

Emergency in Space

From the science fiction novel *Farmer in the Sky* by Robert A. Heinlein

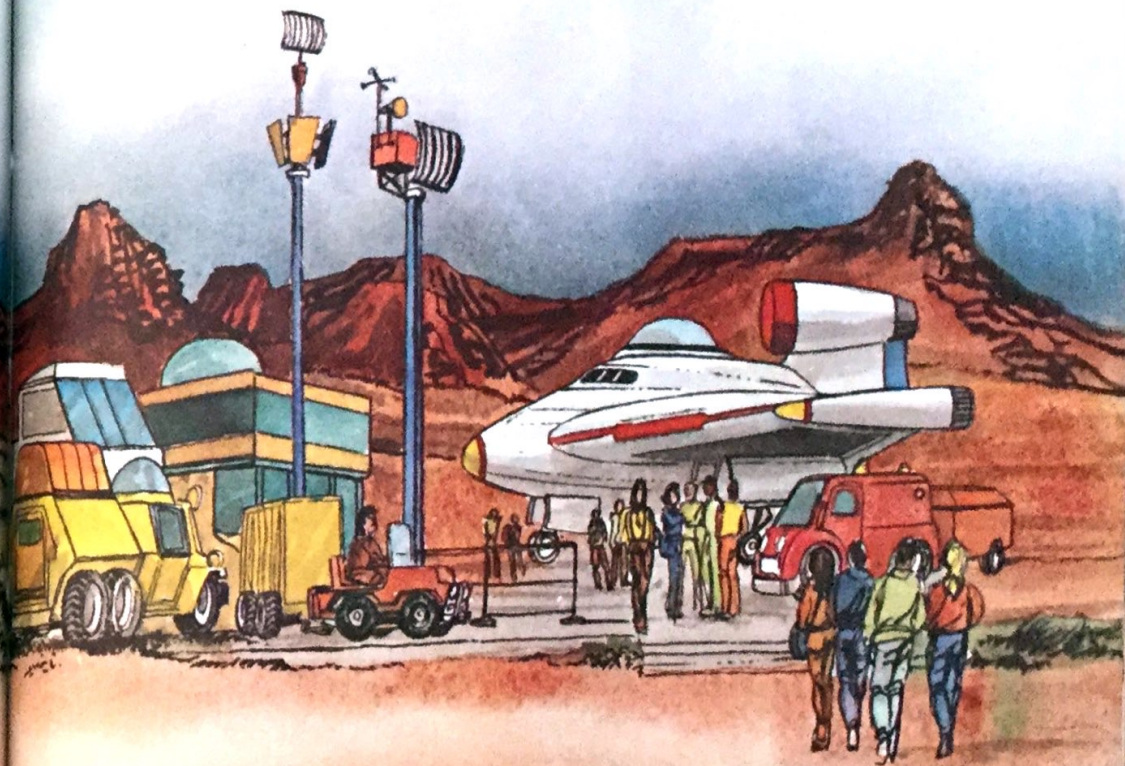
Illustrated by Lyle Miller



Some time in the future, the spaceship *Mayflower* spins through space toward Ganymede,¹ a moon of the planet Jupiter more than half a billion miles from Earth. The 6,000 Earth people inside the *Mayflower*, like the Pilgrims on the original ship *Mayflower*, are traveling to settle a new colony in a new world.

For Bill Lermer, one of the colonists, the decision to leave Earth had been a difficult one. He was leaving his high-school friends and the Scout troop in which he had long been active to be with his father, George, who was emigrating with his new wife Molly and her daughter Peggy. With strict weight limits for each traveler, Bill had packed carefully—even going without food so that he could take one unnecessary item. As Bill tells it, “I began to wonder why I was going to all this trouble to hang on to a Scout uniform I obviously wasn’t going to use.”

