

Editorial

Welcome to the May 2021 edition of the International Hydrographic Review! I am excited to share the articles and notes of this edition with you. Perhaps most importantly, all of us here at the IHR would like to celebrate 100 years of the IHO. Following this editorial, you will find a letter from the current IHO Directorate about this momentous occasion. It is incredible to think that 100 years ago, our predecessor hydrographers had the foresight to create an organization focused on improvement to global hydrography and maritime commerce. I am particularly impressed by the work leading up to the official establishment of the International Hydrographic Bureau in 1921. A reprint of the very first IHR article, "HISTORY of the INCEPTION of the I.H.B." is provided to revisit the hard work and professionalism exhibited during a post-war, global pandemic to improve safety of navigation world-wide. Today, we again find ourselves in a pandemic, yet we continue to conduct hydrographic surveys, process our data, and produce nautical charts, maritime safety information and digital data to support the needs of our maritime world. Our articles in this edition are indicative of the constant drive of today's hydrographers and cartographers to improve the data provided to our customers. First, a fascinating look at a quantitative method to assess hydrographic data and nautical chart information over time. Next, an analysis of the bathymetric compilation process—so important with today's multibeam sonar systems producing terabytes of data. The last article provides a mechanism for evaluating the validity of Volunteered Bathymetric Information, or Crowd-sourced Bathymetry, using a reputation based system adapted from the world of chess.

This notes section of this edition is led by the thoughts of Rear Admiral Shephard Smith, the outgoing Chair of the IHO Council. RDML Smith provides a firsthand account of the actions, outcomes, and strategic impact from the Council's first 3 years. We wish RDML Smith fair winds and following seas for his retirement, and welcome Dr. Geneviève Béchar, the Director General of the Canadian Hydrographic Service, as the new Chair of the IHO Council. This note is followed by an update from the Chair of the International Board on Standards of Competence for Hydrographic Surveyors and Nautical Cartographers, who discusses common shortfalls of applications and provides an overview of the current board membership. Next is a note addressing an important issue in our profession: diversity and inclusion. This note, "Empowering Women in Hydrography", describes an IHO-approved project to address the large gender imbalance in hydrography. Congratulations are also offered to the Portuguese Hydrographic Institute as they celebrate their 60th anniversary, as described in a note from their Director General, Rear Admiral Carlos Ventura Soares. This is followed by the next installment on the term "hydrospatial" and the desire to engage in a conversation about its adoption in our lexicon. A note from Colombia details the impact of, and response to, Hurricanes Eta and Iota. This is followed by two notes on satellite derived bathymetry (SDB) showcasing new techniques and recapping the 3rd International Conference on SDB. Use of uncrewed surface vessels in Canada is the topic of the next note, providing unique insight for cold climate surveys. This use of remotely operated vehicles ties in nicely with the next note on cloud-based processing and training that is becoming a more prevalent, especially during the pandemic. Ocean mapping is the topic of the next note, as the "SEAMAP 2030" efforts of the Portuguese Hydrographic Institute to



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map their waters are described. Finally, a detailed description of the challenges faced by the Chilean Navy Hydrographic and Oceanographic Service to update the chart of the Kirke Channel, located in the very southern extreme of Chile.

We also include three obituaries in this edition. These individuals, Sean Hinds of the Canadian Hydrographic Service, Etienne Cailliau of the French Hydrographic Office, and Rick Brennan, the United States' National Hydrographer, left lasting impacts on our hydrographic community. We offer our condolences to their families and thank them for their contributions to hydrography.

I hope you enjoy the articles and notes in this edition; the topics addressed are wide-ranging, relevant, and reflective of the ever-growing knowledge and skill in our hydrographic community. Don't forget to submit articles for the November 2021 edition by July 31, 2021. It's a great time to be a hydrographer!

Brian Connon
Editor