



REPORTS OF MEETINGS

Hornafjörður International Coastal Symposium Höfn, Iceland (20-24 June 1994)

This international symposium was the fourth in a series of International Coastal Symposiums (ICS) that were spearheaded by Per Bruun: (1) Reykjavik, Iceland, 1985; (2) Skagen, Denmark, 1991; (3) Hilton Head Island, South Carolina, U.S.A., 1993; and (4) Höfn, Iceland, 1994. The meeting was attended by about 150 delegates from twelve countries (*viz.* Argentina, Canada, Denmark, Germany, The Netherlands, Iceland, Norway, Sweden, Portugal, Spain, United Kingdom, U.S.A.). Attendees participated in an opening plenary gathering, concurrent technical sessions, and panel discussions in addition to field trips, welcome reception and concluding banquet. The Icelandic contingent was especially well represented with Members of Parliament, Mayor of Höfn, students and faculty from the University of Iceland, and local fishermen and residents that depend on the Hornafjörður Inlet for their livelihood.

ORGANIZERS AND SPONSORS

The organizing committee and sponsors were pleased to see such a wide range of interest groups coming together to exchange ideas and points of view. This ICS was sponsored by the *Journal of Coastal Research* (published by the Coastal Education & Research Foundation, Charlottesville, Virginia). Copies of the 823-page proceedings volume (Viggósson, 1994) may be obtained by writing to the following address: Gisli Viggósson, Icelandic Harbor Authority, P.O. Box 120, 200 Kópavogur, Iceland. Kindly enclose a check in the amount of USD 100 (surface post included).

PLENARY SESSION

The plenary session featured five theme papers by Hjörleifur Guttormsson, Páll Einarsson, Charles W. Finkl, Per Bruun, and John V. Esposito. The first two presentations emphasized important or unusual aspects of the Icelandic environment that were relevant to considerations of

coastal processes and inlet stability (Guttormsson and Einarsson reports). The next two plenary presentations focused on inlet morphodynamics, coastal sand management, and the impacts of coastal structures on downdrift erosion (Finkl and Bruun reports). The concluding paper considered aspects of the law of the land and sea (Esposito) and provided an interesting overview of some coastal legal issues.

TECHNICAL SESSIONS

The technical sessions considered various aspects of coastal processes, climate and sea-level change, management and legal issues, coastal structures, as well as ship maneuvering and navigation in exposed and protected waters. In addition to the disparate discussions of coastal erosion and sedimentation, waves, currents, and other morphodynamic processes, some sessions featured a focused analysis of the Hornafjörður Tidal Inlet. These reports were especially well received because they reflected local conditions that were demonstrated in a field trip to the inlet on a pilot boat. Fifty-five papers were presented in nine technical sessions providing much interesting and useful information. The papers and presentations were of exceptionally high quality and Gisli Viggósson is to be commended for his thoughtful reviews, selection of papers, and their appropriate groupings for presentations. Papers presented in the technical sessions are published in the proceedings volume (Viggósson, 1994) and some may be submitted to the *Journal of Coastal Research* for additional peer review and international publication.

PANEL DISCUSSION

A three-hour long discussion culminated the technical sessions. The purpose of the discussion was to review the important planned stabilization of the Hornafjörður Tidal Inlet. The Chairman,

Charles W. Finkl, conducted discussion first among a "Designers" group (the protagonists) and a "Discussors" group (the antagonists). Members of the Designer Group were: Sturlaugur Thorsteinsson (Mayor at Höfn), Sigurdur Sigurdarson (IHA), Gísli Viggósson (IHA), Capt. Sigfús Hardarson (Pilot, Höfn), and Dr. Per Bruun (Hilton Head Island, U.S.A.). Opposing members of the Discussant Group were: Prof. Fran Gerritsen (University of Hawaii, U.S.A.), Prof. Jonas Eliasson (University of Iceland), Dr. Keith A. Powell (Head, Coastal Group, HR Wallingford, U.K.), Dr. Haukur Tómasson (Division Head, National Energy Authority, Iceland), and Kjell Martinussen (Marintek A.S., Trondheim, Norway).