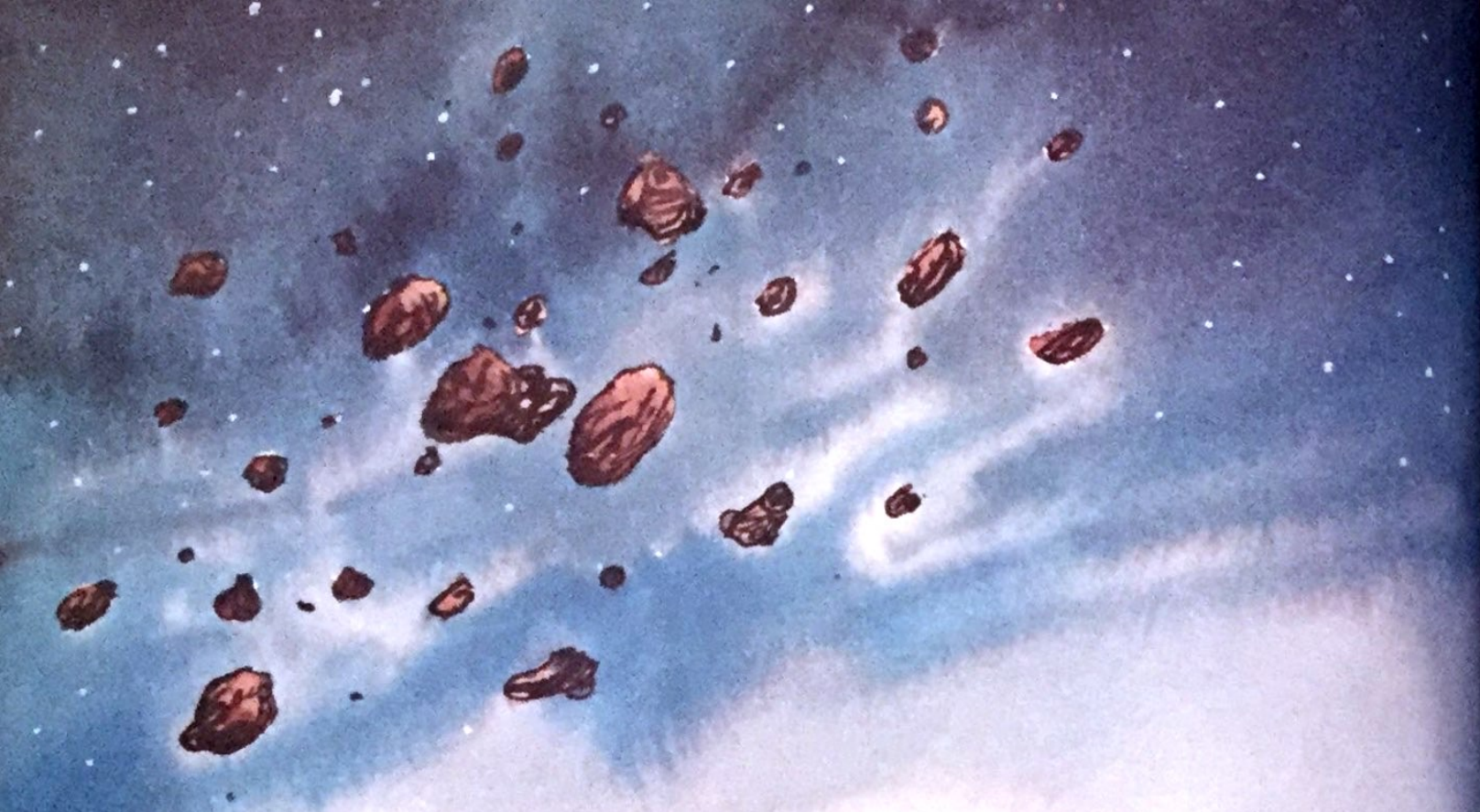
1. Ganymede (GAN•uh•meed), the third and largest satellite of Jupiter.



When we were fifty-three days out and about a week to go to reach Ganymede, Captain Harkness used the flywheel to precess² the ship so that we could see where we were going—so that the passengers could see, that is. It didn’t make any difference to his astrogation.³

You see, the axis of the *Mayflower* had been pointed pretty much toward Jupiter and the torch had been pointed back at the Sun. Since the view ports were

2. precess (PREE•ses): to change the direction of the axis of a rotating body, much like the movement of a spinning top as it loses speed.
3. astrogation (AS•truh•GAY•shun): the guiding of a spaceship in space.

