

Letters

The Spaceplane

According to Eliot Marshall, in "NASA and military press for a spaceplane" (News & Comment, 10 Jan., p. 105), enthusiasts point out that a supersonic plane flying at "more than Mach 5" could "pick up passengers at breakfast time on the U.S. East Coast and unload them on the other side of the Pacific Ocean before lunch." The claim of "before lunch" is a gross understatement.

There are several imprecisions in the statement, principally "more than Mach 5" and "the other side of the Pacific Ocean." Assume the plane flies at 3000 miles per hour from New York to a part of Japan that is ten time zones away. If it leaves the Big Apple at 8 a.m., it will land in Japan at about half an hour after midnight, local time—not very handy for conferences with Japanese businessmen! That will be some 7 hours before a second breakfast. Progress?

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Imprecision is the byword of the spaceplane concept. Advocates have said at different times that the plane will be fueled by methane and by hydrogen; that its *raison d'être* is to carry executives to the Pacific Rim and to fulfill military tasks in space; and that it will travel at a speed of Mach 5, Mach 10, and Mach 25.—ELIOT MARSHALL

Billings Ovulation Method

Constance Holden's article "Right-to-Life' scores new victory at AID" (News & Comment, 13 Sept., p. 1065) has inaccuracies that need clarification. The Billings Ovulation Method is not expensive or ineffective; it is inexpensive, simple, harmless, and more than 98 percent effective according to many statistical evaluations (1).

I have just returned from the People's Republic of China, where I was invited by the Chinese government to teach the Billings Ovulation Method of natural family planning to the Chinese Family Planning Commission, hospitals, and university officials and personnel. The Chinese government also organized lectures for the general public in urban and rural areas. We were received with great enthusiasm and interest because the Chinese women found the

method easy to teach and learn and because the method does not require the expense of providing chemical or mechanical devices or medical care resulting from side effects of contraception, sterilization, and abortion. It is noteworthy that the Chinese government is not easily manipulated by special interest groups and can still afford to choose what is best for its people.

Holden's statement "The per capita cost in these programs is \$473" is baffling to me, as I learned the Billings Ovulation Method in 20 minutes and have been able to teach thousands of women since 1968 free of charge. Holden's statement that last year was the first time that funding was received is correct. This funding is motivated by our expansion to over 100 countries.

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REFERENCE

1. E. Billings, *The Billings Method* (Ballantine, New York, 1980), pp. 208–209.

Titanic—a Royal Mail Ship

I would like to make one small but important point concerning Constance Holden's article about locating the wreck of *Titanic* (News & Comment, 27 Sept., p. 1368). Holden refers to the ship as "The HMS *Titanic*." *Titanic* was never an "HMS," meaning "His (or, currently, Her) Majesty's Ship"; this is reserved for the ships of the Royal Navy. Warships of the Dominions' navies bear similar designations (HMCS and HMAS for Canadian and Australian ships, as two examples).

Titanic was a merchant ship owned by a private company (the White Star Line) that held a contract with the Government Post Office to carry the mails—contracts awarded to lines whose ships provided the fastest service. A ship which carried the Royal Mails was given the title of Royal Mail Ship—RMS—and she flew the Royal Mail Pendant (a triangular flag) at either the fore masthead or the starboard fore yardarm. Needless to say, the mails are now carried in the same jet aircraft as the passengers which such ships served.

Probably the best known of the Royal Mail Ships is *Queen Mary*, now preserved in California. *Queen Mary* served through 5 years of World War II, mostly in the Atlantic, and on one trip in 1943 carried 15,740 U.S. troops to the United Kingdom (with her crew there were 16,683 persons on board—probably a record as the most peo-

ple ever transported in a single vehicle at one time). She was operated throughout the war by the Cunard Steamship Company under contract to the government, and she was manned by a civilian crew. Like *Titanic*, she was never "HMS."

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"Active" and "Passive" Risks

Daniel E. Koshland, Jr. (Editorial, 25 Oct., p. 391), would close the gap between the scientist and the nonscientist by bringing the latter over to the former. But scientific risk assessors typically, and Koshland in his editorial, do not make some key distinctions. Driving a child to school and attending a rock concert are "active" risks, where the person has some control over the risk; living near a nuclear plant or putting your child in a school where someone has a mysterious and fatal disease is a passive risk, where one has no control and even no practical choice over experiencing it. The public, but not the risk assessor, evaluates these differently.

Furthermore, the public distinguishes between known, predictable, and discrete deaths (diabetes, auto accidents) and unfamiliar, unpredictable, and possibly catastrophic deaths (a nuclear power plant accident). They know that no one has died as a result of radiation from the operation of a commercial power plant; but when asked "what if it were a bad year for this system"—which could mean many deaths from one accident—they easily distinguish it from a rock concert or smoking.

Koshland writes that judges and legislators with no scientific training are making sweeping decisions about the risks of nuclear war. Nuclear war is the supreme passive risk, with catastrophic potential; we should welcome judgments from everyone on Earth about that, trained in science or not.

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Erratum: The name of the author of *Prehistory of the Eastern Arctic* (Book Reviews, 31 Jan., p. 506) was omitted from the heading of the review. The author of the book is Moreau S. Maxwell.

Erratum: In the report "A *Plasmodium falciparum* antigen that binds to host erythrocytes and merozoites" by Daniel Camus and Terence J. Hadley (1 Nov., p. 553), the fourth full sentence of column 2 on page 553 should have read, "Parasite antigens of 155K and 130K bind to purified glycophorin A (6); it is not yet known whether these antigens bind specifically to intact erythrocytes." Reference 7 should have been omitted.