

SCIENCE NEWS®

The Weekly Newsmagazine of Science

A Science Service Publication
Volume 131, No. 1, January 3, 1987

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Subscription Department
231 West Center Street, Marion, Ohio 43305

Subscription rate: 1 yr., \$29.50; 2 yrs., \$50.00.
(Foreign postage \$5.00 additional per year.) Change of
address: Four to six weeks' notice is required. Please
state exactly how magazine is to be addressed.
Include zip code. For new subscriptions only call
(1) 800-247-2160. Printed in U.S.A. Second class
postage paid at Washington, D.C., and additional
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SCIENCE SERVICE, Inc., 1719 N St., N.W.,
Washington, D.C. 20036. (202-785-2255)
ISSN 0036-8423

Letters

Train talk

Railroad management could effect a fairly quick change to modernized steam reciprocating locomotives ("Rolling With Coal," SN: 11/8/86, p.298) if they weren't mentally "set in cement" in regard to the diesel locomotive. At the same time they could take advantage of new developments in the use of coal as a clean fuel. There is nothing the diesel can do that the model CL190 cannot do or do better. In fact, the closed cycle engine with electric boosters on the tender wheels can completely defeat any feature of the diesel. However, the big money is all on the diesel and its prototypes, and although it will cost a bundle, they will no doubt be successful in burning coal in an internal combustion engine.

In all fairness it should be noted that the proposed CL190 locomotive, equipped as it is with proven components of modern technology, is not "inherently inefficient" as James Swisher, director of the Coal Research Center at Southern Illinois University, says it

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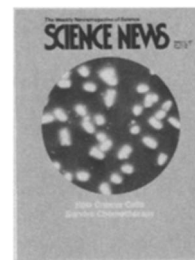
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Cover: Resistance to chemotherapy is frequently the factor that makes cancer fatal. In this picture, the tiny spots around the chromosomes from a drug-resistant mouse cell cancer are small segments of DNA involved in acquired resistance. They are believed to contain extra copies of a gene that enables the cell to withstand chemotherapy. (Photo: R. Schimke, P. Brown)



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is. This was true of the earlier steam engines, and he is apparently making judgments based upon that. For example, early compounds used 3.5 pounds of coal and 22 pounds of water to develop 1 horsepower per hour. The efficiency factor was in the range of 10 percent at the drawbar. Today's locomotive, of which the CL190 is an excellent example, would use 1.5 pounds of coal and 9.5 pounds of water to develop 1 horsepower per hour. The thermal efficiency at the drawbar would be 28 percent. This is 8 percent above the diesel thermal efficiency, which in 1983 was 20 percent when new.

It would cost today an estimated \$4 million to build the first prototype. If eight or more railroads were to combine funding, it could work successfully. This could be written off in two years, each road sharing in the writeoff. I prepared all of this information when I was marketing manager with North American Locomotive Co. With certain changes and modifications updating it, it is still true.

Asa C. Putnam
Santa Rosa, Calif.

I enjoyed "Rolling With Coal." It's probably because my maternal grandfather was a steam locomotive engineer, as was his father. I also remember my paternal grandparents taking me as a young boy to New York City several times aboard the 20th Century Limited and the Empire State Express.

JP-5 and Gasohol just don't bring a tear to the eye as does the sentimental cinder of steam.

Jim (McPeak) Oss
Sharon, Kan.

A lot of us old music buffs will probably send our version of "Trains in the Night": "From Natchez to Mobile/From Memphis to St. Joe." Same towns, different route.

Nice train article!

C. C. Tomlinson
Arapahoe, N.C.

Thanks. I was reaching for a very old memory, and I guess I switched the itinerary to a more alliterative version.

— D.E. Thomsen

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