Space Pilots To Link Ships With Steel Cables To Form First Station in Space

By DR. HERMAN OBERTH
Written for UPI

Editor's note: This is the second of two dispatches in which one of the world's leading experts on space missiles relates how the present exploratory invasion of the universe—by America's sun-orbiting Pioneer IV and other satellites—is carrying us steadily toward the goal of placing men in outer space. The author, now living in retirement near Nuernberg, Germany, was after World War II and until last year supervisory physicist at the Army Ballistic Missile Agency, Hunstville, Ala., and is known as the "Father of Modern Rocketery."

Nuernberg, Germany – (UPI)– Even today, on the basis of space explorations to date, we know that putting an inhabited station in space is possible. The method is already before us.

Two space ships will go up and the pilot of one will bring it close to the other. Both pilots, then, clad in space suits which will allow them to move about in space, will take steel cables attached to their respective ships and, using jet power pistols for propulsion, move toward one another.

It seems a dreadful leap, at a speed of five miles per second, hundreds of miles above earth.

The fact is, though, that it will be a simple occurance—centrifugal force keeps everything floating.

The cables are joined and the pilots return to their ships and put them in motion in such a fashion that they circle each other.

The circling motion will produce centrifugal force so that the occupants of the ships will have the illusion of feeling the earth's gravity—a very important point, for the lack of this feeling, prolonged, could have serious effects on their physical and mental health.

On the other hand, conditions in the center of the linking cable will appear to be utterly weightless. Here, we will build a hollow ball of wire grating material.

It is this ball which serves as the mooring station for other space ships which bring tools and machine parts with them—and from these in turn we build, inside the ball, the actual mechanisms which will make the flights among the heavenly bodies.

The process will be carried out in this way because our kinds of rockets, with their chemical propellants, are really not very well adapted to that kind of flight because their gases exhaust too slowly.

Instead, we will build "electric space ships" inside the ball.

These electric space ships, built inside the ball, will be run on electricity produced with the aid of solar energy or atomic piles and which will be used to accelerate them.

There are, as a matter of fact, several systems already proposed for this plan and, to some extent, already in development.

These electric ships will not, themselves, land on large bodies in space. They circle them, instead, while smaller rockets with chemical propellants—so-called "space boats"—will take expedition members down to the bodies in space and back to the electric ships.

When the first such electric space ship has made its satisfactory test flight near the space station, the next step will be a flight to the moon.

Moon Will Be Key Base

It is from the moon, in fact, that the building materials for further space projects will come. It will be a lot easier to do it that way than to bring them from earth, because transportation costs will be about 1,000 times cheaper that way.

I think it probable that many of us will live to see living accomodations for people on the moon—and coal mines, iron works and other factories as well. More than that, I think that a second springboard station will be orbiting the moon and this springboard station will be the transhipment point from the moon, with electric space ships bring the goods from the moon for delivery to earth.

In my book, "Man Into Space," I described my idea of a series of such constructions in space. I would like to describe just one of them now—the fixed orbit station.

Full Day To Orbit

If such a station orbited the earth at a height of 36,000 kilometers (22,068 miles), it would take one full day for it to orbit. If the orbit were from west to east, it would be, in effect, always standing still over the same spot on earth—because the earth itself turns on its axis.

The station would have a view of 3-7 of the earth's surface. Three of them, therefore, properly spaced, would have among them a full, permanent view of this planet on which we live.

Such a station could, among other things, receive television signals from a single point on earth, strengthen them, and beam them back to earth, either directly or by way of one of its neighbor stations.

It would be possible, under such a system, to have a single transmitter whose pictures would be received everywhere on earth.

In contrast to this wide diffusion it would be possible to focus signals very sharply at the receiving end on the fixed orbit station and at the receiving end from the station back on earth.

These signals could be read only in a small area around transmitter and receiver—and the privacy of a telegram sent that way would be as safe as a thrice-sealed letter.

Wouldn't Interfere

With high frequencies, also, one could give such signals several hundred modulations which would not interfere with one another and would, in turn, serve as carrier signals for longer wave modulations.

So, with one and the same signal, it would be possible to send 10,000 telegrams, television programs and telephone conversations at one and the same time.

It should be emphasized that things are in that state of weightlessness, referred to earlier, aboard this fixed orbit station of ours.

It should be possible, therefore, to set up a lightly constructed, but giant, telescope on the station and clear up the question of whether our neighboring suns also have planetary systems of their own.

Or, it could bring the earth to within clear viewing distance of the eye—and we would even know what goes on behind the Iron Curtain.

California Governor Out To Sell 'Responsible Liberalism'

Editor's note: At opposite ends of the country, in the nation's two most populous states, a couple of freshman governors — Republican Nelson A. Rockefeller of New York and Democrat Edmund G. Brown of California—have plunged into their jobs in a manner that has increased their prominence in 1960 presidential speculation. In two dispatches the United Press International bureau chiefs of the two state capitals compare the men and their programs.

By JAMES C. ANDERSON

Sacramento, Calif. – (UPI) – Democratic Gov. Edmund G. Brown is out to sell the nation's second most populous state, its legislature and maybe even the nation's voters on his program for "responsible liberalism."

In only two months in office, the 53-year-old chief executive of California has proposed a detailed blueprint for carrying out his political philosophy that "a liberal program must be a responsible one, a reasonable, rational, realistic program."

