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Editorial

THE GREAT STORM OF JANUARY 1988

STRONG WINDS AND EXTREMELY large waves resulting from a largely unforecast "southeaster" struck the Pacific coast from Baja California to San Francisco on Sunday and Monday, 17 and 18 January, 1988. The sight of surf zones extending almost to the horizon was one that local coastal engineers will not soon forget. The measured wave heights exceeded anything every recorded or hindcast for this coastline. It was clear from the beginning that this was an exceptional storm. The Naval Ocean Systems Center tower, long part of the seascape offshore of Mission Bay in San Diego, went down - perhaps a victim of the thousands of tons of kelp wrack that eventually littered the area beaches. Redondo Beach was pummeled by huge waves that found an unimpeded path between the offshore islands. Flooding and overwash of seawater, cobbles, sand and kelp was common in low-lying areas.

A few months later I read the harrowing account of a two-man fishing boat crew, caught by the storm because of the inability of present technology to provide warning of such a tight and intense storm, as they fought their way back to port in Los Angeles. The descriptions of the storm evolution, the backing of the wind and the building of the waves, were remarkably similar to Richard Henry Dana's observations in *Two Years Before the Mast* of the dangerous southeasters off this same coast during the 1830s. The problems of the modern boat with breaking glass on the bridge and flooded electrical panels raised interesting questions about how much new marine technology has contributed to the safety of vessels in a severe storm.

During the following months, a number of researchers with interests in coastal engineering, sea level extremes, wave height distributions and weather forecasting continued to study this event. It became even more obvious to them that the January '88 storm did not fit the usual population of winter storms in this part of the Pacific. As coastal engineers and oceanographers fortunately do, they got together informally at some point to discuss their findings. Some one suggested that it would be a good idea to record all this for posterity and the idea of a workshop was generated. It seemed appropriate to me to hold it on the first anniversary of the storm. Dr. Reinhard Flick, staff oceanographer of the California Department of Boating and Waterways (DBAW)

agreed to host the event, which was held at Scripps Institution of Oceanography (SIO) on 18 January, 1989. Dan Cayan, of SIO and I provided some assistance with planning the program and recruiting speakers.

The workshop, which consisted of eleven papers and a very spirited discussion period, was co-sponsored by SIO and DBAW. A total of 34 people attended from industry, government and academe. The quality of the papers and the interest generated by them suggested that we should attempt some broader venue than a typical workshop proceedings volume. Probably because a majority of the attendees were members of ASBPA, a special issue of *Shore & Beach* was suggested. I volunteered to contact the editor for permission and to try to assemble the papers into a single issue devoted to this remarkable storm. Bob Wiegel had been greatly impressed already with the significance of this storm and it was not difficult to convince him to set aside for us the October '89 issue.

Bill S. Satow, the Deputy Director of DBAW, and George Armstrong who heads the Beach Erosion unit in that department, provided valuable and appreciated support for my task of assembling the drafts, obtaining the reviews and putting together this issue. DBAW has supported the CDIP wave data gathering network, which supplied much of the wave data on this storm, for the twelve years of its existence and has also been an important sponsor of research in sediment transport, beach erosion processes, sea level extremes and other topics of interest to *Shore & Beach* readers. In times of shrinking federal budget, this support by a state agency assumes even greater importance. The community of coastal engineers in California recognizes and appreciates the foresight and the perseverance of Bill Satow and George Armstrong in furthering the objectives of our profession and our organization.

I enjoyed my stint as guest editor of this special issue and I would recommend to others that this focussed effort can be a very effective means for bringing international attention to any number of important events, geographical areas, technologies or projects. The efforts of the reviewers and the authors in meeting the deadlines are greatly appreciated. I hope the readers will find the Great Storm of '88 as interesting and exceptional as we did.

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