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### FEATURES

Taking the Lead. 4.2
By Gosfir Gosfin, P.E., S.E., M.ASCE, and Chris Tung, P.E., S.E.
The teardiop-stoped courtosoms within a new federal courtboure in Eugene, Oregon, find reflection in the structural engineering and building systems reflect the federal government's commitment to environmental Sexardship.

Demolition by Design ......50

By Magaret Tang, A.M.ASCE, David A. Carkon, P.E., M.ASCE, Richard Miller, P.E., Stephen Goldblum, Greg Paquin, and Mohammed Ettouney, Ph.D., P.E., M.ASCE

A comprehensive plan was developed and tested to proceet streets and utilities from the impact of a large garage that was to be demolished by implesion. To conserve fiel, the plan made use of local materials, including a cache of old tires that found a new purpose.

Air travel routes in the United States are becoming more congested and more flights are predicted for the future, so the Federal Aviation Administration is seeking ways to

maximize efficiency and minimize delays. One option it is considering uses the Global Positioning System to streamline flight paths, which could have serious implications for airport design.

Double Trouble.....

By Thomas M. Deyle, P.E., S.E., Gug Jones, P.E., M.ASCE, and Renald R. Austin, P.E., M.ASCE

Designing a medical facility in Charleston, South Carolina, to resist both lutricanes and seismic events posed significant challenges for the engineers, who had to resolve the sometimes conflicting structural requirements.

#### ON THE COVER:

In a significant departure from the bunketike designs of some federal buildings, the Wiyne L. Mose United States Courtbouse, in Engency, Orogon, it distinguished by a plut, actifatual design that uses natural light to great advantage in enhancing the building's connection to the outside world. (Photograph by Tim Griffith. See page 42.)







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