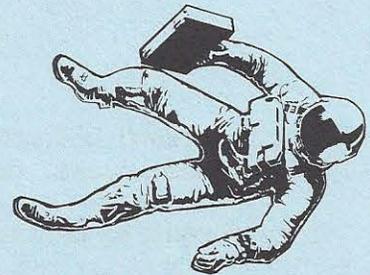


THE  
**COMMERCIAL  
SPACE REPORT**



PUBLISHED MONTHLY

Gary C. Hudson, Editor

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Dear Subscriber:

August, 1981

First, an update on the progress of the Percheron launch vehicle prototype test program. As of this writing (the end of July), no engine burn test has yet been made. However, tests of other propulsion systems have gone well, and no serious problems have arisen. A test burn is anticipated the first week in August.

One of the easiest ways to keep up with the Percheron program is to follow the program's progress in the media. In this month's issue, we will attempt to show you some samplings of coverage that Percheron has received in print, along with comments where required. Articles have appeared in magazines and newspapers. Aviation Week has done writeups in two issues, June 29 and July 6, 1981. Some papers, like the Miami Herald, and the San Jose Mercury have featured top-of-front-page coverage.

Some articles were amusing: under the headline, "Entrepreneurs' Rocket Sneaks Into Texas", the July 13, 1981 issue of the Santa Cruz Sentinel told how the driver of the truck on which the empty Percheron tank was being transported was held up in New Mexico. Apparently a set of papers (which had been properly obtained earlier) had not found its way to the New Mexico Authorities. Unwilling to wait until Monday for offices to open and the red tape to clear, the driver, according to the article, "sneaked out of his motel room and drove off into the night with his conspicuous cargo" Somehow, the driver managed to get across the Texas border without being seen, a difficult feat at best with a 70 foot trailer behind you. The rocket arrived on time, and the red tape was cleared up in due course.

One of the major media attractions, other than the rocket itself, seems to be the test site, Matagorda Island.

The Dallas Times Herald, (July 19, 1981) and the Dallas Morning News, (July 26, 1981) gleefully pointed out the fact that the Percheron test site on Matagorda Island is liberally covered with cattle and cattle emissions which must be periodically chased away and scraped off of shoes, respectively. The Herald accompanied its article with a photo of contented cattle grazing away around the launch control area. The Dallas Morning News had a photo of the alligator which occupies the stock pond containing the water that will be used to cool the launch stand. The alligator appears understandably annoyed, although neither it nor the pond is in any danger.

In its article, the Dallas Times Herald went into further details concerning Matagorda Island:

"Matagorda Island -- Environmentalists nearly always use the word 'pristine' to describe this 41- mile strip of land off the Texas coast. They tell you it is the last barrier island along the entire Gulf Coast to avoid the encroachment of civilization. They conjure up visions of paradise as they describe

the wide sand beaches, lush green grasses and the wildlife -- majestic whooping cranes, ducks, deer, jackrabbits.

They forgot to mention the cow dung.

Mosquitoes are so fierce on the island that at night, the cows come down to the beach to take advantage of the breezes. When they leave in the morning, the beige sand along Matagorda's gulf beaches is covered with the manure, detracting considerably from the 'pristine' atmosphere."

The article mentions that the bugs caused Spanish explorers to "retreat as they hurled the epithet 'purgatory' at the inhospitable place..." (some G.C.H. workers maintain that "hell" would be more appropriate.) Other features are man-made:

"The abandoned air base at the opposite end of the island gives the area an eerie appearance. The old runways are spouting grass. The sides of an old airplane hangar are caving in. Most of the 44 buildings stand empty.

'Whoever laid out this place must have been a second lieutenant and he must have been drunk for about 30 days,' said refuge officer Mickey Harris [the Air Force part of the island, north of the test site, is now being managed as a federal wildlife refuge] The roads seem to all be built in the wrong places, and take indirect routes.

The only trees on the island are palms planted by the Air Force which used their base as kind of a rest and recreation [!] headquarters.

Cast up from the sea as recently as 5000 years ago, Matagorda Island gives off an air of transience."

Well, the alligator seems to like it. To be fair, the test site crew relayed a few positive details not mentioned in the newspaper. For one, the island is accessible only by boat or aircraft. While this has resulted in huge logistics problems, the advantage has been that the crowds and sightseers one would normally have to deal with in a project of this type have been effectively cut off from the test site (cows are relatively easy to chase off). Those hardy souls who do make it out there would be doubtless laid low by the island's climate and tiny winged inhabitants.

The media also supplies a good barometer of public and official opinion. Upon examining the various articles, a considerable change in NASA's attitude towards Percheron appears. Initially, according to the media, the space agency seemed a little skeptical, and more than a little taken unawares:

As mentioned in the San Jose Mercury (June 9, 1981), Percheron took "NASA officials by surprise and left them a bit befuddled about what to do"

In Business Week (June 22, 1981), National Aeronautics and Space Administration engineers "strongly doubted" that Percheron plans would work out.