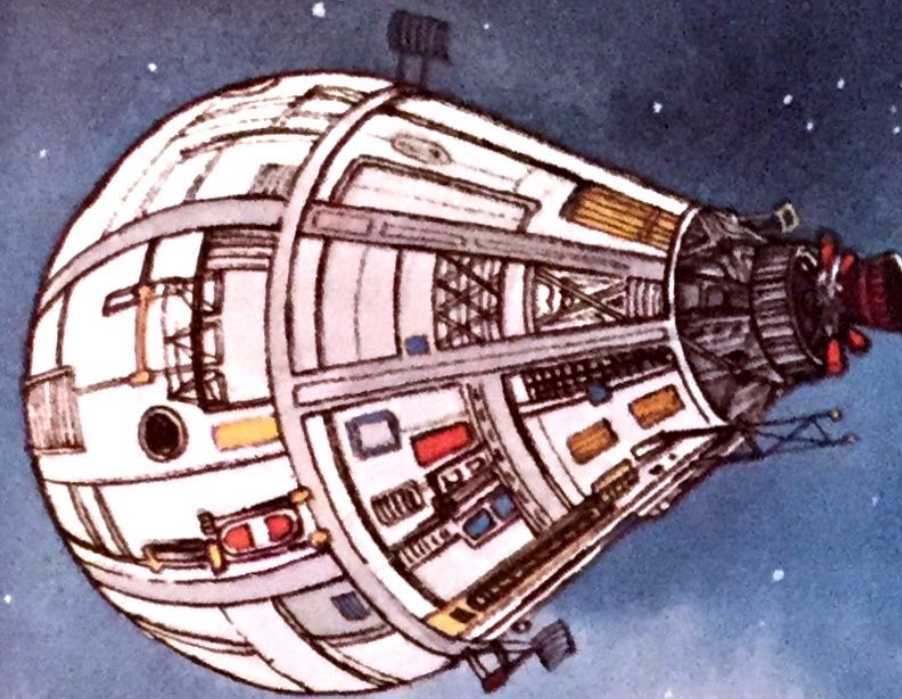


spaced every ninety degrees around the sides, while we had been able to see most of the sky, we hadn't been able to see ahead to Jupiter nor behind to the Sun. Now he tilted the ship over ninety degrees and we were rolling, so to speak, along our line of flight. That way, you could see Jupiter and the Sun both, from any view port, though not both at the same time.

Jupiter was already a tiny, ruddy-orange disc. Some of the boys claimed they could make out the moons. Frankly, I couldn't, not for the first three days after the Captain precessed the ship. But it was mighty fine to be able to see Jupiter.

We hadn't seen Mars on the way out, because Mars happened to be on the far side of the Sun, three hundred million miles away. We hadn't seen anything but the same old stars you can see from Earth. We didn't even see any asteroids.

There was a reason for that. When we took off from the orbit of Supra-New-York, Captain Harkness had not aimed the *Mayflower* straight for where Jupiter



was going to be when we got there; instead he had lifted her north of the ecliptic⁴ high enough to give the asteroid⁵ belt a wide berth. Now anybody knows that meteors are no real hazard in space. Unless a pilot does deliberately foolish things like driving his ship through the head of a comet it is almost impossible to get yourself hit by a meteor. They are too far between.

On the other hand the asteroid belt has more than its fair share of sky junk. The older power-pile ships used to drive straight through the belt, taking their chances, and none of them was ever hit to amount to anything. But Captain Harkness, having literally all the power in the world, preferred to go around and play it safe. By avoiding the belt there wasn't a chance in a blue moon that the *Mayflower* would be hit.

Well, it must have been a blue moon. We were hit.

4. ecliptic (ih•KLIP•tik): the plane, passing through the center of the sun, that contains the earth's orbit.

5. asteroid (AS•tuh•royd): any of several hundred small planets between Mars and Jupiter.

It was just after reveille,⁶ "A" deck time, and I was standing by my bunk, making it up. I had my Scout uniform in my hands and was about to fold it up and put it under my pillow. I still didn't wear it. None of the others had uniforms to wear to Scout meetings so I didn't wear mine. But I still kept it tucked away in my bunk.

Suddenly I heard the strangest noise I ever heard in my life. It sounded like a rifle going off right by my ear, it sounded like a steel door being slammed, and it sounded like a giant tearing yards and yards of cloth, all at once.

Then I couldn't hear anything but a ringing in my ears and I was dazed. I shook my head and looked down and I was staring at a raw hole in the ship, almost between my feet and nearly as big as my fist. There was scorched insulation around it and in the middle of the hole I could see blackness—then a star whipped past and I realized that I was staring right out into space.

There was a hissing noise.

I don't remember thinking at all. I just wadded up my uniform, squatted down, and stuffed it in the hole. For a moment it seemed as if the suction would pull it on through the hole, then it jammed and stuck and didn't go any further. But we were still losing air. I think that was the point at which I first realized that we *were* losing air and that we might be suffocated in vacuum.

