

May 26, 2010

I. OPENING BUSINESS

10:45 a.m.

- Call to Order (John Aho, Chairperson); Roll call: Commission members John Aho, Gary Carver, David Cole, Rod Combellick, Roger Hansen, Laura Kelly, Mark Roberts, and Gayle White were present. Gay Dunham and David Miller were excused.
- The May 26 and 27, 2010 meeting agenda was approved.
- Introductions-Guests: Sam Kito, Facilities Engineer with the School Finance and Facilities Section of the Alaska Department of Education & Early Development (ADEED); Laurie Cummings of HDR Alaska, and Kristi Bischofberger with the Municipality of Anchorage (MOA) Watershed Management Services were present May 26. Ron Wilde with the MOA Department of Public Works and Dr. Utpal Dutta, Associate Professor at the University of Alaska, Anchorage, were present May 27. Richard Koehler, Geologist with the Alaska Division of Geological & Geophysical Surveys (DGGS) and April Woolery, Administrative Assistant with DGGS, were present both days.
- Review and Approval of Minutes for the April 1, 2010 meeting: The minutes were approved with amendments.

II. BRIEFINGS 10:55 a.m.

- Recent Seismic Activity of Interest-Hansen: The average number of events per week has been about 500.
- Health of the Alaska Seismic Networks-Hansen: The Strong Motion network is doing
 well, although the DSL modems occasionally stop working properly and need to be
 power cycled to get them running again. The Coast Guard tower at Yakutat was
 upgraded, and the Alaska Earthquake Information Center (AEIC) received permission
 to use the tower in order to improve their telemetry.
- Shake Map Update-Hansen: The Shake Map 3.5 upgrade is now complete. This new version has GIS applications with no loss of speed over the old version.
- SSA Annual Meeting Update-Hansen: There was an interesting presentation by Sandia National Laboratories in Albuquerque about their capability to globally monitor nuclear activity. They have made 3-D velocity models of different regions around the world and are able to do precise relocation of events. Because there are many monitoring sites in Alaska, they have a very good 3-D model of Alaska, which will allow the AEIC to use in locating seismic events.
- ANSS NIC Meeting Update-Hansen: This was a joint meeting between the USGS Earthquake Hazards and Volcano Hazards Programs. In some areas, these two programs have had problems allocating funding equitably. Fortunately, this has not been the case in Alaska. In this state, the only problems have been the need for better data, and this need is being addressed through stimulus funds for upgrades. There is a push to make the volcano program in Alaska a 24/7 operation, which will be initiated as a pilot project in the near future.

- Municipality of Anchorage Geotechnical Advisory Commission (MOA/GAC) Activity Update-Cole: The Seismic Risk Assessment regarding land use planning in downtown Anchorage is ongoing. A draft of the new regulations has been presented to the Municipality of Anchorage Planning Department. That draft has not yet been forwarded to the Advisory Commission. The Advisory Commission has also been working with the Municipality building board to review local amendments to the 2009 International Building Code (IBC). They have also drafted a resolution to the Mayor and Assembly to provide funding and direction to allow the Municipal Building Department to hire geotechnical firms for the review of geotechnical aspects of building design.
- MOA All Hazards Plan Update-Guest Laurie Cummings of HDR Alaska: Hazard mitigation plans are necessary for timely response to disasters, to formulate mitigation strategies for public safety, and to qualify for FEMA funds. HDR Alaska was hired to do the Hazard Mitigation Plan for the State of Alaska as well as the Municipality of Anchorage's original Hazards Mitigation Plan in 2005. They are now working on the update to the MOA plan, which must be done every five years to meet FEMA requirements. The update will focus on certain sections of the existing plan, including Community Profile, Asset Inventory, Mitigation Strategy, Action Items, and Natural Hazards. They are also adding a new section, Technological Hazards, to the plan. HDR Alaska is working with various Municipality Departments as well as other government agencies in order to develop the plan. Some of the potential seismicspecific action items in the plan are: incorporation of the Municipality's Seismic Risk Assessment for the downtown area, obtaining GIS data used in the recent USGS landslide maps, pursue funding to retrofit Municipality facilities that could be used as shelters after a disaster, continue to install gas shutoff valves in Municipality facilities, and look into installing shatter-resistant windows in the schools that will be used as shelters. HDR Alaska is currently working to create a draft of the plan for review. They hope to have the plan adopted by the Municipality Assembly this fall. Chairman Aho and Commissioner Roberts suggested that Post Disaster Damage Assessment (PDDA) training be added as an action item to the plan. Commissioner Kelly suggested that the use of polyethylene pipe in plumbing and sewer systems be added as an action item. The military is using polyethylene pipe whenever repairs or replacements of older pipes are needed, as polyethylene is more resilient to seismic events than older pipe materials.
- WCATWC Update-Whitmore: Paul Whitmore was not able to attend at this time.
 Chairman Aho will contact him to see if he can come later.

