Application Challenge

The Height of Precision

OCT 2003

Monitoring Buildings

GPS sensors track wind-driven displacements of Chicago skyscrapers and provide the first full-scale insight into structural response that will help produce better building designs.

by Tracy Kijewski-Correa and Ahsan Kareem

Integration Challenge

36 **GPS Car Talk**

Listening to Bluetooth

The Bluetooth wireless communication standard can link in-vehicle GPS receivers, cell phones, PDAs, and notebooks to enable telematics applications. This article lays out architecture options and explores data throughput, integrity, message format, and latency issues.

by Daniel N. Aloi, Patrick E. Dessert, Luke Fay, Matt Ronning, and Mike Willer

System Challenge

GPS for the Rest of Us

Monitoring the Civil Signal

The remarkable accuracy and historical reliability of GPS service might lead observers to believe that the civil signals are closely monitored. They aren't, but they could be. This article tells how.

by John Lavrakas

Book Reviews

60 GPS in Aerial Warfare — A Matter of Precision

The Precision Revolution: GPS and the Future of Aerial Warfare reviewed by Jules McNeff

66 **EU Technology Policy: Why Galileo?**

Competition for Technological Leadership: EU Policy for High Technology reviewed by Steven McGuire

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The Magnetic Compass and GPS

Getting Your Bearings

The compass is one of the oldest navigation instruments. Embedded in multisensor systems, its electronic descendants can help orient GPS users and carry them through areas of blocked signals, as this tutorial column demonstrates.

by Richard Langley

Leading Edge

Deployable DGPS Hardly Much Work Atoll

by Alan Cameron



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