There was somebody yelling and screaming behind me that he was killed and alarm bells were going off all over the place. You couldn't hear yourself think. The

⁶ *reveille* (REV·uh·lee): the sounding of a bugle early in the morning to awaken and call together people, usually in a camp or military post.

airtight door to our bunk room slid across automatically and settled into its gaskets and we were locked in.

That scared me to death.

I know it has to be done. I know that it is better to seal off one compartment and kill the people who are in it than to let a whole ship die—but, you see, *I* was in that compartment, personally. I guess I'm just not the hero type.



I could feel the pressure sucking away at the plug my uniform made. With one part of my mind I was recalling that it had been advertised as "tropical weave, self-ventilating" and wishing that it had been a solid plastic raincoat instead. I was afraid to stuff it in any harder, for fear it would go all the way through and leave us sitting there, chewing vacuum. I would have passed up desserts for the next ten years for just one rubber patch, the size of my hand.

The screaming had stopped; now it started up again. It was Noisy Edwards, beating on the airtight door and yelling, "Let me out of here! *Get me out of here!*"

On top of that I could hear Captain Harkness's voice coming through the bull horn. He was saying, "H-twelve! Report! H-twelve! Can you hear me?"

On top of that everybody was talking at once.

I yelled: "Quiet!" at the top of my voice—and for a second or so there was quiet.

Peewee Brunn, one of my Cubs, was standing in front of me, looking big-eyed. "What happened, Billy?" he said.

I said, "Grab me a pillow off one of the bunks. Jump!"

He gulped and did it. I said, "Peel off the cover, quick!"

He did, making quite a mess of it, and handed it to me—but I didn't have a hand free. I said, "Put it down on top of my hands."

It was the ordinary sort of pillow, soft foam rubber. I snatched one hand out and then the other, and then I was kneeling on it and pressing it down with the heels of my hands. It dimpled a little in the middle and I was scared we were going to have a blowout right through the pillow. But it held. Noisy was screaming again and



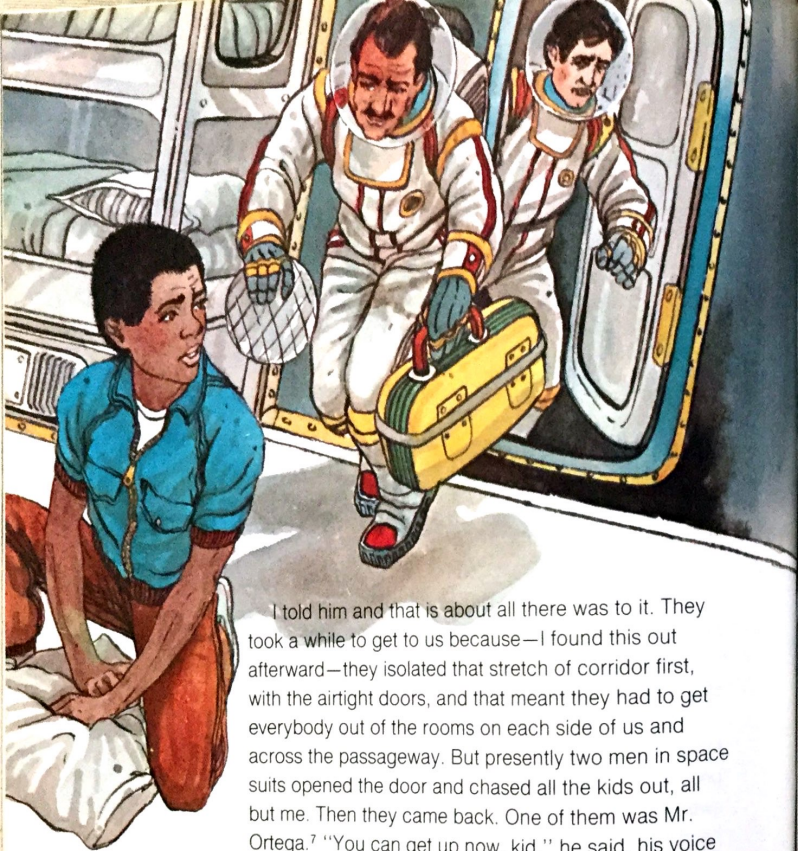
Captain Harkness was still asking for somebody, *anybody*, in compartment H-12 to tell him what was going on. I yelled "*Quiet!*" again, and added, "Somebody slug Noisy and shut him up."

