

Why Do Astronauts Take Those Risks?

Some of the people I meet have trouble understanding why anyone would voluntarily be blasted off into the unknown reaches of space at more than 17,000 miles an hour.

When they ask me about it, I am tempted to reply that it's because, in one very important sense, I have never grown up.

That may sound flippant, but I don't mean to be. Although just 40, I feel I still have a faint remnant of the most precious possession of childhood — curiosity. I share with my own children, Lynn and Dave, a consummate interest in the things around us, and that curiosity isn't restricted by any arbitrary boundaries, whether it be the earth's atmosphere or the vastness of space, writes John Glenn, in *NEWSWEEK*.

I believe if everyone retained a child's curiosity about ideas as well as things — all mankind would benefit. Most of the concepts which surround us in our

which we accept as commonplace, were the products of research and development efforts that were insignificant compared to the massive programs under way today.

We live in the most exciting age in the history of man, and if we use our opportunity wisely, another decade of progress will produce a civilization so far beyond our present experience that it cannot yet be conceived in detail, even by the most visionary mind.

The period in which we live has been called the age of science and technology, and it is the age of imagination and inquiry — of unrestrained curiosity which is leading mankind toward vital discoveries, many of them as yet unforeseen.

Perpetual and intense curiosity is a boon not only in technical and scientific matters. Progress in such areas is matched by an equal progress in social, governmental, intellectual, and human affairs. If we are properly motivated, the concepts which surround us in our

Frank curiosity in all these areas can result in broad progress for all mankind. A child's tremendous interest and curiosity about the world around him results in a rate of learning that is astounding. There is no reason why this should not be when we become adults.

Curiosity is not limited to technical fields. It is more a way of life. I flew alone in Friendship 7, but thousands of brilliant, imaginative, and curious minds developed the knowledge and the other thousands of skilled hands and able minds employed it, to put me there.

In space, one has the inescapable impression that there is a virgin area of the universe in which civilized man, for the first time, has the opportunity to learn and grow without the influence of ancient prejudices.

Yet, untrained with acquired fears, hate, greed, or prejudice. In space, as yet, there is only one enemy — space itself. It is one enemy hostile to all men and all nations, and one which will challenge all men's greatest abilities.

President Kennedy put it well when he said: "There is no conflict in outer space as yet. Its hazards are hostile to us all. Its conquest deserves the best of all mankind, and its opportunity for peaceful cooperation may never come again."

To that I would add only this: The human race may never again have a similar chance to demonstrate that we can be the kind of people God intended us to be.

PROOF-READER GOES TO JAIL

A typesetter and a proofreader in Communist East Germany were out of their jobs and in jail last month. The charge: A typographical error.

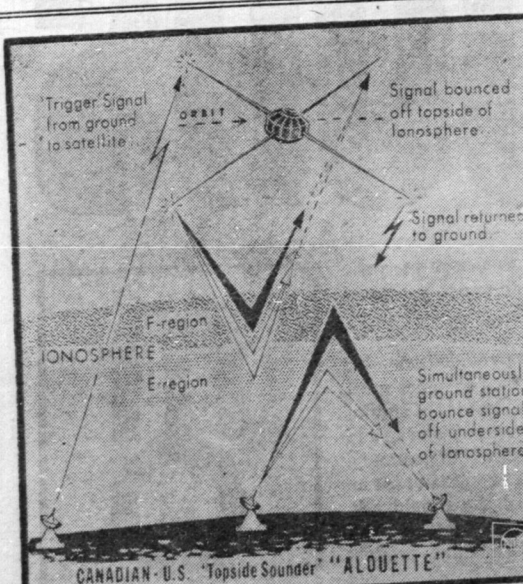
It occurred in a front-page reference to Communist boss Walter Ulbricht in the newspaper *Neue Zeit*. Ulbricht has the laborious title of first secretary of the Central Committee of the Socialist Unity Party of Germany, customarily abbreviated, in German, to the ZK of the SED.

What put the anonymous typesetter and proofreader behind bars was the transposition of ZK to KZ. As every German knows, KZ stands for Konzentrationslager, or concentration camp.

Ulbricht's title came out: "First secretary of the concentration camp of the Socialist Unity (Communist) Party."

Question: Was it really a typo?

