

Robert Young's new story is about Earth's first starship and the man who builds it, a man whose dream began during one summer when he was 10 . . .

The Summer of the Fallen Star

BY

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The fallen star had lain in a clearing in the woods behind his father's farm, not far from the lip of the ravine into which it was destined to be bulldozed and buried. It was partially covered with moss, and at first glance appeared to be nothing more than a big egg-shaped boulder. Only when you looked close could you see the fissures and the charred areas that provided prima fade evidence of its fiery passage through the atmosphere.

A true meteor, of course, would have created a crater and wiped out part of the woods, but the kids who lived in the vicinity weren't about to look a gift horse in the mouth, Larkin least of all.

Even in those days he'd been a loner, and almost always, when he visited the clearing where the fallen star lay, he did so alone. The summer when he was 10 was when he visited it the most often. At the time, he'd been blissfully unaware that the star was doomed—that the following spring the woods would be cleared to make room for a housing development.

He would sit there in the warm sun on long summer afternoons and gaze at the star and make up stories about it. In one of the stories it was an alien spaceship—a spaceship that had malfunctioned while in the vicinity of the solar system and made a forced landing on Earth. A spaceship whose pilot had perished during passage through the atmosphere, or who, unable to get out of the ship because of injuries suffered during the forced landing, had died either from starvation or from a lack of oxygen.

In a sense, the fallen star had shaped Larkin's life.

* * *

"Oh, you're Mr. Larkin. *The* Mr. Larkin. Sorry I didn't recognize you, sir. Go right on through."

"Thanks," Larkin said, zipping the front of his nylon jacket back over the ID card clipped to his shirt pocket.

"I can understand why you'd want to make a last-minute inspection," the guard at the launch-pad gate went on. "If she was my ship—if I'd built her, that is, like you did—I'd want to make sure she was okay too. Incidentally, sir, do you have any idea why they're holding—why countdown was stopped and almost everybody was sent home?"

"None whatsoever," Larkin lied.

The Brunhilde-Valkyrie launch-complex (Scandinavian mythology had recently become the rage in space circles) was reminiscent of the Apollo-Saturn complex (Launch Complex 39), now in mothballs. The Launch Control Center, a long rectangular structure, stood next to the giant Vertical Assembly Building and, in juxtaposition to it, appeared like a medium-sized building block yet to be set in place. The pad itself (unlike Launch Complex 39, there was only one) was linked to the VAB by a wide, three-mile-long crawlerway, down which, three days ago, the mobile launcher had carried the Valkyrie launch vehicle and the Brunhilde 2 spacecraft.

Larkin began walking toward the massive support-pedestal on which the mobile launch and the Brunhilde 2-Valkyrie had been positioned. Driving down the new highway that ran the length of the crawlerway and gave onto the parking area, he had become increasingly aware of the towering spaceship. Now, as he walked through the lake of light created by the floodlights, his awareness intensified. The ship, with its slender escape tower affixed to the nose of the command module, seemed

to touch the hem of Heaven. Beside it, taller yet, the launch-and service-tower, even with all of its extensions withdrawn save for the walkway that gave access to the hatch, brought to mind the great ash tree, Yggdrasil.

The Brunhilde 2 spacecraft atop the third Valkyrie stage was the second offspring of Larkin's quarter-of-a-century marriage to his Dream. Its slightly less sophisticated older sister, Brunhilde 1, had carried three astronauts around Neptune and demonstrated the viability of the Larkin Space Drive, at least to the extent that its full potential of 0.99 C could be employed on an interplanetary flight. The Brunhilde 2 would also carry three astronauts — this time, around Barnard's Star, 6.2 light-years from the sun.

Barnard's Star had been known to have a planet as long ago as 1963, its presence having been deduced from its gravitational effect on its sun. Many times the size of Jupiter, it was *ex officio* unfit for human habitation, but the presence of one planet (Larkin had argued in his successful jihad against NASA's choice of Alpha Centauri) virtually guaranteed the presence of others, and one of them just *might* be the long-range answer to Earth's population dilemma.

