RNT Foundation 4558 Shetland Green Rd Alexandria, VA 22312 dgoward@RNTFnd.org

25 June 2019

ADM Karl Schultz Commandant United States Coast Guard 2703 Martin Luther King Jr. Ave SE Washington, DC 20593-7714

Admiral,

We request that you raise the urgent issue of deliberate interference with America's Global Positioning System (GPS) and other Global Navigation Satellite Systems (GNSS) signals at the upcoming one hundred twenty second session of International Maritime Organization (IMO) Council from July 15th to 19th 2019.

GNSS signals have become an important part of all maritime operations. Interfering with them places the efficiency and safety of maritime operations at risk and can impact the safety of life.

A report recently released by the non-profit C4ADS¹ clearly shows deliberate transmissions designed to block and deceive GPS and other GNSS signals affecting maritime operations in the Black Sea and Eastern Mediterranean from 2016 to 2018. Vessels operating in international waters and in innocent passage through territorial seas were impacted. Recent vessel reports and AIS data show that these transmissions continue.

Anecdotal reports have indicated that this kind of interference can be found across the globe. As one example, researchers at the German Aerospace Center detected interference on every leg of a cargo ship's year-long operations between Europe and the far east.²

In addition to degrading safety of life at sea, these transmissions violate International Telecommunications Union Radio Regulation 19.2 that stipulates "All transmissions with false or misleading identification are prohibited."

We request you propose an IMO Council resolution that includes:

- GNSS signals are important to safety of navigation
- Member states should enact measures to prevent unauthorized transmissions on GNSS frequencies
- Member states should refrain from interfering with GNSS signals as much as possible, except when required for security reasons.
- Member states interfering with GNSS signals for security reasons should issue notices to mariners specifying the time periods and areas impacted to help minimize negative effects on maritime operations.

¹ Above Us Only Stars – Exposing GPS Spoofing in Russia and Syria. Available at: https://static1.squarespace.com/static/566ef8b4d8af107232d5358a/t/5c99488beb39314c45e782da/1553549492 554/Above+Us+Only+Stars.pdf Hardcopy enclosed with version of this letter sent by post.

² https://www.gpsworld.com/year-long-ocean-cruise-finds-gnss-interference-everywhere/

We regret not all the signatories will be able to attend the 11 July public meeting to help prepare your delegation for the IMO Council meeting.

Thank you for your attention to this important issue. Please feel free to contact us if you would like additional information.

Ic I	Ic I
/S/ William H. Watson	/S/ Dana A. Goward
Vice President, Government Affairs	President
Maritime Security Council	Resilient Navigation and Timing Foundation
/S/	/s/
James Caponiti	Michael Jones
President	President
American Maritime Congress	The Maritime Alliance
/S/	/S/
Don Marcus	Brian T. Holden
President	President
International Organization of Masters, Mates & Pilots	United States Maritime Resource Center
/S/	/s/
James Patti	James L. Henry
President	Chairman and President
Maritime Institute for Research and	Transportation Institute
Industrial Development	

/S/	/S/
Michael Sacco	H. Marshall Ainley
President	President
Seafarers International Union (AFL-CIO)	Marine Engineers Beneficial Association
/S/	/s/
Paul Doell	Ed Wendlandt
President	President
American Maritime Officers	Radio Technical Commission for Maritime Services
/S/	
Brenda Otterson	CAPT Jeff Cowan
Legislative Consultant	President
American Maritime Officers Service	Council of American Master Mariners, Inc.

Advance copy by email: Mr. Benjamin J. Hawkins
Acting Director, Standards
Commandant (G-5PS)
Benjamin.j.hawkins@uscg.mil