That was a popular idea. About three of them jumped to it. Noisy got clipped in the side of the neck, then somebody poked him in the pit of his stomach and they swarmed over him. "Now everybody keep quiet," I said, "and keep on keeping quiet. If Noisy lets out a peep, slug him again." I gasped and tried to take a deep breath and said, "H-twelve, reporting!"

The Captain's voice answered, "What is the situation there?"

"There is a hole in the ship, Captain, but we got it corked up."

"How? And how big a hole?"



I told him and that is about all there was to it. They took a while to get to us because—I found this out afterward—the isolated that stretch of corridor first, with the airtight doors, and that meant they had to get everybody out of the rooms on each side of us and across the passageway. But presently two men in space suits opened the door and chased all the kids out, all but me. Then they came back. One of them was Mr. Ortega.⁷ “You can get up now, kid,” he said, his voice sounding strange and far away through his helmet. The other man squatted down and took over holding the pillow in place.

Mr. Ortega had a big metal patch under one arm. It had sticky padding on one side. I wanted to stay and watch him put it on but he chased me out and closed

⁷ Ortega (aw•TAY•guh).

the door. The corridor outside was empty but I banged on the airtight door and they let me through to where the rest were waiting. They wanted to know what was happening but I didn't have any news for them because I had been chased out.

After a while we started feeling light and Captain Harkness announced that spin would be off the ship for a short time. Mr. Ortega and the other man came back and went on up to the control room. Spin was off entirely soon after that and I got very sick. Captain Harkness kept the ship's speaker circuits cut in on his conversations with the men who had gone outside to repair the hole, but I didn't listen. I defy anybody to be interested in anything when he is drop sick.

Then spin came back on and everything was all right and we were allowed to go back into our bunk room. It looked just the same except that there was a plate welded over the place where the meteorite had come in.

Breakfast was two hours late and we didn't have school that morning.

That was how I happened to go up to Captain's mast for the second time. George was there and Molly and my sister Peggy and Dr. Archibald, the Scoutmaster of our deck, and all the fellows from my bunk room and all the ship's officers. The rest of the ship was cut in by visiplate. I wanted to wear my uniform but it was a mess—torn and covered with sticky stuff. I finally cut off the merit badges and put it in the ship's incinerator.

The First Officer shouted, “Captain's Mast for punishments and rewards!” Everybody sort of straightened up and Captain Harkness walked out and faced us. Dad shoved me forward.

The Captain looked at me. “William Lerner?” he said. I said, “Yessir.”

He said, "I will read from yesterday's log: 'On twenty-one August at oh-seven-oh-four system standard, while cruising in free fall according to plan, the ship was breached by a small meteorite. Safety interlocks worked satisfactorily and the punctured volume, compartment H-twelve, was isolated with no serious drop in pressure elsewhere in the ship.'

"'Compartment H-twelve is a bunk room and was occupied at the time of the emergency by twenty passengers. One of the passengers, William J. Lermer, contrived a makeshift patch with materials at hand and succeeded in holding sufficient pressure for breathing until a repair party could take over.

"'His quick thinking and immediate action unquestionably saved the lives of all persons in compartment H-twelve.'"

The Captain looked up from the log and went on, "A certified copy of this entry, along with depositions of witnesses, will be sent to Interplanetary Red Cross with recommendation for appropriate action. Another copy will be furnished you. I have no way to reward you except to say that you have my heart-felt gratitude. I know that I speak not only for the officers but for all the passengers and most especially for the parents of your bunkmates."

He paused and wagged a finger for me to come closer. He went on in a low voice, to me alone, "That really was a slick piece of work. You were on your toes. You have a right to feel proud."

I said I guessed I had been lucky.

He said, "Maybe. But that sort of luck comes to the man who is prepared for it."

He waited a moment, then said, "Lermer, have you ever thought of putting in for space training?"



I said I suppose I had but I hadn't thought about it very seriously. He said, "Well, Lermer, if you ever do decide to, let me know. You can reach me care of the Pilots' Association, Luna City."

