

Each Unmanned Rocket Flight Another Step To Appearance of Man in Space

Editor's note: America's Pioneer IV Satellite, out in the vastness of the universe in an orbital rendezvous around the sun with Russia's Lark, is carrying mankind a big step forward in the conquest of space. In all probability, it means that "many of us will live to see living accommodations for people on the moon." That's not the statement of a science fiction writer but of one of the world's best-informed men on rocketry and missiles — Dr. Hermann Oberth, "the father of modern rocketry" and a key man in development of the U.S. missile-satellite program.

After World War II and until last year when he retired, Dr. Oberth was supervisory physicist at the Army Ballistic Missile Agency, Huntsville, Ala. Now living in retirement near Nuernberg, Germany, Dr. Oberth helped in development of Nazi Germany's dreaded "V" rockets of the last war, was a co-worker and one-time teacher of Dr. Werner von Braun, and a pioneer in the development of the U.S. missile-satellite program. This is the first of two dispatches in which he analyzes the meaning of the latest strides made in efforts to send man exploring into space.

By DR. HERMANN OBERTH
Written for UPI

Nuernberg, Germany—(UPI)—Every unmanned rocket flight is a step in the right direction—the appearance of men in space.

At Huntsville, Ala., where I worked with the title of supervisory physicist, I headed an office whose main duty was to investigate what we could expect in rocket techniques in the next decade.

Some of what we learned is classified. Insofar as I can do so without violating security regulations, I propose to discuss in this article some results of our research. On the basis of our research in this field we made proposals to those who would be working on rocket development in the future.

Let me say at the outset that anyone who thinks human pilots aboard space ships are going to be worthless ballast is dead wrong.

Human Beings Irreplaceable

It is, rather, the other way 'round—automatons cannot replace human beings.

They certainly can't do so when it comes to the correction of directional errors—or if it comes, as it could, to combat with enemy satellites, long-range missiles or anti-missile missiles.

No automaton can do anything its designer has not thought of in advance. Furthermore, the more versatile an automaton is, the more complex and subject to trouble it is.

Set against those facts, this one: The human brain is universally inventive in unforeseen situations.

Unmanned rockets were developed because among other things we wanted to know what dangers future space pilots might face. These rockets have taught us that there are

no dangers we cannot overcome and that is exactly what we had to know.

Carry Delicate Instruments

Let's take a look, first, at some of the things the unmanned rockets have made known to us. Unmanned rockets—like the German V-2 of World War II, the Corporal and the Viking—long-range missiles under test conditions, the earth satellites and the three attempted lunar shots, were all equipped with a variety of delicate instruments.

These instruments were, in the first instance, set up to record conditions inside the rocket itself, such as acceleration, propellant consumption and the like—and to radio the information back to earth.

In this way we have appreciably bettered our knowledge while radio research, high altitude balloons, jet and rocket planes also came to our aid by providing us with valuable additional knowledge.

These, then, are some of the things now known about the conditions humans will encounter in space.

Cosmic rays are most dangerous between 500 and 900 miles up, a factor which must be taken into account.

Meteorites are another problem and about them, we now have the following information.

The largest are the ones most seldom encountered. The odds on a collision with a meteorite weighing one gram—15 grains—are that a satellite the size of a football could orbit for 100,000 years before it hit one.

Meteorites weighing one milligram (1-65th of a grain) would hit the satellite at about the rate of one per cent and those of 1-100th of a milligram—size at the rate of about once in ten years.

The smaller they get, thought, the tougher the odds. There are dust grains which would hit the sides of the satellite with sufficient force to affect a transmitter and these grains, on the order of a thousandth of a millimeter (roughly 1,250th of an inch) would be hitting on an average of four times a day. They would put dents in the walls about 1-300th of a millimeter deep.

There does not seem to be any need to take any special protective measures against these tiny grains, but the bigger ones pose something of a problem.

Double Walls One Answer

It would seem that the way

EAGLE POINT Family Returns to U.S.

By LAURA A. McFALL
Eagle Point—Mr. and Mrs. William Carlson and son, William Craig, returned recently from Southport Air Force base, England, where he has been stationed for the past three years. Mrs. Carlson has been in England the past two

years. She is the daughter of Everett Skeeters, Phoenix. William is the son of Mr. and Mrs. Gus Carlson, Eagle Point. William is to report to duty at Glasgow, Mont., on March 25.

A surprise birthday party was given C. E. Smith and grandson, John Mee, Medford, at the Smith home recently.

Those attending and furnishing the potluck dinner were Mr. and Mrs. E. C. Tams and son, Robert; Mr. and Mrs. Warren Mee and Teresa, Ronald and John; Mr. and Mrs. Tom Tams, Debra and Vickie; Mr. and Mrs. Jack Sanders and Carl; Mr. and Mrs. Owen Kunkel and daughters, and the guest of honor Mr. and Mrs. C. E. Smith, Agate rd., Eagle Point.

