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COVER: A large antenna in synchronous orbit around the earth is one of NASA's proposed options for a search for extraterrestrial intelligence. The ring-shaped shield blocks terrestrial interference. Two small satellites above the antenna are signal feeds to gather reflections from the dish. The satellite at upper left relays data to the ground. Inside the ring is the space shuttle that would put it all up. See p. 332. (Illustration: NASA)

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NOVEMBER 20, 1976

LETTERS

ICSU and advanced weaponry

I've just finished reading your report on the recent 16th General Assembly of the International Council of Scientific Unions (ICSU) in Washington D.C. (SN: 10/23/76, pg. 259). And I would like to commend this council on its accomplishments and efforts, especially with respect to recombinant DNA and the personal freedoms of the world's scientific community.

The Council's listed successes, in Japan, for example, indicate the extents of their influence and casts light, so to speak, on their intentions, which seem to be oriented toward the ultimate improvement of the human condition through morally mature application of science, fostered by inter-course of researchers (ideally), free of political restrictions.

I am thus disappointed that no mention was made of any activities of the ICSU in helping to raise the voices of the "politically independent" scientific community against wanton proliferation and/or development of potentially disastrous "advanced weapons systems" (i.e.: nuclear, "super laser," "graser", etc.), as it has with the nasty question of control of genetic engineering. Particularly since most of these other technologies have already (or soon will) proved their worth, economically and (sadly) militarily.

Asilomar indicated, and ICSU seems to have confirmed, the existence of a rising consciousness of the world's scientists in respect to the technologic applications of their work.

It would be tragic indeed if such an international organization, as the ICSU, were to prevent the destruction of world civilization in one way (genetic warfare, for example), just to have the planet ruined in another (i.e.: nuclear war), which was allowed to develop and spread by this organization, due merely to political reasons.

David Park
Dix Hills, N.Y.

Lithium powered auto?

The article on the lithium/water/air cell (SN: 10/2/76, p. 219) was very interesting and informative, but before we go tooling down the old garden path toward Ureka in our merry Lithomobile, we should consider some very basic problems not mentioned in the article.

If the lithium/water/air cell truly represents the discovery of a new energy source

(or fuel) then we need to consider the total energy expenditure required to locate, mine, transport, refine and smelt the lithium—manufacture the electrodes and transport them to the service stations—safely dispose of the lithium carbonate and provide the carbon dioxide required for a routine re-charging. If this total energy expenditure is considerably less than that delivered to the very wheels of our merry Lithomobile, then we do indeed have a viable new energy source.

The environmentally clean way to operate the new cell is, obviously, to eliminate the disposal problem by recycling the lithium carbonate, but this ultimately rules out all possibility of lithium being an energy source (or fuel), since the recycling process will definitely require more energy than the cell can deliver. This brings our prospective use of the new cell down to that of a (possibly) efficient, high-energy-density storage cell for energy generated by some other source, like for instance, petroleum fuel or solar energy.

Raymond G. Spinnett
Independent Inventor
Santa Ana, Calif.

Illusions in nature

The letters concerning Mars photographs (SN: 10/16/76 and 11/6/76) brought to mind a similar illusion observed in viewing Death Valley from Dante's View at the summit of the Black Mountains, which form a portion of the east wall of the valley. The view includes an alluvial fan lying some 5,000 feet directly below the observation point and sloping from the foot of the mountains down to the valley floor. The main north-south highway through the valley follows the approximately circular base of the fan. As seen from Dante's View, the fan appears to be a portion of a crater, with the highway on the rim. The illusion persists even when binoculars are used, and is also apparent in viewing slides of the scene. Sketches based upon photographs suggest that it may be the result of a false perspective effect produced by numerous gullies that radiate from the apex of the fan.

After reading Mr. Grover's letter, I confirmed that inverting photographs of the scene does indeed overcome the illusion. On my next visit to Dante's View, perhaps I shall have the temerity to observe the fan while standing on my head.

Herbert J. Reich
Dyer, Nev.

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