



September 11, 2012

I. OPENING BUSINESS

10:30 a.m.

- Call to Order (John Aho, Chairperson); Roll call: Commission members John Aho, Ann Gravier, Rich Koehler, Mark Delozier, Robert Scher and Robin McSharry were present. Gary Carver, Bud Cassidy, and Laura Kelly were forced to participate via teleconference on both days due to bad weather in Kodiak. Roger Hansen and David Miller were excused. Vickie Butherus with the Alaska Division of Geological and Geophysical Surveys (DGGS) was also present.
- The meeting agenda was approved with the following changes: Commissioner Koehler added two items under the Earthquake Hazards Committee meeting for distribution of the Cascadia white paper and discussion of the Riley Creek bridge. The Earthquake Scenarios Committee meeting was erroneously scheduled twice, so that meeting will take place as scheduled on September 12th, as the 11th is overscheduled. Commissioner Scher added discussion of commission correspondence under Old Business. Commissioner Carver requested that Koehler discuss some recent tsunami research under the Earthquake Hazards Committee meeting.
- Introductions of Guests: Rod Combellick of DGGS, Natalia Ruppert of the Alaska Earthquake Information Center (AEIC) at UAF, Joanne Bennett with the Alaska Division of Insurance, Chief Scientist John Power of the Alaska Volcano Observatory (AVO), Associate Professor Utpal Dutta from the UAA School of Engineering, Emergency Management Specialist Sam Hutchinson with the Alaska Division of Homeland Security & Emergency Management (DHS&EM), and from FEMA Region X were Risk Analyst Amanda Engstfeld, Earthquake Program Manager Tamra Biasco, Liaison Officer Tom Wilder, and Emergency Operations Planner James White. Joan Gomberg of the USGS called in from Seattle for the FEMA/USGS MOU discussion by Tamra Biasco.
- Review and Approval of Minutes for the June 7, July 5 and August 2, 2012 meetings: The minutes were approved with amendments. Approval of the April 5 and 6 minutes was postponed until the next meeting.

II. BRIEFINGS

11:00 a.m.

- FEMA Region X Alaska Earthquake Planning Effort-Biasco: FEMA is developing an earthquake scenario for Alaska for planning purposes, which they hope to have completed by the end of March, 2014. The project's working title is the Alaska Annex to the Region X All Hazards Plan. They would like to have better data to use as a baseline in HAZUS instead of just relying on the defaults. FEMA has discussed this with State of Alaska officials and the state would like a scenario similar to the 1964 Good Friday event. They will look at how transport of commodities (goods) will be affected and how best to get supplies to affected areas. Ms. Biasco was interested in the information being worked on by the Municipality of Anchorage in refining ground motion models for the downtown area. Such information would be valuable in creating a more realistic HAZUS result. Mr. White pointed out that there will be a core planning

team created to support the scenario work, and Mr. Wilder added that members of the ASHSC may be invited to be part of that team. Ann Gravier can direct commission input to the FEMA staff working on the project. Commissioner Kelly pointed out that the time of year must be considered in Alaskan events as winter weather can be severe. Commissioner Carver asked about a recent FEMA report on the Cascadia Region, and Ms. Biasco replied that she could send the report to interested parties. Carver also added another agenda item to his committee meeting to discuss credible Alaskan events that would be useful for the FEMA scenario.

- FEMA/USGS MOU-Biasco and Gomberg: The national headquarters for both FEMA and the USGS have signed a memorandum of understanding to coordinate activities concerning hazards, risk assessments, mitigation/risk reduction, preparedness, response/recovery, land use planning, and economic development. They will implement coordination with interagency agreements at regional levels. This will formalize and expand cooperation that already exists between the two agencies. FEMA would like to work more closely with state agencies as well. Joan Gomberg spoke about programs that have worked in Washington state and that could be applied in Alaska. Ms. Gomberg discussed how the USGS in Washington used focus groups, meeting with county level emergency managers and responders. They used feedback from these groups to make their products better known, more understandable, and more useful.

LUNCH

12:00 p.m.

III. OLD BUSINESS

1:00 p.m.