Questions were also fielded from the audience and many interesting aspects of the proposed inlet stabilization project were reviewed. It became apparent that a great deal of engineering expertise has gone into the proposal for stabilization. Panel members agreed that an excellent proposal had been put forward by a most competent group of coastal and harbor engineers. Before construction begins, there will be further studies of computer models, littoral drift, and impacts of structures on tidal flow characteristics. Stabilization of this dynamic inlet will provide safer entrance conditions for larger ships in a navigation channel that is crucial to the financial security of the south coast region. The panel discussion was an interesting experience because it provided a basis for frank interaction on a level commensurate with grass roots needs, fears, and desires. Such real world interaction between engineers, scientists, planners, politicians, and members of the community brings all interested parties together on a common basis where pros and cons of coastal stabilization can be aired in public. The effort was rewarding and a refreshing change from usual symposium format.

FIELD EXCURSIONS

Intra-symposium field trips provided relaxing breaks and enjoyment of the Icelandic landscape. The afternoon trip to the Vatnajökul glacier, some two hours distant from Höfn by bus up a steep, "four-wheel drive only" mountain road, was enjoyed by all. The more daring coastal specialists got to try their hand as ski-doo drivers on the glacier while others chose to tour the area aboard the more sedate snow cats. Understanding volcanogenic and glaciogenic processes is important to proper interpretation of many coastal processes

in this land of fire and ice. Particularly relevant here are the jokulhaups (produced by subglacial volcanic eruptions) which bring enormous quantities of glaciofluvial sediments to the coast. Many coastal segments along the south coast are supplied by the sandur (glacial outwash) plains. Fortunately, there were no jokulhaups at the time of our field trip! Jokulhaups occur on average once every five years somewhere in Iceland. The lack of jokulhaup activity in some areas has contributed to the development of sediment-starved coasts that are now eroding dramatically (*e.g.* Vik).

The two-day post-symposium excursion started at Höfn and meandered along the south coast on the way back to Reykjavik. There were many interesting stops at harbor installations, coastal protection works, and high-energy beach environments. Short side trips to some of Iceland's most scenic waterfalls and geysers were appreciated. This field trip culminated with a visit to Thingvellir (ancient site of the Iceland democratic parliament which has met almost continuously for 1,100 years) and the modern seat of government in Reykjavik.

AUDIENCE WITH THE PRESIDENT OF ICELAND

Members of the field trip were especially honored by their private audience with the President of Iceland, Ms. Vigdís Finnbogadóttir. Though not normally accorded, our group was granted an exceptional meeting with the president because her father was one of Iceland's first harbor engineers. Participants were most appreciative of this great honor bestowed on our humble group of coastal specialists. This was also an occasion to celebrate the recent Icelandic Knighthood of Per Bruun and his honorary doctoral degree from the University of Iceland. Per Bruun already holds a D.Sc. (Doctor of Science) degree, one notch higher on the academic ladder from the Ph.D. degree!

TOUR OF THE ICELANDIC HARBOR AUTHORITY FACILITY

Prior to our meeting with the President of Iceland, we were treated to a visit of the new headquarters and research facilities of the Icelandic Harbor Authority (IHA). We were especially impressed with the new world-class physical plant and research being conducted by the IHA. It was obvious that careful planning went into the development of this facility. Office space and common areas maximized function and form to ad-

vantage. The fixed bed physical model of the Hornafjörður Tidal Inlet was demonstrated for us so that we could see wave-current interactions in the inlet and the combined effects of different wave climates and tidal currents on scale model ships navigating the inlet. A harbor pilot operating the remote-controlled model ship made the channel navigation look easy. Members of our group attempting to navigate the channel grounded many times, had to be rescued, and came to better appreciate the hazards associated with this tricky inlet. We were impressed with this fine physical model facility. The IHA is justly proud of this first-class facility. I have seen no other of its size that can compare.

In sum, this was a most successful and profitable meeting in a hospitable atmosphere. The scenic beauty of Iceland is unparalleled and is a most congenial setting for international interaction. For participants this meeting facilitated meeting old friends and provided opportunity for making new ones. On behalf of the organizing committee, hosts, sponsors, and reviewers of technical papers, I thank all participants for taking the time to share their expertise for the solution of common problems. Viva the ICS!

Charles W. Finkl
Fort Lauderdale, Florida, U.S.A.