

InsideGNSS

GPS | GALILEO | GLONASS | BEIDOU

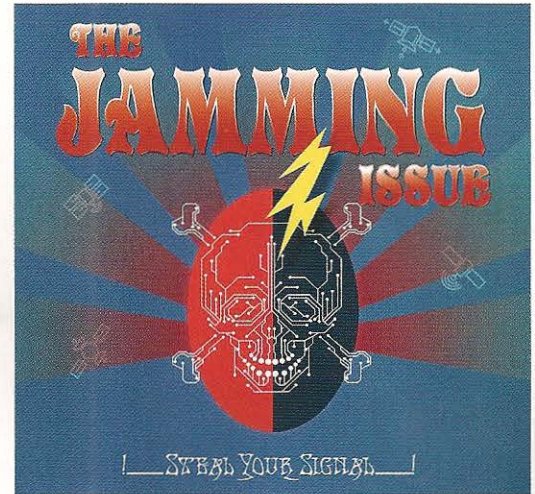
ON THE COVER

46 Systemic Jamming

A look at the threat of systemic jamming of GNSS

James T. Curran, Michele Bavaro, Pau Closas, and Monica Navarro

This article represents only a very preliminary examination of the concept on mitigating the threat of systemic jamming of GNSS, but does seem to highlight the fact that it may be naïve to assume that the jamming threat will not evolve in reaction to anti-jamming technology.



Cover illustration with images from iStockphoto.com/ DimaChe and MicrovOne

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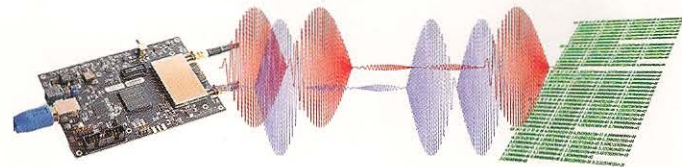
TECHNICAL ARTICLES

54 A Fresh Look at GNSS Anti-Jamming

Addressing common approaches for interference mitigation and framing them with respect to the principles of Interference Cancellation (IC) and robust estimation.

Daniele Borio and Pau Closas

Although strong jamming can overwhelm much weaker GNSS signals, receiver performance can be significantly improved by implementing interference mitigation techniques

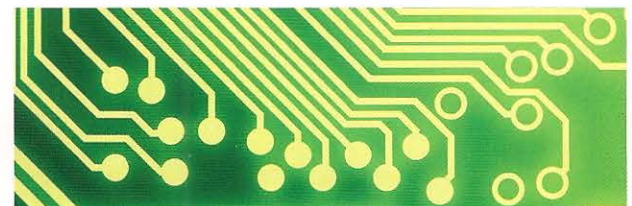


62 Consumer Mass Market Accelerometers for GNSS Anti-Spoofing

A novel GNSS spoofing detection method via direct comparison of acceleration using commercial inertial sensors.

Sherman Lo, Yu Hsuan Chen, Tyler Reid, Adrien Perkins, Todd Walter, and Per Enge

These results provide good indication that a low cost IMU can be useful for spoofing detection during critical phases of flight.



COLUMNS

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GPS III Contest At Hand But Context as Shifted Sharply
Dee Ann Divis
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How do you use GNSS to compute the attitude of an object?
Mark Petovello
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Location Privacy Challenges and Solutions, Part 1: GNSS localization
Elena Simona Lohan, Philipp Richter, Vicente Lucas-Sabola, José A. López-Salcedo, Gonzalo Seco-Granados, Helena Leppäkoski, and Elena Serna Santiago

This article presents an overview of the location privacy challenges in indoor and outdoor localization and tracking with various wireless technologies.

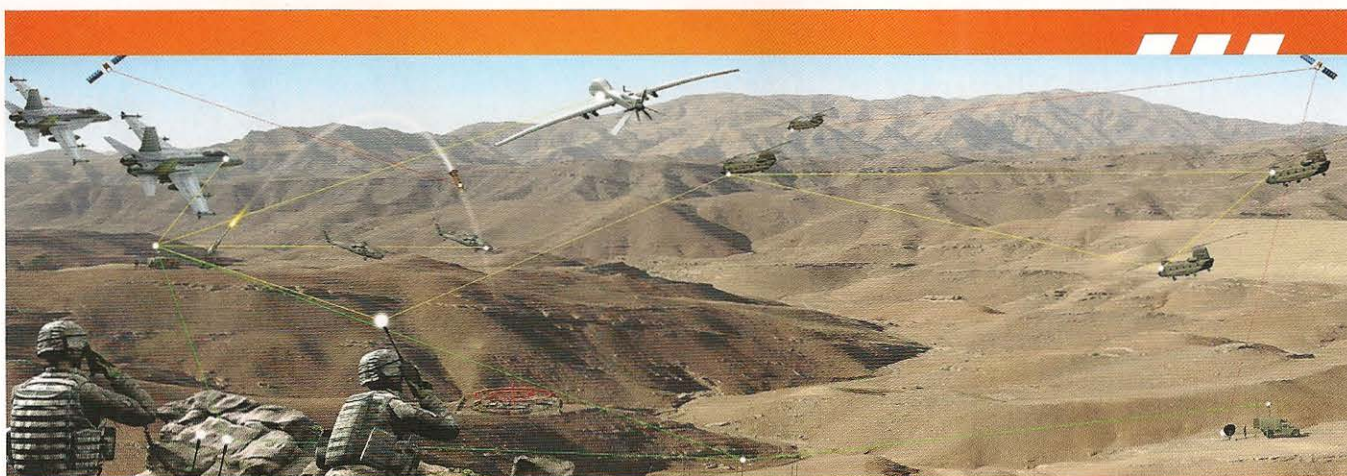
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News from the world of GNSS
Location Privacy: GAO Asks More of NHTSA, New State Laws In the Works
Combined Spending Bill Unlikely to Impact GPS
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GNSS OPINION LEADERS

- 20** **Europe pushes forward on 5G and multi-constellation GNSS**
Enrico Salvatori explains how Qualcomm is leveraging multiple GNSS constellations, including Galileo, to create a broad range of powerful modem and application processor portfolios.



Navigation jamming and spoofing threats are growing. Be ready.

HIGH-ASSURANCE MILITARY PNT

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