

Astounding SCIENCE FICTION

Serial

- The Pirates of Ersatz, *Murray Leinster* 8
(Part One of Three Parts)

Novelette

- Hi Diddle Diddle! *Calvin M. Knox* 69

Short Stories

- The Stoker and the Stars, *John A. Sentry* 59
Accidental Death, *Peter Baily* 92
Missing Link, *Frank Herbert* 100

Article

- The Professional Touch, *Leonard Lockhard* 116

Readers' Departments

- The Editor's Page 5
The Analytical Laboratory 68
In Times to Come 115
The Reference Library, *P. Schuyler Miller* 137
Brass Tacks 150

JOHN W. CAMPBELL, JR.
Editor

KAY TARRANT
Assistant Editor

Advertising Manager: WALTER J. MCBRIDE
H. A. Staab, Art Director

COVER: BY FREAS

SYMBOL: Warning: Poisonous if misapplied

Illustrations by Freas, Schoenherr,
Summers and van Dongen

FEBRUARY
1959

The editorial contents have not been published before, are protected by copyright and cannot be reprinted without publisher's permission. All stories in this magazine are fiction. No actual persons are designated by name or character. Any similarity is coincidental.

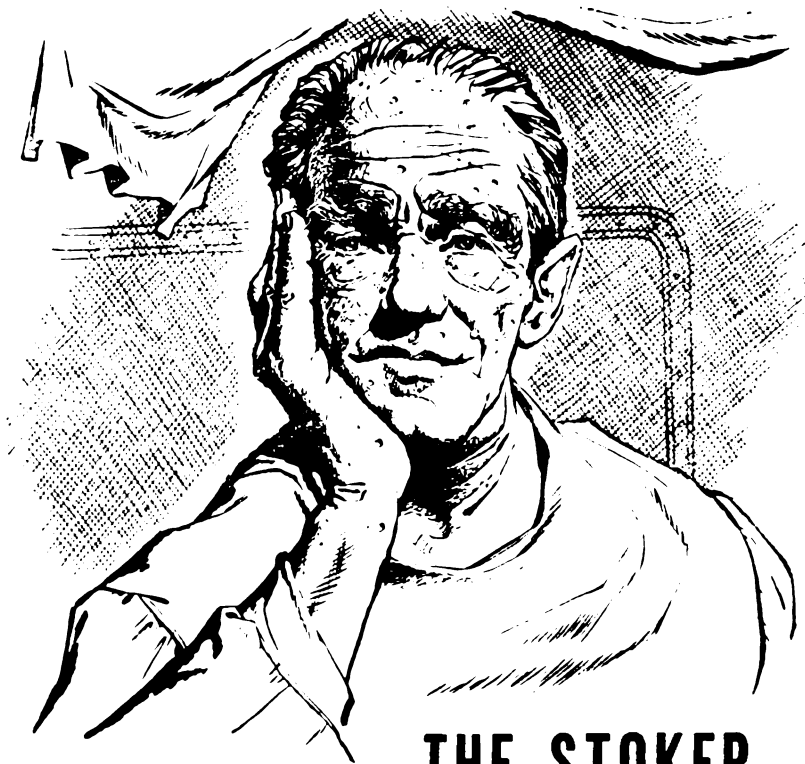
Astounding SCIENCE FICTION published monthly by Street & Smith Publications, Incorporated, at 375 Madison Avenue, New York 17, N. Y. Arthur Z. Gray, President; Ralph B. Whittaker, Jr., Executive Vice-President; Arthur P. Lawler, Vice-President and Secretary; Robert E. Park, Vice-President and Advertising Director; Thomas H. Kaiser, Treasurer. © 1958 by Street & Smith Publications, Inc. All rights reserved under International and Pan American Copyright Conventions. Second-class postage paid at New York, N. Y. Subscription \$3.50 for one year and \$6.00 for two years in the United States, Possessions and Canada; \$4.75 for one year and \$8.00 for two years in Pan American Union, Philippine Islands and Spain. Elsewhere \$5.00 for one year and \$8.50 for two years. When possible allow four weeks for change of address. Give old address and new address when notifying us. We cannot accept responsibility for unsolicited manuscripts or art work. Any material submitted must include return postage. All subscriptions should be addressed to Subscription Department, Street & Smith Publications, Incorporated, 304 East 45th Street, New York 17, New York.