Confident of his Drive, he had even impugned the necessity of a test flight, maintaining that Barnard's Star should be the Brunhilde 1's objective, not Neptune. But NASA would have no part of such foolhardiness. Even after the spacecraft's flawless performance, even after Larkin's aerospace company had built an even more sophisticated vehicle, NASA had still hung back, insisting on another test run around Neptune, plus probes and flybys of the extrapolated Barnard's Star system. More years would have gone by, years that Larkin couldn't afford to squander. He was in his 40s. He would be 60 by the time the mission was completed, even if it were undertaken at once. Desperate, he threatened to resign as prime contractor and to dissolve his company, and be damned to the lawsuits, if NASA continued to procrastinate. NASA gave in. They knew as well as he did that without his genius to guide it the New Space Program would go *Pfffffft!* like the Vanguard rocket.

The spaceship loomed almost directly above him now, a giant goddess out of the remote past. The downward flare of the lowermost stage became in his mind the flare of a Brobdingnagian skirt.

Soon, when the hold he'd put into effect ended, the launch site would again swarm with technicians. Now, except for himself and the guards, there was no one about. NASA might be his Master, but as No. 1 Houseboy he'd carried sufficient weight to shut the machinery down. Long enough to say good-by.

Tomorrow, his beloved starship would be starborne. Starborne, and climbing swiftly toward the speed of light.

The idea for the Drive had come to him when he was a young man. It had come to him during the night, or so it seemed in retrospect. He had seen in his mind a sophisticated device analogous to a multifaceted reflector. A reflector that would slow approaching light-waves by throwing them back upon themselves, the amount of slowdown to be dependent upon the number of facets in operation. The retardation would be analogous to a wrench thrown into the machinery of the physical universe, and the universe would have to compensate for the resultant discrepancy by forcing the Drive and the spacecraft incorporating it toward the light source at a Velocity commensurate to the amount of retardation.

Theoretically, if approaching light-waves could be brought to a standstill, such a drive could attain C—the velocity of light. In practice, however, this did not prove to be true. The unknown cosmic force that co-operated in the first instance refused to co-operate in the second, and while Larkin's Space Drive, when perfected, had been able to attain 0.99 C, it was unable to equal C. It had yet another limitation. By its very nature, it was operable only in deep space, thus making a spacecraft employing it partially dependent on the very action-and-reaction systems it had otherwise transcended.

Ideas are for free, but there is a price tag on realizing them. Larkin had paid for his Drive. Dearly. With years of exhausting endeavor. With mental anguish. With celibacy. With the right to live by proxy through a son. With sleepless nights. Sometimes with despair. But he had got what he paid for. A practical pathway to the stars. Allowing for acceleration and deceleration, the forthcoming mission would consume a decade and a half, but owing to the Lorentz-FitzGerald contraction, less than three would pass for the astronauts on board. If Barnard's Star proved to have an Earth-type planet, uninhabited, or inhabited by beings inferior to man, colonization could be begun.

The night had grown cold. Dampness was creeping in from the sea. He turned up the collar of his jacket as he covered the remaining distance to the support pedestal. His heart seemed to be flattened against his ribs; there was a stricture in his throat. It was as though he were an astronaut on his way to keep a stellar rendezvous, instead of a tired businessman-engineer on his way to say good-bye to the embodiment of his Dream. A businessman-engineer denied the use of the wings he'd fashioned out of light, able to fly only by proxy to the stars he yearned to touch.

One time, when Larkin was visiting the clearing in the woods, a curious thing happened. A rabbit poked its long-eared head out of the dead leaves and broken twigs that the wind had heaped around the fallen star's base, then squirmed the rest of the way out into the daylight and hopped off into the underbrush.

A rabbit hole under a boulder was anything but unusual, but a rabbit hole under this particular boulder opened wide the door to a host of intriguing possibilities, the most fascinating of which was the chance that the alien pilot he'd postulated hadn't died of inanition or asphyxiation after all, but had escaped his spaceship-prison via a ventral hatch and dug his way to freedom.

