# **Ring Around the Sun**

Isaac Asimov

Jimmy Turner was humming merrily, if a bit raucously, when he entered the reception room.

“Is Old Sourpuss in?” he asked, accompanying the question with a wink at which the pretty secretary blushed gratefully.

“He is; and waiting for you.” She motioned him towards the door on which was written in fat, black letters, “Frank McCutcheon, General Manager, United Space Mail.”

Jim entered. “Hello, Skipper, what now?”

“Oh, it’s you, is it?” McCutcheon looked up from his desk, champing a foul-smelling stogie. “Sit down.”

McCutcheon stared at him from under bushy gray eyebrows. “Old Sourpuss,” as he was euphoniously known to all members of United Space Mail, had never been known to laugh within the memory of the oldest inmate, though rumor did have it that when a child he had smiled at the sight of his father falling out of an apple-tree. Right now his expression made the rumor appear exaggerated.

“Now, listen. Turner,” he barked, “United Space Mail is inaugurating a new service and you’re elected to blaze the trail.” Disregarding Jimmy’s grimace, he continued, “From now on the Venerian mail is on an all-year-round basis.”

“What! I’ve always thought that it was ruinous from a financial standpoint to deliver the Venerian. mail except when it was this side of the Sun.”

“Sure,” admitted McCutcheon, “if we follow the ordinary routes. But we might cut straight across the system if we could only get near enough to the sun. That’s where you come in! They’ve put out a new ship equipped to approach within twenty million miles of the sun and which will be able to remain at that distance indefinitely.”

Jimmy interrupted nervously, “Wait a while, S-Mr. McCutcheon, I don’t quite follow. What kind of a ship is this?”

“How do you expect me to know? I’m no fugitive from a laboratory. From what they tell me, it emits some kind of a field that bends the radiations of the sun around the ship. Get it? It’s all deflected. No heat reaches you. You can stay there forever and be cooler than in New York.”

“Oh, is that so?” Jimmy was skeptical. “Has it been tested, or is that a little detail that has been left for me?”

“It’s been tested, of course, but not under actual solar conditions.”

“Then it’s out. I’ve done plenty for United, but this is the limit. I’m not crazy, yet.”

McCutcheon stiffened. “Must I recall the oath you took upon entering the service. Turner? ‘Our flight through space—’ “

“‘—must ne’er be stopped by anything save death,’“ finished Jimmy. “I know that as well as you do and I also notice that it’s very easy to quote that from a comfortable armchair. If you’re that idealistic, you can do it yourself. It’s still out, as far as I’m concerned. And if you want, you can kick me out. I can get other jobs just like that,” he snapped his fingers airily.

McCutcheon’s voice dropped to a silky whisper. “Now, now. Turner, don’t be hasty. You haven’t heard all I have to say yet. Roy Snead is to be your mate.”

“Huh! Snead! Why, that four-flusher wouldn’t have the guts to take a job like this in a million years. Tell me some other fairy tale.”

“Well, as a matter of fact, he has already accepted. I thought you might accompany him, but I guess he was right. He insisted you’d back down. I thought at first you wouldn’t.”

McCutcheon waved him away and bent his eyes unconcernedly on the report he had been scrutinizing at the time of Jimmy’s entrance. Jimmy wheeled, hesitated, then returned.

“Wait a while, Mr. McCutcheon; do you mean to say that Roy is actually going?” McCutcheon nodded, still apparently absorbed in other matters, and Jimmy exploded, “Why, that low-down, spindle-shanked, dish-faced mug! So he thinks I’m too yellow to go! Well, I’ll show him. I’ll take the job and I’ll put up ten dollars to a Venerian nickel that he gets sick at the last minute.”

“Good!” McCutcheon rose and shook hands, “I thought you’d see reason. Major Wade has all the details. I think you leave in about six weeks and as I’m leaving for Venus tomorrow, you’ll probably meet me there.”

Jimmy left, still boiling, and McCutcheon buzzed for the secretary. “Oh, Miss Wilson, get Roy Snead on the ‘visor.”