Send notice of undelivered copies on Form 3579 to: Astounding Science Fiction, McCall Street, Dayton 1, Ohio.

Printed in  the U. S. A.

NEXT ISSUE ON SALE
FEBRUARY 17, 1959

\$3.50 per Year in U. S. A.
35 cents per Copy



THE STOKER AND THE STARS

BY JOHN A. SENTRY

When you've had your ears pinned back in a bowknot, it's sometimes hard to remember that an intelligent people has no respect for a whipped enemy ... but does for a fairly beaten enemy.

Illustrated by van Dongen

THE STOKER AND THE STARS

59



NOW him? Yes, I know him—*knew* him. That was twenty years ago.

Everybody knows him now. Everybody who passed him on the street knows him. Everybody who went to the same schools, or even to different schools in different towns, knows him now. Ask them. But I knew him. I lived three feet away from him for a month and a half. I shipped with him and called him by his first name.

What was he like? What was he thinking, sitting on the edge of his bunk with his jaw in his palm and his eyes on the stars? What did he think he was after?

Well . . . Well, I think he— You know, I think I never did know him, after all. Not well. Not as well as some of those people who're writing the books about him seem to.

I couldn't really describe him to you. He had a duffelbag in his hand and a packed airsuit on his back. The skin of his face had been dried out by ship's air, burned by ultraviolet and broiled by infra red. The pupils of his eyes had little cloudy specks in them where the cosmic rays had shot through them. But his eyes were steady and his body was hard. What did he look like? He looked like a man.

It was after the war, and we were beaten. There used to be a school of thought among us that deplored our combativeness; before we had ever met any people from off Earth, even, you could hear people saying we

were toughest, cruellest life-form in the Universe, unfit to mingle with the gentler wiser races in the stars, and a sure bet to steal their galaxy and corrupt it forever. Where these people got their information, I don't know.

We were beaten. We moved out beyond Centaurus, and Sirius, and then we met the Jeks, the Nosurwey, the Lud. We tried Terrestrial know-how, we tried Production Miracles, we tried patriotism, we tried damning the torpedoes and full speed ahead . . . and we were smashed back like mayflies in the wind. We died in droves, and we retreated from the guttering fires of a dozen planets, we dug in, we fought through the last ditch, and we were dying on Earth itself before Baker mutinied, shot Cope, and surrendered the remainder of the human race to the wiser, gentler races in the stars. That way, we lived. That way, we were permitted to carry on our little concerns, and mind our manners. The Jeks and the Lud and the Nosurwey returned to their own affairs, and we knew they would leave us alone so long as we didn't bother them.

We liked it that way. Understand me—we didn't accept it, we didn't knuckle under with waiting murder in our hearts—we *liked* it. We were grateful just to be left alone again. We were happy we hadn't been wiped out like the upstarts the rest of the Universe thought us to be. When they let us keep our own solar system and carry on a trickle of trade with the outside, we accepted it for

the fantastically generous gift it was. Too many of our best men were dead for us to have any remaining claim on these things in our own right. I know how it was. I was there, twenty years ago. I was a little, pudgy man with short breath and a high-pitched voice. I was a typical Earthman.

We were out on a God-forsaken landing field on Mars, MacReidie and I, loading cargo aboard the *Serenus*. MacReidie was First Officer. I was Second. The stranger came walking up to us.

"Got a job?" he asked, looking at MacReidie.

Mac looked him over. He saw the same things I'd seen. He shook his head. "Not for you. The only thing we're short on is stokers."

You wouldn't know. There's no such thing as a stoker any more, with automatic ships. But the stranger knew what Mac meant.

