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**Cover:** Whether atmospheric conditions are cloudy or clear, a smooth flight can quickly turn into a roller coaster ride. Scientists are working to provide more accurate warning of turbulence. **Page 408**

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## Letters

### Upholding the right to secrecy

Rivest's new technique, "chaffing and winnowing," allows people to communicate secret messages by larding the intended message with packets of gibberish and differentially tagging all packets with message authentication codes so that only the intended recipient can pick out (winnow) the gibberish (chaff) from the intended message (wheat) ("Hiding secret data in plain view," SN: 5/2/98, p. 286).

We say he does this without traditional encryption because the intended message, although broken into fragments, is not scrambled, nor are any of its characters substituted, nor are they rearranged in sequence. However, one may argue that chaffing and winnowing, viewed large, is cryptography: A sender inserts a message and key into a black box at one end, producing unintelligible output; the recipient inserts this output and key into the black box and gets the message at the other end.

But Rivest has achieved something much more profound: He has proved the futility of

any attempt by authorities such as the U.S. government to prohibit secret communication. You and I could just as easily prearrange a system of winks and nods to tell each other when we were telling the truth and when we were lying and then carry on a secret conversation entirely in the open.

The difference between winks and nods, chaffing and winnowing is just a matter of degree. The only way to prevent secret communication is to prohibit all communication.

Hence, freedom of speech ultimately equates to the right to secrecy!

*Peter F. Klammer  
Wheat Ridge, Colo.*

### Wading through the Web

Much has been said about the fabulous data resources available on the Internet and the difficulties in accessing them, including several items in the latest *SCIENCE NEWS* ("Sifting through the Web's data jumble," SN: 5/2/98, p. 278; "Web searches fall short," p. 286). Nobody seems to address the problem that bothers me the most: incompatible formats.

Very often I find that what is available has been presented in some obscure Boolean format that my PC can't process, and I have to give up. Is there a remedy?

*Bill Beaman  
Chicago, Ill.*

### Exercise and HIV

It shouldn't come as a surprise to researchers that exercise does not exacerbate AIDS ("Exercise does not spur AIDS course," SN: 5/9/98, p. 299). One has only to look at the recent news reports of Magic Johnson, HIV-positive for 6 years or more, who routinely works out hard at least 4 hours per day. In his last test, the virus was undetectable (although presumably still present).

Granted, the "cocktail" of drugs can take some credit for his continued health. But a still more beneficial effect might be attributable to his physical activity—through the same mechanism as the "statistically significant" decline in HIV produced in Roubenoff's study.

*Christina Russell  
Sugar Land, Texas*