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TOP-SIDE SOUNDER — Canada joined the United States and the Soviet Union in launching the first space vehicle into orbit. The launch was conducted at Vandenberg Air Force Base, Calif. Described as a "top-side sounder," the Alouette is designed to investigate upper levels of the ionosphere and space noise that disrupts long-range telecommunications.



FILES SUIT — Singing star Judy Garland filed suit in Las Vegas, Nev., to divorce her third husband, producer Sid Luft, who is right, on charges of "extreme cruelty, mental in nature."

Women Have Stolen Our Pants Collars, Hats, Now Our Braces

So many items of male attire have been stolen by women that only one single dress accessory remains which is still unobtainable male.

Which one? The back collar stud. Our trousers were stolen years ago. Tailored suits became an intrinsic part of the male wardrobe, and the Bowler hat has been so widely adopted as to become practically neutral.

A few years ago a Parisian couturier offset strapless evening gowns on his models with shirtless wing-collars and neckties around their swan necks. Our shirts, our sweaters, our slacks (if that is the name for them) the adoption have been taken over by women.

This week a fashion flash reveals that a new Parisian gimmick is the adoption of men's braces as decoration on women's leisure clothes.

Sweeping into popularity is the fad for "relaxed" stretch-pants — and a new feature aimed at keeping tight trousers in the correct position is the adoption of the elasticated strap beneath the instep. All this tension, coupled with the formidable pull of a pair of brasses asserting its claim in a diametrically opposed direction offers menacing consequences.

If the failure takes place in the boot-strap area then the sudden release of tension offers the lady a fearful jolt in the fork. Whilst if the failure occurs within the braces it is likely the lady will find her trousers down round her ankles like they've been catapulted.

Also, even the flimsiest, abridest pair of those esoteric creations which women laughingly describe as "panties" has been elastic designed to retain them at the waistline. Considerable aplomb is required for any lady who wears such a device, for the slightest slip of the diaphragm and she will find it smartly into her handbag.

To the more practically minded, the immediate question is concerned with how the braces will male chest the question never arises, but when a woman wears braces do they... well... go

Prosperity Depends On Threat Of War

America is getting to depend on its war machine... California, for example, receives \$100 million a week from its defense orders, and California (by coincidence?) is the state where the most money is donated for jingoism. The people on the West Coast have convinced themselves that a Communist is under every bed and the missiles will fly next month.

We are pleased in Colorado that the Martin Co. is ready to move into the aerospace program which should absorb technical personnel in huge numbers in a peace-time effort.

What about Lowry Air Force Base? Our metro area will not readily yield to a reduction in the 13,000 force there. With their families, these Air Force men mean a community of 40,000 people. That's a weekly purchasing power of one million dollars.

Economists convinced former President Eisenhower that we can have prosperity without having a program that will wipe out Russia 25 times.

But the transition period might prove bothersome. No one likes to make adjustments. Millions would rather whip themselves into a frenzy and keep the cold war "on the brink."

Some Reflections On "My Fair Lady"

My Fair Lady closed in New York Sept. 29. I would have preferred to see the Empire State Building go.

I liked to think of the musical as a permanent New York fixture.

Early during its New York run, My Fair Lady was more than an institution; it was a sensation. People who had institutions.

The fact, and those who had seen it twice were unimpressed; a contrary snobism appeared: "I've never been to Europe or My Fair Lady."

In those days you could get a seat to My Fair Lady by acquiring tickets long in advance, by knowing the right person, or by paying outrageous prices. In those days you could get a seat to My Fair Lady by acquiring tickets long in advance, by knowing the right person, or by paying outrageous prices.

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Modern Etiquette

By Anne Ashley

Q. Is it correct to eat shortcake with the fork, or should a spoon be used?

A. The fork should be used.

Q. Isn't it all right, when introducing a man to a woman, merely to say, "Miss Collins, Mr. Hartley?"

A. Yes — with a slight pause between the names.

Q. Is it all right to write thank-you notes on the typewriter?

A. Although most opinionated notes are now generally accepted, it is still better to write thank-you notes by hand.

Q. Is it correct for a divorcee to continue wearing her wedding ring — since there is no marriage anymore and she wishes to continue wearing her engagement ring, she wears it on other than her third finger, left hand.

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Scientists Going Back To Nature

Scientists are recognizing more and more that nature is the best guide to mechanical perfection. And so, in 1960, a new science was born—Bionics.

