

GIANT ISSUE 02 - 226 PAGES!



PLUS...

Revenge of the Crab Monsters By Paul Hurst

And Classics by: Andre Norton Ray Bradbury Bryce Walton

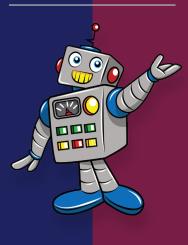
Press



THE New and Classic Stories From Sci-Fi's Golden Age

IN THIS ISSUE

New, Original Short **Stories**



Timeless Classics by the Masters



A Novella by Pierre V. Comtois

REVENGE OF THE CRAB MONSTERS

Fan Fiction By Paul Hurst

101 PAGES

9 PAGES

36 PAGES

24 PAGES

FREEWAY Bryce Walton

THE CREATURES THAT TIME FORGOT (PART 2)

by Ray Bradbury

10 AGES

ALL CATS ARE GRAY By Andre Norton

ROBOT DREAMS

Grading Isaac Asimov's Predictions

Claude Tobor

SCI-FI RETROSPECTIVE

A Look Back at Sci-fi From the 1950s. Part One

Chislain Barbe

REPORT FROM THE HELM

Your Editor, on our FIRST ISSUE

Davie Gcótt

First Issue With Us?

Here's why we exist, and why the magazine looks as it does. There's a gold mine of fantastic science fiction in the old magazines of the mid-20th Century, but much of it can only be read by viewing "scans" of the original old magazines, with their squinty text, multiple columns, and faded pages. The Interocitor is here to bring these classics back to life in a format that's easy to read on modern, digital devices. Compare the examples below.



ICE PLANET Carl Selwyn

stolen secret, a mysterious woman, a person high in the government-it had all the angles. Then Senator Trexel was acquitted, Molly Borden confessed. Now she was journeying to a life sentence on the penal planet. **EASY!**

"Too bad she burned Adison's plans when they trapped her." er's self-appointed traveling companion again.

"We lost the resources of four worlds by that little trick," Bill agreed. "The police found enough in the ashes to convince them it was the plans." He smiled to himself stightly, like someone who expected something but wasn't quite sure he could count on it. Ricker glanced up, then stiffened erect.

ective and the woman. He The Martian stood in the aisle be- side the calmly over his shoulder at stare government—it had all the angles. Ricker and the sourdough and in his right hand was a pistol leveled gen-Then Senator Trexel was acquitted, erally at them both. Molly Borden confessed. Now she was "Please be very quiet," his lips journeying to a life sentence on the moved in soft, even to penal planet.

"Too bad she burned Adison's plans when they trapped her." It was Ricker's self-appointed traveling companion again.

"We lost the resources of four worlds by that little trick" Rill

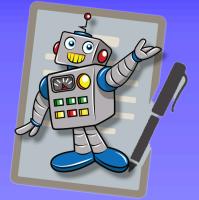
out taking his snaky e he spoke to the woma

in his left vest pocket," he said. "We'll take a small boat and drop out of this before the pilots can be warned."

RICKER stared like he was watching

THE INTEROCITOR

Thanks to This Issue's Contributing Writers



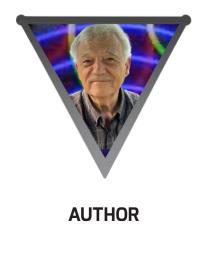
We Couldn't do it Without You!



Dane Scott

After 20 years in radio, Dane snipped the cord in '96 and went full time as freelance voiceover guy. He also developed a radio automation system.

Now semi-retired, Dane still does voiceovers, coaches others on voiceover, and was recently hired as the voice of "Kup" (an Autobot) for a Transformers video game. He manages and writes for Facebook groups like "Keep Watching the Skies" (classic scifii), "BoomTown," a group for baby boomers, and is Founder/Editor of *The Interocitor*.



Pierre V. Comtois

Pierre V. Comtois is a former newspaper reporter in Lowell, MA who has been editing and publishing "Fungi, the Magazine of Fantasy and Weird Fiction" since 1984. Scheduled for release in August 2024 is, "Marvel Comics in the Early 1960s" from Twomorrows Publishers. In addition, the author has had SF stories in "The Way the Future Was" and "Different Futures," and penned a dystopian novel called, Scheduled for Extinction." There's lots more to tell! Visit <u>his website</u> for more about the Pierre and his writings. Much obliged, Pierre!



Paul Hurst

Paul's contribution to Issue 02 is a fan fiction short story; a spooky sequel to the cult classic movie from the 1950s, "Attack of the Crab Monsters."

At release time, we were unable to reach Paul for his bio information, though the beauty of digital publishing is that we an update this it at any time, we we'll definitely do so as soon as we can. Thanks for the story, Paul!



Ghislain Barbe

Ghislain Barbe has worked as an art director in video games for over 20 years and as a full-time dad to three lovely daughters for nearly as long. Previously, he was a character designer and story artist in the animation industry, and has illustrated over 100 penand-paper RPG books.He has published portfolios of his doodles, and the essay, "Cosmopopicon: Cosmogony through Mythology, Science Fiction, Fantasy, Pop Culture and more." We begin excerpts from his book, The Fifties" in this issue. Thanks G!



You're Next

If you're a short story writer, contact us through our volunteer page and tell us about one or more stories you'd like us to consider for use in a future issue of *The Interocitor.* Remember that, for our magazine, stories should look and feel like those written in the mid-20th century, without reference to modern things like cellphones and "Starbucks." Also in keeping with the storytelling of that era, they should not contain sexual scenes, vulgarity, or swearing.



Greetings, Fleet! It's been exciting to see the reaction to our first issue. Based on all your positive feedback and the growing number of subscribers, it's clear people feel the magazine is meeting a need. So...welcome to Issue 02 of *The Interocitor*.

What We're Hearing

The comments we're getting from subscribers tell us we're succeeding so far in meeting our goal of providing really great classic *and* modern sci-fi short stories in a reader-friendly format. Here are some of the messages we've received:

"Oh man, it was fantastic!!! It's so very good and has that sense of the old magazines of my youth and before. Thank you so much for doing this. I'm 59 and kids nowadays have no idea of the wonderful time spent on a rainy afternoon on the back porch curled up with a magazine like this! Thanks again!!!" -Carroll Martin

"Great, really enjoyed the graphics, the mix of current and past sci-fi stories and the format of the magazine. Looking forward to the next issue." -Stan Van Horn

"Very much enjoyed the story material. It was everything you had promised." **-Terry Michitsch**

"CONGRATULTIONS, best ezine I've read in a long time. I'll be looking forward with relish to upcoming issues." -Harlan Weikle



"Thank you for issue 1, I read every word! Great stories, keep them coming!" -Edmud Fratus

"Classy, stylish, and a pleasure to read. It's an obvious work of affection for 50's & 60's SiFi. Well done and thank you!!" -Jim Abernathy

"Liked it! I'm 76 so grew up on golden age sci-fi." -William Guy

"Loved the first edition. Reminded me of the early scifi mags I read in the 60's. Proper stories not the Japanese style cartoon stuff that seems to be in everything today" **-Christopher Hiett**

"First edition is very very well presented. And, thanks for the new format and more readable text...did I mention the great artwork on the cover? Wow." **-Donald Boyd**

"I love it Dane, great stories, a wonderful idea, and really well presented. Thank you and the whole team" -**Philip Powell**

"Have just finished reading first issue and liked it greatly. Looks great, well set out...give yourself, and your team, a deserved pat on the back." **-Geoff Thornley**

"I loved every inch of the first issue. Perfect format and contents. Easy to read and can't wait until the next one is released." **-Paul Rankin**

Subscription Model vs. Instant Access

While the idea of making our magazine something you subscribe to was a nice idea, and served as a fond tip-of-the-hat to the classic subscription model of years gone by, we were finding it cost prohibitive to use an email service to notify our rapidly growing number of subscribers. So as of July, 2024, we've opened *The Interocitor* up to instant downloads by everybody, everywhere. You can always find the latest issue, and all back issues, at https://www.theinterocitor.org/downloads.html Feel free to share the link and all issues of *The Interocitor* with your friends and colleagues. The more, the merrier!

If you'd like to be informed of each new release, join our <u>Facebook group</u>, where we'send a notification to group members as each issue comes out.

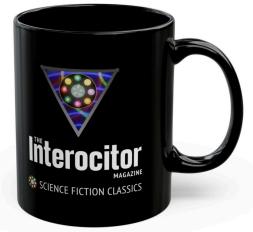
What's New This Time

Artificial intelligence is nothing new to readers of science fiction. Isaac Asimov wrote about it in depth in his many books and stories centering around robots and robotics, "positronic brains," etc. How close did he come to predicing the AI breakthroughs we're presently seeing? An interesting "Robot Dreams" <u>article</u> in this issue talks about Asimov's hits and misses Plus, all our regular features, stories, and goodies. Enjoy!

Also in Issue 02 is the first installment of a new feature I'm really excited about. Classic sci-fi aficionado and talented artist **Ghislain Barbe** has come on board to provide fascinating excerpts from his upcoming book, "The Fifties," that talks about the science fiction of that decade. I'm learning all kinds of things from his writeups, and I know you'll enjoy them.

It's been gratifying to see how many people are coming on board to offer their talents to *The Interocitor*, making it better and better with every issue! You can volunteer your unique abilities <u>at our website</u>.

Want to Show Your Appreciation?



We've created a beautiful *Interocitor Magazine* mug that's available at a reasonable price with free shipping to the continental U.S. Not only will you appreciate having it, but each mug purchased helps support what we're doing. Here's the link to our little <u>online store</u>.

Dane Scott, Editor, and Fellow Sci-Fi Lover



Thanks to these special people

John Watson, 3D Design, Contest Prize Alexander Smith, Technical Assistance Jerry Fuchs, Cartoonist Lyza Herman, Story Research Ben Taylor, Story Research Mark Nelson, Story Research Jay Rietz, Story Review and Proofreading John Sachanda, Proofreading Jason Karpf, Publicity

The beauty of an online magazine like this is that we can quickly and easily update the current issue even after it's released, so if we've failed to mention someone who has contributed their talents to this issue, please email us and we'll get them added pronto. And please be assured that your contributions of time and talents are *greatly* appreciated!

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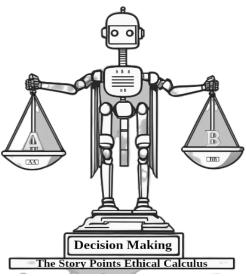
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decision, choose the alternative which will make the compressed story larger. In other words, be interesting!

Requires an extensive information gathering network, deep knowledge of history and science, and a vast quantum computing facility. Slightly compatible with Human ethics, in the way general relativity is to Newtonian physics.

See the #StoryPointsEC article!

Contact AGMS unit #00 for redundant details.



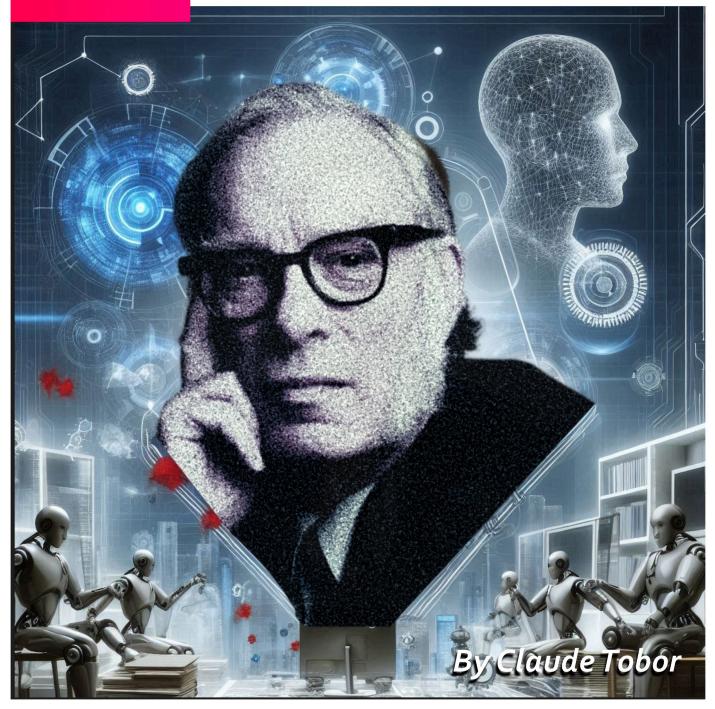




We were happy to receive this gracious thank-you letter from Stephen Bardy, the ultimate winner of our The Interocitor Subscription Contest (we were unable to reach the first person whose name we drew). Based on Stephen's choice of the Rhedosaurus from "The Beast From 20,000 Fathoms," volunteer artist John Watson designed this beautiful figurine for him.

Stephen wrote: "Gentlemen, Rhedosaurus arrived yesterday afternoon and here he is on my mantle! I love him, this is such a great gift. John, thank you so much for what you did. I will always treat this present with the respect it deserves."

ASIMOV'S **Obot Dreams** THE HITS AND THE MISSES



Isaac Asimov made a number of interesting predictions about artificial intelligence in his science fiction works, particularly in his Robot series. How many of them have come true?



simov's visions were remarkably prescient in some ways, particularly in anticipating the ethical challenges and societal impacts of AI. However, he didn't foresee some key aspects of modern AI, such as machine learning from big data, the internet's role in AI development, or the dominance of nonhumanoid AI applications.

Let's compare some of his key ideas with modern AI developments.

Three Laws of Robotics

Asimov's most famous contribution was the Three Laws of Robotics, designed to ensure AI safety. While we don't have sentient robots governed by such laws, the idea of building ethical constraints into AI systems is a major focus in modern AI development and AI ethics discussions.

Positronic Brains

Asimov envisioned robots with "positronic brains" - a fictional technology that allowed for human-like cognition. While we don't have anything exactly like this, neural networks and deep learning models are our closest analogue, allowing for increasingly sophisticated information processing and decision-making.

Humanoid Robots

Many of Asimov's robots were humanoid. We do have humanoid robots today, but they're not as advanced as Asimov's. Most practical AI applications are disembodied - software rather than physical robots.

Al Integration in Society:

Asimov explored how robots might integrate into human society. We're seeing this play out now with AI in various sectors like healthcare, finance, and customer service, though not with humanoid robots as he envisioned.

AI Psychology

Asimov introduced the concept of "robopsychology." While we don't have this exact field, there is growing research into AI behavior, decision-making processes, and potential cognitive biases in AI systems.

Centralized AI Control

In some stories, Asimov depicted a central AI system managing large parts of



human civilization. While we don't have a single AI running everything, we do see large-scale AI systems influencing areas like financial markets, social media content distribution, and urban infrastructure management.

Timeline

Asimov often set his robot stories in the near future, suggesting advanced AI would be commonplace by the early 21st century. While AI has progressed significantly, we're not at the level of sentient, general-purpose robots he envisioned for this timeframe.

Physical form

Asimov focused heavily on humanoid robots. In reality, most of our advanced AI systems are software-based and don't have physical bodies. When robots are used (like in manufacturing), they rarely resemble humans.

Centralized development

In many of Asimov's stories, robot development was controlled by a



few large corporations. While big tech companies do play a major role in AI development, there's also significant work being done by universities, startups, and open-source communities.

Generalized AI

Asimov's robots often possessed general intelligence comparable to humans. Our current AI systems are narrow or specialized, excelling in specific tasks but lacking general intelligence.

Robot-human interactions

Asimov envisioned robots interacting with humans primarily through speech and physical actions. Much of our AI interaction today is through text, apps, or digital

interfaces.

AI emotions

Some of Asimov's advanced robots developed emotions. While we're working on affective computing, we're far from AI systems with genuine emotions.

Speed of advancement



Asimov didn't anticipate the rapid acceleration of AI capabilities we've seen in recent years, particularly in areas like natural language processing and image recognition.

Data dependence

The critical role of big data in modern AI development wasn't a factor in Asimov's visions.

Global impact

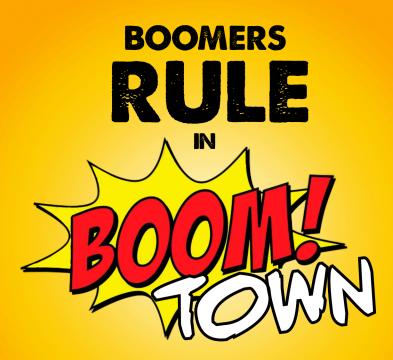
While Asimov explored societal impacts of robots, he didn't foresee the global, transformative effect of AI on industries like finance, healthcare, and entertainment.

These divergences highlight the challenges of predicting technological development, even for a visionary like Asimov. They also underscore how AI has evolved in unexpected ways, presenting both unforeseen challenges and opportunities.



EDITOR'S NOTE

We thought it might be interesting, in light of the subject matter, to see how well artificial intelligence could do when writing an introspective piece about, well, *itself*! We gave the task to the "Claude" AI engine, and what you just read was the result. Not bad! By the way, the AI resource's name inspired the name we chose for the author, "Claude Tobor" (where the last name is "robot" spelled backwards).



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THE CREATURES THAT TIME FORGOT, PT II By Ray Bradbury

Here's the <u>conclusion</u> of Ray Bradbury's "The Creature That Time Forgot," continued from <u>Issue 01</u> of The Interocitor. <u>Click to read the first half.</u>

He found what he looked for. A half dozen men gathered in a small basalt cave deep down in the cliff lode. On a table before them lay objects which, though unfamiliar, struck harmonious chords vin Sim.

The Scientists worked in sets, old men doing important work, young men learning, asking questions; and at their feet were



three small children. They were a process. Every eight days there was an entirely new set of scientists working on any one problem. The amount of work done was terribly inadequate. They grew old, fell dead just when they were beginning their creative period. The creative time of any one individual was perhaps a matter of twelve hours out of his entire span. Three-quarters of one's life was spent learning, a brief interval of creative power, then senility, insanity, death.

The men turned as Sim entered.

"Don't tell me we have a recruit?" said the eldest of them.

"I don't believe it," said another, younger one. "Chase him away. He's probably one of those war-mongers."

"No, no," objected the elder one, moving with little shuffles of his bare feet toward Sim. "Come in, come in, boy." He had friendly eyes, slow eyes, unlike those of the swift inhabitants of the upper caves. Grey and quiet. "What do you want?"

Sim hesitated, lowered his head, unable to meet the quiet, gentle gaze. "I want to live," he whispered.

The old man laughed quietly. He touched Sim's shoulder. "Are you a new breed? Are you sick?" he queried of Sim, half-seriously. "Why aren't you playing? Why aren't you readying yourself for the time of love and marriage and children? Don't you know that tomorrow night you'll be an adolescent? Don't you realize that if you are not careful you'll miss all of life?" He stopped.

Sim moved his eyes back and forth with each query. He blinked at the instruments on the table top. "Shouldn't I be here?" he asked, naively.

"Certainly," roared the old man, sternly. "But it's a miracle you are. We've had no volunteers from the rank and file for a thousand days! We've had to breed our own scientists, a closed unit! Count us! Six! Six men! And three children! Are we not overwhelming?" The old man spat upon the stone floor. "We ask for volunteers and the people shout back at us, 'Get someone else!' or 'We have no time!' And you know why they say that?"

"No." Sim flinched.

"Because they're selfish. They'd like to live longer, yes, but they know that anything they do cannot possibly insure their own lives any extra time. It might guarantee longer life to some future offspring of theirs. But they won't give up their love, their brief youth, give up one interval of sunset or sunrise!"

Sim leaned against the table, earnestly. "I understand."

"You do?" The old man stared at him blindly. He sighed and slapped the child's thigh, gently. "Yes, of course, you do. It's too much to expect anyone to understand, any more. You're rare."

The others moved in around Sim and the old man.

"I am Dienc. Tomorrow night Cort here will be in my place. I'll be dead by then. And the night after that someone else will be in Cort's place, and then you, if you work and believe—but first, I give you a chance. Return to your playmates if you want. There is someone you love? Return to her. Life is short. Why should you care for the unborn to come? You have a right to youth. Go now, if you want. Because if you stay you'll have no time for anything but working and growing old and dying at your work. But it is good work. Well?"

Sim looked at the tunnel. From a distance the wind roared and blew, the smells of cooking and the patter of naked feet sounded, and the laughter of lovers was an increasingly good thing to hear. He shook his head, impatiently, and his eyes were wet.

"I will stay," he said.

he third night and third day passed. It was the fourth night. Sim was drawn into their living. He learned about that metal seed upon the top of the far mountain. He heard of the original seeds—things called "ships" that crashed and how the survivors hid and dug in the cliffs, grew old swiftly and in their scrabbling to barely survive, forgot all science. Knowledge of mechanical things had no chance of survival in such a volcanic civilization. There was only NOW for each human.

Yesterday didn't matter, tomorrow stared them vividly in their very faces. But somehow the radiations that had forced their aging had also induced a kind of telepathic communication whereby philosophies and impressions were absorbed by the new born. Racial memory, growing instinctively, preserved memories of another time.

"Why don't we go to that ship on the mountain?" asked Sim.

"It is too far. We would need protection from the sun," explained Dienc.

"Have you tried to make protection?"

"Salves and ointments, suits of stone and bird-wing and, recently, crude metals. None of which worked. In ten thousand more life times perhaps we'll have made a metal in which will flow cool water to protect us on the march to the ship. But we work so slowly, so blindly. This morning, mature, I took up my instruments. Tomorrow, dying, I lay them down. What can one man do in one day? If we had ten thousand men, the problem would be solved...."

"I will go to the ship," said Sim.

"Then you will die," said the old man. A silence had fallen on the room at Sim's words. Then the men stared at Sim. "You are a very selfish boy."

"Selfish!" cried Sim, resentfully.

The old man patted the air. "Selfish in a way I like. You want to live longer, you'll do anything for that. You will try for the ship. But I tell you it is useless. Yet, if you want to, I cannot stop you. At least you will not be like those among us who go to war for an extra few days of life."

"War?" asked Sim. "How can there be war here?"

And a shudder ran through him. He did not understand.

"Tomorrow will be time enough for that," said Dienc. "Listen to me, now."

The night passed.

T t was morning. Lyte came shouting and sobbing down a corridor, and ran full into his arms. She had changed again. She was older, again, more beautiful. She was shaking and she held to him. "Sim, they're coming after you!"

Bare feet marched down the corridor, surged inward at the opening. Chion stood grinning there, taller, too, a sharp rock in either of his hands. "Oh, there you are, Sim!"

"Go away!" cried Lyte savagely whirling on him.

"Not until we take Sim with us," Chion assured her. Then, smiling at Sim. "If that is, he is with us in the fight."

Dienc shuffled forward, his eye weakly fluttering, his bird-like hands fumbling in the air. "Leave!" he shrilled angrily. "This boy is a Scientist now. He works with us."

Chion ceased smiling. "There is better work to be done. We go now to fight the people in the farthest cliffs." His eyes glittered anxiously. "Of course, you will come with us, Sim?"

"No, no!" Lyte clutched at his arm.

Sim patted her shoulder, then turned to Chion. "Why are you attacking these people?"



"There are three extra days for those who go with us to fight."

"Three extra days! Of living?"

Chion nodded firmly. "If we win, we live eleven days instead of eight. The cliffs they live in, something about the mineral in it! Think of it, Sim, three long, good days of life. Will you join us?"

Dienc interrupted. "Get along without him. Sim is my pupil!"

Chion snorted. "Go die, old man. By sunset tonight you'll be charred bone. Who are you to order us? We are young, we want to live longer."

Eleven days. The words were unbelievable to Sim. Eleven days. Now he understood why there was war. Who wouldn't fight to have his life lengthened by almost half its total. So many more days of youth and love and seeing and living! Yes. Why not, indeed!

"Three extra days," called Dienc, stridently, "if you live to enjoy them. If you're not killed in battle. If. If! You have never won yet. You have always lost!"

"But this time," Chion declared sharply, "We'll win!"

Sim was bewildered. "But we are all of the same ancestors. Why don't we all share the best cliffs?"

Chion laughed and adjusted a sharp stone in his hand. "Those who live in the best cliffs think they are better than us. That is always man's attitude when he has power. The cliffs there, besides, are smaller, there's room for only three hundred people in them."

Three extra days.

"I'll go with you," Sim said to Chion.

"Fine!" Chion was very glad, much too glad at the decision.

Dienc gasped.

Sim turned to Dienc and Lyte. "If I fight, and win, I will be half a mile closer to the Ship. And I'll have three extra days in which to strive to reach the Ship. That seems the only thing for me to do."

Dienc nodded, sadly. "It is the only thing. I believe you. Go along now."

"Good-bye," said Sim.

The old man looked surprised, then he laughed as at a little joke on himself. "That's right—I won't see you again, will I? Good-bye, then." And they shook hands.

They went out, Chion, Sim, and Lyte, together, followed by the others, all children growing swiftly into fighting men. And the light in Chion's eyes was not a good thing to see.

Lyte went with him. She chose his rocks for him and carried them. She would not go back, no matter how he pleaded. The sun was just beyond the horizon and they marched across the valley.

"Please, Lyte, go back!"

"And wait for Chion to return?" she said. "He plans that when you die I will be his mate." She shook out her unbelievable blue-white curls of hair defiantly. "But I'll be with you. If you fall, I fall."

Sim's face hardened. He was tall. The world had shrunk during the night. Children packs screamed by hilarious in their food-searching and he looked at them with alien wonder: could it be only four days ago he'd been like these? Strange. There was a sense of many days in his mind, as if he'd really lived a thousand days. There was a dimension of incident and thought so thick, so multi-colored, so richly diverse in his head that it was not to be believed so much could happen in so short a time.



The fighting men ran in clusters of two or three. Sim looked ahead at the rising line of small ebon cliffs. This, then, he said to himself, is my fourth day. And still I am no closer to the Ship, or to anything, not even—he heard the light tread of Lyte beside him—not even to her who bears my weapons and picks me ripe berries.

One-half of his life was gone. Or a third of it—IF he won this battle. If.

He ran easily, lifting, letting fall his legs. This is the day of my physical awareness, as I run I feed, as I feed I grow and as I grow I turn eyes to Lyte with a kind of dizzying vertigo. And she looks upon me with the same gentleness of thought. This is the day of our youth. Are we wasting it? Are we losing it on a dream, a folly?

Distantly he heard laughter. As a child he'd questioned it. Now he understood laughter. This particular laughter was made of climbing high rocks and plucking the greenest blades and drinking the headiest vintage from the morning ices and eating of the rock-fruits and tasting of young lips in new appetite.

They neared the cliffs of the enemy.

He saw the slender erectness of Lyte. The new surprise of her white breasts; the neck where if you touched you could time her pulse; the fingers which cupped in your own were animate and supple and never still; the....

Lyte snapped her head to one side. "Look ahead!" she cried. "See what is to come—look only ahead."

He felt that they were racing by part of their lives, leaving their youth on the pathside, without so much as a glance.

"I am blind with looking at stones," he said, running.



"Find new stones, then!"

"I see stones—" His voice grew gentle as the palm of her hand. The landscape floated under him. Everything was like a fine wind, blowing dreamily. "I see stones that make a ravine that lies in a cool shadow where the stone-berries are thick as tears. You touch a boulder and the berries fall in silent red avalanches, and the grass is very tender...."

"I do not see it!" She increased her pace, turning her head away.

He saw the floss upon her neck, like the small moss that grows silvery and light on the cool side of pebbles, that stirs if you breathe the lightest breath upon it. He looked upon himself, his hands clenched as he heaved himself forward toward death. Already his hands were veined and youthswollen.

They were the hands of a young boy whose fingers are made for touching, which are suddenly sensitive and with more surface, and are nervous, and seem not a part of him because they are so big for the slender lengths of his arms. His neck, through which the blood ached and pumped, was building out with age, too, with tiny blue tendrils of veins imbedded and flaring in it.

Lyte handed him food to eat.

"I am not hungry," he said.

"Eat, keep your mouth full," she commanded sharply. "So you will not talk to me this way!"

"If I could only kiss you," he pleaded. "Just one time."

"After the battle there may be time."

"He roared, anguished. "Who cares for battles!"

Ahead of them, rocks hailed down, thudding. A man fell with his skull split wide. The war was begun.

Lyte passed the weapons to him. They ran without another word until they entered the killing ground. Then he spoke, not looking at her, his cheeks coloring. "Thank you," he said.

She ducked as a slung stone shot by her head. "It was not an easy thing for me," she admitted. "Sim! Be careful!"

The boulders began to roll in a synthetic avalanche from the battlements of the enemy!

Only one thought was in his mind now. To kill, to lessen the life of someone else so he could live, to gain a foothold here and live long enough to make a stab at the ship. He ducked, he weaved, he clutched stones and hurled them up. His left hand held a flat stone shield with which he diverted the swiftly plummeting rocks. There was a spatting sound everywhere. Lyte ran with him, encouraging him. Two men dropped before him, slain, their breasts cleaved to the bone, their blood springing out in unbelievable founts.

It was a useless conflict. Sim realized instantly how insane the venture was. They could never storm the cliff. A solid wall of rocks rained down. A dozen men dropped with shards of ebony in their brains, a half dozen more showed drooping, broken arms. One screamed and the upthrust white joint of his knee was exposed as the flesh was pulled away by two successive blows of well-aimed granite. Men stumbled over one another.

The muscles in his cheeks pulled tight and he began to wonder why he had ever come. But his raised eyes, as he danced from side to side, weaving and bobbing, sought always the cliffs. He wanted to live there so intensely, to have his chance. He would have to stick it out. But the heart was gone from him.

Lyte screamed piercingly. Sim, his heart panicking, twisted and saw that her hand was loose at the wrist, with an ugly wound bleeding profusely on the back of the knuckles. She clamped it under her armpit to soothe the pain. The anger rose in him and exploded. In his fury he raced forward, throwing his missiles with deadly accuracy. He saw a man topple and flail down, falling from one level to another of the caves, a victim of his shot. He must have been screaming, for his lungs were bursting open and closed and his throat was raw, and the ground spun madly under his racing feet.

The stone that clipped his head sent him reeling and plunging back. He ate sand. The universe dissolved into purple whorls. He could not get up. He lay and knew that this was his last day, his last time. The battle raged around him, dimly he felt Lyte over him. Her hands cooled his head, she tried to drag him out of range, but he lay gasping and telling her to leave him.

"Stop!" shouted a voice. The whole war seemed to give pause. "Retreat!" commanded the voice swiftly. And as Sim watched, lying upon his side, his comrades turned and fled back toward home.

"The sun is coming, our time is up!" He saw their muscled backs, their moving, tensing, flickering legs go up and down. The dead were left upon the field. The wounded cried for help. But there was no time for the wounded. There was only time for swift men to run the gauntlet home and, their lungs aching and raw with heated air, burst into their tunnels before the sun burnt and killed them.

The sun!

Sim saw another figure racing toward him. It was Chion! Lyte was helping Sim to his feet, whispering helpfully to him. "Can you walk?" she asked.



And he groaned and said, "I think so." "Walk then," she said. "Walk slowly, and then faster and faster. We'll make it. Walk slowly, start carefully. We'll make it, I know we will."

Sim got to his feet, stood swaying. Chion raced up, a strange expression cutting lines in his cheeks, his eyes shining with battle. Pushing Lyte abruptly aside he seized upon a rock and dealt Sim a jolting blow upon his ankle that laid wide the flesh. All of this was done quite silently.

Now he stood back, still not speaking, grinning like an animal from the night mountains, his chest panting in and out, looking from the thing he had done, to Lyte, and back. He got his breath. "He'll never make it," he nodded at Sim. "We'll have to leave him here. Come along, Lyte."

Lyte, like a cat-animal, sprang upon Chion, searching for his eyes, shrieking through her exposed, hard-pressed teeth. Her fingers stroked great bloody furrows down Chion's arms and again, instantly, down his neck. Chion, with an oath, sprang away from her. She hurled a rock at him. Grunting, he let it miss him, then ran off a few yards. "Fool!" he cried, turning to scorn her. "Come along with me. Sim will be dead in a few minutes. Come along!"

Lyte turned her back on him. "I will go if you carry me."

Chion's face changed. His eyes lost their gleaming. "There is no time. We would both die if I carried you."

Lyte looked through and beyond him. "Carry me, then, for that's how I wish it to be."

Without another word, glancing fearfully at the sun, Chion fled. His footsteps sped away and vanished from hearing. "May he fall and break his neck," whispered Lyte, savagely glaring at his form as it skirted a ravine. She returned to Sim. "Can you walk?" Agonies of pain shot up his leg from the wounded ankle. He nodded ironically. "We could make it to the cave in two hours, walking. I have an idea, Lyte. Carry me." And he smiled with the grim joke.

She took his arm. "Nevertheless we'll walk. Come."

"No," he said. "We're staying here."

"But why?"

"We came to seek a home here. If we walk we will die. I would rather die here. How much time have we?"

Together they measured the sun. "A few minutes," she said, her voice flat and dull. She held close to him.

He looked at her. Lyte, he thought. Tomorrow I would have been a man. My body would have been strong and full and there would have been time with you, a kissing and a touching. Damn, but what kind of life is this where every last instant is drenched with fear and alert with death? Am I to be denied even some bit of real life?

The black rocks of the cliff were paling into deep purples and browns as the sun began to flood the world.

What a fool he was! He should have stayed and worked with Dienc, and thought and dreamed, and at least one time cupped Lyte's mouth with his own.

With the sinews of his neck standing out defiantly he bellowed upward at the cliff holes.

"Send me down one man to do battle!"

Silence. His voice echoed from the cliff. The air was warm.

"It's no use," said Lyte, "They'll pay no attention."

He shouted again. "Hear me!" He stood with his weight on his good foot, his injured left leg throbbing and pulsating with pain. He shook a fist. "Send down a warrior who is no coward! I will not turn and run home! I have come to fight a fair fight! Send a man who will fight for the right to his cave! Him I will surely kill!"

More silence. A wave of heat passed over the land, receded.

"Oh, surely," mocked Sim, hands on naked hips, head back, mouth wide, "surely there's one among you not afraid to fight a cripple!" Silence. "No?" Silence.

"Then I have miscalculated you. I'm wrong. I'll stand here, then, until the sun shucks the flesh off my bone in black scraps, and call you the filthy names you deserve."

He got an answer.

"I do not like being called names," replied a man's voice.

Sim leaned forward, forgetting his crippled foot.

A huge man appeared in a cave mouth on the third level.

"Come down," urged Sim. "Come down, fat one, and kill me."

