



13

'THE BEST OF ...'

collections are intended to present the representative stories of the masters of science fiction in chronological order, their aim being to provide science fiction readers with a selection of short stories that demonstrate the authors' literary development and at the same time providing new readers with a sound introduction to their work.

The collections were compiled with the help and advice of the authors concerned, together with the invaluable assistance of numerous fans, without whose good work, time and patience they would not have been published.

In particular the advice of Roger Peyton, Gerald Bishop, Peter Weston and Leslie Flood is appreciated.

ANGUS WELLS, Editor.

Also available from Sphere Books

THE BEST OF ISAAC ASIMOV
THE BEST OF ARTHUR C. CLARKE
THE BEST OF JOHN WYNDHAM
THE BEST OF ROBERT HEINLEIN
THE BEST OF FRITZ LEIBER
THE BEST OF A. E. VAN VOGT
THE BEST OF CLIFFORD D. SIMAK
THE BEST OF FRANK HERBERT 2

The Best of Frank Herbert 1952–1964



SPHERE BOOKS LIMITED
30/32 Gray's Inn Road, London WC1X 8JL

First published in Great by Sidgwick & Jackson Ltd 1975

Published by Sphere Books 1976

Copyright © Frank Herbert 1975

Anthology copyright © Sphere Books Ltd 1975

Introduction copyright © Frank Herbert 1975

Bibliography copyright © Aardvark House 1975

This book was originally published in one volume

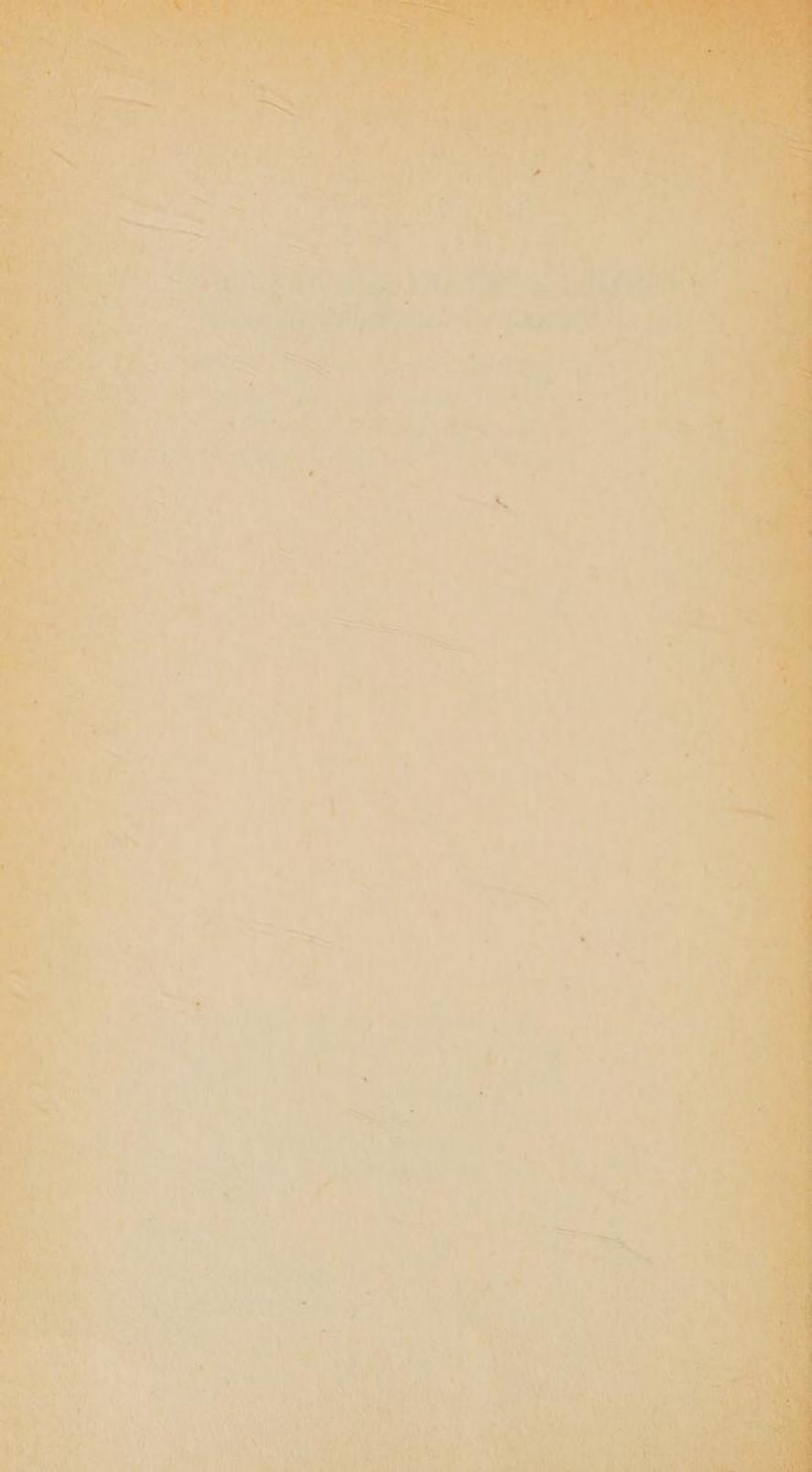
TRADE



This book is sold subject to the condition that it shall not, by way of trade or otherwise, be lent, re-sold, hired out or otherwise circulated without the publisher's prior consent in any form of binding or cover other than that in which it is published and without a similar condition including this condition being imposed on the subsequent purchaser.

Set in Intertype Times

Printed in Great Britain by Hazell Watson & Viney Ltd Aylesbury, Bucks This book is dedicated with love to Bev for all the reasons which she knows best



CONTENTS

Introduction	9
1952: Looking for Something?	21
1954: Nightmare Blues	33
1956: Dragon in the Sea (extract)	82
1958: Cease Fire	118
1960: Egg and Ashes	139
1964: Marie Celeste Move	146
Ribliography	154

ACKNOWLEDGMENTS

Looking for Something?: Startling, 1952

Nightmare Blues (Operation Syndrome): Astounding, 1954

Cease Fire: Astounding, 1958

Egg and Ashes: If, 1960

Mary Celeste Move: Astounding, 1964

INTRODUCTION

It's a great thing to create, to grow and to give of your-self in the process, but it's quite another thing to be thrown into an orgy of introspective analysis out of which you must refashion your work. To review more than twenty years of my own writing and come up with coherent comments required such analysis, however, and having been forced to the task, I find the recovery pleasant.

Analysis is a trick activity.

Sometimes, it's hardest for the person doing his thing to describe what he does. You can analyze the life out of any activity, and to little purpose.

'Tell me, Dr. Livingston, what were your innermost thoughts when Mr. Stanley confronted you with his im-

mortal greeting?'

Do you really want to know?

What kept me at this job was the suspicion that my labors might be useful to others wishing to make a career of letters. Similar works by earlier authors were useful to me – particularly the practical advice of Jack Woodford, and the marvelously candid Summing Up by W. Somerset Maugham.

I hope I can be as candid and as practical.

The flat statement of what I do requires little thought.

I write.

As humans measure time, I've been doing this for quite a while – more than forty years. This collection contains the laboriously hand-printed copy of one of my earliest efforts. It was produced when I was only seven. A few months later, having tested this process and found it to my liking, I announced to my family in the grand manner that I was going to be 'an author'.

That was on the morning of my eighth birthday, and

I've never deviated far from that ambition since.

If you'll turn to that early effort, you'll find my introductory description reads: 'This story is about love and adventures.'

Even at seven, I knew the ingredients of a good story:

love and adventures.

There must also have been some sense in me of the limits implicit in words. The seven-year-old warns you that his book will only tell something about how animals

live in the deep woods.

The seven-year-old also gives his work a narrative hook. I didn't know a narrative hook from a verb at the age of seven, but the instincts of the writer triumph. A narrative hook describes how the author catches your interest and makes you want to learn more about what's

going on in his story.

The seven-year-old begins with a man and his dog lost in the forest. You are warned that the forest is a fearsome place. It contains noises which indicate dangerous creatures, especially at night. And please note that such creatures retain a deeper sense of threat when they are known only by their noises. The unknown can be a dreadful thing.

Despite the crudities, the unabashed hubris and the misspellings, this childhood effort is amazing for the number of storytelling necessities it contains: People, place, time of day, mysterious dangers and the promise of love and

adventures to come.

There's the nutshell, and I count myself lucky to have

come upon it so early.

That was not so much writing as it was plumbing, however. The pieces are there, but they're badly assembled.

The plumbing was all bare and exposed.

I have tried to teach writing, only to discover that you cannot teach writing. You can teach the plumbing – which pipe connects to which elbow. The actual writing is something you must teach yourself. You learn by doing. The knowledge comes from the inside and it leans most heavily on the oral tradition of language, much to the despair of those who would like it all orderly and neat with explicit rules to follow.

It comes as a shock to many in our print-oriented civilization to be told that language, the basic tool of the writer, is more oral than written. Contemplate those thousands of years of oral tradition before we ever ven-

tured to carve symbols in clay and stone. We are most profoundly conditioned to language-as-speech. The written word is a latecomer.

Before you will believe the reality of a story, someone must stand up on that printed page and speak. His words must have the characteristics of speech. They must reach your ears through your eyes. Under the onslaught of non-print media (TV, film, radio, casette players . . .) this is becoming ever more necessary. The oral tradition has

never really been subjugated.

True to that tradition, I find I must have a sense of joy in what I do. There has to be some fun in it which you can feel even in the darkest moments of the story. This is the entertainment business. I'm the jongleur visiting your castle. I bring songs and news from other castles I have visited, and some of those are strange indeed. I sing for my supper and those other castles of which I sing are only partly figments of imagination. We may share a concensus reality which demands our service, but if you write science fiction you crowd the edges of that reality.

When we say 'science', we usually mean technology. Science fiction is deeply involved with technology and the questioning of the human future. To write science fiction, you make a connection between technology and the mythdream of human immortality. We inevitably deal with the alienation of man brought on by his immersion in a welter of things which he is told he wants/needs, but which always seem to remove him from an essential contact with

his own life.

This is not really a recent development.

The company of science fiction writers is a venerable troop. We go back somewhere beyond Lucian of Samosata in the 2nd Century AD. We number in our company such lights as Plato, Cyrano de Bergerac, Thomas More (who gave us the word *Utopia*), Jules Verne, H. G. Wells, Edgar Allen Poe, Aldous Huxley and George Orwell – which represents only the barest listing.

We are, as a rule, concerned with mankind living on other planets. (Lucian sent his hero to the moon on a waterspout.) Often, our concern is touched by the realization that no animal species can survive forever on one planet. Even as we most freely express our fears that the

human species is in danger of extinction, we parade our differences from other animals via our stories. We have imagination and, occasionally, touches of reason. Much of science fiction says these may be our ultimate strength in facing that chaotic unknown which constantly threatens to reduce us to zero.

Freud once said: 'When you try to conceal your inner-

most thoughts, every pore oozes betrayal.'

When you write, the printed page absorbs all of that ooze - all of you, the wise and the silly, the profound, the shallow and the in-between. It all hangs out in these talking letters. I want to write for as large an audience as possible, all of you sitting around the castle fireplace after a four-star dinner, all of you raptly enjoying the sound of my lute. There's no sense trying to hide that; it's in everything I do. And always there's the upcoming story in which I hope to do it all better. The current work, about which I will not talk because that wastes the energies which should go into the creation, remains my favorite. I will pour as much of myself into it as I am able, holding back nothing. You cannot lose by this. You destroy nothing. You are creating the egg, not the goose. But while that gestating egg remains my favorite, I reserve a warm spot for creations of yesteryear.

That fragment saved from childhood: I recall the child I was with a special poignancy through that fragment. And even while I laugh with you at his bumbling, I remember his unshakable drive to perfect this form of communication. It was only later that I learned about perfection – that it remains forever beyond your grasp, that you are always working toward it in a monstrous parody of Zeno's Paradox, that perfection fades when you seem

to touch it.

It has been educational for me to apply the analytical tool to my own work; I couldn't possibly set down here everything I've derived from that effort. And certainly you must detect the ambivalence with which I view this. The discovery of science fiction by colleges and universities, a move led by such academics as Willis E. McNelly at the University of California, Fullerton, and Berkley Dreissel at Stanford, raises such ambivalence. We've seen analysis take the fun and the life out of other

literary genre. Rest assured then that whatever comments I make hereafter I am attempting to maintain the fun and the life.

The stories in this collection are like steps on a path to me. I recall the throes of creation, some of the ambience in the working places which inevitably bleeds over into the work. These are stories I might write differently today. I might. Tony Boucher, the later author and critic for the New York Times, called 'Mary Celeste Move' 'one of the most perfect short stories I've ever read'. Out of the love I held for Tony, I might not change that one, although I disagree with his judgment. I find 'Seed Stock' a better story. 'Mary Celeste' is brittle. It shows the sharpening and re-sharpening process through which it went in the writing. As with analysis, you can go too far with that process; you run into a kind of Heisenbergian wall where all of your original intentions turn to glitter. To me that's a flaw in 'Mary Celeste'.

My first venture into Science Fiction was 'Looking for Something?' As with the childhood fragment, it contains

rough edges.

'Looking' deals with a subject which I explored in greater detail later: that borderline of awareness out of which our compulsions grope for recognition. It says you may not know the full spectrum of motivation behind your everyday activities. And when you go looking for that motivation, you may encounter more than you wanted.

'Nightmare Blues' ('Operation Syndrome') was my first acceptance by the late John Campbell of Astounding/Analog. I was still mining the same vein of 'Looking'. However, 'Nightmare' moves more freely and contains more of that special color which science fiction requires – the teleprobe, the skytrain, the sound switch beside the window, the undersea nightclub. It has that immediacy of detail which I believe a story must contain before it gives you the full sense of the place were the characters are performing. It contains some things familiar today, but the backdrop is tomorrow.

'Nightmare' says, as well, that tomorrow's world may not be the most pleasant place you've ever imagined. It brings up the subtle meaning of the old Chinese curse:

'May you live in interesting times.'

Much science fiction views the world and human future more from a Hebrew curse than the Chinese. It reads: 'May you grow like an onion with your head in the ground!' For this latter variant, the writer plays prophet, crying: 'Lift up your heads and look around you at what we are doing!' Looking back on it, I can see that this dominates the story, 'Cease Fire', a modern Sorcerer's

Apprentice yarn.

Please note the monumental prophetic error in 'Cease Fire', however. Written in 1958, it was set in that far off time of 1972. Vietnam was a decade ahead and somewhat warmer of climate than the setting I chose. To the best of my knowledge, Vietnam did not produce an equivalent to Larry Hulser, my protagonist, nor did it produce his invention. 'Cease Fire' does say something about the war syndrome and the simplistic world of those who begin their preachments with: 'We could end wars if we would

Hulser's invention will have to wait, but I expect something like this to come. You will recall that dynamite was supposed to end the possibility of war because it was too

dreadful. And before that, it was the crossbow. Instruments of violence apparently don't end wars.

My timing error recalls the story told about Edgar Allan Poe, that he was walking with a friend in New York City in 1847 and suddenly cried out: 'I've just had a vision of the future! Within a hundred years (by 1947) New York will have ten-storey buildings!'

Poe, the father of the modern science fiction story, failed to take into account the invention of the elevator

and the steel-frame building.

As with much prophecy, so it is with science fiction. Thus far, we've been unable to achieve a surprise-free future. We fail to take some surprising development into account.

We do score occasionally, however, and these provide some of our greatest moments. Think of Arthur Clarke telling the world how a communications satellite would function and long before such wonders came into being. He predicted the development with such detail that the concept cannot be patented. Prior publication will prevent a patent. I did the same thing in 'Dragon in the Sea' with

the prediction of collapsible cargo devices and television periscopes. The truly classic example is that of Cleve Cartmill in the middle of World War II describing how to build an atom bomb. To this day, there probably are officials of the United States government who believe Cartmill's story developed from a leak in the Manhattan Project. The unimaginative always seem to underestimate how far the imagination can leap.

'Egg and Ashes' with its phoenix theme represents one of my earlier attempts to weave a linguistics theme into a yarn. How does a creature react if it hears in the spectrum which we see? This tale revolves on that common-to-science fiction element – possession as an alien presence. Why not? Most science fiction assumes an infinite universe where the wonders will never end. If you sample such a future through fiction, does that not prepare you to deal

with surprising real events?

This is a question Martin Fisk of 'Mary Celeste Move' might ask himself. Fisk could be any of us in a velocitized world which moves so fast we're unaware of running out of time and cannot react with sufficient rapidity to the shock power of a future into which we plunge. How much difference is there between the present breakneck pace of our freeway-insanity and Fisk's world of 300-mile-perhour expressways where you slow down to 75 and a speed of 55 is to creep? Is it caricature or a glimpse of our current reality?

'Committee of the Whole', may have a familiar ring to some who read it. Is it today's world or just the day after

tomorrow?

Here's where you separate the people who grow like an onion from those who merely accept that they live in the universe of the Chinese curse. I regret to say that 'Committee' is my view of imminent reality. The future does tend to beguile us with myths of progress while the other hand prepares ever more potent shocks. 'Look out for my atom bomb!' the future says. And all the while, an anonymous human is working in his basement on that surprise which will make over the atomic age into 'the good old days'.

Cracking the atom represented only a milestone on a longer path. If science fiction does no more, it tells us

this: we are developing larger and larger chunks of energy which can be manipulated by fewer and fewer of us. If this curve continues to rise exponentially, single individuals will soon be able to focus planet-shattering energies.

The role of the anonymous individual in this development is relatively clear. Science fiction at least since H. G. Wells has been drawing his portrait with a consistent success/horror. Propinquity, serendipity and curiosity lie in wait for the unwary onion head. My ventures into science fiction see our world in far more peril from a pharmacist and bio-technician working privately in a basement laboratory than it is from the atom, fission of fusion. Given the sums of energy becoming available to fewer and fewer of us, the brutalized human, the disaffected fanatic, represents our most profound peril.

There appears no present way to prevent his surprise whether that comes in the form of a biological weapon or an application of the bias-current principle to the cracking of our entire planet. The horrors of science fiction's most bug-eyed-monster extremes don't compare

with what's happening in our 'real world'.

The basic energy involved in this process is, of course, knowledge. How can you suppress that which is already or about to become common knowledge? Thought control quickly runs out of dependable controllers. Once Lize Meitner had published her findings, atomic fission was public property. Cleve Cartmill merely dipped into this public trough to produce his story. The materials and information tools behind such runaway growth are so widely spread in our world that the words security and secrecy contain a hideous kind of gallows humor or even worse. Official secrecy acts and the concepts of security based on them represent distractions which actually contribute to humankind's insecurity. I say it baldly here instead of letting it unfold in fiction, but I'm not the first to take this alarming view that the fault is not in our stars, Mercutio . . .

Thus, 'Committee' represents that form of science fiction which attempts to depict a deeper reality: Future History. It says in a story, which the reader can accept because it's 'only a story', that the essence of this fiction will

come to pass. You as reader put the connections to reality

together only after the reading.

This leads by what is to me an orderly thought process into the concept of the operating manual, the handbook for whatever you do as work. This is the book which gives you the myth of the orderly world, hiding all of the hangups and misalignments behind illusionary rules. Often such manuals are written by committees. (You may recall that a camel is a horse created by a committee.) My favorite of such handbooks is the Blue Jackets Manual which is issued to incoming recruits of the US Navy. The BJM has many classic lines, including this one:

'It is absolutely imperative that the ship be kept water-

tight.'

Nobody can doubt this, especially if his life depends on it. Between the book and the execution of the obvious, however, is a world of creative originality. Here's where we really operate by the book. It's this in-between world which inspired me to write a short story about the educated ignorance to be found in a handbook of the future, calling the story, of course, 'By the Book'. The story says that those precise and orderly barriers we raise against omnipresent outer chaos can be useful tools or they can be traps. It all depends on how you interpret your manual. This is usually what I tell people who come to me asking for 'rules about writing'.

Such a handbook is possible, of course, and many have

been written. Mine might begin this way:

Rule One: Work to develop an almost organic link between your primary tool and yourself.

Rule Two: Your primary tool is language, written,

spoken, however it communicates.

Rule Three: Write regularly; don't wait for a call from your favorite muse.

Rule Four: Be sensitive to and responsive to your

audience, but not slavish.

And so on ...

I mean that about an organic linkage most profoundly, understanding that you are connected to language by devices; in my case, a typewriter. This linkage is unique to the individual and, in a sense, it dissolves as you use it. You have to develop your linkage anew each time.

So much for rule books.

Which brings us to 'The Primitives'.

The author's name originally was to have been Noah Arkwright. That's the pseudonym chosen by Jack Vance, Poul Anderson and myself when we plotted the story while building a houseboat which we used on the waters of the Sacramento-San Joaquin delta at the head of San Francisco Bay. We intended to write the story together as a lark, but the pressure of work forced Vance and Anderson out of the picture and they insisted I finish it. I developed our plot into the novelette.

To me this story has a lovely logic. After all, what would a primitive make out of a diamond? See if you

disagree.

'The Primitives' also represented my attempt to open up another possibility for the role of women in our past. In my view humankind was matriarchal for far more centuries than it was patriarchal. Male dominance probably came onto the scene rather late after an earlier animal history of pack relationships probably similar to those of the higher apes, and then a long period of female dominance after we became self-conscious.

The picture of the female cowering in the cave with her brood while the male fought off the sabertooth tiger has always struck me as a bit much. I find it easier to see the image of the domineering Cave Mother, keeper of the birth mystery and the sacred vessel of ongoing life. If there's one thing primitives do not like, that's to bring

down the wrath of powerful spirits.

Perhaps we haven't changed much in that respect, which is another recurring theme of science fiction: It may look

new, but it's really the same old thing.

