

MINUTES OF THE ALASKA SEISMIC HAZARD SAFETY COMMISSION MEETING
HELD January 6 & 7, 2009



- I. OPENING BUSINESS 10:30 a.m.
- Call to Order (John Aho, Chairperson); Commission members John Aho, Gary Carver, David Cole, Roger Hansen, Robert Hicks, Kathy Hosford, Laura Kelly, and Mark Roberts present. Commission members Rod Combellick and Dean Maxwell were excused. On January 7, Commission member Combellick was present. April Woolery of the State Division of Geological & Geophysical Surveys was present both days.
 - Agenda approved, all in favor.
 - Introductions – January 6: Scott Karner and Kim Pontbriand of the Alaska Division of Homeland Security and Emergency Management (DHS&EM) and Dr. Zhaohui (Joey) Yang, Associate Professor from the University of Alaska, Anchorage, were present. Larry Newton, School Finance Director for the state of Utah, gave a briefing via teleconference.
January 7: Ivan Wong, principal Seismologist and Vice President of the Seismic Hazards Group, URS Corporation, Diana Carlson and Port Engineer Todd Cowles of the MOA Port Authority (in person), and Richard Pierce, geotechnical engineer, via teleconference.
Review of Minutes for December 2, 2008: The minutes were approved with changes. All in favor.
- II. BRIEFINGS 8:30 a.m.
- Utah Schools Briefing – Larry Newton: He worked with the Utah State Office of Education in an effort to secure state funding for school seismic hazard safety efforts similar to those done in Kodiak. His group's idea was to provide for assessment of potential hazards, have local committees work with consultants to determine what should be done to mitigate those hazards, and have committees work with the school board to establish actions and costs. Mr. Newton's group requested \$25 million per year for ten years to accomplish their goals. This number was an estimate, as they did not actually know how much they would need. School districts and charter schools could apply for funds and would have to match any money used dollar for dollar. Their presentation to the Utah State Public Education Appropriations Sub-Committee was well-received, but a senator determined that seismic retrofits were a local, not state, problem. That ended any chance of the proposal going ahead. Mr. Newton's group then tried to pass a house bill to get \$500,000 to do FEMA Rapid Visual Screening (RVS) school assessments, which would be a starting point for future retrofit efforts.

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This was shot down when a legislator claimed that by doing assessments but not acting on them, the school board was opening itself up to liability. One item was passed, House Joint Resolution 7, Recognizing Unreinforced Masonry Buildings. Since schools are the top priority for all public buildings, at least some schools will be retrofitted under HJR7.

Mr. Newton gave some advice on what should have been done differently. First, he said that risk mitigation should be part of overall planning: e.g., don't retrofit if replacement is a better option. Hire consultants who are capable of making such decisions. Second, they should have gotten political support before asking for the money. If the politicians say no, you have no project. Third, they should have had solid numbers, not estimates.

- Alaska DHS&EM Briefing – Scott Karner et al: The DHS&EM will be running a joint emergency response exercise in the spring of 2010. It will be called Alaska Shield 2010 and will cover a time period starting 72 hours after the “event”. This exercise will be testing immediate recovery efforts rather than emergency response. The Department of Defense will likely run their own exercise for the first 72 hours after the “event” which will dovetail with Alaska Shield. These will be statewide exercises, with the main focus on the disruption of the supply chain in the state. They want to test how Alaska will react and recover to the proposed damage.
- The Wenchuan Earthquake of May 12, 2008 – Dr. Yang, UAA: Also known as the Sichuan Earthquake, this was a magnitude 8 event that occurred along the Beichuan-Yingxin and Hanwang Rupture Zones in south-central China. Although the fault is known to be active, it had not been thought that it would rupture over such a long distance. Official estimates are 69,197 dead, 18,222 missing, and 374,176 people injured. In all, 46,240,000 people were affected by this earthquake in some way. Property and infrastructure damage was widespread and significant. Dr. Yang was able to visit the area on October 21 and 22, 2008, with a small group of professors and graduate students from Sichuan University. Quake-spawned landslides caused massive damage. Slides caused 104 earthquake lakes by damming outflow. Ten of these were deliberately drained to prevent potentially devastating outburst floods. There were 100 areas with large-scale liquefaction, including sand boiling. In general, newer structures withstood the quake better than older ones. One dam, completed in 2005, suffered no serious damage. A newer school building sat two meters from the fault and survived with little damage other than windows breaking. Older designs, such as structures with tile-covered roofs, proved dangerous when they collapsed. A very old wooden temple survived almost intact. There were many new buildings that did not fare well, however. Some lacked shear reinforcement, in others, the stairs collapsed, preventing people inside from escaping. Dr. Yang says that design standards in high risk

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areas have been increased since the earthquake, and that new designs for buildings are being introduced in this area.