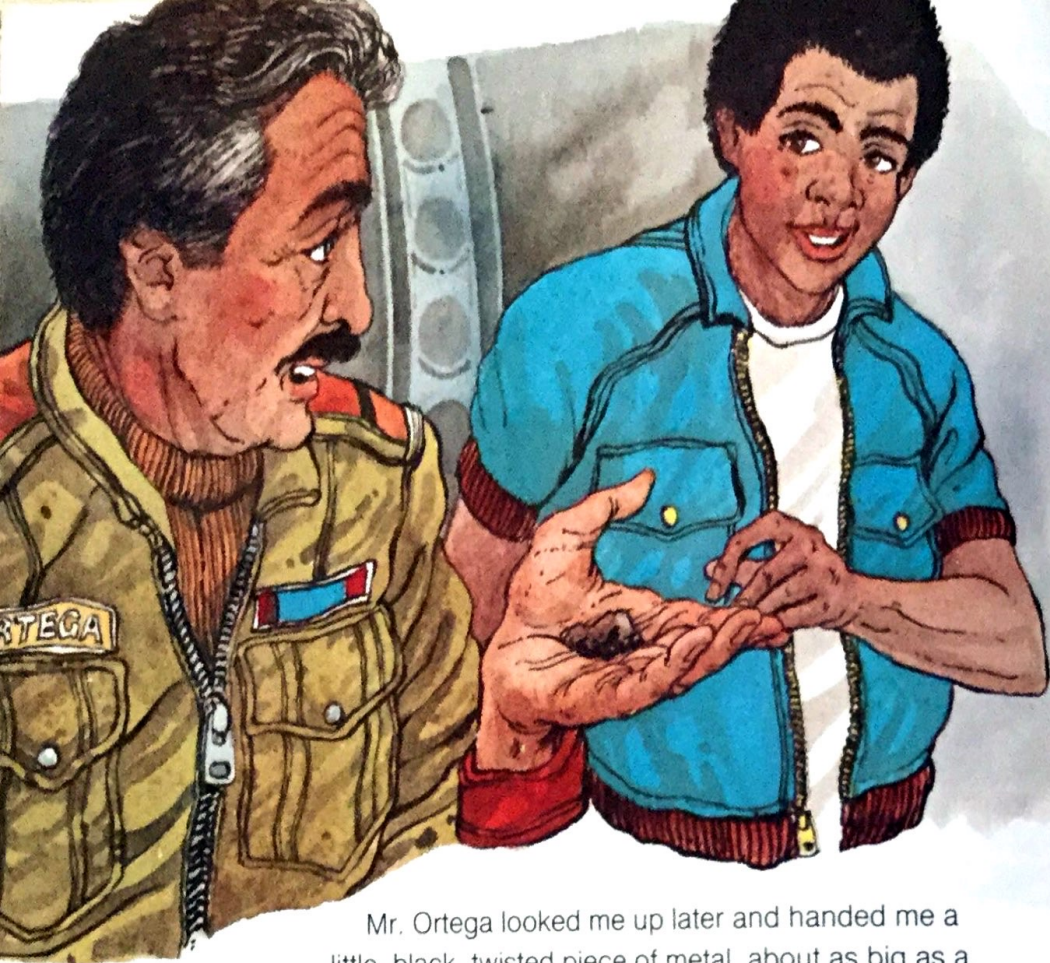
With that, mast was over and we went away, George and I together and Molly and Peggy following along. I heard Peggy saying, "That's *my* brother."

Molly said, "Hush, Peggy. And don't point."

Peggy said, "Why not? He *is* my brother—well, isn't he?"

Molly said, "Yes, but there's no need to embarrass him."

But I wasn't embarrassed.



Mr. Ortega looked me up later and handed me a little, black, twisted piece of metal, about as big as a button. "That's all there was left of it," he said, "but I thought you would like to have it—pay you for messing up your Scout suit, so to speak."

I thanked him and said I didn't mind losing the uniform; after all, it had saved my neck, too. I looked at the meteorite. "Mr. Ortega, is there any way to tell where this came from?"

"Not really," he told me, "though you can get the scientific johnnies to cut it up and then express an opinion—if you don't mind them destroying it."

I said no, I'd rather keep it—and I have. I've still got it as a pocket piece.

Think about the story. Finish the diagram on page 291 by filling in Bill's character traits. Then answer the questions.

1. Although people are screaming and alarms are sounding, Bill acts calmly. What is there in Bill's background that keeps him calm in the emergency?
2. Who acts differently from Bill in the emergency? What does he do? Why might the writer have included him in the story?
3. Use your diagram. What weaknesses do we see in Bill? What might the writer be saying about heroes?
4. How does Bill's adventure in space fit in with a unit on living with nature?
5. What choice did Bill have to make before the story began?
6. What is Bill's most important possession before the emergency? How do you know this?
7. What choice does Bill make when the meteor hits? What has become more important to him?
8. People never know how they will act during an emergency. If Bill had acted differently, how might the story have ended?

Think and Discuss