- Action Items: The Advocacy Chairman of the Alaska PTA is expected to attend the afternoon session of the current ASHSC meeting. New members should take the ICS 100 course and forward a copy of the certification to Chairman Aho. Many of the action items will be covered under the committee meetings. Chairman Aho has contacted EERI regarding coordination of the 10th U. S. National Conference on Earthquake Engineering to be held in Anchorage in 2014, and he will talk about this more during his committee meeting tomorrow. The strategic plan is nearly complete, but it is a dynamic plan that may change as new goals are identified. Commissioner Scher motioned to follow up on letters sent by the Commission to the Knik Arm Bridge and Toll Authority (KABATA) and to the Port of Anchorage, as there has been no response so far. Commissioner Koehler seconded, all were in favor. The Commission will send follow-up letters requesting a response.
- 10th U. S. National Earthquake Engineering Conference/2014 EERI Annual Meeting-Aho: Farzad Naeim of EERI has been appointed conference chair. A local committee will be formed to assist in coordination here in Alaska, and Chairman Aho is interested in getting the names of likely candidates. Interested parties should let the chairman know before the planning meeting that will be held in Anchorage October 8th.
- 2012 Annual Report-Aho: He needs information from the committee chairs to complete the report, so please forward the one to two page summaries of goals and accomplishments to him.
- ASHSC Strategic Plan-Aho: This is essentially in final form, but the chairman will make changes as needed. Feedback is welcome from Commission members.

- Potential New Members: These positions have either been filled or are in process.
- Reappointment Letters (Aho, Hansen, Miller): Everyone who was due was reappointed. Next summer, Commissioners Scher and Koehler will need to seek reappointment if they wish to continue to serve. The committee roster was reviewed, and it was decided to eliminate the Partnership Committee and place its duties under the Education and Outreach Committee.

IV. MEETINGS OF INTEREST

1:30 p.m.

- 15th World Conference on Earthquake Engineering, September 24-28, 2012, Lisbon, Portugal
- Non-Structural Seismic Mitigation and Rapid Visual Screening Training, October 2012, Anchorage (date is tentative)
- California Seismic Safety Commission, November 8, 2012
- Nevada Earthquake Safety Council, November 8, 2012
- GSA Annual Meeting, November 4-7, 2012, Charlotte, NC
- WSSPC Board Meeting, November 14, 2012, Sacramento, CA
- Tsunami Operations Workshop, October 30-November 1, 2012, Cordova, AK
- AGU Fall Meeting, December 3-6, 2012, San Francisco, CA
- Post-Earthquake Safety Evaluation of Buildings, December 11-12, 2012, Anchorage
- Seismological Society of America (SSA) Annual Meeting, February 17-19, 2013, Salt Lake City, UT
- WSSPC Annual Meeting, May 2, 2013, Seattle, WA
- SSA Annual Meeting, April 30-May 2, 2014, Anchorage
- 10th U.S. National Conference on Earthquake Engineering, July 20-26, 2014, Anchorage

V. CRITICAL DEADLINES

1:40 p.m.

- ASHSC Report to WSSPC October 1, 2012
 - Chairman Aho spoke with Patricia Sutch, the Executive Director of WSSPC. He will submit a one-page summary of Commission activities to be included in the WSSPC Annual Report.
- ASHSC Strategic Plan Complete
- 2012 Report to Legislature Final February 1, 2013
 - Committee chairs will prepare a one to two page summary of goals, activity and accomplishments for the past year. Forward these to Chairman Aho by mid-December.
- Legislative Trip TBD

VI. BRIEFING

2:00 p.m.

- Seismic Instrumentation Maintenance Program/AVO-Power: The AVO is upgrading its seismic network to support the USGS National Strong Motion Project (NSMP), which has the primary Federal responsibility for recording damaging earthquakes in the United States. The resulting information is necessary to improve the designs of earthquake-resistant structures and mitigate hazards to life and property from seismic events. The strong motion network in Anchorage is part of this program, and at least four entities use the data from this network: the USGS, AVO, AEIC and the UAA