A few minutes’ pause and then the red signal-light shone. The ‘visor was clicked on and the dark-haired, dapper Snead appeared on the visi-plate.

“Hello, Snead,” McCutcheon growled. “You lose that bet, Turner accepted that job. I thought he’d laugh himself sick when I told him you said he wouldn’t go. Send over the twenty dollars, please.”

“Wait a while, Mr. McCutcheon,” Snead’s face was dark with fury, “what’s the idea of telling that punch-drunk imbecile I’m not going? You must have, you double-crosser. I’ll be there all right, but you can put up another twenty and I’ll bet he changes his mind yet. But I’ll be there.” Roy Snead was still spluttering when McCutcheon clicked off.

The General Manager leaned back, threw away his mangled cigar, and lit a fresh one. His face remained sour, but there was a definite note of satisfaction in his tone when he said, “Ha! I thought that would get them.”

It was a tired and sweaty pair that blasted the good ship Helios across Mercury’s orbit. In spite of the perfunctory friendship enforced upon them by the weeks alone in space, Jimmy Turner and Roy Snead were scarcely on speaking terms. Add to this hidden hostility, the heat of the bloated sun and the torturing uncertainty of the final outcome of the trip and you have a miserable pair indeed.

Jimmy peered tiredly at the maze of dials confronting him, and, brushing a damp lock of hair from his eyes, grunted, “What’s the thermometer reading now, Roy?”

“One hundred twenty-five degrees Fahrenheit and still climbing,” was the growled response.

Jimmy cursed fluently, “The cooling system is on at maximum, the ship’s hull reflects 95% of the solar radiation, and it’s still in the hundred twenties.” He paused. “The gravometer indicates that we’re still some thirty-five million miles from the Sun. Fifteen millions miles to go before the Deflection Field becomes effective. The temperature will probably scale 150 yet. That’s a sweet prospect! Check the desiccators. If the air isn’t kept absolutely dry, we’re not going to last long.”

“Within Mercury’s orbit, think of it!” Snead’s voice was husky. “No one has ever been this close to the sun before. And we’re going closer yet.”

“There have been many this close and closer,” reminded Jimmy, “but they were out of control and landed in the sun. Friedlander, Debuc, Anton—” His voice trailed into a brooding silence,

Roy stirred uneasily. “How effective is this Deflection Field anyway, Jimmy? Your cheerful thoughts aren’t very soothing, you know.”

“Well, it’s been tested under the harshest conditions laboratory technicians could devise. I’ve watched them. It’s been bathed in radiation approximating the sun’s at a distance of twenty million. The Field worked like a charm. The light was bent about it so that the ship became invisible. The men inside the ship claimed that everything outside became invisible and that no heat reached them. A funny thing, though, the Field will work only under certain radiation strengths.”

“Well, I wish it were over one way or the other,” Roy glowered. “If Old Sourpuss is thinking of making this my regular run-, well, he’ll lose his ace pilot.”

“He’ll lose his two ace pilots,” Jimmy corrected.

The two lapsed into silence and the Helios blasted on.

The temperature climbed: 130, 135, 140. Then, three days later, with the mercury quivering at 148, Roy announced that they were approaching the critical belt, the belt where the solar radiation reached sufficient intensity to energize the Field.

The two waited, minds at feverish concentration, pulses pounding.

“Will it happen suddenly?”

“I don’t know. We’ll have to wait.”

From the portholes, only the stars were visible. The sun, three times the size as seen from Earth, poured its blinding rays upon opaque metal, for on this specially designed ship, portholes closed automatically when struck by powerful radiation.

And then the stars began disappearing. Slowly, at first, the dimmest faded-then the brighter ones: Polaris, Regulus, Arcturus, Sirius. Space was uniformly black.

“It’s working,” breathed Jimmy. The words were scarcely out of his mouth, when the sunward portholes clicked open. The sun was gone!