Serenus had what they called an electronic drive. She had to run with an evacuated engine room. The leaking electricity would have broken any stray air down to ozone, which eats metal and rots lungs. So the engine room had the air pumped out of her, and the stokers who tended the dials and set the cathode attitudes had to wear suits, smelling themselves for twelve hours at a time and standing a good chance of cooking where they sat when the drive arced. *Serenus* was an ugly old tub. At that, we were the better of the two interstellar freighters the human race had left.

"You're bound over the border, aren't you?"

MacReidie nodded. "That's right. But—"

"I'll stoke."

MacReidie looked over toward me and frowned. I shrugged my shoulders helplessly. I was a little afraid of the stranger, too.

The trouble was the look of him. It was the look you saw in the bars back on Earth, where the veterans of the war sat and stared down into their glasses, waiting for night to fall so they could go out into the alleys and have drunken fights among themselves. But he had brought that look to Mars, to the landing field, and out here there was something disquieting about it.

He'd caught Mac's look and turned his head to me. "I'll stoke," he repeated.

I didn't know what to say. MacReidie and I—almost all of the men in the Merchant Marine—hadn't served in the combat arms. We had freighted supplies, and we had seen ships dying on the runs—we'd had our own brushes with commerce raiders, and we'd known enough men who joined the combat forces. But very few of the men came back, and the war this man had fought hadn't been the same as ours. He'd commanded a fighting ship, somewhere, and come to grips with things we simply didn't know about. The mark was on him, but not on us. I couldn't meet his eyes. "O.K. by me," I mumbled at last.

I saw MacReidie's mouth turn

down at the corners. But he couldn't gainsay the man any more than I could. MacReidie wasn't a mumbling man, so he said angrily: "O.K., bu:ko, you'll stoke. Go and sign on."

"Thanks." The stranger walked quietly away. He wrapped a hand around the cable on a cargo hook and rode into the hold on top of some freight. Mac spat on the ground and went back to supervising his end of the loading. I was busy with mine, and it wasn't until we'd gotten the *Serenus* loaded and buttoned up that Mac and I even spoke to each other again. Then we talked about the trip. We didn't talk about the stranger.

Daniels, the Third, had signed him on and had moved him into the empty bunk above mine. We slept all in a bunch on the *Serenus*—officers and crew. Even so, we had to sleep in shifts, with the ship's designers giving ninety per cent of her space to cargo, and eight per cent to power and control. That left very little for the people, who were crammed in any way they could be. I said empty bunk. What I meant was, empty dur—and I'd be sharing work shifts—me ing my sleep shift. That meant he up in the control blister, parked in a soft chair, and him down in the engine room, broiling in a suit for twelve hours.

But I ate with him, used the head with him; you can call that rubbing elbows with greatness, if you want to.

He was a very quiet man. Quiet in the way he moved and talked. When we were both climbing into our

bunks, that first night, I introduced myself and he introduced himself. Then he heaved himself into his bunk, rolled over on his side, fixed his straps, and fell asleep. He was always friendly toward me, but he must have been very tired that first night. I often wondered what kind of a life he'd lived after the war—what he'd done that made him different from the men who simply grew older in the bars. I wonder, now, if he really did do anything different. In an odd way, I like to think that one day, in a bar, on a day that seemed like all the rest to him when it began, he suddenly looked up with some new thought, put down his glass, and walked straight to the Earth-Mars shuttle field.

He might have come from any town on Earth. Don't believe the historians too much. Don't pay too much attention to the Chamber of Commerce plaques. When a man's name becomes public property, strange things happen to the facts.

It was MacReidie who first found out what he'd done during the war.

I've got to explain about MacReidie. He takes his opinions fast and strong. He's a good man—is, or was; I haven't seen him for a long while—but he liked things simple.

MacReidie said the duffelbag broke loose and floated into the middle of the bunkroom during acceleration. He opened it to see whose it was. When he found out, he closed it up and strapped it back in its place at the foot of the stoker's bunk.

MacReidie was my relief on the bridge. When he came up, he didn't relieve me right away. He stood next to my chair and looked out through the ports.

