THE INDUSTRIAL PHYSICIST

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Charles Harris

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ADVERTISING DIRECTOR
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EDITORIAL OFFICES
One Physics Ellipse
College Park, MD 20740-3843
Tel: 301-209-3051
Fax: 301-209-0842
e-mail: tip@aip.org

ADVERTISING OFFICES
500 Sunnyside Boulevard
Woodbury, NY 11797-2999
Tel: 516-576-2440
800-247-2242
e-mail: advtsg@aip.org

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EDITORIAL

Where are we?

For just $200 you can now buy what used to cost $150,000 in 1984 and $3,000 in 1989—a global positioning system device that tells you where you are geographically within twenty-five meters of accuracy. Pricier systems can pinpoint altitude, latitude and longitude to centimeter accuracy.

There are myriad emerging industrial, scientific and commercial applications of GPS technology—everything from recalibrating offshore oil positions, measuring continental drift, to returning to your favorite fishing hole (see story, page 8).

General Motors Corp. introduced the first vehicle navigation system in 1993 and, in the view of some analysts, this application will become the most pervasive commercial use of GPS. Your car will be able to tell you how to get there, but only after you key in the destination address. In other words, the navigation system can answer the question "Where are you?" but you will have to answer the question "Where are you going?"

The broader philosophical questions "Where are we?" and "Where are we going?" are being asked about physics, physicists and the places where they work. Where are you in your career—still working for a corporate giant or national lab, off starting your own business or consulting, or just getting out of school and wondering which way to go?

How well are industrial physicists doing in relation to other physicists? Where can you still do industrial physics research? Where are government research laboratories going? If they're no longer focused on defense, where should they be focused? Where is physics education going? Do we need to exercise birth control in our PhD programs? For those who abandon the program, and for those who go full term, how should they be trained? What is the role of industry in the process?

Assessing where we are helps answer the question "Where are we going?" And in the words of Laurence J. Peter, author of *The Peter Principle*, "If you don't know where you are going, you'll probably end up somewhere else."

Earlier this year, executives at AT&T must have asked such questions. When the answers were digested, the company broke into three separate organizations to allow each of these new companies to pursue different goals, in what is widely perceived as a savvy strategic move.

Asking and answering these basic questions in this time of change should provide some exciting new directions for physics and physicists. The mission of *The Industrial Physicist* is to play an active part in the process.

Ken McNaughton
Editor/Associate Publisher

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