Probably, during the years that had intervened since, the tunnel he'd dug had either partially caved in or had partially filled up with dead leaves and twigs. Whichever, it would have provided a made-to-order burrow for the rabbit Larkin had seen.

If the hole were to be enlarged, access to the ship's interior, or at least to the hatch (or lock) might be obtained. At once, Larkin began to dig. With his hands at first, then, when the dead leaves and twigs gave way to dirt, with a shovel that he went home and got out of the barn along with a flashlight from his father's pickup. He was no engineer (then), but he had sense enough to know that if he enlarged the hole too much he might bring the ship down on top of him; so, even in his soaring excitement, he confined the width of his tunnel to the width of his shoulders.

The rabbit hole (he persisted in thinking of it as such, even though he realized that the rabbit was probably only the most recent of a long line of diverse occupants) went down only a few feet, then leveled out. The digging became more and more difficult, especially after the narrowness of the tunnel precluded further use of the shovel and he had to go back to using his hands. Presently, his fingers began encountering bits and scraps of metal, and he knew he was on the right track.

As he dug, he pieced together what had probably happened, revising and embellishing some of his previous conjecture. Light-years from his native world, his ship disabled (possibly by a meteoroid,) the alien pilot had managed to reach the solar system and had come in for a landing on the only planet that offered him a chance to survive: Earth. Then, at the last moment, the controls had jammed and the ship had come down on its side, rendering its only hatch inoperable. (Or, perhaps, after landing upright, it had tipped over, with the same result.) Faced with eventual starvation and/or suffocation, he'd burned his way through the hatch with his ray gun and tunneled his way to the surface of the ground.

Maybe there'd been more than one alien. Maybe there'd been two or three. The ship was small, but maybe the aliens had been small too.

No, there'd been only one. And his proportions had been those of an average-sized man. Larkin saw this at once when he poked his head and shoulders through the jagged opening where the hatch had been and panned the interior with the beam of his flashlight. And apparently he'd never got out of the ship. Or, if he had, he'd crawled back inside to die. The fact of his death was indisputable. It was attested to by his bones.

Seen from the boarding walkway, the three Valkyrie stages seemed to taper down to the launch pad, lending the illusion that the third and smallest was largest, the first and largest, smallest.

A man standing on the pad would have seemed the size of a mouse. If there'd been a man standing there. There wasn't, of course. The hold Larkin had called had begun at 2300 hours, shortly after the spacecraft and the launch vehicle had been fueled. The second-shift pad-crew, scheduled to go off duty at 2400 hours, had been sent home an hour early. The hold would last until 0100 hours; then the

third-shift crew would come on duty one hour late, and countdown would be resumed. The three Barnard's Star Mission astronauts, Cleaves and Barnes and Wellman, would board the spacecraft at 0600 hours. The space buffs encamped along the perimeter of the complex would resume their vigil, and commercial-television coverage would grind back into gear. If all went well, lift-off would take place just before noon.

The floodlights blinded Larkin, and from his eyrie on the uncovered boarding walkway he could see neither to right nor to left. But there was nothing in either direction that he cared to see. "Mr. Larkin," an astute girl reporter had asked him during the press conference he'd held after the Brunhilde 1 spacecraft had returned from its successful orbit of Neptune, "what interests in life do you have other than advanced space-technology? And what do you plan to do after you've proved that your Space Drive is capable of carrying man to the stars?"

"None," Larkin had answered. Then he had looked at her blankly. "I don't know."

The skeleton crew on duty at the Launch Control Center must have spotted him on their monitors by this time and had probably called the gate and demanded to know who he was. He'd neglected to apprise them of his visit. But he wasn't worried. Once his identity was established, nothing would be said.

He covered the remaining distance to the lateral hatch of the command module, opened it, stepped inside and dogged it closed behind him.

He felt for and found the master switch and brought the interior to fluorescent life. He actuated the automatic atmosphere-control.