'The Heaven Makers' plays with zen consciousness/taoist eternity translated for Western awareness. Words are finite creatures, however, and the universe (even the universe of your own book) changes as you touch it. There exists in this book a recognition of our concensus choice to use a linear rather than a non-linear model for our universe. But what do we do when we find that this linearity closes its own circle? Do the endless serial events merely repeat? These are some of the underlying conceptualizations of 'The Heaven Makers'. We think our

ancestral gods no longer awaken mysteries in our minds. We have the myth of the endless personal story, denying the visions of the older mysteries in the hope of finding new scientific answers. Thus we deify science and its offspring, technology. Science fiction has become a special toy to those alerted to this spectrum. It unfolds the monsters of awareness which lurk in our mutually-created vision of eternity. We know there are things in this eternity which we don't want to see, but like children peering past the protective legs of an adult, we seek a safe glimpse of the monster.

'The Heaven Makers' assumes that the immortal have no morality which can be equated with a finite morality. Look around you. The morality of the species overrides the puny morality of the individual. Our creation of law may have been the attempt to match species' morality with that of the individual. And, of course, the species

may not be immortal.

In a natural progression from 'The Heaven Makers', and all the stories before it, you get 'The Being Machine' ('Mind Bomb'). This is in part another story of outside manipulation of the individual, playing with the concept of what we mean by 'free will'. It is the influence of reason in rebellion against any manipulation, even by itself. It is the paradox of manipulation in an equalizing (entropic) universe. This is law and order at the end of its tether, the species projected into a far-far future where manipulation of the individual has been carried to a self-defeating extreme. It says law and order lead inevitably to chaos.

Another paradox?

'Seed Stock' takes up that recurrent science fiction theme of humans colonizing/populating another planet (the eternity myth for the species). This story, however, says specifically that these colonizing humans must become transformed into children of that planet, even to the point of rejecting Mother Earth. By inference, it speaks to the eternity myth right here on this planet, saying that humans, to make their myth a reality, must become children of this planet once more and children of any planet.

That, essentially, represents the motif of hope behind most science fiction: the fact that we write about any future at all, even an interesting one, assumes that future will come to pass. We balance on Occam's razor, our assumptions on one side, our myths on the other, and sometimes we cannot tell the two apart. In common with other art forms, science fiction strives to translate our old dreams into new ones and, in the process, to make the nightmares less fearsome.

Frank Herbert Port Townsend, Washington 29 April 1973

LOOKING FOR SOMETHING?

Mirsar Wees, chief indoctrinator for Sol III sub-prefecture, was defying the intent of the Relaxation-room in his quarters. He buzzed furiously back and forth from metal wall to metal wall, his pedal-membrane making a cricket-like sound as the vacuum cups disengaged.

'The fools!' he thought. 'The stupid, incompetent, mind-

less fools!'

Misar Wees was a Denebian. His race had originated more than three million earth years ago on the fourth planet circling the star Deneb – a planet no longer existing. His profile was curiously similar to that of a tall woman in a floor-length dress, with the vacuum-cup pedal-membrane contacting the floor under the 'skirt.' His eight specialized extensors waved now in a typical Denebian rage-pattern. His mouth, a thin transverse slit entirely separate from the olfactory-lung orifice directly below it, spewed forth a multi-lingual stream of invective against the assistant who cowered before him.

'How did this happen?' he shouted. 'I take my first vacation in one hundred years and come back to find my

career almost shattered by your incompetency!'

Mirsar Wees turned and buzzed back acrooss the room. Through his vision-ring, an organ somewhat like a glittering white tricycle-tire jammed down about one-third of the distance over his head, he examined again the report on Earthling Paul Marcus and maintained a baleful stare upon his assistant behind him. Activating the vision cells at his left, he examined the wall chronometer.

'So little time,' he muttered. 'If only I had someone at Central Processing who could see a deviant when it comes by! Now I'll have to take care of this bumble myself, before it gets out of hand. If they hear of it back at the

bureau . . .'

Mirsar Wees, the Denebian, a cog in the galaxy-wide korad-farming empire of his race, pivoted on his pedalmembrane and went out a door which opened soundlessly before him. The humans who saw his flame-like profile this night would keep alive the folk tales of ghosts, djinn, little people, fairies, elves, pixies...

Were they given the vision to see it, they would know also that an angry overseer had passed. But they would not see this, of course. That was part of Mirsar Wees' job.

It was mainly because Paul Marcus was a professional hypnotist that he obtained an aborted glimpse of the rulers of the world.

The night it happened he was inducing a post-hypnotic command into the mind of an audience-participant to his show on the stage of the Roxy Theater in Tacoma, Wash-

ington.

Paul was a tall, thin man with a wide head which appeared large because of this feature although it really was not. He wore a black tailcoat and formal trousers, jewelled cuff links and chalkwhite cuffs, which gleamed and flashed as he gestured. A red spotlight in the balcony gave a Mephisto cast to his stage-setting, which was dominated by a backdrop of satin black against which gleamed two giant, luminous eyes. He was billed as 'Marcus the Mystic' and he looked the part.

The subject was a blonde girl whom Paul had chosen because she displayed signs of a higher than ordinary intelligence, a general characteristic of persons who are easily hypnotized. The woman had a good figure and showed sufficient leg when she sat down on the chair to excite whistles and cat-calls from the front rows. She

flushed, but maintained her composure.

'What is your name, please?' Paul asked.

She answered in a contralto voice, 'Madelyne Walker.'

'Miss or Mrs?'
She said, 'Miss.'

Paul held up his right hand. From it dangled a gold chain on the end of which was a large paste gem with many facets cut into its surface. A spotlight in the wings was so directed that it reflected countless star-bursts from the gem.

'If you will look at the diamond,' Paul said. 'Just keep

your eyes on it.'

He began to swing the gem rhythmically, like a pend-

ulum, from side to side. The girl's eyes followed it. Paul waited until her eyes were moving in rhythm with the swinging bauble before he began to recite in a slow monotone, timed to the pendulum:

'Sleep. You will fall asleep . . . deep sleep . . . deep sleep . . . asleep . . . asleep . . . asleep . . . asleep

Her eyes followed the gem.

'Your eyelids will become heavy,' Paul said. 'Sleep. Go to sleep. You are falling asleep... deep, restful sleep... healing sleep... asleep... asleep...

asleep . . .

Her head began to nod, eyelids to close and pop open, slower and slower. Paul gently moved his left hand up to the chain. In the same monotone he said, 'When the diamond stops swinging you will fall into a deep, restful sleep from which only I can awaken you.' He allowed the gem to swing slower and slower in shorter and shorter sweeps. Finally, he put both palms against the chain and rotated it. The bauble at the end of the chain began to whirl rapidly, its facets coruscating with the reflections of the spotlight.

Miss Walker's head fell forward and Paul kept her from falling off the chair by grasping her shoulder. She was in deep trance. He began demonstrating to the audience the classic symptoms which accompany this ... insensitivity to pain, body rigidity, complete obedience to

the hypnotist's voice.

The show went along in routine fashion. Miss Walker barked like a dog. She became the dowager queen with dignified mien. She refused to answer to her own name. She conducted the imaginary symphony orchestra. She sang an operatic aria.

The audience applauded at the correct places in the performance. Paul bowed. He had his subject deliver a

wooden bow, too. He wound up to the finale.

'When I snap my fingers you will awaken,' he said. 'You will feel completely refreshed as though after a sound sleep. Ten seconds after you awaken you will imagine yourself on a crowded streetcar where no one will give you a seat. You will be extremely tired. Finally, you will ask the fat man opposite you to give you his seat. He will do so and you will sit down. Do you understand?'

Miss Walker nodded her head.

'You will remember nothing of this when you awaken,' Paul said.

He raised his hand to snap his fingers . . .

It was then that Paul Marcus received his mind-jarring idea. He held his hand up, fingers ready to snap, thinking about this idea, until he heard the audience stirring restlessly behind him. Then he shook his head and snapped his fingers.

Miss Walker awakened slowly, looked around, got up, and exactly ten seconds later began the streetcar hallucinations. She performed exactly as commanded, again awakened, and descended confusedly from the stage to more

applause and whistles.

It should have been gratifying. But from the moment he received the idea, the performance could have involved someone other than Paul Marcus for all of the attention he gave it. Habit carried him through the closing routine, the brief comments on the powers of hypnotism, the curtain calls. Then he walked back to his dressing room slowly, preoccupied, unbuttoning his studs on the way as he always did following the last performance of the night. The concrete cave below stage echoed to his footsteps.

In the dressing room he removed the tailcoat and hung it in the wardrobe. Then he sat down before the dressing table mirror and began to cream his face preparatory to removing the light makeup he wore. He found it hard to

meet his own eyes in the mirror.

'This is silly,' he told himself sourly.

A knock sounded at the door. Without turning, he said, 'Come in.'

The door opened hesitantly and the blonde Miss Walker stepped into the room.

'Excuse me,' she said. 'The man at the door said you

were in here and . . . '

Seeing her in the mirror, Paul turned around and stood up.

'Is something wrong?' he asked.

Miss Walker looked around her as though to make sure they were alone before she answered.

'Not exactly,' she said.

Paul gestured to a settee beside his dressing table. 'Sit

down, won't you?' he asked. He returned to the dressing table as Miss Walker seated herself.

'You'll excuse me if I go on with this chore,' he said,

taking a tissue to the grease paint under his chin.

Miss Walker smiled. 'You remind me of a woman at

her nightly beauty care,' she said.

Paul thought: Another stage-struck miss, and the performance gives her the excuse to take up my time. He glanced at the girl out of the corners of his eyes. Not bad, though . . .

'You haven't told me to what I owe the pleasure of

your company,' he said.

Miss Walker's face clouded with thought.

'It's really very silly,' she said.

Probably, Paul thought.

'Not at all,' he said. 'Tell me what's on your mind.'

'Well, it's an idea I had while my friends were telling me what I did on the stage,' she said. She grinned wryly. 'I had the hardest time believing that there actually wasn't a streetcar up there. I'm still not absolutely convinced. Maybe you brought in a dummy streetcar with a lot of actors. Oh, I don't know!' She shook her head and put a hand to her eyes.

The way she said, 'I don't know!' reminded Paul of his own idea; the idea. He decided to give Miss Walker the fast brush-off in order to devote more time to thinking

this new idea through to some logical conclusion.

'What about the streetcar?' he asked.

The girl's face assumed a worried expression. 'I thought I was on a real streetcar,' she said. 'There was no audience, no . . . hypnotist. Nothing. Just the reality of riding the streetcar and being tired like you are after a hard day's work. I saw the people on the car. I smelled them. I felt the car under my feet. I heard the money bounce in the coin-catcher and all the other noises one hears on a streetcar – people talking, a man opening his newspaper. I saw the fat man sitting there in front of me. I asked him for his seat. I even felt embarrassed. I heard him answer and I sat down in his seat. It was warm and I felt the people pressing against me on both sides. It was very real.'

'And what bothers you?' Paul asked.

She looked up from her hands which were tightly

clasped in her lap.

'That bothers me,' she said. 'That streetcar. It was real. It was as real as anything I've ever known. It was as real as now. I believed in it. Now I'm told it wasn't real.' Again she looked down at her hands. 'What am I to believe?'

This is getting close to the idea, Paul thought.

'Can you express what bothers you in any other way?'
he asked.

She looked him squarely in the eyes. 'Yes,' she said. 'I got to thinking while my friends were talking to me. I got to wondering. What if all this - 'she gestured around her - 'our whole lives, our world, everything we see, feel, hear, smell, or sense in any way is more of the same. A hypnotic delusion!'

'Precisely!' Paul exhaled the word.

'What did you say?' she asked.

'I said, "Precisely!"

Her brows drew together. 'Why?'

Paul turned toward her and rested his left elbow on the dressing table. 'Because,' he said, 'at the very moment I was telling you what you would do when you awakened, at the moment I was giving you the commands which resulted in your hallucination, I got the same idea.'

'My goodness!' she said. The very mildness of her exclamation made it seem more vehement than if she had

sworn.

Paul turned back to the dressing table mirror. 'I wonder

if there could be something in telepathy as well?'

Miss Walker looked at him in the mirror, the room seeming to draw in closely behind her. 'It was an idea I couldn't keep to myself,' she said. 'I told my friends – I came with a married couple – but they just laughed at me. I decided on the spur of the moment to come back here and talk to you and I did it before I could lose my nerve. After all, you're a hypnotist. You should know something about this.'

'It'll take some looking into,' Paul said, 'I wonder . . .' He turned toward Miss Walker. 'Are you engaged tonight?'

Her expression changed. She looked at him as though

her mother were whispering in her ear: 'Watch out! Watch out! He's a man.'

'Well, I don't know . . . ' she said.

Paul put on his most winning smile. 'I'm no backstage wolf,' he said. 'Please. I feel as though somebody had asked me to cut the Gordian knot, and I'd rather untie it – but I need help.'

'What could we do?' she asked.

It was Paul's turn to hesitate. 'There are several ways to approach the problem,' he said. 'We in America have only scratched the surface in our study of hypnotism.' He doubled up his fist and thudded it gently on the dressing table. 'Hell! I've seen witch doctors in Haiti who know more about it than I do. But . . .'

'What would you do first?' she asked.

'I'd . . . I'd . . .' Paul looked at her for a moment as though he really saw her for the first time. 'I'd do this,' he said. 'Make yourself comfortable on that settee. Lean back. That's it.'

'What are you going to do?' she asked.

'Well,' Paul said, 'it's pretty well established that these sensory hallucinations are centered in one part of the human nervous system which is laid bare by hypnotism. It's possible, by using hypnotism, to get at the commands other hypnotists have put there. I'm going to put you back in deep trance and let you search for the commands yourself. If something is commanding us to live an illusion, the command should be right there with all the others.'

'I don't know,' she said.

'Please,' Paul urged. 'We might be able to crack this thing right here and now in just a few minutes.'

'All right.' She still sounded hesitant, but she leaned

back as directed.

Paul lifted his paste gem from the dressing table and focused the table spotlight on it. 'Look at the diamond,' he said. . . .

This time she fell into the trance more readily. Paul checked her for pain threshold, muscular control. She responded appropriately. He began questioning:

'Do you hear my voice?'

'Yes,' she said.

'Do you know what hypnotic commands are in your mind?' he asked.

There was a long pause. Her lips opened dryly. 'There

are . . . commands,' she said.

'Do you obey them?' he asked.

'I must.'

'What is the most basic of these commands?' he asked.

'I . . . can . . . not . . . tell.'

Paul almost rubbed his hands. A simple 'Don't talk about it,' he thought.

'Just nod your head if I repeat the command,' he said.

'Does it say, "You must not tell"?"

Her head nodded.

Paul rubbed his hands against his pants legs and realized suddenly that he was perspiring excessively.

'What is it you must not tell?' he asked. She shook her head without speaking.

'You must tell me,' he said. 'If you do not tell me, your right foot will begin to burn and itch unbearably and will continue to do so until you tell me. Tell me what it is that you have been commanded not to tell.'

Again she shook her head. She reached down and began

to scratch her right foot. She pulled off her shoe.

'You must tell me,' Paul said. 'What is the first word of the command?'

The girl looked up at him, but her eyes remained unfocused.

'You . . .' she said.

It was as though she had brought the word from some dark place deep within her and the saying of it was almost too much to bear. She continued to scratch her right leg.

'What is the second word?' Paul asked.

She tried to speak, but failed.

'Is it "must"?' he asked. 'Nod your head if it is.'

She nodded her head. 'You "must" what?'

Again she was wordless.

He thought about it for a moment. 'Sensory perception,' he thought. He leaned forward. 'Is it "You must sense..."?' he asked. 'Is it "You must sense only..."?'

She relaxed. Her head nodded and she said, 'Yes.'

Paul took a deep breath.

'What is it "You must sense only . . ."?' he asked. She opened her mouth, her lips moved, but no sound issued.

He felt like screaming at her, dragging the answer from her mind with his hands.

'What is it?' His voice cracked on the question. 'Tell

me!'

She shook her head from side to side. He noticed signs of awakening.

Again he took a deep breath. 'What will happen to you

if you tell me?'

'I'll die,' she said.

He leaned forward and lowered his voice to a confidential tone. 'That is foolishness,' he said. 'You can't die just because you say a few words. You know that. Now tell me what it is that you have been ordered to sense.'

She stared straight ahead of her at nothing, mouth open. Paul lowered his head to look directly into her eyes. 'Do

you see me?' he asked.

'No,' she said.

'What do you see?' he asked.

'I see death.'

'Look at me instead,' Paul said. 'You remember me.'

'You are death,' she said.

'That's nonsense! Look at me,' he commanded.

Her eyes opened wider. Paul stared into them. Her eyes seemed to grow and grow and grow and grow and grow... Paul found himself unable to look away. There was nothing else in the world except two blue-gray eyes. A deep, resonant voice, like a low-register cello, filled his mind.

Paul's lips formed the words, 'yes'.

'Who am I?' the voice asked.

Paul dampened his dry lips with his tongue. 'You are death,' he said.

Bureaucracy has a kind of timeless, raceless mold which

makes its communiques recognizable as to type by the members of any bureau anywhere. The multiple copies, the precise wording to cover devious intent, the absolute protocol of address – all are of a pattern, whether the communication is to the Reconstruction Finance Corporation or the Denebian Bureau of Indoctrination.

Mirsar Wees knew the pattern as another instinct. He had been supervisor of indoctrination and overseer of the korad farming on Sol III for one hundred and fifty-seven of the planet's years. In that time, by faithfully following the letter of the Indoctrination Bureau's code and never an individual interpretation of its spirit, he had insured for himself a promotion to Coordinator of the entire Sol prefecture whenever such an opening occurred.

Having met another threat to his position and resolved it, knowing the security of his tenure, he sat before the mechanical secretary-transmitter in his office and dictated a letter to the Bureau. The vision-ring around his head glowed a dull amber as he relaxed the receptors in it. His body stretched out comfortably, taking a gentle

massage from the chair.

'There has been considerable carelessness lately with the training of neo-indoctrinators,' he said into the communo-tube.

Let a few heads fall at the bureau, he thought.

There seems to be a feeling that, because we of the Sol prefecture are dealing with lesser beings, a lesser amount of care need be taken with the prefecture's indoctrinators. I have just dealt with a first-order threat to the Sol III korad supply, a threat which was directly attributable to neo-indoctrinator carelessness. A deviant was allowed to pass through the hands of three of our latest acquisitions from the College of Indoctrinators. These indoctrinators have been sent back for retraining.'

He thought in satisfaction: They will reflect that the korad secreted by the glands of our charges is necessary for their own immortality, and will be more severe at the training centre because of that. And pensively: It is almost time for me to tell them of our breeding experiments to bring the korad glands to the exterior of these creatures, making more frequent draining possible. They will particularly appreciate the niceties of indoctri-

nation – increasing the mating pattern, increasing individual peril and, thereby, the longevity gland secretion, and the more strict visual limitation to keep the creatures

from discovering the change....

'I am sending a complete visio-corder report on how I met this threat,' he spoke into the tube. 'Briefly, I insinuated myself into the earth-being's presence and installed a more severe command. Standard procedure. It was not deemed practical to eliminate the creature because of the latest interpretations on command interference; it was felt that the being's elimination might set off further thought-patterns inimical to our designs.

'The creature was, therefore, commanded to mate with another of its ilk who is more stringently under our control. The creature also was removed from any labor involving the higher nerve-centres and has been put to another task, that of operating a transportation device

called a streetcar.

'The mate has been subjected to the amputation of an appendage. Unfortunately, before I could take action, the creature I treated had started along an exceedingly clever line of action and had installed irremovable commands which made the appendage useless.'

They will see how much of a deviant the creature was, he thought, and how careless the new indoctrinators

were.

'The indoctrinator service must keep in mind at all times what happened to create the Sol planetoid belt. Those bodies, as we all know, once were the planet Dirad, the greatest korad source in the entire galaxy. Slipshod procedure employed by indoctrinators set up a situation similar to the one I have just nipped, and we were forced to destroy the entire planet. The potency of minds which have slipped from our control should be kept constantly before our attention. Dirad is an object lesson.

'The situation here is again completely normal, of course, and the korad supply is safe. We can go on draining the immortality of others – but only as long as we

maintain constant vigilance.'

He signed it, 'Cordially, Mirsar Wees, Chief Indoctrinator, Sol Sub-prefecture.'

Someday, he thought, it will be 'Coordinator.'

Rising from the mechano-secretary, Mirsar Wees moved over to the 'incoming' tube of his report-panel and noticed a tube which his new assistant had tabbed with the yellow band of 'extreme importance.'

He inserted the tube into a translator, sat down, and

watched as it dealt out the report:

'A Hindu creature has seen itself as it really is,' the

report said.

Mirsar Wees reached over and put a tracer-beam on his new assistant to observe how that worthy was meeting this threat.

The report buzzed on: 'The creature went insane as per indoctrination command, but most unfortunately it is a member of a sect which worships insanity. Others are beginning to listen to its babblings.'

The report concluded: 'I make haste.'

Mirsar Wees leaned back, relaxed and smiled blandly. The new assistant showed promise.

NIGHTMARE BLUES

Honolulu is quiet, the dead buried, the rubble of buildings cleared away. A salvage barge rocks in the Pacific swell off Diamond Head. Divers follow a bubble trail down into the green water to the wreck of the Stateside skytrain. The Scramble Syndrome did this. Ashore, in converted barracks, psychologists work fruitlessly in the aftermath of insanity. This is where the Scramble Syndrome started: one minute the city was peaceful; a clock tick later the city was mad.

In forty days – nine cities infected. The twentieth century's Black Plague.

SEATTLE

First a ringing in the ears, fluting up to a whistle. The whistle became the warning blast of a nightmare train roaring clackety-clack, clackety-clack across his dream.

A psychoanalyst might have enjoyed the dream as a clinical study. This psychoanalyst was not studying the dream; he was having it. He clutched the sheet around his neck, twisted silently on the bed, drawing his knees under his chin.

The train whistle modulated into the contralto of an expensive chanteuse singing 'Insane Crazy Blues.' The dream carried vibrations of fear and wildness.

'A million dollars don't mean a thing-

Hoarse voice riding over clarion brass, bumping of

drums, clarinet squealing like an angry horse.