School of Engineering. Mr. Power gave a brief overview of the AVO and its work, specifically their recent additions and improvements to the Anchorage strong motion network. Some of the sensors in this network have technical problems and have not been working properly, in some cases for months. The USGS has given AVO the responsibility of maintaining the network. The funding from USGS for the work has been small, although Mr. Power expects the amount to increase annually for the next few years. The AVO's limited staff makes it difficult to do onsite visits at times, and their expertise does not include maintaining borehole array equipment. Chairman Aho asked how the Commission can assist the AVO in getting better support for this network. Dr Utpal Dutta pointed out that there might be people available from UAA to assist in maintaining the sites. Dr. Dutta also reported that UAA is not able to access the data from instruments located in buildings in downtown Anchorage, although they have requested access to this information. Chairman Aho suggested that Dr. Dutta send an official letter to request the data and copy Bill Leith of the USGS and the ASHSC. Mr. Power will look into data availability for Dr. Dutta as well. Chairman Aho stated that instrumentation in the Anchorage network represents an investment of millions of dollars. Gravier related her experience with instrumentation systems and emphasized that maintenance must be a priority or the investment is wasted and data opportunities are lost. In the case of the Anchorage network, AVO has limited funding and no dedicated staff to maintain the resource. Dr. Ruppert reported that the Anchorage strong motion network has roughly 65 to 75% of the instruments working at any one time. This falls below the ANSS performance standard of 85 to 90%. Chairman Aho suggested forming a small group from among those who use the data to work cooperatively and seek solutions for the maintenance issues plaguing the network. Mr. Power expressed his willingness to work with such a group. He will let his superiors know of the problems that users have been experiencing with the network.

BREAK 2:45 p.m.

VII. COMMITTEE MEETINGS 3:00 p.m.

- Education and Outreach-Scher: A link to the ASHSC website has been added to the AEIC web page as a partner organization. As agreed at the June 7, 2012 ASHSC meeting, Commissioner Scher followed up with Kurt Byers, Education Services Manager for the Alaska Sea Grant Program at UAF. The Commission and the Sea Grant Program may collaborate on a future white paper. Scher has been in communication with Teresa Morris, with the Network of Earthquake Engineering Simulation (NEES) at Purdue University, regarding the 10th U.S. National Conference on Earthquake Engineering to be held in Anchorage in 2014. Scher worked on raising awareness of the ASHSC in the media. He also invited Sam Hutchinson of the DHS&EM to the committee meeting to speak about the Anchorage Museum's preparation for an exhibit that will commemorate the 1964 Anchorage earthquake. The exhibit will be shown in 2014 for the 50 year anniversary of the event, and the DHS&EM and the museum are working together to get ideas for the displays. Mr. Hutchinson and the Commissioners brainstormed ideas. Commissioner Scher mentioned that he contacted Jay Berger, the Executive Director of EERI, and let him know that the museum was planning this exhibit. EERI will hold its annual meeting in

Anchorage, July 2014, concurrent with the 10th U.S. National Earthquake Engineering Conference. Mr. Berger was interested in the exhibit and asked about the potential to hold a conference event at the museum. Scher forwarded him the e-mail addresses to museum staff.

Commissioner Scher also requested that Commission members review and give feedback on the policy recommendation letter he drafted regarding licensing requirements of civil and structural engineers. Currently, an engineer must have training in arctic engineering to be licensed in Alaska. Scher proposed expanding that training to include seismic engineering. He requested that feedback be returned by next month's ASHSC meeting so that he can send the letter on.

Chairman Aho will make sure to forward the letter regarding protection for post-earthquake inspectors from civil liability to the state Attorney General's Office for their input.

Commissioner Scher would like to craft a new policy recommendation that owners of important facilities utilize seismic instrumentation in those facilities, especially in more densely populated areas. He will distribute the proposal to Commission members for their feedback. Again, he would like comments by the next meeting.

Scher would like to post one or more links on the ASHSC website to glossaries of seismic terms, as there are several very good examples of these available on the web.

BREAK

3:55 p.m.

- Response and Recovery-Gravier: The State hazard Mitigation Plan is due to be revised by the end of 2013. Commissioner Gravier will submit the seismic and tsunami portions to the Commission for review and comment. She plans to have two training events in Anchorage by the end of the year: the Post-Earthquake Safety Evaluation of Buildings listed under Meetings of Interest and a course on structural and non-structural seismic mitigation.

