

## From field to finish, Ashtech has the future covered!

As the Navstar Global Positioning System constellation is completed, the scope of applications for its use moves us into the 21st Century. Ashtech, the world leader in GPS technology offers the best solutions for both global surveying and differential navigation. Ashtech's Z-12 dual-bit, analog-to-digital GPS Receiver mitigates the effects of Anti-Spoofing (AS), allowing the continuation of civilian applications. Our PRISM state-of-the-art software modules provide user-friendly processing support to GPS users involved with acquisition, analysis and management of data collected with GPS Receivers. Our Precision Navigation software, (PNAV), when combined with

dual-frequency data from an Ashtech Z-12 receiver, presents a powerful new capability for GPS surveying, providing centimeter-level accuracy on-the-fly!

This capability is valuable to terrestrial surveyors and crucial to the creation of robust sub-decimeter photogrammetic flight trajectories. ■ Ashtech continues to anticipate the requirements of the future, designing advanced, fully-integrated systems to meet those needs. Our global distribution network has ancillary offices in the U.K. and Moscow. ■ Call (800) 229-2400 for more information.





#### DATA ACQUISITION SOFTWARE FOR GPS RECEIVERS



- Data Logging to DiskGraphical Display of Data
- · Real Time Maps
- Variable Log Rates
- User Definable Data Format
- Ability to Change UnitsDisplay of SV Information
- Position Projection
- Statistics Window
- Printer SupportExternal Instrument Data Acquisition
- Supports most GPS receivers: NMEA-0183 Output Devices Trimble Products
- · Optional add-on modules: Navigational Module Crypto Module
  Differential Base Station Module (Post Processing) Roving Differential Module (Post Processing)

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Circle 9

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Circle 16

## Ashtech is **Growing!**

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1170 Kifer Road Sunnyvale, California 94086 Attn: GPSW

Ashtech is an Equal Opportunity Employer

# Stamp of Approval

Sure, the Collier Trophy was a real honor, and Rockwell's commemorative emblems (featured in the December *GPS World Showcase*) were a wonderfully designed series. But these and other acknowledgments of one of the most remarkable, practical, and far-reaching accomplishments of human technical ingenuity and endeavor have mostly taken place among a small circle of friends, as a conversation among satnay cognoscenti.

Isn't it time that we took our light out from under the bushel? Isn't it time to celebrate the Global Positioning System with the rest of the United States? Isn't it time that the U.S. Postal Service issued some stamps featuring GPS? As a recurrent philatelist from childhood myself, I appreciate the wonder and educational value that a well-designed stamp can produce: a little window into the world, a miniature TV screen for the imagination. And, as a communications practitioner by training and trade, I definitely respect the cost-effective and irresistible promotions that the postal system carries into the homes and offices of the country.

GPS is ripe for postal commemoration. Unlike biographic stamps of, say, Elvis or Grace Kelly, we don't have to wait for anyone to die to honor GPS. The satellite constellation is complete. Applications are multiplying; markets are expanding steadily. But 95 percent of the population still doesn't know how to spell GPS. Despite the favorable prospects for GPS, some of the largest prospective applications — particularly among land vehicle and recreational users — would benefit from some education about the system and its utility. A stamp series could also give credit where credit is due — the Department of Defense and the GPS industry — and give a real boost to the marketplace as well. Like the quadrennial Olympic series that dedicate individual stamps to several different events, GPS would lend itself to a multiple issue portraying the diverse uses to which the system is being put.

Given the politics and time required for proposing and approving a new stamps, the idea needs institutional advocates, perhaps the U.S. GPS Industry Council or the Institute of Navigation or DoD itself. Having put the system together in the first place, it seems only right that we get into the stamp marketplace ahead of Liechtenstein, Pitcairn Islands, and those other philatelic entrepreneurs for whom postal revenue constitutes a significant portion of GNP. After all, being first to issue a GPS stamp would be a way for the nation to show that while you might lick us, you can't beat us.

Glen Gibbons W 07.19

## ARE YOU LOOKING FOR BETTER THAN ONE METER ACCURACY...



# All the reasons you need real-time navigation capabilities will convince you to use the Ashtech Super C/A Senso

The Ashtech Super C/A Sensor GPS receiver is a powerful navigation system that offers Real-Time Differential capability and Super C/A Tracking™ There's a long list of features that outperform other receivers and some of them may surprise you.

## It Provides Higher Accu

As a stand-alone unit, the Super C/A receiver is capable of 25 meters SEP. In Real-Time Differential mode, you can achieve <1 meter accuracy and optionally, using Ashtech's PNAV™ post-processing software, an accuracy of 1 cm is achievable.

One independent measurement is determined per second. Data from all satellites in view are computed simultaneously. A 1 PPS timing pulse, accurate to 50 ns, can be advanced or delayed for different triggering applications. Real-time data outputs are standard to accommodate a variety of raw pseudorange, ephemeris and position data.

The Super C/A uses different antenna configurations for unique applications. It supports a telemetry link such as a data radio or a maritime beacon system. Three RS-232 serial ports provide interfacing with external devices using the NMEA 0183 format. Optionally photogrammetry/event input marker information and carrier phase are available and a 4Mb memory board can be added for post-processing applications.

### t's Economical

At half the price of comparable receivers, you can't afford not to use the Ashtech Super C/A Sensor. For more information, call us at 1-800-229-2400.





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