The man scowled seriously at his opponent a moment, then lumbered slowly down the path, his hands empty of any weapons. Immediately every cave above clustered with heads. An audience for this drama.

The man approached Sim. "We will fight by the rules, if you know them."

"I'll learn as we go," replied Sim.

This pleased the man and he looked at Sim warily, but not unkindly. "This much I will tell you," offered the man generously. "If you die, I will give your mate shelter and she will live, as she pleases, because she is the wife

of a good man."

Sim nodded swiftly. "I am ready," he said.

"The rules are simple. We do not touch each other, save with stones. The stones and the sun will do either of us in. Now is the time—"

tip of the sun showed on the horizon. "My name is Nhoi," said Sim's enemy, casually fingering up a handful of pebbles and stones, weighing them. Sim did likewise. He was hungry. He had not eaten for many minutes. Hunger was the curse of this planet's peoples—a perpetual demanding of empty stomachs for more, more food. His blood flushed weakly, shot tinglingly through veins in jolting throbs of heat and pressure, his ribcase shoved out, went in, shoved out again, impatiently.

"Now!" roared the three hundred watchers from the cliffs. "Now!" they clamored, the men and women and children balanced, in turmoil on the ledges. "Now! Begin!"

As if at a cue, the sun leaped high. It smote them a blow as with a flat, sizzling stone. The two men staggered under the molten impact, sweat broke from their naked thighs and loins, under their arms and on their faces was a glaze like fine glass.

Nhoj shifted his huge weight and looked at the sun as if in no hurry to fight. Then, silently, with no warning, he kanurcked out a pebble with a startling trigger-flick of thumb and forefinger. It caught Sim flat on the cheek, staggered him back, so that a rocket of unbearable pain climbed up his crippled foot and burst into nervous explosion at the pit of his stomach. He tasted blood from his bleeding cheek.

Nhoj moved serenely. Three more flickers of his magical hands and three tiny, seemingly harmless bits of stone flew like whistling birds. Each of them found a target, slammed it. The nerve centers of Sim's body! One hit his stomach so that ten hours' eating almost slid up his throat. A second got his forehead, a third his neck. He collapsed to the boiling sand. His knee made a wrenching sound on the hard earth. His face was colorless and his eyes, squeezed tight, were pushing tears out from the hot, quivering lids. But even as he had fallen he had let loose, with wild force, his handful of stones!

The stones purred in the air. One of them, and only one, struck Nhoj. Upon the left eyeball. Nhoj moaned and laid his hands in the next instant to his shattered eye.

Sim choked out a bitter, sighing laugh. This much triumph he had. The eye of his opponent. It would give him ... Time. Oh, he thought, his stomach retching sickly, fighting for breath, this is a world of time. Give me a little more, just a trifle!

Nhoj, one-eyed, weaving with pain, pelted the writhing body of Sim, but his aim was off now, the stones flew to one side or if they struck at all they were weak and spent and lifeless.

Sim forced himself half erect. From the corners of his eyes he saw Lyte, waiting, staring at him, her lips breathing words of encouragement and hope. He was bathed in sweat, as if a rain spray had showered him down.

The sun was now fully over the horizon. You could smell it. Stones glinted like mirrors, the sand began to roil and bubble. Illusions sprang up everywhere in the valley. Instead of one warrior Nhoj he was confronted by a dozen, each in an upright position, preparing to launch another missile. A dozen irregular warriors who shimmered in the golden menace of day, like bronze gongs smitten, quivered in one vision!

Sim was breathing desperately. His nostrils flared and sucked and his mouth drank thirstily of flame instead of oxygen. His lungs took fire like

silk torches and his body was consumed. The sweat spilled from his pores to be instantly evaporated. He felt himself shriveling, shriveling in on himself, he imagined himself looking like his father, old, sunken, slight, withered! Where was the sand? Could he move? Yes. The world wriggled under him, but now he was on his feet.

There would be no more fighting.

A murmur from the cliff told this. The sunburnt faces of the high audience gaped and jeered and shouted encouragement to their warrior. "Stand straight, Nhoj, save your strength now! Stand tall and perspire!" they urged him. And Nhoj stood, swaying lightly, swaying slowly, a pendulum in an incandescent fiery breath from the skyline. "Don't move, Nhoj, save your heart, save your power!"

"The Test, The Test!" said the people on the heights. "The test of the sun."

And this was the worst part of the fight. Sim squinted painfully at the distorted illusion of cliff. He thought he saw his parents; father with his defeated face, his green eyes burning, mother with her hair blowing like a cloud of grey smoke in the fire wind. He must get up to them, live for and with them!

Behind him, Sim heard Lyte whimper softly. There was a whisper of flesh against sand. She had fallen. He did not dare turn. The strength of turning would bring him thundering down in pain and darkness.

His knees bent. If I fall, he thought, I'll lie here and become ashes. Where was Nhoj? Nhoj was there, a few yards from him, standing bent, slick with perspiration, looking as if he were being hit over the spine with great hammers of destruction.

"Fall, Nhoj! Fall!" screamed Sim, mentally. "Fall, fall! Fall and die so I can take your place!" But Nhoj did not fall. One by one the pebbles in his half-loose left hand plummeted to the broiling sands and Nhoj's lips peeled back, the saliva burned away from his lips and his eyes glazed. But he did not fall. The will to live was strong in him. He hung as if by a wire.

Sim fell to one knee!

"Ahh!" wailed the knowing voices from the cliff. They were watching death. Sim jerked his head up, smiling mechanically, foolishly as if caught in the act of doing something silly. "No, no," he insisted drowsily, and got back up again. There was so much pain he was all one ringing numbness. A whirring, buzzing, frying sound filled the land. High up, an avalanche came down like a curtain on a drama, making no noise. Everything was quiet except for a steady humming. He saw fifty images of Nhoj now, dressed in armours of sweat, eyes puffed with torture, cheeks sunken, lips peeled back like the rind of a drying fruit. But the wire still held him.

"Now," muttered Sim, sluggishly, with a thick, baked tongue between his blazing teeth. "Now I'll fall and lie and dream." He said it with slow, thoughtful pleasure. He planned it. He knew how it must be done. He would do it accurately. He lifted his head to see if the audience was watching.

They were gone!

The sun had driven them back in. All save one or two brave ones. Sim laughed drunkenly and watched the sweat gather on his dead hands, hesitate, drop off, plunge down toward sand and turn to steam half way there.

Nhoj fell.

The wire was cut. Nhoj fell flat upon his stomach, a gout of blood kicked from his mouth. His eyes rolled back into a white, senseless insanity.

Nhoj fell. So did his fifty duplicate illusions.

All across the valley the winds sang and moaned and Sim saw a blue lake with a blue river feeding it and low white houses near the river with people going and coming in the houses and among the tall green trees. Trees taller than seven men, beside the river mirage.

"Now," explained Sim to himself at last, "Now I can fall. Right—into—that—lake."

He fell forward.

He was shocked when he felt the hands eagerly stop him in mid-plunge, lift him, hurry him off, high in the hungry air, like a torch held and waved, ablaze.

"How strange is death," he thought, and blackness took him.

He wakened to the flow of cool water on his cheeks.

He opened his eyes fearfully. Lyte held his head upon her lap, her fingers were moving food to his mouth. He was tremendously hungry and tired, but fear squeezed both of these things away. He struggled upward, seeing the strange cave contours overhead.

"What time is it?" he demanded.

"The same day as the contest. Be quiet," she said.

"The same day!"

She nodded amusedly. "You've lost nothing of your life. This is Nhoj's cave. We are inside the black cliff. We will live three extra days. Satisfied? Lie down."

"Nhoj is dead?" He fell back, panting, his heart slamming his ribs. He relaxed slowly. "I won. I won," he breathed.

"Nhoj is dead. So were we, almost. They carried us in from outside only in time."

He ate ravenously. "We have no time to waste. We must get strong. My leg—" He looked at it, tested it. There was a swathe of long yellow grasses around it and the ache had died away. Even as he watched the terrific pulsings of his body went to work and cured away the impurities under the bandages. It has to be strong by sunset, he thought. It has to be.

He got up and limped around the cave like a captured animal. He felt Lyte's eyes upon him. He could not meet her gaze. Finally, helplessly, he turned.

She interrupted him. "You want to go on to the ship?" she asked, softly. "Tonight? When the sun goes down?"

He took a breath, exhaled it. "Yes."

"You couldn't possibly wait until morning?"

″No.″

"Then I'll go with you."

″No!″

"If I lag behind, let me. There's nothing here for me."

They stared at each other a long while. He shrugged wearily.

"All right," he said, at last. "I couldn't stop you, I know that. We'll go together."



hey waited in the mouth of their new cave. The sun set. The stones cooled so that one could walk on them. It was almost time for the leaping out and the running toward the distant, glittering metal seed that lay on the far mountain.

Soon would come the rains. And Sim thought back over all the times he had watched the rains thicken into creeks, into rivers that cut new beds each night. One night there would be a river running north, the next a river running north-east, the third night a river running due west. The valley was continually cut and scarred by the torrents. Earthquakes and avalanches filled the old beds. New ones were the order of the day. It was this idea of the river and the directions of the river that he had turned over in his head for many hours. It might possibly—Well, he would wait and see.

He noticed how living in this new cliff had slowed his pulse, slowed everything. A mineral result, protection against the solar radiations. Life was still swift, but not as swift as before.

"Now, Sim!" cried Lyte, testing the valley air.

They ran. Between the hot death and the cold one. Together, away from the cliffs, out toward the distant, beckoning ship.

Never had they run this way in their lives. The sound of their feet running was a hard, insistent clatter over vast oblongs of rock, down into ravines, up the sides, and on again. They raked the air in and out their lungs. Behind them the cliffs faded away into things they could never turn back to now.

They did not eat as they ran. They had eaten to the bursting point in the cave, to save time. Now it was only running, a lifting of legs, a balancing of bent elbows, a convulsion of muscles, a slaking in of air that had been



fiery and was now cooling.

"Are they watching us?"

Lyte's breathless voice snatched at his ears, above the pound of his heart.

Who? But he knew the answer. The cliff peoples, of course. How long had it been since a race like this one? A thousand days? Ten thousand? How long since someone had taken the chance and sprinted with an entire civilization's eyes upon their backs, into gullies, across cooling plain. Were there lovers pausing in their laughter back there, gazing at the two tiny dots that were a man and woman running toward destiny? Were children eating of new fruits and stopping in their play to see the two people racing against time? Was Dienc still living, narrowing hairy eyebrows down over fading eyes, shouting them on in a feeble, rasping voice, shaking a twisted hand? Were there jeers? Were they being called fools, idiots? And in the midst of the name calling, were people praying them on, hoping they would reach the ship? Yes, under all the cynicism and pessimism, some of them, all of them, must be praying.

Sim took a quick glance at the sky, which was beginning to bruise with the coming night. Out of nowhere clouds materialized and a light shower trailed across a gully two hundred yards ahead of them. Lightning beat upon distant mountains and there was a strong scent of ozone on the disturbed air.

"The halfway mark," panted Sim, and he saw Lyte's face half turn, longingly looking back at the life she was leaving. "Now's the time, if we want to turn back, we still have time. Another minute—"

Thunder snarled in the mountains. An avalanche started out small and ended up huge and monstrous in a deep fissure. Light rain dotted Lyte's smooth white skin. In a minute her hair was glistening and soggy with rain.

"Too late now," she shouted over the patting rhythm of her own naked feet. "We've got to go ahead!"

And it was too late. Sim knew, judging the distances, that there was no turning back now.

His leg began to pain him a little. He favored it, slowing. A wind came up swiftly. A cold wind that bit into the skin. But it came from the cliffs behind them, helped rather than hindered them. An omen? he wondered. No.

For as the minutes went by it grew upon him how poorly he had estimated the distance. Their time was dwindling out, but they were still an impossible distance from the ship. He said nothing, but the impotent anger at the slow muscles in his legs welled up into bitterly hot tears in his eyes.

He knew that Lyte was thinking the same as himself. But she flew along like a white bird, seeming hardly to touch ground. He heard her breath go out and in her throat, like a clean, sharp knife in its sheathe.

Half the sky was dark. The first stars were peering through lengths of black cloud. Lightning jiggled a path along a rim just ahead of them. A full thunderstorm of violent rain and exploding electricity fell upon them.

They slipped and skidded on moss-smooth pebbles. Lyte fell, scrambled up again with a burning oath. Her body was scarred and dirty. The rain washed over her.

The rain came down and cried on Sim. It filled his eyes and ran in rivers down his spine and he wanted to cry with it.

Lyte fell and did not rise, sucking her breath, her breasts quivering.



He picked her up and held her. "Run, Lyte, please, run!"

"Leave me, Sim. Go ahead!" The rain filled her mouth. There was water everywhere. "It's no use. Go on without me."

He stood there, cold and powerless, his thoughts sagging, the flame of hope blinking out. All the world was blackness, cold falling sheathes of water, and despair.

"We'll walk, then," he said. "And keep walking, and resting."

They walked for fifty yards, easily, slowly, like children out for a stroll. The gully ahead of them filled with water that went sliding away with a swift wet sound, toward the horizon.

Sim cried out. Tugging at Lyte he raced forward. "A new channel," he said, pointing. "Each day the rain cuts a new channel. Here, Lyte!" He leaned over the flood waters.

He dived in, taking her with him.

The flood swept them like bits of wood. They fought to stay upright, the water got into their mouths, their noses. The land swept by on both sides of them. Clutching Lyte's fingers with insane strength, Sim felt himself hurled end over end, saw flicks of lightning on high, and a new fierce hope was born in him. They could no longer run, well, then they would let the water do the running for them.

With a speed that dashed them against rocks, split open their shoulders, abraded their legs, the new, brief river carried them. "This way!" Sim shouted over a salvo of thunder and steered frantically toward the opposite side of the gully. The mountain where the ship lay was just ahead. They must not pass it by. They fought in the transporting liquid and were slammed against the far side. Sim leaped up, caught at an overhanging



rock, locked Lyte in his legs, and drew himself hand over hand upward.

As quickly as it had come, the storm was gone. The lightning faded. The rain ceased. The clouds melted and fell away over the sky. The wind whispered into silence.

"The ship!" Lyte lay upon the ground. "The ship, Sim. This is the mountain of the ship!"

Now the cold came. The killing cold.

They forced themselves drunkenly up the mountain. The cold slid along their limbs, got into their arteries like a chemical and slowed them.

Ahead of them, with a fresh-washed sheen, lay the ship. It was a dream. Sim could not believe that they were actually so near it. Two hundred yards. One hundred and seventy yards. It was SO cold.

Ahead of them lay the ship. Sim could not believe they were so near.

The ground became covered with ice. They slipped and fell again and again. Behind them the river was frozen into a blue-white snake of cold solidity. A few last drops of rain from somewhere came down as hard pellets.

Sim fell against the bulk of the ship. He was actually touching it.



Ahead of them lay the ship. Sim could not believe they were so near.

Touching it! He heard Lyte whimpering in her constricted throat. This was the metal, the ship. How many others had touched it in the long days?

He and Lyte had made it!

He touched it lovingly. Then, as cold as the air, his veins were chilled.

Where was the entrance?

You run, you swim, you almost drown, you curse, you sweat, you work, you reach a mountain, you go up it, you hammer on metal, you shout with relief, you reach the ship, and then—you can't find the entrance.

He fought to keep himself from breaking down. Slowly, he told himself, but not too slowly, go around the ship. The metal slid under his searching hands, so cold that his hands, sweating, almost froze to it. Now, far around to the side. Lyte moved with him. The cold held them like a fist. It began to squeeze.

The entrance.

Metal. Cold, immutable metal. A thin line of opening at the sealing point. Throwing all caution aside, he beat at it. He felt his stomach seething with cold. His fingers were numb, his eyes were half frozen in their sockets. He began to beat and search and scream against the metal door. "Open up! Open up!" He staggered.

The air-lock sighed. With a whispering of metal on rubber beddings, the door swung softly sidewise and vanished back.

He saw Lyte run forward, clutch at her throat, and drop inside a small shiny chamber. He shuffled after her, blankly.

The air-lock door sealed shut behind him.

He could not breathe. His heart began to slow, to stop.

They were trapped inside the ship now, and something was happening. He sank down to his knees and choked for air.



The ship he had come to for salvation was now slowing his pulse, darkening his brain, poisoning him. With a starved, faint kind of expiring terror, he realized that he was dying.

Blackness.

He had a dim sense of time passing, of thinking, struggling, to make his heart go quick, quick.... To make his eyes focus. But the fluid in his body lagged quietly through his settling veins and he heard his temple pulses thud, pause, thud, pause and thud again with lulling intermissions.

He could not move, not a hand or leg or finger. It was an effort to lift the tonnage of his eyelashes. He could not shift his face even, to see Lyte lying beside him.

From a distance came her irregular breathing. It was like the sound a wounded bird makes with his dry, unraveled pinions. She was so close he could almost feel the heat of her; yet she seemed a long way removed.

I'm getting cold! he thought. Is this death? This slowing of blood, of my heart, this cooling of my body, this drowsy thinking of thoughts?

Staring at the ship's ceiling he traced its intricate system of tubes and machines. The knowledge, the purpose of the ship, its actions, seeped into him. He began to understand in a kind of revealing lassitude just what these things were his eyes rested upon. Slow. Slow.

There was an instrument with a gleaming white dial.

Its purpose?

He drudged away at the problem, like a man underwater.

People had used the dial. Touched it. People had repaired it. Installed it. People had dreamed of it before the building, before the installing, before



the repairing and touching and using. The dial contained memory of use and manufacture, its very shape was a dream-memory telling Sim why and for what it had been built. Given time, looking at anything, he could draw from it the knowledge he desired. Some dim part of him reached out, dissected the contents of things, analyzed them.

This dial measured time!

Millions of days of time!

But how could that be? Sim's eyes dilated, hot and glittering. Where were humans who needed such an instrument?

Blood thrummed and beat behind his eyes. He closed them.

Panic came to him. The day was passing. I am lying here, he thought, and my life slips away. I cannot move. My youth is passing. How long before I can move?

Through a kind of porthole he saw the night pass, the day come, the day pass, and again another night. Stars danced frostily.

I will lie here for four or five days, wrinkling and withering, he thought. This ship will not let me move. How much better if I had stayed in my home cliff, lived, enjoyed this short life. What good has it done to come here? I'm missing all the twilights and dawns. I'll never touch Lyte, though she's here at my side.

Delirium. His mind floated up. His thoughts whirled through the metal ship. He smelled the razor sharp smell of joined metal. He heard the hull contract with night, relax with day.

Dawn.

Already-another dawn!

Today I would have been mature. His jaw clenched. I must get up. I must move. I must enjoy my time of maturity.

But he didn't move. He felt his blood pump sleepily from chamber to red chamber in his heart, on down and around through his dead body, to be purified by his folding and unfolding lungs. Then the circuit once more.

The ship grew warm. From somewhere a machine clicked. Automatically the temperature cooled. A controlled gust of air flushed the room.

Night again. And then another day.

He lay and saw four days of his life pass.

He did not try to fight. It was no use. His life was over.

He didn't want to turn his head now. He didn't want to see Lyte with her face like his tortured mother's—eyelids like gray ash flakes, eyes like beaten, sanded metal, cheeks like eroded stones. He didn't want to see a throat like parched thongs of yellow grass, hands the pattern of smoke risen from a fire, breasts like desiccated rinds and hair stubbly and unshorn as moist gray weeds!

And himself? How did he look? Was his jaw sunken, the flesh of his eyes pitted, his brow lined and age-scarred?

His strength began to return. He felt his heart beating so slow that it was amazing. One hundred beats a minute. Impossible. He felt so cool, so thoughtful, so easy.

His head fell over to one side. He stared at Lyte. He shouted in surprise.

She was young and fair.

She was looking at him, too weak to say anything. Her eyes were like tiny silver medals, her throat curved like the arm of a child. Her hair was blue

fire eating at her scalp, fed by the slender life of her body.

Four days had passed and still she was young ... no, younger than when they had entered the ship. She was still adolescent.

He could not believe it.

Her first words were, "How long will this last?"

He replied, carefully. "I don't know."

"We are still young."

"The ship. Its metal is around us. It cuts away the sun and the things that came from the sun to age us."

Her eyes shifted thoughtfully. "Then, if we stay here-"

"We'll remain young."

"Six more days? Fourteen more? Twenty?"

"More than that, maybe."

She lay there, silently. After a long time she said, "Sim?"

"Yes."

"Let's stay here. Let's not go back. If we go back now, you know what'll happen to us...?"

"I'm not certain."

"We'll start getting old again, won't we?"

He looked away. He stared at the ceiling and the clock with the moving finger. "Yes. We'll grow old."

"What if we grow old—instantly. When we step from the ship won't the

shock be too much?"

"Maybe."

Another silence. He began to move his limbs, testing them. He was very hungry. "The others are waiting," he said.

Her next words made him gasp. "The others are dead," she said. "Or will be in a few hours. All those we knew back there are old and worn."

He tried to picture them old. Dark, his sister, bent and senile with time. He shook his head, wiping the picture away. "They may die," he said. "But there are others who've been born."

"People we don't even know," said Lyte, flatly.

"But, nevertheless, our people," he replied. "People who'll live only eight days, or eleven days unless we help them."

"But we're young, Sim! We're young! We can stay young!"

He didn't want to listen. It was too tempting a thing to listen to. To stay here. To live. "We've already had more time than the others," he said. "I need workers. Men to heal this ship. We'll get on our feet now, you and I, and find food, eat, and see if the ship is movable. I'm afraid to try to move it myself. It's so big. I'll need help."

"But that means running back all that distance!"

"I know." He lifted himself weakly. "But I'll do it."

"How will you get the men back here?"

"We'll use the river."

"If it's there. It may be somewhere else."

"We'll wait until there is one, then. I've got to go back, Lyte. The son of

Dienc is waiting for me, my sister, your brother, are old people, ready to die, and waiting for some word from us-"

After a long while he heard her move, dragging herself tiredly to him. She put her head upon his chest, her eyes closed, stroking his arm. "I'm sorry. Forgive me. You have to go back. I'm a selfish fool."

He touched her cheek, clumsily. "You're human. I understand you. There's nothing to forgive."

They found food. They walked through the ship. It was empty. Only in the control room did they find the remains of a man who must have been the chief pilot. The others had evidently bailed out into space in emergency lifeboats. This pilot, sitting at his controls, alone, had landed the ship on a mountain within sight of other fallen and smashed crafts. Its location on high ground had saved it from the floods. The pilot himself had died, probably of heart failure, soon after landing. The ship had remained here, almost within reach of the other survivors, perfect as an egg, but silent, for—how many thousand days? If the pilot had lived, what a different thing life might have been for the ancestors of Sim and Lyte. Sim, thinking of this—felt the distant, ominous vibration of war. How had the war between worlds come out? Who had won? Or had both planets lost and never bothered trying to pick up survivors? Who had been right? Who was the enemy? Were Sim's people of the guilty or innocent side? They might never know.

He checked the ship hurriedly. He knew nothing of its workings, yet as he walked its corridors, patted its machines, he learned from it. It needed only a crew. One man couldn't possibly set the whole thing running again. He laid his hand upon one round, snout-like machine. He jerked his hand away, as if burnt. "Lyte!"

"What is it?"

He touched the machine again, caressed it, his hand trembled violently, his eyes welled with tears, his mouth opened and closed, he looked at the machine, loving it, then looked at Lyte.

"With this machine—" he stammered, softly, incredulously. "With—with this machine I can—"

"What, Sim?"

He inserted his hand into a cup-like contraption with a lever inside. Out of porthole in front of him he could see the distant line of cliffs. "We were afraid there might never be another river running by this mountain, weren't we?" he asked, exultantly.

"Yes, Sim, but-"

"There will be a river. And I will come back, tonight! And I'll bring men with me. Five hundred men! Because with this machine I can blast a river bottom all the way to the cliffs, down which the waters will rush, giving myself and the men a swift, sure way of traveling back!" He rubbed the machine's barrel-like body. "When I touched it, the life and method of it shot into me! Watch!" He depressed the lever.

A beam of incandescent fire lanced out from the ship, screaming.

Steadily, accurately, Sim began to cut away a river bed for the storm waters to flow in. The night was turned to day by its hungry eating.

The return to the cliffs was to be carried out by Sim alone. Lyte was to remain in the ship, in case of any mishap. The trip back seemed, at first glance, to be impossible. There would be no river rushing to cut his time, to sweep him along toward his destination. He would have to run the entire distance in the dawn, and the sun would get him, catch him before he'd reached safety.

"The only way to do it is to start before sunrise."

"But you'd be frozen, Sim."

"Here." He made adjustments on the machine that had just finished cutting the river bed in the rock floor of the valley. He lifted the smooth snout of the gun, pressed the lever, left it down. A gout of fire shot toward the cliffs. He fingered the range control, focused the flame end three miles from its source. Done. He turned to Lyte. "But I don't understand," she said.

He opened the air-lock door. "It's bitter cold out, and half an hour yet till dawn. If I run parallel to the flame from the machine, close enough to it, there'll not be much heat but enough to sustain life, anyway."

"It doesn't sound safe," Lyte protested.

"Nothing does, on this world." He moved forward. "I'll have a half hour start. That should be enough to reach the cliffs."

"But if the machine should fail while you're still running near its beam?"

"Let's not think of that," he said.

A moment later he was outside. He staggered as if kicked in the stomach. His heart almost exploded in him. The environment of his world forced him into swift living again. He felt his pulse rise, kicking through his veins.

The night was cold as death. The heat ray from the ship sliced across the valley, humming, solid and warm. He moved next to it, very close. One misstep in his running and—

"I'll be back," he called to Lyte.

He and the ray of light went together.

In the early morning the peoples in the caves saw the long finger of orange incandescence and the weird whitish apparition floating, running along beside it. There was muttering and superstition.

So when Sim finally reached the cliffs of his childhood he saw alien peoples swarming there. There were no familiar faces. Then he realized how foolish it was to expect familiar faces. One of the older men glared down at him. "Who're you?" he shouted. "Are you from the enemy cliff? What's your name?"

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"I am Sim, the son of Sim!"
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"Sim!"

An old woman shrieked from the cliff above him. She came hobbling down the stone pathway. "Sim, Sim, it is you!"

He looked at her, frankly bewildered. "But I don't know you," he murmured.

"Sim, don't you recognize me? Oh, Sim, it's me! Dark!"

"Dark!"

He felt sick at his stomach. She fell into his arms. This old, trembling woman with the half-blind eyes, his sister.

Another face appeared above. That of an old man. A cruel, bitter face. It looked down at Sim and snarled. "Drive him away!" cried the old man. "He comes from the cliff of the enemy. He's lived there! He's still young! Those who go there can never come back among us. Disloyal beast!" And a rock hurtled down.



Sim leaped aside, pulling the old woman with him.

A roar came from the people. They ran toward Sim, shaking their fists. "Kill him, kill him!" raved the old man, and Sim did not know who he was. "Stop!" Sim held out his hands. "I come from the ship!"

"The ship?" The people slowed. Dark clung to him, looking up into his young face, puzzling over its smoothness.

"Kill him, kill him!" croaked the old man, and picked up another rock.

"I offer you ten days, twenty days, thirty more days of life!"

The people stopped. Their mouths hung open. Their eyes were incredulous.

"Thirty days?" It was repeated again and again. "How?"

"Come back to the ship with me. Inside it, one can live forever!"

The old man lifted high a rock, then, choking, fell forward in an apoplectic fit, and tumbled down the rocks to lie at Sim's feet.

Sim bent to peer at the ancient one, at the bleary, dead eyes, the loose, sneering lips, the crumpled, quiet body.

"Chion!"

"Yes," said Dark behind him, in a croaking, strange voice. "Your enemy. Chion."

That night a thousand warriors started for the ship as if going to war. The water ran in the new channel. Five hundred of them were drowned or lost behind in the cold. The others, with Sim, got through to the ship.

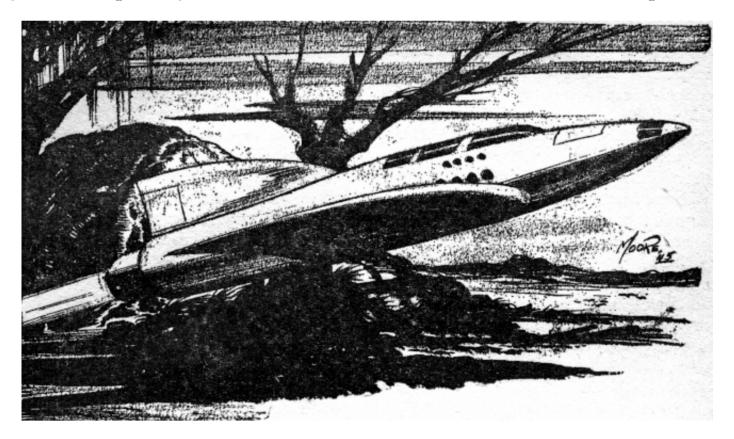
Lyte awaited them, and threw wide the metal door.

The weeks passed. Generations lived and died in the cliffs, while the five hundred workers labored over the ship, learning its functions and its parts.

On the last day they disbanded. Each ran to his station. Now there was a destiny of travel who still remained behind.

Sim touched the control plates under his fingers.

Lyte, rubbing her eyes, came and sat on the floor next to him, resting her

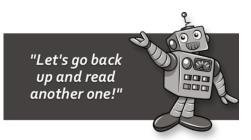


head against his knee, drowsily. "I had a dream," she said, looking off at something far away. "I dreamed I lived in caves in a cliff on a cold-hot planet where people grew old and died in eight days and were burnt."

"What an impossible dream," said Sim. "People couldn't possibly live in such a nightmare. Forget it. You're awake now."

He touched the plates gently. The ship rose and moved into space. Sim

was right. The nightmare was over at last.





Surprise...It's a Girl!

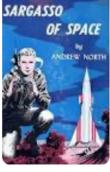


1983



Witch World 1997

The Solar Queen



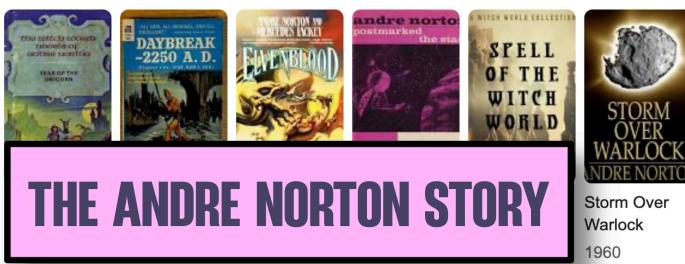
Sargasso of Space 1955

Plague Ship 1956

ANDRE MORTON

PLAGUE SHIP





or over half a century Andre Norton has impressed readers with wonderful works of science fiction and fantasy, imaginatively written in a smooth, flawless style that inevitably brings people back for more. What many readers don't learn until much later, if ever, is that Andre isn't an Andre. v She's an Alice!

Andre Alice Norton (born Alice Mary Norton, February 17, 1912 – March 17, 2005) was an American writer of science fiction and fantasy, who also wrote



works of historical and contemporary fiction. She wrote primarily under the pen name Andre Norton, but also published as Andrew North and Allen Weston. She was the first woman to be Gandalf Grand Master of Fantasy, to be SFWA Grand Master, and to be inducted by the Science Fiction and Fantasy Hall of Fame.

In 1934, her first book, The Prince Commands, being sundry adventures of Michael Karl, sometime crown prince & pretender to the throne of Morvania,

with illustrations by Kate Seredy, was published by D. Appleton–Century Company (cataloged by the U.S. Library of Congress as by "Avndré Norton"). She went on to write several historical novels for the juvenile (now called "young adult") market.

Norton's first published science fiction was a short story, "The People of the Crater", which appeared under the name "Andrew North" as pages 4–18 of the inaugural 1947 number of Fantasy Book, a magazine from



Fantasy Publishing Company, Inc. Her first fantasy novel, Huon of the Horn, published by Harcourt Brace under her own name in 1951, adapted the 13thcentury story of Huon, Duke of Bordeaux.[18] Her first science fiction novel, Star Man's Son, 2250 A.D., appeared from Harcourt in 1952. She became a prolific novelist in the 1950s, with many of her books published for the juvenile market, at least in their original hardcover editions.

As of 1958, when she became a full-time professional writer, Kirkus had reviewed 16 of her novels,[b] and awarded four of them starred reviews. Her four starred reviews to 1957 had been awarded for three historical adventure novels—Follow the Drum (1942), Scarface (1948), Yankee Privateer (1955)— and one cold war adventure, At Swords' Points (1954). She received four starred reviews subsequently, latest in 1966, including three for science fiction.v

Norton was twice nominated for the Hugo Award, in 1964 for the novel Witch World and in 1967 for the novelette "Wizard's World". She was nominated three times for the World Fantasy Award for lifetime achievement, winning the award in 1998. Norton won a number of other genre awards and regularly had works appear in the Locus annual "best of year" polls.

She was a founding member the Swordsmen and Sorcerers' Guild of America



(SAGA), a loose-knit group of vs founded in the 1960s, led by Lin Carter, with entry by fantasy credentials alone. Norton was the only woman among the original eight members. Some works by

SAGA members were published in Lin Carter's Flashing Swords! anthologies.

In 1976, Gary Gygax invited Norton to play Dungeons & Dragons in his Greyhawk world. Norton subsequently wrote Quag Keep, which involved a group of characters who travel from the real world to Greyhawk. It was the first novel to be set, at least partially, in the Greyhawk setting and, according to Alternative Worlds, the first to be based on D&D. Quag Keep was excerpted in Issue 12 of The Dragon (February 1978) just prior to the book's release.[21] She and Jean Rabe were collaborating on the sequel to Quag Keep when Norton died. Return to Quag Keep was completed by Rabe and published by Tor Books in January 2006.

Her final complete novel, Three Hands for Scorpio, was published on April 1,



2005. Besides Return to Quag Keep, Tor has published two more novels with Norton and Rabe credited as co-authors, Dragon Mage (November 2006) and Taste of Magic (January 2008).

Despite being plagued by ill health for much of her adult life, Norton was an incredibly prolific writer of both sci-fi and fantasy, penning many books (and book series), as well as individual short stories that have become true classics. We're pleased to feature one of them in this issue of *The Interocitor*.

Includes material excerpted from Wikipedia.

