However, as early as the June 8, 1981 edition of the Miami Herald, Robert F. Freitag, NASA's deputy director of advanced programs stated,

"What they say is certainly possible. The equipment you need for that kind of engine has been developed and built for a long time. To at least some degree, the hardware would be available off the shelf, and there is probably more experience with kerosene and liquid-oxygen propellants than with any other combination in the business."

Later, NASA sources, as quoted in Science (July 10, 1981), became still more enthusiastic:

"NASA, according to agency spokesman Charles Redmond is impressed with the ability of G.C.H.'s top engineers. 'Most of the technical people in NASA are saying "Full steam ahead,"' he says. 'If this works, it means space isn't a luxury anymore.'"

And then, finally, in the July 23, 1981 issue of the Washington Star:

"... the historic effort has won praise from NASA officials - who see it as an important first step in commercial use of U.S. space technology ...

James Beggs, recently named by the Reagan administration to head NASA, told reporters in Houston on Monday that he supported the Percheron venture.

'God love them. I hope they do it. I'm a free enterprise man,' said Beggs."

The opinions of the competition also appeared in print. In Satellite Week, Vol. 3, No. 31 (Aug. 3, 1981), the attitude of Otrag, the German rocket company, seemed, like NASA's initial attitude, to be one of skepticism. Under the headline, "German Thinks U.S. Rocket 'Not Serious':

"Frank Wukasch, manager of Otrag's work in Libya, believes the Percheron project in U.S. is "concurrent" with Otrag's own work in trying to build rockets, but "not serious." Wukasch told our European representative that he was skeptical about Percheron's engine and said necessary hot test firings are unlikely to be complete in one year (Percheron maiden flight is supposed to occur next month). Wukasch said he was reluctant to talk about what Otrag is doing because of sensitivity of W. German political authorities and because of defamatory coverage in European media."

Apparently Otrag, like many others, does not understand that the present tests are "proof of concept" only, involving a non-production launch vehicle, and do not relate to the extensive test program planned for the production system. The "maiden flight" of a production Percheron system will not be for some time yet. Incidentally, as far as engine test programs go, the Percheron will use a coaxial pintle injector in its engine, an inherently more stable design than the radial valois injector used by Otrag. (A similar radial valois injector is used on the Ariane, and caused combustion instabilities which hampered that program.) Hence, it is not anticipated that Percheron's engine test program will reveal any problems which could cause substantial delays.

One hopes, that like that of NASA, the initial opinion of Otrag will change. Until then, we wish them luck in Libya. Keep your noses clean and your payloads commercial, fellows!

Not all of the opinions are in writing. A cartoon in the Chicago Tribune takes a poke at commercial space. The cartoon shows three fat, bald men in pinstripe suits observing the construction of a rocket at a Percheron launch site. One man is saying to the other two,

"Well, it's settled then....when it comes to our first moon shot our crew will be Ronald McDonald, Mr. Clean, and the Jolly Green Giant!"

Although this particular example may have been intended in fun, it reflects an all-too-common view that space as a commercial venture, and as a matter of fact, commercial, profitable ventures in general, are somehow more ludicrous, demeaning or "lowbrow" than those "nobler" ventures that are not for the crass purposes of profit. This attitude is reminiscent of the Old World-type class differences between "old" (read "unearned") money and the socially frowned-upon "new" (read "earned") money, and it still seems to be all too present in some circles. (Incidentally, the three suggested "astronauts" may be humorous and unsophisticated as far as corporate symbols go, but the companies which these three characters represent gross hundreds of millions of dollars per year. One assumes that they laugh all the way to the bank.)

Another opinion of free enterprise in space: Time magazine, in its June 29, 1981 issue wrote a short article on the "brash entrepreneur" building Percheron:

"In Ian Fleming's novel Moonraker, Multimillionaire Hugo Drax built himself a huge rocket to annihilate the city of London. He was foiled in his sinister strategems by James Bond, Agent 007. Now a businessman space buff named Gary Hudson is trying some rather far-out capitalism of his own, with a plan to start putting satellites into orbit from a private launching pad in Texas by 1983. So far, not even the U.S. Government is trying to stop him."

Hugo Drax? Not even the U.S. government is stopping him? Time's implication seems to be that due to the inexcusable and inexplicable failure of the U.S. government to regulate, control and otherwise squash a fledgling industry, James Bond ought to be sent in to deal with this threat before it's too late!

Still, by and large, media exposure in print to date has been favorable. Keep an eye on your local papers and magazines...we appreciate those who have sent in clippings which we otherwise might have missed.

Until next time...

Sincerely,



THE  
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