Like another freshman governor, Republican Nelson Rockefeller of New York, Brown has proposed a hefty increase in state taxes to finance his program and to offset an inherited deficit.

Would Gain Stature

If the legislature during the next four months embraces all or even a major part of his program, Brown stands to gain stature throughout the nation – and could be a man to be reckoned with in 1960 when the Democrats choose a national ticket.

Brown already stands near the top of the list in his party because of his victory by more than a million votes over San. William F. Knowland in last November's election.

The new governor says he intends to serve out the full four years of his term, which would rule him out as a presidential contender next year. But many of his so - called "kitchen cabinet," his staff of young and dedicated advisors, are organizing a big buildup for the genial Irish Catholic attorney.

Levy on Tobacco

Brown's tax proposals include a new levy on tobacco, a severance tax on petroleum, higher bank and corporation taxes, boosts in horse racing and beer levies and increases for upper-bracket income tax payers.

An indication that Brown is very well aware that Republican Rockefeller may be a presidential contender in a recent speech by the California governor.

"I assure you the tax program I have outlined is as fair and equitable as it can be," Brown said. "Unlike the 275 million-dollar 'soak-the-poor' program proposed by Governor Rockefeller in New York, our program treats the low income taxpayer fairly."

Brown again mentioned Rockefeller in a recent news conference when he said several people had suggested that the New York Governor wanted to increase the number of horse racing days in New York as a means of raising additional state revenues.

Serious Mistake

"Gambling is no answer to our tax program in California or any other place," Brown said. "Any state that thinks it can meet its revenue needs by taking an easy road is making a very, very serious mistake."

Brown's program embraces far more than a proposal to increase state taxes by 256 million dollars a year. Brown wants and has proposed to the legislature:

Creation of a fair employment practices commission; a new agency called the consumer counsel to "protect the consumers' interests;" an economic development agency to encourage new industry to come to California and a labor union reform program.

Labor Benefits

He also wants to increase labor benefits, including unemployment insurance and workmen's compensation; liberalize the medical care program for the disabled; enact a $1.25 an hour minimum wage for all workers and reform election practices.

Brown also has proposed specific programs to control smog and develop the state's water resources, and he advocates stiffer traffic laws to cut down on the toll of 3,510 persons killed and 135,000 injured on the state highways last year.

Right now, Brown is in the honeymoon period of his four - year administration. Even though both houses of the legislature are controlled by his own party, the big question is what will happen to his legislative program before the Legislature adjourns June 19.

Tomorrow –
Nelson A. Rockefeller

Medford Man Wins In National Contest

Peter Trimm, 1428 Crown ave., was a recent winner in a contest sponsored by California Spray Chemical company, manufacturer of Ortho products.

Trimm received an automatic dishwasher and clothes dryer.

The local man, distributor of Mid-Coast farm and garden supplies, attended a recent regional sales meeting at Sun Valley, Idaho.

At the meeting, he was judged a winner due to questions he had given to a set of answers distributed regarding information told at the convention. His name, as district winner, was sent to the national meeting of the group, where he won the major appliances.

The prizes are being installed locally by Hal K. Appliance.

Local Woman Wins Bond in Contest

Mrs. Herbert F. Rivers, 2719 Jacksonville highway, was one of 408 winners in the Remington Rand Electric shaver contest, it was announced recently.

Mrs. Rivers won a $100 U.S. savings bonds in the contest. First prize was an investment portfolio of $25,000.

WE PRESIDENT DIES

New York – (UPI) – Arthur B. Goetze, 57, president of the Western Electric Co., died of a heart attack Monday at the company's offices.

Quotes From the News

By UNITED PRESS INTERNATIONAL

Nicosia, Cyprus–Col. George Grivas, leader of the Greek underground on Cyprus, reporting he would leave the island now that an agreement for an independent Cyprus had been reached:

"I have done my duty."

Lafayette, Ind.–Atomic Energy Commissioner Willard F. Libby, telling of the dangers of radioactive fallout over thousands of square miles following a nuclear attack:

"It would be hazardous to life to stay out in the open for more than an hour."

Washington–AFL-CIO President George Meany, calling on Congress to vote a bold new construction program for homes, schools, roads, airports and hospitals despite claims such a program would be inflationary:

"The real danger of inflation would come if we continue to neglect the nation's housing needs and permit present shortages to become aggravated."

New York–Sen. John L. McClellan (D.-Ark.) charging that the instability of the U.S. Supreme court threatens our republic:

"More than a dozen decisions warrant severest criticism."

New York–Capt. Andrew MacKellar, skipper of the liner Queen Mary, telling of the Atlantic storm which delayed his ship 17 hours and did minor damage to some of the superstructure:

"We got off very light. No crockery was broken."

Southampton, England–Lady Nora Docker, commenting on the theft of $280,000 in jewelry from a case hidden underneath the rug of their Rolls-Royce for safekeeping while she dined with Sir Bernard:

"We took the jewelry with us because we thought that it would be safer than leaving it home."

The census figures show that there are 105 to 106 males born every year compared with 100 females.

The highest lighthouse on the Pacific coast of the U.S. is at Cape Mendocino, Calif. It rises 422 feet above sea level.