

Resilient Navigation & Timing Foundation

Board of Directors Meeting Minutes

April 3, 2019

I. Convening

The board met at the Dolly Madison Library, Mclean, VA from 10:30am to noon, April 3, 2019. Mr. Dana Goward, Mr. Martin Faga, and Mr. William Porter attended. Mr. Charles Schue and Ms Nancy Smith sent regrets.

The proposed agenda for the meeting was discussed and approved/ modified and approved.

II. Approval of the minutes from prior meetings

The minutes from the February 11th board meeting were reviewed and approved.

III. Regular Business: Detailed information on the foundation's recent activities and finances for the months of February and March was provided in advance of the meeting. The board reviewed these written reports.

IV. New Business

a) The board was unsure if it could approve reimbursement of Mr. Goward's travel expenses for February and March with the number of directors present as Mr. Goward would be required to refrain from discussion and voting. The chair elected to defer the action to an electronic vote from all directors after the meeting. The board discussed taking up a resolution at the next meeting to the effect that local travel expense claims in the amount of \$300 or less for a given month will be considered approved unless the board acts to the contrary. *Note: Later investigation of the bylaws showed that, since there was a quorum at the meeting, a simple majority of those present would have been sufficient to approve the proposal.*

b) The board discussed modifications to the website and branding and approved "Speaking Up for GPS Users."

c) The board approved revised PTA Recommendations – The board modified the recommendations previously distributed. The new version (attached) will be posted on the website.

d) The board approved the following actions:

- Inviting Harrison Society members to a monthly conference call with the RNTF Board of Directors.
- Inviting Navigator Forum members to a quarterly conference call with the RNTF Board of Directors.
- Holding a member reception with National PNT Advisory Board of the 5th of June and expending up to \$3,000 for it. We will invite the GPS Innovation Alliance to co-host the event.

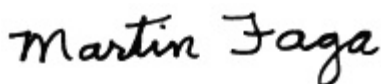
- Holding the Annual Meeting and Members' Forum at the Westin, Old Town Alexandria on the afternoon of June 7th.
- e) The board will elect a new Board of Directors in mid-June. The new board will serve for two years or until replaced. Nominations and volunteers will be considered from two categories:
- Community Candidates – Individuals that have no financial or commercial interest in the outcome of the foundation's efforts.
 - Business Candidates – Individuals who, although they may have a financial or commercial interest in the outcome of the foundation's efforts, pledge they will follow the RNTF's conflict-of-interest policy and will make decisions, where not conflicted, that will prioritize the needs of RNTF to achieve its charitable purposes.

Financial and commercial interests include employment by a company that has or seeks to provide positioning, navigation, and timing (PNT) services or equipment, investments in such companies (except when included as a part of a mutual fund or other managed portfolio), and efforts or intentions to engage in such activities.

For the June 2019 election, only business candidates who **do not** have interests in companies that intend to compete or bid on business with the U.S. government for the GPS Backup Technology Demonstration, or the GPS Timing Backup System required by the National Timing Resilience and Security Act of 2018 will be considered.

V. Other Business

a) None



Martin Faga, Chairman of the Board

Attached: RNTF PTA Policy Recommendations

*Policy Recommendations for GPS/GNSS**

“Speaking Up for GPS Users”

Protect the frequencies by preventing

interference

- Establish a national capability to detect & rapidly locate jamming
- Make anti-jamming and anti-spoofing laws enforceable at all levels of government
- Ensure enough enforcement personnel to detect, prevent, respond to and prosecute jamming
- Modernize the Communications Act of 1934 to better enable enforcement of sanctions against intentional interference, jamming/spoofing
- Ensure authorized transmissions in adjacent frequency bands do not exceed highest power provided for by industry standards

Toughen receivers with readily available technology

- Use receivers capable of resisting jamming, spoofing, adjacent band interference, other disruptions in critical infrastructure and applications.
- Establish as an industry best practice having more than one source of precise Position, Navigation and Timing (PNT) for critical infrastructure
- For critical infrastructure that uses space-based PNT, establish as an industry best practice being able to continue normal operations in the event of an extended GPS/GNSS service disruption.

Augment services with difficult to disrupt terrestrial signals

- Provide a wireless, wide-area, difficult to disrupt, diverse PNT service to augment GPS/GNSS.
- Encourage development of numerous, complementary terrestrial PNT services to increase resilience (integrated radar, local positioning systems, inertial, etc.)

**Thanks to Dr. Brad Parkinson for his inspiration and leadership that lead to development of these recommendations.*