The Great Alaska ShakeOut will take place on October 18, 2012. Details can be found on the website: <http://www.shakeout.org/alaska/>. The DHS&EM Outreach Section plans to use the ShakeOut to spark discussion and readiness as well as building interest for public education purposes. They may do additional ShakeOut events leading up to the 2014 anniversary of the 1964 Alaska earthquake. Gravier will e-mail the link to Commission members.

The Tsunami Operations Workshop in Cordova will cover planning, emergency management, and an earthquake/science component. Commission members are welcome to attend.

The National Earthquake Hazard Reduction Program (NEHRP) state assistance award is pending. Once the award has been issued, the application process for a grant under this award will be open to interested groups, including the Commission. Members should contact Gravier for information.

In early October, 2013, the DHS&EM will hold their annual preparedness conference. The theme will be mitigation of hazards, including seismic hazards.

VIII. BRIEFING

4:15 p.m.

- Recent Seismic Activity of Interest/Health of the Alaska Seismic Networks-Ruppert: There were about 6,600 events in June, July and August, 2012. There was a

magnitude five event in the Chukchi Sea this past spring, and smaller aftershocks continue in the area. On June 19th there was a M6 event close to the Near Islands in the Aleutians. Annual maintenance on the network has been completed for the summer. There were only a handful of stations that could not be serviced due to time constraints or weather. A new network of four stations was installed at the proposed site of the Susitna/Watana hydroelectric dam. AEIC is still working on getting the data from this network and plan to start receiving data in a couple of weeks. The AEIC is working with IRIS on the U.S. Array project in advance of the network coming to Alaska in 2014. Rod Combellick reported that Apache Corporation is using a portable array to assist in their search for energy deposits in the Cook Inlet area. Apache has offered to make the background seismic data available to the state. AEIC will receive this data under a confidentiality agreement with Apache and will share the data with DGGGS for review.

IX. MEETING RECESSED UNTIL 09/12/12 AT 8:00 a.m. 4:30 p.m.

September 12, 2012

I. OPENING BUSINESS 8:00 a.m.

- Call to Order (John Aho, Chairperson); Roll call: Commission members John Aho, Mark Delozier, Rich Koehler, Robin McSharry and Robert Scher were present. Gary Carver, Bud Cassidy, and Laura Kelly called in via teleconference from Kodiak. Ann Gravier will join the meeting at 10:00 a.m. Roger Hansen and David Miller were excused. Vickie Butherus with the Alaska Division of Geological and Geophysical Surveys (DGGGS) was also present.
- The September 12, 2012 agenda was approved with the additions that DNR Legislative Liaison Esther Tempel may have to send an alternate to do her briefing due to jury duty, and Commissioner Scher would like to discuss the ASHSC website under "Administrative Matters".
- Introductions of Guests: Rod Combellick of DGGGS, Natalia Ruppert of the Alaska Earthquake Information Center (AEIC) at UAF, Joanne Bennett with the Alaska Division of Insurance, Dr. Orson Smith of the UAA School of Engineering, FEMA Liaison Officer Tom Wilder, FEMA Lead Exercise Planner Kathy Cavyell, FEMA Emergency Operations Planner James White, David Kelly, David King of the federal Department of Homeland Security, and Municipality of Anchorage Geotechnical Advisory Commission (MOA/GAC) members Kyle Brennan, David Cole, and John Thornley. Dave Tremont, Anchorage Municipality representative to the GAC, was also present. Professor Christine Theodoropoulos, Dean of the California Polytechnic State University's College of Architecture and Environmental Design, called in for her presentation. DNR Legislative Liaison Officer Esther Tempel attended part of the afternoon session for her presentation. Alaska PTA Advocacy Chair Janice Crutchfield attended and Sam Kito of ADEED called in for the Schools Committee session.

II. JOINT ASHSC/GAC MEETING 8:15 a.m.

- Introductions (covered above)

