

WHEN THE DREAM DIES - Complete Novel

# Amazing

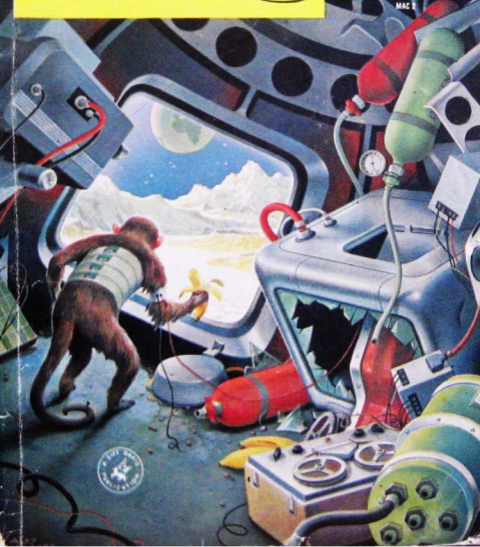
Fact and Science Fiction

stories

FEBRUARY

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# Amazing

Fact and Science Fiction *Stories*

FEBRUARY, 1961 Vol. 35, No. 2

REG. U. S. PAT. OFF.

"FIRST IN SCIENCE FICTION SINCE 1926"

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Covers: ALEX SCHOMBURG

Illustrating *What Need of Man?*

Publisher

MICHAEL MICHAELSON

Editorial Director

NORMAN M. LOBSENZ

Editor

CELE GOLDSMITH

ZIFF-DAVIS PUBLISHING Co.,  
One Park Avenue, New  
York 16, New York. William  
Ziff, President; W. Bradford  
Briggs, Executive Vice Pres-  
ident; Michael Michelson,  
Vice President and Circula-  
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# WHAT NEED of MAN?

By HAROLD CALIN

Illustrated by SUMMERS

*Bannister was a rocket scientist. He started with the premise of testing man's reaction to space probes under actual conditions; but now he was just testing space probes—and man was a necessary evil to contend with.*

WHEN you are out in a clear night in summer, the sky looks very warm and friendly. The moon is a big pleasant place where it may not be so humid as where you are, and it is lighter than anything you've ever seen. That's the way it is in summer. You never think about space being "out there". It's all one big wonderful thing, and you can never really fall off, or have anything bad happen to you. There is just that much more to see. You lie on the grass and look at the sky long enough and you fall into sort of a detached mood. It's suddenly as if you're looking down at the sky and you're lying on a ceiling by some reverse process of gravitation, and everything is absolutely pleasant.

In winter it's quite another thing, of course. That's because



the sky never looks warm. In winter, if you are in a cold climate, the sky doesn't appear at all friendly. It's beautiful, mind you, but never friendly. That is when you see it as it really is. Summer has a way of making it look friendly. The way you see it on a winter night is only the merest idea of what it is really like. That's why I can't feel too bad about the monkey. You see, it might have been a man, maybe me. I've been out there, too.

There are two types of classified government information. One is the type that is really classified because it is concerned with efforts and events that are of true importance and go beyond public evaluation. Occasional unauthorized reports on this type of information, within the scope that I knew it at least, are written off as unidentified flying objects or such. The second type of classified information is the kind that somehow always gets into the newspapers all over the world . . . like the X-15, and Project Dyna-Soar . . . and Project Argus.

Project Argus had as its basis theory that was proven completely unsound six years ago. It was proven unsound by Dennis Lynds. He got killed doing it. It had to do with return vehicles from capsules traveling as escape velocity, being oriented

and controlled completely by telemetering devices. It didn't work. This time, the monkey was used for newspaper consumption. I'm sure Bannister would have preferred it if the monkey had been killed on contact. It would have been simpler that way. No mass hysteria about torturing a poor, ignorant beast. A simple scientific sacrifice, already dead upon announcement, would have been a *fait accompli*, so to speak, and nothing could overshadow the success of Project Argus.

But Project Argus was a failure. Maybe someday you'll understand why.