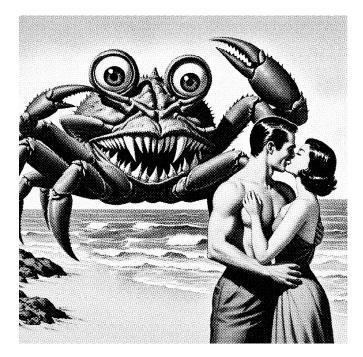




REVENGE OF THE CRAB MONSTERS *Fan Fiction, by Paul Hurst*

If is '41 DeSoto Coupe was parked nearby, the fading sunlight reflected at the windshield. Henry and Doris spread the blanket upon the sand and tuned to the local radio broadcast just in time to hear, "Love Letters in the Sand." The waves were somewhat calm and there was only a mild breeze off the water.

The young couple began to kiss and embrace. The soothing melody from the transistor radio masked all other sounds from being noticed. They talked for a while of future plans together as the Sun sank deeper into the ocean. Moonlight began to light the secluded beach afterward and they felt no hurry to return, content in each other's arms. Suddenly, Elvis Presley changed the night's romantic



mood with the swinging, "All Shook Up." They chuckled at the change, and he kissed her passionately. His arms held her close to his heart. There was in her mind nothing else but that moment. She relaxed completely in his embrace. Oblivious to everything around them, everything changed in a moment; for he was grasped and pulled away from her. She recoiled immediately, backing from the blanket on hands and feet at the grotesque sight before her, screaming and wailing in fear, until another took her from behind... or three days, Dale Drewer and Dr. Martha Hunter survived on the remnant of the island off of scraps of the supplies they found at the wreckage. They buried Hank Chapman with what honor and gratitude they could voice, for his sacrifice to save them from the Crab. Relieved their ordeal was over, and the threat stopped, each settled in to a routine for their comfort, and had long talks of their hopes for the days ahead.

When the Navy sent out another Catalina, they waved anxiously to the sailors in the inflatable as they came to shore. The two held their story to themselves, knowing that an official debrief must soon follow. That they were the only ones to survive the party of eight who had come ashore, and the loss of the flight crew, was a mystery to all involved.

The return to Pearl Harbor and meetings with the Admiral and staff did not quite put the affair to bed. Questions about the radioactivity, and the enlarged, intelligent crabs, led to speculation about what other marine animals might have been affected. Dale and Martha were called upon to recount the entire expedition's experiences before a panel of scientists and naval personnel. Many found it too fantastic to believe; that crabs could project the voices of the dead to metal objects within buildings. Others questioned the crab's ability to manipulate and use explosives in the destruction of the island.

However, photos of the remnant of the land mass were compared to earlier photographs. The destruction was evident. The official report was sealed as "Top Secret" on the same day that a memorial for the survey team was



held. Dr. Karl Weigand, Professor Jules Deveroux, Dr. James Carson, Ron Fellows, Jack Sommers, Ensign Quinlan, Tate (who perished headless), the Catalina crew which perished in the explosion and the hero Hank Chapman; were all named with respect and honor.

After the formal conclusion of the matter, while they could return their thoughts to enjoying Hawaii, Dale and Martha dined and celebrated their matrimonial plans. The dinner was uninterrupted as they sat in the evening air and gazed upon the sunset. Sometime after their cocktails were served, however, a message was brought to them by the waiter, instructing them to return the Admiral's call as soon as possible.

Martha waited as Dale dialed the number and was quickly informed they were needed to investigate something rather bizarre on a beach in Moloka'i. What follows is the exchange between the police captain and our two experts: "This is the strangest thing I've ever encountered," the captain said, "we have the car, the blanket, blood soaked sand and remnants of swimsuits. No bodies." Both Dr. Hunter and Dale Drewer wondered why they were needed, but they looked over the evidence. The couple had apparently laid their blanket on dry sand. The area was disturbed by human footprints, as well as by strange multiple animal prints. "What are your thoughts, Captain?" Martha asked.

"I dunno, look at all this blood. The scene was found yesterday morning. We have the names of the couple that were here because their friends mentioned they never returned to their homes the night before. The DeSoto is parked right where they left it, (motioning upward to the car). Their small radio was still switched on, but the batteries had died. And



then there are these strange prints in the sand, like nothing I've seen before. We contacted the Navy because we heard they had some marine scientists who might know what we are dealing with," he replied.

"These tracks," Dale pointed, "they are very large and non-descript, but they do lead back to the wet sands of the shore."

"We had some rain earlier that day which seemed to have smoothed the beach sand before these kids came," the captain added.

Martha looked closely at Dale's expression, wondering if she should hold her fear for later, when they could talk more privately. They asked for copies of the photographs of the scene, which they could study further and make their report at the admiral's office. The police work completed, the area was restored to normal, and the investigation, a mystery, remained open, but unsolved.

Privately, they both had concluded their worst fear was real. The male and female crabs that were killed on the island may have already reproduced at least one generation of offspring. These had come across the Pacific to find more human prey. The staff member turned on the projector at Dale's request, so the admiral could view how crabs swim in the ocean. The fact that these are likely the slayers of the couple at Moloka'i, and had crossed a vast part of the Pacific seemed incredible to all in the room. They would have laughed at the suggestion, if it were not for the grim expression on the admiral's face. "I thought they could only walk along the bottom," he said sadly.

"What we don't know, is how many exist, and how many we have to stop before more people are savagely killed." Dale responded.

"Here's what we know about these crabs" Dr. Hunter then explained to the assembled officials. "They are essentially Sand Crabs, but with enormous size and strength. We battled them on the Island and they were perhaps six to eight feet across the shell. We saw that the female carried a number of eggs on her abdomen. Sand Crabs mate anytime between February and October. The female can carry the male's sperm for a year or more before fertilization. We believe she will exude the eggs in warm conditions, where they will cling to her abdomen until they hatch and the young larvae are released to the current.

"She can produce up to forty-five thousand eggs, which get fertilized as they pass out of her. When the eggs hatch, 30 days later, the larval form is carried great distances by the ocean currents. These develop in two to four months, become fully mature in four to five months, and live two to three years. We don't know how long these giant ones can live. "The male crab has bright blue color on the ends of its claws. The female has bright red. But there is another indicator of gender: the male's abdomen has a spike, the female has a dome. When fully mature, that dome is more rounded.

"What we face, what the world faces, is the greatest threat to human and ocean life the planet has ever seen. If these reproduce, or in fact have already reproduced tens of thousands more like them, the exponential threat will be unstoppable!" Dale added to her words: "Can you imagine a world that is dependent upon the sea for sustenance, yet the sea is without life, and these crabs have taken the coastal regions?" "Dr. Hunter, and Gentlemen, I received today another report of missing individuals and strange circumstances on Moloka'i. Perhaps we can contain the threat, but who knows if these creatures have moved beyond Moloka'i.

"I've asked the authorities to close the beaches until further notice. Mr. Drewer and Dr. Hunter have consented to return and head up the investigation. We will have personnel there to hunt down and destroy these things before it gets out of control," the admiral added.

"The trouble is," Martha injected, "these things can move easily on land. When we close the beaches, they will simply go further inland. They will seek places to hide during the day if they can't return to the sea. We saw how they used extensive caves on the island."

"And," Dale insisted, "firearms and even grenades are useless against these things. When we find them, their powerful claws and long reach will make any combat difficult, even for a whole group of men. We found that electricity is the answer. They can't withstand it, and our best hope will be to trap them in electrical current. That is how Hank Chapman killed the last one we saw on the island, saving our lives."

Feverish work commenced on creating traps that could be deployed quickly and energized when the creature was near or upon it. Reports began to come in of various sightings of strange night creatures, missing persons and livestock; of trance-like experiences where individuals heard the voices of their missing loved-ones and neighbors. Time was of the essence, and Dr. Martha Hunter and Dale Drewer worked tirelessly to track the movements of the giant crabs, based on these sightings. All of Moloka'i was in turmoil, and the populace was alarmed as soldiers and Navy personnel moved in. High alert was the order to the troops. Naval patrols off shore attempted with Sonar to detect movements of these large shelled creatures. Water samples thus far failed to detect any larval forms of the giant crabs.

National leaders across the globe were informed of the threat to their seacoasts. The hunt was on! However, to date, no sightings or odd occurrences had been reported elsewhere in the world. For now, the problem seemed localized to Moloka'i.

"That's hopeful news," Martha said to Dale. "We may have a chance to stop this before any eggs are hatched."

"Maybe the ones we are fighting now are just a few that are left over from our previous encounter, he replied. "That female was not releasing her young larvae at the time, so maybe, just maybe, we got lucky."

The search was intensified, on the beach areas, as well as a mile or so out into the ocean. The authorities hoped the creatures' needs would keep them within a short distance of the water, coming nightly up onto the beaches. When extensive electrified traps were laid along the sands, and house to house searches were conducted, the greatest question remained: "where are the crabs?"



A local boy named Johnny, who was driving home after work, spotted a large mass in the darkness in the glow of his headlight, but too late to avoid collision. The great crab lay motionless at the site of the accident. Though dazed and shaken by this, Johnny walked to the nearest house to call for help. Near his wrecked car was a lifeless male sand crab, larger than his sedan.

The remains of the male crab were taken immediately that night. The examination began with testing the for residual radioactivity that they assumed had caused its incredible growth. Fully mature, it was dissected carefully to reveal its secrets. Martha and Dale were summoned in the early hours that morning, in time for the autopsy to be completed before their eyes.

"If the female was nearby, assuming they kept together in pairs, we have got to close the area and find her," Dale commented. "If she is carrying her eggs, and, if there are no other pregnant crabs, and, if we can destroy her along with her eggs."

Oh, dare we hope?" Martha gasped.

While no traces were found along the coast of the Island, the search intensified inland, to include any area, home or rock formation that could possibly conceal a female crab. Soldiers, armed with flame throwers, scoured the search areas by day and into the night, hoping flames would cause the beast to flee to a safe location, where they could destroy it.



Each man was warned of the great danger posed by getting too close to the creature, of its quick movement, and of its ability to quietly approach from behind. No man was to search without two partners, so all men could scan constantly in all directions.

The female crab, knowing her eggs were close to hatching, had to leave her hiding place to venture back to the open waters of the sea. She would release her young as they hatched. Satiated with the flesh of her victims, as the night was upon her, she set out for the beach and waves.

She could not know how close the approaching soldiers were, as they advanced cautiously in the dark. She had a concern that her mate, the one who came with her to this distant island, was absent and possibly dead. She moved with that subtle sound of clicking others had heard and were puzzled by.

She saw from her side the glow of flashlights, their beams shifting from side to side as the soldiers were searching. The beach was near, but she hurried her steps because of their approach.

Suddenly men were shouting. Flame was thrown in her direction. Her speed increased, pushing over a tree on her way to the beach. Men along the coast readied themselves as they heard the commotion. Now, with trap set and energized, they only needed the crab to step out onto it.

More flames, and the pace increased. She managed to clear the trees, to



be greeted by a mass of soldiers and sailors. Wildly she thrashed about, injuring one soul who was not careful enough to keep his distance. She grabbed another man, held him high off of the sand in her claw, snipping him apart at the waist. Some men fled in retreat from the sight. One or two of them, when they stopped running, emptied their stomachs on the beach. Others held their place, and when the giant crab was fully upon the electric trap, the current was applied. A horrendous wail was heard from the female crab as she was destroyed along with her eggs.

Examining the scene in the morning, Martha and Dale, along with the Admiral and his staff; concluded after a briefing about the encounter briefed by the survivors, concluded they had a respite. "We may never know how many of these crabs were grown by the nuclear radiation," the admiral said, as he looked at the sight before him.

"Let's hope we have finally seen the last of these," Martha added.

"Yes, let's hope, " Dale responded.

* * *

n evening swim, not far from his San Diego home, was a habitual practice for Mike Connors, who had loved the beach his whole life. But his life was cut short as he did the breast stroke out away from the shore, and was suddenly and violently pulled beneath the waves. The crab monsters would have their revenge.





he Morrisons didn't lose their freedom. They were merely sentenced to the highways for life, never stopping anywhere, going no place, just driving, driving, driving....

Some people had disagreed with him. They were influential people. He was put on the road.



S tan wanted to scream at the big sixteen-cylinder Special to go faster. But Salt Lake City, where they would allow him to stop over for the maximum eight hours, was a long way off. And anyway, he couldn't go over a hundred. The Special had an automatic cut-off.

He stared down the super ten-lane Freeway, down the glassy river, plunging straight across the early desert morning--into nowhere. That was Anna's trouble. His wife couldn't just keep travelling, knowing there was no place to go. No one could do that. I can't do it much longer either, Stan thought. The two of us with no place to go but back and forth, across and over, retracing the same throughways, highways, freeways, a thousand times round and round like mobile bugs caught in a gigantic concrete net.

He kept watching his wife's white face in the rear-view mirror. Now there was this bitter veil of resignation painted on it. He didn't know when the hysteria would scream through again, what she would try next, or when.

She had always been highly emotional, vital, active, a fighter. The Special kept moving, but it was still a suffocating cage. She needed to stop over somewhere, longer, much longer than the maximum eight hours. She needed treatment, a good long rest, a doctor's care--

She might need more than that. Complete freedom perhaps. She had always been an all-or-nothing gal. But he couldn't give her that.

Shimmering up ahead he saw the shack about fifty feet off the Freeway, saw the fluttering of colorful hand-woven rugs and blankets covered with ancient Indian symbols.

It wasn't an authorized stop, but he stopped. The car swayed slightly as he pressed the hydraulic.

From the bluish haze of the desert's tranquil breath a jackrabbit hobbled onto the Freeway's fringe. It froze. Then with a squeal it scrambled back into the dust to escape the thing hurtling toward it out of the rising sun. S tan jumped out. The dust burned. There was a flat heavy violence to the blast of morning sun on his face. He looked in through the rear window of the car.

"You'll be okay, honey." Her face was feverish. Sweat stood out on her forehead. She didn't look at him.

"It's too late," she said. "We're dead, Stan. Moving all the time. But not alive."

He turned. The pressure, the suppression, the helpless anger was in him meeting the heavy hand of the sun. An old Indian, wearing dirty levis and a denim shirt and a beaded belt, was standing near him. His face was angled, so dark it had a bluish tinge. "Blanket? Rugs? Hand-made. Real Indian stuff."

"My wife's sick," Stan said. "She needs a doctor. I want to use your phone to call a doctor. I can't leave the Freeway--"

This was the fourth unauthorized stop he had made since Anna had tried to jump out of the car back there--when it was going a hundred miles an hour.

The Indian saw the Special's license. He shrugged, then shook his head.



"For God's sake don't shake your head," Stan yelled. "Just let me use your phone--"

The Indian kept on shaking his head. There was no emotion, only a fatalistic acceptance of the overly-complex world he and many of his kind had rejected long ago. "You're a Crackpot."

"But what's that to you when I just want to use your phone? If I can get a doctor's affidavit--"

"If I help you, then the Law come down on my neck."

"But I only want to use the phone!"

"I cannot risk it. You drive on now."

He felt it, the thing that was slowly dying in Anna's eyes. This need to strike out, strike out hard and murderously at something real. This suppressed feeling had been growing in him now for too many miles to remember. He started forward. But the Indian slid the knife from his beaded belt. "I am sorry, and that is the honest truth," the Indian said. "But you have to move on now." The Indian stepped back toward the ancient symbols of his kind. "We have stopped moving. We stay here now no matter what. Now, White Doctor, it is your turn to move on."

He put his hand over his eyes as though to push something down. One act of violence, and the questionable "freedom" would be ended. That would be an admission of defeat. His hand still over his eyes, he backed away. Then he turned, choking and half blinded with smoldering rage.

Keep moving. Nothing else to do with them but put them on the road and keep them moving, never letting them stop over long enough to cause trouble, to stir up any wrong ideas. Hit the road, Crackpot. Head on down the super ten-lane Freeway into the second Middle Ages lit with neon.

Then he was running, yelling at Anna. She was past the shack and stumbling through sand toward the mountains. He coaxed her back and into the car, sickness gorging his throat as she kicked and screamed at him and he forced her into the corner of the back seat.

"Stan, we could run to the mountains."

"The Law wouldn't let us get very far. Remember, the Special's remotely controlled. If we leave the Freeway, they'd be on us in no time. They know when we stop, where we stop. They know if we leave the Freeway!"

"But we would have tried!"

"They're just waiting for us to do something legally wrong so they can put us away, honey. We can't let ourselves be goaded into doing anything legally wrong!"

"Stan--" she was shaking her head, and her eyes were wet. "Can't you see, can't you see? What they do to us doesn't matter now. It's what we do, or

don't do--"

When she quieted down a little, he got back under the wheel. Within a hundred feet, the Special was going eighty-five miles an hour.

* * * * *

They were risks. They might be dangerous. Attitudes not quite right. A little off center one way or another at the wrong time. Some personal indiscretion in the past. A threat to total security.

Be careful, easy does it. Too many black marks on his road record and the "freedom" of the road would go. Then he would be a criminal in fact, instead of a vague criminal possibility, and put behind bars. Or worse.

The heck with them. The heck with them all. He pulled over onto an emergency siding and stopped. Not authorized. A good long rest and talk with Anna--

Then he saw it. Suddenly, frantically, he wanted to move on. But now he couldn't. He kept seeing the light of defiance fading from Anna's eyes.



The Patrolcar was there, the way it always was there, suddenly, materializing out of the desert, or out of a mountain, a side street. Sometimes it was a helio dropping out of the sky. Sometimes it was a light flashing in darkness.

Every official of the law: city, county, state, or federal, had a full record on every Special. They could control them at will. Stop them, start them, keep them moving down the line.

Jails of the open road. Mobility lending to incarceration a mock illusion of freedom. Open sky. Open prairie. The Freeway stretching ahead.

And the Patrolcar coming up behind.

The Patrolcar stopped. The two Patrolmen in black and gold uniforms looked in at Stan. "Well, egghead," the older, beefy one said. "It was nice of you to stop without being asked. A fellow named Ferreti back at Snappy Service No. 7 said you might be a trouble-maker. We thought we ought to check up."

Stan said, "I wanted to use his phone to try to get a doctor to examine my wife. She's ill. She needs help and I've been trying--"

Without turning, the older Patrolman interrupted, "Larry, what you got on the philosopher here?"



The younger Patrolman who had a shy, almost embarrassed air about him looked into his black notebook. "He isn't a philosopher, not officially, Leland. Every Crackpot we stop, you figure him to be a philosopher. You just hate philosophers that's all."

"Well, that's a fact, boy." When he took the cigar out of his mouth, the corners of his mouth were stained brown. "My kid got loused up plenty by a philosopher in High School last year. I raised a squawk and got the Crackpot kicked out. I also got three others booted out for hiring him in the first place. I found out he was a lousy atheist!"

The Patrolman put the cigar back into his mouth. "What have you got on him, Lieutenant?"

"Stanley L. Morrison, B.A. Drake University, Class of '55. Doctor of Philosophy, Drake University, 1957. Federal employee 1957-59. Dropped from Federal employment, January, 1959--"

"What for, Lieutenant?"

"For excessive political enthusiasm for the preceding political party in office." The Lieutenant looked up almost apologetically. "Looks like he was unfortunate enough to have been on the wrong side of the fence when the Independants were elected."

"These guys are dangerous no matter what side they're on. A Crackpot shouldn't be on either side. Well, Lieutenant, what else?"



"Professor of Nuclear Physics, Drake University, 1960-62. Dismissed by Board of Regents May 31, charged with 'private thought inconsistent with the policies of the University'. Special inquiry August 5. Dismissal sustained. Was put on the road as a permanent risk to security February 3, 1963. He's been on the roads for a year and three months."

Stan forced quiet into his voice. "My wife's sick. If I could get a doctor to examine her, I'm sure I could get a permit to lay over somewhere so she can get rest and proper treatment."

"Only eight hours," the beefy one said. "That's the limit. And you're not supposed to have stopped here at all. Or back at the Indian's."

"I know," Stan said. "But this is an emergency. If you could help me--"

The beefy one grinned into the back seat. "That might be all that's bothering the missus, egghead. She ain't getting the proper treatment maybe."

Easy, easy does it. In the rear-view mirror he could see that what the Patrolman said had brought a flush of life to her face. She was rigid now, and then suddenly she screamed. "Stan! For God's sake, Stan, don't take any more from the simian!"

"Let's go," the young Lieutenant said quickly. "We've got the report and we'll forward it. There's no call to bait them."



"Shut up," the beefy one said.

"Don't tell me to shut up," the Lieutenant said. He put his notebook away. "This man's never committed any crime. That's why he's on the road. They didn't know what else to do with him. We're supposed to keep them moving that's all. Not hold them up because of personal vindictiveness."

The beefy one's face was getting red. "Don't use your big words on me, boy. I'll send you back to College."

"He's getting punishment enough. You've got nothing against him, or the woman."

The beefy one took a deep breath. "Okay, Lieutenant. But I'm going to drop a few words in the right place. I guess you know how the Commissioner feels about Crackpots."

"I don't give a darn. Come on, let's get out of here." The Lieutenant looked at Stan a moment. "You'd better move on, Doctor."

"Thanks," Stan said.

"At the next Snappy Service maybe you can phone. That's an hour's authorized stop for Specials. There's a Government Project in the hills nearby. You might be able to contact a Doctor there."



In the rear-view mirror he saw Anna leaning back, her legs stretched out, her arms limp at her sides. She wasn't thinking about this with an historical perspective, that was the trouble. She had lost the saving sense of continuity with generations gone, which stretched like a lifeline across the frightening present.

Keep the perspective. Wait it out. That was the only way. This was an historical phase, part of a cycle. Stan couldn't blame any one. Anxiety, suspicion of intellectuals and men of science--as though they had been any more responsible really than any one else--suspicion and fear. There always had to be whipping boys. In one form or another, he knew, it had happened many times before. Another time of change and danger. There was a quicksand of fear under men's reasoning.

When things were better, they hadn't remained better. When they were bad, they couldn't stay bad. Wait it out. One thing he knew--neither he nor any other scientist could detach himself from life. The frightened policemen of the public conscience had made the mistake of thinking they could detach the scientist.

I'll not withdraw from it. All of it represents a necessary change. If not for the immediate better, then I'll be here for the immediate worst which will someday change into something better than ever. But Anna's tired voice was whispering in his ear. "First of all, we're individuals, men, women. We've got to fight, fight back!"

"At what? Ourselves?"

A sign said: HAL'S SNAPPY SERVICE. TWENTY-SEVEN MILES.

She's right, he thought, and started slowing down. This is it. He wasn't going any farther until Anna was examined, and he was given an okay to stop somewhere so she could rest.

* * * * *

I t was a dusty oasis, an arid anachronism on the desert's edge. Beyond it, the mountains blundered up like giants from a purplish haze, brooding and somehow threatening. Groves of cottonwoods could be seen far ahead, and sprinklings of green reaching into the thinning sage.

The old man shuffled out of the shade by the coke machine. Behind him, through dusty glass, Stan saw the blurred faces staring with still curiosity.

The old man hesitated, then came around between the pumps to the driver's side. He was all stooped bone and leathery skin. His face, Stan thought beneath the rising desperation, resembled an African ceremonial mask.



To the left a '62 Fordster was cranked up for a grease job. But the only life around it was a scrawny dog lying out flat to get all the air possible on its ribby body, its tongue hanging out in the black grease.

"The car's okay," Stan said. "I just want to use your telephone."

"Doctor Morrison, you'd better go on to Salt Lake City. That's an eighthour stopover."

"My wife needs a doctor's okay for a long rest. I can't take a chance on going clear to Salt Lake City."

"But this is only an hour stop."

Stan got out and shoved past the old man. Heat waves shivered up out of the concrete and through the soles of his shoes. The heat seared his dry throat and burned his lungs.

Anna wasn't even looking. She seemed to have forgotten him. Almost everyone had forgotten him by now, he thought, forgotten Doctor Stanley Morrison the man who had never been afraid to speak out and say what he thought, and think what he wanted to think. Fifteen months with never more than an eight hour stopover. Thought and self-regard frozen by perpetual motion, and shriveled by consequent neglect. Only the old man remembered. That was odd.



A man stepped into the doorway. He was lean and powerful with a long gaunt chewing jaw like that of a horse. His eyes were small and black, and he was grinning with anticipation. Stan felt his stomach muscles tighten.

Behind the man, Stan saw the kid. Almost as tall as the man who was obviously his father, but rail-thin, like an emaciated duplicate of the man, a starved, frustrated shadow, grinning and feverishly picking at a pimple under his left ear. He carried a grease-gun cradled in his left arm as though it were a machine gun.

"I'd like to use your phone, please," Stan said. "My wife's ill. I want to phone the Government Project and see if I can get a doctor over here to look at her."

"What seems to be troubling the missus?"

"I don't know!"

"Then how do you know it's a serious sickness, Crackpot?"

"Just let me use the phone? Will you do that?"

"They phoned in ahead, Crackpot. Said you might be a trouble-maker."

"I don't want to make any trouble. I just want to use the phone!"



"Why? Even if the Doc came over, you wouldn't be here. He can't get here inside an hour. And that's all the longer you can stay here. You got to move on."

"I'm coming in to use the phone," Stan heard himself saying. He fought to keep the breathiness out of his voice, the trembling out of his throat.

"I don't guess I'd want to have it said I was coddling a Crackpot."

"I never caused you any trouble."

"You helped build hellbombs," the man said. He took the toothpick out of his mouth. "You crazy bastards got to be kept moving along the road."

"How do you know what I did or didn't do?"

"You're a Crackpot."

"I never helped build any kind of bomb," Stan whispered. "But even if I did--"

"You're one of them nuclear physicists."

"I was an instructor at a University. I taught at a Government school once too--for a while--" He stopped himself, realizing he was defending himself as though somehow he suspected his own guilt.



"You taught other guys how to build hellbombs. Who needs you and your kind, Crackpot? We need your brains like we need a knife in the back."

Stan lunged forward. The kid yelled something in a high cracked voice as Stan lashed out again. He felt his knuckles scrape across hard teeth. Blood leaped from the man's upper lip in a thin crimson slash. His eyes widened with a grudging respect, then he snarled through the blood as he stumbled backward and off balance. He fell against the window and trying to regain his balance, reeled and went down in a welter of empty gallon oil cans.

He gathered himself for an upward lunge. Through the blood staining his teeth, he muttered, "By gawd, Crackpot. I didn't think you had the guts!"

Stan glanced out the window and saw that Anna was gone from the car.

Dimly, he heard the man saying he was going to beat heck out of the Crackpot, going to beat the Crackpot over the head and then the Crackpot wouldn't be able to cook up any more dangerous ideas in it for a long, long time.

Anna may die now, Stan thought as he stood there bent over a little, feeling his wet fists tightening. She may die now, because of a frustrated fool who doesn't know what else to do with himself on a hot and dull and empty afternoon.

Stan suddenly caught the flash of color out of the corner of his eye. He



twisted, not thinking at all, and felt his fist sink into the kid's stomach. The kid fell, curled up among the empty oil cans. He writhed and moaned and held his stomach.

"Get up," Stan yelled into the man's face. "Get up--"

The man came up all at once, and his weight hurled Stan clear across the room. He felt the gum machine shatter under him, and the metal grinding into his side as he rolled. Stan felt the grease-gun in his hand as he saw the man lifting the tire tool, and then Stan swung the grease gun into the face, seeing the terrible grin, the blood-stained white smile.

Unrecognizable as it was, the man's face wouldn't go away. Stan swung at it again. Then he heard her voice, Anna's voice, intense and alive, and there was a flash of Anna the way he remembered her a thousand years ago, before they were put on the road. She was tearing at the man's face with her fingernails and kicking him savagely.

Stan had the man's shirt collar and it was ripping under his fingers as he slammed the head against the concrete floor. The thudding rhythm was coming up through his arm and throbbing behind his eyes.

Like drums, he thought as a sickening light flashed on the dusty glass, like primitive war drums beating out a dance of tribal doom.

Suddenly feeling sick and weak, he stood up and walked stiffly out into the sun.



He leaned against the side of the building trying to keep from retching. Anna touched his arm and he looked up, half blinded by the glare of the sun. Her face was flushed and alive. She seemed ten years younger.

"Don't be sorry," she said. "Be glad, Stan."

"They broke us," he whispered. "We've crawled into the cage."

"It doesn't matter, Stan, it doesn't matter what they do to us now! It's something to admit you're human, isn't it?"

She was partly right at least. He felt both glad and sad. But in either case, it was the end of the road.

He saw the old man lowering the hood of the Special. He ran back between the pumps carrying a metal tool box. "I've fixed it," he said, breathing heavily. "Now get out of here. Push it to the limit. I broke the cut-off too. Hurry it up!"

"But what's the use?" Stan said. "They'll get us sooner or later--"

"They're not going to get you now, not if you stop reasoning everything out as though it were a problem in calculus! I've cut the remote control off, and the radar and radio. They won't know where you are. I've changed the license plate too. But hurry out of here before Hal or his kid start



phoning."

"But being on the Freeway," Stan said, "they'll catch up with us! What's the use--"

"Stan!" Anna said sharply. "Can't you see? We're getting away!"

"I don't want to run away from it," Stan said.

"You're not running away from anything," the old man said. "You'll find out. Follow my directions and you'll find out. You're not running away. You can get out of the flood water for a while, sit on the bank, until the water drops and clears a little."

Stan looked into the old man's face a long moment. "Who the heck are you anyway?"

"That doesn't matter, Doctor Morrison. Now will you get out of here! Move on down the road!"

Stan finally nodded and took Anna's arm and they started toward the Special. "All right, but what about you?" he asked the old man.

"I'll make out. You just be concerned about yourself, Doctor Morrison. This isn't the first time I've helped someone off the road. It won't be the last time either, I hope."



He waved to them as the Special, without any limit to its speed now except the limitations of a driver's nerve, roared away toward the mountains.

* * * * *

ow the special became anonymous on the Freeway, one of countless cars hurtling down the super ten-lane Freeway, its license changed, its controls and checkers cut off, its sovereignty returned to it by a nameless old man, a box of wrenches, and a roll of wire.

Three hundred miles farther on, the Freeway began a long banked curve; a thick wall of cottonwoods, willows and smaller brush lined the side where a creek rushed out of a cleft in the lower hills and ran along the Freeway's edge.

Stan started to slow down.

"There, that's it!" Anna said, pointing excitedly. "The big rock, the three tall trees. There, between the rock and the tree. Turn, Stan. Turn!"

"But there isn't any road. There isn't--"

"Turn!"

Stan turned.

He blinked as the Special roared off the Freeway and smashed through a solid wall of leaves, branches and brush. Then they were on a narrow winding dirt road, dipping down into the stream where a foot of water ran over stones to create a fiord. It twisted up the other side, around the creek's edge, over stones and gravel, twisting tortuously upward and out of sight like a coiled rope.

"Go on, Stan, keep going!"

Stan kept going. It demanded all his power of concentration just to stay on the road which was hardly more than a pathway through the rising mountains. He had no time to think, and had very little to say.

Some hundred and fifty miles farther into the mountains, at an altitude that bit into their lungs, they saw the marker almost buried in rocks at the left of the road. The place where the old man had told them to stop and wait.

But they didn't have to wait. A man, lean and healthy for his age--which must have been at least sixty, Stan thought--stepped from behind a rock, and came toward the Special. He was smiling and he extended his hand.

"Doctor and Mrs. Morrison," he said. Anna was already out of the car, shaking his hand. Stan got out. He took a second look, then whispered: "Doctor Bergmann!"



The man wore levis and a mackinaw, and he carried a rifle slung under one arm. "I wasn't expecting you to recognize me," he said as they shook hands. "I've lost about thirty-five pounds." He smiled again. "It's healthier up here."

He walked around to the driver's side and opened the door. The motor was still running. Stan realized then what Bergmann was doing, and for some reason without definition he started to protest. Bergmann was setting the automatic clutch and releasing the brake. The Special started moving up the road, but there was no one inside to turn the wheel when it reached the hairpin turn about fifty feet ahead.

Stan watched the car gaining speed, its left door swinging like the door in a vacant house. He thought of stories he had heard about convicts finally released after many years, stunned, frightened by reality, begging to be returned to the restricted but understandable cell. Then he smiled. Anna smiled.

The Special, once you pushed the right button, could do almost everything by itself, feed itself gas, gain speed, shift its gears; but it didn't know when to turn to avoid self-destruction.

Stan winced slightly as the car lurched a little and then leaped out into space. He felt the black void opening under him as though he were still in the Special. Fifteen months.

His ears were filled with the sudden screeching whine of the wheels against unresisting air, then the world seemed to burst with a thundering series of solid smashing roars which were quickly dissipated in the high mountain air.

Doctor Bergmann went over to the edge and looked down. "That's the tenth one," he said. "We're going to send a work party down there in a few days to cover it all over with rocks. Still, I doubt if we have to worry about them spotting the wreckage."

He turned. "Well, let's start hiking. It's still a few miles."

"Where," Stan asked. "I've gone along this far. I've had no choice. But now what's it all about?"

"Didn't the old man tell you?"

″No.″

"Just remember, Morrison. We're not running away. This is an old Mormon trail. A lot of the old pioneers took it. That marker says that the Williams-Conner Party camped here and was massacred by Indians in 1867. There's an old Indian city at about three thousand feet. I guess we're the first ones to use it for maybe a thousand years. We've got an archeologist up there--Michael Hilliard--who's been going slightly crazy. Anyway, we've got books up there, we raise most of our own food, and we've plenty of time to study and try to figure out where we made the big mistakes. We're really doing very well."

"But what about the old man?" Anna asked.

Bergmann chuckled. "Arch has turned into a regular man of a thousand faces. He works along the Freeways and watches for those who are at the breaking point and can't stay on the road any longer. Some of those condemned to the Freeways are criminals, others are fools or misguided zealots; and we've got to be careful not to wise those birds up by mistake. Arch has an unerring instinct, and sending our people to us is his job."

The three of them started walking up the old pioneer trail.

"We made a lot of mistakes," Bergmann said. "All of us, some more than others. You can't blame people for being afraid, suspicious of us. We did unleash the potentialities for total destruction without ever thinking about the social implications or ever bothering to wonder about how our contributions would be used and controlled.

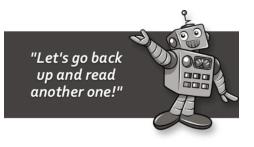
"So we're off there waiting now. Waiting and studying. Someday they'll need us again. And we'll be ready."

"But who was the old man?" Anna asked.

Bergmann laughed. "Only the greatest physicist of the age. Remember Arch Hoffenstein?"



