



- I. OPENING BUSINESS 9:00 a.m.
- Call to Order (John Aho, Chairperson); Roll call: Commission members John Aho, Roger Hansen, Laura Kelly, Richard Koehler, Mark Roberts, and Gayle White were present. Gary Carver was late. Daniel Mahalak, David Miller and Robert "Buzz" Scher were excused. Commissioner Gay Dunham was absent.
 - Introductions-Guests: Deborah Wilmoth of the Alaska Division of Legislative Audit, Sam Kito of the Alaska Department of Education and Early Development (ADEED), and Rod Combellick and April Woolery of the State Division of Geological & Geophysical Surveys (DGGS) were also present.
 - The meeting agenda was approved with Commissioner Roberts adding two items: an information request that was made of the Municipality of Anchorage Emergency Management Office on seismic instrumentation funding, and FEMA support for the Kodiak Island Borough earthquake scenario and the FEMA Risk MAP process under New Business.
 - Review and Approval of Minutes for the March 3, 2011 meeting: The minutes were approved with amendments.

- II. BRIEFINGS 9:05 a.m.
- Recent Seismic Activity of Interest-Hansen: From March 21 through 27, 2011, there were 498 events in the state of Alaska. One notable event had a magnitude of 3.5 and was located to the west of the Seward Peninsula near the Diomedede Islands. It is a reminder that this region is seismically active and capable of producing up to magnitude 7.5 earthquakes. Statewide there were three events that week that were larger than magnitude 4, two of which were felt. There were 2,063 events for the entire month of March, ten of which were felt. There was continued seismicity on the North Slope. The largest event in March was magnitude 5.3, located near the Rat Islands in the Aleutians.
 - Health of the Alaska Seismic Networks-Hansen: Longer daylight hours mean that the solar-powered remote stations are showing more activity. The Alaska Earthquake Information Center (AEIC) is working on getting stations back up in the McCarthy area, as well. They are more active at keeping stations running year-round instead of just doing field work during the summer. There are two strong motion sensors out due to phone and hardware issues. They will be upgraded to new, Kinemetrics Basalt sensors as soon as possible.
 - ShakeMap Update-Hansen: The AEIC is using the latest version of ShakeMap. It continues to work well and produces maps as needed for both regional areas and the Trans-Alaska Pipeline. Further discussion of the Japan event and its relevance to Alaskan seismic issues is reported under the General Discussion section of these minutes.
 - WSSPC Meeting-Combellick, Hansen, Roberts: Commissioner Roberts, who was calling from the WSSPC meeting, reported that the regular WSSPC Meeting was held the first day, followed by the National Earthquake Program Managers' Meeting the second day. He said that attendees recognized that the

recent earthquake in Japan has created a teachable moment, and an opportunity to promote legislation, policy and outreach. The federal tsunami program is due for reauthorization in 2012, and it is important that it continue to be funded. There is already new information available from the earthquake in Christchurch, New Zealand, and much more will be forthcoming from both that event and the one in Japan. Rod Combellick added that the first half day was devoted to a meeting of the various seismic safety commissions from around the country. They followed the same basic agenda that Chairman Aho developed for last year's meeting. There were twice as many people attending the seismic safety commission meetings as last year. WSSPC has now added a page of links to all of the western states' seismic safety commissions to their website. The common top priority for all of the commissions was the safety of public schools, which corresponds to what ASHSC has done. Commissioner Hansen pointed out that the attendees all agreed that the seismic commission meeting was a valuable addition to WSSPC. It seemed to Commissioner Hansen that the higher level FEMA representatives were less knowledgeable about earthquakes as compared to other natural disasters, even though they reported that five of their ten largest disasters were related to earthquakes. It is important for groups such as the ASHSC to invite these representatives to meetings and continue to educate them about seismic events. Rod Combellick added that it was apparent that there is a serious lack of coordination between NOAA and FEMA with regard to tsunamis. NOAA was not represented at the meeting, but FEMA and USGS stated that they do not deal with tsunamis: they are NOAA's responsibility. This is a critical gap in the federal system with regard to earthquake and tsunami hazards. Commissioner Hansen said that efforts are being made to address this gap in the reauthorization of the Tsunami Warning and Education Act.

- Municipality of Anchorage Geotechnical Advisory Commission (MOA/GAC) Activity Update-Scher: Commissioner Scher was not present to report, and Chairman Aho was not able to attend the last meeting. However, there are continuing efforts to follow up on the port construction and instrumentation issues. Commissioner Roberts reported that his division has funding for seismic mitigation of gas valves for critical facilities in the Municipality of Anchorage, but the funding is being held up until the local hazard mitigation plan that is required by FEMA is approved. There is a required public involvement component to the plan, and the Municipality has elected to use the Geotechnical Advisory Commission to satisfy that requirement. While the plan will be on the assembly's agenda for approval, the Municipality's opportunity to comment on the plan, including the full range of hazards that the city faces, will be at the GAC meeting. It will be advertised, so anyone who is interested, especially in seismic issues, should attend. Chairman Aho said that the GAC sent a letter to the Municipality with some good remarks on the hazard mitigation plan, including feedback to address some holes in the plan. He will forward the letter to commission members for their reference.