Because of the monkey? Possibly. You see, I flew the second shot after Lynds got killed. After that, came the hearing, and after that no men flew in Bannister's ships anymore. They proved Lynds nuts, and got rid of me, but nobody would try it, even with manual controls, where there is no atmosphere.

When you're putting down after a maximum velocity flight, you feed a set of landing coordinates into the computer, and you wait for the computer to punch out a landing configuration and the controls set themselves and lock into pattern. Then you just sit there. I haven't yet met a pilot who didn't begin to sweat at that moment, and sweat all the way down. We

weren't geared for that kind of flying. We still aren't, for that matter. We had always done it ourselves, (even on instruments, we interpreted their meaning to the controls ourselves) and we didn't like it. We had good reason. The telemetry circuits were no good. That's a bad part of a truly classified operation: they don't have to be too careful, there aren't any voters to offend. About the circuits, sometimes they worked, sometimes not. That was the way it went. They wouldn't put manual controls in for us.

It wasn't that they regarded man with too little faith, and electronic equipment with too much. They just didn't regard man at all. They looked upon scientific reason and technology as completely infallible. Nothing is infallible. Not their controls, not their vehicles, and not their blasted egos.

Lynds was assigned the first flight at escape velocity. They could not be dissuaded from the belief that at ultimate speed, a pilot operating manual controls was completely ineffectual. Like kids that have to run electric trains all by themselves, playing God with a transformer. That was when I asked them why bother with a pilot altogether. They talked about the whole point being a test of man's abil-

ity to survive; they'd deal with control in proper order. They didn't believe it, and neither did we. We all got very peculiar feelings about the whole business after that. The position on controls was made pretty final by Bannister.

"There will be no manuals in my ships," he said. "It would negate the primary purpose of this project. We must ascertain the successful completion of escape and return by completely automatic operation."

"How about emergency controls?" I asked. "With a switch-off from automatic if they should fail."

"They will not fail. Any manual controls would be inoperative by the pilot in any case. No more questions."

I feel the way I do about the monkey, Argus, because, in a way, we all quit about that time. You don't like having spent your life in a rather devoted way with purposes and all that, and then being placed in the hands of a collection of technologists like just so many white mice . . . or monkeys, if you will. Lynds, of course, had little choice. The project was cleared and the assignment set. He hated it well enough, I know, but it was his place to perform the only way one does.

It ended the way we knew it would. I heard it all. It wasn't

gruesome, as you might imagine. I spoke with Lynds the whole time. It was sort of a resigned horror. The initial countdown went off without a hitch and the hissing of the escape valves on the carrier rocket changed to a sound that hammered the sky apart as it lifted off the pad.

"Well, she's off," somebody said.

"Let's don't count chickens," Bannister said tautly. Wellington G. Bannister worked for the Germans on V-2s. He is the chief executive of technology in the section to which we were assigned at that time. He is the world's leading expert on exotic fuel rocket projectile systems, rocket design, and a brilliant electronic engineer as well. High enough subordinates call him Wellie. Pilots always called him Professor Bannister. I issued the report that was read in closed session in London in which I accused Bannister of murdering Lynds. That's how come I'm here now. I was cashiered out, just short of a general court martial. That's one of the nice parts about truly classified work. They can't make you out an idiot in public. Living on a boat in the Mediterranean is far nicer than looking up at the earth through a porthole in a smashed up ship on the moon, you must admit.

Well, Bannister could have well counted chickens on that

launching. The first, second and third stages fired off perfectly, and within fourteen minutes the capsule detached into orbit just under escape velocity. The orbit was enormously far out. They let Lynds complete a single orbit, then fired the capsule's rockets. He ran off tangential to orbit at escape velocity on a pattern that would probably run in a straight path to infinity. In fact, the capsule is probably still on its way, and as I said, it's six years now. After four minutes, the return vehicle was activated and as it broke away from the capsule, Lynds blacked out for twenty seconds. That was the only time I was out of direct contact with him after he went into orbit.

"Now do you understand about the manual controls?" Bannister said.

"He'll come out of it in less than a minute."

"One can never be sure."

"There's still no reason why you can't use duplicate control systems."

