



June 30, 2023

Representative Frank Lucas
Chairman
House Committee on Science, Space, and Technology
2321 Rayburn House Office Building
Washington, DC 20515

Representative Zoe Lofgren
Ranking Member
House Committee on Science, Space, and Technology
1401 Longworth House Office Building
Washington, DC 20515

Dear Chairman Lucas and Ranking Member Lofgren:

On behalf of Sofar Ocean, thank you for your leadership on weather policy in the U.S. House of Representatives. The work your committee has accomplished will leave a lasting positive impact on Federal abilities to protect lives and property. I look forward to continuing to work with you and your colleagues to reauthorize the Weather Act of 2017.

In particular, provisions related to improving Federal agency access to commercial sector technologies, like *in situ* buoy data that Sofar Ocean can provide, will be transformative to helping agencies meet their missions. The Coastal Flooding Forecast Innovation Program and National Mesonet Program are two provisions that Sofar strongly supports. The Sofar Ocean Spotter buoys provide data on real time surface ocean conditions. This data, combined with models used by Federal forecasters, will significantly improve the development and extension of accurate, effective, actionable, and probable forecasts and warnings for coastal communities.

Annually, coastal flooding, commonly associated with hurricanes, atmospheric rivers, and other major weather events, is estimated to cause billions in damage and dozens of fatalities across all coastal states. Nearly half of Americans are at risk of coastal flooding: 40% of Americans live in a coastal county. However, despite the major potential impact to coastal communities, the observations necessary to better inform coastal impact forecasts are frequently lacking. Weather systems impacting coasts often originate over the open ocean (e.g., hurricanes, atmospheric rivers, nor'easters) where there is a dearth of observation systems. Because of this lack of observations, Federal forecasters tend to rely solely on modeling which can yield results significantly different from the actual impacts, putting American lives and property at risk.

For example, the initial forecasted storm surge for 2022's Hurricane Ian was 4-7 feet in Fort Meyers Beach, FL, but the recorded water level ended up being 12.7 feet. Storm warning advisories did eventually increase to 8-12 feet just 24 hours before landfall and the final advisory, issued 6 hours before



landfall, was 12-18 feet; however, the delay in a more accurate assessment meant that residents had little time to prepare.

Distributed *in situ* networks that transmit data in real time can provide necessary observations including the full suite of variables (e.g., wave spectra) for broader forecast improvement. Observation data like those currently available in the commercial sector can be immediately incorporated into NOAA operational forecasts without obligating NOAA to develop new observing platforms. Incorporating existing data or observing networks from the private sector will save taxpayers millions of dollars and save lives and property much sooner than if Federal agencies were to build such a network themselves.

A Coastal Flood Forecasting Improvement Program and National Mesonet Program that leverages all resources currently available, including private sector technologies and data, will empower forecasters and emergency managers to protect lives and property more effectively.

Thank you again for your consideration and leadership in the U.S. House of Representatives. I hope to be a resource for you in this process.

Kind regards,

A handwritten signature in black ink, appearing to read "Tim Janssen", with a stylized flourish at the end.

Tim Janssen, PhD
CEO & Co-founder
Sofar Ocean