Stan put his arm over Anna's shoulders and they walked on, and up. He had almost forgotten. But now he never would. Somewhere, Arch Hoffenstein was hitch-hiking along the Freeway with the ghost of Galileo.







ALL CATS ARE GRAY



Under normal conditions, a whole person has a decided advantage over a handicapped one. But out in deep space the normal may be reversed--for humans at any rate.

S teena of the spaceways-that sounds just like a corny title for one of the Stellar-Vedo spreads. I ought to know, I've tried my hand at writing enough of them. Only this Steena was no glamour

babe. She was as colorless as a Lunar plant--even the hair netted down to her skull had a sort of grayish cast and I never saw her but once draped in anything but a shapeless and baggy gray space-all.

Steena was strictly background stuff and that is where she mostly spent her free hours--in the smelly smoky background corners of any stellar-port dive frequented by free spacers. If you really looked for her you could spot her--just sitting there listening to the talk--listening and remembering. She didn't open her own mouth often. But when she did spacers had learned to listen. And the lucky few who heard her rare spoken words-these will never forget Steena. She drifted from port to port. Being an expert operator on the big calculators she found jobs wherever she cared to stay for a time. And she came to be something like the master-minded machines she tended-smooth, gray, without much personality of her own.

But it was Steena who told Bub Nelson about the Jovan moon-rites--and her warning saved Bub's life six months later. It was Steena who identified the piece of stone Keene Clark was passing around a table one night, rightly calling it unworked Slitite. That started a rush which made ten fortunes overnight for men who were down to their last jets. And, last of all, she cracked the case of the Empress of Mars.

All the boys who had profited by her queer store of knowledge and her photographic memory tried at one time or another to balance the scales. But she wouldn't take so much as a cup of Canal water at their expense, let alone the credits they tried to push on her. Bub Nelson was the only one who got around her refusal. It was he who brought her Bat.

About a year after the Jovan affair he walked into the Free Fall one night and dumped Bat down on her table. Bat looked at Steena and growled. She looked calmly back at him and nodded once. From then on they traveled together--the thin gray woman and the big gray tom-cat. Bat learned to know the inside of more stellar bars than even most spacers visit in their lifetimes. He developed a liking for Vernal juice, drank it neat and quick, right out of a glass. And he was always at home on any table where Steena elected to drop him.



This is really the story of Steena, Bat, Cliff Moran and the Empress of Mars, a story which is already a legend of the spaceways. And it's a darn good story too. I ought to know, having framed the first version of it myself.

For I was there, right in the Rigel Royal, when it all began on the night that Cliff Moran blew in, looking lower than an antman's belly and twice as nasty. He'd had a spell of luck foul enough to twist a man into a slugsnake and we all knew that there was an attachment out for his ship. Cliff had fought his way up from the back courts of Venaport. Lose his ship and he'd slip back there--to rot. He was at the snarling stage that night when he picked out a table for himself and set out to drink away his troubles.

However, just as the first bottle arrived, so did a visitor. Steena came out of her corner, Bat curled around her shoulders stole-wise, his favorite mode of travel. She crossed over and dropped down without invitation at Cliff's side. That shook him out of his sulks. Because Steena never chose company when she could be alone. If one of the man-stones on Ganymede had come stumping in, it wouldn't have made more of us look out of the corners of our eyes.

She stretched out one long-fingered hand and set aside the bottle he had ordered and said only one thing, "It's about time for the Empress of Mars to appear again."

Cliff scowled and bit his lip. He was tough, tough as jet lining--you have to be granite inside and out to struggle up from Venaport to a ship command. But we could guess what was running through his mind at that moment. The Empress of Mars was just about the biggest prize a spacer could aim for. But in the fifty years she had been following her queer derelict orbit through space many men had tried to bring her in--and none had succeeded.

A pleasure-ship carrying untold wealth, she had been mysteriously abandoned in space by passengers and crew, none of whom had ever been seen or heard of again. At intervals thereafter she had been sighted, even boarded. Those who ventured into her either vanished or returned swiftly without any believable explanation of what they had seen--wanting only to get away from her as quickly as possible. But the man who could bring her in--or even strip her clean in space--that man would win the jackpot.

"All right!" Cliff slammed his fist down on the table. "I'll try even that!"

Steena looked at him, much as she must have looked at Bat the day Bub Nelson brought him to her, and nodded. That was all I saw. The rest of the story came to me in pieces, months later and in another port half the System away.

Cliff took off that night. He was afraid to risk waiting--with a writ out that could pull the ship from under him. And it wasn't until he was in space that he discovered his passengers--Steena and Bat. We'll never know what happened then. I'm betting that Steena made no explanation at all. She wouldn't.

It was the first time she had decided to cash in on her own tip and she was



there--that was all. Maybe that point weighed with Cliff, maybe he just didn't care. Anyway the three were together when they sighted the Empress riding, her dead-lights gleaming, a ghost ship in night space.

She must have been an eerie sight because her other lights were on too, in addition to the red warnings at her nose. She seemed alive, a Flying Dutchman of space. Cliff worked his ship skillfully alongside and had no trouble in snapping magnetic lines to her lock. Some minutes later the three of them passed into her. There was still air in her cabins and corridors. Air that bore a faint corrupt taint which set Bat to sniffing greedily and could be picked up even by the less sensitive human nostrils.

Cliff headed straight for the control cabin but Steena and Bat went prowling. Closed doors were a challenge to both of them and Steena opened each as she passed, taking a quick look at what lay within. The fifth door opened on a room which no woman could leave without further investigation.

I don't know who had been housed there when the Empress left port on her last lengthy cruise. Anyone really curious can check back on the old photo-reg cards. But there was a lavish display of silks trailing out of two travel kits on the floor, a dressing table crowded with crystal and jeweled containers, along with other lures for the female which drew Steena in. She was standing in front of the dressing table when she glanced into the mirror--glanced into it and froze.

Over her right shoulder she could see the spider-silk cover on the bed. Right in the middle of that sheer, gossamer expanse was a sparkling heap



of gems, the dumped contents of some jewel case. Bat had jumped to the foot of the bed and flattened out as cats will, watching those gems, watching them and--something else!

Steena put out her hand blindly and caught up the nearest bottle. As she unstoppered it she watched the mirrored bed. A gemmed bracelet rose from the pile, rose in the air and tinkled its siren song. It was as if an idle hand played.... Bat spat almost noiselessly. But he did not retreat. Bat had not yet decided his course.

She put down the bottle. Then she did something which perhaps few of the men she had listened to through the years could have done. She moved without hurry or sign of disturbance on a tour about the room. And, although she approached the bed she did not touch the jewels. She could not force herself to that. It took her five minutes to play out her innocence and unconcern. Then it was Bat who decided the issue.

He leaped from the bed and escorted something to the door, remaining a careful distance behind. Then he mewed loudly twice. Steena followed him and opened the door wider.

Bat went straight on down the corridor, as intent as a hound on the warmest of scents. Steena strolled behind him, holding her pace to the unhurried gait of an explorer. What sped before them both was invisible to her but Bat was never baffled by it.

They must have gone into the control cabin almost on the heels of the



unseen--if the unseen had heels, which there was good reason to doubt-for Bat crouched just within the doorway and refused to move on. Steena looked down the length of the instrument panels and officers' station-seats to where Cliff Moran worked. On the heavy carpet her boots made no sound and he did not glance up but sat humming through set teeth as he tested the tardy and reluctant responses to buttons which had not been pushed in years.

To human eyes they were alone in the cabin. But Bat still followed a moving something with his gaze. And it was something which he had at last made up his mind to distrust and dislike. For now he took a step or two forward and spat--his loathing made plain by every raised hair along his spine. And in that same moment Steena saw a flicker--a flicker of vague outline against Cliff's hunched shoulders as if the invisible one had crossed the space between them.

But why had it been revealed against Cliff and not against the back of one of the seats or against the panels, the walls of the corridor or the cover of the bed where it had reclined and played with its loot? What could Bat see?

The storehouse memory that had served Steena so well through the years clicked open a half-forgotten door. With one swift motion she tore loose her spaceall and flung the baggy garment across the back of the nearest seat.

Bat was snarling now, emitting the throaty rising cry that was his hunting song. But he was edging back, back toward Steena's feet, shrinking from



something he could not fight but which he faced defiantly. If he could draw it after him, past that dangling spaceall.... He had to--it was their only chance.

"What the...." Cliff had come out of his seat and was staring at them.

What he saw must have been weird enough. Steena, bare-armed and shouldered, her usually stiffly-netted hair falling wildly down her back, Steena watching empty space with narrowed eyes and set mouth, calculating a single wild chance. Bat, crouched on his belly, retreating from thin air step by step and wailing like a demon.

"Toss me your blaster." Steena gave the order calmly--as if they still sat at their table in the Rigel Royal.

And as quietly Cliff obeyed. She caught the small weapon out of the air with a steady hand--caught and leveled it.

"Stay just where you are!" she warned. "Back, Bat, bring it back!"

With a last throat-splitting screech of rage and hate, Bat twisted to safety between her boots. She pressed with thumb and forefinger, firing at the spacealls. The material turned to powdery flakes of ash--except for certain bits which still flapped from the scorched seat--as if something had protected them from the force of the blast. Bat sprang straight up in the air with a scream that tore their ears.



"What...?" began Cliff again.

Steena made a warning motion with her left hand. "Wait!"

She was still tense, still watching Bat. The cat dashed madly around the cabin twice, running crazily with white-ringed eyes and flecks of foam on his muzzle. Then he stopped abruptly in the doorway, stopped and looked back over his shoulder for a long silent moment. He sniffed delicately.

Steena and Cliff could smell it too now, a thick oily stench which was not the usual odor left by an exploding blaster-shell.

Bat came back, treading daintily across the carpet, almost on the tips of his paws. He raised his head as he passed Steena and then he went confidently beyond to sniff, to sniff and spit twice at the unburned strips of the spaceall. Having thus paid his respects to the late enemy he sat down calmly and set to washing his fur with deliberation. Steena sighed once and dropped into the navigator's seat.

"Maybe now you'll tell me what in the heck's happened?" Cliff exploded as he took the blaster out of her hand.

"Gray," she said dazedly, "it must have been gray--or I couldn't have seen it like that. I'm colorblind, you see. I can see only shades of gray--my whole world is gray. Like Bat's--his world is gray too--all gray. But he's been compensated for he can see above and below our range of color vibrations and--apparently--so can I!"



Her voice quavered and she raised her chin with a new air Cliff had never seen before--a sort of proud acceptance. She pushed back her wandering hair, but she made no move to imprison it under the heavy net again.

"That is why I saw the thing when it crossed between us. Against your spaceall it was another shade of gray--an outline. So I put out mine and waited for it to show against that--it was our only chance, Cliff.

"It was curious at first, I think, and it knew we couldn't see it--which is why it waited to attack. But when Bat's actions gave it away it moved. So I waited to see that flicker against the spaceall and then I let him have it. It's really very simple...."

Cliff laughed a bit shakily. "But what was this gray thing? I don't get it."

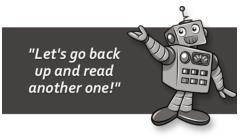
"I think it was what made the Empress a derelict. Something out of space, maybe, or from another world somewhere." She waved her hands. "It's invisible because it's a color beyond our range of sight. It must have stayed in here all these years. And it kills--it must--when its curiosity is satisfied." Swiftly she described the scene in the cabin and the strange behavior of the gem pile which had betrayed the creature to her.

Cliff did not return his blaster to its holder. "Any more of them on board, d'you think?" He didn't look pleased at the prospect.

Steena turned to Bat. He was paying particular attention to the space between two front toes in the process of a complete bath. "I don't think so. But Bat will tell us if there are. He can see them clearly, I believe."

But there weren't any more and two weeks later Cliff, Steena and Bat brought the Empress into the Lunar quarantine station. And that is the end of Steena's story because, as we have been told, happy marriages need no chronicles. And Steena had found someone who knew of her gray world and did not find it too hard to share with her--someone besides Bat. It turned out to be a real love match.

The last time I saw her she was wrapped in a flame-red cloak from the looms of Rigel and wore a fortune in Jovan rubies blazing on her wrists. Cliff was flipping a three-figure credit bill to a waiter. And Bat had a row of Vernal juice glasses set up before him. Just a little family party out on the town.





Introducing SCI-FI RETROSPECTIVE

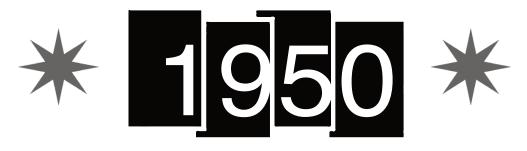
By Ghislain Barbe

We're thrilled to introduce a new feature here in Issue 02, courtesy of contributing author and artist Ghislain Barbe of Montreal, Canada

In each issue of The Interocitor, we'll be excerpting portions of his fascinating book, "The Fifties," which presents a unique historical perspective on the science fiction movies of that decade, year by year. A work in progress, Ghislain tells us this massive project already encompasses over 600 pages, so we will have no shortage of fascinating material for each issue!

We know you'll enjoy them.

Let's dig in.



January 5: The film *The Flying Saucer* comes out in theaters.

Although it does not involve aliens, it is the first film to feature a UFO.

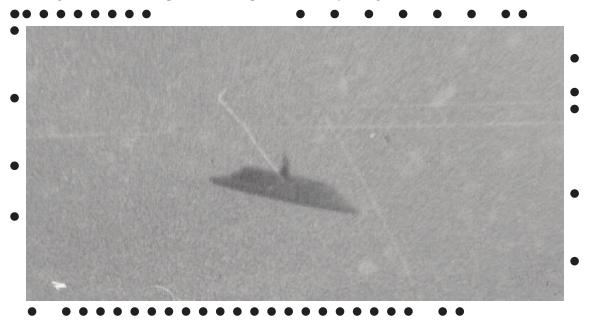


January 31

United States President Harry Truman orders development of hydrogen bomb, a weapon theorized to be hundreds of times more powerful than the atomic bombs dropped on Japan during World War II, in response to the detonation of the Soviet Union's first atomic bomb in 1949.

May 11: The McMinnville UFO Photgraphs.

McMinnville, Oregon, USA: famers Paul and Evelyn Trent took pictures of a purported flying saucer. These were the first claimed photographs of flying saucers since the coining of the term. The pictures were published in *Life* Magazine.



May 26: The film *Rocketship X-M* is released in theaters in the US,

June 17th: First Organ Transplant

Dr. Richard Lawler performed the first successful kidney transplant at the Peter Bent Brigham Hospital in Boston, Massachussetts.





June 25 (4AM): Start of the Korean War

70,000 North Korean troops with Russian T-34 tanks cross the 38th parallel and invade South Korea. President Harry Truman appeals to the United Nations to take police action against the attack. Hence, under the name of the United Nations, the United States send troops and forces.

June 27: Destination Moon is released in theaters in the US.

August 11 to 16: Events from *The Flying Saucer*.



August 15: Mariana UFO incident:

Great Falls, Montana: Nick Mariana, the manager of Great Falls' pro baseball team took color film of two UFOs flying over Great Falls. The film was extensively analyzed by the US Air Force and several independent investigators.



September 15:

General Douglas MacArthur's American forces allow the UN forces to break through the Pusan perimeter, retake Seoul, and cross the 38th parallel by September 30. By the end of the first phase of the Korean war, 111,000 South Koreans died and 57,000 were missing.

October 22:

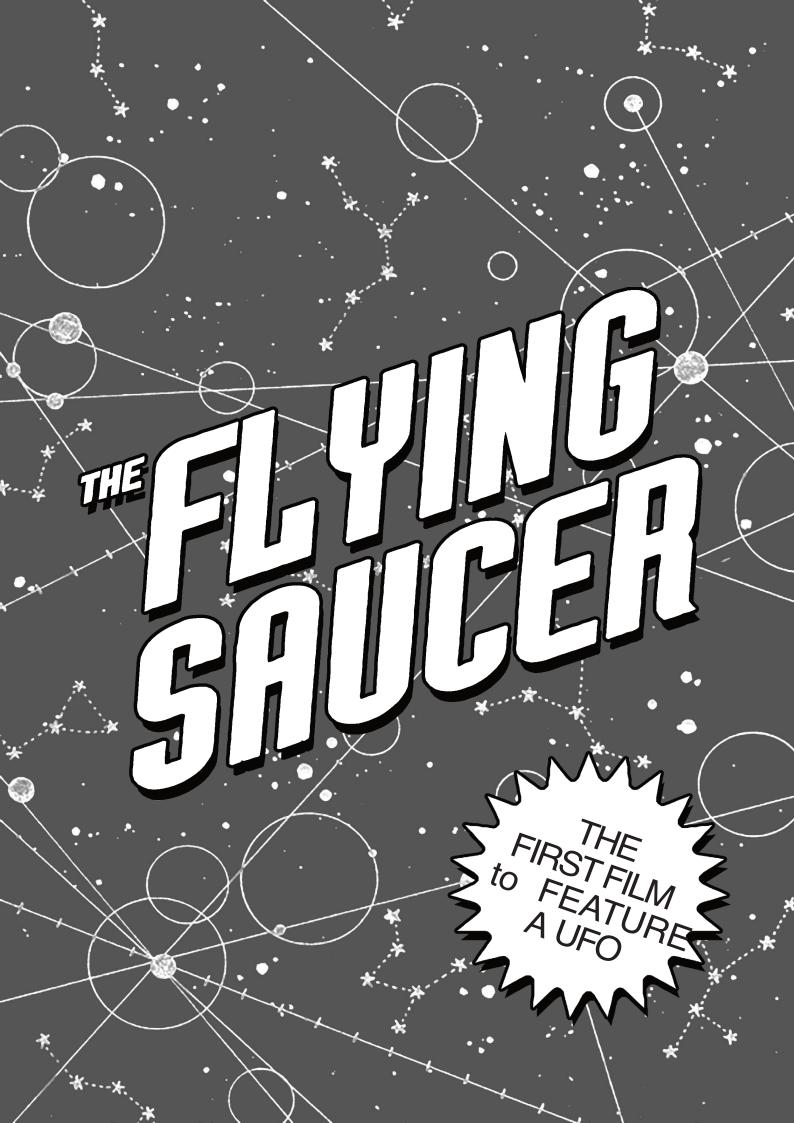
Pyongyang, the capital of North Korea, falls to United Nations forces. China intervenes in Korea with 300,000 soldiers, catching the United Nations by surprise. However, they withdraw after initial engagements.

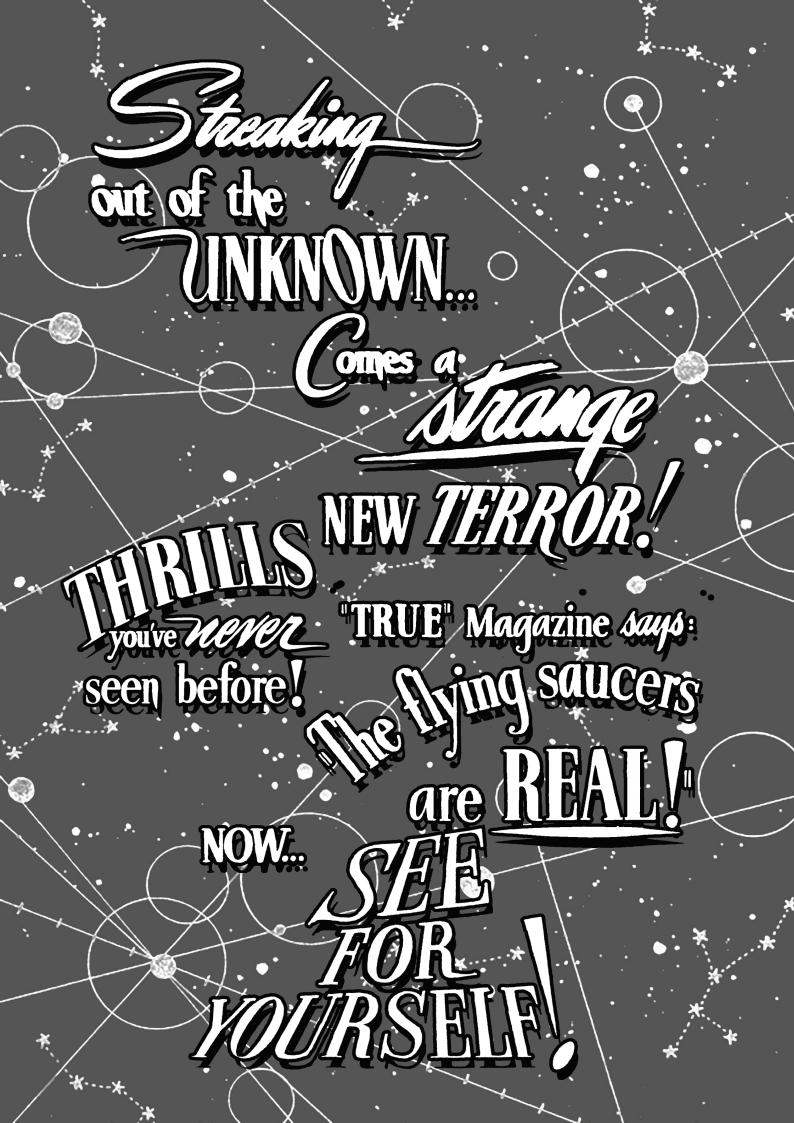


October 12: *Menace from Mars*, Chapter One of the *Disc Man from Mars* serial is released in theaters in the US. Events from the story are assumed to take place around this time.

November 1 to 4: Events from *The Thing from Another World*.









A lot of highly imaginative people, some neurotic, some just plain liars, all swore they saw the flying saucer. Some experts, commercial and Air Force pilots also claim to have seen it... There must be a spark of fire somewhere under all that smoke. If it's true what the expert witnesses say, it'll outfly anything we can put in the air. And it works on a revolutionary principle that we can't even guess at. ... It appears it was designed for one purpose. To carry the atomic bomb. Now the first country that learns the secret of the flying saucer will control the skies of the world. And I don't want that country to be Russia.

Hank Thorn, to Mike Trent³

During the summer of 1949, flying saucers are reported across the United States, from Miami to Alaska. Soviet spies have been reported near **Juneau**, south-eastern Alaska, supposedly in search of answers about the saucers.

American Intelligence officer **Hank Thorn** wants to send an agent to Juneau but fears it could trigger the Russians. He devises a plan in which his agent could masquerade as nurse to someone going in an Alaskan retreat.

Mike Trent, the son of one of his wealthy friends, grew up in Juneau, where his father had a hunting lodge. Although he served five years in the US army during the WW2, he is now living off his father's fortune as a wealthy Bachelor in New York, spending most of his nights in nightclubs.

• A telegraph dated August 16, 1949, sent on the seventh day of the story allows an exact datation of the events.

DAY 1 - AUGUST 11

Thorn contacts Trent, insisting on the fact that he is a friend of his father, and asks him to assist Secret Service agent **Vee Langley** in discovering what the Soviets may have found out about the saucer. Langley will be posing as Trent's nurse, Their cover story: he is suffering from a nervous breakdown and needs his private nurse. Mike does not believe the saucer story but agrees nevertheless, mainly because he's attracted to Vee. They take the afternoon plane to Seattle where his father's yatcht is waiting for them.

DAY 4 - AUGUST 12

After a three days cruise, the yatch arrives in Juneau, Alaska, north-east of the Taku Glacier. At Mike's family's hunting lodge, they are met by newly hired foreign-accented caretaker named Hans.

DAY 5 to 6 - AUGUST 13 8 14

During the next few days, Trent and Langley visit the region, acting as tourists, but trying to get in touch with one of Thorn's agents supposedly already there, and try to get informations on the flying saucer and the russians,

During that time, they get closer to one another. That night, Mike witnesses one flying over the lodge. He has no choice but to believe in them now.

DAY 7 - AUGUST 15

Despite Vee's refusal, Trent decides to go to town to try and find some of his old friends. Vee tracks him down, but when she finds him, he is in the company of a bar girl named Nanette who has recognised him as a millionaire and is trying to get him drunk. Mike, quite inebriated, gets in an argument with her. She leaves him at the bar, having also managed to get in touch with her contact.

Soon after, Mike's old friend **Matt Mitchell** comes in and shows him money he's made from renting his boat to foreigners. He is overheard telling his story by some of those foreigners who were also at the bar. As it turns out, those foreigners are the russians and do not appreciate Mitchell talking about their affair.

They bring Mitchell to their hideout and lock him up Mitchell to make sure he'll stop talking. Just then, a man called **Turner** comes in. He presents himself as the assistant of professor **Carl Lawton**, an American scientist who is responsible for the creation of the flying saucer. The russians offer him a million dollars in exchange for the saucer. Turner invites them to see the saucer for themsleves at Lawton's lab while he's away. It is situated at the Twin Lakes on the other side of the Glacier. Having overhead everything, Mitchell flees by a window. When the russians find out it is too late but, worried that he may talk, they decide to eliminate him firt thing the next morning.

During that time, Trent has been trying to get back home, but, too drunk, has a boat accident and ends up of a small folating block of ice. Luckily, he is rescued by Mitchell who brings him to his place.

Meanwhile, Carl Lawton had flown to Seattle to offer his invention to an aviation company for \$10 million.

DAY 8 - AUGUST 16

In Seatlle, **Fred Burnside**, the aviation company's president, refuses Lawton's offer, dismising him as a lunatic.

After the meeting, he calls Hank Thorn, with whom he is friend, to tell him the story, as he finds it quite amusing, specially knowing Thorn is investigating flying saucers. Thorn is not amused, but then receives a telegram from Vee informing him that she has lost Trent. He informs her right away that the inventor of the saucer is a man call Lawton and that he is flying back to Juneau.

The Russians go to Mitchell's place and shoot him and beat up Trent before leaving in Mitchell's boat. Before he dies, however, Matt reveals the location of the saucer: Twin Lakes, and all he knowns about the Russians.

Matt decides to to to Lawton's place, and to go faster, he rents a plane. Once at Twin Lakes, all he can fin is an isolate cabin. But inside, he discovers a secret trap leading to an underground hanger where he finds the flsying saucer. He rushes back to Juneau to tell of his discovery to Thorn.

Meanwhile, Vee has intercepted Lawton as he was getting out of this plnand and made a offer to him for his invention.

With his plane's reservoir low, Mike has no choice but to stop at his hunting lodge to refuel if he is to make it to Juneau.

From the sky, he spots Hans discussing with some men he recognises as the Russians. When confronting him, the latter dismisses the encounter, saying they were only some fishermen. Mike asks him to put some fuel in the plane so that he can be on his way. Hans tries to sabotage the plane. Both men end up fighting. The Russians come back with Turner and subdue Mike. As they are about to interrogate him, Vee and Lawton arrive at the lodge.

They threaten Lawton and force him to bring them to the Saucer. The whole crew leaves, taking a secret passage under the Glacier that leads to the saucer hanger. Mike has an altercation with a Russian in the ice tunnel. Colonle Marikof, the Russian's leader, attempts to shoot him. The sound from the gunshot starts an avalanche and the tunnel collapses under his men. Vee, Mike and Lawton escape just in time but Turner makes also makes it. They come ouf the of the passage just in time to see Turner fly off in the saucer. The vehicle suddenly explodes in mid-air. Lawton reveals that he had planted on board for such an eventuality. Their mission now accomplished, Mike and Vee are free to embrace and kiss.

RAMBLINGS

No information is given about what happens to Lawton's invention. The prototype has been destroyed but Lawton's knowledge is now known of by the American authorities.

CREDITS⁴

Directed: Mikel Conrad Writer: Howard Irving Young & Mikel Conrad Producer: Mikel Conrad Cinematography: Phillip Tannura Editor: Robert Crandall Music: Darrell Calker

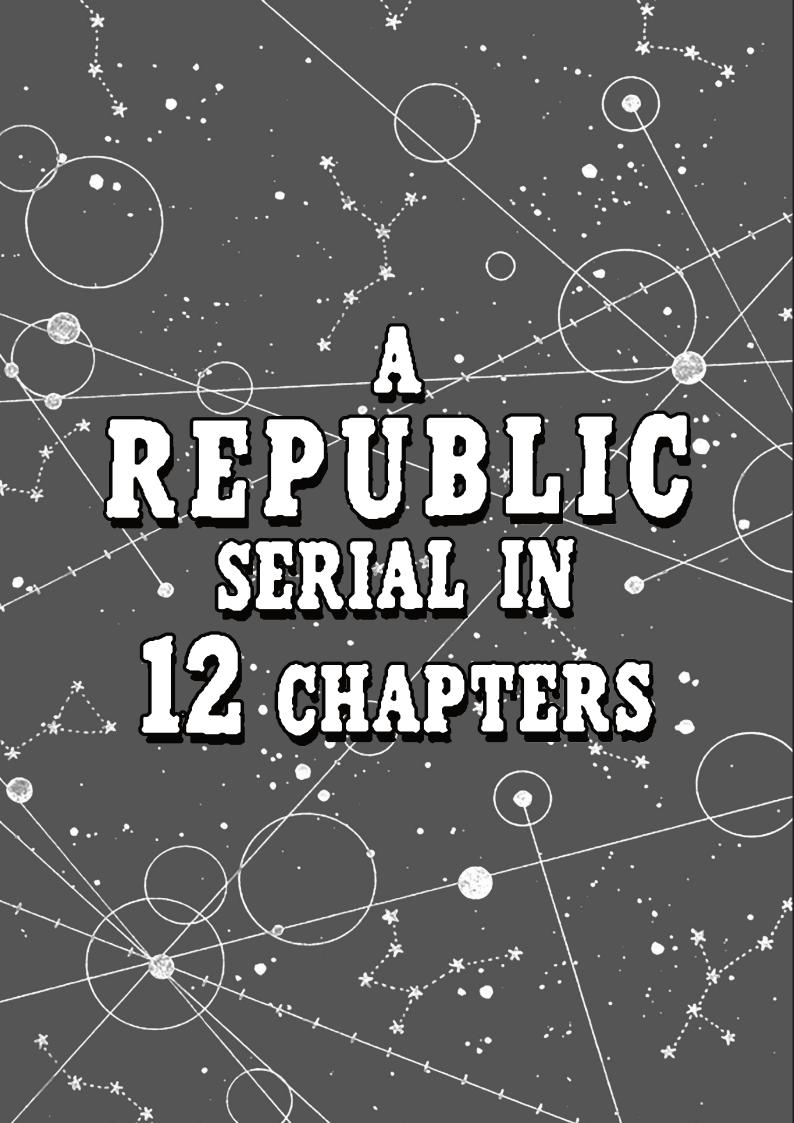
Production companies: Colonial Productions, Inc. Distributor: Film Classics Release date: January 5, 1950 Running time: 75 minutes Country: United States Language: English

Mikel Conrad as Mike Trent Pat Garrison as Vee Langley Hantz von Teuffen as Hans Roy Engel as Dr. Lawton Lester Sharpe as Col. Marikoff Denver Pyle as Turner, a spy Earl Lyon as Alex, a spy Frank Darrien as Matt Mitchell Russell Hicks as Intelligence Chief Hank Thorn Virginia Hewitt as Nanette, bar girl Garry Owen as Bartender

ADDITIONAL NOTES

While *The Flying Saucer* does - surprisingly - not involve extraterrestrials at all (nor is it related to outer space in any way), it is the first film to feature a flying saucer...though it is an american experimental aircraft rather than an alien starship.





👽 FLYING DISC MAN FROM MARS 🔆

- While no year is given, we will assume the action takes place contemporarily to the release of the serial, in the fall of 1950. The only set date that
- is given in the story is the day on which the ransom is to be delivered via a guided rocket, Wednesday.⁵
- The action seems to be taking place in the vicinity of Los Angeles, two locations mentioned, Glen Canyon and Sand Canyon, being just north of
- the city.

SEQUENCE OF EVENTS

DAY 1 - SUNDAY

Kent Pilot, ace pilot and owner of Fowler Air Patrol, is called by Dr, Bryant to the demonstration of a new type of radar. With it, he destroys a guided plane.

Bringing Fowler to the offices of **Bryant Manufacturing Co**., Bryant reveals to him that he is working on a new atomic ray with a range of 15000 feet which works automatically with his radar set. Bryant, who has heard of Fowler through the plant next to his own, **Argosy Metals**, wants to hire Fowler to patrol the sky above his plant. Fowler acquired at least six old army planes after the war and, with the help of his partner **Steve** and his girlfriend **Helen Hall**, offers his service in patrolling the large installation by ground and air.

According to Bryant, for a couple of nights, a weird aircraft flew over Bryant's plant at an altitude 60 to 80 000 feet then descended vertically to 30 000 and hovered in the air for over an hour. Bryant would like to put the radar and atom guy on Fowler's plane so that he can shoot the bogie.

That night, Fowler spots the aircraft and shoots it. The aircraft crashes north of the airfields. Bryant rushes to the wreckage where he stumbles upon a strangely dressed man. He tells him he knows him from radio broadcast and asks him for sanctuary so that his existence remains a secret to humankind, because he comes from Mars. Once at his laboratory, he reveals he'd been watching the Earth since we'd started to play with the atom. Atomic weaponry being a threat to other civilisations, the alien, named **Mota**, wants to put amdictator in charge of the planet, who would oversee humanity's technological development in a manner than would serve his purpose. Dr. Bryant having been sympathetic to the third Reich during WW2 seems to be a likely candidate to be made planetary autocrat. He is ready to give Bryant advanced atomic weaponry in exchange for being their puppet dictator.

With Mota's help and scientific knowledge, Bryant starts building a disc-ship.

DAY 3 - TUESDAY

Bryant has set things in motion to get large quantities of radium brought to his plant. He asks Fowler to guard it. That very night two thugs, **Drake** and **Ryan**, break in his warehouse. Fowler knocks them out and brings them to Bryant. Bryant sends him away and offers the thugs to work for him and steal uranium from Argosy Metal.

Learning from the attempted theft at Bryant, Argosy metal asks Fowler to patrol their plant in car and plane. Fowler intercepts Bryant's goons, leaving the plant with the stolen Uranium. A car chase follows, Drake and Ryan manage to bring the uranium to a plane pilot in a field but Fowler jumps from his car and crashes it in the plane to prevent it from taking off.

DAY 4 - WEDNESDAY

Fowler informs Bryant that there seems to be a racket to steal radioactive material. Bryant refuses his offer to patrol his plant but Argosy Metals hires him.

