that currently no one uses the</td>
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<td>parafin/parafilm procedure. Each state needs to address before it can be removed.</td>
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<td>Sean was asked to have the committee include the specimen section from AASHTO T 166 in</td>
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<td>the FOP. After discussion it appeared that TM 11 covered the information. Sean will</td>
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<td>verify that Oregon will be satisfied with the inclusion of TM 11 instead of</td>
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<td>incorporating the language from AASHTO T 166.</td>
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<td>*Each state must determine if it is ok with the elimination of T 275 from the FOP for T</td>
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<td>166/T 275.</td>
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<td>T 40</td>
<td>Sean will determine if TM 11 meets the request.</td>
<td>Sean</td>
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<td>No revisions other than below.</td>
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<td>Amy Rico will provide information on cutbacks and emulsion for inclusion in Asphalt basics.</td>
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<td>Department personnel to not perform this procedure due to the safety issues. Generally supplier/contractor personnel samples bituminous material with a qualified witness. The procedure is quite short and simple and is covered well in training and the written exam, the performance exams are an unnecessary redundancy for this FOP.</td>
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<td>The Performance exam(s) for the FOP for T 40 will be eliminated in this update.</td>
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<td>T 30</td>
<td>Added ‘Mass verification’ example.</td>
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<td>Concrete</td>
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<td>TM 2</td>
<td>No revisions</td>
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<td>T 309</td>
<td>Second Instructor box on page 4-3 eliminated (will not be included in PowerPoint notes)</td>
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<td>T 119, T 121, T 152</td>
<td>Added to tamping rod description: ‘a hemispherical tip the same diameter as the rod.’</td>
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<td>T23</td>
<td>Added to tamping rod description: ‘a hemispherical tip the same diameter as the rod.’</td>
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<td>Corrected wet sieving screen size.</td>
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<td>Exam #4</td>
<td>Exam #4 was vetted by Montana and Oregon. The questions with a high failure rate (about 20%) were reviewed and discussed to determine if the issue was the question. Some were found to have problems with the question such as poor wording, material not in FOP, lengthy answers.</td>
<td>Linda and Misty</td>
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<td>Exams #4 have issues that need to be fixed.</td>
<td>These exams are more difficult than the existing exams. Review to determine if exams 4 questions should be incorporated into the original exams 1, 2, and 3. Exams #4 were vetted by Montana and Oregon. The questions with a high failure rate (about 20% or more) were reviewed and discussed to determine if the issue was the question. Some were found to have problems with the question such as poor wording, material not in FOP, lengthy answers etc. Some were found to be viable questions. Each question in the fourth exams was reviewed by the group; many questions required more work and time than currently available Linda and Misty have offered to rework these questions. The questions acceptable questions were identified and Greg will incorporate these questions into the existing exams (1,2&amp;3). Greg agreed to have the reworked exams out to the members for review by Sept. 1 It has been suggested that the QAC establish criteria for questions for uniformity for exams. Incorporating acceptable questions from exam 4 into exams 1, 2, and 3. Reworking remaining questions for possible future use.</td>
<td>Greg</td>
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<td>Other Exam discussions</td>
<td>Should there be a difference between initial qualification and re-qualification? Should the competency be measured differently? Garth and Linda suggest that initial Qualification include written and performance and re-qualification could be measured with just performance unless they are unable to prove competency then both exams would apply. Discussions lead to tabling the idea for now. Continue to place on agenda</td>
<td>Desna</td>
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<td>Performance Exam Questionnaire answers</td>
<td>Garth handed out Idaho’s Performance Examiner’s instructions and explained the process that Idaho uses. Each state representative discussed their process. Performance exam questionnaire responses emailed to all members. Desna will compile the answers in a spreadsheet by question. <em>Performance exam process will be complied and provided to each state for information and reference.</em></td>
<td>Desna</td>
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<td>AASHTO SOM Research ideas</td>
<td>T 209 – difference of absorption of HMA when the HMA used for testing is sampled at the Hot plant and immediately tested and when HMA is sampled from the roadway. Time at temperature increases absorption. T 85 – placing material under residual pressure, using T 209 for aggregate to eliminate the 15-19 hour soak. T 168 – sampling from the auger Linda will provide an example of an AASHTO research proposal to Desna for future use. Desna will present these ideas at the Executive Committee meeting.</td>
<td>Linda, Desna</td>
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<td>Other items</td>
<td>Sean proposed that a Desk Manual to be started from the meetings etc. Go through the last few meeting minutes for a starting.</td>
<td>Desna</td>
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<td>Meeting in Reno</td>
<td>El Dorado – January 30 thru February 3, 2012 Desna will make arrangements and provide information.</td>
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<td>PowerPoint presentations</td>
<td>Misty would like to get videos for the test procedures for optional use. Linda has quite a few and is willing to supply videos for the group. Linda will put the videos she has on an FTP site and the group can review. <em>All will review the Washington’s videos for future discussion.</em></td>
<td>Linda, All</td>
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| New aggregate PP | Desna needs to fix the notes: some do not match the slides.  
The Alaska PP needs fewer ‘graphics’ such as the banner picture on the text slides. Some of the slides should be shifted to multiple slides. Less reflective pictures.  
Garth suggested that everyone to go through the ‘New’ Aggregate PP and send Desna comments. After she receives the comments Desna will put address the comments in the aggregate PowerPoint.  
The group will have an ‘on-line’ and review the revised version. Linda has arranged to have WsDOT host the meeting.  
Comments listed by Slide number and Test procedure – Linda will provide a template for ease in compiling comments.  
Linda will also provide aggregate video.  
*The on-line meeting has been arranged for Sept. 7th at 9:30 mountain time.*  
*Everyone needs to have their comments to Desna by August 15th.* | Desna               |
| On-line training | Alaska’s on-line training program is for everyone’s use, the EC needs to discuss adoption of Alaska’s version.  
Montana has a program that is tied to their testing program that is adapted from Alaska and Texas.  
Does the organization want an On-line training program for all to use or is each state going to develop their own?  
Issues to address:  
  Where to house the single training,  
  how to attach to each states testing and tracking program  
  How this group can develop a program?  
  How to deal with revisions and updates especially over the long term  
Greg will provide Misty with the source files for the Alaska program so she can use | All                 |
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| AkDOT Training for Examiners | They have developed program beginning with TCCC’s program. Covers Adult learning theory. Greg is willing to provide his information to anyone who would like it.  
  *Anyone who would like AkDOT’s ‘Trainer’s training program’ should contact Greg.* |
| Newsletter Topics        | Developments from the QAC meetings and the reasons for the updates and/or changes.  
  AASHTO revisions  
  AASHTO SOM                                                                                               |
|                          | *Alaska’s on-line training has not been officially adopted by WAQTC, needs to be discussed with the Executive Committee.*         |

Kudos  
Thank you Misty for all your efforts and hospitality.