"With a switch-off on the automatic, if they fail?"

"Yes. If for nothing more than to give a man a chance to save his own neck."

"They won't fail."

"The simplest things fail, Bannister. Campbell was killed in a far less elaborate way."

He looked at me. "Campbell?"

Oh, yes. The landing over the reef. I had nothing to do with that."

"You designed the power shut-off that failed."

"Improper servicing. A simple mechanical failure."

"Or the inability of a mechanism to compensate. The wind shifted after computer coordination. A pilot can feel it. Your instruments can't. There was no failure, there. The shut-off worked perfectly and Campbell was killed because of it."

I watched the tracking screen, listened to the high keening noises coming from the receivers. The computers clicked rapidly, feeding out triangulated data on the positions of the escape vehicle and the capsule. The capsule had been diverted from its path slightly by reaction to the vehicle's ejection. Its speed, however, was increasing as it moved farther out. The vehicle with Lynds was in a path parabolic to the capsule, almost like the start of an orbit, but at a fantastic distance. He was, of course, traveling at escape velocity or better, and you do not orbit at escape velocity.

"Harry. Harry, how long was I out?" We heard Lynds' voice come alive suddenly through the crackling static.

"Hello, Dennis. Listen to me. How are you?"

"I'm fine, Harry. What's wrong? How long was I out?"

"Nothing is wrong. You were out less than half a minute. The ejection gear worked perfectly."

"That's good." The tension left his voice and he settled back to a checking and rechecking of instruments, reactions and what he would see. They activated the scanner. The transmitting equipment brought us a view that was little more than a spotty blackness. But I think the equipment was not working properly. You see, what Lynds said did not quite match what we saw. They later used the recording of his voice together with an affidavit sworn to by a technician that our receiver was operating perfectly, as evidence in my hearing. They proved, in their own way, that Lynds had suffered continual delirium after blacking out. The speed, they said, was the cause. It became known as Danger V. Nobody ever bothered to explain why I never encountered the phenomenon of Danger V. It became official record, and my experience was the deviant. It was Bannister's alibi.

We watched the spotty blackness on the screen and listened to Lynds.

"Harry, I can see it all pretty well now," he began. "There's a slight spin on this bomb so it comes and goes. About sixty second revolutions. Nice and slow.



Terrribly nauseating to look at. But I'm feeling fine now, better than fine. Give me a stick and I'll move the Earth. Who was it said that? Clever fellow. You say I was out about half a minute. That makes it about three more minutes until Bannister's controls are supposed to bring me back."

"Yes, Dennis, but what do you see? Do you hear me? What do you see?"

"Let me tell you something, Harry," he said. "They aren't going to work. They're not wrecked or anything. I just know they aren't worth sweet damn all. Like when Campbell had it. He knew it was going to happen. You can trust the machines just so long. After that, you're batty to lay anything on them at all. But can you see the screen? There it is again. We're turning into view. I can see the earth now. The whole of it."

There was silence then. We looked at the screen but saw only the spotty blackness. I looked from the screen to the speaker overhead, then back at the screen. I looked about the control room. Everyone was doing his work. The instruments all were working. The computers were clicking and nobody looked particularly alarmed, except one other pilot who was there too, Forrest. Maybe Forrest and I pictured ourselves in Lynds'

place. Maybe we both had the same premonitions. Maybe we both held the same dislike and distrust of the rest of them. Maybe a lot of things, but one thing was sure. The papers would never get hold of this story, and because of that, Bannister and the rest of them didn't really care a hang about Lynds or me or Forrest or any of the others that might be up there.

It seemed an age passed until we heard Lynds again. The tape later showed it was no more than half a minute. "Bannister, can you hear me?" he said suddenly. "Bannister, do you know what it feels like to be lied into a barrel and tossed over Victoria Falls? Do you? That's what it's like out here. Not that you care a damn. You'll never come up here, you're smart enough for that. Give me a paddle, Bannister, that's what I want. It's no more than a man in a barrel deserves. It's black out here, black and there's nothing to stand on. The earth looks like a flat circle of light and very big, but it doesn't make me feel any better. These buggies of yours won't be any use to anybody until you let the pilot do his own work. I crashed once, in a Gypsy Moth, with my controls all shot away by an overenthusiastic Russian fighter pilot near the Turkish border. Coming down, I felt the way I do now.