“Ha! I feel cooler already,” Jimmy Turner was jubilant. “Boy, it worked like a charm. You know, if they could adjust this Deflection field to all radiation strengths, we would have perfected invisibility. It would make a convenient war weapon.” He lit a cigarette and leaned back luxuriously.

“But meanwhile we’re flying blind,” Roy insisted.

Jimmy grinned patronizingly, “You needn’t worry about that, Dishface. I’ve taken care of everything. We’re in an orbit about the sun. In two weeks, we’ll be on the opposite side and then I’ll let the rockets blast and out of this band we go, zooming towards Venus.” He was very self-satisfied indeed.

“Just leave it to Jimmy ‘Brains’ Turner. I’ll have us through in two months, instead of the regulation six. You’re with United’s ace pilot, now.”

Roy laughed nastily. “To listen to you, you’d think you did all the work. All you’re doing is to run the ship on the course I’ve plotted. You’re the mechanic; I’m the brains.”

“Oh, is that so? Any damn pilot-school rookie can plot a course. It takes a man to navigate one.”

“Well, that’s your opinion. Who’s paid more, though, the navigator or the course-plotter?”

Jimmy gulped on that one and Roy stalked triumphantly out of the pilot room. Unmindful of all this, the Helios blasted on.

For two days, all was serene; then, on the third day. Jimmy inspected the thermometer, scratched his head and looked worried. Roy entered, watched the proceedings and raised his eyebrows in surprise.

“Is anything wrong?” He bent over and read the height of the thin, red column. “Just 100 degrees. That’s nothing to look like a sick goat over. From your expression, I thought something had gone wrong with the Deflection Field and that it was rising again,” he turned away with an ostentatious yawn.

“Oh, shut up, you senseless ape,” Jimmy’s foot lifted in a half-hearted attempt at a kick. “I’d feel a lot better if the temperature were rising. This Deflection Field is working a lot too good for my liking.”

“Huh! What do you mean?”

“I’ll explain, and if you listen carefully you may understand me. This ship is built like a vacuum bottle. It gains heat only with the greatest of difficulty and loses it likewise.” He paused and let his words sink in. “At ordinary temperatures this ship is not supposed to lose more than two degrees a day if no outside sources of heat are supplied. Perhaps at the temperature at which we were, the loss might amount to five degrees a day. Do you get me?”

Roy’s mouth was open wide and Jimmy continued. “Now this blasted ship has lost fifty degrees in less than three days.”

“But that’s impossible.”

“There it is.” Jimmy pointed ironically. “I’ll tell you what’s wrong. It’s that damn Field. It acts as a repulsive agent towards electromagnetic radiations and somehow is hastening the loss of heat of our ship.”

Roy sank into thought and did some rapid mental calculations. “If what you say is true,” he said at length, “we’ll hit freezing point in five days and then spend a week in what amounts to winter weather.”

“That’s right. Even allowing for the decrease in heat-loss as the temperature is lowered, we’ll probably end up with the mercury anywhere between thirty and forty below.”

Roy gulped unhappily. “And at twenty million miles away from the sun!”

“That isn’t the worst,” Jimmy pointed out. “This ship, like all others used for travel within the orbit of Mars, has no heating system. With the sun shining like fury and no way to lose heat except by ineffectual radiation, Mars and Venus space-ships have always specialized in cooling systems. We, for instance, have a very efficient refrigeration device.”

“We’re in a devil of a fix, then. The same applies to our space suits.”

In spite of the still roasting temperature, the two were beginning to experience a few anticipatory chills.

“Say, I’m not going to stand this,” Roy burst out. “I vote we get out of here right now and head for Earth. They can’t expect more of us.”

“Go ahead! You’re the pilot. Can you plot a course at this distance from the sun and guarantee that we won’t fall into the sun?”

“Hell! I hadn’t thought of that.”

The two were at their wits’ end. Communication via radio had been impossible ever since they had passed Mercury’s orbit. The sun was at sunspot maximum and static had drowned out all attempts.

So they settled down to wait.

