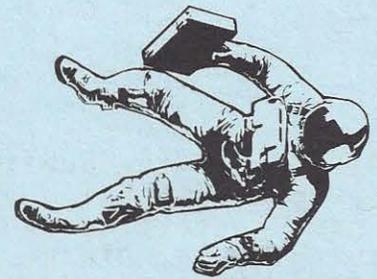


THE
**COMMERCIAL
SPACE REPORT**



PUBLISHED MONTHLY

Gary C. Hudson, Editor

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Dear Subscriber:

April, 1981

Every once in a while I get a pleasant surprise that reaffirms my basic belief that most people are extremely sensible if you give them enough facts to make a decision. Last month's issue of The Report was devoted to a number of recommendations to the Reagan Administration for encouraging the private sector to begin exploitation of the space environment for commercial purposes and at the same time stimulating American industrial productivity. These bits of advice were generated as part of a whole series of Space Policy recommendations intended for the President's scrutiny. I hoped that the President would read them. I hoped his people would understand the implications. I did not really expect them to.

As I said, however, once in a while I get a surprise. Not only have senior administration officials read the recommendations, they liked them. Although they were included as part of a whole series of suggestions that dealt with many aspects of American Space Policy and the NASA budget, the mechanisms for promoting the involvement of American industry in space were singled out for praise as the most interesting recommendations on space to date. There is even talk that some consideration of the 1967 Treaty will be taken up this year.

Getting an idea in front of the policy makers is half the battle. My thanks to all the people who drafted this set of recommendations and worked to get them into the Oval Office. I enjoyed participating and it looks like it was well worth the effort. Naturally, The Report will keep its readers posted on any further activities that may occur in Washington in response to this first encouragement from the Administration.

MORE NEWS ON OTRAG

In a surprising turn of events, more information on OTRAG's operations in Libya has surfaced in the American popular press. The NBC Weekly Magazine (Fridays at 10:00pm EST) ran a piece on OTRAG just two weeks ago that contained some of the most revealing data yet on the situation in which this first attempt at private launch vehicles finds itself. Readers of The Report will remember that speculations about the "real" purposes behind OTRAG have been running rampant for years.

Along with the publicly stated purposes of OTRAG to successfully build and fly the world's first privately funded satellite launch vehicles for commercial sale in the Third World, OTRAG has also been accused of being a clever tax scam and more seriously, a cover for a German attempt to circumvent the Treaty of Brussels and build cheap missiles for sale to Third World armies.

As most readers have probably noted, I have personally suspected that the tax scam explanation was probably the most correct. The "German Missiles in Africa" articles that have appeared over the years always seemed to have a pro-Soviet undertone that gave away the source of information and the only other motivation that would explain the run of bad business decisions made by OTRAG management was a desire to lose vast sums of money.

NBC, however, has managed to dig a little deeper than most press organizations (after all they have a bigger budget). According to copies of memos that NBC was able to obtain, OTRAG representatives have been in attendance at several meetings of German arms manufacturers to discuss the development of new missile systems for Middle Eastern nations including Saudi Arabia. When confronted with these memos on camera, OTRAG president Frank K. Wukasch first tried to change the subject, then denied any knowledge of the meetings alleged to have taken place (implying that NBC could have fabricated the memos) and finally demanded that the cameras be turned off.

Naturally, NBC indicated it had statements from executives of other firms that had participated in the meetings that OTRAG was indeed represented, but they all refused to be interviewed on camera. I had turned on the TV mostly out of curiosity, fully expecting NBC to do quite a job on OTRAG but with the usual panel of "experts" describing what their system might be capable of doing, not with any "hard" evidence of a military program. So where does all this leave us? OTRAG is apparently not a tax scam but it is also "apparently" not motivated by purely commercial space purposes. Perhaps the source of those memos was not as NBC believes them to be and the meetings are a fiction. Perhaps OTRAG management has indeed as its mission the development of low cost space transportation systems but has seen the profit potentials of taking the route they have already been accused of. They are looking for an additional \$20 Million from investors to complete their projects. Perhaps they have had development problems and are no longer confident of reaching orbit with their present system. They do have 1500 investors to keep happy. Qadhafi says they are a purely scientific group and that he is interested in weather satellites, but then that's what he would say.

So this all seems to leave us right back where we started. OTRAG is or is not testing missiles in Africa and is or is not building a low cost satellite launcher. We will just have to wait for their first orbital launch. That is scheduled for some time in 1983. In the mean time we will keep you posted as events develop.