The command module (Cleaves and Barnes and Wellman called it the "Condor"; Larkin didn't) was far more commodious than those employed on the manned Apollo missions. It had had to be. In addition to the control room, there were partitioned-off living quarters and a small partitioned-off rec room that contained a microfilm library. The hydroponic vats were also screened off, as was the recycling unit. The onboard computer was incorporated in the control console, and the Larkin Space Drive was located in the nose, behind the transparent dust-particle deflector. The artificial-gray generator, which Larkin's aerospace company had perfected after the return of the Brunhilde 1, was encased in the hull. The provisions, medical supplies and spare equipment were stored in the service module.

A large viewscreen mounted on the control console supplemented the port and starboard windows.

In flight, the deck on which he was standing would become the aft bulkhead. Bolted to it beneath the movable control console were three acceleration couches, each equipped with a microphone, and an armrest that incorporated manual-override controls.

On an impulse, he went over and lay down on the nearest one.

After his initial horror had abated somewhat, young Larkin climbed the rest of the way into the alien ship and stood up. He'd been right about its landing on—or tipping over onto—its side. Just above his head an array of dials and gauges and rusted levers—unquestionably the components of a control panel—bore his conjecture out. So did the inner contour of the hull. But he'd been wrong about its being a regular ship. It was much, much too small. What it was, was an ejection capsule, or a lifeboat. The ship itself had probably plunged into the sun.

Located near the control panel was a small, cracked, television-like screen. The viewscope?

Obviously, the rock-like aspect of the outer hull resulted from a heat-resistant coating of some kind, for both the inner hull and the deck were made of steel, or, if not steel, an alloy that closely resembled it. To Larkin, standing on the hull, the deck appeared to be vertical. The propulsion unit, since it was nowhere else in evidence, was probably located underneath it.

He returned the beam of the flashlight to the skeleton. It still horrified him, and he had to force himself not to turn away. It lay beside the hatch, extending almost the full length—or rather, height—of the capsule/lifeboat. Larkin had seen pictures of skeletons and he'd seen a real one once at school. So far as he could tell, this one didn't differ noticeably from any of them. Rotted remnants of apparel still clung to the ribs, and leather-like fragments still clung to the metatarsal bones and the phalanges. There were dried animal droppings all around it, and in the rib cage there was a small pile of crumbled dead leaves, dried

grass and bits of rotted cloth where an unknown precursor of the rabbit had nested long enough to bear and nurse a litter. It was the animal droppings, Larkin decided, that were responsible—or, at least partly responsible—for the miasmatic smell that filled the place and that was making him sicker by the second.

The hatch that the alien astronaut had burned out lay next to his hip bone. Not far away lay the "ray gun" he'd burned it out with. A rotted hose connected the "ray gun" to a small cylindrical tank that in several places had rusted completely through.

Ever since boarding the alien craft, Larkin had become increasingly aware of how small and cramped it was. In a way, it was more like a spacesuit than an ejection capsule or a lifeboat. A spacesuit the wearer hadn't been able to get out of, that had negated its own purpose. A suit of armor analogous, but by no means identical, to those of the conquistadores. To the one Balboa had worn when he fought his way across the Isthmus of Panama and looked down at the Pacific, and all his men—

Look'd at each other with a wild surmise—

Silent, upon a peak in Darien.

How ironic it would have been if he *hadn't* been able to see the Pacific. If, like this Balboa, he had made the perilous journey only to have the armor that had been designed to protect him become his downfall!

Romanticism aside, Larkin knew he had made a tremendous discovery, a discovery that would jar the teeth of the scientific community, which still scorned the very idea of extraterrestrial life (this was way back in the 50s when little green men from Mars were popping out of flying saucers left and right, and Sunday newspaper supplement-writers were having a field day). But he knew also, standing beside the bones, the flashlight beam growing dimmer by the second, that what he had found was too precious to throw to the dogs and risk having it torn to pieces (he had never had a high regard for his fellow human beings, even when he was 10); that he would never breathe a word of it to anyone. Not even to his mother and father. *Especially* not to his mother and father. They were simple people, neither of whom had gone past eighth grade. Even if they were to see the skeleton with their own eyes, they would reject the idea that it was that of a being from the stars; moreover, they would be angry at him for even suggesting such a possibility. Particularly his father. His father didn't like him to begin with. He was always calling him names. "You bastard you," his father would say. "Go fetch this, go fetch that!" His mother didn't care much for him either. All she cared about was watching TV.