III. OLD BUSINESS

12:05 p.m.

• 2010 Alaska Shield Exercise Results-Roberts: The ASHSC conference call drill worked well, with most members responding. The call was included in the situation report that went to the Governor, and the director of the Division of Homeland Security and Emergency Management (DHS&EM) was pleased with the participation of the Commission. Commission members now need to write up a review of the state plan sections that Commissioner Roberts has provided. The state must have this information in order to be eligible for millions of dollars in FEMA funds. In particular, Commission members are asked to review the plan goals and action items. This will be the controlling document for State of Alaska emergency policy for the next five

years, and this is the Commission's opportunity to provide input. Commission members should also list any items that they feel the Commission needs. Please turn reviews in by the end of June at the latest. This will be discussed further in committee meetings.

- Hazard Mitigation Grant Program-Roberts: The Commission did not have an application prepared, so the money went to a different group.
- Action Items: See 04/01/2010 Action Item List. Commission members should continue to review the committee list and let Chairman Aho know if they want to participate in a committee.
- National Incident Management System (NIMS) training-Roberts: He reminded Commission members to take advantage of the online Incident Command System (ICS) training.
- Recognition-Hansen: He has drafted a letter of thanks to ACS, which can be modified for MTA as well. He also wants to recognize the Municipality of Anchorage and the Anchorage School District for their participation in seismic monitoring efforts.
 Commissioner Roberts pointed out that the Commission could give an award directly to groups like ACS who support seismic risk mitigation.

IV. MEETINGS OF INTEREST

12:35 p.m.

- IRIS Annual Workshop, June 9, 2010, Snowbird, Utah
- WSSPC Annual Meeting, July 9-13, 2010, Broomfield, CO
- 9th U.S. National & 10th Canadian Conference on Earthquake Engineering, July 25-29, 2010, Toronto
- Joyner Lecture, Art Frankel/USGS, "Progress & Controversy in Seismic Hazard Mapping", Anchorage, September, 2010
- Association of Engineering Geology (AEG) Meeting, Anchorage, Autumn 2011.
- 2014 National Earthquake Engineering Conference-Anchorage

LUNCH 12:45-1:30 pm

V. COMMITTEE MEETINGS

1:35 p.m.

(Following Committee Meetings, the meeting was adjourned for the day.)

May 27, 2010

I. OPENING BUSINESS

8:30 a.m.

- Call to Order (John Aho, Chairperson); Roll call: John Aho, Gary Carver, David Cole, Laura Kelly, Dan Mahalak, and Gayle White were present. Rod Combellick arrived later. Gay Dunham and David Miller were excused. Roger Hansen was excused due to illness and Mark Roberts was excused due to work demands.
- The May 27, 2010 agenda was approved with no changes.
- Guests: Ron Wilde, Engineer with the MOA Department of Public Works and Dr. Utpal Dutta, Associate Professor at the University of Alaska, Anchorage, were present May 27. Richard Koehler, Geologist with the Alaska Division of Geological & Geophysical

Surveys (DGGS) and April Woolery, Administrative Assistant with DGGS, were also present.

II. CRITICAL DEADLINES

8:40 a.m.

- ASHSC Report to WSSPC-Date TBA
- 2010 Report to Legislature-Draft due December 15, 2010. Committee chairs will need to submit a page-long summary of their committees' activities and progress for the past year.
- 2010 Report to Legislature-Final due January 15, 2011.
- Legislative Trip in January, 2011.

III. BRIEFINGS II

9:00 a.m.

- MOA Plans Review-Wilde/MOA: Engineer Ron Wilde's department reviews building designs before the Municipality can issue building permits. Of the problems they see, 80 to 90% have to do with seismic issues. The engineers who design these structures do not seem to have enough background in seismic issues. Some firms do not always perform in-house reviews of designs, so problems are caught during permitting reviews. There is a real need for better training of engineers in seismic aspects of structural design.
- MOA Seismic Instrumentation Activities-Dutta/UAA: Professor Dutta discussed the Anchorage Strong Motion Network and data archive. The University of Alaska, Anchorage provided funding to establish a Strong Motion Data Center, while the MOA provided funds for processing the data. The network includes free field stations around the Municipality as well as structural monitoring of the Frontier, BP and Atwood Buildings as well as the Port Access Bridge. The center receives the data in real time, which they process as much as possible so that the Municipality can use it.

BREAK 11:00-11:15 pm

• Seismic Fault Identification-Koehler/DGGS-Geologist Rich Koehler: Mr. Koehler was a member of a team of geologists who traveled to Haiti following the January, 2010 magnitude 7.0 earthquake in Port Au Prince. The team found that surface rupture did not occur along the trace of the fault. This raises the possibility that other magnitude 7.0 earthquakes are missing from the Paleoseismic record, causing an underestimation of seismic hazards in areas prone to these events. Based on the history of earthquakes in this part of the Caribbean, seismic hazards are now elevated and additional events are expected in this region.