III. OLD BUSINESS

9:45 a.m.

- Kevin Spillers, Director of the MOA Office of Emergency Management, forwarded an inquiry for grant opportunities to Commissioner Roberts in his capacity as an Emergency Management Specialist with the Alaska Division of Homeland Security and Emergency Management. The inquiry was seeking seismic instrumentation funding for the port facility in Anchorage. Both the MOA/GAC and the ASHSC have urged that seismic instrumentation be included at the port facility, as it is a very large, critical facility. There is no grant funding available for this purpose, and Commissioner Roberts would like feedback from the Commission before he responds to the inquiry. Commissioner Hansen would like to supply information on how the AEIC monitors other parts of the state, particularly for strong ground motion. Chairman Aho noted that the MOA/GAC provided a proposal for placing seismic instruments at the port facility. He will forward a copy to Commissioners Hansen and Roberts.
- Future Briefings
 - Using Social Media (Facebook, Twitter, etc.)-Roberts
 - AIA Document on Damage Assessment-Thompson
 - Alaska Municipal League Risk Control-Dewalt
 - Using Real-Time GPS for Large Earthquake Location and Magnitude-Hansen
 - Christchurch, New Zealand Earthquake-Carver
 - Japan Earthquake-Roberts, others
 - MOA Emergency Operations Center Tour
 - Utilities Risk Mitigation Approaches
 - DOT Seismic
 - DOT inventory of bridges: photo inventory of types and weaknesses
 - Gas Pipeline potential investors: TransCanada, Denali and Enstar all have projects going related to the planned gas pipeline
 - Warning and Coordination Meteorologists from NOAA
 - Alaska Rail Road bridge upgrade
 - Peter Haeussler and/or Rich Koehler on the Denali Fault
 - Carol Olson, Deputy Fire Marshal and Plan Review Bureau Supervisor, regarding the structural aspects of plan reviews
 - Other suggestions should be forwarded to Chairman Aho

VII. REPORTS

10:20 a.m.

- Chairperson
 - The Commission's sunset date is June 30, 2012. The legislative audit is ongoing to determine whether the Commission will be reauthorized.
 - On March 14, the Senate Community and Regional Affairs Committee hearing regarding Alaska Tsunami Modeling and Emergency Preparedness was attended by Chairman Aho and Commissioner Hansen. They reported that the hearing went well.
 - Tsunami Committee: Chairman Aho will be starting this committee and is looking for a chair and members for this. Commissioner

Roberts volunteered to be on the committee, which will be finalized at the May meeting.

- Publications: Nothing new to report at this time.
- Face-to-Face Meeting: The next meeting will be the face-to-face meeting is scheduled for May 5th and 6th, 2011.
- The first quarter ethics report is due. Commission members should e-mail Chairman Aho if potential conflicts of interest arise.

Committee Reports

- Insurance-White: No report at this time.
- Schools-Kelly: Sam Kito reported that ADEED has completed an application cycle with the new seismic hazard mitigation item available. Some districts have included the item in their applications. ADEED will continue to educate and work with school districts as to what information they will need to provide on the application. Three new school projects were funded through the bond initiative in November. Seismic hazard mitigation work is being done on Ryan Middle School in Fairbanks. Right now, ADEED has no plans to make statutory or regulatory changes. They are open to any suggestions that the Commission might have, and he and Commissioner Kelly have discussed some options. Commissioner Roberts requested that Mr. Kito let the Commission know when districts take advantage of the seismic provision or perform seismic hazard mitigation projects, as the Commission wants to support these projects. Commissioner Kelly made sure that the certificate of appreciation was sent to former ADEED Commissioner Larry LeDoux, who, along Mr. Kito, supported the work of the Schools Committee.
- Earthquake Scenario-Koehler: Bud Cassidy, the Director of Community Development for the Kodiak Island Borough, is interested in going ahead with the level 2 HAZUS run for Kodiak. Rod Combellick added that the committee hopes to assist the borough in developing an earthquake planning scenario, and this HAZUS run will provide loss-estimation information that would be invaluable in that effort. Mr. Cassidy attended the WSSPC meeting this past week at his own expense and was able to see presentations on HAZUS, loss-estimation, and the new updates to the HAZUS system. The Kodiak Island Borough will be filling a GIS position soon, and Mr. Combellick suggested to Mr. Cassidy that it would be a good idea for their new GIS employee to have HAZUS training. The Kodiak infrastructure database will need to be updated before FEMA can do the level 2 HAZUS run, and FEMA would pay for most of the HAZUS training if the employee is approved by DHS&EM. Both Rod Combellick and Bud Cassidy are interested in serving on the Scenario Committee as non-Commission members. Commissioner Roberts affirmed that FEMA is committed to doing this HAZUS run for Kodiak. He has spoken with the FEMA Region Ten Risk Analysis Division Director, and he verified that they would do the work. Commissioner Roberts suggested that Jennifer "Jen" Meyer of FEMA should be invited to call in during the Earthquake Scenario Committee meeting in May. Commissioner Koehler will let him know what time Ms. Meyer should call so that they can coordinate.