A dark-skinned singer with electric blue eyes and dressed in black stepped away from a red backdrop. She opened her arms to an unseen audience. The singer, the backdrop lurched into motion, revolving faster and faster and faster and faster until it merged into a pinpoint of red light. The red light dilated to the bell mouth of a trumpet sustaining a minor note.

The music shrilled; it was a knife cutting his brain. Dr. Eric Ladde awoke. He breathed rapidly; he oozed perspiration. Still he heard the singer, the music.

I'm dreaming that I'm awake, he thought.

He peeled off the top sheet, slipped his feet out, put them on the warm floor. Presently, he stood up, walked to the window, looked down on the moontrail shimmering across Lake Washington. He touched the sound switch beside the window and now he could hear the night – crickets, spring peepers at the lakeshore, the far hum of a skytrain.

The singing remained.

He swayed, gripped at the windowsill.

Scramble Syndrome—

He turned, examined the bedside newstape: no mention of Seattle. Perhaps he was safe – illness. But the music inside his head was no illness.

He made a desperate clutch for self-control, shook his head, banged his ear with the palm of his hand. The singing persisted. He looked to the bedside clock – 1:05 a.m., Friday, May 14, 1999.

Inside his head the music stopped. But now – Applause! A roar of clapping, cries, stamping of feet. Eric rubbed

his head.

I'm not insane . . . I'm not insane—

He slipped into his dressing gown, went into the kitchen cubicle of his bachelor residence. He drank water, yawned, held his breath – anything to drive away the noise, now a chicken-haggle of talking, clinking, slithering of feet.

He made himself a highball, splashed the drink at the back of his throat. The sounds inside his head turned off. Eric looked at the empty glass in his hand, shook his head.

A new specific for insanity – alcohol! He smiled wryly. And every day I tell my patients that drinking is no solution. He tasted a bitter thought: Maybe I should have joined that therapy team, not stayed here trying to create a machine to cure the insane. If only they hadn't laughed at me—

He moved a fibreboard box to make room beside the sink, put down his glass. A notebook protruded from the box, sitting atop a mound of electronic parts. He picked

up the notebook, stared at his own familiar block printing on the cover: Amanti Teleprobe - Test Book IX.

They laughed at the old doctor, too, he thought. Laughed him right into an asylum. Maybe that's where I'm headed - along with everyone else in the world.

He opened the notebook, traced his finger along the diagram of his latest experimental circuit. The teleprobe in his basement laboratory still carried the wiring, partially dismantled.

What was wrong with it?

He closed the notebook, tossed it back into the box. His thoughts hunted through the theories stored in his mind, the knowledge saved from a thousand failures. Fatigue and despondency pulled at him. Yet, he knew that the things Freud, Jung, Adler and all the others had sought in dreams and mannerisms hovered just beyond his awareness in an electronic tracer circuit.

He wandered back into his study-bedroom, crawled into the bed. He practiced yoga breathing until sleep washed over him. The singer, the train, the whistle did

not return.

Morning lighted the bedroom. He awoke, trailing fragments of his nightmare into consciousness, aware that his appointment book was blank until ten o'clock. The bedside newstape offered a long selection of stories, most headed 'Scramble Syndrome.' He punched code letters for eight items, flipped the machine to audio and listened to the news while dressing.

Memory of his nightmare nagged at him. He wondered, 'How many people awake in the night, asking them-selves, "Is it my turn now?"

He selected a mauve cape, drew it over his white coveralls. Retrieving the notebook from the box in the kitchen, he stepped out into the chill spring morning. He turned up the temperature adjustment of his coveralls. The unitube whisked him to the Elliott Bay waterfront. He ate at a seafood restaurant, the teleprobe notebook open beside his plate. After breakfast, he found an empty bench outside facing the bay, sat down, opened the notebook. He found himself reluctant to study the diagrams, stared out at the bay.

Mists curled from the gray water, obscuring the opposite shore. Somewhere in the drift a purse seiner sounded its hooter. Echoes bounced off the buildings behind him. Early workers hurried past, voices stilled: thin look of faces, hunted glances – the uniform of fear. Coldness from the bench seeped through his clothing. He shivered, drew a deep breath of the salt air. The breeze off the bay carried essence of seaweed, harmonic on the dominant bitter musk of a city's effluvia. Seagulls haggled over a morsel in the tide rip. The papers on his lap fluttered. He held them down with one hand, watching the people.

I'm procrastinating, he thought. It's a luxury my pro-

fession can ill afford nowadays.

A woman in a red fur cape approached, her sandals tapping a swift rhythm on the concrete. Her cape billowed

behind in a puff of breeze.

He looked up to her face framed in dark hair. Every muscle in his body locked. She was the woman of his nightmare down to the minutest detail! His eyes followed her. She saw him staring, looked away, walked past.

Eric fumbled his papers together, closed the notebook and ran after her. He caught up, matched his steps to hers, still staring, unthinking. She looked at him, flushed,

looked away.

'Go away or I'll call a cop!'
'Please, I have to talk to you.'

'I said go away.' She increased her pace; he matched it.

'Please forgive me, but I dreamed about you last night.
You see—'

She stared straight ahead.

'I've been told that one before! Go away!'

'But you don't understand.'

She stopped, turned and faced him, shaking with anger. 'But I do understand! You saw my show last night! You've dreamed about me!' She wagged her head. 'Miss Lanai, I must get to know you!'

Eric shook his head. 'But I've never even heard of you

or seen you before.'

'Well! I'm not accustomed to being insulted either!'
She whirled, walked away briskly, the red cape flowing out behind her. Again he caught up with her.

'Please-'

'I'll scream!'

'I'm a psychoanalyst.'

She hesitated, slowed, stopped. A puzzled expression flowed over her face. 'Well, that's a new approach.'

He took advantage of her interest. 'I really did dream about you. It was most disturbing. I couldn't shut it off.'

Something in his voice, his manner. She laughed, 'A real dream was bound to show up some day.'

'I'm Dr. Eric Ladde.'

She glanced at the caduceus over his breast pocket. 'I'm Colleen Lanai; I sing.'

He winced. 'I know.'

'I thought you'd never heard of me.'

'You sang in my dream.'

'Oh.' A pause. 'Are you really a psychoanalyst?'

He slipped a card from his breast pocket; handed it to her. She looked at it.

'What does "Teleprobe Diagnosis" mean?'

'That's an instrument I use.'

She returned the card, linked an arm through his, set an easy, strolling pace. 'All right, doctor. You tell me about your dream and I'll tell you about my headaches. Fair exchange?' She peered up at him from under thick eyelashes.

'Do you have headaches?'

'Terrible headaches.' She shook her head.

Eric looked down at her. Some of the nightmare unreality returned. He thought, 'What am I doing here? One doesn't dream about a strange face and then meet her in the flesh the next day. The next thing I know the whole world of my unconscious will come alive.'

'Could it be this Syndrome thing?' she asked. 'Ever since we were in Los Angeles I've—' She chewed at her

lip.

He stared at her. 'You were in Los Angeles?'

'We got out just a few hours before that . . . before—'

She shuddered. 'Doctor, what's it like to be crazy?'

He hesitated. 'It's no different from being sane – for the person involved.' He looked out at the mist lifting from the bay. 'The Syndrome appears similar to other forms of insanity. It's as though something pushed people over their lunacy thresholds. It's strange; there's a rather well-defined radius of about sixty miles which it saturated. Atlanta and Los Angeles, for instance, and Lawton, had quite sharp lines of demarcation: people on one side of a street got it; people on the other side didn't. We suspect there's a contamination period during which—'He paused, looked down at her, smiled, 'And all you asked was a simple question. This is my lecture personality. I wouldn't worry too much about those headaches; probably diet, change of climate, maybe your ears. Why don't you get a complete physical?'

She shook her head. 'I've had six physicals since we left Karachi: same thing – four new diets.' She shrugged.

'Still I have headaches.'

Eric jerked to a stop, exhaled slowly. 'You were in Karachi, too?'

'Why, yes; that was the third place we hit after Hono-

lulu.'

He leaned toward her. 'And Honolulu?'

She frowned. 'What is this, a cross-examination?' She waited. 'Well—'

He swallowed, thought, How can one person have been in these cities the Syndrome hit and be so casual about it? She tapped a foot. 'Cat got your tongue?'

He thought, She's so flippant about it.

He ticked off the towns on his fingers. 'You were in Los Angeles, Honolulu, Karachi; you've hit the high spots of Syndrome contamination and—'

An animal cry, sharp, exclamatory, burst from her. 'It

got all of those places?'

He thought, How could anyone be alive and not know exactly where the Syndrome has been?

He asked, 'Didn't you know?'

She shook her head, a numb motion, eyes wide, staring. 'But Pete said—' She stopped. 'I've been so busy learning new numbers. We're reviving the old time hot jazz.'

'How could you miss it? TV is full of it, the news-

tapes, the transgraphs.'

She shrugged. 'I've just been so busy. And I don't like to think about such things. Pete said—' She shook her head. 'You know, this is the first time I've been out alone for a walk in over a month. Pete was asleep and—' Her

expression softened. 'That Pete; he must not have wanted me to worry.'

'If you say so, but—' He stopped. 'Who's Pete?'

'Haven't you heard of Pete Serantis and the musikron?'

'What's a musikron?'

She shook back a curl of dark hair. 'Have your little joke, doctor.'

'No, seriously. What's a musikron?'

She frowned. 'You really don't know what the musi-kron is?'

He shook his head.

She chuckled, a throaty sound, controlled. 'Doctor, you talk about my not knowing about Karachi and Honolulu. Where have you been hiding your head? Variety has us at the top of the heap.'

He thought, 'She's serious!'

A little stiffly, he said, 'Well, I've been quite busy with a research problem of my own. It deals with the Syndrome.'

'Oh.' She turned, looked at the gray waters of the bay, turned back. She twisted her hands together. 'Are you sure about Honolulu?'

'Is your family there?'

She shook her head. 'I have no family. Just friends.' She looked up at him, eyes shining. 'Did it get . . . everybody?'

He nodded, thought: She needs something to distract

her attention.

He said, 'Miss Lanai, could I ask a favor?' He plunged ahead, not waiting for an answer. 'You've been three places where the Syndrome hit. Maybe there's a clue in your patterns. Would you consent to undergoing a series

of tests at my lab? They wouldn't take long.'

'I couldn't possibly; I have a show to do tonight. I just sneaked out for a few minutes by myself. I'm at the Gweduc Room. Pete may wake up and—' She focused on his pleading expression. 'I'm sorry, doctor. Maybe some other time. You wouldn't find anything important from me anyway.'

He shrugged, hesitated. 'But I haven't told you about

my dream.'

'You tempt me, doctor. I've heard a lot of phony

dream reports. I'd appreciate the McCoy for just once. Why don't you walk me back to the Gweduc Room? It's only a couple of blocks.'

'Okay.'

She took his arm.

'Half a loaf—'
He was a thin man with a twisted leg, a

He was a thin man with a twisted leg, a pinched, hating face. A cane rested against his knee. Around him wove a spiderweb maze of wires – musikron. On his head, a dome-shaped hood. A spy, unsuspected, he looked out through a woman's eyes at a man who had identified himself as Dr. Eric Ladde. The thin man sneered, heard through the woman's ears: 'Half a loaf—'

On the bayside walk, Eric and Colleen matched steps. 'You never did tell me what a musikron is.'

Her laughter caused a passing couple to turn and stare. 'O.K. But I still don't understand. We've been on TV for a month.'

He thought, She thinks I'm a fuddy; probably am! He said, 'I don't subscribe to the entertainment circuits.

I'm just on the science and news networks.'

She shrugged. 'Well, the musikron is something like a recording and playback machine; only the operator mixes in any new sounds he wants. He wears a little metal bowl on his head and just thinks about the sounds – the musikron plays them.' She stole a quick glance at him, looked

ahead. 'Everyone says it's a fake; it really isn't.'

Eric stopped, pulled her to a halt. 'That's fantastic. Why—' He paused, chuckled. 'You know, you happen to be talking to one of the few experts in the world on this sort of thing. I have an encephalo-recorder in my basement lab that's the last word in teleprobes . . . that's what you're trying to describe.' He smiled. 'The psychiatrists of this town may think I'm a young upstart, but they send me their tough diagnostic cases.' He looked down at her. 'So let's just admit your Pete's machine is artistic showmanship, shall we?'

'But it isn't just showmanship. I've heard the records before they go into the machine and when they come out

of it.'

Eric chuckled.

She frowned. 'Oh, you're so supercilious.'

Eric put a hand on her arm. 'Please don't be angry. It's just that I know this field. You don't want to admit that

Pete has fooled you along with all the others.'

She spoke in a slow, controlled cadence: 'Look . . . doctor . . Pete . . . was . . . one . . . of . . . the . . . inventors . . . of . . . the . . . musikron . . . Pete . . . and . . . old . . . Dr. . . . Amanti.' She squinted her eyes, looking up at him. 'You may be a big wheel in this business, but I know what I've heard.'

'You said Pete worked on this musikron with a doctor.

What did you say that doctor's name was?'

'Oh, Dr. Carlos Amanti. His name's on a little plate inside the musikron.'

Eric shook his head. 'Impossible. Dr. Carlos Amanti is in an asylum.'

She nodded. 'That's right; Wailiku Hospital for the

Insane. That's where they worked on it.'

Eric's expression was cautious, hesitant. 'And you say when Pete thinks about the sounds, the machine produces them?'

'Certainly.'

'Strange I'd never heard about this musikron before.'

'Doctor, there are a lot of things you've never heard about.'

He wet his lips with his tongue. 'Maybe you're right.'
He took her arm, set a rapid pace down the walkway. 'I want to see this musikron.'

In Lawton, Oklahoma, long rows of prefabricated barracks swelter on a sunbaked flat. In each barracks building, little cubicles; in each cubicle, a hospital bed; on each hospital bed, a human being. Barracks XRO-29: a psychiatrist walks down the hall, behind him an orderly pushing a cart. On the cart, hypodermic needles, syringes, antiseptics, sedatives, test tubes. The psychiatrist shakes his head.

'Bailey, they certainly nailed this thing when they called it the Scramble Syndrome. Stick an egg-beater into every psychosis a person could have, mix 'em up, turn 'em all on.' The orderly grunts, stares at the psychiatrist.

The psychiatrist looks back. 'And we're not making any progress on this thing. It's like bailing out the ocean with a sieve.'

Down the hallway a man screams. Their footsteps

quicken.

The Gweduc Room's elevator dome arose ahead of Eric and Colleen, a half-melon inverted on the walkway. At the top of the dome a blue and red script-ring circled slowly, spelling out, 'Colleen Lanai with Pete Serantis and the Musikron.'

On the walkway before the dome a thin man, using a cane to compensate for a limp, paced back and forth. He

looked up as Eric and Colleen approached.

'Pete,' she said.

The man limped toward them, his cane staccato on the paving.

'Pete, this is Dr. Ladde. He's heard about Dr. Amanti

and he wants to—'

Pete ignored Eric, stared fiercely at Colleen. 'Don't you know we have a show tonight? Where have you been?'

'But, it's only a little after nine; I don't—'

Eric interrupted. 'I was a student of Dr. Amanti's. I'm interested in your musikron. You see, I've been carrying on Dr. Amanti's researches and—'

The thin man barked, 'No time!' He took Colleen's

arm, pulled her toward the dome.

'Pete, please! What's come over you?' She held back.

Pete stopped, put his face close to hers. 'Do you like this business?'

She nodded mutely, eyes wide.

'Then let's get to work!'

She looked back at Eric, shrugged her shoulders. 'I'm sorry.'

Pete pulled her into the dome.

Eric stared after them. He thought, 'He's a decided compulsive type . . . very unstable. May not be as immune to the Syndrome as she apparently is.' He frowned, looked at his wrist watch, remembered his ten o'clock appointment. 'Damn!' He turned, almost collided with a young man in busboy's coveralls.

The young man puffed nervously at a cigarette, jerked it out of his mouth, leered. 'Better find yourself another gal, Doc. That one's taken.'

Eric looked into the young-old eyes, stared them down.

'You work in there?'

The young man replaced the cigarette between thin lips, spoke around a puff of blue smoke. 'Yeah.'

'When does it open?'

The young man pulled the cigarette from his mouth, flipped it over Eric's shoulder into the bay. 'We're open now for breakfast. Floor show doesn't start until seven tonight.'

'Is Miss Lanai in the floor show?'

The busboy looked up at the script-ring over the dome,

smiled knowingly. 'Doc, she is the floor show!'

Again Eric looked at his wrist watch, thought. I'm coming back here tonight. He turned toward the nearest unitube. 'Thanks,' he said.

'You better get reservations if you're coming back

tonight,' said the busboy.

Eric stopped, looked back. He reached into his pocket, found a twenty-buck piece, flipped it to the bushow. The thin young man caught the coin out of the air, looked at it, said, 'Thank you. What name, Doc?'

'Dr. Eric Ladde.'

The busboy pocketed the coin. 'Righto, Doc. Floorside. I come on again at six. I'll attend to you personally.'

Eric turned back to the unitube entrance again and left

immediately.

Under the smog-filtered Los Angeles sun, a brown-dry city. Mobile Laboratory 31 ground to a stop before Our Lady of Mercy Hospital, churning up a swirl of dried palm fronds in the gutter. The overworked turbo-motor sighed to a stop, grating. The Japanese psychologist emerged on one side, the Swedish doctor on the other. Their shoulders sagged.

The psychologist asked, 'Ole, how long since you've

had a good night's sleep?'

The doctor shook his head. 'I can't remember, Yoshi; not since I left Frisco, I guess.'

From the caged rear of the truck, wild, high-pitched laughter, a sigh, laughter.

The doctor stumbled on the steps to the hospital side-

walk. He stopped, turned. 'Yoshi-

'Sure, Ole. I'll get some fresh orderlies to take care of this one.' To himself he added, 'If there are any fresh orderlies.'

Inside the hospital, cool air pressed down the hallway. The Swedish doctor stopped a man with a clipboard.

'What's the latest count?'

The man scratched his forehead with a corner of the clipboard. 'Two and a half million last I heard, doctor. They haven't found a sane one yet.'

The Gweduc Room pointed a plastine finger under Elliott Bay. Unseen by the patrons, a cage compressed a high density of sea life over the transparent ceiling. Illumabeams traversed the water, treating the watchers to visions of a yellow salmon, a mauve perch, a pink octopus, a blue jellyfish. At one end of the room, synthetic mother-ofpearl had been formed into a giant open gweduc shell the stage. Colored spotlights splashed the backdrop with

ribbons of flame, blue shadows.

Eric went down the elevator, emerged in an atmosphere disturbingly reminiscent of his nightmare. All it lacked was the singer. A waiter led him, threading a way through the dim haze of perfumed cigarette smoke, between tables ringed by men in formal black, women in gold lamé, luminous synthetics. An aquamarine glow shimmered from the small round table tops - the only lights in the Gweduc Room other than spotlights on the stage and illumabeams in the dark water overhead. A susurration of many voices hung on the air. Aromas of alcohol, tobacco, perfumes, exotic seafoods layered the room, mingled with a perspirant undertone.

The table nestled in the second row, crowded on all

sides. The waiter extricated a chair; Eric sat down.

'Something to drink, sir?'

'Bombay Ale.'

The waiter turned, merged into the gloom.

Eric tried to move his chair into a comfortable position, found it was wedged immovably between two chairs behind him. A figure materialized out of the gloom across from him; he recognized the busboy.

'Best I could get you, Doc.'

'This is excellent.' Eric smiled, fished a twenty-buck piece from his pocket, pressed it into the other's hand.

'Anything I can do for you, Doc?'

'Would you tell Miss Lanai I'm here?'

'I'll try, Doc; but that Pete character has been watching her like a piece of prize property all afternoon. Not that I wouldn't do the same thing myself, you understand.'

White teeth flashed in the smoke-layered shadows. The busboy turned, weaved his way back through the tables. The murmuring undercurrent of voices in the room damped out. Eric turned toward the stage. A portly man in ebony and chalk-striped coveralls bent over the microphone.

'Here's what you've been waiting for,' he said. He gestured with his left hand. Spotlights erased a shadow, revealing Colleen Lanai, her hands clasped in front of her. An old-fashioned gown of electric blue to match her

eyes sheathed the full curves.

'Colleen Lanai!'

Applause washed over the room, subsided. The portly man gestured with his right hand. Other spotlights flared, revealing Pete Serantis in black coveralls, leaning on his cane.

'Pete Serantis and-'

He waited for a lesser frenzy of clapping to subside.

"... The Musikron!"

A terminal spotlight illuminated a large metallic box behind Pete. The thin man limped around the box, ducked, and disappeared inside. Colleen took the microphone from the announcer, who bowed and stepped off the stage.

Eric became aware of a pressing mood of urgency in the room. He thought, 'For a brief instant we forget our fears, forget the Syndrome, everything except the music

and this instant.'

Colleen held the microphone intimately close to her mouth.

'We have some more real oldies for you tonight,' she said. An electric pressure of personality pulsed out from her. 'Two of these songs we've never presented before.

First, a trio - "Terrible Blues" with the musikron giving you a basic recording by Clarence Williams and the Red Onion Jazz Babies, Pete Serantis adding an entirely new effect; next, "Wild Man Blues" and the trumpet is pure Louis Armstrong; last, "Them's Graveyard Words," an old Bessie Smith special.' She bowed almost imperceptibly.

Music appeared in the room, not definable as to direction. It filled the senses. Colleen began to sing, seemingly without effort. She played her voice like a horn, soaring with the music, ebbing with it, caressing the air with it.

Eric stared, frozen, with all the rest of the audience.

She finished the first song. The noise of applause deafened him. He felt pain in his hands, looked down to find himself beating his palms together. He stopped, shook his head, took four deep breaths. Colleen picked up the thread of a new melody. Eric narrowed his eyes, staring at the stage. Impulsively, he put his hands to his ears and felt panic swell as the music remained undiminished. He closed his eyes, caught his breath as he continued to see Colleen, blurred at first, shifting, then in a steady image from a place nearer and to the left.