LUNCH 12:00 p.m.

IV. NEW BUSINESS

1:00 p.m.

ASHSC Response to a Damaging Seismic Event in Alaska-All Commission members:
 Discussion of what the Commission's role should be in the first hours, days, weeks,
 months following a significant seismic event. All agreed that the Chair should convene
 a teleconference within hours of the event if at all possible. Chairman Aho would also

like to have a seat at the Alaska Emergency Operations Center and be available for advisory issues. Establishing an online discussion board would help to facilitate cooperation between groups who want to capture scientific data following the event. In the days after a large seismic incident, several Commission members will be doing event-related work, either on their own or as part of their professions. The Commission should stay connected with these members and have access to their information if possible. For the weeks and months following a seismic occurrence, Chairman Aho would like to continue the development of on the shelf "products" to use at such times. In particular, he would like to have appropriate legislation ready to propose during the period following an event, when public support will be high. He would also like to recommend programs to assist in mitigating seismic risks, per the ASHSC Charter. Commissioner Mahalak suggested adding a "lessons learned" section to the internal website to record what was learned, what worked and what didn't, in the wake of a large event.

Future Briefings

- o Mat-Su Prison Presentation
- MOA Emergency Operations Center Tour
- Monitoring of Large Earthquakes
- Utilities Risk Mitigation Approaches
- 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
- o Peter Haeussler on the Denali Fault
- Paul Whitmore on Tsunamis
- Yumei Wang on Hazard Mitigation in Oregon Schools
- Mike Metz on the proposed bullet line
- o John Aho, APIP presentation
- Other suggestions should be forwarded to Chairman Aho

• Committee Reports

- o Chair:
 - The first quarter ethics report is complete. Chairman Aho will report his gift from the Mongolian earthquake managers in the second quarter report.
 - He has been attending the monthly APIP meetings. It is good to hear other viewpoints on the subject of seismic safety.
 - Presentations-Alaska Command & Joint Task Force Alaska, Mongolian Earthquake Managers: both presentations were well-received.
 - WSSPC Meeting: Chairman Aho will chair a meeting of representatives of the various Seismic Safety Commissions.
- Insurance-White: She is updating the white paper and brochure. There have been no changes in earthquake insurance coverage in Alaska since the last meeting.
- Schools-Kelly: She gave members a copy of the Alaska Capital Improvement Policy which will apply beginning in 2012. The ADEED has a committee to approve bond proposals, and Chairman Aho's presentation last year helped them to see the importance of the policy. The Commission should seek

feedback on which schools have used the policy and track that information. Commissioner Carver suggested using the schools requirements as a template for hospitals, fire houses, and other critical facilities.

- Earthquake Scenarios-Combellick: The committee reviewed their goals and metrics: there were no changes at this time. They will work toward getting a scenario completed for Kodiak. Commissioner Carver suggested contacting the Kodiak Island Borough and making them aware of the committee's efforts. Commissioner Combellick will draft a letter and get committee feedback. The committee also discussed soil-type and site-response maps that were developed jointly by DGGS and UAF about 10 years ago for Anchorage but never published for lack of documentation from UAF. Committee members agreed that it is not worth trying to recover the documentation and publish the maps.
- Response & Recovery-Roberts: They went over the current state hazards mitigation plan and gave productive feedback.
- Education & Outreach-Aho: Chairman Aho would like to have public service announcements on the anniversaries of large events. He plans to get to Juneau early in the session next year and possibly giving an interview on a radio talk show there. Other potential venues for outreach include periodic press releases or newspaper blurbs and brochures such as the ASHSC tri-fold that Chairman Aho is working on, one on seismic hazards and schools by Commissioner Kelly, and Commissioner White's brochure on the pros and cons of buying earthquake insurance in Alaska. Commissioner Combellick would like to explore getting Twitter access for the Commission, as well.
- Hazards Identification-Carver: Committee members need to get their rough drafts to Commissioner Carver so that he can compile the white paper for publication. Commissioner Carver requested that Rich Koehler be added as an information member to the Hazards ID committee. Chairman Aho approved.
- Partnerships-Aho: He is working on the next Joyner Lecture, which will take place in September in Anchorage. Planning for the National Earthquake Engineering Conference in Anchorage for 2014 will be a major effort.

V. GENERAL DISCUSSION

3:55 p.m.

- Commission Members: Commissioner Combellick will not be renewing his term on the Commission. He is encouraging Rich Koehler to apply in his place. Commissioner Combellick will continue to serve until his position is filled.
- Public: none

VI. ADMINISTRATIVE MATTERS

3:45 p.m.

- Budget Report-Woolery: The current budget is \$1,471, pending travel expenses.
- ASHSC Web Site Update Status-Woolery: the web site is up to date.
- Next Meeting Date (Teleconference): July 1, 2010. The next face-to-face meeting will be either September or October in Anchorage.

VII. ADJOURNMENT

4:00 p.m.

