



Rocket tests feasibility of space transportation

New venture could aid communications

By PRESTON PENDERGRASS

ROCKPORT, Conn. — If things go as planned, a space venture by private enterprise that could further revolutionize satellite communications will be attempted at Matagorda Island about 15 miles north of Rockport in early August.

The much-publicized launching of a rocket designed to test the feasibility of providing economical methods of space transportation is in the preparation stage, awaiting launch permission from the Federal Aviation Administration.

The rocket, built by GCH Inc., of Sunnyvale, Calif. at a cost of \$1.2 million, was transported to Matagorda Island by truck and barge after being delayed in New Mexico for violation of that state's trucking laws.

Known as the Percheron Project, the space venture is the first in a series to develop commercial space services and is being undertaken by the Houston-based, investor-owned Space Services Inc. (SSI).

The basic Percheron module is four feet in diameter and 40 feet long. When the engine and nose cone are included, the prototype measures 55 feet. Each module carries a single pressure-fed engine designed to burn kerosene and capable of 75,000 pounds of thrust.

Percheron represents a venture into an area by private enterprise normally and historically reserved by national governments.

David Hannah Jr., a Houston businessman who is founder and president of SSI, observes, "We recognize, and are grateful, that governmental programs have advanced the nation to the new frontiers of space. But we are equally aware that governments are inherently limited in their ability to exploit these frontiers."

"Such activity logically is a function of private enterprise; so we have organized to make space accessible to the private sector for industrialization and commercialization, an effort bound to benefit the nation and society."

As this was being written, SSI officials announced they would rent a boat to transport 15 members of the news media and photographers to the launch site. Matagorda Island is inaccessible except by air and boat.

SSI officials said the exact date of the planned launch will be announced well ahead so that citizens in Rockport and other areas can watch the launch from the bay shore.

Percheron is the first attempt by SSI to make space industry accessible to the private sector by reducing the capital requirements to a level consistent with

that currently supported by other ventures, such as oil and gas exploration and drilling.

As with oil and gas development, SSI officials point out, a certain degree of calculated risk attends each project. SSI believes that only by allowing promising projects and groups, such as Percheron and GCH, an opportunity to succeed, or fail, will the development of a mature industrial space economy be possible, SSI officials said.

SSI has issued 1,800 shares of stock, 800 held by members of the board of directors and 1,000 divided among initial investors. SSI has recently attracted its first international investor, a Hong Kong businessman.

So far three rocket engines have been manufactured by GCH. Each is designed to develop 75,000 pounds of thrust. The prototype is expected to develop 60,000 pounds of thrust, which is necessary for a successful launching of the Percheron rocket.

The first rocket Space Services will launch is scheduled to be a suborbital flight with an altitude of 50 miles. The rocket will burn out and drop into the Gulf of Mexico some 20 miles downrange from the launch site.

Rockets of the Percheron type may eventually be capable of placing up to 5,000 pounds of payload into geostationary Earth orbits, according to SSI officials.

Tied-down tests of the Percheron's engine are now being conducted on the private Matagorda Island site. The engine will be mounted in the launch vehicle and should burn for about 28 seconds without liftoff.

Engineers estimate that chances of a successful burn are about 50-50. If this and subsequent engine tests are completed successfully, SSI plans a suborbital flight of the 55-foot Percheron vehicle from the same site later this summer. No date has been set.

The Percheron system burns propellants that are inexpensive and accessible, SSI officials explained. Moreover, the rocket uses new materials and structure technology to reduce construction costs.

★
24 Kt. GOLD