NEW NASA ADMINISTRATION ANNOUNCED

The last two weeks have been a busy time for NASA. The announcement was made that President Reagan will nominate James M. Beggs, executive vice president-aerospace for General Dynamics Corp. as new administrator of NASA and Hans Mark, Secretary of the Air Force, as deputy administrator. According to sources in Washington, it is expected that Beggs will spend the majority of his time on Capitol Hill and Mark will have responsibility for the day-to-day activities of NASA. Aviation Week readers may remember that as Secretary of the Air Force, Hans Mark surprised NASA officials by publicly stating his concern that the Shuttle would not provide DOD with the quick look capabilities needed for maintaining national security and encouraging the development of new expendable boosters.

COLUMBIA COUNTDOWN BEGINS

As of this writing, the Columbia launch is still go for dawn, Friday, April 10th, 1981. Rumors of another delay due to problems in an electrical system have apparently been laid to rest and countdown began at 11:30pm EST pm on April 5th. Procedures have been tightened up considerably since the accident on March 19th that killed two Rockwell employees and injured four others during a nitrogen purge. Associate administrator John Yardley has been quoted in the press as extremely impressed by the maturity of the system due to the extra time for overall preparation allowed by the thermal tile difficulties.

Since so many publications and television programs will be doing background info on the Shuttle during the week before launch I will not attempt to provide more here. Readers who wish to familiarize themselves with Shuttle procedures should check out the April 6, 1981 issue of Aviation Week. Also keep an eye out for the various Network programs that will be aired during launch week.

Astronauts Young and Crippin have continually indicated that they are well prepared and perhaps even overtrained for this launch. Mission commander John W. Young flew on Gemini 3 and Gemini 10, was command module pilot on the Apollo 10 lunar orbit mission and commanded Apollo 16, the fourth U.S. manned lunar landing. Mission pilot, Navy Capt. Robert L. Crippen is making his first space flight on the initial shuttle mission. We wish them the best of luck on this maiden voyage.

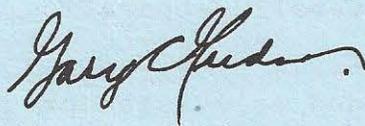
Like so many other members of the press, I have found these continual delays in the shuttle launch to be an inconvenience. I had originally set aside this issue for a report on the Columbia launch and subsequent issues for a variety of technical topics and new ideas that have come to my attention. In light of the new schedule and barring any delays that push the shuttle launch date beyond the end of April, next month's issue will report the events of next week from our commercial perspective.

In subsequent issues over the next few months we will take up some of the new projects proposed for commercial utilization of space. Among these new projects are plans at Satellite Television Corporation (a subsidiary of Comsat) to develop, own and operate direct broadcast satellites for providing multiple television channels directly to the homes of subscribers in the United States.

Another interesting development we will take up is the Spacewatch Project proposed by the Jet Propulsion Laboratory at Pasadena to look for near earth asteroids and plan safety procedures in case of high probability of collision with the earth. Those of you interested in asteroid mining will no doubt see the possibilities of such a data base.

We will also be following up a new rumor that Bob Truax has received additional funding and that Project Private Enterprise rides again. Other subjects will include some new developments in vehicle design and the activities of G.C.H., Inc., the first attempt by a U.S. company to design and build a low cost launch vehicle system for commercial payloads.

Until next time,



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The **Report** is published monthly, and has a subscription price of \$12 per year. Back issues are available at \$1 each from September, 1977. Xerographic copies may be substituted as stocks are depleted. Address all correspondence to G.C.H., Inc., 85 East Geranium Avenue, St. Paul, MN 55117 or call (612) 489-4466. Editorial Direction: Gary C. Hudson. Phone orders accepted at (612) 489-4466. No collect calls please. **G.C.H., Inc.** is a diversified research and development organization formed to engage in advanced scientific and technology business. Capabilities include theoretical research and study, systems research and development of services and products. A high level of effort is presently being expended in astronautics, especially the commercial utilization of outer space and the need for economical space transportation. **G.C.H., Inc.** has a permanent and consulting staff of professionals to call upon including engineers, designers, scientists, communications experts, management specialists and the like. The **Commercial Space Report** is a concentrated effort to report all areas of private and industrial initiatives in the development of space. We hope it will stimulate ideas by raising questions and offering innovative concepts contributed by acknowledged leaders in the field. If you have any comments, ideas or requests for information we encourage you to contact us.