"Look at the instruments and remember, Bannister. My reflexes are perfect. There's nothing wrong with me. I could split rails with an axe now, if I had an axe. An axe or a paddle. Harry, I'm not getting back down in one piece. Somehow, I know it. Don't you let them do it to anyone else unless there are manual controls from the ejection onwards. Don't do it. This isn't just nosing into the Slot, over the reef between the town and the island and letting go then, and beginning to sweat. This is much more, Harry. This is bloody frightening. Are the three minutes up yet? My stomach is crawling at the thought of you pushing that button and nothing happening. Listen, Bannister, you're not getting me down, so forget any assurances. I hope they never let you put anybody else up here like this. It's black again. We've swung away."

Bannister looked at my eyes. "It's almost time," he said.

Eight seconds later they pushed the button. Perhaps it would have been better if nothing happened then. But that part worked. They got him out of the parabolic curve and headed back down. They fired reverse rockets that slowed him. They threw him into a broad equatorial orbit and let him ride. It took over an hour to be sure he was in orbit. I admired them

that, but began to hate them very much. They ascertained the orbit and began new calculations. Here was where he should have had the controls on in.

The escape vehicle was a small delta shaped craft. The wings, if one could call them that, spanned just under seven feet. They planned to bring him down in a pattern based on very orthodox principles of flight. There remained sufficient fuel for a twelve second burst of power. This would decelerate the craft to a point where it would drop from orbit and begin a descent. I later utilized the same pattern by letting down easy into the atmosphere after the power ran down and sort of bouncing off the upper layers several times to further decelerate and finally gliding down through it at about Mach V, decelerating rapidly then, almost too rapidly, and finally passing through the exosphere into the ionosphere. The true stratosphere begins between sixty and seventy miles up, and once you've passed through that level and not burnt up, the rest of it is with the pilot and his craft.

It takes hours. I came down gradually, approaching within striking distance west of Australia, then finally nosed in and took my chance on stretching it to one of the ten mile strips for

a powerless landing. I did it in Australia. But if I had not had orthodox controls, had I even gotten that far, I would have churned up a good part of the Coral Sea between Sydney and New Zealand. You see, you've got to feel your way down through all that. That's the better part of flying, the "feel" of it. Automatic controls don't possess that particular human element. And let me tell you, no matter what they call it now—space probing, astronautics or what have you—it's still flying. And it's still men that will have to do it, escape velocity or no. Like they talk about push-button wars, but they keep training infantry and basing grand strategy on the infantry penetration tactics all down through the history of warfare. They call Clausewitz obsolete today, but they still learn him very thoroughly. I once discussed it with Bannister. He didn't like Clausewitz. Perhaps because Clausewitz was a German before they became Nazis. Clausewitz would not look too kindly on a commander whose concern with a battle precluded his concern for his men. He valued men very highly. They were the greatest instrument then. They still are today. That's why I can't really make too much out of the monkey. I feel pretty rotten about him and all that. But the monkey up there means a man someplace is still down here.

Anyway, after Lynds completed six orbital revolutions, they began the deceleration and descent. The whole affair, as I said, was very solidly based on technical determinations of stresses, heat limits, patterns of glide, and Bannister's absolute conviction



that nothing would let go. The bitter part was that it let go just short of where Lynds might have made it. He was through the bad part of it, the primary and secondary decelerations, the stretches where you think if you don't fry from the heat, the ship will melt apart under you, and the buffeting in the upper levels when ionospheric resistance really starts to take hold. And believe me, the buffeting that you know about, when you approach Mach I in an after-burned machine, is a piece of cake to the buffeting at Mach V in a rocket when you hit the atmosphere,

any level of atmosphere. The meteorites that strike our atmosphere don't just burn up, we know that now. They also get knocked to bits. And they're solid iron.