Mr. and Mrs. C. M. Cartwright recently returned from Sacred Heart hospital as medical patients.

Mayor J. Ed Putnam returned Feb. 27 from Medford Osteopathic hospital after being a patient for a week. Putnam fell from the end of his cold storage plant in Eagle Point while repairing a leak in the roof.

Louisa's Beauty shop opened in Eagle Point at the corner of First and A sts. March 3. Mrs. Lloyd E. Breeding will operate the shop. She graduated from the Medford Beauty school in 1951.

Mr. and Mrs. W. M. Huntington motored to San Diego, and Yuma, Ariz., returning home through Death Valley recently. While in southern California they visited Mr. and Mrs. E. J. Grow of Los Angeles, Calif.

The neighborhood birthday club recently honored the birthday of Mrs. Mattie Brown and Mrs. Raymond Robertson at the home of Mrs. J. N. Fortin. Mrs. Lottie VanSoy was cohostess.

Those attending were the honored guests, Mrs. Hazel Atkins, Mrs. Ruby Stowell, Mrs. Jessie Tyner, Miss Yetta Olsen, Mrs. Ora Mevig, Mrs. Amy Brown, Mrs. Donna Ashpole, Mrs. Lester McFall, Mrs. Christine Linder, Mrs. George McLean, and the hostesses.

The drivers examiner of Medford will be in Eagle Point on Tuesday, March 10, from 9 a.m. until 4 p.m. at the city library for renewal of licenses and driving tests.

A blue and gold dinner was held Feb. 23 for Pack 48 at the grade school cafeteria. The Boy Scouts of Troop 48 of Eagle Point were invited guests. The following Cub Scouts received awards:

Bobbie Westfall, a new member received his bobcat pin. Jamie Hanscom received a silver arrow; David McConnell, wolf badge; Terry Kerr, one gold and two silver arrows; Richie Trimble, wolf badge; John Clayton, wolf badge and a gold arrow; Jeff Serewalt, silver arrow; John Carlson, silver arrow; and Leslie Krambeal, wolf badge. They were presented by the Rev. Joseph Munshaw, Cub Scoutmaster is Ted Hoffman.

The following Boy Scouts were presented awards: Ed Hanscom, a scholarship, music, camping, and soil conservation awards; Joe Andrews, scholarship, camping, cooking, fishing and hiking; Jim Ackerman, animal husbandry, horsemanship, scholarship, music, fishing, camping, cooking and soil conservation; Joe Munshaw, soil conservation, scholarship award; Victor Ecleston, soil conservation award; Don Hanscom, soil conservation; Richard Short, soil conservation; Art Harbison, soil conservation; Greg Hooper, soil conservation.

The awards were presented by Mike Kaiser, Eagle Point Lions club, and David Harbison, Eagle Point Jaycees. Scoutmaster is Lester Marshall of Lake Creek. Fred Bruegger, Lion member, made the arrangements for the potluck dinner with the assistance of the Eagle Point Jaycees and Lady Lions. A total of 150 attended.

The Home Economics club of Eagle Point Grange met at the home of Mrs. Robert Bitterling with Mrs. Edwin Hayes as cohostesses. Following the dessert luncheon, the business meeting was called to order by the chairman, Mrs. Jake D. Brown. There were 22 members present and two visitors, Mrs. Fred A. Canterbury and Mrs. Youree.

Final plans were made for the sausage supper that was served at the Grange hall Feb. 28. Reports were given by committee women on fancy work, aprons and other projects that are being carried on at the present time.

The next meeting to be held at the home of Mrs. Lenn Hickman with Mrs. Lottie Cingcade as cohostess on March 25. Roll call for the meeting will be planting suggestions for April.

Aircraft Tires Made Radiation Proof

Brecksville, Ohio—(Science Service)—Radiation-proof tires have been developed for use on future nuclear-powered aircraft. The tires are treated with anti-rads—chemical materials added to rubber stocks before vulcanization to improve rubber's resistance to radiation damage. Simulated landing tests have shown that irradiated tires protected with anti-rads rolled twice as many miles before failure than did irradiated tires without anti-rads, reports B. F. Goodrich company research center here.

MAIL TRIBUNE, Medford, Oregon, Monday, March 9, 1959 7

RETIREE NEWSMAN DIES
Twenty-nine Palms, Calif. — (UPI) — Funeral services will be held today for Thomas Richard (Speed) Evans, 65, veteran newsman who worked on the New York Times and was news editor of the San Diego (Calif.) Tribune at his retirement in 1954. He died Friday night.

Matches for Khrushchev
Chicago — (UPI) — The Anti-Communist League of America, Inc., has sent a carton of safety matches to Soviet Premier Nikita Khrushchev to inaugurate its "strike for freedom" campaign.

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