A wavering threnody of emotions accompanied the vision. Eric put his hands before his eyes. The image shifted to normal. He searched to one side of Colleen for the position from which he had been seeing her. He decided it could only be from inside the musikron and at the instant of decision discerned the outline of a mirror

panel in the face of the metallic box.

'Through a one-way glass,' he thought. 'Through Pete's

eyes.'

He sat, thinking, while Colleen finished her third number. Pete emerged from the musikron to share the applause. Colleen blew a kiss to the audience.

'We'll be back in a little while.'

She stepped down from the stage, followed by Pete; darkness absorbed them. Waiters moved along the tables. A drink was placed on Eric's table. He put money in the tray. A blue shadow appeared across from him, slipped into the chair.

'Tommy told me you were here . . . the busboy.' She leaned across the table. 'You mustn't let Pete see you.

He's in a rage, a real pet. I've never seen anybody that

angry.'

Eric leaned toward her, caught a delicate exhalation of sandalwood perfume. It dizzied him. 'I want to talk to

you,' he said. 'Can you meet me after the show?'

'I guess I can trust you,' she said. She hesitated, smiling faintly. 'You're the professional type.' Another pause. 'And I think I need professional advice.' She slipped out of the chair, stood up. 'I have to get back before he suspects I didn't go to the powder room. I'll meet you near the freight elevator upstairs.'

She was gone.

A cold breeze off the bay tugged at Eric's cape, puffing it out behind him. He leaned against the concrete railing, drawing on a cigarette. The glowing coal flowed an orange wash across his face, flaring, dimming. The tide rip sniggled and babbled; waves lap-lap-lapped at the concrete beneath him. A multi-colored glow in the water to his left winked out as the illumabeams above the Gweduc Room were extinguished. He shivered. Footsteps approached from his left, passed behind him – a man, alone. A muffled whirring sound grew, stopped. Light footsteps ran toward him, stopped at the rail. He smelled her perfume.

'Thanks,' he said.

'I can't be long. He's suspicious. Tommy brought me

up the freight elevator. He's waiting.'

'I'll be brief. I've been thinking. I'm going to talk about travel. I'm going to tell you where you've been since you hooked up with Pete in Honolulu.' He turned, leaned sideways against the railing. 'You tried your show first in Santa Rosa, California, the sticks; then you went to Piquetberg, Karachi, Reykjavik, Portland, Hollandia, Lawton – finally, Los Angeles. Then you came here.'

'So you looked up our itinerary.'

He shook his head. 'No.' He hesitated. 'Pete's kept you pretty busy rehearsing, hasn't he?'

'This isn't easy work.'

'I'm not saying it is.' He turned back to the rail, flipped his cigarette into the darkness, heard it hiss in the water. 'How long have you known Pete?'

'A couple of months more or less. Why?'

He turned away. 'What kind of a fellow is he?'

She shrugged. 'He's a nice guy. He's asked me to marry him.'

Eric swallowed. 'Are you going to?'

She looked out to the dark bay. 'That's why I want your advice. I don't know. . . I just don't know. He put me where I am, right on top of the entertainment heap.' She turned back to Eric. 'And he really is an awfully nice guy... when you get under that bitterness.'

Eric breathed deeply, pressed against the concrete rail-

ing. 'May I tell you a story?'

'What about?'

'This morning you mentioned Dr. Carlos Amanti, the inventor of the teleprobe. Did you know him?'

'No.'

'I was one of his students. When he had the breakdown it hit all of us pretty hard, but I was the only one who took up the teleprobe project. I've been working at it eight years.'

She stirred beside him. 'What is this teleprobe?'

'The science writers have poked fun at it; they call it the "mind reader." It's not. It's just a means of interpreting some of the unconscious impulses of the human brain. I suppose some day it may approach mind reading. Right now it's a rather primitive instrument, sometimes unpredictable. Amanti's intention was to communicate with the unconscious mind, using interpretation of encephalographic waves. The idea was to amplify them, maintain a discrete separation between types, and translate the type variations according to thought images.'

She chewed her lower lip. 'And you think the musikron would help make a better teleprobe, that it would help

fight the Syndrome?'

'I think more than that.' He looked down at the paving. 'You're trying to tell me something without saying it,' she said. 'Is it about Pete?'

'Not exactly.'

'Why'd you give that long recitation of where we'd been? That wasn't just idle talk. What are you driving at?' He looked at her speculatively, weighing her mood.

'Hasn't Pete told you about those places?'

She put a hand to her mouth, eyes wide, staring. She

moaned. 'Not the Syndrome . . . not all of those places, too?'

'Yes.' It was a flat, final sound.

She shook her head. 'What are you trying to tell me?' 'That it could be the musikron causing all of this.'

'Oh, no!'

'I could be wrong. But look at how it appears. Amanti was a genius working near the fringe of insanity. He had a psychotic break. Then he helped Pete build a machine. It's possible that machine picks up the operator's brain wave patterns, transmits them as a scrambling impulse. The musikron does convert thought into a discernible energy – sound. Why isn't it just as possible that it funnels a disturbing impulse directly into the unconscious.' He wet his lips with his tongue. 'Did you know that I hear those sounds even with my hands over my ears, see you with my eyes covered. Remember my nightmare? My nervous system is responding to a subjective impulse.'

'Does it do the same thing to everybody?'

'Probably not. Unless a person was conditioned as I have been by spending years in the aura of a similar machine, these impulses would be censored at the threshold of consciousness. They would be repressed as unbelievable.'

Her lips firmed. She shook her head. 'I don't see how all this scientific gobbledy-gook proves the musikron

caused the Syndrome.'

'Maybe it doesn't. But it's the best possibility I've seen. That's why I'm going to ask a favor. Could you get me the circuit diagrams for the musikron? If I could see them I'd be able to tell just what this thing does. Do you know if Pete has plans for it?'

'There's some kind of a thick notebook inside the musi-

kron. I think that's what you mean.

'Could you get it?'

'Maybe, but not tonight . . . and I wouldn't dare tell Pete.'

'Why not tonight?'

'Pete sleeps with the key to the musikron. He keeps it locked when it's not in use; so no one will get inside and get a shock. It has to be left on all the time because it

takes so long to warm it up. Something about crystals or energy potential or some words like that.'

'Where's Pete staying?'

'There are quarters down there, special apartments.'

He turned away, breathed the damp salt air, turned back.

Colleen shivered. 'I know it's not the musikron. I . . .

they—' She was crying.

He moved closer, put an arm around her shoulders, waiting. He felt her shiver. She leaned against him; the shivering subsided.

'I'll get those plans.' She moved her head restlessly.

'That'll prove it isn't the musikron.'

'Colleen . . .' He tightened his arm on her shoulders, feeling a warm urgency within him.

She moved closer. 'Yes.'

He bent his head. Her lips were warm and soft. She clung to him, pulled away, nestled in his arms.

'This isn't right,' she said.

Again he bent his head. She tipped her head up to meet

him. It was a gentle kiss.

She pulled away slowly, turned her head toward the bay. 'It can't be like this,' she whispered. 'So quick – without warning.'

He put his face in her hair, inhaled. 'Like what?'

'Like you'd found your way home.'

He swallowed. 'My dear.'

Again their lips met. She pulled away, put a hand to his cheek. 'I have to go.'

'When will I see you?'

'Tomorrow. I'll tell Pete I have to do some shopping.'

'Where?'

'Do you have a laboratory?'

'At my home in Chalmers Place on the other side of the lake. It's in the directory.'

'I'll come as soon as I can get the diagrams.'

Again they kissed. 'I really have to go.' He held her tightly.

'Really.' She pulled away. 'Good night' - she hesitated

- 'Eric.' Shadows flowed in around her.

He heard the whirring of the elevator, leaned back

against the concrete, drawing deep breaths to calm himself. Deliberate footsteps approached from his left. A hand-light flashed in his face, the dull gleam of a night patrolman's brassard behind the light. The light moved to the caduceus at his breast.

'You're out late, doctor.'

The light returned to his face, winked off. Eric knew he had been photographed – as a matter of routine.

'Your lipstick's smudged,' the patrolman said. He

walked away past the elevator dome.

Inside the silent musikron: a thin man, pinched face, hating. Bitter thought: Now wasn't that a sweet love scene! Pause. The doctor wants something to read? Wry smile. I'll provide it. He'll have something to occupy his mind after we've gone.

Before going to bed, Eric filed a transgraph to Mrs. Bertz, his secretary, telling her to cancel his appointments for the next day. He snuggled up to the pillow, hugging it. Sleep avoided him. He practiced Yoga breathing. His senses remained alert. He slipped out of bed, put on a robe and sandals. He looked at the bedside clock – 2:05 a.m., Saturday, May 15, 1999. He thought, Just twenty-five hours ago – nightmare. Now . . . I don't know. He smiled. Yes I do; I'm in love. I feel like a college kid.

He took a deep breath. I'm in love. He closed his eyes and looked at a memory picture of Colleen. Eric, if you only solve this Syndrome, the world is yours. The thoughts

skipped a beat. I'm an incipient manic-

Eric ruminated. If Pete takes that musikron out of

Seattle— What then?

He snapped a finger, went to the vidiphone, called an all-night travel agency. A girl clerk finally agreed to look up the booking dates he wanted – for a special fee. He gave her his billing code, broke the connection and went to the microfilm rack across from the foot of his bed. He ran a finger down the title index, stopped at 'Implications of Encephalographic Wave Forms, A Study of the Nine Brain Pulses, by Dr. Carlos Amanti.' He pushed the selector opposite the tape, activated the screen above the

rack and returned to his bed, carrying the remote-control unit.

The first page flashed on the screen; room lights dimmed

automatically. He read:

'There is a scale of vibratory impulses spanning and exceeding the human auditory range which consistently produce emotional responses of fear in varying degrees. Certain of these vibratory impulses – loosely grouped under the term sounds – test the extremes of human emotional experience. One may say, within reason, that all emotion is response to stimulation by harmonic movement, by oscillation.

'Many workers have linked emotions with characteristic encephalographic wave responses: Carter's work on Zeta waves and love; Reymann on Pi waves and abstract thinking; Poulson on the Theta Wave Index to degrees of sor-

row, to name a few.

'It is the purpose of my work to trace these characteristic responses and point out what I believe to be an

entirely new direction for interpretation of-

Because of the late hour, Eric had expected drowsiness to overtake his reading, but his senses grew more alert as he read. The words had the familiarity of much re-reading, but they still held stimulation. He recalled a passage toward the end of the book, put the film on motor feed and scanned forward to the section he wanted. He slowed the tape, returned the controls to single-page advance; there it was:

'While working with severely disturbed patients in the teleprobe, I have found a charged emotional feeling in the atmosphere. Others, unfamiliar with my work, have reported this same experience. This suggests that the characteristic emanations of a disturbed mentality may produce sympathetic reactions upon those within the unshielded field of the teleprobe. Strangely, this disturbed sensation sometimes follows by minutes or even hours the period when the patient was under examination.

'I am hesitant to suggest a theory based upon this latter phenomenon. There is too much we do not know about the teleprobe – its latency period, for instance. However, it is possible that the combination of teleprobe and disturbed personality broadcasts a field with a depressant effect upon the unconscious functions of persons within that field. Be that as it may, this entire field of teleprobe and encephalographic wave research carries implications which—'

With a decisive gesture, Eric snapped off the projector, slipped out of bed and dressed. The bedside clock showed 3:28 a.m., Saturday, May 15, 1999. Never in his life had he felt more alert. He took the steps two at a time down to his basement lab, flipped on all the lights, wheeled out his teleprobe.

I'm on to something, he thought. This Syndrome prob-

lem is too urgent for me to waste time sleeping.

He stared at his teleprobe, an open framework of shelves, banks of tubes, maze of wiring, relaxing chair in the center with the metal hemisphere of the pickup directly above the chair. He thought, The musikron is rigged for sound projection; that means a secondary resonance circuit

of some kind.

He pulled an unused tape recorder from a rack at the end of his bench, stripped the playback circuit from it. He took the recorder service manual, sketched in the changes he would need, pausing occasionally to figure circuit loads and balances on a slide rule. Presently, not too satisfied with his work, but anxious to get started, he brought out the parts he would need and began cutting and soldering. In two hours he had what he wanted.

Eric took cutter pliers, went to the teleprobe, snipped away the recorder circuit, pulled it out as a unit. He wheeled the teleprobe cage to the bench and, delicately feeling his way, checking the circuit diagrams as he went, he wired in the playback circuit. From the monitor and audio sides, he took the main leads, fed them back into the first bank of the encephalographic pickup. He put a test power source on the completed circuit and began adding resistance units by eye to balance the impedance. It took more than an hour of testing and cutting, required several units of shielding.

He stepped back, stared at the machine. He thought, It's going to oscillate all over the place. How does he

balance this monster?

Eric pulled at his chin, thinking. Well, let's see what this hybrid does.

The wall clock above his bench showed 6:45 a.m. He took a deep breath, hooked an overload fuse into a relay power switch, closed the switch. A wire in the pickup circuit blazed to incandescence; the fuse kicked out. Eric opened the switch, picked up a test meter, and returned to the machine. The fault eluded him. He went back to the circuit diagrams.

'Perhaps too much power—' He recalled that his heavy duty rheostat was at a shop being repaired, considered bringing out the auxiliary generator he had used on one experiment. The generator was beneath a pile of boxes in a corner. He put the idea temporarily aside, turned back

to the teleprobe.

'If I could just get a look at that musikron.'

He stared at the machine. 'A resonance circuit— What else?' He tried to imagine the interrelationship of the components, fitting himself into the machine.

'I'm missing it some place! There's some other thing and I have the feeling I already know it, that I've heard

it. I've got to see the diagrams on that musikron.'

He turned away, went out of the lab and climbed the stairs to his kitchen. He took a coffee capsule from a package in the cupboard, put it beside the sink. The vidiphone chimed. It was the clerk from the travel bureau. Eric took down her report, thanked her, broke the connection. He did a series of subtractions.

'Twenty-eight hour time lag,' he thought. 'Every one

of them. That's too much of a coincidence.'

He experienced a moment of vertigo, followed by weariness. 'I'd better get some rest. I'll come back to this thing when I'm more alert.'

He padded into the bedroom, sat down on the bed, kicked off his sandals and lay back, too tired to undress. Sleep eluded him. He opened his eyes, looked at the clock: 7:00 a.m. He sighed, closed his eyes, sank into a somnolent state. A niggling worry gnawed at his consciousness. Again he opened his eyes, looked at the clock: 9:50 a.m. But I didn't feel the time pass, he thought. I must have slept. He closed his eyes. His senses drifted into dizziness, the current in a stream, a ship on the current, wandering, hunting, whirling.

He thought, I hope he didn't see me leave.

His eyelids snapped open and, for a moment, he saw a unitube entrance on the ceiling above his head. He shook his head.

'That was a crazy thought. Where'd that come from?'

he asked him. 'I've been working too hard.'

He turned on his side, returned to the somnolent state, his eyes drooping closed. Instantly, he had the sensation of being in a maze of wires; an emotion of hate surged over him so strongly it brought panic because he couldn't explain it or direct it at anything. He gritted his teeth, shook his head, opened his eyes. The emotion disappeared, leaving him weak. He closed his eyes. Into his senses crept an almost overpowering aroma of gardenias, a vision of dawnlight through a shuttered window. His eyelids snapped open; he sat up in the bed, put his head in his hands.

Rhinencephalic stimulation, he thought. Visual stimulation . . . auditory stimulation . . . nearly total sensorium response. It means something. But what does it mean? He shook his head, looked at the clock: 10:10 a.m.

Outside Karachi, Pakistan, a Hindu holy man squatted in the dust beside an ancient road. Past him paraded a caravan of International Red Cross trucks, moving selected cases of Syndrome madness to the skytrain field on the Indus delta. Tomorrow the sick would be studied at a new clinic in Vienna. The truck motors whined and roared; the ground trembled. The holy man drew an ancient symbol with a finger in the dust. The wind of a passing truck stirred the pattern of Brahmaputra, twisting it. The holy man shook his head sadly.

Eric's front door announcer chimed as someone stepped onto the entrance mat. He clicked the scanner switch at his bedside, looked to the bedroom master screen; Colleen's face appeared on the screen. He punched for the door release, missed, punched again, caught it. He ran his hands through his hair, snapped the top clip of his coveralls, went to the entrance hall.

Colleen appeared tiny and hesitant standing in the hall. As he saw her, something weblike, decisive, meshed in-

side him - a completeness.

He thought, Boy, in just one day you are completely on the hook.

'Eric,' she said.

Her body's warm softness clung to him. Fragrance wafted from her hair.

'I missed you,' he said.

She pulled away, looked up. 'Did you dream about me?'
He kissed her. 'Just a normal dream.'

'Doctor!'

A smile took the sting out of the exclamation. She pulled away, slipped off her fur-lined cape. From an inner pocket of the cape she extracted a flat blue booklet. 'Here's the diagram. Pete didn't suspect a thing.'

Abruptly, she reeled toward him, clutched at his arm,

gasping.

He steadied her, frightened. 'What's the matter, darling?'

She shook her head, drawing deep, shuddering breaths.

'It's nothing; just a . . . little headache.'

'Little headache nothing.' He put the back of his wrist against her forehead. The skin held a feverish warmth. 'Do you feel ill?'

She shook her head. 'No. It's going away.'

'I don't like this as a symptom. Have you eaten?'

She looked up, calmer. 'No, but I seldom eat break-fast... the waistline.'

'Nonsense! You come in here and eat some fruit.'
She smiled at him. 'Yes, doctor... darling.'

The reflection on the musikron's inner control surfaces gave an underlighted, demoniacal cast to Pete's face. His hand rested on a relay switch. Hesitant thought: Colleen, I wish I could control your thoughts. I wish I could tell you what to do. Each time I try, you get a headache. I wish I knew how this machine really works.

Eric's lab still bore the cluttered look of his night's activities. He helped Colleen up to a seat on the edge of the bench, opened the musikron booklet beside her. She looked down at the open pages.

'What are all those funny looking squiggles?'

He smiled, 'Circuit diagram.' He took a test clip and,

glancing at the diagram, began pulling leads from the resonance circuit. He stopped, a puzzled frown drawing down his features. He stared at the diagram. 'That can't be right.' He found a scratch pad, stylus, began checking the booklet.

'What's wrong?'

'This doesn't make sense.'

'How do you mean?'

'It isn't designed for what it's supposed to do.'

'Are you certain?'

'I know Dr. Amanti's work. This isn't the way he works.' He began leafing through the booklet. A page flopped loose. He examined the binding. The booklet's pages had been razored out and new pages substituted. It was a good job. If the page hadn't fallen out, he might not have noticed. 'You said it was easy to get this. Where was it?'

'Right out on top of the musikron.'

He stared at her speculatively.

'What's wrong?' Her eyes held open candor.

'I wish I knew.' He pointed to the booklet. 'That thing's as phony as a Martian canal.'

'How do you know?'

'If I put it together that way' – a gesture at the booklet – 'it'd go up in smoke the instant power hit it. There's only one explanation: Pete's on to us.'

'But how?'

'That's what I'd like to know . . . how he anticipated you'd try to get the diagram for me. Maybe that busboy—'

'Tommy? But he's such a nice young fellow.'

'Yeah. He'd sell his mother if the price was right. He could have eavesdropped last night.'

'I can't believe it.' She shook her head.

In the webwork of the musikron, Pete gritted his teeth. Hate him! Hate him! He pressed the thought at her, saw it fail. With a violent motion, he jerked the metal hemispere off his head, stumbled out of the musikron. You're not going to have her! If it's a dirty fight you want, I'll really show you a dirty fight!

Colleen asked, 'Isn't there some other explanation?'

'Can you think of one?'

She started to slide down from the bench, hesitated, lurched against him, pressing her head against his chest. 'My head . . . my head—' She went limp in his arms, shuddered, recovered slowly, drew gasping breaths. She stood up. 'Thank you.'

In a corner of the lab was a canvas deck chair. He led her over to it, eased her down. 'You're going to a hospital right now for a complete check-up – tracers, the works. I

don't like this.'

'It's just a headache.'

'Peculiar kind of a headache.'
'I'm not going to a hospital.'

'Don't argue. I'm calling for reservations as soon as

I can get over to the phone.'

'Eric, I won't do it!' She pushed herself upright in the chair. 'I've seen all the doctors I want to see.' She hesitated, looked up at him. 'Except you. I've had all those tests. There's nothing wrong with me . . . except something in my head.' She smiled. 'I guess I'm talking to the right kind of a doctor for that.'

She lay back, resting, closed her eyes. Eric pulled up a stool, sat down beside her, holding her hand. Colleen appeared to sink into a light sleep, breathing evenly. Minutes

passed.

If the teleprobe wasn't practically dismantled, I could test her, he thought.

She stirred, opened her eyes.

'It's that musikron,' he said. He took her arm. 'Did you ever have headaches like this before you began work-

ing with that thing?'

'I had headaches, but . . . well, they weren't this bad.' She shuddered. 'I kept having horrible dreams last night about all those poor people going insane. I kept waking up. I wanted to go in and have it out with Pete.' She put her hands over her face. 'How can you be certain it's the musikron. You can't be sure. I won't believe it! I can't.'

Eric stood up, went to the bench and rummaged under loose parts for a notebook. He returned, tossed the book into her lap. 'There's your proof.'

She looked at the book without opening it. 'What is this?'

'It's some figures on your itinerary. I had a travel bureau check your departure times. From the time Pete would have been shutting down the musikron to the moment all hell broke loose there's an even twenty-eight-hour time lapse. That same time lag is present in each case.'

She pushed the notebook from her lap. 'I don't believe

it. You're making this up.'

He shook his head. 'Colleen, what does it mean to you that you have been each place where the Syndrome hit . . . that there was a twenty-eight-hour time lapse in each case. Isn't that stretching coincidence too far?'

'I know it's not true.' Her lips thinned. 'I don't know what I've been thinking of to even consider you were right.' She looked up, eyes withdrawn. 'It can't be true. If it was, it would mean Pete planned the whole thing. He's just not that kind of a guy. He's nice, thoughtful.'