DAY 7 - SATURDAY

Mota suggests that Bryant move the development of his new weaponry to a more secret place. The crater of Altamont volcano has a cave inside its caldera where his people once stored some equipment to use it as an outpost. Mota test drives the disc-ship with the help of **Trent**, a pilot Bryant has hired, Fowler spots and follows. Mota shoots him out of the sky. Fowler parachutes to safety while his plane crashes.

DAY 8 - SUNDAY

Steve, Fowler's associate who was patrolling by car the vicinity of Argosy Metals, follows the thugs's truck that brough the material to the disc-ship. Fowler interrogates the owner of the tuck rental company, Graves, and learns of Drake and Ryan's identity. From their description, he recognises them as the crook he captured for Bryant and who supposedly escaped him. Graves calls Fowler to inform him that Drake and Ryan are coming back. Fowler and Graves try to trap them but fail. Fowler notices the police. That night, he goes back to patrol and spot the disc-ship. An air battle ensues. The alien



ship goes up in the stratosphere, Fowler tails it but cant' follow it but falls unconscious because of the the altitude and lack of oxygen. He ejects from his plane just in time before it crashes,

In the meantime, Bryant has come in contact with one of his old employees, Boyd, now working at the shipping department of Argosy Metals. The man agrees to smuggle uranium for a good price.

DAY 11 — WEDNESAY

Argosy Metal asks Fowler to find out how their uranium is being smuggled out of their facility.

DAY 12 - THURSDAY

Using a Geiger counter, Fowler and his partner Steve follow the uranium as it is being smuggled out of the plant in a truck. They track it to abandoned offices of Academy Chemical Supply Co. where they spot Drake and Ryan taking the boxes stolen by the truck in their car. They tail them. A car chase follows but they lose them at a railroad stop. Talking with the people at Argosy, Fowler gets a lead on Boyd. They decide to follow him that night when his shift ends. But Bryant is worried that Fowler or the police might trace him back through Boyd. He tasks Drake and Ryan to get rid of him and ask him to come to his plant that night. Fowler, who had followed Boyd, see Drake and Ryan knocking him out to put him in the plant's incinerator. He intervenes but a fight ensues but they still manage to escape after having gotten rid of Boyd. The two crooks then go sabotage Fowler's two remaining planes.

DAY 14 - SATURDAY

Fowler and Steve decide to find out the spot where the disc-ship meets the crooks. They send Helen to watch out from Eagle Peak, a mountain top where she can see the disc-ship coming from afar. But Drake an Ryan stumble upon their radio communication and kidnap jer. They have Helen send them on a red herring but she passes information that only Fowler can understand as being false. Fowler and Steve manage to pinpoint the origin of the communication and go save her, in an abandoned mine where Drake and Ryan's radioactive theft is kept between each rendez-vous with the disc-ship. They manage to save her, but once again, the crooks have fled. Fowler, Steve and Helen rush

in their car to the point of rendez-vous with the disc-ship. Mota manages to flee with the radioactive material but Fowler gets in the disc-ship too. The two fight while Trent pilots until Mota opens the bomb bay, making Fowler fall ouf ot the ship. He fortunately lands in a stack of hay and comes out uninjured. Going back to the mine, they find lots of material stolen from Bryant's company. Fowler goes to him to let him know. After the visit, Braynt decides to get rid of Fowler once and for all. He asks Fowler to patrol his plant that night and tasks Drake and Ryan to take care of him. Their ambush fails and they end up being chased by Fowler until they managed to lose him.

DAY 16 - MONDAY

Fowler goes to make him report to Bryant about the previous night's patrol and tries to place a microphone in his office, but Drake, hiding nearby. sees him do it. They put it away in a backroom. They decide to put a bomb in Fowler's plane, to explode in his next day's aerial patrol.

DAY 17 - TUESDAY

While Fowler flies off for his patrol. Helen hears voices on the radio, coming from the mic. Ryan and another goon have entered by the back room and mentioned that Fowler's plane has a bomb inside it. She calls him immediately. He jumps just in time by parachute. Going back to the plant with Steve, they stumble on thugs charging more radioactive material, but they get beaten up and the bandits get away. Bryant tells Fowler that he's found his mic and does not want to deal with him anymore.

Fowler, Helen and Steve decide to go after the truck, since the spot where they meet with Mota's disc-ship must be the same as the last time. In the same spot as before, Steve and Helen indeed find Drake and Ryan preparing a guided air torperdo. The torpedo takes off. Fowler goes after it in his plane. Realising the torpedo is aiming for a bridge, Fowler crashes his planes into it before it can do so, jumping ouf of this plane in a parachute.

DAY 18- WEDNESDAY

Argossy Metal gets threatened by blackmail to have their plant bombed by aerial torpedoes if they don't give a ransom of 250,000 dollars in a small rocket launcher the next Wednesday at a fork in the road at Glenn Camyon between 10:45 and 11:00. Argosy asks Fowler to deliver the money, Fowler places a tracer in the rocket and follows it by car. It leads them to Drake and Ryan, but not before Bryant, Drake and Ryan have found out the tracer. The bandits manage to escape, but not before Fowler manages to put a tracer in their truck. They track them to thie lair but in the battle the place

catches fire and explodes. They manage to escape just in time. Meanwhile, Mota orders Bryant and his men to eliminate Fowler once and for all. Thay night, they attack his office while he's alone in the place, the shootout attracts the police and the bandits have ot leave without being able to make sure their target was dead.

DAY 19 - THURSDAY

Mota decides to start bombing different locations,

DAY 20 - FIRDAY

Fowler tells his suspicions about Bryant to the police and is deputized and given a warrant to search Bryant's place. They arrive just as he is about to leave. But just then, Drake and Ryan arrive. After a fight, they manage to flee, but without the plans of the radar controlled atomic gun. Mota tasks them to retrieve them as it is the only weapon effective against Mota's technology. They go the Fowler to aks for the plan, Helen sounds the alarm. They flee but take Helen hostage. Fowler and Steve follow them to Mota's disc-ship. Bryant manages to get onboard with Helen, but Drake and Ryan are left behind. Fowler shoots Ryan but Drake surrenders. Under Fowler's order, Drake calls Mota, offering the plans in exchange for Helen.

Mota sends Trent in the disc-ship, but without Helen. Fowler forces Trent to bring him to Mota's base. There, he frees Helen. While he asks Trent to make the disc-ship ready to leave the volcano base, Bryant and Mota attack him. In the melee, bombs fall in the volcano, making it erupt. Fowler and Helen escape in the disc-ship just in time to avoid being incinerated in the volcano.

But they soon have to jump by parachute as the disc-ship is badly damaged.

DAY 21 - SATURDAY

Fowler meets with the authorities to tell his whole story.

Although he presents himself like the emissary from the Martian Dictator, sent to tame Earth, Mota seems to be lacking any support, whether technological or human, from his people. His behaviour seems more like the one of a criminal con man trying ot manipulate a less advanced culture. He looks more like a man on his own than the first line of an aggressive alien civilisation. He looks much like other humanoid aliens later found in other science-fiction films of the 1950s, like *The Day the Earth Stood Still, Plan Nine from Outer Space* or *Teenagers from Outer Space*.

CREDITS⁶

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Director: Fred C. Brannon WritterL Ronald Davidson Producer: Franklin Adreon CinematographyL Walter Strenge Music: Stanley Wilson

Distributor: Republic Pictures Release date: October 25, 1950[1] Running time: 12 chapters / 167 minutes (serial) Country: United States Language: English Budget \$152,640

Walter Reed as Kent Fowler, pilot Lois Collier as Helen Hall Gregory Gaye as Mota, martian invader James Craven as Dr Bryant, scientist and secret former Nazi supporter Harry Lauter as Drake, one of Mota's henchmen Richard Irving as Ryan, one of Mota's henchmen Sandy Sanders as Steve, Kent's sidekick Michael Carr as Trent, disc-ship pilot-henchman 

I. Plans Go Astray

ise and shine, you lovebirds!" called Finley in a voice deliberately calculated to drive Jules Santros crazy.

Hard rapping on the cabin door.

"You guys in there?" asked Finley, no doubt with a smirk on his face. "Honeymoon's over and ole Sol's waiting. We'll be in Mars orbit in three standard hours."

Growling, Jules staggered across the small cabin and hit the door controls. The panel slid open a crack, just enough to reveal Finley leaping away and out of reach.

"Tell Pris we'll be out in twenty minutes, Finley," called Joan from where she still huddled in the bunk.

"Thanks, Joan. At least someone around here is taking things seriously."

"Get lost, you spoiler," said Jules, hitting the control button.

The door panel had barely slid closed before he was back under the covers.

"Hey, didn't you hear Finley? We're wanted on deck!"

"Then you'd better get a move on," replied Jules playfully, throwing off the sheet for the second time and herding Joan out of the bunk.

Precisely twenty minutes later, Joan stepped onto the control deck where Pris Gower

sat in the navigator's chair. Across the confined space, grown suddenly more crowded with the appearance of the extra crew member, Finley was doing something over at the atmospherics panel.

It did not escape Joan's notice.

"So it was you brought down the temp in our cabin!" she said, propping her fists on her hips.

"I cannot tell a lie," confessed Finley, slinking back to the pilot's position.

Pris shrugged. "Men. They never grow up!"

"C'mon, Pris! With only a few hours left till we reach Mars, there won't be time to have any fun before this mission is officially over."

Joan softened. It was true. Six months ago the Interplanetary Geological Survey had teamed up she and Jules with fellow husband and wife team Finley and Pris Gower, pilot and navigator of the deep space survey ship E.R. Burroughs to explore a chain of worlds in the Cygnus system. As a xeno-geologist, Joan was more than excited when they came across Cygnus Alpha 12, a planet completely covered by a sea of liquid methane. At the very least, it promised quite a diversity of life forms in such an unusual environment. She didn't know how diverse until she and Jules stumbled across a downed Coalition warship with some troopers still alive and determined to kill them. They'd managed to turn the tables on the troopers only to find out that the crashed ship had used some kind of dangerous new black hole technology that Jules recognized as something the Consortium had experimented with and decided not to pursue.

It'd been touch and go for a while there as the still active forbidden tech threatened to get out of control...Jules even said it endangered all space-time! Joan wasn't sure about that, but was sufficiently frightened by the experience to be relieved when they returned to their friends aboard ship. After that, she filed her report with the Survey and thought that would be the end of it. She'd almost forgotten that Jules had retired from military intelligence and old habits died hard. As it turned out, he'd filed his own report to former

colleagues and whatever he wrote must have set off alarm bells because the next thing they knew, the E.R. Burroughs had been ordered to cancel the remainder of its tour and return to Mars immediately.

"What's our ETA, Pris?" asked Jules, appearing in the control room hatchway.

"Just under 2.40 hours," replied Pris. "Have to admit, you guys can be pretty efficient when you want to be."

"That message we received to turn back sounded serious," said Pris then, without turning her attention from the instruments. The approach to Mars with its two moons was tricky even for the best navigators.

Jules recognized the note of curiosity in the statement and was genuinely sorry that he couldn't fill in she and Finley more than what they already knew...which was not much. He'd warned Joan to say as little as possible about what happened on Cygnus Alpha 12 but knowing that they'd have to tell their partners something, they told them about the downed ship and the attack by the troopers and their escape from them. Nothing about the black hole tech or the near galactic catastrophe that he'd barely averted.

"Military intelligence takes everything seriously," replied Jules cautiously. "And we did find a Coalition ship after all. You can't blame them for wanting to know all about it."

"Think they'll be sending a salvage operation to recover the wreck?" asked Finley.

"Possibly...or a demo team."

"Wonder how it ended up way out there in the first place?"

"Your guess is as good as mine. Up to no good, that's for sure."

The Terran Consortium had been at war with the Outer Arm Coalition off and on for over 50 Earth years having come in contact with it when a survey vehicle similar to the E.R. Burroughs encountered an advanced colony of a subject people deep in the newly discovered Atullun Nexus. It was fired upon without any warning and managed to limp back to Altair IV with the story. After that, the Consortium dispatched a task force to the Nexus to chastise the colony, but ended up tangling with a Coalition battle fleet instead. Luckily, the enemy had no idea of the power of Mark IX photon pulse cannons and had the worst of the fight. But it was not to be the last anyone heard of them. The war was on, marked by a number of deep space skirmishes and full scale battles numbering over a dozen in the decades since, with neither side getting the upper hand. And though Consortium strategists had no doubt that they would end up the ultimate victor, it was not going to be a cake walk.

Time passed all too quickly until finally, the E.R. Burroughs received clearance from Marsport and Pris calculated a course that would take the ship in by Deimos before slinging around to the planet's equator. From there, it was a simple affair for the experienced Finley to cut boosters and allow the ship to slowly descend using Mars' thin atmosphere as a brake.

"What it amounts to is a controlled fall," explained Finley as atmospheric condensation streaked the forward view ports. Suddenly, the wispy cloud formations gave way and the red and pink soil of the dusty planet loomed ahead of them.

As the ship continued to slacken speed by use of its belly thrusters, the green of cultivated areas, irrigated by waters located beneath the poles, came into view. In another few minutes they came within sight of Marsport, its multiple bubble domes gleaming in the weak sunlight. Finley pulled back on the cyclical and the E.R. Burroughs pulled up, coming to a hovering stop over a scorched landing pad. In a matter of seconds, he had the survey ship on solid ground and cut the whine of the thrusters.

"Welcome to Marsport," he said.

II. Trouble

hat?" "I said," repeated Joan, removing the oxygen mask from her face, "it's going to feel good to be home again, even if the mission was cut short."

"Oh," said Jules, fixing a mask to his own face and breathing deeply. Although

terraforming had begun almost 300 years ago, Mars was far from a completely

comfortable place for people to live. The atmosphere, for instance, was still pretty thin with a relatively low oxygen content. Thus, for anyone venturing outside, there was still the need to saturate their lungs with pure oxygen first and then use the occasional oxygen-tube between times.

Jules and Joan had bid goodbye to Finley and Pris amid hugs and handshakes before going their separate ways. A temporary situation to be sure as Joan was scheduled to meet with Finley and Pris again in a couple days for debriefing by Survey officials. Jules was excused, due to having his own appointment with military intelligence in a couple hours. Just enough time to escort Joan to their living unit under dome three before setting off. Leaving the government terminal, they boarded a public speedcar that raced along

reserved lanes to dome three, covering the 2.8 mile distance in minutes. Without the need to step outside, the couple entered the spacious lobby crowded with people coming and going, and stepped into an up capsule. The ride was only a few flights (there not being many tall buildings in Martian cities), so they soon found themselves at the door to suite 436. Joan dug out her laser-key from somewhere and signaled the door that it was all right to let them in.

The inside was well lit, with a wide bank of clear plas windows giving a view over dome three and the nearby Martian landscape outside. It was a beautiful day.

"I didn't realize how tired I was," said Joan, throwing herself on the sofa.

"Count your blessings," replied Jules, checking to see what was available in the 'frig. "I have to dash over to headquarters in a few minutes."

"Tell Director Revoir he should be more thoughtful."

"Right!" laughed Jules, picking out a Coke and wasting no time unsealing the vacuum pack and taking a long slug.

"Well, don't forget to take some 'tubes with you," reminded Joan. "Remember, you're not aboard ship anymore."

"I'll grab some now," said Jules, crossing the room and taking a few sticks from a dispenser. "Well, no use putting it off, I guess."

Joan accompanied him to the door and kissed him goodbye.

"Be back in a few hours," said Jules, slipping out the door.

"Bye."

Jules wasted no time descending to the lobby and hailing a speedcar. The drive took

him out of dome three, through seven and twelve, around a stony outcropping that divided the northern and southern dome clusters, and into dome one, where all the government offices were located.

There, the speedcar came to a halt in the lobby of a non-descript square block of a

building that sported no sign or any other designation as to what its purpose was. But it didn't matter. Everyone knew what went on inside those blank, white walls.

Ahead of schedule, Jules took his time heading to an up capsule that took him to the top floor of the windowless structure. Stepping out into a quiet corridor, he stood a moment taking it in. The synth-carpeting beneath his feet, the stereotypical pastoral

scenes on Earth, the iso-walls that he knew were lined with the most advanced detection-

search devices known to man, even the plas-glass partition at the end of the hall were all

familiar to him. In a previous life, before joining the Interplanetary Geological Survey, Jules had been a secret agent. Well, not exactly an agent, just an engineer in the military intelligence science division where he spent ten years retro-engineering alien tech. It was something he had grown tired of eventually and requested out. It was then that he joined Joan with the Survey. He'd thought he'd seen the last of these featureless hallways and the labs on the floors below, deep beneath the Martian surface, but he had a feeling that he hadn't.

Taking a drag from one of his oxygen-tubes, Jules headed for the plasglass partition and entered officer country; more specifically, the office of Henri Revoir, director of MI, or military intelligence. It used to be General Revoir but now it was just plain director, but that was enough.

Knowing he'd been checked over every which way from Sunday, he made his way from the up capsule to the partition where he announced himself to the woman occupying a work station in the center of the otherwise featureless room.

"Go right in, Mr. Santros," she said, "the director is waiting for you." "Thanks."

Past the final door, he entered another office, this one twice as big as the secretary's and equally as featureless except for the X-ray plas windows banked behind the director's

work station. Jules knew that from outside the building, the featureless walls showed nothing but blank stone. From inside however, the nature of the X-ray plas windows allowed a view outside. Just now, the view looked over green farmland outside the dome

that stretched out to the horizon where a pinkish haze indicated that the Martian desert lay just out of sight. Still somewhat cold outside for successful planting of most Earthly crops, terra forming had still managed to make the Martian climate hospitable enough for some varieties of winter wheat and other genetically altered vegetables and varieties of ground nuts. It was enough to make farming on Mars worthwhile and even profitable.

"Have a seat, Jules," said the man behind the workstation, which was what people in another century might have referred to as a desk except it was now far more than that.

Revoir had risen in welcome to Jules, his big frame dwarfed somewhat behind the expansive work station.

"How's Joan?" asked Revoir, after he'd taken his own chair.

"Good. Thanks for asking," said Jules, sucking on a 'tube. "Nothing different around here I see."

"Nope. Still the same routine."

"How goes the war?"

"You watch the 'casts, don't you?"

"Sure."

"Then you know how it's going. Pretty much stalemate at the moment."

"And that incident out at Procyon hasn't rattled anyone?"

"You know it has and before you point it out, no, that wasn't in the 'casts. Officially, we were jumped by Coalition forces but we managed to fight them off before they could do any harm to our colonies."

"Ambushed, you mean."

"All right, ambushed. How they were able to take us so completely by surprise had strategists in Command scrambling and people here wondering where the ax of blame was going to fall until your report came in."

"As I reported, it was black hole tech," confirmed Jules. "A variation of the kind we were working on but basically the same theory."

"We'd wondered how they managed to take us by surprise."

In his report, Jules had described how he and Joan had discovered a downed Coalition vessel that appeared to be emanating time distortion effects. Years before, Jules had been lead engineer for military intelligence reverse engineering black hole technology acquired from the Coalition. That line of research was quickly abandoned when it became apparent that the slightest damage to the containment unit harnessing the artificial black hole could result in a temporal rift. An effect that had the potential of engulfing the entire galaxy wiping out all reality. No one knew exactly what that would mean, but there were theories: time could be bent, twisted, mixed, the immutable laws of nature would become elastic and unpredictable. In short, it was deemed by everyone concerned that the research was too dangerous to pursue and the whole effort was shut down. But how do you put the genie back in the bottle? The Coalition already had the tech and if their military situation disintegrated enough, the temptation would grow to risk using it to regain the upper hand. Because the bottom line was, black hole tech, as dangerous as it was, bypassed time and granted faster than light speed. Something no general could ignore. With it, a fleet of warships say, could get the jump on an opposing force any time,

anywhere. Which was exactly what Jules had confirmed in his report. The Coalition had not only found a way to harness a temporal black hole, but had installed it in at least some of their warships. The only problem was that like Earth's military intelligence, they had failed to find a way to properly secure the artificial black hole. A hit by a Terran warship that disabled one of those vessels, forced it down on Cygnus Alpha 12 where he and Joan found it. It was only luck that Jules was able fix the problem then. There was no guarantee that next time, and there would be a next time if the Coalition persisted in using the technology, there would be anyone else on hand who knew how to do the same thing.

"It was the same tech as we worked on 13 years ago," pointed out Jules, after a moment of thought. "Only then, we called it 'director mechanics for deep space navigation.'"

"I thought it was an effective code name, whatever it meant."

"It wasn't intended to mean anything," said Jules. "But did they see through it? Any chance they got the tech from us?"

"Spies, you mean? We considered that but dismissed it. We got the

basic science from

them after all. They were way ahead of us at the time. After we shut down your unit, why would they bother trying to get anything from us?"

"Then you think the Coalition is doing this strictly on their own?"

"Right. One consolation is that their military position must be more precarious than we figured for them to resort to such dangerous methods as black hole tech."

"It does confer on them massive advantages," said Jules. "Why, a Coalition fleet could show up in Earth orbit even as we speak!"

"Then you understand the gravity of the situation," smiled Revoir, aware of the pun.

Jules quietly shook his head and took a drag on his 'tube. Outside, a lone flyer scudded along far off in the pink sky.

"Anyway, to come to the point, that's why I asked that you report to me right away."

"Joan wasn't very happy about that. You interrupted her survey mission."

"She'll get over it. And if she wants to go on other missions, we're going to have to do something about this black hole business."

"Meaning?"

"Meaning we want to take you on again on a temporary basis, Jules."

"What for? You have the reverse engineering unit's original report as well as the one I just filed..."

"We do but that's not enough. Look, Jules. As soon as we received your report, we briefed the Prime Minister and seeing the danger, he had the Exterior Minister get in touch with the Coalition through channels. It seems they're as nervous as we are about the tech and agreed to a secret



meeting at a neutral site to discuss the situation. There's a good chance we can negotiate this thing away, outlaw black hole tech and restore the balance of power."

"That's great, but what do you want me for?"

"Besides having worked on the tech before, you've just saved nearly the whole blamed universe, Jules. That makes you our expert on black hole tech whether you like it or not."

"I get it. You want to make me an adviser to the negotiating team?"

"Now you're cooking. There's no time to waste. You're leaving thirteen hundred hours tomorrow, Mars time on a naval shuttle. It'll rendezvous with Task Force 8 where you'll join the diplomatic team. You'll find out where the meeting is going to take place once you've trans-shipped. I don't have to tell you how important it is that we reach an agreement with the Coalition on this, do I?"

"Believe me, director, no one knows that better than I do!"

3. Summit Meeting

ooking around the room, Jules missed his wife. It was two weeks later. Two weeks spent mostly cooped up in a cramped Naval ship as it transited millions of parsecs of space via sub-photon drive that left everyone aboard exhausted. Now, they had reached their destination, one that Jules had only learned after Task Force 8 had abandoned thrusters for sub-photon drive out past the orbit of Pluto.

It was an ice world of perpetual winter. It had no name, only a number, one that Jules

had promptly forgotten. He only knew that it was in the constellation

Piscus Autrinus located far enough from either the Consortium or Coalition territory that neither was interested in it. As good a place as any for a meeting on neutral ground.

Right now, he was in the day room of the St. Peter, Admiral Freeman's flag ship. Not that day room meant it was very big. No single space within a Naval ship could be considered roomy. That was why it seemed so crowded at the moment. There was the Exterior Minister himself, Alistair Jones, his first assistant Bentley O'Shea, and the secretary they shared, Jessica Mooney. Jules took a moment to admire Miss Mooney for a moment. A very attractive woman, and one who hadn't been shy about flirting with him during the voyage, even with his wedding ban prominently featured on his finger. Generally speaking, the Consortium frowned on single women traveling on government vessels but sometimes exceptions had to be made.

Talking with Admiral Freeman were a number of his officers as well as the military liaison Col. Ivor Swenson not that anyone expected any trouble but in time of conflict, it just wasn't wise for warships to travel anywhere without its contingent of soldiers.

The rest of the crowd consisted of various scientific advisers, cultural historians versed in everything from Coalition military strategy to social customs, and the all important translators.

Not for the first time, Jules wished there were some view ports in the room so that he'd have some place to look without the danger of making eye contact with someone but it was not to be. Dr. Amanda Sanders spotted him as his gaze swept past her and decided to come over and keep him company.

"You look a little lost," said Sanders, one of the delegation's science advisers. As a psycho-xeniologist, she specialized in how aliens did their thinking. A valuable skill in any negotiations like the ones due to begin in a few hours.

"Do I?"

"And not especially happy to be here."

"Is that your diagnosis, doctor?"

"No, it's what anyone could tell just by looking at you."

"Well, you're right, however you figured it. I'd just got back from a deep space survey when I was drafted for this mission. I was looking forward to some down time...with my wife."

"That explains it, I guess," said Sanders, sipping at a vacuum drink.

"So, I hear you've done this sort of thing before. Do you expect to be able to tell what the Coalition representatives will be thinking?"

"Not what they're thinking," corrected Sanders. "A psycho-xeniologist can only study behavior and extrapolate thought patterns, there's a big difference."

"What difference exactly?" asked Jules, genuinely interested.

"Well, I don't read minds for instance," laughed Sanders. "Depending on specialty, and

mine concentrated on the three major Coalition races, the Drool, Sangi, and Zhapoologani, psycho-xeniologists study all they can about non-Terran races: culture, military, religion. We especially concentrate on their cultural myths and legends to identify the root inspirations for societal behavior. Once we've mastered that, we can predict present day thought patterns with a fair degree of accuracy."

"And what will you be looking for during the negotiations?"

"That depends on what the negotiators bring to the table and what race they are. There

are a couple of my colleagues here who specialize in some of the

Coalition's junior partners just in case, but it's not likely the Drool for instance will allow that."

"Why not?"

"The Coalition practices what might be called a caste system that's pretty rigid. It's not exactly comparable to those systems we've had on Earth, but something like it. No way a junior partner like the Joviani would ever be invited to an important meeting like this."

"Does that make the job easier?"

"For me it does!" laughed Sanders again. She did that easily. Jules was finding that if it were not for Joan, he'd be mightily attracted to the redhaired psycho-xeniologist.

"Then tell me," asked Jules, "knowing what you do of how the Coalition thinks, will having to leave behind one of the ships in the task force make any difference?"

"You mean if having only four ships along instead of five will make a difference in intimidating them? No. One ship won't make a difference. After half a century of warfare with the Consortium and losing ground so I'm told, they know enough by now not to underestimate us. In fact, if it weren't for this black hole thing, my guess is that they'd be coming to the bargaining table to talk peace not war."

"You think so?"

"Yes, I do."

But before Jules could press her further on her belief, a high pitched whistle came over the intercom and the admiral announced that the Coalition Strike Group had arrived.

"Oh, good," said Sanders. "They won't want to waste any time now and get started." "Is that SOP?"

"For the Coalition it is."

"They won't even send a team down to the planet's surface to review our preparations?"

"It's part of their cultural protocol. When meeting someone, it's expected that the first to arrive will have everything prepared and proper. We've done that."

"On your advice?"

"Yes and no. I'm part of a team after all."

With that, everyone in the room whose presence was expected at the negotiations was asked to report to the ship's hangar to catch transport planet side. Jules joined the science advisers and soon found himself strapped into a shuttle ready to go. Launch was made

without any special ceremony and the next thing he knew, they had joined a small flotilla of surface to air craft that escorted them through the wispy atmosphere. Jules could barely see a thing through the small porthole near his seat but what he saw was enough to confirm that the planet was covered in ice and snow and as it all rushed up to meet them, all detail was lost in the blinding whiteness.

But the trip down was really quite comfortable and the shuttle's insulation such that no sound of rushing wind could be heard in the cabin. Jules found himself looking for Sanders and spotted her sitting with the translators. She, at least, seemed to be taking the descent in stride. He hardly had time to think any further before he felt the thrusters cut off and the whine of the air foils kick in for the final approach. He couldn't see it, but he imagined the temporary signal lights flashing, allowing the pilots visual direction the last few hundred feet down. His thoughts were confirmed when he felt the gentle bump of a soft landing and the cabin lights brighten indicating touchdown.

As with civilians anywhere, his fellow passengers hardly waited until the shuttle was secure before leaping from their seats and crowding toward the exit. When Jules finally made it himself, he stepped into an embarkation tunnel of toughened plastic that led about 100 feet to a membrane giving access to the main portion of the all-weather tempstructure. It was designed to be set up quickly in any kind of hostile environment so long as there was an atmosphere. He knew from earlier briefings that the embarkation tunnel had its duplicate on the opposite side for use by the Coalition delegation.

"Exciting, isn't it?"

Jules turned to see Mooney using the press of bodies to get close to him.

"Hope it all doesn't turn out to be anti-climactic," said Jules.

"Oh, I don't think so! It's not every day we get to see a Zhapoologani up close!"

"You never saw one before?"

"Only on the 'casts. You?"

"I've seen some action once or twice. Bumped into some of their troopers."

"Really? That's interesting. You'll have to tell more about it on the flight back."

Jules decided to change the subject, hoping she'd forget about any lengthy talk. "Any idea how your boss intends to approach the Zhapoologani? They're not exactly what you'd call loquacious fellows."

"Oh, Minister Jones is quite savvy. He knows how to get people to talk..."



"People, maybe."

"An unbeliever are we? You'll see...oh, Bentley wants me."

Walking back from the head of the line, O'Shea reached them giving Jules only a perfunctory nod.

"Jess, Minister Jones wants to see you. Wants to make sure he's got the protocol down."

"Right," responded Mooney. "I'll talk to you later, Jules."

Moving along, he noticed that there were no armed guards in sight. That came as no surprise to Jules as he had been briefed on protocol. The two sides had done this kind of thing often enough over the years that a level of trust had been established. Besides, they each had reason to keep the lines of communication open.

Stepping through the membrane, Jules followed directions given by O'Shea as he arranged everyone according to pre-set plans. Sanders joined the translators at a table inlaid with computer screens and speakers. There, she sat down, inserting an earpiece discreetly under her hair.

Exterior Minister Alistair Jones took a seat at another table located at the center of the room; a plastoid curtain hung rigidly in front of him hiding activity on the other side which Jules could make out only as vague movements.

After directing the science contingent to stand at the back of the room, O'Shea took his place on Jones' right while Mooney took hers on the left. Someone must have signaled that everything was ready because without any notice, the curtain in front of the negotiating team parted revealing a similar arrangement on the other side.

It was the Zhapoologani all right. Jules glanced at Sanders who was

suddenly the center of attention among the translators who instantly began whispering together, no doubt comparing notes on what they knew about the Coalition representatives.

The Zhapoologani delegate, from what Jules could see, differed little in appearance from the few Coalition troopers of his race that he had seen before. Human-like in general outline except for being a good deal huskier in the torso, its arms were thinner than those of human beings while its legs thicker. A bullet head hunched heavily on his broad shoulders that showed little neck. Rough, tannish skin or hide covered the hairless body as tiny eyes squinted out at the Terran contingent seated across the table. Like others of its kind, the Zhapoologani wore little in the way of clothes except for an embroidered breech cloth of some kind and heraldic ensigns displayed on a colorful sash that banded its chest. There was one other Zhapoologani standing behind him, the rest of the contingent seemed to be Drools whose gray skin looked oily in the room's light. Their heads were featureless, lacking in sensory organs of any kind while the rest of their bodies lay hidden in thick folds of lunnite cloth, a material intended to protect them from ambient germs present in the cleanest of atmospheres.

Jules knew it wasn't right, but he couldn't help feeling uncomfortable in their presence, something he knew was based solely on their physical appearance. He could never decide if it was a natural human reaction to the unearthly or a personal prejudice that he needed to overcome.

He had no time to think on the issue further as the opening pleasantries were concluded and Jones signaled for him to approach the table.

"Dr. Santros is one our top physicists who was involved in research dealing with black hole technology," Jones was saying to the Zhapoologani ambassador. "He will now explain the situation that prompted us to call this meeting."

O'Shea stood and waved Jules over to the table holding out his arm to stop him well short of where he and Jones sat. When O'Shea retook his seat, Jones nodded and Jules, in well rehearsed words, began to recount his experience on Cygnus Alpha 12. When he finished, he let the translator catch up before concluding with a few remarks about the danger for everyone should black hole technology be used, especially in warships.

Throughout his summation, he could not tell from the expression on the Zhapoologani's face what the creature was thinking. He prayed that his words had been

chosen correctly to adequately convey the seriousness of the subject.

"So you see, ambassador Keestofernomi," Jones said. "Just as we already have agreed

on a ban covering atomics, we believe this new technology may be even more dangerous, threatening the entire galaxy rather than single worlds. Black hole technology presents the possibility of even more uncontrollable consequences should its natural energies be released. As yet, neither of our two sides have developed reliable methods for its containment and from what our scientists say, nor are likely ever to do so."

"We are not unmindful of the danger," rumbled the Zhapoologani.

"Then the Coalition is open to an agreement?"

"Perhaps," said the Zhapoologani carefully. "But what assurances do we have...?

"I think the Consortium's history in adhering to our agreements regarding the use of atomics speaks for itself while our unilateral choice not to use germ, DNA, or other weapons of indiscriminate death speaks to our good intentions." "Sometimes good intentions can be self-serving can they not?"

"They can," admitted Jones. "But regardless of the intention, the actions are real."

"You do not want to despoil worlds that you may later wish to colonize."

"True again, but there is no guarantee that victory will be the Consortium's in our contest."

"I am glad to hear that you Terrans are not so overconfident that you minimize the power of the Outer Arm Coalition," said the Zhapoologani with a hint of pride.

"The Consortium takes nothing for granted," said Jones, diplomatically.

At that point, the Zhapoologani leaned over to the Drool sitting beside him and the two held a brief conference the gist of which could not be heard by the translators. Finished, the ambassador signaled for someone in the delegation behind him and another of his race thumped over to join those at the table. More low key words as Jules guessed the newcomer was likely his counterpart in the Coalition's delegation.

Finished, the Zhapoologani turned back to Jones and began to speak. "Exterior Minister Jones, the Outer Arm Coalition is prepared to..."

Just then, there was a late arrival on the Coalition side of the room who called something out that stopped the Zhapoologani in mid sentence. Jules could tell the ambassador was annoyed by his body language alone. He turned abruptly to face the cause of the disturbance and after a moment, another Drool, after apparently receiving the message brought by the newcomer, approached the ambassador and whispered in the orifice in the side of his head that passed for an ear. Instantly, the Zhapoologani became alert and turning back to Jones angrily berated him! "So, you believed you could treat us like fools!" he thundered, rising to his feet. "This

has been a direct insult to the honor of the Coalition! Think you that we would not discover your perfidy? Pfah, on your negotiations!"

