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Cover: Several Indonesian islands were photographed July 27 by the newly launched ERTS I earth resources satellite. This cluster of islands is near the eastern end of the Lesser Sunda Islands. Expected future capabilities in observing resources from space raise important international issues. See p. 90. (Photo: NASA)

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Home fuel cell

I found the article "Is there a fuel cell in every home's future?" (SN: 7/15/72, p. 37) to be quite interesting as I participated in a study in 1961 (sponsored by the American Gas Association) which had as one of its background motivations the idea that gas would be the sole source of energy for homes and commercial buildings. There are now large buildings in the country for which the only energy input is gas.

Today I find the situation to be confusing. On the one hand we find that we are running out of natural gas. There are restrictions placed upon residential and commercial construction because of a shortage of gas. On the other hand I learn from the aforementioned article that \$50 million has been invested in an energy supply system whose source is dwindling and may have to be replaced in the near future. Tell me, do the gas people know of some secret reservoir of gas that will be "discovered" when the price is right? I feel that SCIENCE NEWS will do its readers a service by reporting on the general subject of our reserves of energy with emphasis upon natural gas.

Harold F. Klock, Professor
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College of Engineering and Technology
Ohio University
Athens, Ohio

Your article on the fuel cell was very informative and brought us up to date on this very important development. The straight hydrogen-oxygen cell with natural gas as the source of hydrogen is the simplest and cheapest type now available. One can envision many homes and industries in the future powered by these devices.

Unfortunately the development is based on a dwindling supply of natural gas, which very well may delay final development of the device.

Walter J. Seeley
Dear Emeritus
School of Engineering
Duke University
Durham, N.C.

Alaska pipeline

Re: Merrill T. Endicot's letter concerning Judge Hart, the Alaska pipeline, etc. (SN: 7/8/72, p. 18).

Speaking only for myself, I must say

that I for one am becoming a bit fed up with having apologists for the oil companies, official and unofficial, prophesy all kinds of unpleasant consequences if the exploitation of our oil resources is in any way inhibited by law or regulation. I am fully aware that the enactment of certain conservation measures will result in a higher price for gasoline and other forms of energy. I am prepared to pay these prices, but so far the oil interests have been so successful in blocking these measures that I haven't had the opportunity of doing so.

I hope Endicot is not so naive as to believe the main reason the oil companies want the Alaska pipeline is the altruistic one of sparing their customers higher costs. Wouldn't it be more realistic to suppose they favor it because they stand to profit greatly thereby?

David J. Meschi
Lawrence Berkeley Lab.
Berkeley, Calif.

Life on other planets

The recent discovery of the pervasive presence of X-rays in our galaxy leads us to a revision of our ideas about the presence of intelligent life on other planets in our galaxy. We have been led to believe that of the uncounted suns that are our galactic neighbors, many millions have planets, and of these there may be life on hundreds of thousands, and intelligent life on thousands. We have no proof, of course. But knowing the deadly effect of X-rays on life, we must now speculate further.

Is it a law of galaxies that in creation planets are naturally surrounded by a protective environment as is ours, so that life may develop normally? Or that life on planets exposed to a continuous bombardment of X-rays may acquire an immunity, or resistance to such an environment so that after all there may be sentient life on these thousands of favored planets in this galaxy, as well as in others, elsewhere. It is not likely that we shall ever know.

Willis A. Boughton
Fort Lauderdale, Fla.

(According to the processes of planet formation that are generally believed in, sizable planets will develop and retain atmospheres. It is probable that some of these will not only protect against X-rays but also have the gas composition and thermal regime suitable to life.—Ed.)

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