He started to put his hand on her arm. 'But, Colleen,

I thought—'

'Don't touch me. I don't care what you thought, or what I thought. I think you've been using your psychological ability to try to turn me away from Pete.'

He shook his head, again tried to take her arm.

She pulled away. 'No! I want to think and I can't think when . . . when you touch me.' She stared at him.

'I believe you're just jealous of Pete.'

'That's not-'

A motion at the lab door caught his eye, stopped him. Pete stood there, leaning on his cane.

Eric thought, How did he get there? I didn't hear a

thing. How long has he been there? He stood up.

Pete stepped forward. 'You forgot to latch your door, doctor.' He looked at Colleen. 'Common enough thing. I did, too.' He limped into the room, cane tapping methodically. 'You were saying something about jealousy.' A pause. 'I understand about jealousy.'

'Pete!' Colleen stared at him, turned back to Eric.

'Eric, I—' She began, and then shrugged.

Pete rested both hands on his cane, looked up at Eric. 'You weren't going to leave me anything, were you,

doctor - the woman I love, the musikron. You were even going to hang me for this Syndrome thing.'

Eric stopped, retrieved his notebook from the floor. He handed it to Pete, who turned it over, looked at the back.

'The proof's in there. There's a twenty-eight-hour time lag between the moment you leave a community and the moment madness breaks out. You already know it's followed you around the world. There's no deviation. I've checked it out.'

Pete's face paled. 'Coincidence. Figures can lie; I'm no monster.'

Colleen turned toward Eric, back to Pete. 'That's what I told him, Pete.'

'Nobody's accusing you of being a monster, Pete . . . yet,' Eric said. 'You could be a savior. The knowledge that's locked up in that musikron could practically wipe out insanity. It's a positive link with the unconscious . . . can be tapped any time. Why, properly shielded—'

'Nuts! You're trying to get the musikron so you can throw your weight around.' He looked at Colleen. 'And you sugar-talked her into helping you.' He sneered. 'It's not the first time I've been double-crossed by a woman;

I guess I should've been a psychiatrist.'

Colleen shook her head. 'Pete, don't talk that way.'

'Yeah . . . How else do you expect me to talk? You were a nobody; a canary in a hula chorus and I picked you up and set you down right on the top. So what do you do—' He turned away, leaning heavily on the cane.

'You can have her, Doc; she's just your type!'

Eric put out a hand, withdrew it. 'Pete! Stop allowing your deformity to deform your reason! It doesn't matter how we feel about Colleen. We've got to think about what the musikron is doing to people! Think of all the unhappiness this is causing people . . . the death . . . the pain—'

'People!' Pete spat out the word.

Eric took a step closer to him. 'Stop that! You know I'm right. You can have full credit for anything that is developed. You can have full control of it. You can—'

'Don't try to kid me, Doc. It's been tried by experts. You and your big words! You're just trying to make a

big impression on baby here. I already told you you can have her. I don't want her.'

'Pete! You-'

'Look out, Doc; you're losing your temper!'

'Who wouldn't in the face of your pig-headedness?'

'So it's pig-headed to fight a thief, eh Doc?' Pete spat on the floor, turned toward the door, tripped on his cane and fell.

Colleen was at his side. 'Pete, are you hurt?'

He pushed her away. 'I can take care of myself!' He struggled to his feet, pulling himself up on the cane.

'Pete, please-'

Eric saw moisture in Pete's eyes. 'Pete, let's solve this thing.'

'It's already solved, Doc.' He limped through the door-

way.

Colleen hesitated. 'I have to go with him. I can't let him go away like this. There's no telling what he'll do.'

'But don't you see what he's doing?'

Anger flamed in her eyes; she stared at Eric. 'I saw what you did and it was as cruel a thing as I've ever seen.' She turned and ran after Pete.

Her footsteps drummed up the stairs; the outer door slammed.

An empty fibreboard box lay on the floor beside the teleprobe. Eric kicked it across the lab.

'Unreasonable . . . neurotic . . . flighty . . . irrespon-

sible—'

He stopped; emptiness grew in his chest. He looked at the teleprobe. 'Sometimes, there's no predicting about women.' He went to the bench, picked up a transistor, put it down, pushed a tumble of resistors to the back of the bench. 'Should've known better.'

He turned, started toward the door, froze with a thought

which forced out all other awareness:

What if they leave Seattle?

He ran up the stairs three at a time, out the door, stared up and down the street. A jet car sped past with a single occupant. A woman and two children approached from his left. Otherwise, the street was empty. The unitube entrance, less than half a block away, disgorged

three teenage girls. He started toward them, thought better of it. With the tubes running fifteen seconds apart, his chance to catch them had been lost while he'd nursed his hurt.

He re-entered the apartment.

I have to do something, he thought. If they leave, Seattle will go the way of all the others. He sat down by the vidiphone, put his finger in the dial, withdrew it.

If I call the police, they'll want proof. What can I show them besides some time-tables? He looked out the window at his left. The musikron! They'll see— Again he reached for the dial, again withdrew. What would they see? Pete would just claim I was trying to steal it.

He stood up, paced to the window, stared out at the

lake.

I could call the society, he thought.

He ticked off in his mind the current top officers of the King County Society of Psychiatric Consultants. All of them considered Dr. Eric Ladde a little too successful for one so young; and besides there was the matter of his research on the teleprobe; mostly a laughable matter.

But I have to do something . . . the Syndrome— He shook his head. I'll have to do it alone, whatever I do. He slipped into a black cape, went outside and headed

for the Gweduc Room.

A cold wind kicked up whitecaps in the bay, plumed spray onto the waterfront sidewalk. Eric ducked into the elevator, emerged into a lunchroom atmosphere. The girl at the checktable looked up.

'Are you alone, doctor?'

'I'm looking for Miss Lanai.'

'I'm sorry. You must have passed them outside. She and Mr. Serantis just left.'

'Do you know where they were going?'

'I'm sorry; perhaps if you come back this evening—'

Eric returned to the elevator, rode up to the street vaguely disquieted. As he emerged from the elevator dome, he saw a van pull away from the service dome. Eric played a hunch, ran toward the service elevator which already was whirring down.

'Hey!'

The whirring stopped, resumed; the elevator returned to the street level, in it Tommy, the busboy.

'Better luck next time, Doc.'

'Where are they?'

"Well-"

Eric jammed a hand into his coin pocket, fished out a

fifty-buck piece, held it in his hand.

Tommy looked at the coin, back at Eric's eyes. 'I heard Pete call the Bellingham skytrain field for reservations to London.'

A hard knot crept into Eric's stomach; his breathing became shallow, quick; he looked around him.

'Only twenty-eight hours-'

'That's all I know, Doc.'

Eric looked at the busboy's eyes, studying him.

Tommy shook his head. 'Don't you start looking at me that way!' He shuddered. 'That Pete give me the creeps; always staring at a guy; sitting around in that machine all day and no noises coming out of it.' Again he shuddered. 'I'm glad he's gone.'

Eric handed him the coin. 'You won't be.'

'Yeah,' Tommy stepped back into the elevator. 'Sorry you didn't make it with the babe, Doc.'

"Wait."

"Yeah?"

'Wasn't there a message from Miss Lanai?'

Tommy made an almost imperceptible motion toward the inner pocket of his coveralls. Eric's trained eyes caught the gesture. He stepped forward, gripped Tommy's arm.

'Give it to me!'

'Now look here, Doc.'

'Give it to me!'

'Doc, I don't know what you're talking about.'

Eric pushed his face close to the busboy's. 'Did you see what happened to Los Angeles, Lawton, Portland, all the places where the Syndrome hit?'

The boy's eyes went wide. 'Doc, I-'

'Give it to me!'

Tommy darted his free hand under his coveralls, extracted a thick envelope, thrust it into Eric's hand.

Eric released the boy's arm. Scrawled on the envelope

was: 'This will prove you were wrong about Pete.' It was signed, 'Colleen.'

'You were going to keep this?' Eric asked.

Tommy's lips twisted. 'Any fool can see it's the plans

for the musikron, Doc. That thing's valuable.'

'You haven't any idea,' Eric said. He looked up. 'They're headed for Bellingham?'

'Yeah.'

The nonstop unitube put Eric at the Bellingham field in twenty-one minutes. He jumped out, ran to the station, jostling people aside. A skytrain lashed into the air at the far end of the field. Eric missed a step, stumbled, caught his balance.

In the depot, people streamed past him away from the ticket window. Eric ran up to the window, leaned on the counter. 'Next train to London?'

The girl at the window consulted a screen beside her. 'There'll be one at 12:50 tomorrow afternoon, sir. You just missed one.'

'But that's twenty-four hours!'

'You'd arrive in London at 4:50 p.m., sir.' She smiled. 'Just a little late for tea.' She glanced at his caduceus.

Eric clutched at the edge of the counter, leaned toward her. 'That's twenty-nine hours—one hour too late.'

He pushed himself away from the window, turned.

'It's just a four-hour trip, doctor.'

He turned back. 'Can I charter a private ship?'

'Sorry, doctor. There's an electrical storm coming: the traveler beam will have to be shut down. I'm sure you couldn't get a pilot to go out without the beam. You do understand?'

'Is there a way to call someone on the skytrain?'

'Is this a personal matter, doctor?'

'It's an emergency.'

'May I ask the nature of the emergency?'

He thought a moment, looking at the girl. He thought, Same problem here . . . nobody would believe me.

He said, 'Never mind. Where's the nearest vidiphone?

I'll leave a message for her at Plymouth Depot.'

'Down that hallway to your right, doctor.' The girl went

back to her tickets. She looked up at Eric's departing

back. 'Was it a medical emergency, doctor?'

He paused, turned. The envelope in his pocket rustled. He felt for the papers, pulled out the envelope. For the second time since Tommy had given them to him, Eric glanced inside at the folded pages of electronic diagrams, some initialed 'C.A.'

The girl waited, staring at him.

Eric put the envelope back in his pocket, a thought crystalizing. He glanced up at the girl. 'Yes, it was a

medical emergency. But you're out of range.'

He turned, strode outside, back to the unitube. He thought about Colleen. Never trust a neurotic woman. I should have known better than to let my glands hypnotize me.

He went down the unitube entrance, worked his way out to the speed strip, caught the first car along, glad to find it empty. He took out the envelope, examined its contents during the ride. There was no doubt about it; the envelope contained the papers Pete had razored from the musikron service book. Eric recognized Dr. Amanti's characteristic scrawl.

The wall clock in his lab registered 2:10 p.m. as Eric turned on the lights. He took a blank sheet of paper from his notebook, wrote on it with grease pencil:

'DEADLINE, 4:00 p.m., Sunday, May 16th.'

He tacked the sheet above his bench, spread out the circuit diagrams from the envelope. He examined the

first page.

Series modulation, he thought. Quarter wave. He ran a stylus down the page, checked the next page. Multiple phase-reversing. He turned to the next page. The stylus paused. He traced a circuit, went back to the first page. Degenerative feedback. He shook his head. That's impossible! There'd just be a maze of wild harmonics. He continued on through the diagrams, stopped and read through the last two pages slowly. He went through the circuits a second time, a third time, a fourth time. He shook his head. What is it?

He could trace the projection of much of the diagram, amazed at the clear simplicity of the ideas. The last ten pages though— They described a series of faintly familiar

circuits, reminding him of a dual frequency crystal calibrator of extremely high oscillation. '10,000 KC' was marked in the margin. But there were subtle differences he couldn't explain. For instance, there was a sign for a lower limit.

A series of them, he thought. The harmonics hunt and change. But it can't be random. Something has to control

it, balance it.

At the foot of the last page was a notation: 'Important – use only C6 midget variable, C7, C8 dual, 4ufd.'

They haven't made tubes in that series for fifty years,

he thought. How can I substitute?

He studied the diagram.

I don't stand a chance of making this thing in time. And if I do; what then? He wiped his forehead. Why does it remind me of a crystal oscillator? He looked at the clock – two hours had passed. Where did the time go? he asked himself. I'm taking too much time just learning what this is. He chewed his lips, staring at the moving second hand of the clock, suddenly froze. The parts houses will be closing and tomorrow's Sunday!

He went to the lab vidiphone, dialed a parts house. No luck. He dialed another, checking the call sheet beside the phone. No luck. His fifth call netted a suggestion of a substitute circuit using transistors which might work. Eric checked off the parts list the clerk suggested, gave the man his package tube code.

'I'll have them out to you first thing Monday,' the

man said.

'But I have to have them today! Tonight!'

'I'm sorry, sir. The parts are in our warehouse; it's all locked up tight on Saturday afternoon.'

'I'll pay a hundred bucks above list price for those

parts.'

'I'm sorry, sir; I don't have authorization.'

'Two hundred.'

'But-'

'Three hundred.'

The clerk hesitated. Eric could see the man figuring. The three hundred probably was a week's wages.

'I'll have to get them myself after I go off duty here,'

the clerk said. 'What else do you need?'

Eric leafed through the circuit diagrams, read off the parts lists from the margins. 'There's another hundred bucks in it if you get them to me before seven.'

'I get off at 5:30, doctor. I'll do my best.'

Eric broke the circuit, returned to his bench, began roughing-in from the diagram with what materials he had. The teleprobe formed the basic element with surprisingly few changes.

At 5:40, the dropbell of his transgraph jangled upstairs. Eric put down his soldering iron, went upstairs, pulled out the tape. His hands trembled when he saw the

transmission station, London. He read:

'Don't ever try to see me again. Your suspicions are entirely unfounded as you probably know by now. Pete and I to be married Monday. Colleen.'

He sat down at the transmitter, punched out a message to American Express, coding it urgent for delivery to

Colleen Lanai.

'Colleen: If you can't think of me, please think of what this means to a city full of people. Bring Pete and that machine back before it's too late. You can't be this inhuman.'

He hesitated before signing it, punched out, 'I love you.' He signed it, 'Eric.'

He thought, You damn' fool, Eric. After the way she

ran out on you.

He went into the kitchen, took a capsule to stave off weariness, ate a dinner of pills, drank a cup of coffee. He leaned back against the kitchen drainboard, waiting for the capsule to take hold. His head cleared; he washed his face in cold water, dried it, returned to the lab.

The front door announcer chimed at 6.42 p.m. The screen showed the clerk from the parts house, his arms gripping a bulky package. Eric punched the door release, spoke into the tube: 'First door on your left, downstairs.'

The back wall of his bench suddenly wavered, the lines of masonry rippling; a moment of disorientation surged through him. He bit his lip, holding to the reality of the pain.

It's too soon, he thought. Probably my own nerves; I'm

too tense.

An idea on the nature of the Syndrome flashed into his mind. He pulled a scratch pad to him, scribbled, 'Loss of unconscious autonomy; overstimulation subliminal receptors; gross perception – petit perception. Check C. G. Jung's collective unconscious.'

Footsteps tapped down the stairway.

'This the place?'

The clerk was a taller man than he had expected. An air of near adolescent eagerness played across the man's

features as he took in the lab. 'What a layout!'

Eric cleared a space on the bench. 'Put that stuff right here.' Eric's eyes focused on the clerk's delicately sensitive hands. The man slid the box onto the bench, picked up a fixed crystal oscillator from beside the box, examined it.

'Do you know anything about electronic hookups?' Eric

asked.

The clerk looked up, grinned. 'W7CGO. I've had my own ham station over ten years.'

Eric offered his hand. 'I'm Dr. Eric Ladde.'

'Baldwin Platte . . . Baldy.' He ran one of his sensitive hands through thinning hair.

'Glad to know you, Baldy. How'd you like to make a thousand bucks over what I've already promised you?'

'Are you kidding, Doc?'

Eric turned his head, looked at the framework of the teleprobe. 'If that thing isn't finished and ready to go by four o'clock tomorrow afternoon, Seattle will go the way of Los Angeles.'

Baldy's eyes widened; he looked at the framework.

'The Syndrome? How can-'

'I've discovered what caused the Syndrome . . . a machine like this. I have to build a copy of that machine and get it working. Otherwise—'

The clerk's eyes were clear, sober. 'I saw your nameplate upstairs, Doc, and remembered I'd read about you.'

'Well?'

'If you say positive you've found out what caused the Syndrome, I'll take your word for it. Just don't try to explain it to me.' He looked toward the parts on the

bench, back to the teleprobe. 'Tell me what I'm supposed to do.' A pause. 'And I hope you know what you're talk-

ing about.

'I've found something that just can't be coincidence,' Eric said. 'Added to what I know about teleprobes, well—' He hesitated. 'Yes, I know what I'm talking about.'

Eric took a small bottle from the rear of his bench, looked at the label, shook out a capsule. 'Here, take this; it'll keep you awake.'

Baldy swallowed the capsule.

Eric sorted through the papers on his bench, found the first sheet. 'Now, here's what we're dealing with. There's a tricky quarter-wave hookup coupled to an amplification

factor that'll throw you back on your heels.'

Baldy looked over Eric's shoulder. 'Doesn't look too hard to follow. Let me work on that while you take over some of the tougher parts.' He reached for the diagram, moved it to a cleared corner of the bench. 'What's this thing supposed to do, Doc?'

'It creates a field of impulses which feed directly into

the human unconscious. The field distorts-'

Baldy interrupted him. 'O.K., Doc. I forgot I asked you not to explain it to me.' He looked up, smiled. 'I flunked Sociology.' His expression sobered. 'I'll just work on the assumption you know what this is all about. Electronics I understand; psychology . . . no.'

They worked in silence, broken only by sparse questions, muttering. The second hand on the wall clock moved around, around, around; the minute hand followed, and the hour hand.

At 8:00 a.m., they sent out for breakfast. The layout of the crystal oscillators still puzzled them. Much of the diagram was scrawled in a radio shorthand.

Baldy made the first break in the puzzle.

'Doc, are these things supposed to make a noise?'

Eric looked at the diagram. 'What?' His eyes widened.

'Of course they're supposed to make a noise.'

Baldy wet his lips with his tongue. 'There's a special sonar crystal set for depth sounding in submarine detec-

tion. This looks faintly like the circuit, but there are some

weird changes.'

Eric tugged at his lip; his eyes glistened. 'That's it! That's why there's no control circuit! That's why it looks as though these things would hunt all over the place! The operator is the control – his mind keeps it in balance!'

'How's that?'

Eric ignored the question. 'But this means we have the wrong kind of crystals. We've misread the parts list.' Frustration sagged his shoulders. 'And we're not even halfway finished.'

Baldy tapped the diagram with a finger. 'Doc, I've got some old surplus sonar equipment at home. I'll call my wife and have her bring it over. I think there are six or

seven sonopulsators - they just might work.'

Eric looked at the wall clock: 8:28 a.m. Seven and a half hours to go. 'Tell her to hurry.'

Mrs. 'Baldy' was a female version of her husband. She carried a heavy wooden box down the steps, balancing it with an easy nonchalance.

'Hi, Hon. Where'll I put this stuff?'

'On the floor . . . anywhere. Doc, this is Betty.'

'How do you do.'

'Hiya, Doc. There's some more stuff in the car. I'll get it.'

Baldy took her arm. 'You better let me do it. You shouldn't be carrying heavy loads, especially down stairs.'

She pulled away. 'Go on. Get back to your work. This is good for me – I need the exercise.'

'But-'

'But me no buts.' She pushed him.

He returned to the bench reluctantly, looking back at his wife. She turned at the doorway and looked at Baldy. 'You look pretty good for being up all night, Hon. What's all the rush?'

'I'll explain later. You better get that stuff.'

Baldy turned to the box she had brought, began sorting through it. 'Here they are.' He lifted out two small plastic cases, handed them to Eric, pulled out another, another. There were eight of them. They lined the cases up on

the bench. Baldy snapped open the cover of the first one.

'They're mostly printed circuits, crystal diode transistors and a few tubes. Wonderful engineering. Don't know what the dickens I ever planned to do with them. Couldn't resist the bargain. They were two bucks apiece.' He folded back the side plate. 'Here's the crys - Doc!'

Eric bent over the case.

Baldy reached into the case. 'What were those tubes you wanted?'

Eric grabbed the circuit diagram, ran his finger down the parts list. 'C6 midget variable, C7, C8 dual, 4ufd.'

Baldy pulled out a tube. 'There's your C6.' He pulled out another. 'There's your C8.' Another. 'Your C7.' He peered into the works. 'There's a third stage in here I don't think'll do us any good. We can rig a substitute for the 4ufd component.'

Baldy whistled tonelessly through his teeth. 'No wonder that diagram looked familiar. It was based on this war-

time circuit.'

Eric felt a moment of exultation, sobered when he looked at the wall clock: 9:04 a.m.

He thought, 'We have to work faster or we'll never

make it in time. Less than seven hours to go.'

He said, 'Let's get busy. We haven't much time.'

Betty came down the stairs with another box. 'You

guys eaten?'

Baldy didn't look up from dismantling the second plastic box. 'Yeah, but you might make us some sandwiches for later.'

Eric looked up from another of the plastic boxes. 'Cup-

board upstairs is full of food.'

Betty turned, clattered up the stairs.

Baldy glanced at Eric out of the corners of his eyes. 'Doc, don't say anything to Betty about the reason for all this.' He turned his attention back to the box, working methodically. 'We're expecting our first son in about five months.' He took a deep breath. 'You've got me convinced.' A drop of perspiration ran down his nose, fell onto his hand. He wiped his hand on his shirt. 'This has gotta work.'

Betty's voice echoed down the stairs: 'Hey, Doc, where's

your can opener?'

Eric had his head and shoulders inside the teleprobe. He pulled back, shouted, 'Motor-punch to the left of the

sink.'

Muttering, grumbling, clinking noises echoed down from the kitchen. Presently, Betty appeared with a plate of sandwiches, a red-tinted bandage on her left thumb. 'Broke your paring knife,' she said. 'Those mechanical gadgets scare me.' She looked fondly at her husband's back. 'He's just as gadget happy as you are, Doc. If I didn't watch him like a spy-beam my nice old kitchen would be an electronic nightmare.' She upended an empty box, put the plate of sandwiches on it. 'Eat when you get hungry. Anything I can do?'