"Captain leave any special instructions in the Order Book?" he asked.

"Just the usual. Keep a tight watch and proceed cautiously."

"That new stoker," Mac said.

"Yeah?"

"I knew there was something wrong with him. He's got an old Marine uniform in his duffel."

I didn't say anything. Mac glanced over at me. "Well?"

"I don't know." I didn't.

I couldn't say I was surprised. It had to be something like that, about the stoker. The mark was on him, as I've said.

It was the Marines that did Earth's best dying. It had to be. They were trained to be the best we had, and they believed in their training. They were the ones who slashed back the deepest when the other side hit us. They were the ones who sallied out into the doomed spaces between the stars and took the war to the other side as well as any human force could ever hope to. They were always the last to leave an abandoned position. If Earth had been giving medals to members of her forces in the war, every man in the Corps would have had the Medal of Honor two and three times over. Posthumously. I don't believe there were ten of them left alive when Cope was shot. Cope was one of them. They were a kind of human being neither MacReidie

nor I could hope to understand.

"You don't know," Mac said. "It's there. In his duffel. Damn it, we're going out to trade with his sworn enemies! Why do you suppose he wanted to sign on? Why do you suppose he's so eager to go!"

"You think he's going to try to start something?"

"Think! That's exactly what he's going for. One last big alley fight. One last brawl. When they cut him down—do you suppose they'll stop with him? They'll kill us, and then they'll go in and stamp Earth flat! You know it as well as I do."

"I don't know, Mac," I said. "Go easy." I could feel the knots in my stomach. I didn't want any trouble. Not from the stoker, not from Mac. None of us wanted trouble—not even Mac, but he'd cause it to get rid of it, if you follow what I mean about his kind of man.

Mac hit the viewport with his fist. "Easy! Easy—nothing's easy. I hate this life," he said in a murderous voice. "I don't know why I keep signing on. Mars to Centaurus and back, back and forth, in an old rust tub that's going to blow herself up one of these—"

Daniels called me on the phone from Communications. "Turn up your Intercom volume," he said. "The stoker's jamming the circuit."

I kicked the selector switch over, and this is what I got:

"—so there we were at a million per, and the air was gettin' thick. The

Skipper says 'Cheer up, brave boys, we'll—' "

He was singing. He had a terrible voice, but he could carry a tune, and he was hammering it out at the top of his lungs.

"Twas the last cruise of the Venus, by God you should of seen us! The pipes were full of whisky, and just to make things risky, the jets were . . ."

The crew were chuckling into their own chest phones. I could hear Daniels trying to cut him off. But he kept going. I started laughing myself. No one's supposed to jam an intercom, but it made the crew feel good. When the crew feels good, the ship runs right, and it had been a long time since they'd been happy.

He went on for another twenty minutes. Then his voice thinned out, and I heard him cough a little. "Daniels," he said, "get a relief down here for me. *Jump to it!*" He said the last part in a Master's voice. Daniels didn't ask questions. He sent a man on his way down.

He'd been singing, the stoker had. He'd been singing while he worked with one arm dead, one sleeve ripped open and badly patched because the fabric was slippery with blood. There'd been a flashover in the drivers. By the time his relief got down there, he had the insulation back on, and the drive was purring along the way it should have been. It hadn't even missed a beat.

He went down to sick bay, got the arm wrapped, and would have gone back on shift if Daniels'd let him.

Those of us who were going off shift found him toying with the theremin in the mess compartment. He didn't know how to play it, and it sounded like a dog howling.

"Sing, will you!" somebody yelled. He grinned and went back to the "Good Ship *Venus*." It wasn't good, but it was loud. From that, we went to "Starways, Farways, and Barways," and "The Freefall Song." Somebody started "I Left Her Behind For You," and that got us off into sentimental things, the way these sessions would sometimes wind up when spacemen were far from home. But not since the war, we all seemed to realize together. We stopped, and looked at each other, and we all began drifting out of the mess compartment.