The next few days were taken up entirely with thermometer watching, with a few minutes taken out here and there when one of the two happened to think of an unused malediction to hurl at the head of Mr. Frank McCutcheon. Eating and sleeping were indulged in, but not enjoyed.

And meanwhile, the Helios, entirely unconcerned in the plight of its occupants, blasted on.

As Roy had predicted, the temperature passed the red line marked “Freezing” towards the end of their seventh day in the Deflection Belt. The two were remarkably unhappy when this happened even though they had expected it.

Jimmy had drawn off about a hundred gallons of water from the tank. With this he had filled almost every vessel on board.

“It might,” he pointed out, “save the pipes from bursting when the water freezes. And if they do, as is probable, it is just as well that we supply ourselves with plenty of available water. We have to stay here another week, you know.”

And on the next day, the eighth, the water froze. There were the buckets, overflowing with ice, standing chill and bluecold. The two gazed at them forlornly. Jimmy broke one open.

“Frozen solid,” he said bleakly and wrapped another sheet about himself.

It was hard to think of anything but the increasing cold now. Roy and Jimmy had requisitioned every sheet and blanket on the ship, after having put on three or four shirts and a like number of pairs of pants.

They kept in bed for as long as they were able, and when forced to move out, they huddled near the small oil-burner for warmth. Even this doubtful pleasure was soon denied them, for, as Jimmy remarked, “the oil supply is extremely limited and we will need the burner to thaw out the water and food.”

Tempers were short and clashes frequent, but the common misery kept them from actually jumping on each other’s throats. It was on the tenth day, however, that the two, united by a common hatred, suddenly became friends.

The temperature was hovering down near the zero point, making up its mind to descend into the minus regions. Jimmy was huddled in a corner thinking of the times back in New York when he had complained of the August heat and wondered how he could have done so. Roy, meanwhile, had manipulated numb fingers long enough to calculate that they would have to endure the coldness for exactly 6354 minutes more.

He regarded the figures with distaste and read them off to Jimmy. The latter Scowled and grunted, ”The way I feel, I’m not going to last 54 minutes, let alone 6354.” Then, impatiently, “I wish you could manage to think of some way of getting us out of this.”

“If we weren’t so near the sun,” suggested Roy, “we might start the rear blasts and hurry us up.”

“Yes, and if we landed in the sun, we’d be nice and warm. You’re a big help!”

“Well, you’re the one that calls himself ‘Brains’ Turner. You think of something. The way you talk, you’d think all this was my fault.”

“It certainly is, you donkey in human clothing! My better judgment told me all along not to go on this fool trip. When McCutcheon proposed it, I refused pointblank. I know better.” Jimmy was very bitter. “So what happened? Like the fool you are, you accept and rush in where sensible men fear to tread. And then, of course. I naturally had to tag along.

“Why, do you know what I should have done,” Jimmy’s voice ascended the scale, “I should have let you go alone and freeze and then sat down by a roaring fire all by myself and gloated. That is, if I had known what was going to happen.”

A hurt and surprised look appeared on Roy’s face. “Is that so? So that’s how it is! Well, all I can say is that you certainly have a genius for twisting facts, if for nothing else. The fact of the matter is that you were unutterably stupid enough to accept and I the poor fellow raked in by the force of circumstances.”

Jimmy’s expression was one of the utmost disdain. “Evidently the cold has driven you batty, though I admit it wouldn’t take much to knock the little sense you possess out of you.”

“Listen,” Roy answered hotly. “On October 10th, McCutcheon called me up on the ‘visor and told me you had accepted and laughed at me for a yellow-belly for refusing to go. Do you deny that?”

“Yes, I do, and unconditionally. On October 10, Sourpass told me that you had decided to go and had bet him that—”

Jimmy’s voice faded away very suddenly and a shocked look spread over his face. “Say-, are you sure McCutcheon told you I had agreed to go?”

A chill, clammy feeling clutched at Roy’s heart when he caught Jimmy’s drift, a feeling that drowned out the numbness of the cold.