- Break for Committee Meetings followed. Committee reports follow under section III. Committee meetings lasted for the rest of the day. The meeting reconvened the following day at 9:00 am.

BRIEFINGS (continued)

- Led by Commission member Cole, Commission members discussed the seismic vulnerability study by the Geotechnical Advisory Committee of the Municipality of Anchorage.
- AGU Meeting report – Carver and Hansen: The meeting was well-attended. Commission member Carver attended a pre-meeting at which tsunami mitigation in the Aleutians was discussed. Commission member Hansen talked about the “Bigfoot” transportable array.
- Break for the Earthquake Scenario Committee meeting followed (it could not be held until Commission member Combellick was present). The meeting reconvened at 10:15 a.m.
- Port of Anchorage expansion project – Ivan Wong of URS Corporation and Richard Pierce: The project is expected to cost \$700 million and create 135 acres of new land and 700 feet of new dock space. The new port facility is being built to withstand “a significant event” to maintain the supply chain and assist in any needed rebuilding. URS used both a site-specific probabilistic hazard analysis and a deterministic hazard analysis, which is scenario-type analysis based on actual earthquakes possible. Chairman Aho requested that the Port Authority install free-field instruments at the site. Following the presentation, Mr. Pierce signed off, but Mr. Wong remained for the rest of the meeting.
- Lunch break. The meeting resumed after lunch with Ivan Wong of URS present.
- WSSPC Award for Kodiak Island Borough – Commission members Kelly and Roberts: Two representatives from the Kodiak Island Borough will be in Salt Lake City to receive the award at the WSSPC meeting there. Ivan Wong has been appointed to a new ad hoc committee on school safety at the last EERI meeting. He would like a representative from the ASHSC to attend one of their meetings to discuss the Kodiak school mitigation project.
- Alaska State Board of Education Presentation – John Aho: The Board of Education would like to have one of their members participate in Schools Committee meetings and be able to report back to the Board.
- Recent Seismic Activity of Interest – Hansen: 1825 events occurred in December, 2008. Aftershocks from the 2002 event continue along the Denali Fault.

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- Determining Large (8+) Magnitudes Using Real-Time GPS Information – Hansen: We can determine magnitude in minutes if you have the stations and know how to calculate the information.

III. REPORTS 2:00 p.m.

- Committee Reports
 - Earthquake Scenario – Combellick: His committee has developed definitions of planning and response earthquake scenarios. They would like to do an earthquake scenario for the Anchorage area. The scope of work could be provided in fiscal year 2009. They suggest a level 2 HAZUS, with Commission member Hansen’s staff producing the ShakeMap. They would need a contractor to generate the numbers.
 - Schools – Kelly: The presentation by Larry Newton was discussed. They decided to focus on legislation that would require seismic safety to be a part of all new school construction in Alaska.
 - Education & Outreach – Hicks: Work continues on the newsletter. Ivan Wong suggests looking at the Utah Seismic Commission’s newsletter as an example. The “shelved inventory” is still a long term goal.
 - Hazard Identification – Carver: Work continues on the white paper. He has identified what is needed and has assigned specific topics to committee members.
 - Insurance – Maxwell: Absent, no report.

IV. GENERAL DISCUSSION 3:30 p.m.

- Public: (none)
- Commission Members: (none)

V. ADMINISTRATIVE MATTERS 3:35 p.m.

- Election of Officers: John Aho was unanimously retained as Chairman, Laura Kelly as Vice-Chair.
- Budget Report-Woolery: Our current budget is \$4,383.
- ASHSC Web Site Update Status-Woolery: The web site is currently up to date.
- Next Meeting Date: Thursday, February 5, 2009 (teleconference)

VI. ADJOURNMENT 4:10 p.m.

- Commission member Hicks motioned to adjourn, seconded by Commission member Hosford. All in favor. Meeting adjourned.