By that time, Jones' face had turned a beet red and he too shot to his feet quickly followed by O'Shea.

"What is the meaning of this about face, Keestofernomi?" he asked. "By what right do you make such an accusation?"

"By what right? By right of betrayal! By right of violation of diplomatic trust!"

"In what way have we violated diplomatic trust? You must offer proof!"

"Proof is it? I will give you proof. The Coalition is not without its resources and those resources tell us that one of your own naval ships has been reserved and sent on a secret mission to develop the very black hole technology that you have been at this table trying to convince the Coalition to leave aside!"

"What ship? I have no knowledge of this!"

"Oh, you are very good, Exterior Minister Jones! You lie well! But our sources are quite as good and they do not lie! There will be no agreement this day, Exterior Minister Jones!"

By that point, people on both sides of the room were talking with voices being raised on all sides. Meaningful communications broke down and the meeting ended in much mutual acrimony and accusation. But the bottom line was that not only would there be no deal, but that the Coalition vowed to continue its research into black hole technology, the very thing the Terrans had hoped the summit would help to avoid!



4. Cabal

The next few days were dominated by angry recriminations with the diplomatic team blaming military intelligence for not keeping them informed and scientists wringing their

hands warning that something must be done to salvage the negotiations. But what it all ended up being was a lot of heat but no light. When the two week journey back to Sol was over, not much more was learned than what was known in those first few days.

For his part, Jules felt as if the trip had lasted six months instead of two weeks. Time stretched out endlessly as he waited to get back to Mars and Director Revoir to find out what the real lowdown was.

Now he was looking out at the same view of farmland and distant desert but somehow, it wasn't the same as it appeared the last time he saw it. It didn't look different but his perception of it had changed. With the black hole tech genie out of its bottle, there was a good chance all of it might just disappear as if it never existed. Everything, he realized, all reality, had become ephemeral, uncertain, impermanent...

"...have to do something about this and fast," Revoir was saying from behind his work station.

His words jarred Jules from his reverie as he turned his attention back to the meeting at hand. He was in the director's office again, summoned there by Revoir for he knew not what. At this point, no one really knew what came next.

"So what happened?" asked Jules by way of breaking the tension and getting whatever conversation Revoir had in mind started. "Were they telling us the truth? Were we just used as pawns to get the Coalition to stop its research to give our side time to get it first?" "Absolutely not," insisted Revoir.

"Then why didn't our side know about that ship?"

"Because the Navy didn't get word to us in time," said Revoir. "They were more worried about covering their backsides than anything else. The John Crosse was left behind when a crack was supposedly found in its thruster housing. But as things turned

out, that wasn't the case because a few days after the Task Force left the system, it disappeared. The Navy wasted over a week trying to find out what happened to it before finally having to admit that one of their ship's went missing."

"Sabotage then?"

"Maybe, or someone just made it look that way. We're leaning on that explanation because the ship was obviously stolen, it didn't just disappear! Checking back, the best our people can figure, the ship's computers were hacked and shipyard workers given a false reading about the housings. That was enough to keep the ship from joining the Task Force and would have reduced the crew to a minimum while the housing awaited repair. From there, who knows what happened. Maybe the remaining crew were in on the theft or were just taken along with the ship. Where it is now is anyone's guess.

"As to the Coalition delegation, the only way they could have known about the theft before we did is by having an informant inside the Naval Office."

"Or the thieves told them," said Jules.

"What makes you say that?"

"To throw us off balance?" Jules offered. "Or force the Consortium to take up the black hole research again? After all, if the Coalition is going at it, we can't just stand by and let it happen. In any case, we've likely got an arms race on our hands."

"Unless we find that ship," said Revoir. "If we can bring the thieves in soon enough and prove the Consortium wasn't trying to double cross the Coalition, there might still be a chance to stop that arms race before it starts."

"Okay, but where do you start?"

"Well, we haven't been idle while you were making your way back from Piscus Autrinus," said Revoir. "Our boys figure the reason why the John Crosse was taken was because it was a deep range ship. Only Naval ships as you know have the capability of inter-stellar travel...except for the big liners, there aren't any commercial models that can do that. So wherever the thieves were going, it was likely out of the solar system."

"That's logical...unless it's a ruse. They took a deep range vessel with the intention of making you look for them in the wrong place."

"We thought of that, which means we're going to look everywhere for them. No stone left unturned and all that but I personally doubt they're still in the solar system. Too hard to hide a Navy ship for long and the operation was far too chancy to be just a ruse."

"All right. Assuming they're no longer in the solar system, where would they go? What's the range of the John Crosse?"

"You know that," rejoined Revoir. "Virtually unlimited. The only restrictive factor would be time. How much of it would they need to get wherever it is they were going to?"

"Well it sounds like you've hit a wall with this," said Jules, pausing to take a drag on his 'tube. "With the whole galaxy to hide in you'll never find them."

"That's where you come in, Jules."

"Me? How can I help?"

Revoir stood and came around his work station. "When they hacked the ship's computers, they left their fingerprints so to speak. Not to get into too much detail, but some years ago the military's cyber-warfare division was able to develop a program that could trace back any attempt to break into our computer systems."

"Then they were able to identify who the thieves were?" asked Jules, leaning forward in his chair. "Well, who are they?"

"Take it easy. You're not going to like this. The signals were traced back to our own labs downstairs..."

"The Science Division?"

"More specifically, your old black hole tech research group."

Jules sat stunned, his 'tube hanging limply between his fingers.

"We checked the records and found that a few of our top men put in for leaves of absence just before the John Crosse disappeared," the director was saying.

"That's just not possible!" insisted Jules. "Our people are too dedicated to...and besides, they were all vetted and back checked every which way from..."

The director was shaking his head.

"And we found nothing. These guys didn't do this for the usual reasons that treason is committed. They did it for other purposes."

"What purposes?"

"That's what I want you to find out...after you track them down."

"Me? What makes you think I can do any better than the whole service..."

"Because you knew these guys. You worked side by side with them for

years. You must have figured out how they think...what they think. There must be some clue in some past conversation you had with them that could lead you to them. And frankly, we've got nothing else to go on. We have men watching their homes, their family members, tapping their holophones and their home and office computers in case they try to access them remotely. We've come up with nothing so far."

"So what more do you think I..."

"I don't know, Jules!" shouted Revoir, losing his patience. "Think of something! Talk to their friends, their wives, kids...anything but get us something to work on!"

Jules waited a few seconds to let things calm down. Then he asked "Do you have some names for me?"

5. Flashpoint

he Golgotha and its escorts rode in orbit well away from the corona of the main sequence star Betelgeuse in the constellation Orion but still within its gravitational flux. Remaining within the shadow of the flux was important in order to keep the task force hidden from Coalition deep range scanners.

At 640 light years from Sol, Betelgeuse was among the star systems under dispute between the Terran Consortium and the Outer Arm Coalition whose nearest settlements were well within sensor range of the Golgotha. Accompanied by a trio of sleek destroyers and an equal number of cruisers, the Terran battleship's signal was boosted by the combined power generated by her six escorts. It was vital that the task force remain undiscovered as Admiral Dalton Blaine had orders to simply eavesdrop on Coalition communications and track local stellar traffic. He was to avoid battle. It rankled Blaine somewhat not to be able to initiate action if it was necessary but hardcopy orders opened only once the task force was underway revealed that some Coalition ships could be equipped with dangerous black hole tech and until the Consortium could find a way to neutralize it or talk the Coalition into abandoning it, risk of rupturing the tech's containment housing could not be hazarded. Thus, in case of a confrontation, Blaine had orders to defend himself but also to break off and retreat at the first opportunity.

Those orders were about to be put to the test when a disturbance in the star's magnetic flux drew the attention of the watch officer.

"Sir!" he called out. "I have enemy cruisers off our port bow!"

"What? Why weren't they detected before now?" demanded a suddenly-alert Blaine.

"Sir. They weren't there a moment ago...they just...are there now!"

"They must be using that accursed black hole tech, sir," said the XO.

"Must be. Helm, evasive action! Sparks, notify the rest of the task force to do the same and reassemble at point delta!"

"Yes, sir!" came the simultaneous replies.

"Mr. Silko," said Blaine, turning to his XO. "Take over fire control. Targeted lasers only. No pulse cannons."

"Yes, sir." Saluting, the XO dashed to the weapons console to direct fire personally. It was vital that the men not let their eagerness for battle get the best of them. The targeted lasers were light weapons used largely to disable.

"Target enemy thruster housings only," reminded Blaine. "Avoid

damaging the engine sections where the tech is likely to be stored."

"Yes, sir," called back Silko.

Outside, in the super hot glare of the giant sun, the Golgotha had already begun to come about, bringing its port gun emplacements to bear toward the Coalition battleship that had so suddenly come out of nowhere to take the first shot.

BLANG!

Struck while the Golgotha was in mid turn, the blow of the Coalition ion borer missed hitting full broadside, deflecting most of its energy off the Terran vessel's tintinabulum hull.

"One shot is all they get!" growled one of the weaponeers from fire control before

letting loose a laser blast of his own.

With its full port side now facing the enemy ship, the Golgotha was able to fire all of its guns at once, the force of which cut the Coalition ship's thruster housings point blank. Instantly, its propulsive power was diminished to nothing rendering the huge vessel dead in space.

There was a howl of glee from a number of the ship's crew and even Blaine allowed himself a bit of a smile before recalling that they had been taken completely by surprise in the sneak attack. How had the enemy known that the Terrans would be here? The admiral recalled how the Coalition delegation in recent negotiations had learned of the stolen John Crosse before its Terran counterparts did. That time, it was determined that spies back in the Sol system had been the informants. Could that have happened again here? How else would the Coalition have learned of the task force's presence?

BLANG! BLANG!

The sounds of the hits and the resultant shudder that coursed through the ship jolted Blaine's thoughts back to the present.

"Curse it! Where are our escorts? Why aren't they drawing fire?"

"Sir!" cried the XO. "The Red Sea and the Halo are damaged, the Santo Dominguez is exchanging fire with two enemy K-class cruisers, and the Jerusalem, San Antonio, and Ste. Marguerite are chasing off a pair of light battlewagons."

"So what hit us?"

"There was another heavy battleship positioned behind the first one we disabled, sir."

"Helm! Hard about and down 40 degrees! We'll take that ship in the belly!"

"Yes, sir!" And even as he spoke, Blaine felt the Golgotha sink beneath him as the artificial gravity strained at the shift in angle. On the bow screens, he saw the disabled battleship up ahead with its mangled thruster housings sparking away as it slid upward and disappeared from view. Suddenly, the second Coalition battleship loomed up ahead.

"Bow lasers, prepare to fire!" he called.

"Bow lasers are green, sir!"

"Target thruster housings!"

"Thruster housings, targeted, sir!"

"Fire!"

For a moment, the glare of the lasers filled the screen, blinding Blaine. When it cleared, the enemy ship showed damage to its thrusters but there was no time to congratulate themselves as the watch officer called out again.

"Sir! More enemy ships have arrived!"

"Sparks!" said Blaine, recalling his orders. "Have all ships turn about and assemble at point delta!"

"Point delta, yes, sir!"

It was touch and go there for a while with the Golgotha having to train its lasers once more on enemy vessels to take pressure off the Santo Dominguez while the Red Sea and the Halo were taken into tow with 'tractor beams. Finally, they all managed to assemble at point delta and though it rankled Blaine to do it, he gave the order to fire up the subphoton drive engines and retreat. Luckily, it seemed, ships moving along with sub-photon drive presented too fast a target for black hole tech to be used to its best advantage. Still, retreat was retreat, and unless something was not done to neutralize the enemy's technical advantage, Blaine feared that the days of the Consortium being a major power in the galaxy were numbered.

6. Following the Trail

he whine of the reverse thrust engines jolted Jules to wakefulness as the shuttle entered Earth's atmosphere.

For a moment, he wondered where he was, then remembered: Three weeks ago, he had exhausted his leads on Mars and was forced to take his investigation to Earth where all he had to go on was a single name, one of his colleagues from the research labs at military intelligence. Faced with the inevitable, he caught a naval cruiser back to the home planet and spent the week in transit worrying about what would happen if he failed to get on the trail of the renegades or going over his plans for finding Georg Heintzle.

Looking out of the tiny porthole, all he could see were clouds and



condensation streaking the plastiscene pane. Giving up, he threw himself back into his seat and closed his eyes.

He recalled running down the addresses to every one of the missing researchers on Mars. That wasn't hard to do since for the most part, they lived in government housing within the military intelligence dome. A few though, had living units in other domes, preferring to stay away as much as possible from the more regimented atmosphere of the MI dome. Luckily, they didn't prove to be too far away, just a speedcar jump to one of the residential domes including one in Dome 3 where Jules and Joan had their own little hideaway.

Jules smiled remembering how he'd brought Joan along with him to check out the local addresses thinking that together, they'd present a little domestic camouflage to put the men he was searching for at ease. But in the end, it was unnecessary as they found the units either abandoned or occupied by others. Families who knew nothing about the plot had been sent off to relatives. And no, there were no forwarding addresses.

Of course, Joan was disappointed to hear that he would have to leave her again but what was he to do? The fate of the universe hung in the balance or so he told her.

"I don't think any husband ever had the nerve to use that kind of an excuse to get away from his wife!" Joan had complained.

"You believe me, don't you?" Jules had asked, tongue in cheek...but then, you never knew...

Luckily, Joan was the understanding sort, helped him pack his things, kissed him on the cheek, and sent him on his way. It was that kiss on the cheek that worried him...

There was a bump as the shuttle hit some turbulence and broke through the clouds to emerge somewhere over open water. Jules only assumed it was the Pacific Ocean since they were due to land at the space port outside Reno.

Anyway, Georg was the only member of the missing researchers Jules had been unable to investigate directly on Mars. His work with the agency ended months before and he moved back to Earth to take up residence at his last known address, a suburban unit in the high country outside Visalia, California.

If that lead didn't pan out, it was back to the computer console for hours of tracking down extended family members of all the missing researchers in hopes one of them might have heard from their wayward relatives. Jules didn't relish that and dearly hoped something came about through Georg whom he remembered as being roughly his own age, an expert on gravimetrics and white dwarf parameters recruited from SoCal Aeroflotilla Laboratories which happened to be located outside Visalia.

The red warning lights came on and Jules prepared for landing which did not come soon enough for him. Minutes later, he was exiting the shuttle into the bright Nevadan sunshine, happier than he expected to be in an atmosphere that did not require breathing enhancements of protective outerwear.

He was directed to a terminal building where he

He was directed to a terminal building where he was cycled through with a minimum of fuss. Outside again, an escort in military tanks led him to a private field where a number of rocket planes sat on the tarmac.

"Headed over the mountains I hear?" asked a civilian pilot, his eyes hidden behind a pair of opaque sunglasses.

"You my ride?"

"If your names Jules Santros, it is."

"That's me. Which one's your 'craft?"

"None of these horse and buggies," said the pilot. "Follow me."

He led Jules on a short walk to where a row of corrugated hangers sat baking in the sun. The first in line had its big doors open with the pointed nose of a sleek rocket plane poking out.

"This one's mine," said the pilot unnecessarily. "The latest model plus some improvements by yours truly."

"Fast?" asked Jules grateful for the cool shade inside the hangar.

"Won the high desert speed trials last two years in a row. Why? You in a hurry?"

"Could be. Where do I stow my gear?"

"There's room behind the passenger seat," said the pilot, taking Jules' bag and stuffing it in back of the rear jump seat. "Get in."

Jules did so and let the pilot fix the safety straps and adjust his helmet and oxygen mask. Then he hopped into the forward seat and wasted no time in lowering the canopy.

"Tower, this is AR-2, read?"

"Read," crackled the receiver.

"Ready for take off. Special delivery."

"That's a roger, AR-2. Special delivery."

It seemed that his arrival had been prepared for because the plane was quickly cleared for takeoff and in no time the pilot had maneuvered it into position at the head of the runway.

"You are cleared for takeoff AR-2."

"Roger, tower," replied the pilot. "Better hold on to your breakfast, pal!"

The next thing Jules knew, the plane was in the air and climbing at an

enormous rate.

He hardly even saw the runway as the plane left the field and headed like an arrow into the sky. It seemed the pilot had not been kidding when he said his plane was fast! In fact, Jules had barely exchanged more than a word or two with him before he was signaled for an impending descent.

"There's Visalia over there," said the pilot, pointing off to the west. To the east rose the jagged peaks of the Rocky Mountains, many of them snow covered. They hopped right over them by the simple expedient of reaching to the edge of space and then diving straight down.

"Field, this is AR-2 approaching," the pilot called.

"AR-2, we have you and you are cleared to land on runway 6J."

"Roger that."

Jules didn't know if special arrangements were being made for him, but he was grateful not to have to spend more time in the air than he had to. Nothing against the pilot or his 'craft but his stomach could only take so much.

A few minutes later, he was on terra firma again and shaking hands with the pilot.

"You come back now, hear?"

"Sure," waved Jules as he made his way to a nearby robo-cab.

Deciding not to waste any time, he told the 'cab to head to Georg's address.

Visalia was still a relatively small town. After much of its population had moved to Mars in the early days of colonization, a good part of the rest simply left rather than stay in a virtual ghost town. Later, when Aeroflotilla built its labs in the area, the city was revitalized somewhat as a company town. More of an exo-burb than a true city, Georg's home was



a modernistic shell on the outskirts embedded in gardens and thick stands of Arecaceae.

Ordering the robo-cab to stop a ways up the street, Jules shouldered his bag and alighted. As the 'cab sped away, he looked around. There were only a few other houses in sight and those well hidden behind their own screens of plants. The street itself was empty. Slowly walking up the sidewalk, he approached the Heintzle home never taking his eyes off it. By the time he had reached the front walk, he'd still seen no one.

Placing his bag out of sight among some flowering shrubs, he stepped to the door and passed his hand over the alarm sensor. Dimly, he heard a tinkling sound inside then the sense that someone was approaching. He was right. Through the side panes along the front door, he saw a figure approach. A woman. She stopped before he could make out her features, hesitated, then moved away quickly.

Instantly alert, Jules dashed around the house, leaping shrubs and weaving around stray palms in an effort to catch her before she escaped out back somewhere. But he was too late. He had just broken through to some open lawn when an aircar slid silently from a driveway, took a banking turn, and hovered quickly out of site down the street. Who could it have been? Not Georg's wife, Lucinda, surely?

Still wondering, Jules continued on into the driveway and peeked into the open ended garage stall. There was no other vehicle in sight. Inside, an access door stood against the basement of the house. It was ajar. Confident no one was home, he stepped through and moved cautiously up a short flight of stairs past some hanging garden tools.

"Hello?" he called experimentally. "Anyone home?"

He didn't expect a reply so wasn't surprised when none came.

Completing the climb onto the main floor, he stepped into a roomy

entranceway that led to the front door in one direction and a pantry in the other. Choosing neither direction, he crossed the vestibule into the living room.

Indoors, the house revealed itself to be quite modern with a few walls of fieldstone and the rest floor to ceiling clear-plas windows making for an airy, well lit interior. Overhead, wooden beams crisscrossed, supporting the roof making for a woodsy,

outdoorsy feel. Jules liked it. That is, until he noticed the papers and such scattered about.

Obviously, someone had been searching the place. Likely the woman he caught taking off earlier. Slowly, he made a circuit of the house, looking in each room in turn but touching nothing. The only sign that Georg may have been home at all was the absence of travel bags. He was supposed to have returned home, that much was known. And so far as he had been able to check, there were no travel or credit records indicating that he had gone anywhere else on Earth. No, if he came to Earth at all, it would have been here. This was his home and his employer, the only other place he could have gone, was nearby.

Having completed a cursory examination of the house, Jules began a more thorough check. Although the bathroom had been cleaned, he found a fresh smudge of toothpaste on the side of the sink...he recalled Georg distrusted the sonic toothbrushes recommended by 8 out of 10 dentists.. .and there were some strands of hair...still damp...caught inside the shower drain. That was enough for Jules. Georg had been here all right, and recently.

In a small study nook separated from the living room by a stand alone stone wall, Jules found a fully computerized, multi-function work station. Floor to ceiling clear-plas windows gave the feeling that the nook was actually outdoors amid the riot of tropical plants that crowded close to the house.

Concerned that the work station's security system would give him a problem, Jules used a pocket de-scrambler supplied him by MI before he left. Handy devices those. In seconds, he had the work station's system deactivated and a moment later all the passwords were bypassed as well. From there, it was only a matter of telling the work station what he was looking for to see if Georg had left anything incriminating behind but.. .that would have been too easy. He soon discovered that his former colleague was as thorough as he had expected him to be. Every system in the work station had been wiped clean.

So. Back to square one.

From a pocket in his suit jacket, he pulled out a nano-card and inserted it in one of the

half dozen ports in the work station's input deck. Instantly, preprogrammed nanites streamed into the desk's hardware to chase down the wiped information. The information still existed somewhere in the cloud and they would find it...the top secret software wasn't called a cloud chaser for nothing.

Jules judged he had a few minutes before the little buggers would complete their assignment so repaired to the pantry to fix himself a cup of coffee. Sure enough, when he came back, mug in hand, the information had been retrieved.

Taking a sip from his mug, he asked the work station for Georg's whereabouts but to his surprise, it had no record of that.

"Search all your files," ordered Jules. "Even the hard drive if you have to."

Still nothing.

Jules was impressed. Apparently Georg really knew his stuff. But

admiration only went so far because it meant he was at a dead end. What now? Well, there was only one more option. Aeroflotilla. Georg likely had a workstation there and there was just the chance he might not have been as thorough with that as he had been with his own. In fact, he could not have. To have been as thorough as that, he would have had to destroy much of his department's research records since all of them were tied in together as a self-enclosed cloud unit. As dedicated a scientist as Jules knew him to be, it was just possible that he might not have brought himself to do that.

Signaling for a robo-cab, Jules left the house the way he went in and waited a few minutes outside until his ride drew up.

"Aeroflotilla," he told the 'cab as it drifted down the road on a cushion of air and the invisible signals from fiber optic cables buried in the smart street.

7. Trap!

I t did not take long to reach the outskirts of town where homes thinned out amid increasing woodland. Slowly, the ground rose in the direction of the nearby mountains that loomed overhead as strange and awesome as any alien landscape. But before they drew any closer, the robo-cab slowed and pulled up to a gate set in a metal fence stretching off to either side of the road. A sign read:

SoCal Aeroflotilla Laboratories Visalia Campus. Private property. Fence monitored by satellite. Jules had little time to think about what to do next before an aircar approached the gate from the opposite side. In it were a pair of uniformed security guards.

Getting out of the 'cab, Jules met one of the guards at the gate.

"Can I help you, sir?" the man asked.

"Yes. I'd like to see the facility manager. It's urgent business." He extended his telcomm that displayed his credentials including the one from Military Intelligence.

The guard examined the information as it scrolled past the screen.

"Just a minute," he said, returning to his vehicle.

A minute later, he came back and signaled the gate to open.

"Come in, Mr. Santros. Mr. Minniac will meet you at the head office."

"Wait for me," Jules told the robo-cab before joining the guards in their own vehicle.

They followed a winding road that led up the ridge upon which the main facility was built and soon, Jules spotted a massive structure that towered over the trees that otherwise blocked his view. He recognized it as an enclosed test stand for gravimetric devices, the biggest in fact, that he had ever seen. Impressive. Then the structure disappeared behind more trees as he was conducted to a sleek glass and metal building where he was told that director Henrico Minniac was waiting for him.

Sure enough, he was greeted by Minniac in the lobby. They shook hands.

"You've come a long way, Dr. Santros," Minniac was saying. "All the way from Mars I'm told."

The comment was meant as an invitation to explain his presence at

Aeroflotilla so Jules filled him in.

"As you've been made aware, I've been delegated by military intelligence to investigate the disappearance of Georg Heintzle who also happened to be a colleague of mine on Mars," no need to tell Minniac anything about what they were doing as colleagues. "He's a suspect in the theft of a naval cruiser from Earth orbit."

The look on Minniac's face indicated disbelief.

"I admit it sounds fantastic, but military intelligence can't overlook any possibility," continued Jules. "I came to Earth to see if Georg might have returned to his home here in Visalia and it seems that he has. He wasn't there when I...visited...but there was evidence that he'd been there recently. His home work station files had been thoroughly wiped, not something that happens by accident. Anyway, I got the idea that information on his work station here might still exist. Any little detail might be the key I'm looking for."

"Well, I guess you have to investigate every possibility in business like this," agreed Minniac, affixing a visitor's badge to the lapel of Jules' suit jacket. "Follow me and I'll show you to his office."

It was not far. A pleasant up capsule ride took them into the upper levels of the administration building. On the seventh floor, Jules stepped into a large open area filled with rows of work stations occupied by busy secretaries doing whatever it was secretaries did. Around the circumference of the room, were doorways obviously leading to separate offices.

"Here we are," said Minniac holding a door open for Jules. On it was a plaque that read "Prof. Georg Heintzle."

The room was modest in size but Jules could tell that the multifunction work station was the best money could buy. A wall of plas-glass



allowed a beautiful view outside, downslope over the trees to Visalia in the distance.

"When was the last time Prof. Heintzel visited this office," asked Jules, recalling the fresh toothpaste in Georg's bathroom.

"A few days ago," replied Minniac. "We were expecting him of course. We knew he was due back from his trip to Mars. He sent news ahead to have his laboratory prepared to set specifications in anticipation of getting right to work. I don't mind saying that we missed his input around here while he was working for the government."

"He is a brilliant man," admitted Jules. "Do you know where he went since he was last in?"

"I wasn't aware that he'd gone anywhere," said Minniac. "I thought he was at home."

"Is there anyplace you know of that he might have gone other than his home?"

Minniac paused a moment to think. "No."

"What about his secretary, his colleagues, would they know?"

"I can ask them."

"Then do you mind doing that while I go through his records here?"

"Of course not. I'll be right back."

Turning to the desk, Jules went through the same procedure as he did at Georg's home expecting and finding that again, everything had been wiped. Again, he pulled out the nano-card and put it to work. This time he had success.

Information began filtering back into the work station building up a record of activity. Finally, there was enough to go on and Jules began with the most recent entries and worked his way backward. Jules had caught a

break. Because his records would be tied in with the facility's own mainframe, Georg had not been able to do as thorough a job cleansing his files as he had with his home station. Not without seriously compromising the facility's own records, something he obviously did not want to do. Which indicated that however he was involved in the theft of the naval ship, Georg may not have been as committed to the plot as at first assumed. That gave Jules hope.

"Let's see," he mumbled to himself as information cascaded on the embedded screen before him. "Lab records, flow charts, survey findings, research notes, business trips, aircar records, flight itineraries, five year plan, equipment orders..."

Jules stopped. Could it be this easy?

"Director mechanics for deep space navigation!"

That was the phony heading military intelligence had given their research into black hole tech! Why had Georg listed it here? Quickly, Jules navigated through menu options tracking down the files listed under the phony heading. It all boiled down to Test Stand 1. It was there that he would find the answers.

Dashing from the office, Jules found that Minniac was nowhere in sight. Deciding not to wait on him, he received directions to Test Stand 1 from a girl at one of the work stations, leaving word with her to tell the director where he had gone.

Passing from the room, he stepped into an enclosed catwalk connecting the administration building with the labs on the other side. A long corridor led to a down capsule at the end which took him to a subtunnel giving entry to main electronics and mechanical assembly. His company issued badge allowing him passage with no questions asked. Finally, he arrived at Test Stand 1, the same massive structure he had



glimpsed on the road outside.

At the moment, the test stand was not in operation, apparently it being between experiments. Aeroflotilla was the largest manufacturer of gravimetric devices in the Consortium and having patented the first artificial gravity systems a hundred years before, continued to lead the field in the development of more commercial applications. In fact, it was one of the largest military contractors, second only to Lockheed, Martin, & Boeing, builders of naval spacecraft.

So maybe it was lucky that he was able to find the Test Stand idle...or maybe not. There must have been a reason why Georg created that file with the phony black hole tech project name. Jules walked over to one of the half dozen hatches that gave access to the huge, enclosed space inside the test stand. Peering through the thickened plas-glass aperture, he saw that it was empty; just a vast, metallic floor space. He knew that beneath the deceptive flooring lay a complex array of equipment that controlled, contained, and measured the gravimetric energies released onto the test stand during experiments.

"Can I help you?" asked a lab tech, approaching him from a distant work station.

"Was just looking. Are you familiar with Prof. Heintzle?"

"Georg? Sure. You know him?"

"I worked with him on Mars."

"You don't say?" said the tech, crossing his arms. "He isn't around today. Was here a couple days ago though."

Interested, Jules wanted to know more.

"Know where he went?"

"He told me he was going home. I assumed he meant his place in

town."

"What was he doing down here?"

The man shrugged. "Going over some stats for an upcoming experiment. We're...by the way, have you been cleared to be down here?" He glanced at Jules' ID tag where it hung on his suit jacket.

"Call director Minniac and check for yourself."

"I'll do that." The man took out his telcomm and beeped the director. Minniac's voice came on. "I have a Mr...Santros down here, doctor. He's asking questions but I wanted to make sure he had clearance before I answered them. He does? Fine. Guess you're all right."

"So what was Heintzle doing down here?" Jules asked again.

"Well, he was picking up where he left off when he went on sabbatical to Mars," said the tech. "At the time we were working on dwarf-matter experiments..."

"Dwarf-matter as in white dwarfs...collapsed stars?"

"That's right. The company has managed to manufacture dwarf-matter artificially...not an easy process, believe me...and we've been experimenting with it for about two years now trying to find just the right amounts needed for different jobs."

"In space, a white dwarf is formed from the triple-alpha process," said Jules. "Fusing helium to carbon and oxygen."

"That's right," agreed the tech. "But if not enough heat is built up to fuse the carbon, it combines with the oxygen to form a heavy mass which as you say, in space would end up being the remains of the dead star...one whose mass after millions of years could further collapse into a black hole."

"And Georg's experiments?"

"Well, handling the artificial carbon-oxygen fusal mix as you must realize, is a lot

easier than doing it with a black hole. If it could be properly controlled, there's no limit what that gravimetric power could be used for..."

"I get it. Did you notice any unusual action or requests from Prof. Heintzle?"

The tech thought for a moment. "No, nothing. He spent some time in the test stand but I can't tell you what he was doing there."

"Mind if I look around in there?"

"Nope. Nothing to see though." So saying the tech went over to the hatch that Jules had peered through and punched in a code on a touch pad in the wall. Pretty low tech so far as security systems went but then, who would want to break into an empty test stand?

As the hatch hissed open, a message came through the tech's telcomm. He answered it.

"I'll have to leave for a few minutes. Be right back."

Jules did not wait for the tech to get out of sight before stepping into the test stand. Just inside the hatch he stopped and stared. Sure enough, it was the biggest he had ever seen. Most of those he had worked with over the years were never more than half its size.

He took a few more steps farther in, listening to the sound of his feet echoing among the metal plates that covered the structure's interior surfaces. Slowly, then more obviously, he began to notice that his feet became more reluctant to leave the flooring. He had been aboard enough space vessels to recognize the sensation of artificial gravity as it tugged at the soles of his shoes. Rapidly however, its grip increased until he could barely lift his feet. He lost his balance and fell to his knees, then his stomach. The pull was growing more powerful! If it continued, he would not be able to breath, he would be crushed! Straining

with all his might, he managed to raise his shoulders to arm's length before collapsing for the final time. Ahead of him, he could see the open hatch, beckoning, teasing but it might as well have been on the other side of the Moon for all he could do to reach it.

Then, as if an impossible weight had descended upon him, he felt his ribs creak and he could no longer draw in breath. He was being slowly crushed to death and there was nothing he could do about it!

8. Proxima

hen suddenly, he was breathing again! Instinctively, he tried to draw in a deep breath before pain in his chest brought him up short.

"Take it easy, tiger," said a woman's voice.

"Breathe slowly, Dr. Santros," said Minniac from somewhere close by. "It'll take a few minutes before your muscles ease up."

"And even then, your ribs are going to be sore for a while," said the woman's voice again.

He was lying on his back, on the floor. Slowly, he forced his eyes open and a woman's face came into focus. It looked familiar.

"Mooney? Jessica Mooney?"

"It's me, all right."

"What are you doing here?" Around them, a number of white suited techs looked on curiously. Minniac waved them away. "Same thing you are, trying to get a line on Heintzle," Mooney was saying.

"If it were not for Miss Mooney, you'd surely be dead by now," said Minniac. "Crushed to a pulp in the test stand."

"I spotted you coming down here, followed, and when I saw something was wrong, called Dr. Minniac here," explained Mooney.

"It was only luck that I was on my way down at the time," continued Minniac. "As soon as I received Miss Mooney's call, I ran the rest of the way. I realized what must have happened of course, so wasted little time initiating emergency measures."

"What...what did you...?"

"The dwarf-matter is susceptible to intense heat...one of the problems we've been working to overcome to make it commercially useful. I super heated the carbon-oxygen mix, it was only a few molecules held in special chamber beneath the test stand, and that lessened the gravimetric forces enough to drag you from the chamber."

"A little CPR after that did the trick," finished Mooney.

"You...?"

Mooney nodded. "Just part of the training."

"What training?"

"I'm an agent for the exterior minister's office."

"A spy?"

Mooney laughed. "If that's how you want to look at it. It doesn't do any harm to tell you now, since my cover's blown," said Mooney. "O'Shea assigned me to investigate the stolen navy ship. See, the minister's office doesn't fully trust the military to investigate itself so once they found out that you'd narrowed the search down to just Heintzle, they sent me ahead of you to check up on him."

"Then it was you I saw in Georg's house?"

"It was. After I aircarred out of sight, I turned back to keep an eye on you since the

purpose of my coming to Earth was no longer valid. I followed you here, got inside, and when I saw something was wrong in the test stand, called the director for help."

"But how did you get inside the facility?"

"I'd like to know that too," said Minniac.

"I'm a secret agent, remember? That's my job."

"Ouch!" Jules cried, as he tried to get to his feet.

"Take it easy," said Mooney, helping to steady him. "It's going to hurt for a while."

"It must have been a trap," mumbled Jules. "Georg set me up. Thought for a while there that he might not be fully in with the other renegades. Sure was wrong on that count."

"A trap?" asked Minniac, startled. Clearly the thought had not occurred to him. "You mean Prof. Heintzle deliberately tried to have you killed?"