- GAC Purpose: Mr. Thornley discussed GAC goals as well as purpose (attach handout)
- ASHSC Purpose: Chairman Aho gave an overview (attach presentation)
- Discussion of Potential Common Goals: David Cole suggested that the port project in Anchorage has statewide significance as most shipments to Alaska come through the Port of Anchorage. Mr. Combellick pointed out that the port project also receives state money. He also pointed out that the two commissions can support each other when they are due to be extended. Chairman Aho mentioned the Knik Arm Bridge as another important project. Upcoming projects in Anchorage would include the UAA sports arena and Engineering Industry Building which are both currently in the planning stages, the highway-to-highway project that is planned to be routed through part of the downtown area, and the UAA Mat-Su Valley Center. Mr. Cole offered the GAC's help if the ASHSC wants to create an earthquake scenario for the Anchorage area as they have extensive knowledge of the built environment in the municipality. Commissioner Scher said that the GAC's expertise would be an asset to the scenario that FEMA plans to develop. Commissioner Koehler would like to know what types of products the GAC needs for their work so that the ASHSC Hazards Identification Committee can push for their development and encourage appropriate research. Commissioner Scher would like to push for the formal publication of a surficial geology map that covers the Anchorage bowl area. Work was done on this in the late 1990s, but the map was never published in final form. Such a map might be of great benefit to the GAC. Mr. Combellick, who was a co-author on the map in question, discussed the information contained in the map. He pointed out that the map could be published with no further research as a surficial map, but that to get more detailed information about the subsurface, much more research would be needed. Cole and Scher agreed that the map would be useful with the fill information included. Commissioner Scher would also like to see more information about the Border Ranges Fault and other possible seismic sources in the upper Cook Inlet. Mr. Cole would like to see more detailed probabilistic seismic maps for Alaska. Ms. Ruppert pointed out that these maps are updated every five years or so based on the information available at the time, so that over time the maps become more accurate. However, she affirmed that the limitations of the data must be taken into account when using these maps. Commissioner Koehler stated that DGGs continues to produce research and maps that may be useful to the GAC, but that there is very little funding for tectonic research in Alaska at this time. He has been encouraging more research and will continue collaborative efforts with other entities (universities and the USGS, for example) to share knowledge in this area.
- 10th National Earthquake Engineering Conference: A planning meeting will be held in Anchorage on October 8th. If ASHSC or GAC members are interested in being involved, they should let John Aho know. Commissioner Koehler asked whether the two commissions should give presentations on their work at the conference. Chairman Aho said that it was a possibility and that he would know more after the planning meeting.
- Action Items: No specific action items were generated, but the two commissions understand the value of working together in support of large projects and may hold annual joint meetings as a way to renew focus on common goals.

BREAK 9:30 a.m.

III. BRIEFINGS 9:50 a.m.

- Focal Mechanism Beach Balls-Koehler: Explanation of the use of focal mechanism graphics to describe fault characteristics.
- Rapid Visual Screening of Schools-Kelly: Rapid Visual Screening (RVS) is a FEMA product for assessing building safety before and after a seismic event. Discussion of updates to RVS in response to recent seismic events in New Zealand and Japan, the purpose of this screening, how it is used, and how RVS is being utilized in the state of Utah. RVS can be used to get an idea of how infrastructure might respond to a seismic event. Ann Gravier suggested that the ASHSC Schools Committee look at applying for this year's NEHRP grant in order to get RVS done in vulnerable school districts. She would like to work with Commission members to determine which schools should be screened first. Commissioner Kelly reported that this is similar to what was done in the state of Oregon.
- Achieving Risk Reduction at the University of Oregon-Professor Theodoropoulos: She discussed how she worked with graduate students, supervising their work to maintain quality control, as they did Rapid Visual Screening of buildings in Oregon. The state of Oregon provided funding for their work, which resulted in a database and map showing seismic vulnerability of the screened structures. These products are used by the state to identify priorities in managing seismic risk and allocating funding. Dr. Orson Smith, interim Dean of the UAA Engineering Department, agreed with Theodoropoulos that engaging students in real-world programs that promote community involvement is important. He praised the continuity of her student programs, which involved many students over several semesters to compile the data.

LUNCH 12:00 p.m.