“Absolutely,” he answered. “I’ll swear to that. That’s why I went.”

“But he told me you had accepted and that’s why / went.” Jimmy felt very stupid all at once.

The two fell into a protracted and ominous silence which was broken at length by Roy, who spoke in a voice that quivered with emotion.

“Jimmy, we’ve been the victims of a contemptible, dirty, lowdown, doublecrossing trick.” His eyes dilated with fury. “We’ve been cheated, robbed-,” words failed him but he kept on uttering meaningless sounds, indicative mainly of devouring rage.

Jimmy was cooler, but none the less vindictive, “You’re right, Roy; McCutcheon has done us dirty. He has plumbed the depths of human iniquity. But we’ll get even. When we get through in 6300 odd minutes, we will have a score to settle with Mr. McCutcheon.”

“What are we going to do?” Roy’s eyes were filled with a bloodthirsty joy.

“On the spur of the moment, I suggest that we simply tear into him and rend him into tiny, little pieces.”

“Not gruesome enough. How about boiling him in oil?”

“That’s reasonable, yes; but it might take too long. Let’s give him a good old-fashioned beating-with brass knuckles.”

Roy rubbed his hands. “We’ll have lots of time to think up some really adequate measures. The dirty. God-forsaken, yellow-livered, leprous—” The rest verged fluently into the unprintable.

And for four more days, the temperature dove. It was on the fourteenth and last day that the mercury froze, the solid red shaft pointed its congealed finger at forty below.

On this terrible last day, they had lit the oil-burner, using their entire scanty supply of oil. Shivering and more than half frozen, they crouched close, attempting to extract every last drop of heat.

Jimmy had found a pair of ear-muffs several days before in some obscure corner, and it now changed hands at the end of every hour. Both sat buried under a small mountain of blankets, chafing chilled hands and feet. With every passing minute, their conversation, concerning McCutcheon almost exclusively, grew more vitriolic.

“Always quoting that triply-damned slogan of the Space Mail: ‘Our flight through sp—’ “ Jimmy choked with impotent fury.

“Yes, and always rubbing holes in chairs instead of coming out here and doing something like a man’s work, the rotten so-and-so,” agreed Roy.

“Well, we’re due to pass out of the deflection zone in two hours. Then three weeks and we’ll be on Venus,” said Jimmy, sneezing.

“That can’t be too soon for me,” answered Sneed, who had been sniffling for the last two days. “I’m never taking another space trip except maybe the one that takes me back to Earth. After this, I make my living growing bananas in Central America. A fellow can be decently warm out there at least.”

“We might not get off Venus, after what we’re going to do to McCutcheon.”

“No, you’re right there. But that’s all right. Venus is even warmer than Central America and that’s all I care about.”

“We have no legal worries either,” Jimmy sneezed again. “On Venus, life imprisonment’s the limit for first-degree murder. A nice,-warm dry cell for the rest of my life. What could be sweeter?”

The second hand on the chronometer whirled at its even pace; the minutes ticked off. Roy’s hands hovered lovingly over the lever that would set off the right rear blasts which would drive the Helios out away from the sun and from that terrible Deflection Zone.

And at last, “Go!” shouted Jimmy eagerly. “Let her blast!”

With a deep reverberating roar, the rockets fired. The Helios trembled from stem to stern. The pilots felt the acceleration press them back into their seats and were happy. In a matter of minutes, the sun would shine again and they would be warm, feel the blessed heat once more.

It happened before they were aware of it. There was a momentary flash of light and then a grinding and a click, as the sunward portholes closed.

“Look,” cried Roy, “the stars! We’re out of it!” He cast an ecstatically happy glance at the thermometer. “Well, old boy, from now on we go up again.” He pulled the blankets about him closer, for the cold still lingered.

There were two men in Frank McCutcheon’s office at the Venus branch of the United Space Mail: McCutcheon himself and the elderly, white-haired Zebulon Smith, inventor of the Deflection Field. Smith was talking.