"Not me personally," replied Jules. "Anyone who came snooping after him. He couldn't wipe all his work station records without damaging the facility's own research records. If he did that, it would have left a big footprint signaling anyone that something was up. So he did the next best thing. He left a false clue pointing to the test stand. Anyone stepping into it would set it off. I was just dumb enough to do that. By the way, doctor, I'd have your techs check out the below decks arrays. Likely whatever it was that triggered the trap when I stepped inside the test stand is still functional."

"I'll get them right on it," said Minniac rising.

"It was only luck that no one else had a reason to go in there before I showed up," said Jules.

"Well, looks like this is a dead end so far as tracking down Heintzle is concerned," sighed Mooney. "Maybe if we go back to his house and..."

"No use," said a rapidly recovering Jules. "His home work station was thoroughly wiped. All the files were...wait a minute! The files!"

"What files?" asked Mooney, startled at Jules' sudden outburst.

"The ones on Georg's work station! He didn't wipe them all out. There was something there that I think might be useful."

"Boy, you don't ease up at all do you? Here you are with maybe a few cracked ribs and..."

"Can't ease up. There's too much at stake. Help me up."

So saying, Jules took hold of Mooney's arm and let her haul him to his feet.

"Ow. That hurts. But don't stop. Take me over to the lab tech's work station."

It took nearly a full minute to cross the room where the tech who he'd first spoken to upon coming down to the test stand rose from his chair and held it out for Jules.

"Thanks," said Jules lowering himself gingerly into the chair. "This station ties in to all the other stations in the facility doesn't it?"

"If you know the passwords it does," said the tech.

"Give me the sign in window," Jules told the station. When it appeared, he gave it Georg's password. "Now give a list of Prof. Heintzle's files." Instantly, icons began to stream past the screen. "Stop! Open the file labeled aircar records."

Opening, the file displayed a complete history of Georg's use of the company's fleet of aircars. "Scroll to the latest entry," ordered Jules even as the data jumped to the final log.

"Bingo!" said Jules excitedly. "Ouch!"

"What is it? What did you find?" Mooney wanted to know.

"Apparently, Georg didn't own his own aircar. He relied on company vehicles for use around the neighborhood. This last entry shows he used a company aircar not two days ago, about the last time anyone saw him. It went to the municipal rocket field outside Fresno!"

"Then we've got something to go on!"

"What do you mean 'we?" asked Jules twisting in his seat and inadvertently sending waves of pain through his sides.

Noting the wince on his face, Mooney replied, "You think you're in any condition to do any pursuing on your own? Besides, it'd be pretty silly for us both to be running around after Heintzle separately, wouldn't it?"

Holding his side, Jules gave it some thought. Two heads would be better than one...if he could forget how pretty the one on Mooney's shoulders was.

"Okay," he agreed. "We work together."

"Good," said a pleased Mooney. "Now let's get you to the infirmary. If you don't get those ribs taped up, you won't even be able to walk out of this place."

A half hour later, they were in Mooney's aircar speeding along the smartway to Fresno.

"So O'Shea put you up to this?" Jules was asking as they sat back and

let the 'car do the driving, or rather, the smartway.

"He didn't put me up to it," replied Mooney. "He's my boss. Head of ministry security."

"So you weren't a real secretary?"

Mooney laughed. "You think I can't do two things well? Sure, I wasn't the minister's real secretary, but I could do the job. And I was doing it at the negotiations. You didn't notice?"

Jules realized she was flirting again but tried to ignore it. Maybe it was something she did instinctively, to every guy she met. "I did. I was fooled wasn't I? But you say the ministry doesn't trust the military?"

"In a general way, yes. You have to admit that the Navy has good reason to hush up the theft of one of their ships. That's pretty embarrassing."

"I guess so. And did you find anything in Georg's house before I got there?"

"Not much. There was some dirty laundry in the autochute. The laundrymech hadn't been turned on in a couple of days so I knew he'd been around."

"Didn't think to look there..."

"You're a man, silly."

Jules smiled, thinking that was something Joan had been likely to say.

"Nothing else?"

"His work station was wiped. That alone let me know that something was up but nothing else."

"Was that when I broke into your little investigation?"

"You sure gave me a start! I didn't expect you to get there so quickly. Thought you were someone from Aeroflotilla come looking for their employee. Soon as I saw it was you, I got out of there as fast as I could."

"You move pretty fast when you want to," admitted Jules.

Mooney shrugged, her tight fitting leisure wear flattering her figure. Jules noticed that it was made of that new light absorbing stuff so that its black color would make her virtually invisible under low light conditions.

"You have any ideas for when we get to the rocket field?" Mooney asked.

"Check the register, I guess. Speak of the devil. There it is now."

As the smartway unwound ahead, the hills around them flattened giving way to an arid plain in the midst of which was the rocket field. They were still miles away, but even from that distance, they could see at least two commercial liners resting in their cradles and the cluster of administrative and passenger processing buildings off to the side. A control tower for local rocket planes poked up from behind a few hangars down field.

"Better report in to O'Shea," said Mooney. "Let him know where I am."

Jules barely heard her speaking into her telcomm. His mind was racing ahead, figuring out different possibilities, where to look in case the register idea didn't pan out.

A few minutes later, the aircar slid to a smooth halt in front of the passenger processing center and settled to the ground. Jules and Mooney wasted little time alighting and making their way to the registration desk.

Impressed both by Jules' MI identification as well as Mooney's ministry security ID, the desk manager wasted no time in displaying the passenger list for the waiting rockets. No luck.

"What about other flights over the past couple of days?" asked Jules.

"There was one North American/UK spaceliner that lifted off two days ago," said the manager, barking orders to his company telcomm. "Here's the passenger list."

Jules looked and scanned down the list. Suddenly his eyes widened. "That's the one! Where was the liner headed?"

"Alpha Centauri," said the manager.

"What about the next rocket off planet? When does it leave? Where is it going?"

"Flight 712 leaves in a few hours. It's scheduled for a stopover on the Moon before heading out to Callisto."

"Callisto..." mused Jules. "A resort colony mostly, isn't it?"

The manager nodded, guessing Jules' intentions. "You should still be able to catch a connecting flight to Alpha Centauri from there. It's one of the more popular routes."

"Then get us aboard flight 712."

A short time later, Jules was strapped into a seat in the coach section of the liner,

Mooney beside him.

"I'm not used to this," said Mooney. "I mean traveling coach."

"Oh, that's right," said Jules. "You're government property. First class all the way."

"Hey, you are too!"

"We lowly scientists never get the royal treatment you people in the ministries do."

Further conversation was cut short when a red light flashing overhead indicated that the pilot was prepared to cut the ship's gravitic anchor. That would be followed a few minutes later with ignition. Sure enough,

the rocket shuddered beneath them and so smoothly that they hardly felt it, the huge bulk of the commercial spacecraft began to lift past the cradle harnesses that even then were still in retreat away from the upright rocket.

Suddenly, the true G forces of liftoff began to tell and Jules felt himself sink into his conforming seat. There was a moment of nausea that passed quickly and in seconds the rocket had reached the stratosphere and in a few more, freefall. It was then that main engines kicked in, boosting the rocket from near Earth orbit on a trajectory to the Moon. Soon, the vague roar of the engines ended and Jules knew it was simply a matter of coasting to their destination. One that he could not arrive at soon enough.

"What's our layover at the Moon before moving on to Alpha Centauri?" asked Mooney after recovering from liftoff.

"Six hours," said Jules. "Too long!"

"Can't be helped. But once we leave the Moon, it won't be long before we get to Alpha Centauri."

Jules did some mental calculations. "But will a week be too long? We have no idea what Georg plans to do once he gets there."

"With luck, he'll likely be using the same name he registered with at Fresno...by the way, what was the name he registered under? You recognized it pretty easy."

"You won't believe this..."

"Try me."

"Amanda Sanders."

"I don't believe it!"

"Told you."

"The psycho-xeniologist?"

"That's the one."

"I guess that settles the question of how alert those clerks are at the ticket counter! You think she's in on this or what?"

Jules shrugged. "I have no idea. It would seem strange for Georg to use a name someone might recognize though."

"Unless he were feeling cocky. His lack of house cleaning back in Visalia would indicate that."

"Recklessness can work to our advantage. Let's hope that's the case."

Just then, another signal light indicated that lunch was served and as they picked what they wanted from the menu display, Jules lapsed into silence. Mooney seemed all out of small talk and that suited him fine. He was getting to like her...a dangerous thing for a married man. Thought of Joan reminded him that he had not spoken to her since leaving Mars. Digging out his telcomm, he put in a call to Mars Central.

"Joan, just Jules calling in to let you know I'm all right," said Jules, taking into account the three hour delay the call would have in being received on Mars. "Left Earth but can't say where I'm headed next. Hope to see you soon. Love you."

"Too bad."

"What's that?"

"Too bad you're married," said Mooney. "Any woman would be more than happy to have a man as loyal as you are...or seem to be?" she finished on a hopeful note.

"Joan is one heck of a woman."

"She'd have to be, obviously. But you won't mind if I keep trying, do you?"

Jules tried to avoid noticing the way her eyes twinkled when she said that.

"Who you calling now?"

"My boss at military intelligence."

This time Jules used the encrypting function and texted his report. No point in letting Mooney know everything he was about. He finished the message with a request that Revoir message ahead to Alpha Centauri naval command giving him clearance for whatever help he might need.

Finished, he concentrated on his meal and tried to ignore the fragrance of Mooney's hair.

The layover at the Moon went more quickly than anticipated and the big ship was able to move on in a good deal less than six hours. The layover at Callisto also went smoothly with Jules and Mooney having little trouble finding a berth headed to Alpha Centauri. It turned out that Callisto with its impressive view of Jupiter was a popular honeymoon destination for Centaurans, something Mooney spent some little time trying to talk up with Jules.

Finally, with the new passengers securely in their seats, the connecting liner pulled away from orbit and ignited its main thrusters taking the ship beyond the plane of the ecliptic. Once it was a safe distance away, the sub-photon drive could be safely engaged and finally and truly start them on their way to Alpha Centauri.

Four point thirty-seven light years from Sol, the Alpha Centauri system, part of the constellation Centaurus, is actually a binary star system with its twin suns orbiting each other. But Alpha Centauri was only the system's popular name, the Terran colonies to which Jules was headed were actually located on worlds circling Proxima Centauri, a nearby sun with a dozen planets. Two of those, Proxima 4 and 5, were sufficiently Earth-like to have made them attractive as potential settlements and indeed, outside of Mars, they comprised Earth's oldest colonies. Outside the orbit of Proxima 5 was an asteroid belt similar to the one surrounding Sol between the orbits of Mars and Jupiter. In one of the larger of those barren rocks was the Proxima Naval Station, the largest navy yard outside the Sol system and one of the most sensitive areas in the entire Terran Consortium. It was there most naval shipping returned for repairs and upgrades while many others were built from scratch in its massive slipways. On constant watch was an entire fleet of war craft, four full squadrons on permanent station in addition to a fifth squadron assigned to protect the two colony worlds themselves.

"Ever been to Alpha Centauri?" asked Mooney, using the common designation for the Proxima colonies.

"A couple times," answered Jules, tired and more than a little stiff after two full days stuck in his seat. He would be glad when Alpha Centauri's twin suns finally came into view as passengers were told they would a few minutes before. "Me and Joan, my wife, outfitted there before heading out in a deep space survey ship for the Interplanetary Geological Survey."

"Really? That's interesting. I thought you were a physicist of some kind..."

"I am, but Joan's a xenobiologist and I was tired of what I was doing at the time and signed on to keep her company on the mission."

"And saved the universe while you were at it," finished Mooney with not a little admiration in her voice.

"You heard about that, did you?"

"Part of our briefing before those negotiations with the Coalition."

"Of course."

The warning klaxon sounded then, alerting passengers of imminent emergence of the liner from hyper-void and in another moment, the twin suns were in view.

"Impressive sight," said Mooney, watching a screen on the seat back in front of her showing the liner's forward view.

"You never said if you'd been here yourself," pointed out Jules.

"I was born on Proxima 4."

"You don't say?"

"Sub-photon engines off," called the pilot's voice over the cabin intercom. "Passengers will be aware that we are switching to thrusters for the remainder of the trip. On behalf of the crew, I hope you've had a pleasant journey and choose Xinhua-Orient for your next holiday run or business trip."

With that, the intercom went silent and the liner quickly passed the giant Alphan suns and entered the Proxima system, headed directly to Proxima 5.

Unlike Callisto, the liner did not simply remain in orbit but proceeded to land on the planet's surface, reversing its position and falling through its atmosphere stern first. The roar of the air outside could be heard distantly through the reinforced tintinabulum hull as Robinson City, capitol of the first and oldest colony on the planet, came into sight on

Jules' seat back monitor. Close to the ground, as its designated cradle came into view, growing larger as the liner approached the ground, the gravitic anchor was brought into play, helping to guide the big ship softly into place.

Later, in the terminal building, Jules hefted his travel bag admiring the view outside the expansive plas-glass windows where a long rank of spaceliners stood in their cradles diminishing with distance. Overhead, a green tinged sky dominated by Proxima's sun almost but not quite outshone one of Centauri's suns that at the moment hung low over the horizon.

"Come on, Jules," said Mooney interrupting his reverie. "You've seen rocket liners before."

"I guess I have," admitted Jules as he turned to follow her to the terminal's information counter.

Arriving there, the manager conducted them into his office whose windows overlooked the rocket field outside including the ship from which Jules had just disembarked.

"I've been informed of your arrival, Dr. Santros, and have instructions to help you out in any way I can," said the manager.

"Good. I'm trying to find a Prof. Georg Heintzle who might also be traveling under the name of Amanda Sanders."

The manager's eyebrows rose at that but he said nothing. Instead, he spoke to his work station, calling up the registration records of the past few days.

"Nothing here under either of those names. I sorry."

"Can I look at the registry?" asked Jules. "Maybe he used another name that I might be able to recognize."

As the manager stood aside to let Jules behind his work station, the air outside was suddenly filled by a crackling sound followed immediately by a huge explosion that rocked the terminal and threw them to the floor. Stunned, Jules was the first to recover and looking out the window, saw that where the rocket he had arrived on had been resting in its cradle, there was only a thick pall of oily smoke and raging fires that threatened to spread the resultant chaos to the rest of the landing field!

9. Assault on an Asteroid

ut the gravitic anchors to the Constitution!" cried Commander Polditz desperate to regain control of the situation.

"But sir, it's still in the slipway!" returned the frightened lieutenant.

"To heck with that!" said Polditz, slamming his fist on the big red knob that cut the gravitic anchors. "Better it's damaged some getting free than being caught in there like a fish in a barrel!"

"Sir," reported the lieutenant. "The Constitution's starting her thrusters!"

"Good," said Polditz, relieved. "Captain Hidatsu guessed what we intended. He's got to get out of there and join the fight."

Even as they spoke, the Constitution roared from the slipway, scraping its surfaces against the stone walls from which it was carved and damaging its hull and much of its sensor array but managing to emerge with all its guns firing.

"Patch me in to Captain Hidatsu," ordered Polditz even as he tried to keep track of the other action taking place all around the naval station.

It all happened so fast. One minute everything was operating smoothly; a typical day at the Proxima slipways. There were three ships in various stages of construction, two light cruisers and a battleship with the Constitution a nearly completed fourth. In fact, it was slated for official commission in only a few weeks time. Cover squadrons at their regular duty stations reported nothing amiss. Then suddenly, from nowhere, slipway #3 was destroyed in the flash of an ion borer and amid the subsequent explosions, sensors indicated that they were under attack by a Coalition task force!

With half its sensors knocked out of commission, there was no way for

Command to tell just how great the force was that raged against it but reserved military hyper-wave communications, protected in hardened arrays, conveyed the order: all vessels converge on the naval station and fire at will.

Another explosion rocked Command with such concussive force that it knocked most everyone from their chairs. In a rage, Polditz clawed back to the communications console and forced himself to remind all ships not to target the enemy's amidships.

"All ships!" called Polditz. "Target enemy thruster housings only. Targeted lasers only. No pulse cannons. Repeat, no pulse cannons!" Turning to his fire control crew working the defense shield embedded in the asteroid itself, he repeated his order. "Blast it! Targeted lasers only!"

"But sir," pleaded a lieutenant. "Our whole defense grid is based around the pulse cannons! If we can't use them, we might as well defend ourselves with pea shooters!"

"Then do it!" growled Polditz, hoping the incoming squadrons could arrive in time to save the yards.

Meanwhile, the explosions had eased off and the Command's sensors that were still operational indicated they had the Constitution to thank.

Appearing as they did well inside the defense perimeter of the facility's cover squadrons, the enemy ships were able to strike suddenly without fear of retaliation by other warships for some minutes. As such, the last thing they expected was a fully armed battleship to emerge from a slipway and give battle. As a result, Captain Hidatsu caught them unawares, damaging two cruisers and a battlewagon in his first volleys. That bought him enough time to clear the slipway and turn about, presenting his bow, and smallest profile, to the remaining members of the enemy task force. "Sir!" shouted the lieutenant manning the sensor array. "The Constitution is firing its bow guns point blank to the battlewagon's broadside...hit, sir!"

"Take it easy, lieutenant," soothed Polditz, conscious of the fact that a number of his staff were newly graduated from the Naval Academy. Well, they would be veterans after this. "Just follow the action and keep me posted."

"Yes, sir."

Secretly, however, Polditz was relieved at the news. The yards could not have taken much more of that pounding. As it was, they were likely to remain off line for months

while repairs were made. Suddenly, a deep rumble passed through Command like an invisible wave of force.

"Sir! Enemy cruiser hitting us with a vibra-drone!"

Remaining outwardly calm, Polditz ordered crews outside to find the 'drone and disarm it before it shook the asteroid to pieces. Then, the steady vibrations in the deck were canceled out by a roar heard even through the mile of rock beneath which Command was buried. From experience, Polditz knew that at least a cruiser sized warship had been destroyed. He did not know which would be worse: one of his own or a Coalition vessel along with its dangerous black hole technology.

"Sir! Constitution reports the Calvary destroyed, sir!"

A cruiser then. One of his own. Polditz was silent for a moment but only for a moment as the reports continued to come in of Constitution's valiant stand and the status of the nearest cover squadron as it bore down on the yards.

"Sir," called the lieutenant manning the sensor array. "More of our sensors are coming on line and indicate one of the enemy cruisers has abandoned the formation and is moving off."

"Direction?"

"Heading toward Proxima 5, sir," came the reply after some hesitation.

Aware of his duty to protect the civilian population first, Polditz did not hesitate to order the Constitution to give chase. Now it was in God's hands. With the destruction of the Calvary, they were defenseless against the remaining Coalition vessels.

Slowly, the pounding of the asteroid began to build up again and Polditz noticed that the vibrations in the deck had not diminished.

Meanwhile, the Constitution had sheered off, firing her port guns as she did so giving the besieging enemy one last salvo before pulling away sunsward on full thrusters. Captain Hidatsu had no hope of catching up to the enemy cruiser before it reached Proxima 5 but he could at least keep it from conducting a sustained assault on the defenseless planet after its initial attack.

Firing ahead, the ship's targeted lasers did little good in impeding the enemy's progress. Whatever its purpose in attacking Proxima 5, it was determined not to let anything sway it from its mission.

"Jefferson," called Hidatsu from the command chair. "Are our cold fusion 'casters on line?"

"Yes, sir," replied his XO. "But they haven't even been tested under controlled conditions yet, let alone field tested."

"Be that as it may, warm them up. They're the only thing that might have a chance of reaching that ship at this distance while leaving their amidships undamaged. If there's anything we can do to save lives on Proxima 5, we've got to do it."

"It's a hellofa situation sir."

"You got that right, Jefferson."

It was another twenty minutes before the 'casters were ready and when they were,

Hidatsu wasted no time in giving the order to fire.

"Direct hit, sir!" said the XO. "Missed the amidships by two standard units."

"Damage report?" The enemy vessel was still moving sunsward and not returning fire.

"Damage to enemy thruster flanges, sir, but its engines are still firing."

"Prepare for another shot."

But before the 'casters could be fired up again, the enemy ship arrived within range of Proxima 4 and had fired its own pulse-cannon toward the surface.

"More speed!" called Hidatsu, leaning forward in his chair.

The Constitution bore down and as it finally came in laser range, a number of its forward guns opened up, wrecking the enemy thruster housings and forcing it out of orbit. It had had time for only a single shot at Proxima 5 and Hidatsu breathed a sigh of relief at that before the cruiser suddenly vanished.

"It must have engaged its black hole drive, sir," said Jefferson, looking over the shoulders of the ship's navigators at the sensor readings.

"Very well, full about," ordered Hidatsu. "Maybe we can still do some good back at the yards."

"Full about!" ordered the XO. "Full power to thrusters! Gun crews, on the alert!"

As the ship's Klaxon's sounded again and the Constitution prepared to plunge into battle again, that battle came to an end as abruptly as it began.



The Coalition task force simply vanished back to where they had come from just as the first Terran covering squadron made its appearance.

In Command center, Polditz permitted himself to relax, easing muscles that had been tensed up from time of the first strike. Even though the Terrans had managed to hold their own and even thwart the enemy's plans, the surprise attack had been devastating and if the Consortium could not do anything to counter the Coalition's clear technological advantage, Earthmen would find themselves confined once again to their own little Sol system as they had been before the invention of the sub-photon drive.

Four hundred years of progress wiped out in a few months! It was unthinkable; but it would happen if nothing was done to even the playing field. But what was being done, what could be done, to in effect, put the genie back in the bottle?

10. Into the Unknown

n Proxima 5, the plas-glass windows of the terminal building had held against the explosion but the resultant pressure wave had not only thrown almost everyone inside to the floor, but scattered loose objects through the air like deadly missiles that luckily, only caused minor injuries.

As Jules recovered his wits, he became conscious of the sounds around him, alarm klaxons and sirens filled the air and slowly as people dusted themselves of debris and rose to their feet, excited voices were raised all around.

Outside, emergency flyers sprayed foam composed of aluminium hydroxide over the area of the explosion to keep fires from spreading to nearby cradles. The chemical foam had great heat absorption qualities that would cool hot metals leaving a residue of alumina as a protective coating. On the ground, crews dressed in foil coveralls, likewise sprayed a gel composed of huntite and hydromagnesite that would decompose under heat turning to both water and carbon dioxide.

In the meantime, thick clouds of oily smoke curled into the green sky, a grim reminder of all that was left of a once proud space faring liner.

"What happened?" asked Mooney, as Jules helped her up. "Was it a fuel leak, do you think?"

"Impossible!" said the manager, straightening his chair and throwing himself into it. "We employ the latest safety measures!"

"That was no accident," said Jules, easing Mooney onto a nearby couch.

"What do you mean?"

"That was a concentrated neutrino spread," replied Jules going to the window and looking at the hole that used to be cradle 6. "It's the preferred method of planetary bombardment by the Coalition. I could tell by the crackling sound just before the explosion. We've been attacked!"

"But only the most powerful warships have that kind of capability," insisted Mooney.

"I know. They were after us."

Mooney sat stunned. "All that just for us?"

"The dwarf-matter trap back on Earth didn't work," explained Jules. "So this time, they tried something more general. Obviously, they assumed we might be still on the liner. A neutrino spread is a targeted weapon. You don't use it at random. That liner was hit deliberately. What it means is they're getting desperate so we must be getting close."

"You said we were attacked?" asked the manager who suddenly grew

frightened again. "And they're after you? Then you should go! Before they strike again! As long as you're here, the lives of thousands of innocent people could be endangered."

"They're already endangered or haven't you heard? The Consortium has been at war with the Outer Arm Coalition for years," reminded Jules. "Still, there hasn't been a followup strike. That's not how the enemy operates. Something must have happened to

interfere with their routine ... "

"Mr. Stannis!" said a frightened clerk appearing in the office doorway. "We need you right away! Janice has been hurt and the baggage handlers are threatening to walk off!"

"I'll be right there," said the harried manager who left the office just a tad too eagerly.

After he was gone, Mooney joined Jules at the window.

"You said it was a Coalition weapon," she said. "Does that mean they're involved in this too? They're mixed up with the renegades?"

Jules thought for a moment.

"Not necessarily. If there's an informant on our side feeding them information like the theft of the Navy ship and if that informant was cooperating with the renegades, he could be feeding specific information to the Coalition that they'd be certain to act upon without ever knowing that their actions were serving the purposes of the renegades."

"So the Coalition is being used?"

"Why not? What reason would they have to stop us? If we succeed in our mission, it would be to their benefit. They'd continue to have the upper hand in the war."

"But that begs the question, who knew we were here?"

"It must have been O'Shea," said Jules grimly.

"...or Revoir," countered Mooney.

"But O'Shea was on the scene at the negotiations, remember. And if you'll recall, the enemy only got notice of the theft of the Navy ship just before the meeting. Otherwise,

why would they have bothered to attend it at all?"

Jules' reasoning brought Mooney up short.

"I'm trying to figure out why he sent me to Earth then," she said at last. "He said it was because the ministry didn't trust the military..."

"Ridiculous on the face of it," replied Jules. "Who do you think has been fighting and dying in this war all these years? You don't think the Navy is as anxious to find who stole their ship as anyone else is? No, he sent you to run interference. He was hoping you'd either uncover and remove evidence before I arrived, or trip me up somehow afterwards."

"And I almost did," said Mooney, recalling how she went through Heintzle's house.

"Well it's too late to worry about that," said Jules, turning to the manager's work station. "Let's see if this unit has access to some stellar charts."

"Stellar charts?"

"Right. Don't know why this didn't occur to me before," said Jules, settling himself behind the work station.

"What didn't occur to you?"

"The direction Heintzle took when he left Earth. Why did he come to Alpha Centauri? He could have gone any number of directions but he came here."

"So?"

"So, there's no reason not to assume a direct line from Earth to Alpha Centauri needs to stop at Alpha Centauri. The logical conclusion to reach is that he was headed somewhere in this general direction. Why not continue that line outward from Alpha Centauri?"

"Show me 3D stellar mapping of the Milky Way Galaxy," Jules told the computer.

Instantly, a three dimensional display was projected in the air over the work station.

"Label local star systems in neighborhood of Sol, Orion arm."

The image reconfigured slightly to indicate Sol and other star systems of the Terran Consortium including Alpha Centauri which lay on the far side of Sol, away from the galactic center.

"Hmmm."

"What are you looking for?" asked Mooney.

"I'm wondering where I'd go if I was a gravimetric engineer and a member of a team of scientists expert in black hole technology..."

"To a real black hole?" guessed Mooney.

"Close, but not quite."

"Then where ...?"

"Here, I think," said Jules, indicating a point on the map. "It's pretty far from here though...over 5,000 light years at least."

"PER-734?"

"A stellar designation. The prefix means that it's located within the Perseus arm of the galaxy."

"Is it a star?"

"Used to be. It collapsed billions of years ago, maybe soon after the

formation of the galaxy. A proto-black hole. Something well short of that but massive enough to draw anything within its gravitational reach which is pretty far. What's happened over the billions and billions of years since its collapse is that it has drawn everything in reach toward it, even the basic component of the universe, dark matter. Over time, it all formed a crust around the singularity's event horizon, in effect creating a natural Dyson's sphere. Really quite remarkable...I doubt there's another such phenomenon in the galaxy or anywhere for that matter."

"What's a Dyson's sphere?"

"It's called that after a twentieth century researcher named Freeman Dyson who postulated the creation of massive man-made megastructures in space such as using matter to enclose a whole star. That way, people could live on the inside surface, warmed by the sun and with unlimited amounts of space to occupy."

"And you say this one's a natural sphere?"

"Right. The super massive collapsed star inside it has been drawing matter to it long enough for a sphere to form. Me and my wife, Joan, visited it briefly while we were working for the Interplanetary Geological Survey."

"And you think that's where Heintzle is hiding out?"

"Seems logical. It's more or less on a straight heading from here and its magnetic properties would have been familiar to a group of scientists specializing in the effects of gravity and mass."

"But how do we get out there? Even I know that no rocket liners ever leave the Orion arm..."

"True. But I've got some influence in high places."

Jules pulled out his telcomm hoping that stellar communications had not been broken by the attack. Neutrino weapons had been known to play havoc with atmospheric signaling.

Switching to the hyper-waveband, one reserved for military use only, Jules quickly found himself in somewhat instant contact with MI headquarters on Mars. There was a few seconds delay in messaging, but he could live with that.

"Director Revoir. This is Jules. Aside from almost being killed by a Coalition cruiser, not bad at all, sir...what's that? They did? When? I see. It must have been launched to provide cover for the attack here on Proxima 5. I thought the attack indicated that we were getting close but that clinches it. Sir, I don't want to say exactly what my plans are over this signal but I'll need transportation...armed transportation...that's right. We think alike sir. I realize that things must be getting critical and I'm moving as fast as I can. But if it's any consolation, I think I'm closing in, sir. Very well, sir...oh! Almost forgot. You'd better take first ministerial assistant Bentley O'Shea into custody. He's the Coalition informant we've been looking for. I think the evidence is pretty strong, sir. I have no time to explain further but I strongly urge you to put him on ice. Good. Thank you, sir."

"Are they going to pick up O'Shea?" asked Mooney.

"Yeah. And you know what? That attack we just had was only part of a larger operation. A whole task force attacked the Proxima yards while our rocket liner was being destroyed. We're getting hot, Mooney!"

"Call me Jessica or Jess, will you? That's what my friends call me."

"I think we'd better keep it formal for now, Mooney," said Jules.

Mooney didn't seem to like that. A frown creased her forehead and her hazel eyes narrowed. But the storm soon passed with the realization that they were closing in on Heintzle.

"So did I hear you've arranged some transport for us? It better be

something more than a shuttle because the Perseus arm isn't just a hop, skip, or jump away."

"Oh, I think it'll be adequate. Besides, who said anything about you coming along? I mean, I'm thankful for your help so far, but I think you've fulfilled your obligations in this thing whatever they were. After all, the man who sent you out in the first place is likely a traitor..."

That frown returned as quickly as it had vanished.

"That may be," admitted Mooney. "But if you think I'm going to leave now, you're crazy. Besides, you wouldn't want me to stay behind and start talking do you? Might be a little premature for word to get out particularly if things end badly and the galaxy is destroyed..."

"Don't even think such a thing," said Jules, who considered having her held by local authorities before deciding against it. Not because he thought anyone would believe her but that despite himself, he'd become used to having her around. She was someone he could talk to about the mission without having to fill in the back story.

"All right, you can tag along," he finally said, not without a twinge of guilt regarding Joan. Was he really giving in because he didn't want to be alone on the case or because he was attracted to her? It was a notion he continued to wrestle with for the next several hours until they were picked up by a Navy shuttle and taken off planet.

For Mooney's part, she quickly realized the understatement with which Jules had spoken about providing transportation when she stepped out of the shuttle and onto the deck of the Constitution, the Terran Navy's newest albeit somewhat worse for wear battleship.

"I guess you weren't kidding about having influence in high places," she whispered, leaning close to Jules. "This is what I call crossing the galaxy in style." As the two worked at getting their space legs back, they were led by the XO through a maze of corridors to the fore part of the ship and the captain's ready room immediately behind the bridge. They were allowed to wait only a few minutes before the commanding officer himself appeared.

"Welcome aboard," said Capt. Hidatsu, extending a hand first to Jules then to Mooney. "You must be some VIPs to hold up a battleship while there's a war on."

"Our business is pretty important, captain," said Jules. "Unfortunately, that's all I can tell you for now. I'll fill you in on the details once we're under way."

Hidatsu said nothing, a tribute to his professionalism.

"I understand the Proxima yards were attacked by a Coalition task force?" asked Jules.

"It was. We were still in the slipway when it started. Almost never got the chance to get out."

"Then what I heard is true? The Constitution is a newly commissioned battleship?"

"Well, it is new. As for commissioned, that's another thing. It has had its baptism of fire, that's for sure."

"How bad are things at the yards?"

"Well, they're not good. Two of three of the slipways are out of commission. Three cruisers have been badly damaged and a fourth destroyed. All hands lost."

"I'm sorry to hear that, captain," said Jules. "But you might be happy to know that this mission is likely to help settle the score."

Hidatsu's eyes lit briefly at that before he turned to his XO.

"Mr. Jefferson. See our guests to their quarters then report to the



bridge. We'll be getting underway momentarily."

"Aye, sir!"

Slowly, the big ship's maneuvering thrusters edged it out of orbit and as Proxima 5 fell away astern, main thrusters came into action adding speed. Outside, repair crews continued to work for a time doing what they could to bring damaged sensors back on line and fix jammed gun ports. Soon enough, however, they were ordered inside and as the battleship proceeded to exit the system, Hidatsu ordered a series of drills performed to gauge the crew's readiness for battle. And while that was being done, he and Jefferson once again retreated to the ready room to meet with Jules and Mooney.

"I don't think we've been fully introduced, captain," said Jules. "As you know, my name is Jules Santros and this is Jessica Mooney. What you might not know but perhaps guessed, is that I'm an operative for military intelligence and Mooney here is an agent for the Exterior Ministry."

"We figured it was something like that," said the XO.

"And what exactly is your mission, Mr. Santros?" asked Hidatsu.

"Our mission, which includes everyone aboard this ship, is to perhaps save the galaxy, captain," said Jules simply. "You no doubt have your orders that if engaged by the enemy, you're to retreat first and, if forced to defend yourself, fire your weapons to disable the enemy not destroy him?"

Hidatsu nodded. "Because some of their ships might be armed with some kind of black hole technology that if damaged, might initiate a time/ space wave that could spread across the galaxy. I don't pretend to understand all the physics but I know enough to be wary about it."

"And it's right that you should be," returned Jules. "And I've been tasked by military intelligence to make sure it never happens. Captain. Some weeks ago, a Navy ship was stolen by parties unknown. That, in turn, sunk negotiations with the Coalition aimed at coming to an agreement to disavow use of black hole tech. News had somehow reached enemy negotiators that the ship was being used as part of a secret Terran project to develop the technology for itself even as it negotiated with the Coalition. Negotiations broke down with the result that the Coalition continues to use the technology while our own forces must stand off for fear of accidentally rupturing an enemy ship's containment unit and loosing a time/space wave that could eventually destroy the whole galaxy. And believe me, that is very likely. In any case, evidence pointed to a group of renegade scientists who stole the Navy ship and who have retreated somewhere to continue working on the black hole tech against the wishes of the Consortium. I traced one of them to Earth and then to Alpha Centauri. We lost him there but I have reason to believe he and the others are hiding out at PER-734..."