IV. COMMITTEE MEETING 1:00 p.m.

- Earthquake Scenarios-Carver: He gave an update on the Kodiak HAZUS run being done by FEMA followed by discussion about how the run can be put into a scenario report. On August 13, 2012, Jennifer Monroe of FEMA let Commissioner Carver know that FEMA has received the information they need from the Coast Guard and the Kodiak Borough. They are reformatting the data to the HAZUS run will be more accurate. They will incorporate some final data into their database and finish up some other parts of the project. He has no more recent update from FEMA at this time. The scenario produced will need to incorporate community impacts. It must be based on a defined seismic event using current scientific and engineering knowledge. Because there are multiple sources for seismic events near Kodiak, they will use three different potential sources. In effect, there will be three scenarios for Kodiak, each showing how a different source would impact the community. Sources were chosen based on the likelihood that they may rupture in the lifetime of the buildings used in the HAZUS run and based on their potential to generate damaging earthquakes. Because the HAZUS tool does not include floating (harbor) infrastructure and ships, Commissioner Scher asked if there should be a section of the report that covers those items. Commissioner Carver affirmed that these should be included in the report along with landslide hazards, which are also not captured by HAZUS. The Alaska Aerospace

Corporation (AAC) facility at Narrow Cape should be discussed, as well. The facility did not respond to an invitation to participate in the HAZUS run, but they have significant infrastructure on the Narrow Cape fault, which is one of the three sources covered in the scenario. David King volunteered to work on getting infrastructure information for the facility and suggested that the Commission make a second request for AAC to participate in the HAZUS run. Chairman Aho agreed to do this. Committee members are to review Commissioner Carver's draft and provide feedback by the next ASHSC meeting. The committee also continued a discussion about the FEMA presentation from the day before regarding credible seismic events to use in FEMA's upcoming planning exercise for Alaska. The committee agreed to work with AEIC to generate Shake Maps for possible events and provide them to FEMA as a starting point.

V. BRIEFING

2:20 p.m.

- DNR Legislative Liaison Update-Tempel: Overview of steps in the passage of a bill in the house and senate of the state of Alaska. Discussion of the legislative audit and extension of the ASHSC. Ms. Tempel was given a copy of the ASHSC strategic plan and asked to review and provide feedback. Mr. Combellick asked what the best way would be to communicate information to the Legislature and Governor, per the Commission's statutory responsibility. Ms. Tempel suggested taking recommendations on a case-by-case basis and suggested avenues for the Commission to use. As Legislative Liaison, she offered her assistance with future recommendations.

VI. COMMITTEE MEETINGS

2:40 p.m.

- Hazards Identification-Koehler: Commissioner Koehler is working on a white paper to support policy recommendation 2011-1 regarding the need for fault characterization in Alaska. One goal of the Hazards Identification Committee for 2012 was to encourage the creation of a program to compile detailed descriptions of each seismic source. The Quaternary Fault and Fold (QFF) Database has been published and will fill this need once the detailed seismic source information is completed. The committee will continue to encourage support for such efforts. The Cascadia white paper, detailing the effects of a Cascadia zone earthquake on Alaska, is in progress. In the interests of encouraging collaboration between DGGS, USGS and university researchers, Commissioner Koehler has provided assistance on the Riley Creek Bridge replacement project, the Point Thompson Pipeline, Susitna Hydroelectric and Akutan geothermal projects. He has also continued to work with the USGS on tsunami hazard identification for Dutch Harbor and the eastern Aleutians. Commissioner Koehler also worked with Rod Combellick to compile a list of large infrastructure projects in the state that will benefit from mitigation of seismic hazards. Koehler plans to contact project managers and asking whether seismic hazards have been addressed, what type of studies were done, if any, and whether he would be able to obtain a copy of the studies if the information is not proprietary. He has already contacted the manager for the Tanana River bridge project and is waiting to hear back from Shannon and Wilson, the consultants. The list of projects that may include state funds includes the proposed natural gas pipeline, Akutan geothermal project, Riley Creek bridge replacement, the proposed "Roads to Resources" program, the Port of