Lynds was about seventy miles up, his velocity down to a point or two over Mach II, in level

shift in air current, or any of a million other circumstances that can occur. That all depends on louch. It's what makes some flyers live longer than others. It's like the drag on a fishing reel. You set it tight or loose according to the weight of the fish you're playing. When you reel in, the



flight heading east over the south Atlantic. From about that altitude, manual controls are essential, not just to make one feel better, but because you really need them. The automated controls did not have any tolerance. You don't understand, do you? Look, when one flies and wants to alter direction, one applies pressure to the control surfaces, altering their positions, redirecting the flow of air over the wings, the rudder and so forth. Now, in applying pressure, you occasionally have to ease up or perhaps press a bit more, as the case may be, to counteract turbulence,

line can't become too tight or it will snap, so you have the drag. It's really quite ingenious. It lets the fish pull out line as you reel in. It's the degree of tolerance that makes it work well as an instrument. In flying, the degree of tolerance, the compensating factor is in man's hands. In the atmosphere, it's too unpredictable for any other way.

Well, they calculated to set the dive brakes at twelve degrees at the point where Lynds was. Lynds saw it all.

"This is more like my cup of tea," he said at that point. "Har-

ry, the sky is a strange kind of purple black up here."

"They're going to activate the brakes, Den," I said. "What's it like?"

"Not yet, Harry. Not yet."

I looked at Bannister. He noted the chart, his finger under a line of calculations.

"The precise rate of speed and the exact instant of calculation, Captain Jackson," Bannister said. "Would you care to question anything further?"

"He said not yet," I told him.

"Therefore you would say not yet?"

"I would say this. He's about in the stratosphere. He knows where he is now. He's one of the finest pilots in the world. He'll feel the right moment better than your instruments."

"Ridiculous. Fourteen seconds. Stand by."

"Wait," I said.

"And if we wait, where does he come down, I ask you? You cannot calculate haphazardly, by feel. There are only four points at which the landing can be made. It must be now."

I flipped the communications switch, still looking at Bannister.

"This is it, Den. They're coming out now."

"Yes, I see them. What are they set for?"

"Twelve degrees."

"I'm dropping like a stone, Harry. Tell them to ease up on

the brake. Bannister, do you hear me? Bring them in or they'll tear off. This is not flying, anymore." His voice sounded as if he was having difficulty breathing.

"Harry," he called.

They held the brakes at twelve degrees, of course. The calculations dictated that. They tore away in fifteen seconds.

"Bannister! They're gone," Dennis shouted. "They're gone, Bannister, you butcher. Now what do you say?"

Bannister's face didn't flinch. He watched the controls steadily.

"Try half-degree rudder in either direction," I said.

Bannister looked at me for a second. "His direction is vertical, Captain. Would you attempt a rudder manipulation in a vertical dive?"

Not a terminal velocity drive, Bannister. He said it's not flying anymore. Lord knows which way he's falling."

"So?"

"So I'd try anything. You've got to slow him."

"Or return him to level flight."

"At this speed?"

We both looked at the controls now. The ship was accelerating again, and dropping so rapidly I couldn't follow the revolutions counter.

"Engage the allerons," Bannister ordered. "Point seven degrees, negative."

Dennis came back on. "Harry,

what are you doing? The ship is falling apart. The ailerons. It won't help. Listen, Harry, you've got to be careful. The flight configuration is so tenuous, anything can turn this thing into a falling stone. It had to happen, I knew, but I don't want to believe it now. This sitting here with that noise getting louder. It's spiraling out at me, getting bigger. Now it's smaller again. I'm afraid, Harry. The ailerons, Harry, they're gone. Very tenuous. They're gone. I can't see anything. The screens are black. No more shaking. No more noise. It's quiet and I hear myself breathing, Harry. Harry, the wrist straps on the suits are too tight. And the helmet, when you want to scratch your face, you can go mad. And Harry—"

That was the end of the communications. Something in the transmitter must have gone. They never found out. He didn't hit until almost a minute later, and nobody ever saw it. The tracking screen followed him down very precisely and very silently. There was no retrieving anything, of course. You don't conduct salvage operations in the middle of the south Atlantic.