And maybe it got to him, too. It may explain something. He and I were the last to leave. We went to the bunkroom, and he stopped in the middle of taking off his shirt. He stood there, looking out the porthole, and forgot I was there. I heard him reciting something, softly, under his breath, and I stepped a little closer. This is what it was:

*"The rockets rise against the skies,
Slowly; in sunlight gleaming
With silver hue upon the blue.
And the universe waits, dreaming.*

*"For men must go where the flame-
winds blow,
The gas clouds softly plaiting;
Where stars are spun and worlds
begin,
And men will find them waiting.*

*"The song that roars where the
rocket soars
Is the song of the stellar flame;
The dreams of Man and galactic span
Are equal and much the same."*

What was he thinking of? Make your own choice. I think I came close to knowing him, at that moment, but until human beings turn telepath, no man can be sure of another.

He shook himself like a dog out of cold water, and got into his bunk. I got into mine, and after a while I fell asleep.

I don't know what MacReidie may have told the skipper about the stoker, or if he tried to tell him anything. The captain was the senior ticket holder in the Merchant Service, and a good man, in his day. He kept mostly to his cabin. And there was nothing MacReidie could do on his own authority—nothing simple, that is. And the stoker had saved the ship, and . . .

I think what kept anything from happening between MacReidie and the stoker, or anyone else and the stoker, was that it would have meant trouble in the ship. Trouble, confined to our little percentage of the ship's volume, could seem like something much more important than the fate of the human race. It may not seem that way to you. But as long as no one began anything, we could all get along. We could have a good trip.

MacReidie worried, I'm sure. I worried, sometimes. But nothing happened.

When we reached Alpha Centaurus, and set down at the trading field on the second planet, it was the same as the other trips we'd made, and the same kind of landfall. The Lud factor came out of his post after we'd waited for a while, and gave us our permit to disembark. There was a Jek ship at the other end of the field, loaded with the cargo we would get in exchange for our holdful of goods. We had the usual things; wine, music tapes, furs, and the like. The Jeks had been giving us light machinery lately—probably we'd get two or three more loads, and then they'd begin giving us something else.

But I found that this trip wasn't quite the same. I found myself looking at the factor's post, and I realized for the first time that the Lud hadn't built it. It was a leftover from the old colonial human government. And the city on the horizon—men had built it; the touch of our architecture was on every building. I wondered why it had never occurred to me that this was so. It made the landfall different from all the others, somehow. It gave a new face to the entire planet.

Mac and I and some of the other crewmen went down on the field to handle the unloading. Jeks on self-propelled cargo lifts jockeyed among us, scooping up the loads as we unhooked the slings, bringing cases of machinery from their own ship. They sat atop their vehicles, lean and aloof, dashing in, whirling, shooting

across the field to their ship and back like wild horsemen on the plains of Earth, paying us no notice.

We were almost through when Mac suddenly grabbed my arm. "Look!"

The stoker was coming down on one of the cargo slings. He stood upright, his booted feet planted wide, one arm curled up over his head and around the hoist cable. He was in his dusty brown Marine uniform, the scarlet collar tabs bright as blood at his throat, his major's insignia glittering at his shoulders, the battle stripes on his sleeves.

The Jeks stopped their lifts. They knew that uniform. They sat up in their saddles and watched him come down. When the sling touched the ground, he jumped off quietly and walked toward the nearest Jek. They all followed him with their eyes.

"We've got to stop him," Mac said, and both of us started toward him. His hands were both in plain sight, one holding his duffelbag, which was swelled out with the bulk of his airsuit. He wasn't carrying a weapon of any kind. He was walking casually, taking his time.

Mac and I had almost reached him when a Jek with insignia on his coveralls suddenly jumped down from his lift and came forward to meet him. It was an odd thing to see—the stoker, and the Jek, who did not stand as tall. MacReidie and I stepped back.

The Jek was coal black, his scales glittering in the cold sunlight, his hatchet-face inscrutable. He stopped

when the stoker was a few paces away. The stoker stopped, too. All the Jeks were watching him and, paying no attention to anything else. The field might as well have been empty except for those two.