Anchorage, the new Akutan airport project, UAF Life Sciences Building, UAF Engineering Facility, UAA Engineering and Industry Building, the Seawolf Sports Arena for UAA, Mat-Su Valley Center, the Kenai Campus Career and Technical Center, the Kenai Campus student housing complex, the state Library, Archives and Museum project in Juneau, the Blue Lake hydroelectric expansion in Sitka, and the Susitna/Watana hydroelectric project. Koehler will add to the list, and he requested that Commission members let him know of new projects that should be included. The Cascadia white paper is complete and available through the DGGGS website. Chairman Aho and Ann Gravier will distribute copies of the white paper at the APIP (Alaska Partnership for Infrastructure Protection) meeting. Commissioner Koehler will send the web link if Commission members request it. The pre-project seismic hazard assessment has been completed for the Susitna/Watana Hydroelectric Project. Commissioner Koehler reviewed the assessment and will be working on characterization of the newly discovered Pass Creek fault. Koehler also participated in the Friends of the Pleistocene field trip over Labor Day weekend. He and Gary Carver worked with the USGS doing tsunami work in the Aleutians this past summer. They found tsunami deposits showing the most complete record yet discovered of seismic events in the region. The Riley Creek Bridge project has LiDAR showing where the fault is located. In addition, they will be doing more seismic work to get the most accurate location possible on this fault. The information will be used to determine fault type and likely parameters to use in the design and construction of the new bridge. Now that the QFF database is available, Commissioner Koehler will complete the Seismic Sources white paper that he has been working on. He will be referencing the QFF database in the white paper.

BREAK

3:20 p.m.

- Schools-Kelly: The committee continues to work with the Alaska Department of Education and Early Development to identify at-risk school structures and prioritize seismic mitigation of those structures. Sam Kito gave a brief overview of the ADEED's Capital Improvement Project (CIP) process which school districts use to gain funding for building and maintenance. ADEED provides annual training on filling out the application for this process, and they highlight the seismic component that has been added to the application. This year's applications are still in review, so he did not know whether there were any seismic projects planned for next year. Ryan Middle School in Fairbanks successfully performed seismic hazard mitigation and retrofitting this past summer as part of a CIP. Commissioner Kelly will continue to work with Mr. Kito to keep the committee's database of Alaskan schools up to date. The most current and accurate school information is managed by ADEED, but the Schools Committee maintains a database to check the ages of schools located in high seismic areas. Commissioner Kelly would like to make sure that the committee database is updated to reflect when schools have been upgraded, such as Ryan Middle School and the schools in Kodiak. She reiterated that rapid visual screening (RVS) should be done on schools to determine which ones might still be vulnerable in a seismic event. Mr. Kito said that if a budget plan could be forwarded to the legislature, they would be able to assess whether this was something to act on in the future. Ann Gravier pointed out that there is a NEHRP grant of about \$51,000 that might be able to fund some RVS work. She encouraged Mr. Kito and Commissioner Kelly to work with her

to apply for the grant.

Commissioner Kelly briefed Ms. Crutchfield on the Schools Committee and its work. She also discussed the mitigation of at-risk schools in the Kodiak Island Borough district, as well as the efforts of the ASHSC in getting at-risk schools identified statewide with the intent of getting all of Alaska's public schools brought up to modern safety standards. Kelly also described the success of partnerships between PTAs and seismic hazard commissions in other states as well as in Canada. She pointed out that such a partnership would be critical to furthering the ASHSC's efforts here in Alaska. Commissioner Cassidy affirmed the important role of PTA groups of raising awareness of the importance of school seismic hazard mitigation among stakeholders, particularly elected officials. Chairman Aho supplied copies of the Commission's two policy recommendations on seismic safety for schools. Ms. Crutchfield agreed that safety is a number one priority for the state PTA. She appreciated the work that has been done to date by the Commission and she would like to see more public awareness of this issue. She will explore getting seismic safety added to the list of legislative priorities for the Alaska PTA. Ms. Crutchfield will present the information from the ASHSC at the Alaska PTA board meeting in two weeks. She would like to set up a teleconference between the PTA board members and a representative from the ASHSC. Commissioner Koehler said that Ms. Crutchfield might be interested in using the QFF database to see if schools are located in proximity to known faults.

VII. ADMINISTRATIVE MATTERS

4:25 p.m.

- Certificates presented to outgoing members.
- Budget Report-Butherus: The current budget is \$8,151. This does not include travel expenses for the current meeting.
- ASHSC Web Site Update Status-Scher: The web site seems crowded to him. Rod Combellick suggested that Commissioners write up proposed changes and work with the DGGS webmaster, who is in charge of the ASHSC web site.
- Next Meeting Date: Teleconference on November 1, 2012 at 9:00 a.m.

VIII. ADJOURNMENT

4:30 p.m.

Commissioner Koehler moved, and Commissioner Scher seconded to adjourn. All in favor. Meeting adjourned at 4:30 p.m.