Baldy stepped back from the bench, turned. 'Why don't

you go over to Mom's for the day?'

'The whole day?'

Baldy glanced at Eric, back at his wife. 'The Doc's paying me fourteen hundred bucks for the day's work. That's our baby money; now run along.'

She made as though to speak, closed her mouth, walked over to her husband, kissed his cheek. 'O.K., Hon. Bye.'

She left.

Eric and Baldy went on with their work, the pressure mounting with each clock tick. They plodded ahead,

methodically checking each step.

At 3:20 p.m., Baldy released test clips from half of the new resonance circuit, glanced at the wall clock. He stopped, looked back at the teleprobe, weighing the work yet to be done. Eric lay on his back under the machine, soldering a string of new connections.

'Doc, we aren't going to make it.' He put the test meter on the bench, leaned against the bench. 'There

just isn't enough time.'

An electronic soldering iron skidded out from under the teleprobe. Eric squirmed out behind it, looked up at the clock, back at the unconnected wires of the crystal circuits. He stood up, fished a credit book from his pocket, wrote out a fourteen hundred buck credit check to Baldwin Platte. He tore out the check, handed it to Baldy.

'You've earned every cent of this, Baldy. Now beat

it; go join your wife.'

'But-'

'We haven't time to argue. Lock the door after you so

you can't get back in if-

Baldy raised his right hand, dropped it. 'Doc, I can't—'
'It's all right, Baldy.' Eric took a deep breath. 'I kind
of know how I'll go if I'm too late.' He stared at Baldy.
'I don't know about you. You might, well—' He
shrugged.

Baldy nodded, swallowed. 'I guess you're right, Doc.' His lips worked. Abruptly, he turned, ran up the stairs.

The outside door slammed.

Eric turned back to the teleprobe, picked up an open lead to the crystal circuits, matched it to its receptor, ran a drop of solder across the connection. He moved to the

next crystal unit, the next—

At one minute to four he looked at the clock. More than an hour's work remained on the teleprobe and then—He didn't know. He leaned back against the bench, eyes filmed by fatigue. He pulled a cigarette from his pocket, pressed the igniter, took a deep drag. He remembered Colleen's question: 'What's it like to be insane?'

He stared at the ember on his cigarette.

Will I tear the teleprobe apart? Will I take a gun, go hunting for Colleen and Pete? Will I run out – The clock behind him clicked. He tensed. What will it be like? He felt dizzy, nauseated. A wave of melancholia smothered his emotions. Tears of self-pity started in his eyes. He gritted his teeth. I'm not insane . . . I'm not insane— He dug his fingernails into his palms, drew in deep, shuddering breaths. Uncertain thoughts wandered through his mind.

I shall faint . . . the incoherence of morosis . . . demoniacal possession . . . dithyrambic dizziness . . . an anima figure concretionized out of the libido . . . corybantic calenture . . . mad as a March hare—

His head sagged forward.

... Non compos mentis ... aliéné ... avoir le diable au corps— What has happened to Seattle? What has happened to Seattle? What has— His breathing steadied; he blinked his eyes. Everything appeared unchanged ... unchanged — I'm wandering. I must get hold of myself!

The fingers of his right hand burned. He shook away

the short ember of his cigarette.

Was I wrong? What's happening outside? He started for the stairs, made it halfway to the door when the lights went out. A tight band ringed his chest. Eric felt his way to the door, grasped the stair rail, climbed up to the dim, filtered light of the hall. He stared at the stained glass bricks beside the door, tensed at a burst of gunshots from outside. He sleepwalked to the kitchen, raised on tiptoes to look through the ventilator window over the sink.

People! The street swarmed with people - some running, some walking purposefully, some wandering without aim, some clothed, some partly clothed, some nude. The bodies of a man and child sprawled in blood at the

opposite curbing.

He shook his head, turned, went into the living room. The lights suddenly flashed on, off, on, stayed. He punched video for a news program, got only wavy lines. He put the set on manual, dialed a Tacoma station. Again wavy lines.

Olympia was on the air, a newscaster reading a weather report: 'Partly cloudy with showers by tomorrow after-

noon. Temperatures—'

A hand carrying a sheet of paper reached into the speaker's field of vision. The newsman stopped, scanned the paper. His hand shook. 'Attention! Our mobile unit at the Clyde Field jet races reports that the Scramble Syndrome has struck the twin cities of Seattle-Tacoma. More than three million people are reported infected. Emergency measures already are being taken. Road blocks are being set up. There are known to have been fatalities, but—'

A new sheet of paper was handed to the announcer. His jaw muscles twitched as he read. 'A jet racer has crashed into the crowd at Clyde Field. The death toll is estimated at three hundred. There are no available medical facilities. All doctors listening to this broadcast – all doctors – report at once to State disaster headquarters. Emergency medical—' The lights again blinked out, the screen faded.

Eric hesitated. I'm a doctor. Shall I go outside and do what I can, medically, or shall I go down and finish the

teleprobe - now that I've been proved right? Would it do any good if I did get it working? He found himself breathing in a deep rhythm. Or am I crazed like all the others? Am I really doing what I think I'm doing? Am I mad and dreaming a reality? He thought of pinching himself, knew that would be no proof. I have to go ahead as though I'm sane. Anything else really is madness.

He chose the teleprobe, located a handlight in his bedroom, returned to the basement lab. He found the long unused emergency generator under the crates in the corner. He wheeled it to the center of the lab, examined it. The powerful alcohol turbine appeared in working order. The pressure cap on the fuel reservoir popped as he released it. The reservoir was more than half full. He found two carboys of alcohol fuel in the corner where the generator had been stored. He filled the fuel tank, replaced the cap, pumped pressure into the tank.

The generator's power lead he plugged into the lab fuse box. The hand igniter caught on the first spin. The turbine whirred to life, keened up through the sonic range. Lab lights sprang to life, dimmed, steadied as the relays

adjusted.

It was 7:22 p.m. by the wall clock when he soldered the final connection. Eric estimated a half hour delay before the little generator had taken over, put the time actually at near eight o'clock. He found himself hesitant, strangely unwilling to test the completed machine. His one-time encephalorecorder was a weird maze of crossed wiring, emergency shielding, crowded tubes, crystals. The only familiar thing remaining in the tubular framework was the half-dome of the head-contact hanging above the test chair.

Eric plugged in a power line, linked it to a portable switchbox which he placed in the machine beside the chair. He eased aside a sheaf of wires, wormed his way through, sat down in the chair. He hesitated, hand on the switch.

Am I really sitting here? he wondered. Or is this some trick of the unconscious mind? Perhaps I'm in a corner somewhere with a thumb in my mouth. Maybe I've torn the teleprobe apart. Maybe I've put the teleprobe together so it will kill me the instant I close the switch.

He looked down at the switch, withdrew his hand. He

thought, I can't just sit here; that's madness, too.

He reached up to the helmetlike dome, brought it down over his head. He felt the pinpricks of the contacts as they probed through his hair to his scalp. The narco-needles took hold, deadening skin sensation.

This feels like reality, he thought. But maybe I'm building this out of memory. It's hardly likely I'm the only sane person in the city. He lowered his hand to the switch.

But I have to act as though I am.

Almost of its own volition, his thumb moved, depressed the switch. Instantly, a soft ululation hung in the laboratory air. It shifted to dissonance, to harmony, wailing, half-forgotten music, wavered up the scale, down the scale.

In Eric's mind, mottled pictures of insanity threatened to overwhelm his consciousness. He sank into a maelstrom. A brilliant spectrograph coruscated before his eyes. In a tiny corner of his awareness, a discrete pattern of sensation remained, a reality to hold onto, to save him – the feeling of the teleprobe's chair beneath him and against his back.

He sank farther into the maelstrom, saw it change to gray, become suddenly a tiny picture seen through the wrong end of a telescope. He saw a small boy holding the hand of a woman in a black dress. The two went into a hall-like room. Abruptly Eric no longer saw them from a distance but was again himself at age nine walking toward a casket. He sensed again the horrified fascination, heard his mother's sobs, the murmurous, meaningless voice sounds of a tall, thin undertaker. Then, there was the casket and in it a pale, waxed creature who looked somewhat like his father. As Eric watched, the face melted and became the face of his uncle Mark; and then another mask, his high-school geometry teacher. Eric thought, We missed that one in my psychoanalysis. He watched the mobile face in the coffin as it again shifted and became the professor who had taught him abnormal psychology, and then his own analyst, Dr. Lincoln Ordway, and then - he fought against this one - Dr. Carlos Amanti.

So that's the father image I've held all these years, he

thought. That means – that means I've never really given up searching for my father. A fine thing for an analyst to discover about himself: He hesitated. Why did I have to recognize that? I wonder if Pete went through this in his musikron? Another part of his mind said, Of course not. A person has to want to see inside himself or he never will, even if he has the opportunity.

The other part of his mind abruptly seemed to reach up, seize control of his consciousness. His awareness of self lurched aside, became transformed into a mote whipping through his memories so rapidly he could barely

distinguish between events.

Am I dying? he wondered. Is it my life passing in review?

The kaleidoscopic progression jerked to a stop before a vision of Colleen – the way he had seen her in his dream. The memory screen lurched to Pete. He saw the two people in a relationship to himself that he had never quite understood. They represented a catalyst, not good or

evil, merely a reagent which set events in motion.

Suddenly, Eric sensed his awareness growing, permeating his body. He knew the condition and action of each gland, each muscle fiber, each nerve ending. He focused his inner eye on the grayness through which he had passed. Into the gray came a tendril of red – shifting, twisting, weaving past him. He followed the red line. A picture formed in his mind, growing there like the awakening from anaesthetic. He looked down a long street – dim in the spring dusk – at the lights of a jet car thundering toward him. The car grew larger, larger, the lights two hypnotic eyes. With the vision came a thought: My, that's pretty!

Involuntary reactions took over. He sensed muscles tensing, jumping aside, the hot blast of the jet car as it passed. A plaintive thought twisted into his mind: Where

am I? Where's Mama? Where's Bea?

Tightness gripped Eric's stomach as he realized he sat in another's consciousness, saw through another's eyes, sensed through another's nerves. He jumped away from the experience, pulling out of the other mind as though he had touched a hot stove.

So that's how Pete knew so much, he thought. Pete

sat in his musikron and looked through our eyes. Another thought: What am I doing here? He sensed the teleprobe chair beneath him, heard the new self within him say, 'I'm

going to need more trained, expert help.'

He followed another red tendril, searching, discarded it; sought another. The orientation was peculiar – no precise up or down or compass points until he looked out of the other eyes. He came to rest finally behind two eyes that looked down from an open window in the fortieth story of an office building, sensed the suicidal thoughts building up pressure within this person. Gently, Eric touched the center of consciousness, seeking the name – Dr. Lincoln Ordway, psychoanalyst.

Eric thought, Even now I turn back to my own analyst.

Tensely, Eric retreated to a lower level of the other's consciousness, knowing that the slightest misster would

consciousness, knowing that the slightest misstep would precipitate this man's death wish, a jump through that window. The lower levels suddenly erupted a pinwheel of coruscating purple light. The pinwheel slowed, became a mandala figure . . . at the four points of the figure an open window, a coffin, a transitus-tree and a human face which Eric suddenly recognized as a distorted picture of

himself. The face was boyish, slightly vacant.

Eric thought, The analyst, too, is tied to what he believes is his patient. With the thought, he willed himself to move gently, unobtrusively into the image of himself, began to expand his area of dominion over the other's unconscious. He pushed a tentative thought against the almost palpable wall which represented Dr. Ordway's focus of consciousness: Linc (a whisper), don't jump. Do you hear me, Linc? Don't jump. The city needs your help.

With part of his mind, Eric realized that if the analyst sensed his mental privacy being invaded that realization could tip the balance, send the man plunging out the window. Another part of Eric's mind took that moment to render up a solution to why he needed this man and others like him: the patterns of insanity broadcast by Pete Serantis could only be counterbalanced by a rebroadcast of calmness and sanity.

Eric tensed, withdrew slightly as he felt the analyst move closer to the window. In the other's mind, he whispered, 'Come away from the window. Come away—'Resistance! A white light expanded in Eric's thoughts, rejected him. He felt himself swimming out into the gray maelstrom, receding. A red tendril approached and with it a question, not of his own origin, lifted into his mind:

Eric? What is this thing?

Eric allowed the pattern of teleprobe development to siphon through his mind. He ended the pattern with an explanation of what was needed.

Thought: Eric, how did the Syndrome miss you?

Conditioning by long exposure to my own teleprobe; high resistance to unconscious distortion built up by that work.

Funny thing; I was about to dive out the window when I sensed your interference. It was something — the red tendril moved closer — like this.

They meshed completely.

'What now?' asked Dr. Ordway.

'We'll need as much trained help as we can find in the city. Others would censor out this experience below the threshold of consciousness.'

'The influence of your teleprobe may quiet everybody.'

'Yes, but if the machine is ever turned off, or if people go beyond its area of influence, they'd be back in the soup.'

'We'll have to go in the back door of every unconscious

in the city and put things in order!'

'Not just this city; every city where the musikron has been and every city where Serantis takes it until we can stop him.'

'How did the musikron do this thing?'

Eric projected a mixed pattern of concepts and pictures: 'The musikron pushed us deep down into the collective unconscious, dangled us there as long as we remained within its area of influence. (Picture of rope hanging down into swirls of fog.) Then the musikron was turned off. (Picture of knife cutting the rope, the end falling, falling into a swirling gray maelstrom.) Do you see it?'

'If we have to go down into that maelstrom after all

these people, hadn't we better get started?'

He was a short man digging with his fingers in the

soft loam of his flowerbed, staring vacantly at shredded leaves – name, Dr. Harold Marsh, psychologist. Unobtrusively, softly, they absorbed him into the network of the teleprobe.

She was a woman, dressed in a thin housecoat, preparing to leap from the end of a pier – name, Lois Voorhies, lay analyst. Swiftly, they drew her back to

sanity.

Eric paused to follow a thin red tendril to the mind of a neighbor, saw through the other's eyes sanity returning around him.

Like ripples spreading in a pond, a semblance of sanity washed out across the city. Electric power returned; emer-

gency services were restored.

The eyes of a clinical psychologist east of the city transmitted a view of a jet plane arrowing toward Clyde Field. Through the psychologist's mind the network picked up the radiating thought patterns of a woman – guilt, remorse, despair.

Colleen!

Hesitantly, the network extended a pseudopod of thought, reached into Colleen's consciousness and found

terror. What is happening to me!

Eric took over. Colleen, don't be afraid. This is Eric. We are getting things back in order thanks to you and the musikron plans. He projected the pattern of their accomplishments.

I don't understand. You're-

You don't have to understand now. Hesitantly: I'm glad you came.

Eric, I came as soon as I heard – when I realized you were right about Pete and the musikron. She paused. We're coming down to land.

Colleen's chartered plane settled onto the runway, rolled up to a hangar and was surrounded by National Guards-

men.

She sent out a thought: We have to do something about London. Pete threatened to smash the musikron, to commit suicide. He tried to keep me there by force.

When?

Six hours ago.

Has it been that long since the Syndrome hit?

The network moved in: What is the nature of this man Serantis?

Colleen and Eric merged thoughts to project Pete's

personality.

The network: He'll not commit suicide, or smash his machine. Too self-centered. He'll go into hiding. We'll find him soon enough when we need him – unless he's lynched first.

Colleen interrupted: This National Guard major won't

let me leave the airport.

Tell him you're a nurse assigned to Maynard Hospital. Individual thought from the network: I'll confirm from this end.

Eric: Hurry . . . darling. We need all of the help we

can get from people resistant to the teleprobe.

Thoughts from the network: That's as good a rationalization as any. Every man to his own type of insanity. That's enough nonsense – let's get to work!

INTRODUCTION

FRANK HERBERT suggested using an extract from The Dragon in the Sea to illustrate the kind of material he was writing in the mid-50s, which is no easy matter when

you're dealing with a novel as taut as Dragon.

Simultaneously an exciting story of a desperate war beneath the sea and a deeply-thought psychological suspense piece, the problem was to decide which angle to show – or try to get both in. Since the themes are pretty closely interlinked, and the one is every bit as good as the other, I have aimed at the latter choice. I hope I've succeeded.

For anyone who hasn't had the pleasure of reading the whole book I should point out that it concerns a shortage of oil in the West (aptly, given the present problems) which prompts the use of nuclear submarines to pirate oil from the Eastern Powers' continental shelf. Twenty subs are lost for no obvious reason, so a psychologist-electronics expert, Ensign Ramsey, is planted aboard the Fenian Ram to find out why. How he does and what happens on the hazardous voyage to Novaya Zemlya and back I'll leave you to find out for yourself.

Angus Wells 1975

DRAGON IN THE SEA

Belland's Chair rasped on the floor. He got to his feet, went to the side wall at his left, indicated a north-polar projection map. 'Ensign Ramsey, we've lost twenty subtugs in these waters over the past twenty weeks,' he said. He turned to Ramsey altogether like a schoolteacher about to propound a problem. 'You're familiar with our pressing need for oil?'

Familiar? Ramsey restrained a wry smile. Through his mind sped the almost interminable list of regulations on oil conservation: inspections, issuance forms, special

classes, awards for innovations. He nodded.

The admiral's bass rumble continued: 'For almost two years now we've been getting extra oil from reservoirs under the marginal seas of the Eastern Powers' continental shelf.' His left hand made a vague gesture over the map.

Ramsey's eyes widened. Then the rumours were true:

the sub services were pirating enemy oil!

'We developed an underwater drilling technique working from converted subtugs,' said Belland. 'A high-speed, low-friction pump and a new type of plastic barge complete the general picture.'

The admiral's mouth spread into what he probably imagined as a disarming grin. It succeeded only in making him appear even more piratical. 'The boys call the barge

a slug, and the pump is a mosquito.'

Dutiful chuckles sounded through the room. Ramsey smiled at the forced response, noted that Dr. Oberhausen

maintained his reputation as Old Stone Face.

Admiral Belland said, 'A slug will carry almost one hundred million barrels of oil. The EPs know they're losing oil. They know how, but they can't always be sure of where or when. We're outfoxing them.' The admiral's voice grew louder. 'Our detection system is superior. Our silencer planes—'

Dr. Oberhausen's brittle voice interrupted him. 'Everything we have is superior except our ability to keep them

from sinking us.'

The admiral scowled.

Ramsey picked up his cue, entered the breach. 'What was the casualty percentage on those twenty subtugs we lost, sir?'

An owl-faced captain near Belland said dryly, 'Of the

last twenty missions, we lost all twenty.'

'One hundred per cent,' said Dr. Oberhausen. The sightless eyes seemed to look across the room at a beet-faced lieutenant commander. 'Commander Turner, would you show Mr. Ramsey the gadget your boys found?'

The lieutenant commander pushed a black cylinder

about the size of a lead pencil down the table. Hands carried the object along until it reached Ramsey. He studied it.

'Mr. Ramsey's work, of course, involves electronics,' said Dr. Oberhausen. 'He's a specialist with the instru-

ments used for detecting traumatic memories.'

Ramsey caught this cue, also. He was the omniscient BuPsych electronics expert. The Man Who Knows Your Innermost Thoughts. Ergo: You don't have Innermost Thoughts in this man's presence. With an ostentatious gesture, Ramsey put his black box onto the table. He placed the cylinder beside it, managing to convey the impression that he had plumbed the mysteries of the device and found them, somehow, inferior.

What the devil is that thing? he wondered.

'You've probably recognized that as a tight-beam broadcaster,' said Belland.

Ramsey glanced at the featureless surface of the black cylinder. What would these people do if I claimed X-ray vision? he asked himself. Obe must have hypnotized them.

Belland transferred his tone of deference-fear to Ramsey. 'The EPs have been getting those things aboard our subtugs. We think there's a delayed-action device which turns them on at sea. Unfortunately, we've been unable thus far to dismantle one without exploding the antitamper charge.'

Ramsey looked at Dr. Oberhausen, back to Belland, implying without words: 'Well, if they'd turn these prob-

lems over to BuPsych . . .

The admiral rallied some of his Pride of Department,

said, 'Turner believes he has it solved, however.'

Ramsey looked at the beet-faced lieutenant commander. And you'll be a rear-rank swabby if you fail, he thought. The lieutenant commander tried to make himself inconspicuous.

The commodore to Dr. Oberhausen's right said, 'Enemy

agents aboard the tugs could be turning them on.'

Dr. Oberhausen said, 'To make a long story short, these devices have been leading the enemy to our secret wells.'

'The real trouble,' said Belland, 'is that we're shot through with sleepers - people the EPs planted years ago

- long before the war - with orders to wait for the right moment. People in the damnedst places.' He scowled. 'Why, my driver—' He fell silent, turned the scowl on Ramsey. 'We're reasonably certain you're not a sleeper.'

'Reasonably certain?' asked Ramsey.

'I am reasonably certain no one in this room is a sleeper,' growled Belland. 'But that's all I am.' He turned back to the wall map, pointed to a position in the Barents Sea. 'This is the island of Novaya Zemlya. Off the west coast is a narrow shelf. The edge is in about one hundred fathoms. It's steep. We've a well into the flank of that shelf tapping one of the richest oil reservoirs we've ever encountered. The EPs don't even know it's there – yet.'

Dr. Oberhausen put a bony hand on the table, tapped a finger once. 'We must make certain Mr. Ramsey understands the morale factor.' He turned toward Ramsey. 'You understand that it has been impossible to keep our losses completely secret. As a result, morale in the subtugs has dropped off to almost nothing. We need good news.'

Belland said, 'Turner, take it from there.' The admiral returned to his chair, lowered himself into it like a battle-

wagon settling into dry dock.

Turner focused watery blue eyes on Ramsey, said, 'We've screened, screened and rescreened our subtug crews. We've found one that looks good. They're at Garden Glenn Rest Camp now and will be coming out in five weeks. However, they do not have an electronics officer.'

Ramsey thought: Great Grieving Freud! Am I going

to be palmed off as a submariner?