- Education & Outreach-Aho: Chairman Aho will take over being the chair of this committee after the May meeting.
- Hazards Identification-Carver: Nothing to report, as the committee chair has just returned from out-of-country travel.
- Response and Recovery-Roberts: The contingency was in place to convene an emergency teleconference of the Commission during the recent tsunami warning. Fortunately, it was not necessary. Members should keep their contact information updated. If Commission members do not have a weather alert radio, please let Commissioner Roberts know and he can provide one. Training certificates have been sent out for the Post Earthquake Safety Evaluation of Buildings class that was held last month. Chairman Aho was the lead instructor and developed curriculum for that training. Demand for this class is high. Commissioner Roberts is recruiting additional instructors to do more courses, and he would like the Commission to vet the instructors. He was also able to secure FEMA funding to do a Structural and Non-structural Mitigation course in the Kodiak Island Borough, and he will try to add a Rapid Visual Screening Course as well. This training will take place in early August, 2011. At the May meeting, he will request that the Commission co-sponsor this training with DHS&EM.
Commissioner Koehler would like to discuss the concept of a clearing house like the one used by the California Seismic Safety Commission at a future meeting. Chairman Aho will put it on the agenda.
- Partnership-Aho: Attendance at the Alaska Partnership for Infrastructure Protection (APIP) meetings continues to generate speaking opportunities. Chairman Aho also distributes copies of the Commission's annual report.

IX. ADMINISTRATIVE MATTERS 10:50 a.m.

- Budget Report-Woolery: The ASHSC budget is currently \$7,311.00.
- ASHSC Web Site Update Status-Woolery: Everything is up to date. The link to the Governor's PSA on tsunamis is in place. Commissioner Koehler has been making sure that Twitter "tweets" go out for website updates.
- Next Meeting Date: Face-to-face meeting in Anchorage, May 5 and 6, 2011.

X. GENERAL DISCUSSION 10:55 a.m.

- Public: None
- Commission members: Commissioner Hansen reported that he, Chairman Aho and representatives from the Division of Homeland Security and Emergency Management (DHS&EM) testified at a hearing by the Senate Community and Regional Affairs Committee on Tuesday, March 22. The hearing was titled: Alaska Tsunami Modeling & Emergency Preparedness, and Commissioner Hansen reported that it went very well.
Chairman Aho noted that there was a magnitude 7.1 aftershock off the coast of Japan this morning. For the magnitude 9.0 earthquake that occurred in Japan on March 11, the AEIC was able to get a location and magnitude estimate within 13 minutes, possibly the first group in the world to do so. Initially, the magnitude of this event was estimated at 7.9. The larger an earthquake, the

more complex it is. It can take many minutes for the event to be complete, so time is needed to get proper estimates of the total energy release. Initial estimates of a large event tend to be low for this reason. Commissioner Roberts pointed out that it is important to monitor updates event magnitudes, as an initial report may be low, and an event that had no initial tsunami warning may be revised to include one.

Commissioner Koehler commented that there is still a learning curve on what magnitude to expect, both in Japan and in Alaska. He pointed out that the Paleoseismic record in Japan suggests that events of this size have occurred in this area in the past, but that information was only recently discovered. It had not yet been incorporated into their mitigation plans. Commissioner Hansen and Chairman Aho agree that there will be more discussion of this topic at the face-to-face meeting in May. Commissioner Kelly would like to add discussion of the addition of port and harbor groups to the Commission's contacts and mailing list. Commissioners Hansen and Roberts agreed, as ports and harbors face significant risks from tsunamis. Commissioner Roberts will also speak about the state tsunami alert system and lessons learned from the Japan event and the resulting tsunami.

Commissioner Carver noted that the Japan earthquake is the best modern equivalent to what could happen in the Cascadia region (southwestern British Columbia, Washington, Oregon, and northwestern California). Such an event will cause the Pacific Northwest to go "off-line," as he put it, and will have significant impacts on Alaska. The Kodiak fishing fleet is mostly based in Seattle, for example. Commissioner Roberts pointed out that the West Coast Catastrophic Exercise is based on a Cascadia event, with a focus on the supply chain to Alaska.

Chairman Aho reminds committee chairs to prepare a one-page summary of their committee meeting proceedings, to be given to Ms. Woolery for addition to the minutes.

XI. ADJOURNMENT

11:10 a.m.

- Commissioner White moved, and Commissioner Kelly seconded to adjourn. All in favor. Meeting adjourned at 10:25 am.