



DEPARTMENT OF TRANSPORTATION

NEWS

URBAN MASS TRANSPORTATION ADMINISTRATION WASHINGTON, D.C. 20590

FOR RELEASE THURSDAY
January 13, 1977

Contact: Joe Marshall
Phone: (202) 426-4043
UMTA 77-03

\$640,000 CONTRACTS FOR ENERGY CONSERVATION

Two research and development contracts with high energy saving potential for the nation's bus fleets were announced today by Robert E. Patricelli, Administrator of the U.S. Department of Transportation's Urban Mass Transportation Administration (UMTA).

Patricelli said that, "converting present diesel buses to electric power would substantially reduce mass transit's dependency on petroleum and by using onboard flywheels to store and conserve electrical energy, the buses could operate independent of overhead wire systems and retain their flexibility." Other benefits associated with electric propulsion are reduced noise levels and air pollution.

The contracts totaling \$640,000 were awarded to the Garrett Corporation of Los Angeles, California and the General Electric Company, of Schenectady, New York. Both General Electric and Garrett, specialists in transit vehicle electric propulsion technology, will conduct Phase I studies aimed at applying flywheel energy storage systems to city buses and trolley coaches. In subsequent phases of the program, buses using these advanced propulsion systems could be available for demonstration in major U.S. cities in 1980.

The objective of the study is to determine the economic feasibility of using an advanced flywheel to store energy aboard buses and trolley coaches, in particular the braking energy. These systems could be used to reduce fuel consumption in diesel buses, increase battery life and vehicle range in battery buses and to provide route flexibility to trolley coaches which are normally tied to the wayside power by overhead wires.

In Phase I of the UMTA program the feasibility of three types of propulsion systems will be examined: pure flywheel propulsion, flywheel/battery propulsion, and flywheel augmented by a small internal combustion engine. All three types would use electric propulsion motors.

The candidate propulsion systems will be compared in the study using three conventional vehicle concepts: the Diesel bus, the electric trolley coach, and the battery powered bus.

Following a successful nine month study phase UMTA plans to develop one or more prototype systems for laboratory testing. In a third phase one or both of the companies will be selected to fabricate several flywheel systems and install them in existing vehicles for demonstration in 1980.

#

DEPARTMENT OF TRANSPORTATION
URBAN MASS TRANSPORTATION
ADMINISTRATION
Washington, D.C. 20590

Official Business

PENALTY FOR PRIVATE USE, \$300

POSTAGE AND FEES PAID
URBAN MASS TRANSPORTATION
ADMINISTRATION
DOT 511



FIRST CLASS