As though he had read Ramsey's thought, Dr. Oberhausen said, 'That's where you come in, Ramsey.' He nodded to Turner. 'Please forgive me, Commander, but we're taking too much time with this.'

Turner shot a glance at Belland, sank back into his

chair. 'Of course, Doctor.'

Dr. Oberhausen arose, again with that air of vast assurance. 'This is my field, anyway. You see, Ramsey, the previous electronics officer suffered a psychotic blow-up at the termination of their last mission. It's the same problem you were working on with the men of the Dolphin. Amplified. The subtugs are smaller, a comple-

ment of only four men. The focal symptoms point to a kind of induced paranoia.'

'The captain?' asked Ramsey. 'Precisely,' said Dr. Oberhausen.

We are now impressing the natives with our mysterious knowledge, thought Ramsey. He said, 'I noticed similar conditions in the battle-fatigue syndrome when I was on the Dolphin.' He patted the box in front of him. 'The captain's emotional variations were reflected in varying degrees all through the ship's personnel.'

'Dr. Oberhausen outlined your work with the men of

the Dolphin,' said Turner.

Ramsey nodded. 'I'm troubled by one point here. You say this crew rates high. That doesn't check if the captain

is a borderline psychotic.'

'Again, that's where you come in,' said Dr. Oberhausen. 'We were about to beach this captain. But now Battle-Comp tells us he and his crew have far and away the highest chance of success in this mission to Novaya Zemlya. But only if certain other conditions are present.'

He paused, tugged at an ear lobe.

Ramsey caught the signal, thought: Ah, there's the bite. Somebody important hasn't agreed to this arrangement and it's vital to Obe that I get on that subtug crew. Who are we playing to? The admiral? No, he'd go himself if Obe said the word. Ramsey's eyes abruptly caught the scowling glare of the commodore on Dr. Oberhausen's left, and at the same moment he noted for the first time the tiny sunburst on the commodore's collar. A presidential aide! That would be the one.

'One of the other conditions would be that they have secret psychological monitoring,' said Ramsey. 'How had you planned to link in my remote-control vampire gauge

to his pivotal captain without his knowing?'

'An ingenious solution has been proposed by Admiral Belland,' said Dr. Oberhausen. 'Security has a new type of detector to combat those spy-beam transmitters. A speaker pellet is surgically imbedded in the neck and tuned to wave scanners which are similarly imbedded beneath the armpits. Micro-instrumentation would permit us to include with the speaker the recorders you need.'

Ramsey nodded toward the admiral. 'Clever. You'd rig

this subtug skipper that way, send me along to keep him in balance.'

'Yes,' said Dr. Oberhausen. 'However, there has been some objection raised.' The sightless eyes seemed to peer down at the commodore on his left. 'On the grounds that you have no extended deep-tug combat experience. It's a specialized service.'

The commodore grunted, glared at Ramsey. 'We've been at war sixteen years,' he said. 'How is it you've

escaped combat?'

Old school tie, thought Ramsey. He turned his telemeter box until one flat surface faced the commodore, squinted at the officer over it. When in doubt, fire a broadside.

'Every man we preserve for combat brings victory that much nearer,' said Ramsey.

The commodore's leathery face grew dark.

'Mr. Ramsey has a special combination of training – psychology and electronics – which have made him too valuable to risk,' said Dr. Oberhausen. 'He has made only the most essential cruises – such as that with the *Dolphin* – when that was absolutely required.'

'If he's so valuable, why're we risking him now?' demanded the commodore. 'This all seems highly irregular!'

Admiral Belland sighed, stared at the commodore. 'The truth is, Lewis, this new emotional-telemetering equipment which Mr. Ramsey developed can be used by others. However, his inventive talents are the very things which make his services so essential at this time.'

'You may think me rude,' said the commodore, 'but I'd like to know also why this young man – if he's as good as all that – is still—' he flicked a glance at Ramsey's

collar bars— 'an ensign.'

Dr. Oberhausen held up a hand, said, 'Permit me, my dear Admiral.' He turned to the commodore. 'It is because there are people who resent the fact that I have been able to keep myself and my top department heads out of uniform. There are those who do not see the necessity for this essential separation. It is regrettable, therefore, that those of my people in the lower echelons, who are required to wear uniforms, sometimes find it

difficult to gain advancement no matter how talented they may be.'

The commodore looked as though he were about to

explode.

'By rights,' said Dr. Oberhausen, 'Mr. Ramsey should be at least a commodore.'

Several fits of coughing broke out simultaneously

around the table.

Ramsey suddenly wished he were anywhere else but under the eyes of this commodore. The latter said, 'Very well, my objection is withdrawn.' The tone of voice said: I will pass sentence in my own court.'

'I have planned,' said Dr. Oberhausen, 'upon completion of this mission, to have Mr. Ramsey released from the service and installed as head of a new department

devoted to problems of submariners.'

A harsh smile pulled at the corners of the commodore's mouth. 'If he lives through it,' he said.

Ramsey swallowed.

As though he had not heard, Dr. Oberhausen said, 'The training will be a problem, but we have five weeks plus

the full facilities of BuPsych.'

Belland heaved his bulk from the chair, stepped to one side. 'If there are no more questions, gentlemen, I believe we are all satisfied with Mr. Ramsey.' He glanced at his wrist watch. 'The medics are waiting for him now, and he's going to need every minute of the next five weeks.'

Ramsey got to his feet, took the telemeter box under

his arm, a question in his eyes.

'You're also going to be rigged as a walking detection

system,' said Belland.

Dr. Oberhausen appeared to materialize beside Ramsey. 'If you'll come with me, please, John.' He took Ramsey's arm. 'I've had the essential material about Commander Sparrow – he's the captain of this subtug – and the other two crewmen reduced to absolute minimum. We've set aside a special ward at the bureau for you. You're going to be our prize patient for . . .'

Ramsey heard Turner speaking behind him. 'Dr. Ober-hausen called the ensign John. Is he the Long John Ram-

sey who ...'

The rest was blurred as Dr. Oberhausen raised his

voice. 'It's going to be rough on you, John.' They stepped into the outer corridor. 'Your wife has been notified.' Dr. Oberhausen lowered his voice. 'You handled yourself very well in there.'

Ramsey suddenly realized that he was allowing himself to be guided by a blind man. He laughed, found that he had to explain the laughter. 'It was the way you handled

that brassy commodore,' he said.

'You don't lie at all well,' said Dr. Oberhausen. 'But I'll let it pass. Now, about the commodore: he's a member of the board which passes upon promotions for BuPsych men.'

Ensign Ramsey abruptly found that laughter had left him.

Ramsey often referred to his five weeks' training for the

subtug mission as 'The time I lost twenty pounds.'

They gave him three rooms in the sound wing of Unadilla Naval Hospital; blank white enclosures furnished in rattan and cigarette-scarred mahogany, a functional TV set, equally functional hospital bed on high legs. One room was set up for training: hypnophone, wall diagrams, mock-ups, tapes, films.

His wife, Janet, a blond nurse, received a weekend schedule for visits: Saturday nights and Sundays. Their children, John junior, age two, and Peggy, age four, were not permitted in the hospital, had to be packed off to their

grandmother's at Fort Linton, Mississippi.

Janet, wearing a one-piece red dress, came storming into the sitting room of Ramsey's suite on their first Saturday night. She kissed him, said, 'I knew it!'

'Knew what?'

'That sooner or later the Navy and that awful Obe would be regulating our sex life.'

Ramsey, aware that everything he said and did in the

hospital was being monitored, tried to shush her.

'Oh, I know they're listening,' she said. She threw herself onto the rattan couch, crossed her legs, lighted a cigarette, which she puffed furiously. 'That Obe gives me the creeking creeps,' she said.

'That's because you let him,' said Ramsey.

'And because that's the effect he wants to give,' she countered.

'Well . . . yes,' admitted Ramsey.

Janet jumped to her feet, threw herself into his arms. 'Oh, I'm being a fool. They said I wasn't to upset you.'

He kissed her, rumpled her hair. 'I'm not upset.'

'I told them I couldn't upset you if I tried.' She pushed away from him. 'Darling, what is it this time? Something dangerous? It isn't another one of those horrible submarines?'

'I'm going to be working with some oilmen,' he said.

She smiled. 'Oh, that doesn't sound bad at all. Will you be drilling a well?'

'The well's already drilled,' he said. 'We're going to see

about increasing production.'

Janet kissed his chin. 'Old efficiency expert.'
'Let's go to dinner,' he said. 'How're the kids?'

They went out, arm in arm, chatting about the children.

Ramsey's weekday routine began at 0500 when the nurse entered with his wake-up shot to rouse him from the hypnophone drugs. High-protein breakfast. More shots. Blood test.

'This is going to hurt a little.'

'Owooooooch! Whatta y mean a little? Next time warn me!'

'Don't be a big baby.'

Diagrams. Floor plans of Hell Driver Class subtugs.

They turned him over to a large subtug expert from Security. Clinton Reed. Bald as an egg. Thin eyes, thin nose, thin mouth, thick skin. Sense of duty as solid as his

neck. Absolutely no sense of humor.

'This is important, Ramsey. You have to be able to go anywhere on this vessel, man any control blindfolded. We'll have a mock-up for you in a couple of days. But first you have to get a picture of it in your mind. Try flashing these plans and then we'll test your memory.'

'Okay. I've finished the general layout. Try me.'

'Where's the pile room?'

'Ask me something hard.'

'Answer the question.'

'Oh, all right. It's forward in the bulb nose; first thirty-two feet.'

'Why?'

'Because of the teardrop shape of this class, and for balance. The nose gives the most room for shielding.'

'How thick is the radiation wall behind the pile room?'

'I missed that.'

'Twelve feet. Remember it. Twelve feet.'

'Well, I can tell you what it's made of: hafnium, lead, graphite, and poroucene.'

'What's on the aft face of the radiation wall?'

'Direct-reading gauges for the reactor. Repeaters are in the control room, forward bulkhead to the right of the first-level catwalk. Then there are lockers for 9BG suits, tool lockers, doors to the tunnels leading into the pile room.'

'You're getting it. How many tunnels into the pile room?'

'Four. Two top; two bottom. Not to be entered for more than twelve minutes at a time unless wearing an ABG suit.'

'Fine. What's the rated horsepower?'

'Two hundred and seventy-three thousand, reduced to about two hundred and sixty thousand by the silencer planes behind the screw.'

'Excellent! How long is the engine room?'

'Uh . . . nope. That one's gone, too.'

'Look, Ramsey, these are important. You have to remember these distances. You have to get a feeling for them. What if you don't have any lights?'

'Okay. Okay. How long is the damned thing?'

'Twenty-two feet. It fills the whole midship section. The four electric engines are set two to a level with the gearbox for the drive below center aft.'

'Gotcha. Here, let me take a flash of the aft section.

Okay. Now try me.'

'How many catwalks in the engine room and where located?'

'Look, I just flashed the aft section.'

'How many catwalks and-'

'Okaaaa. Let's see: one center of the control desk going forward. One off center into machine stores on the second level below. One called A level into top stores. Same for bottom level: called B level. Short bridging catwalks from A and B levels to the engines and oxy tanks. And

one very short to the conning-tower-retracted which lifts into a section of steps when the tower is extended.'

'Good. You see, you can do this if you set your mind to it. Now tell me how the four staterooms are placed.'

'Staterooms yet.'

'Stop dodging the question.'

'Wise guy! Let's see: captain is top level starboard behind the electronics shack. First officer portside behind the recreation room-sick bay. Engineering officer starboard below the captain's quarters and behind the machine shop. Electronics officer portside below the first officer and aft of galley stores. That's the place for me. Gonna cut me a private door into galley stores.'

'Where's the galley?'

'That one I can answer. It's far port, top level, entered through the wardroom. Selector controls for the prepackaged meals are against the bulkhead separating galley and wardroom. The galley-wardroom unit is between control deck and rec room.'

'What's behind the staterooms?'

'Machinery of the Palmer induction drive.'

'Why an induction drive?'

'Because at the dive limit for Hell Divers, there can be no weak points in the hull, therefore no shaft through the hull.'

'You're getting the drive on the hypnophone tonight. Every man blindfolded. There'll be a model for you to work on day after tomorrow.'

'Oh goody!'

'What's the pressure hull limit for Hell Divers?'

'Three thousand and ten pounds to the square inch or 7000 feet.'

'Stick to your first answer. Pressure varies with different water conditions. You'd be okay at 7100 feet in one place, dead at 6900 another. Learn to depend on your static pressure gauge. Now let's go to the atmosphere composition. What's a vampire gauge?'

'A little device worn on your wrist during deep dives. Needle goes into your vein, tells you if your CO₂ diffusion is fast enough so you won't crock out. It also tattles on

nitrogen.'

"What's minimum diffusion?"

'When you get below .200 on CO₂ you get the jeebies. If your blood CO₂ count goes to four percent you're in trouble. With nitrogen it's different. The subtug atmosphere is supposed to be entirely cleared of it. A small quantity of helium is substituted.'

'How do you get by with the high atmospheric pres-

sure?'

'Aerobic carbonic anhydrase is fed into the atmosphere by the ventilator system. This speeds up the CO₂ loading and unloading of the blood, prevents gas bubbles forming.'

'You're good on that. Did you know it before?'

'My emotional telemeter is just a glorified vampire gauge.'

'Oh, sure. Now, why is the electronics officer so im-

portant?'

'Contact with the exterior control motors is by coded wave pulse. If the E-system breaks down when a subtug is submerged, it stays submerged.'

'Right. Now, let's go through the plans again.'

'Not again!'

'Start with the reactor room. In detail.'

'Slave driver!'

The nightly hypnophone sessions flooded Ramsey's mind with the new knowledge: pressure hull, resonating hull, tank hull . . . pressure compensating system . . . header box . . . reactor controls . . . search and sounding . . . diving plane controls . . . valve controls . . . pile check-off . . . sonoran automatic-navigation board . . . atmosphere controls . . . automatic timelog, Mark IX . . . gyro controls . . . tow controls . . . plastic barge, oil, components of . . needle torpedoes, external racking system . . . torpedo homing systems . . . scrambler systems . . . systems . . . systems . . . systems . . . systems . . .

There were times when Ramsey's head felt filled to

the bursting point.

Dr. Oberhausen appeared in Ramsey's quarters on the fourth day of training. The doctor's unpressed clothes gave him the appearance of a bedraggled robin. He came in quietly, sat down beside Ramsey, who was seated in a viewerscope-sequence training hookup.

Ramsey pulled the fitted faceplate away from his eyes,

turned to Dr. Oberhausen. 'Ah, the chief of the inquisi-

'You are comfortable, Johnny?' The sightless eyes

seemed to stare through him.

'No.'

'Good. You are not supposed to be comfortable.' The doctor's chair creaked as he shifted his weight. 'I have come about the man Garcia who is engineering officer of this crew.'

'What's wrong with him?'

'Wrong? Have I said anything was wrong?'

Ramsey completely disengaged the viewerscope, sat back. 'Come to the point.'

'Ah, the impatience of youth.' Dr. Oberhausen sighed.

'Do you have a file on Garcia?'

'You know I have.'

'Get it please, and read me what you have.'

Ramsey leaned to his right, took a file folder from the bottom ledge of his coffee table, opened it. Garcia's picture on the inside front cover showed a short man – about five feet seven inches – slim. Latin features – dark. Black curly hair. Sardonic half smile. The picture managed to impart a sense of devil-may-care. Under the photograph a note in Ramsey's handwriting: 'Member Easton championship water-polo team. Likes handball.'

'Read to me,' said Dr. Oberhausen.

Ramsey turned the page, said, 'Age thirty-nine. Came up from ranks. Ex-CPO machinist. Ham radio license. Born Puerto Madryn, Argentina. Father cattle rancher: José Pedro Garcia y Aguinaldo. Mother died at birth of daughter when Garcia age three. Religion: Catholic. Wears rosary around neck. Takes blessing of priest before each mission. Wife: Beatrice, age thirty-one.'

'Do you have her picture?' asked Dr. Oberhausen.

'No.'

'A pity. I am told she is quite beautiful. Continue, please.'

Ramsey said, 'Educated at New Oxford. That accounts

for his British accent.'

'I grieved when the British Isles were destroyed,' said Dr. Oberhausen. 'Such a lovely culture, really. So basically

solid. Immovable. But that is weakness, also. Continue,

if you please.'

'Plays bagpipes,' said Ramsey. He looked at the doctor. 'Now there's something: a Latin American playing the bagpipes!'

'I see nothing wrong with that, Johnny. For certain

moods, nothing is more soothing.'

Ramsey raised his gaze to the ceiling. 'Soothing!' He looked back at the BuPsych chief. 'Why am I reading this?'

'I wanted to get the full flavor of Garcia in mind before imparting the latest morsel from Security.'

'Which is?'

'That Garcia may be one of these sleepers who are giving Security so many sleepless nights.'

Ramsey snorted. 'Garcia! That's insane! As well as

suspect me!'

'As to Garcia – perhaps; perhaps not. Counter-Intelligence has turned up the description of a sleeper supposed to be in the subtugs. The description fits Garcia. Security almost called off the mission. I convinced them to go ahead by suggesting that you be primed to watch Garcia.'

Ramsey returned to the color photograph in his file folder, observed the sardonic smile. 'I say we're chasing shadows. And that may be what the EEPs really want. If it's carried to its illogical extreme, certain Security-thinking is first cousin to paranoia – dementia praecox

type.'

Dr. Oberhausen lifted himself from the rattan chair. It gave off a reedy creaking. 'Do not say that to the Security gentlemen when they come to brief you on Garcia,' he said. 'Oh, and one other thing: the commodore is sharpening knives with which to carve you if there is some error on this mission.'

'I have you to thank for that,' said Ramsey.

'I take care of my own,' said Dr. Oberhausen. 'Fear not on that score.' He waved toward the viewerscope. 'Continue with wave studies. I have other work.'

tinue with your studies. I have other work.'

Ramsey waited for the door to close, threw the file folder back onto the coffee table, took twenty deep breaths to calm his nerves. Presently, he leaned to the right,

captured the folders on the other two crew members, scanned them.

Commander Harvey Acton Sparrow. Age forty-one. Picture of a tall, thin man with balding sandy hair, a

face of sharp planes, stooped shoulders.

He looks like a small-town college professor, thought Ramsey. How much of that is conditioned on his early desire to teach mathematics? Does he resent the fact that his hardcrust Navy family forced him to follow in the old man's footsteps?

Father: Rear Admiral Acton Orwell Sparrow lost with sub-cruiser *Plunger* in Battle of Irish Sea, 16 October 2018. Mother: Genene Cobe Sparrow. Invalid (heart), lives at Watters Point Government Rest Home. Wife:

Rita. Age thirty-six Blonde? Childless.

Does Sparrow know that his wife is unfaithful? Ramsey

asked himself. Most of their friends are aware of it.

Qualifications: navigator – superior; gunnery officer – superior; medical officer (advanced first aid and pressure syndrome) – excellent; general submarine competence – superior.

Ramsey turned to the other folder.

Lieutenant Commander Leslie (none) Bonnett. Age thirty-eight. Picture of a heavy-bodied man (just under six feet) with brown wavy hair (artificial wave?), aquiline nose, overhanging eyebrows, the look of a brooding hawk.

Orphan foundling. Raised at Cape Neston Home for

the Unwanted.

For the Unwanted! thought Ramsey.

Married four times. Two children – one by each of first two wives. Maintains marriage relationship with wife number four: Helene Davis Bonnett. Age twenty-nine. Miss Georgia of 2021.

The unwanted, thought Ramsey. He's carrying out an unconscious revenge pattern against women, getting even

with the mother who deserted him.

Qualifications: navigator – good; supply officer – excellent; gunnery officer – superior (top torpedo officer of subtugs four years running); general submarine competence – excellent plus.

Ramsey looked at the note in the psych record: 'Held

from advancement to his own command by imperfect

adjustment to deep-seated insecurity feelings.'

The Unwanted, he thought. Bonnett probably doesn't want advancement. This way, his commander supplies the father authority lacking in his youth.

Ramsey tossed the folder back onto the coffee table,

leaned back to think.

An association of twisted and tangled threads.

Sparrow and Bonnett were Protestants, Garcia a Catholic.

No evidence of religious friction.

These men have evolved a tight working arrangement. Witness the fact that their subtug has the highest efficiency rating in the service.

What has been the effect of losing Heppner, the other electronics officer? Will they resent his replacement?

Damn! Heppner was the wrong one to go! A case history with no apparent clues. Quiet childhood. Calm home life. Two sour notes: a broken love affair at age thirty-two. It should have been someone like Bonnett. The Unwanted. Or Captain Sparrow. The frustrated mathematician.

'Sleeping?'

It was Reed, the constant tutor.

'It's three o'clock,' he said. 'I brought a layout plan of the electronics shack on these Hell Divers.' He handed a blueprint to Ramsey, pointed as he spoke. 'Bench here. Vise there. Wrench kit. Micro-lathe. Vacuum pumps. Testingboard plugs.'

'Okay, I can read.'

'You have to be able to plug into that test board in total darkness,' said Reed. He sat down squarely in the rattan chair lately occupied by Dr. Oberhausen. 'Tomorrow you're going to start training on a mock-up.'

'Tomorrow's Saturday, Clint!' Ramsey glared at him.

'You don't get out of here before 1800,' said Reed. He bent forward over the plan. 'Now, concentrate on that plug layout. This here is emergency lighting. You'll be expected to find it the first time.'

'What if it takes me two tries?'

Reed leaned back, turned his flinty gaze on Ramsey.

'Mr. Ramsey, there's something you should understand so thoroughly that it's second nature to you.'

'Yeah? What's that?'

'There is no such thing as a minor accident on a submarine.'

Commander Sparrow trotted down the ramp from the tube landing, slowed as he stepped into the cavernous, floodlighted gloom of the underground submarine moorage. A fine mist of condensation from the rock ceiling far away in upper blackness beat against his face. He picked his way through the pattern of scurrying jitneys, darting, intent people. Ahead of him, the bulbous whale mound of his subtug rose above the pier; a 140-foot Wagnerian diva center stage beneath banks of floodlights.