"They'll kill him. They'll kill him right now," MacReidie whispered.

They ought to have. If I'd been a Jek, I would have thought that uniform was a death warrant. But the Jek spoke to him:

"Are you entitled to wear that?"

"I was at this planet in '39. I was closer to your home world the year before that," the stoker said. "I was captain of a destroyer. If I'd had a cruiser's range, I would have reached it." He looked at the Jek. "Where were you?"

"I was here when you were."

"I want to speak to your ship's captain."

"All right. I'll drive you over."

The stoker nodded, and they walked over to his vehicle together. They drove away, toward the Jek ship.

"All right, let's get back to work," another Jek said to MacReidie and myself, and we went back to unloading cargo.

The stoker came back to our ship that night, without his duffelbag. He found me and said:

"I'm signing off the ship. Going with the Jeks."

MacReidie was with me. He said loudly: "What do you mean, you're going with the Jeks?"

"I signed on their ship," the stoker said. "Stoking. They've got a micro-

nuclear drive. It's been a while since I worked with one, but I think I'll make out all right, even with the screwball way they've got it set up."

"Huh?"

The stoker shrugged. "Ships are ships, and physics is physics, no matter where you go. I'll make out."

"What kind of a deal did you make with them? What do you think you're up to?"

The stoker shook his head. "No deal. I signed on as a crewman. I'll do a crewman's work for a crewman's wages. I thought I'd wander around a while. It ought to be interesting," he said.

"On a Jek ship."

"Anybody's ship. When I get to their home world, I'll probably ship out with some people from farther on. Why not? It's honest work."

MacReidie had no answer to that.

"But—" I said.

"What?" He looked at me as if he couldn't understand what might be bothering me, but I think perhaps he could.

"Nothing," I said, and that was that, except MacReidie was always a sourer man from that time up to as long as I knew him afterwards. We took off in the morning. The stoker had already left on the Jek ship, and it turned out he'd trained an apprentice boy to take his place.

It was strange how things became different for us, little by little after that. It was never anything you could put your finger on, but the Jeks began taking more goods, and giving us

things we needed when we told them we wanted them. After a while, *Serenus* was going a little deeper into Jek territory, and when she wore out, the two replacements let us trade with the Lud, too. Then it was the Nosurwey, and other people beyond them, and things just got better for us, somehow.

We heard about our stoker, occasionally. He shipped with the Lud, and the Nosurwey, and some people beyond them, getting along, going to all kinds of places. Pay no attention to the precise red lines you see on the star maps; nobody knows exactly what path he wandered from people to people. Nobody could. He just kept signing on with whatever ship was going deeper into the galaxy, going farther and farther. He messed with green shipmates and blue ones. One and two and three heads, tails, six legs—after all, ships are ships and they've all got to have something to push them along. If a man knows his business, why not? A man can live on all kinds of food, if he wants to get used to it. And any nontoxic atmosphere will do, as long as there's enough oxygen in it.

I don't know what he did, to make things so much better for us. I don't know if he did anything, but stoke their ships and, I suppose, fix them when they were in trouble. I wonder if he sang dirty songs in that bad voice of his, to people who couldn't possibly understand what the songs were about. All I know is, for some reason those people slowly began treating us with respect. We changed,

too, I think—I'm not the same man I was . . . I think—not altogether the same; I'm a captain now, with master's papers, and you won't find me in my cabin very often . . . there's a kind of joy in standing on a bridge, looking out at the stars you're moving toward. I wonder if it mightn't have kept my old captain out of that place he died in, finally, if he'd tried it.

So, I don't know. The older I get, the less I know. The thing people remember the stoker for—the thing

that makes him famous, and, I think, annoys him—I'm fairly sure is only incidental to what he really did. If he did anything. If he meant to. I wish I could be sure of the exact answer he found in the bottom of that last glass at the bar before he worked his passage to Mars and the *Serenus*, and began it all.

So, I can't say what he ought to be famous for. But I suppose it's enough to know for sure that he was the first living being ever to travel all the way around the galaxy.

THE END