"Never heard of it," said Hidatsu rubbing his chin. "But it sounds like it's in the Perseus arm..."

"It is."

"Then we've got some traveling to do. It could be dangerous you know. We'll be traveling without an escort. After the attack on the yards, no colony is deemed safe now. There's going to be a general retreat to the home worlds and every ship will be needed for security."

"But we have a couple things going for us, captain," said Jules. "I believe the traitor that has been informing the enemy of our movements has been stopped so the Coalition will have no idea of what's become of us once we leave for the Perseus arm. Also, like the Consortium, the Coalition has never been too keen about expanding across the Gulf to Perseus so we shouldn't encounter any enemy patrols."

"True. Well, no sense wasting time then. Mr. Jefferson, set course

across the Gulf to Perseus. I'll confer with navigation about getting us from there to PER-734."

"Aye, sir," said the XO stalking from the room.

"If you'll excuse me, Mr. Santros...Miss Mooney," said Hidatsu, sketching a salute. "It'll be a few weeks before we can complete the crossing and I'm sure we'll have plenty of time to talk further in the interval."

Mooney looked at Jules after they were alone.

"You have any plans in mind for when we get there?"

"Not really," Jules admitted.

"What if you guessed wrong and Heintzle and the others aren't at PER-734?"

"I don't really want to consider that."

A few days later, they were standing in the little observation deck forward looking out of the few plas-glass outlets into open space. Far ahead a thin, misty line stretched across utter blackness, the only evidence of the Perseus arm of the Milky Way far across what was popularly known as the Gulf...that multi-light year gap between the Orion and Perseus arms of the galaxy.

Behind them, as a quick glance at a rear view of the ship being displayed on several monitors showed, was the thick swarm of stars that made up the Orion arm and somewhere, tens of thousands of light years farther on, the central hub of the galaxy.

But just now, on the other side of the plas-glass enclosure, was mostly empty space. Deep blackness dotted only a few pinpoints of light indicating other, infinitely distant galaxies, all racing in every direction away from each other. The sensation as the Constitution left the Orion arm was one of stepping off a cliff into empty air.

"Feels strange, doesn't it?" asked Mooney, wanting to hold Jules' arm but not daring. "Like going off the edge of the world."

"Now I know how Christopher Columbus must have felt when he first lost sight of land on his voyage to discover the new world," said Jules not taking his eyes from the enclosure.

"I wonder what we'll find over there?"

Jules shrugged, hands in the pockets of the ship's coverall uniforms they had been issued.

"Somehow, I can't wait till this is all over," said Mooney. "I want to go home."

"If there's a galaxy to go home to," Jules said, thinking aloud.

He never felt it when Mooney took his arm.

11. Retreat

aptain Nikolai Lescu sat in his command chair watching the steady string of shuttles that were rising up from the otherwise barren moonscape of Callisto. Any other time he would be admiring the awesome site of Jupiter with its drifting red spot as it dominated the heavens beyond the little satellite. But this visit was like no other time he had ever sailed the Jovian system. This time, he was here to oversee the mass evacuation of the resort area.

Since the surprise attack on the Proxima yards two weeks before, the Consortium had been forced to go public with the news that the war with the Coalition was going badly. Through some means (and Lescu, like many in the Navy, knew it was due to the enemy's use of black hole technology, something the Consortium had no defense against as yet), the enemy had taken the upper hand in the contest necessitating extreme measures by the government to protect its citizens.

As a result, a general order had been issued for a retreat from nonessential or sparsely populated colonies to worlds more central to the Consortium where naval forces could be concentrated for better protection.

Barnard's Star, Altair, Epsilon 12, Rigel 2, New Calvary, as well as Alpha Centauri, and the Sol system of course, were to form the last line of defense with orders to accommodate the populations of their sister colonies such as the vacation resort here at Callisto.

Already, every space aboard the City of Rome had been filled up with residents, hotel workers, and other concessionaires who remained behind after the earlier departure of honeymooners and other vacationers on commercial liners requisitioned for the evacuation. Now, they were being redirected to other ships in the squadron, a half dozen cruisers and a tender. Lescu estimated that there would be enough room.

Having lingered here supervising the evacuation, he was anxious to get going, not wishing to be caught by surprise if Coalition battleships suddenly appeared out of nowhere as they had been doing. Not that he feared a fight. He had confidence in himself and his crews. It was just that this time, his ships would be filled with vulnerable civilians with orders not to shoot to kill enemy vessels.

That was no way to fight and win a war. But as the battle lines shifted closer to the home worlds, the Consortium would be forced to retaliate with more vigor, taking the chance on destroying a Coalition ship and perhaps setting in motion the time/space effects of the feared black hole technology.

For his part, Lescu thought it worth the chance. Better to risk the

danger than to live under the heel of a blasted Drool!

12. Confrontation

t loomed before them bigger than any planet any of them had ever seen and it was still a full light year away.

"Look at the size of it," murmured an awed crewman manning the navigation hut.

Jules and Mooney were standing on the bridge somewhat to the side of Hidatsu sitting in the command chair.

Though he had known what to expect, Jules too was impressed.

PER-734 had been discovered over fifty Earth years before but visited fewer than three times so far as he knew and one of those times was he and Joan's fly-by some years ago while mapping the region for the Survey. They hadn't lingered because at the time it was not known what interest the Coalition might have had in the area.

"How big is it, Dr. Santros?" asked Hidatsu, who had learned over the past several weeks of Jules' standing in the scientific community.

"It's radius from the collapsed star at its core is about 48 million miles," replied Jules. "A perfectly formed natural Dyson's sphere, maybe the only one in existence."

"You think it was the mass of the collapsed star that formed it?"

"Couldn't be anything else. But it must have begun billions of billions of years ago; maybe from when the universe was first formed. It would take that long to draw so much matter to itself. Likely it was a proto-star, a star that was never quite able to generate the energy needed to ignite properly. Instead, it collapsed forming a super heavy core that began drawing in nearby matter."

"Like a black hole for instance?"

"Something like that but not as powerful. Strong enough though, to attract dark matter, the microscopic stuff that permeates the entire universe, leftover material from the big bang. Obviously, it was all drawn here over billions of years, coalescing somehow around the star's event horizon where the shell began to form."

"Do you think it's safe for a ship to land on?" asked Mooney staring at the slowly growing size of the distant object that was encircled by a glowing ring of debris only visible from a certain angle.

"By now I would judge so but I wouldn't take any kind of chance on a landing until a thorough study could be done of the gravitics surrounding the sphere," warned Jules.

"So if they're here, the renegades likely wouldn't be on the surface?" asked Hidatsu.

"Right. My guess is that they're either in orbit or located on one of the larger pieces of debris being drawn to the ring surrounding the sphere."

"Mr. Terrece," said Hidatsu to a crewman manning the sensor array. "Can you read anything down there?"

"I'm not having an easy time, captain, that's for sure," said Terrece. "A combination of electro-gravitic clutter is interfering with my instruments."

"That'll be caused by the interaction between the star's gravimetric pull and friction

generated by the structure of the sphere itself. It's all held together through a delicate balance of dynamic forces."

"How delicate?" asked Hidatsu.

"Oh, don't worry. It's not like it'll just fall apart when you touch it! If

this ship crashed into the sphere head on at full thrust, it's not likely to cause any more disturbance than it would doing the same thing on Earth. We're talking about massive, galactic structures here."

"Well, I'm relieved anyway."

"So how do we proceed from here?" Jules wanted to know. "Finding the stolen ship is going to be like looking for a needle in a haystack especially with all that interference out there."

"We don't have to look for them," said Hidatsu. "We'll let them tell us where they are. Assuming that they haven't shut down all of the ship's systems, we should be able to find them by picking up traces of routine ship operations such as power levels, life support functions, and even some hyper-waveband dormancy signals. That last is something civilians might not know anything about."

"Sensor officer will begin monitoring all bands," ordered the XO.

"Rig for silent running," added Hidatsu. "Search pattern Sigma." "Battle stations!" called the XO.

"Battle stations?" asked Mooney. "Is that necessary?"

"I didn't rise through the ranks by being reckless, Miss Mooney," noted Hidatsu. "It's likely that these scientists you're looking for are untrained in the operations of Naval vessels but there's no sense in taking chances."

As crewmen scrambled about taking their stations, Jules and Mooney just tried to stay out of their way. But gradually, things settled down as the big ship assumed a wide orbit around the sphere and well outside the range of debris being slowly drawn to the area.

Jules' attention was taken by a surface monitor showing the curvature of the sphere as objects, picking up speed as they approached it, went on to crash below, adding their mass to the shell surrounding the dead star. He wondered just how powerful the dwarf-matter inside really was? Could it be that a black hole did lurk somewhere in its interior?

As the Constitution continued to circle the sphere, a multi-colored glow rose over its horizon soon revealed as a million mile long streamer of interstellar gas dotted with stars, a nebula, as it was being drawn in by the object's irresistible pull.

"Incredible!" breathed Hidatsu, watching the drama unfold on the bridge's main screen.

"Sir!" called the sensor officer. "We have a signal!"

"Locate and identify!"

"It's an HBD sir," replied the officer, then, realizing that their guests might not understand, "a hyper-bandwave signal."

"Can you follow it in?"

"No problem, sir."

"Feed the coordinates to navigation," ordered Jefferson. "Stay on top of it."

"Any other substantiating signals?" Hidatsu wanted to know.

"Getting some low energy readings, sir," said the sensor officer, putting a finger to his earpiece. "Definitely life support."

"We've got them," said Hidatsu to Jules. "Adjust forward cameras to the HBD and follow it in."

"Aye, sir."

"Propulsion. Steady as she goes. We don't want to spook them."

"Aye, sir."

Slowly, the great ship eased its way inward from its previous orbit, the



navigator demonstrating his skill as he steered between the increasingly crowded space surrounding the sphere. All around them now, debris began to pick up with some quite large chunks mixed in, then it was there, dead ahead: the John Crosse!

"Steady as she goes," said Hidatsu, his eyes riveted on the vessel that slowly grew as they approached it.

With more detail in view, Jules could see that the ship was a cruiser, barely half the size of the Constitution and so bristled with less gun emplacements that were no less dangerous for that. Ominous looking recesses in its bow hinted at pulse cannons that could be brought into play if those aboard had the inclination.

Jules hoped they didn't and began going over his plan of what he wanted to do when the ship had finally been found. Unless the renegades offered resistance of some kind, he would ask to come over and try to talk them into surrendering. After all, their cause was pointless now that that they had been discovered. He hoped to convince them of that and avoid the necessity of a boarding party and the humiliation of seizure and arrest.

"Stop engines," ordered Hidatsu.

"Stop engines," repeated the XO.

"Engines stopped," said the propulsion officer.

"Propulsion. Use thrusters as needed to maintain position," said the XO.

"Aye."

"Now comes the tricky part," said Hidatsu. "Communications. Open a channel to the John Crosse."

"Channel open, sir."

"This is Captain Paul Hidatsu of the Consortium ship Constitution,"

opened Hidatsu. "Identify yourselves."

There was a pause before a voice came over their earpieces.

"We are a group of Terran researchers conducting experimentation," said the voice. "What is your business here? We did not request any aid."

"Heintzle!" whispered Jules.

"You misunderstand," said Hidatsu, playing along for the moment. "We're not here to answer any distress calls, we're here to arrest you in the name of the Consortium."

Silence again, then, "I'm afraid there's been some mistake, captain..."

"No mistake," said Hidatsu firmly. "Our sensors identify your vessel as the John Crosse, a Navy ship that was reported stolen from the Sol system months ago. As such, I have orders to impound it and to apprehend and return anyone aboard for questioning and possible prosecution."

"And if those aboard refuse to cooperate?"

"We will board the ship and fulfill our orders," replied Hidatsu. "But know that if such an extreme contingency is forced upon us, it will not go well for you when you're returned to Sol."

Jules thought he heard some chuckling from the other ship.

"I doubt that things will go well for us in any case, captain. But tell me, is Dr. Jules Santros with you by any chance?"

Hidatsu saw no reason not to admit it. "He is."

"Hello, Jules," said the voice. "You are nothing if not persistent. A quality, as I recall, that endeared you to our superiors in military intelligence."

"Hello, Georg," returned Jules. "I might say the same of you seeing as how you've refused to drop that research we were working on."

"It had too great a potential, Jules. Our superiors were thinking too

small. They had too limited imaginations. Shutting down the project was premature...especially considering the problems the Consortium is having with the Coalition these days. "

"A problem exacerbated by you and your colleagues," countered Jules. "If you hadn't acted as rashly as you did, both sides would have come to an agreement on use of the technology and thousands of lives saved."

"I regret that, but often in order for science to advance, there must be casualties."

It was Jules' turn to remain silent then.

"By your silence I assume you disagree, Jules," continued Heintzle. "What say we call a temporary truce with the good captain's permission and you can come over for a little chat? Perhaps this situation can be defused without the need for boarding parties and arrests and such."

With a signal from Hidatsu to put Heintzle on hold, the captain turned to Jules.

"Seems like you and he are reading from the same script, doctor. What do you think? Is there any reason not to proceed as you planned?"

Jules gave it some thought before replying.

"I think so," he said. "Heintzle and the rest of them are reasonable men. They're not insane despite the lengths they've gone to in this quixotic enterprise. There's still a chance I can reason with them."

Hidatsu sighed. "My orders are to do what you ask. Open channel." He nodded to Jules.

"Georg," said Jules. "Stand by. I'm coming over."

"Excellent!"

"Jules, are you sure you ought to do this?" asked Mooney. "What if you're wrong about them and they take you hostage or something?"



"My orders are to stop them," reminded Hidatsu. "Any way I have to." "I stand by our plan..."

"Your plan, you mean..." said Mooney, clearly more concerned than a professional colleague should be.

"There's no other choice," insisted Jules, uncomfortably. "It's either me going over to convince them to surrender or use force and who knows what might happen if they've managed to create their own black hole over there."

"I still don't like it but...be careful!" said Mooney, giving him a quick, little hug.

"I will," reassured Jules, fighting to keep from feeling anything more about Mooney than professional concern.

13. Collapse

he trip by shuttle from the Constitution to the John Crosse was relatively swift and uneventful with Jules being cycled through the airlock mechanism with little formality. On the other side, he was greeted by his former colleagues with Georg in the lead.

"Good to see you again, Jules," Georg was saying, his hand extended.

Hesitating for only a moment, Jules took it. "I wish it were in better circumstances."

Georg waved aside such concerns. "I won't insult your intelligence by saying something like not concerning yourself with it, but I do wish you'd keep an open mind as we explain our motives."

"I know all of you were opposed to shutting down research in black hole technology when the decision came down," said Jules. "I assume none of you wanted to leave it at that."

"Something like that," conceded Georg.

"We did it for science," declared Henry Martin, a heavy atom expert.

"The military had no right to shut us down," added the team's quantum mech theorist, Klaus Saltoumas. "We have a duty as scientists to pursue knowledge wherever it leads."

"Even if it leads to the destruction of the galaxy?" countered Jules.

"It was for that very reason that we needed to continue," replied Saltoumas. "How else could we learn how to tame the technology?"

"But all it would take was a single lab accident, one miscalculation, even a lone madman if you will, to set those forces loose," said Jules. "And I know what I'm talking about; I had to deal with such an accident first hand when I came across a disabled Coalition warship that had used black hole tech."

"But that's just it," said Martine. "We've solved the problem of security or at least we believe we're almost there."

"Gentlemen," said Georg. "Why don't we hold off on this discussion until we show Jules the progress we've made. Then we can talk about it on a more fully informed level."

So saying, Georg gestured for Jules to follow him.

As they fell in, the gravitic engineer filled in the awkward silence with some explanatory talk.

"I'm sorry we caused the trouble we did when we took control of this ship," said Georg. "But as you know, the only way anyone can get around Consortium space is either by naval vessel or some commercial liner. Any other form of transportation is too expensive for any other arrangement."

"But by doing so, you wrecked negotiations with the Coalition,"

pointed out Jules.

"Or didn't you take that into account? Or maybe you did?"

"It had crossed our minds," admitted Georg. "If it did, so much the better as it would force the Consortium to continue research into artificial black hole technology. Unfortunately, that failed to happen and we were forced to proceed with our plans."

"Which was...what? Set up your own lab somewhere?"

"Exactly. Something I suspect you realized quite early on."

"You had to need the ship for something. The logical answer is that you needed it to take you somewhere where you could work undisturbed. By the way, how did you manage stealing the ship in the first place? One doesn't go around hijacking a Navy cruiser at the drop of a hat."

"Well, we had help ... "

"Bentley O'Shea?"

"You know of him?"

"Unless I miss my guess, he's now the guest of your former boss, director Revoir."

"Ah. Then I guess it'll do no harm if I told you that it was O'Shea who helped us with this ship. You see, we'd met at a diplomatic function a couple years ago...he was in the company of a charming young psychologist..."

"Don't tell me," said Jules. "Amanda Sanders."

"You have done well on this case, Jules!"

"I was afraid of that. She was quite a charming girl. I suppose it was her that passed the information about the stolen ship to the Coalition delegation during the negotiations?"

"I assume so," said Georg. "I'm not sure as O'Shea never told me that

he intended to use the theft to undermine the negotiations."

"And I suppose you also didn't know about the Coalition attack at Proxima that was intended to kill me either?"

"I hadn't heard about that," said Georg, and Jules believed him. "Sorry."

"Don't be, because it was you that set that trap on Earth that came much closer to killing me than the Coalition Navy did."

"Again. Sorry about that. That trap was meant for anyone coming to look for me..."

"Was that why you used the black hole tech project cover name in your records? Only someone who was part of the project would have picked up on that clue."

"Well, you have me there, Jules," admitted Georg. "Of course, I didn't know who Revoir would be sending after us but you were always a possibility of course."

"So you took the John Crosse out here," said Jules, changing the subject.

"We figured it was far enough away and well outside either the Coalition or Consortium's areas of interest. Did you know Aeroflotilla Laboratories sponsored an expedition out here some years ago? They did. That was before my services were loaned out to military intelligence. I was on that mission and remembered the area when it came time to decide where we were to conduct our research. The unique gravitic effects of PER-734 would not only provide some measure of cover from long range sensors, but afford an interesting environment for testing."

"Too bad you weren't as familiar with naval operations and capabilities as you were with PER-734." "Good point," admitted Georg. "But water under the bridge as they used to say. Ah. Here we are."

They had come to the engine compartment and following Georg inside, Jules was once more confronted by the awful and wondrous sight of a temporal black hole, its unfathomable power somehow harnessed, likely within the tenuous confines of a radical cube. The whole arrangement was connected into the ship's sub-photon engines,

obviously with the intention of using the black hole's power in the same manner as the Coalition was doing. Something moved deep in the pit of his stomach as he contemplated the incredible danger represented by what he was seeing.

"Recognize it?" asked Georg, smiling.

"A temporal black hole," replied Jules, not taking his eyes from the glare of the singularity.

"Yes, we built it based on our research with military intelligence. Producing a hydrostatic core, we heated it to 2,000 K allowing for the ionization of hydrogen and helium atoms. That permitted excess energies to escape in the form of radiation. Collapse followed and..."

"A star is born."

"Cute. From there, it was a simple matter of induced starvation of stellar nucleosynthesis forcing the creation of a white-dwarf and thence, a black hole..."

"Nothing we didn't accomplish in the laboratory before. The real question is containment. We always had a problem maintaining its integrity. The radical cube used as a containment unit and existing as it does in four dimensions, was a successful alternative in keeping the singularity stable in space, but time always remained a problem."

"And it remains so," interjected Martine.

"Henry..."

"You know it's so, Georg," said Martine. "Even though we had your report from Cygnus Alpha 12 including the news that Coalition scientists built the radical cube first before growing a black hole inside it, we still haven't been able to lick the containment problem."

"You're too pessimistic, Henry ..."

"The cube is unstable, Georg, and so long as it is, this continued research is not only useless but dangerous. In fact, our being located here within the flux of PER-734 has made the containment unit even more unstable. The entire sphere is surrounded by an electro-magnetic charge that interferes with the cube's theoretical foundations."

"Nonsense," insisted Georg, moving toward the unseen containment unit where its multiple angles and planes existed more in theory than reality, holding in suspension an artificial hole in space/time.

"Georg, don't..." pleaded Martine as the rest of the group leaned forward as if actually being drawn in by the harnessed power of the black hole.

"We need to prove to Jules that our work has shown progress, true progress, if we are to convince him to advise the government to let us continue with our research," said Georg. "Or have you forgotten that there is a Consortium battleship outside with its guns aimed directly at us?"

"But there's no need to take chances like...Georg! Stop!"

It was too late. Desperate to save the situation, Georg pulled a pulsepistol from beneath his lab coverall and aimed it at the unseen cube. As Jules stood, taken by surprise, Martine lunged toward his colleague.

Although he managed to strike up Georg's gun hand, it was not enough. The weapon went off and a high pressure pulse leaped from the weapon and hit the screen with a force that sent streaks of energy, visible as charges of electricity, coursing along the pressure lines that made up the radical cube.

For a minute, as everyone held their collective breaths, there was every sign that the unit had maintained its integrity. Suddenly, light flickered along its hidden seams, revealing fault lines and exposing all space/time to the effects of the singularity.

Horrified, Jules could only recall the close call he had had on Cygnus Alpha 12 and how nearly the whole galaxy had come to extinction. With a prayer on his lips and thoughts of Joan back on Mars and Mooney on the Constitution, both blissfully unaware of the danger that threatened them and everyone else they had ever known, he prepared to once again leap to the rescue, hoping he could repair the damage in the same way he had done before, by rebuilding the radical cube from the inside out.

But before he could take two steps toward the breached containment unit, Martine stopped him.

"Head back to your ship, Jules," he shouted. "I'll attempt the shut down. Don't worry, I read your report thoroughly and understand how you managed the containment. The conclusions reached by our superiors were correct. This technology is too dangerous to

use. Even if we managed to find a way to contain it, the chance would still remain that either something could go wrong or that human fallibility would tell. Go back! Get away while you can!"

With that, Martine plunged into the singularity's expanding event horizon and once again, Jules noted the distortion effect that made it appear that Martine was at once standing still while also slowly being pulled into the space/time vortex.

Around him, the others talked excitedly. Some moved to work stations to monitor Martine's progress while others still held an astonished Georg from plunging himself into the event horizon.

Determined to do what he could, Jules moved to take hold of Martine's waist to anchor him in the present even as his arms and face stretched as they would in a funhouse mirror. Then, as if in slow motion, he saw or sensed, the continued breakdown of the containment unit. Martine, for some reason, was not taking the approach that Jules had back on Cygnus Alpha 12. He was doing something else...

14. Rewind

r!" called the sensor officer. "We have a signal!"

"Locate and identify!"

"It's an HBD sir," replied the officer. "A hyper-bandwave signal."

"Can you follow it in?"

"No problem, sir."

"Feed the coordinates to navigation," ordered Jefferson. "Stay on top of it."

"Any other substantiating signals?" Hidatsu wanted to know.

"Getting some low energy readings, sir," said the sensor officer, putting a finger to his earpiece. "Definitely life support."

"We've got them," said Hidatsu to Jules. "Adjust forward cameras to the HBD and follow it in."

"Aye, sir."

"Propulsion. Steady as she goes. We don't want to spook them."

"Aye, sir."

Slowly, the great ship eased its way inward from its previous orbit. Then it was there, dead ahead: the John Crosse!

"Steady as she goes," said Hidatsu as the Constitution approached.

With more detail in view, Jules could see that the other ship was a cruiser, barely half the size of the Constitution with correspondingly fewer gun emplacements. Ominous looking recesses in its bow hinted at pulse cannons that could be brought into play if those aboard had the inclination.

"Sir!" said the sensor officer. "I have some funny readings here." "Explain."

"Not sure, sir, but they appear to be similar to the gravitics we use for our artificial gravity..."

"You're sure you're not picking up the flux from the sphere?" asked Jules. "Remember, there could be a black hole in there; a collapsed star at the very least..."

"Could be, sir, but...wait one...it's spiking, sir! And it's definitely coming from the John Crosse."

"What...?" Hidatsu was asking Jules when suddenly the view on the forward monitor showed the John Crosse as it collapsed in on itself. In seconds, a ship that was able to hold a crew of 50 was reduced to a mass of crumpled metal the size of a basketball.

"My God!" Jules mumbled, awed at the sight.

"What? What's happened?" asked Mooney, taking hold of Jules' arm.

In another few seconds, the ball of metal had compressed even further. There was no evidence at all that it had once been a man made object. Then, it began to lose its position over the gigantic sphere below, its orbit deteriorating quickly. In seconds, it had fallen thousands of miles, toward the sphere's surface, picking up speed quickly until suddenly, it disappeared from view, crashing through that ancient billion, billion year old crust, hurtling to join the invisible speck of super heavy mass at its heart.

"What the heck just happened?" demanded Hidatsu. "Were we too late?"

"Yes," said a still stunned Jules. "Too late."

"So what happened?"

"I can only speculate, but my guess is that something went wrong with their project," said Jules, still staring at the forward monitor that now showed only empty space where the John Crosse had been only seconds before. "For that to happen, the containment unit must have failed. That was the problem we had in our earlier research. We could never lick the fourth dimensional factor. That was always the weak point...that and the inherently unstable nature of a radical cube."

"I still don't get much of what you're saying, doctor."

"Simply put, the containment unit must have collapsed, unleashing the unlimited power of the artificial black hole that drew in everything around it including anybody aboard that ship."

"How awful!" gasped Mooney.

"It was quick anyway," said Jules. "I'm sure no one aboard had a chance to know what was happening. Anyway, once the thing had collapsed, its own gravitic force would have drawn it toward the flux field being generated by the black hole inside the sphere. Only something with a pull that powerful could have overcome the one generated by the artificial black hole. Anyway, that accounts for why the artificial one was drawn downward. By now, the two have been fused into a single supersingularity." "Navigator," said Hidatsu. "Plot us a course away from here. I don't want to take any chance of being caught by any super-black hole."

"Aye, sir," replied the navigator, not without some nervousness at the possible danger.

"Is there something bothering you, Jules?" asked Mooney. "Something you're not telling us?"

"Not really. Just thinking about the time I ended up in the same situation those poor devils down there did and what I had to do get out of it."

"So?"

"Well, I was wondering if Georg or anyone else aboard the John Crosse was able to do the same."

"Judging from what we just saw, I doubt it."

"Not necessarily. If someone was able to do what I did, we'd never know about it."

Hidatsu noticed the little frown that creased Mooney's forehead as she wondered what Jules meant, but before she could pursue the subject further, his attention was diverted by a message coming in over his personal earphone.

"Who is this?" he asked, placing a finger to his ear.

"I can't say just now, captain," said the voice. "But if you'll come to your cabin, I can explain. We need to talk. But come alone."

"If this is some kind of joke, you're going to be one sorry crewman whoever you are!"

Hidatsu rose from his command chair and approached the XO.

"Jefferson," he said in a lowered voice. "You have the conn."

"Aye, sir."

"I'm going to my cabin. If I don't call in 10 minutes, send a couple men down to find me."

"Aye, sir," replied the XO, not inquiring further.

Hidatsu headed for the exit, leaving Jules and Mooney to continue their conversation. With rising anger at whoever it was that had clearly invaded his cabin, he charged down the corridor leading to officer country, making sure the safety on his pulse-pistol was released.

Not bothering to signal his arrival, he ordered the computer to open the door to his cabin and stepped inside. There, to his surprise, stood Jules.

"What ...? How did you ...?"

"Prepare yourself for the unbelievable, captain," said Jules. "And you won't need that pistol."

Overcoming his surprise, Hidatsu holstered the weapon.

"Now what's the idea, doctor?"

"Well, for one thing, I'm not the Jules you just left on the bridge."

"What do you mean?"

"I mean that I'm Jules from a timeline that's been erased. One that you now know nothing about."

"I still don't understand..."

"Here it is in a nutshell. In another timeline, the Constitution arrived here at PER-734 just as you remember but that time, we arrived in time to contact the renegades before their project failed. I went over alone to talk to them and while I was there, Georg, in an attempt to prove to me that the radical cube containing the artificial black hole they'd constructed was safe, fired at it with a pulse-pistol. Unfortunately, the structure wasn't as strong as he believed. There was a breach and the black hole's energy was



released. In minutes, the ship around us was going to collapse in on itself. But at the last minute, another of my former colleagues, a Dr. Henry Martine, attempted to control the collapse using the same method I did at Alpha Cygnus 12."

Jules paused to heave a sigh.

"Beyond that, I don't know. But considering I find myself here, aboard the Constitution again, I can only conclude that Martine managed to save me by sending me back in time to the point just before the collapse of their black hole. I watched it happen from the monitor here in your cabin. But don't ask me to explain how the thing collapsed in this new timeline without me having to go over and inspiring Georg to take that shot...it's all wrapped up in the paradoxical laws governing temporal black holes. Anyway, I found myself in the ship's engine spaces, the same area I was when things started to go wrong aboard the John Crosse. After I began to realize what must have happened, I came here as the only place that I might be able to stay out of sight until I could talk to you."

"You expect me to believe all that?" asked Hidatsu wonderingly.

"Why should I lie to you?"

Hidatsu had no answer for that. Instead, he used his earphone to contact the bridge.

"Jefferson."

"Sir."

"One question: Is Dr. Santros still on the bridge?"

"Yes, sir. He and Miss Mooney are still here."

"Thanks," Hidatsu replied, then, "I don't believe it!"

"It's not that easy for me to believe either, captain. What I figure is that when this same thing happened to me on Alpha Cignus 12, I re-set



time, allowing everything to go back to the way it was before. Not time travel strictly speaking. What Martine must have done was quite different. In his haste, perhaps, he simply sent me back in time while making sure he and the other renegades didn't, thus ensuring that their project would not be repeated."

"So...now there are two of you?"

"I'm afraid so. And what I want is to stay out of his sight...in fact, I don't want him to even know I exist. Because we're not two different people, we're exactly the same person. No difference. I know exactly how he feels, the way he thinks. And when it comes time to leave the ship, I know what he's going to do. So if you don't mind, captain, I'd like to stay in here, out of sight, until you drop him off back at Alpha Centauri."

"And Miss Mooney..?"

"Don't tell her a thing."

It was not easy for Jules to remain confined for several weeks as the Constitution made its way back across the gulf to the Orion arm, even with the captain's cabin for quarters. Worse still, was being alone with his thoughts as the sacrifice he was determined to make bore down on him in all its growing significance.

At last, however, the battleship arrived in orbit above Proxima 5. By that time, Mooney had long since become reconciled to the fact that Jules was committed to his wife and that he could make no place for her in his heart. It was for the best however, because over the months they had worked together, she had grown fond of him and to have undermined his loyalty to Joan would have been a betrayal of their

friendship.

That, however, did not make their parting any the less easy. "It's my understanding that both sides are headed back to the negotiating table," she was saying as she and Jules walked to the shuttle that would take him down to the Proxima rocket field.

"Well, once the Consortium was able to present them with O'Shea and Sanders as well as the evidence we sent by hyper-waveband of how the threat posed by the renegades had ended, the Coalition had to admit that the Consortium never had any intentions of pursuing black hole tech at their expense," said Jules. "More to the point, the visuals of the John Crosse collapsing on itself were powerful. They had to have shook up even those Zhapoologani hard cases about the danger they were placing themselves in."

"But the war will go on."

"It will."

Conversation seemed to dry up then. There was not much to say. Jules had made his decision to return home and Mooney was to go on to the ministry.

At the door of the shuttle, Jules extended his hand.

"Well, Miss Mooney...Jess...it was good working with you. I admit, at first, I wasn't crazy about having you tag along but it was good to have someone else to bounce ideas off of."

"Not to mention watching your back a time or two," said Mooney, ignoring his hand and throwing her arms around his neck. "I'll miss you, Jules."

Not unresponsive, Jules hugged her back.

"I'll miss you too, Jess. You know," he said, holding her at arm's length. "In any other lifetime..."

"Don't say it," begged Mooney. "We've been through all that already. Better let it be." "You're right," smiled Jules. "Goodbye."

"Bye," said Mooney, watching as he passed into the shuttle and disappeared toward the passenger area.

Back in the ready room, Mooney watched a monitor showing the bay doors opening and the shuttle slowly rise, clearing the hull of the Constitution to bask in the light from Alpha Centauri's suns.

In another minute, it was almost gone from sight, boosted by its thrusters.

A lump in her throat, Mooney fought to keep from tearing up.

"Jess," said a familiar voice behind her.

Startled, Mooney turned to see Jules standing inside the hatch to the ready room.

"Jules? How...?" Instinctively, Mooney turned back to the monitor that showed the last of the shuttle as it vanished from sight.

Jules walked over and switched off the monitor.

"Jules, how could ...?"

"Jess, I want you to listen for a minute," said Jules and proceeded to give her the same explanation of the events that took place at PER-734 as he had told them to Captain Hidatsu.

"You mean, all this time you've been hiding in the captain's cabin?" asked an incredulous Mooney.

"It wasn't fun, believe me! But I couldn't take the chance of the other Jules getting wind of me. You understand don't you?"

"I think so. But don't worry. I'm not holding it against you...does that matter to you?"

"I think it does," admitted Jules. "You've made it pretty hard for me to keep from falling in love with you, you know. In any other lifetime..." Mooney laughed.

"What's so funny?"

"You are! The other Jules just said the exact same thing!"

"Well, we are the same person, after all. I mean, exactly the same. He's not somebody else. He's me. He's the man, dare I say it? you fell in love with."

"You can dare..."

Jules moved toward Mooney falling into her arms.

"It's not going to be easy, Jess," he said. "I'm still the same Jules you've known all along. I still love Joan. I still want to be with her as badly as I did before. But I know I can't now. And I'll always live with the nagging doubt that I let the other Jules have her so that I could have you..."

"No. Don't think of it like that. Like you said, the other Jules is really you too. You couldn't both have her. The only difference was that you had the upper hand. You knew that time had been altered. He didn't. You were fundamentally changed because of that knowledge. He wasn't. He was the most fitted to go back to Joan."

"I want to believe that," said Jules, looking into Mooney's eyes. "But it's not an easy thing to let another man live the only life I've ever known."

"Then we'll make you a new life," Mooney vowed.

"I'd like that," said a sober Jules. "But it'll take time to sort out my emotions. To get Joan out of my system..."

"I'll wait," promised Mooney. "And so will Callisto!"