“But Mr. McCutcheon, it is really of great importance that I learn exactly how my Deflection Field worked. Surely they have transmitted all possible information to you.”

McCutcheon’s face was a study in dourness as he bit the edge off one of his two-for-five cigars and lit it.

“That, my dear Mr. Smith,” he said, “is exactly what they did not do. Ever since they have receded far enough from the sun to render communication possible, I have been sending requests for information regarding the practicability of the Field. They just refuse to answer. They say it worked and that they’re alive and that they’ll give the details when they reach Venus. That’s all!”

Zebulon Smith sighed in disappointment. “Isn’t that a bit unusual; insubordination, so to speak? I thought they were required to be complete in their reports and to give any requested details.”

“So they are. But these are my ace pilots and rather temperamental. We have to extend some leeway. Besides, I tricked them into going on this trip, a very hazardous one, as you know, and so am inclined to be lenient.”

“Well, then, I suppose I must wait.”

“Oh, it won’t be for long,” McCutcheon assured him. “They’re due today, and I assure you that as soon as I get in touch with them, I shall send you the full details. After all, they survived for two weeks at a distance of twenty million miles from the sun, so your invention is a success. That should satisfy you.”

Smith had scarcely left when McCutcheon’s secretary entered with a puzzled frown on her face.

“Something is wrong with the two pilots of the Helios, Mr. McCutcheon,” she informed him. “I have just received a bulletin from Major Wade at Pallas City, where they landed. They have refused to attend the celebration prepared for them, but instead immediately chartered a rocket to come here, refusing to state the reason. When Major Wade tried to stop them, they became violent, he says.” She laid the communication down on his desk.

McCutcheon glanced at it perfunctorily. “Hmm! they do seem confoundedly temperamental. Well, send them to me when they come. I’ll snap them out of it.”

It was perhaps three hours later that the problem of the two misbehaving pilots again forced itself upon his mind, this time by a sudden commotion that had arisen in the reception room. He heard the deep angry tones of two men and then the shrill remonstrances of his secretary. Suddenly the door burst open and Jim Turner and Roy Snead strode in.

Roy coolly closed the door and planted his back against it.

“Don’t let anyone disturb me until I’m through,” Jimmy told him.

“No one’s getting through this door for a while,” Roy answered grimly, “but remember, you promised to leave some for me.”

McCutcheon said nothing during all this, but when he saw Turner casually draw a pair of brass knuckles from his pocket and put them on with a determined air, he decided that it was time to call a halt to the comedy.

“Hello, boys,” he said, with a heartiness unusual in him. “Glad to see you again. Take a seat.”

Jimmy ignored the offer. “Have you anything to say, any last request, before I start operations?” He gritted his teeth with an unpleasant scraping noise.

“Well, if you put it that way,” said McCutcheon, “I might ask exactly what this is all about-if I’m not being too unreasonable. Perhaps the Deflector was inefficient and you had a hot trip.”

The only answer to that was a loud snort from Roy and a cold stare on the part of Jimmy.

“First,” said the latter, “what was the idea of that filthy, disgusting cheat you pulled on us?”

McCutcheon’s eyebrows raised in surprise. “Do you mean the little white lies I told you in order to get you to go? Why, that was nothing. Common business practice, that’s all. Why, I pull worse things than that every day and people consider it just routine. Besides, what harm did it do you?”

“Tell him about our ‘pleasant trip,’ Jimmy,” urged Roy.

“That’s exactly what I’m going to do,” was the response. He turned to McCutcheon and assumed a martyr-like air. “First, on this blasted trip, we fried in a temperature that reached 150 but that was to be expected and we’re not complaining; we were half Mercury’s distance from the sun.

“But after that, we entered this zone where the light bends around us; incoming radiation sank to zero and we started losing heat and not just a degree a day the way we learned it in pilot school.” He paused to breathe a few novel curses he had just thought of, then continued.