His mother and father had been childhood sweethearts, but they weren't sweethearts any more. His father never talked to her and she never talked to him. When he wasn't planting or cultivating or harvesting, his father spent most of his time in the barn, while she spent most of hers huddled in her armchair, looking neither to right nor to left, staring straight before her at the television screen. But she never called him a bastard, like his father did. Curious one time as to why his father so frequently resorted to that particular epithet, and suspecting the truth, he dug their marriage certificate out of a dusty box in the attic one afternoon when they weren't home and compared its date to the date of his birth. Sure enough, his father had had to marry his mother. That didn't make him a real bastard, of course. But it made him a de facto one, which amounted to the same thing.

To cut down on the chances of any of the other kids discovering the true nature of the fallen star (none of them ever did), he rolled a log over the mouth of the tunnel, after he crawled back out, and scuffed leaves against it. The rabbit could still get in and out if it wanted to, but it was unlikely anyone would notice its goings and comings and just as unlikely that they'd make the necessary connection if they did.

He visited the fallen star almost every day that summer, choosing a time when the other kids were off somewhere playing baseball or swimming in the creek. He was always careful to roll the log back in place before he left. He began thinking of the alien astronaut as Balboa. After a while, he started calling him that in his mind. "Balboa," who'd made it across the Isthmus, but who'd been unable to see the Pacific. Who'd surmounted the heights of Darien only to have his armor turn into his tomb.

"Mr. Larkin? Control Center here. Are you all right?"

He realized that the television camera incorporated in the control console was picking up his image and relaying it to the Launch Control monitors.

He reached up and turned the video knob to OFF.

"Mr. Larkin, we strongly suggest that you do not touch any of the other controls. The Brunhilde 2 is ready for launch, and any untoward action on your part may endanger the mission."

Busybodies! he thought. He knew more about the spacecraft than they *ever* would! He could take it apart and put it back together again.

The hell with them!

Defiantly, he ran his fingers over the controls on the manual-override control-arm at his side. When he found the master switch, he moved it to ON position.

He reached up and pulled the control console closer to his chest.

Was this how it felt to be an astronaut? he wondered.

Was this how "Balboa" had felt?

He grinned. Ruefully. It had all been a summer daydream, he realized now. Sitting in the clearing gazing at the big egg-shaped boulder, he'd imagined seeing the rabbit, digging the tunnel, finding the bones. Like Alice, he'd gone down the rabbit hole, and on successive summer afternoons he'd gone down it again and again and again.

Or was it a daydream? He wasn't altogether certain. And probably he'd never really know. But the point was academic. Daydream or not, the summer of the fallen star had given him the direction he'd needed. Had spurred him, years later when his father kicked him out, to finish high school and to work his way through M.I.T. Had provided him with the impetus to found his aerospace company and to develop his Space Drive and to design and build the first starship. Had inspired a simple country boy to essay the heights of Darien and to give mankind the stars.

He realized with mild surprise that he had strapped himself onto the couch.

Now, without conscious volition, he depressed the first-stage ignition button.

As he did so, the hereditary data encoded in his genes triggered a chain reaction in his brain, and he knew in a blinding burst of understanding who he really was, the real reason he had developed his Space Drive, the real reason he had built the starships, the real reason he had chosen Barnard's Star, and the real reason he had called the hold....

"Balboa" had got out of his "armor" after all. And had found a backward country girl through whom he *might* return by proxy to his native shore.

Despite the striking similarity of the human species to his own, he must have been aware of the awesome odds against such a union's bearing fruit. But it had been the only straw available, and he had grasped it.

Afterward, unaware that his victim would be too terrified to betray him, he had crawled back into his tomb to die.

Possibly he had been dying to begin with. Larkin would never know. He did not need to.

The first-stage rockets ignited. He smiled, and uttered his final words on Earth:

"Control Center? Larkin speaking. I'm going Home!"