I turned in my report after that. No one had asked for it, so it went through unorthodox channels. It took an awfully long

time and my suspension did not become effective until after the second shot. I was the pilot on that one, you know. I got them to install the duplicate controls, over the insistence by Bannister that resorting to them, even in the event that it became necessary, would prove nothing. He even went as far as to talk about load redistribution electric control design. As a matter of fact, I thought he had me for a while, but I think in the end they decided to try to avoid the waste of another vehicle. At least, that might be the kind of argument that would carry weight. The vehicles were enormously expensive, you realize.

I made it all right, as I said. It took me nine hours and then some, once they dropped me from orbit. I switched off the automatic controls at the point where the dive brakes were to have been engaged. This time, the brakes had not responded to the auto controls and they did not open at all. I found out readily enough why Lynds was against opening them at that point. Metal fatigue had brought the ship to a point where even a shift in my position could cause it to stop flying.

I came down in Australia and the braking 'chute tore right out when I released it. I skidded nine miles. A Royal Australian Air Force helicopter picked me up two hours later.

I learned of the suspension while in the hospital. I didn't get out until just in time to get to London for the hearing. My evidence and Forrest's, and Lynds' recorded voice all served to no purpose. You don't become a hero by proving an expert wrong. It doesn't work that way. It would not do to have Bannister looked upon as a bad gambit, not after all they went through to stay in power after putting him in. The reason, after all, was all in the way you looked at it. And a human element could always be overlooked in the cause of human endeavor. Especially when the constituents never find out about it.

After that, they started experimentation with powered returns. The atmosphere has been conquered, and now there remained the last stage. They never did it successfully. They couldn't. But it did not really matter. What it all proved was that they did not really need pilots for what Bannister was after. He had started with a premise of testing man's reactions to space probes under actual conditions, but what he was actually doing was testing space probes alone, with man as a necessary evil to contend with to give the project a reason.

It was all like putting a man in a racing car traveling flat out on the Salts in Bonneville, Utah.

He'll survive, of course. But put the man in the car with no controls for him to operate and then run the thing completely through remote transmission, and you've eliminated the purpose for the man. Survival as an afterthought might be a thing to test, if you didn't care a hoot about man. Survival for its own sake doesn't mean anything unless I've missed the whole point of living, somewhere along the line.

Bannister once described to me the firing of a prototype V-2. The firing took place after sunset. When the rocket had achieved a certain altitude, it suddenly took on a brilliant yellow glow. It had passed beyond the shadow of the earth and risen into the sunlight. Here was Bannister's passion. He was out to establish the feasibility of putting a rocket vehicle on the moon. It could have a man in it, or a monkey. Both were just as useless. Neither could fly the thing back, even if it did get down in one piece. It could tell us nothing about the moon we didn't already know. Getting it down in one piece, of course, was the reason why they gave Bannister the project to begin with.

So Bannister is now a triumphant hero, despite the societies for the prevention of cruelty to animals. But nobody understood it. Bannister put a vehicle on the moon. We were the first to

do it. We proved something by doing nothing. Perhaps the situation of true classified information is not too healthy a one, at that. You see, we've had rockets with that kind of power for an awfully long time now. Maybe some of them know what he's up to. When I think about that, I really become frightened.

The monkey, I suppose, is dead. The most we can hope for is that he died fast. It's very like another kind of miserable hope I felt once, a long time ago, for a lot of people who could be offered little more than hope for a fast death, because of something somebody was trying to prove.

There's some consolation this time. It's really only a monkey.

This I know, they'll never publish a picture of the vehicle. Someone might start to wonder why the cabin seems equipped to carry a man.

When you're out in a clear night in summer, the sky looks very friendly, the moon a big pleasant place where nothing at all can happen to you. The vehicle used in Project Argus had a porthole. I can't imagine why. The monkey must have been able to see out the porthole. Did he notice, I wonder, whether the earth looks friendly from out there.

**THE END**





ALEX  
SCHONBERG