“In three days, we were down to a hundred and in a week down to freezing. Then for one entire week, seven long days, we drove through our course at sub-freezing temperature. It was so cold the last day that the mercury froze.” Turner’s voice rose till it cracked, and at the door, a fit of self-pity caused Roy to catch his breath with an audible gulp. McCutcheon remained inscrutable.

Jimmy continued. “There we were without a heating system, in fact, no heat of any kind, not even any warm clothing. We froze, damn it; we had to thaw out our food and melt our water. We were stiff, couldn’t move. It was hell, I tell you, in reverse temperature.” He paused, at a loss for words.

Roy Snead took up the burden. “We were twenty million miles away from the sun and I had a case of frost-bitten ears. Frost-bitten, I say.” He shook his fist viciously under McCutcheon’s nose. “And it was your fault. You tricked us into it! While we were freezing, we promised ourselves that we’d come back and get you and we’re going to keep that promise.” He turned to Jimmy. “Go ahead, start it, will you? We’ve wasted enough time.”

“Hold it, hoys,” McCutcheon spoke at last. “Let me get this straight. You mean to say that the Deflection Field worked so well that it kept all the radiation away and sucked out what heat there was in the ship in the first place?” Jimmy grunted a curt assent.

“And you froze for a week because of that?” McCutcheon continued.

Again the grunt.

And then a very strange and unusual thing happened. McCutcheon, “Old, Sourpuss,” the man without the “risus” muscle, smiled. He actually bared his teeth in a grin. And what’s more, the grin grew wider and wider until finally a rusty, long-unused chuckle was heard louder and louder, until it developed into a full-fledged laugh, and the laugh into a bellow. In one stentorian burst, McCutcheon made up for a lifetime of sour gloom.

The walls reverberated, the windowpanes rattled, and still the Homeric laughter continued. Roy and Jimmy stood openmouthed, entirely non-plussed. A puzzled bookkeeper thrust his head inside the door in a fit of temerity and remained frozen in his tracks. Others crowded about the door, conversing in awed whispers. McCutcheon had laughed!

Gradually, the risibilities of the old General Manager subsided. He ended in a fit of choking and finally turned a purple face towards his ace pilots, whose surprise had long since given way to indignation.

“Boys,” he told them, “that was the best joke I ever heard. You can consider your pay doubled, both of you.” He was still grinning away like clockwork and had developed a beautiful case of hiccoughs.

The two pilots were left cold at the handsome proposal. “What’s so killingly funny?” Jimmy wanted to know, “I don’t see anything to laugh at, myself.”

McClutcheon’s voice dripped honey, “Now, fellows, before I left I gave each of you several mimeographed sheets containing special instructions. What happened to them?”

There was sudden embarrassment in the air.

“I don’t know. I must have mislaid mine,” gulped Roy.

“I never looked at mine; I forgot about it.” Jimmy was genuinely dismayed.

“You see,” exclaimed McCutcheon triumphantly, “it was all the fault of your own stupidity.”

“How do you figure that out?” Jimmy wanted to know. “Major Wade told us all we had to know about the ship, and besides, I guess there’s nothing you could tell us about running one.”

“Oh, isn’t there? Wade evidently forgot to inform you of one minor point which you would have found on my instructions. The strength of the Deflection Field was adjustable. It happened to be set at maximum strength when you started, that’s all.” He was now beginning to chuckle faintly once more. “Now, if you had taken the trouble to read the sheets, you would have known that a simple movement of a small lever,” he made the appropriate gesture with his thumb, “would have weakened the Field any desired amount and allowed as much radiation to leak through as was wanted.”

And now the chuckle was becoming louder. “And you froze for a week because you didn’t have the brains to pull a lever. And then you ace pilots come here and blame me. What a laugh!” and off he went again while a pair of very sheepish young men glanced askance at each other.

When McCutcheon came around to normal, Jimmy and Roy were gone.

Down in an alley adjoining the building, a little ten-year-old boy watched, with open mouth and intense absorption, two young men who were engaged in the strange and rather startling occupation of kicking each other alternately. They were vicious kicks, too.