This is the art of applying the knowledge of how living systems and methods work to help solve the complex engineering problems of today.

Bionics is being encouraged to work hand in glove.

In only two years, progress has been fantastic.

For instance, discovery of how the eye of a certain beetle reacts to changing lights has led to the drawing up of a ground-speed indicator for aircraft, which operates on just two of the hundreds of facets composing one beetle's eye.

Then, from the stalk-like eye of the horse-shoe crab, an electronic model has been constructed in the United States which augurs contrasts and is likely to be applied to target recognition.

Yes, the five senses provided by nature are really biological transducers—or translators—although, of course, infinitely more sensitive than anything engineers have yet been able to make.

Valuable work on optical illusions is today being done by Donald McKay at University College, North Staffordshire, while N. S. Sutherland of Oxford University and J. Z. Young and others at University College, London, are primarily concerned at the moment with the vision of the octopus.

In America a synthetic retina has just been designed which duplicates the known functions of a frog's eye, the structure of which is much simpler than man's. When completed it will measure thirty-five inches across.

But it is the smallness and compactness of the examples from life which is exciting most. One species of sand flies can direct itself to the sea in the basis of the moon's position—performing by instinct almost unbelievably difficult navigational computations.

Even the tiniest man-made guidance device weighs about five pounds.

Smaller and smaller still is the demand, and it is here that scientists can learn most from living creatures.

Bats detect obstacles, as well as their prey, while fitting through the air at tremendous speeds in the dark. They do not see light, but sound waves—quite inaudible to humans—emanating from the larynx in some species, and from the nose in others.

On my October day, 27 familiar faces, two new ones (friends of scalpers), and mine showed up for the night performance. Now wearing suits and dresses instead of our morning attire of

After all, artificial kidneys, lungs, hearts and hearing have already been employed for varying periods of time to help a patient's illness or trauma. Just imagine it... electronic amplifiers and recorders small enough to be carried around in the pocket and minute transmitters, which have been swallowed like a pill or injected, which would at once tell the doctor when and where he or she was not "ticking over" properly!

There is no doubt information from such probes would greatly help doctors, who dream of regional health storage centres, containing the millions of health records.

As Gordon Park, of System Research Limited, Richmond, Surrey, pointed out recently: "Bionics is a science which has arisen because men realized that a man-made environment must have a more biological structure."

For instance, the B17 airplane of 1940 had only 2,000 electronic parts. Twenty years

later, the B58 has 97,000. Reduction in size has thus become of paramount importance. And here economical nature knows all the answers.

In other words, machines are tending more and more to resemble living systems. The development of high-speed, high-capacity electronic computers — "mechanical brains" — means providing something almost as intricate as a network of living nerve cells!

Of course, the marvelous complexity of the human brain is quite beyond compare, but scientists have been able to learn much from just a few of its myriad functions, writes Basil Bailey in "Tit-Bits".

One by-product is the construction of the extraordinary "maze-runner." This mechanism, which has a rodent will, learns much from a system of "rewards and punishments."

Although it cannot feel pain in the physical sense, it will react violently to electric shocks and take good care not to make the same mistake twice!

The nervous system of animals is, indeed, actually a digital computer... with electrical impulses, or nerve fibres, reacting to information received through the senses.

Thus, research into how various creatures collect, construct and store information is important in the building of "thinking machines" without brains.

Scientists, for example, are today studying the transducers in the ear, which act as receivers and also appear to select what shall be relayed to the brain.

Then, at the U.S. Office of Naval Research, another group of learned men are trying to understand how and why some birds and animals migrate over huge distances with astonishing accuracy.

The answer, they believe, will lead to the construction of better, and much smaller mechanical navigation and detection devices.

But it is in the field of medical electronics that the most startling results may well be obtained.

The body accomplishes many of its functions through the joint interaction of millions of cellular units. Associated with these are invariably existing an electrical signal, or something extraordinarily like it, which can be converted into electricity by means of transducers.

Electronic probes, tiny enough to be injected into the body, have been used to stimulate the heart. These minute broadcasting stations also transmit information, including temperature and pressures to receivers outside the body.

It is hoped that one day self-powered transducers may be swallowed. These would regulate control or supplement the action of physical organs which have become defective. Even now, they could have a fairly wide range of more than five years.

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