Instructions from the final Security session jangled

through his mind.

'Your crew has the top Security rating of the service,

but you must remain alert for sleepers.'

'In my crew? Hell, man, I've known them all for years. Bonnett's been with me eight years. Joe Garcia and I served together before the war. Heppner and—' His face had crimsoned. 'What about the new E-officer?'

'You won't need to worry about him. Now, the inspectors assure us there are no enemy signal devices

aboard your boat.'

'Then why this gadget in my neck?'
'That's just an added precaution.'

'What about this new man? What's his E-rating?'

'He's one of the best in the service. Here, look at his record.'

'Limited combat experience in gulf patrol! He's practically a dryback!'

'But look at his E-rating.'

'Limited combat!'

A jitney driver shouted at Sparrow, bringing him out of his reverie. He glanced at his wrist watch: 0738 - twenty-two minutes until castoff. His stomach tightened. He quickened his steps.

Damn Security's last minute details!

Across the ebony velvet of the mooring pool he could see the glow tubes outlining the marine tunnel. Down

the 160-mile slant of that tunnel, out into the underwater deeps of De Soto Canyon and the Gulf of Mexico – and beyond – ranged the enemy. An enemy grown suddenly, terrifyingly, one hundred per cent effective against vessels such as his.

It came to Sparrow that the marine tunnel formed a grotesque birth canal. This cavern carved under a Georgia mountain was nestled in the earth like a fantastic womb. When they took their vessel out to do battle they were

born into a terrible world that they did not want.

He wondered what BuPsych would think of an idea like that. They'd probably rate it as an indication of weakness, he thought. But why shouldn't I have weakness? Something about fighting a war a mile and a half under the ocean – the unrelenting pressure of water all around – exposes every weakness in a man. It's the pressures. Constant pressures. Four men isolated in pressure, held in a plasteel prison as they are held in the prisons of their souls.

Another jitney scurried across Sparrow's path. He dodged, looked up at his boat. He was close enough now to make out the name plate on the retractable conning tower high above him: Fenian Ram S1881. The boarding ramp swooped down from the tower in a long graceful

curve.

The dock captain, a moonfaced lieutenant commander in fatigues, hurried up to Sparrow, a check list in his hands.

'Captain Sparrow.'

Sparrow turned without stopping. 'Yes? Oh, hullo, Myers. Are all the ready crews off?'

Myers fell into step beside him. 'Most of them. You've

lost weight, Sparrow.'

'Touch of dysentery,' said Sparrow. 'Got some bad fruit up at Garden Glenn. Has my new electronics officer

showed up?'

'Haven't seen him. His gear came along earlier. Funny thing. There was a sealed box with his stuff. About so by so.' He gestured with his hands. 'Cleared by Admiral Belland.'

'ComSec?'

'None other.'

'Why was it sealed?'

'It's supposed to contain some highly delicate instruments to monitor your new long-range search equipment. It was sealed so no zealous searcher could foul the works.'

'Oh. I take it the new long-range gear is installed?'

'Yes. You're battle-checking it.

Sparrow nodded.

A cluster of men at the foot of the boarding ramp snapped to attention as the two officers approached. Sparrow and Myers stopped. Sparrow said, 'At ease.'

Myers said, 'Sixteen minutes, Captain.' He held out his

hand, shook with Sparrow. 'Good luck. Give 'em hell.'

'Right,' said Sparrow.

Myers headed for the foot of the dock.

Sparrow turned toward a heavy-bodied, hawk-faced

man beside the ramp, First Officer Bonnett, 'Hi, Les.'

'Good to see you, Skipper,' said Bonnett. He tucked a clip board under his left arm, dismissed three ratings who were with him, turned back to Sparrow. 'Where'd you and Rita go after the party?'

'Home,' said Sparrow.

'So'd we,' said Bonnett. He hooked a thumb toward the submarine behind him. 'Final safety inspection's completed. Spare gear checked out. But there's a bit of a delay. Heppner's replacement hasn't reported.'

Sparrow cursed inwardly, felt a stomach-gripping surge

of frustration-anger. 'Where is he?'
Bonnett shrugged. 'All I know is that Security called and said there might be some delay. I told them—'

'Security?'

'That's right.'

'Suffering Jesus!' barked Sparrow. 'Do they always have to wait until the last minute? They had me-' He broke off. That was classified.

'They said they'd do their best,' said Bonnett.

Sparrow pictured the complicated arrangements which would pass the Fenian Ram through their own defense network outward bound.

'It could take another day to set up a new passage time.'

Bonnett glanced at his wrist watch, took a deep breath. 'I told them 0800 was the latest. They wouldn't answer

a damned one of my—' He fell silent as the ramp beside

them rattled to descending footsteps.

Both men looked up, saw three figures coming down; two ratings carrying heavy-duty electronics detection gear, followed by a short wiry man with dark Latin features. He wore stained service fatigues, carried a small electronic search box under his right arm.

'Don José Garcia,' said Sparrow.

Garcia shifted the search box to his left arm, stepped down to the dockside. 'Skipper! Am I glad to see you!'

Sparrow moved back to permit the ratings to pass with their load, looked questioningly at the search box under

Garcia's arm.

Garcia shook his head. 'For God and Country,' he said. 'But sometimes I think I overdraw my account with God.' He crossed himself. 'The Security chaps have had us at this floating sewer pipe half the night. We've been over it from stem to stern four distinct times. Not a blip. Now, I say to you: they want me to make another search after we get underway down tunnel!' He raised his eyebrows. 'I ask you!'

'We'll have to do it,' said Sparrow. 'I've allowed time before our first contact point for total deep-dive inspec-

tion.'

'I say,' said Garcia. He grinned. 'You know, I've already gone and rigged for it.'

Sparrow answered the grin, felt some of the tensions

inside him begin to unknot.

Bonnett glanced significantly at his watch. 'Twelve min—'

The whine of a command jitney's electric motor intruded upon him. All three men turned toward the sound. It came down the dark line of mooring slots, its single light casting an erratic Cyclops gleam upon the damp concrete. The jitney swerved up to the ramp, jerked to a stop. A redheaded man with round, innocent face sat beside the driver, clutching his uniform cap in his hands.

Sparrow saw ensign's bars on the man's collar, thought: That will be my new E-officer. Sparrow grinned at the man's obvious relief upon a safe arrival. The recklessness of the base jitney drivers was a standard service joke.

The new man put his cap over his red hair, stepped out

of the jitney. The machine rebounded from his weight. The driver whirled the jitney back the way they had come.

The ensign stepped up to Sparrow, saluted, said, 'I'm

Ramsey.'

Sparrow returned the salute, said, 'Glad to have you aboard'

Ramsey handed his service record to Sparrow, said,

'No time to send these through channels.'

Sparrow passed the papers to Bonnett, said, 'This is Mr. Bonnett, first officer.' He turned to Garcia. 'Mr. Garcia, engineer.'

'Good to meet you,' said Ramsey.

'We'll soon dissuade you of that illusion,' said Garcia.

Sparrow smiled, offered his hand to Ramsey, was surprised to feel strong muscle in the new man's grip. The fellow just looked soft. Bonnett and Garcia also shook hands.

Ramsey was busy cataloging his first visual impressions of the three men in the flesh. It seemed strange to be meeting these people for the first time when he felt that he already knew them. And that, he knew, would have to be concealed. Odd bits of knowledge about the personal lives of these men – even the names of their wives – could not be in the memory of a new man.

'Security said you might be delayed,' said Sparrow.

'What's got Security on its ear?' asked Ramsey. 'I

thought they were going to dissect me.'

'We'll discuss that later,' said Sparrow. He rubbed at the thin scar on his neck where the Security surgeons had imbedded the detection-system speaker. 'Castoff is 0800. Mr. Garcia will take you aboard. Get into fatigues. You'll be assisting him in a final spy-beam inspection as we get underway.'

'Yes, sir,' said Ramsey.

'Your gear came along hours ago,' said Garcia. He took Ramsey's arm, propelled him toward the ramp. 'Let's get with it.' They hurried up the ramp.

Ramsey wondered when he could break away to examine his telemeter box. He felt an anxiety – a need to study

the first records on Sparrow.

That mannerism of rubbing his neck, thought Ramsey.

Extreme nervous tension well concealed. But it shows in

the tight movements.

On the pier, Sparrow turned to look across the mooring basin at a string of moving lights. 'Here comes our tow, Les.'

'Do you think we'll make it, Skipper?'

'We always have.'

'Yes, but-'

"For now is our salvation nearer than when we believed," said Sparrow. "The night is far spent, the day is at hand: let us therefore cast off the works of darkness, and let us put on the armour of light." He looked at Bonnett. 'Paul wrote that to the Romans two thousand years ago.'

'A pretty wise fellow,' said Bonnett.

A bos'n's whistle sounded at the head of the dock. A swifty crane came darting up to take away the boarding ramp. Ratings hurried to attach the hooks, looked in-

quiringly at the two officers.

Men hurried along the pier, a new purposefulness in their movements. Sparrow swept his gaze over the scene. 'We're being asked to perform,' he said. He gestured for Bonnett to precede him up the ramp. 'Like the man said: Let's get with it.'

They climbed to the conning tower. Bonnett ducked for the cable rack which mounted the float for their TV periscope. As a matter of routine, he glanced at the housing, saw that it was secured for dive. He grasped the

ladder arms, slid down into the subtug.

Sparrow remained topside. Around him, the mooring basin appeared a vast lake. He looked at the rock ceiling's blackness.

There should be stars, he thought. Men should get one

last look at stars before they go under the sea.

On the pier below, scurrying figures moved to cast off the magnetic grapples. For a moment, Sparrow felt like a useless pawn being thrown into a sacrifice position. There had been a time, he knew, when captains conned their vessels away from the dock, shouting orders through a megaphone. Now, it was all automatic – done by machines and by men who were like machines.

A surface tug swung up to their bow, slapped its tow

grapples onto them. White water boiled from beneath the tug's stern. The Fenian Ram resisted momentarily, as though reluctant to leave, then began a slow, ponderous

movement out into the basin.

They cleared the slot, and another tug slid alongside their stern. The magna-shoe men leaped onto the Ram's silencer planes, hitched the tow and guide cables of the long plastic tube which stretched out across the dark water of the basin. Their shouts came up to Sparrow in the tower like the clear noise of children. He tasted a sudden oil-tainted breeze and knew they had crossed the path of a ventilator duct.

No special fanfare, no brass bands, no ceremony for the departure of a raider, he thought. We are as a reed shaken with the wind. And what go we out into the wilderness to see? No John the Baptist awaits us. But it's

a kind of baptism all the same.

Somewhere in the darkness a klaxon hooted. Turn and identify the man next to you. Another Security scheme: Show your identification when the horn sounds. Damn Security! Out here I identify myself to my God and none other.

Sparrow looked astern at the set of the tow. Oil. War demanded the pure substance born in the sediment of rising continent. Vegetable oil wouldn't do. War was no vegetarian. War was a carnivore.

The tow tug shifted to the side of the Ram and now the sub was being nosed into the traveler rack which would carry it down to the underwater canyon and the gulf.

Sparrow looked at the control console in the conning tower, and the green clear-away light. He flashed the standby signal to the tug below him and, with a practiced motion, touched the controls to retract the tower. It slid smoothly into the sub, its plasteel lid twisted into the groove seats.

A chest microphone hung beside the tower console. Sparrow slipped it on, spoke into it: 'Rig for dive.'

He focused his attention on the dive board in front of him.

Back came Bonnett's voice, robbed of life by the metallic mutes of the intercom: 'Pressure in the hull.'

One by one, the lights on Sparrow's dive board shifted

from red to green. 'Green board,' he said. 'Stand by.' Now he could feel the hull pressure and another pressure in his stomach. He closed the signal circuit which told the outside crews that the subtug was ready to go down tunnel.

The Ram shifted, lurched. A dull clang resonated through the boat. Across the top of the dive board amber lights flashed: they were in the grip of the tunnel

elevator. Twenty hours of free ride.

Sparrow grasped a handhold beside the dive board, swung down and out onto the engine-room catwalk. His feet made a slithering sound on the catwalk padding as he made his way aft, crawled through the control-room door, dogged it behind him. His gaze paused for a moment on the hand-etched brass plate Heppner had attached beside the door – a quotation from some nineteenth-century pundit:

'No one but a crazy man would waste his time inventing a submarine and no one but a lunatic would go down

in it if it were invented.'

Through the gulf shelf in the Florida elbow, De Soto Canyon slashes the soft peninsula limestone like a railroad cut: fourteen fathoms where it starts in Apalachee Bay, more than two hundred and sixty fathoms where it dives off into the ocean deeps south of Cape San Blas and east of Tampa.

The gulf exit of the marine tunnel opens into the canyou wall at fifty fathoms: a twilight world of waving fan kelp, red fingers of gorgonian coral, flashing sparkles

of reef-dwelling fish.

The Fenian Ram coasted out of the dark hole of the tunnel like a sea monster emerging from its lair, turned, scattering the fish, and slanted down to a resting place in the burnt-umber mud of the canyon bottom. A sonar pulse swept through the boat. Detectors in the triple hulls responded, registered on control gauges of the navigation deck.

Garcia's clipped accent – oddly squeaking in the oxygenhigh atmosphere – repeated the check list as he watched the Christmas tree lights of the main board. '. . . no leaks, trim weights balanced, external salvage air clear and pressure holding, atmosphere free of nitrogen, TV eyes clear and seeing, TV periscope surfaced and seeing; periscope gyro checks with—' His laughter echoed through the intercom: 'Seagull! It tried to land on the peri-box as I started to reel in. Lit on its fanny in the water.'

Bonnett's crisp tones interrupted: 'What's it like top-

side, Joe?'

'Clear. Just daybreak. Going to be a good day for

fishing.'

Sparrow's voice rasped over the speakers: 'Enough of that! Was there anyone up there to spot the gull's flop? They could've seen our box.'

'Negative, Skipper.'

Sparrow said, 'Les, give me the complete atmosphere check. Vampire gauges everyone. Follow the check. Report any deviations.'

The patient inspection continued.

Ramsey interrupted. 'I'm in the induction-drive chamber. A lot of static here as I entered.'

Garcia said, 'Did you go back by the lower shaft

tunnel?'

'Lower.'

'I noticed that myself earlier. We'll rig a ground for the scuff mat. I think that'll fix it.'

'I grounded myself before entering.'

Sparrow said, 'Run that down, Joe. Les where are you?' 'Second-level catwalk in the engine room.'

'Relieve Joe on the main board. Ramsey, get into your

shack. Contact with base in eleven minutes.'

'Aye, Skipper.'

Sparrow moved from his position on the control deck below Garcia to a point at the first-level door which was open to permit visual inspection of the big gauges forward on the radiation wall. That room in the bow, he thought. That's what worries me. We can see into it with our TV eyes; gauges tell us what's happening. But we can't touch it with our bare hands. We don't have a real feeling for that place.

He mopped his forehead with a large red handkerchief. Something, somewhere is wrong. He was a subtug skipper who had learned to depend on his feeling for the boat.

A string of Spanish curses in Garcia's voice, rendered

metallic by the intercom, interrupted his reverie.

Sparrow barked: 'Joe! What's wrong?' He turned toward the stern, as though to peer through the bulk-heads.

'Wiper rag in the rotor system. It was rubbing the induction ring every revolution. That's Ramsey's static.'

'Does it look deliberate?'

'Did you ever come across a silk wiping rag?' The sound of a grunt came over the intercom. 'There, by heaven!'

Sparrow said, 'Save that rag.' Then: 'Ramsey, where are you?'

'In the shack warming up the transmitter.'

'Did you hear Joe?'

'Yes.'

'Tell base about that rag. Tell them-'

'Skipper!' It was Garcia's voice. 'There's oil in the atmosphere back here!'

Sparrow said, 'A mist of oil plus static spark equals

an explosion! Where's that oil coming from?'

'Just a minute.' A clanking of metal against metal. 'Open pet-cock in the lube system. Just a crack. Enough to squirt a fine spray under full drive.'

Sparrow said, 'Ramsey, include that in the report to

base.'

'Aye, Skipper.'

'Joe, I'm coming back there,' said Sparrow. 'We're going over that drive room with a microscope.'

'I've already started.'

Bonnett said, 'Skipper, would you send Ramsey up here after he gets off the contact? I'll need help checking the main board.'

'Hear that, Ramsey?' asked Sparrow.

'Aye.'

'Comply.'

'Will do.'

Sparrow went aft, dropped down to the lower level, crawled through the shaft tunnel and into the drive room – a cone-shaped space dominated by the gleaming brass induction ring, the spaced coils. He could smell the oil, a heavy odor. Garcia was leaning into the coil space, examining the induction ring by magnifying glass.

'They're just little things,' said Sparrow. 'But taken

together - boom!'

Garcia turned, his eyes glittering in the harsh work lights. 'I don't like the feel of things, Skipper. This is a bad beginning. This is starting like a dead-man mission.'

Sparrow took a deep breath, exhaled slowly. With an abrupt motion, he thumbed the button of his crest mike. 'Ramsey, when you contact base, request permission to return.'

'Aye, Skipper.'

Ramsey's thoughts leaped. What will that do to morale? The first raider in months turns back without getting out of the gulf. Bad. He stared at the wavering fingers of the dial needles. His contact timer hit the red line, buzzed. He rapped out the first pulse with its modulated message: 'Able John to Red Hat. Over.'

The speaker above his head hissed with background noise like a distant surf. Presently, a voice came out of

it, overriding the noise: 'This is Red Hat. Over.'

'Able John to Red Hat: We've discovered sabotage aboard. A silk rag was put in the motor system of our drive room. A static spark from the rag could've blown us out of the bay. Over.'

'Red Hat to Able John. Stand by, please. We are routing

your message to Bird George.'

'Security!'

Again the speaker came to life. 'Bird George to Able John. This is Teacher. What is the situation? Over.'

Clint Reed! Ramsey could almost see the humorless face of his Security teacher. Teacher Reed. Impromptu code. Ramsey bent over his own mike: 'Teacher, this is Student.' He repeated the story of sabotage.

'Teacher to Student. What's your suggestion? Over.'

'Student to Teacher. Permit us to go on with inspection out here. There's less chance for an unknown factor. Just the four of us aboard. If we check safe, allow us to continue the mission. Bad for morale if we came back. Over.'

'Teacher to Student. That's the way we see it. But stand by.' Pause. 'Permission granted. How much time do you need? Over?'

Ramsey turned on his intercom microphone. 'Skipper,

base suggests we continue the inspection here and not return if we check secure.'

'Did you tell him what we'd found?'

'Yes, sir.'

'What'd they say?'

'That's there's less chance for a Security slip out here. Fewer personnel. They suggest we double-check each other, give every-'

'Suffering Jesus!'

'They want to know how much time we'll need.'

Silence.

'Skipper, they-'

'I heard you. Tell them we'll need ten hours.'

Ramsey turned back to his transmitter. 'Student to Teacher. Skipper says give us ten hours. Over.'

'Teacher to Student. Continue as ordered. We'll clear

new check points for you. Over and out.'

Ramsey sat back, thought: Now, I've really stuck my

neck out. But Obe said this one has to go through.

Bonnett's voice rasped over the intercom: 'Ramsey! If that contact's over, get your ass up here and help me on this board!'

'Coming.'

In the drive room, Sparrow hefted a socket wrench, looked at Garcia crouched under the secondary coils. 'They want this one to go through, Joe. Very badly.'

Garcia put a contact light on two leads. It glowed. 'Yes, and they give us a green hand like that Ramsey. A near dryback.'

'His service record says limited combat in gulf Security

patrols.'

'Get the priest and the parish!' He shifted to a new position. 'Something odd about the chap!'

Sparrow opened the plate over a condenser. 'How so?' 'He strikes me like a ringer, a chap who pretends to be one thing when he's actually something else.'

'Where do you get that idea?' 'I really couldn't say, Skipper.'

Sparrow shrugged, went on with his work. 'I dunno, Joe. We'll go into it later. Hand me that eight-inch flex wrench, please.'

Garcia reached up with the wrench, turned back to his

own work. Silence came over the little room, broken only by the sound of metal on metal, buzzing of test circuits.

Sparrow ducked through the door into the control room, stood silently as Bonnett and Ramsey reinstalled the

final cover plate of the main board.

Bonnett straightened, rubbed the back of his neck. His hand left a grease smear. He spoke to Ramsey: 'You're a boy, Junior. We may make a submariner out of you yet. You've just gotta remember that down here you never make the same mistake once.'

Ramsey racked a screw driver in his tool kit, closed

the kit, turned, saw Sparrow. 'All secure, Skipper?'

Sparrow didn't answer at once. He looked around the control room, sniffed the air. Faint smell of ozone. A distant humming of stand-by machinery. The round eyes of the indicator dials like symbiotic extensions of himself. The plucking disquiet remained within him.

'As secure as mortals can make it - I hope,' he said. 'We'll repair to the wardroom.' Sparrow turned, ducked

out the way he had entered.

Ramsey put his tool kit into its wall rack. Metal grated against metal. He shivered, turned. Bonnett was going through the door. Ramsey stepped across the control room, ducked through the door, followed Bonnett into the wardroom. Sparrow and Garcia already were there, Garcia seated to the right, Sparrow standing at the opposite end of the table. Ramsey's eyes widened. An open Bible lay on the table before Sparrow.

'We invoke the help of the Almighty upon our mean

endeavors,' said Sparrow.

Bonnett slipped into a chair at the left.

Sparrow indicated the seat opposite himself. Will you

be seated, please, Mr. Ramsey?'

Ramsey lowered himself into the chair, rested one hand on the green felt of the table cover. Sparrow towered above them at the other end of the table. The Giver of the Law with hand upon the Book.

Religious services, thought Ramsey. Here's one of the binding forces of this crew. Participation Mystique! The

consecration of the warriors before the foray.

'What is your religion, Mr. Ramsey?' asked Sparrow.

Ramsey cleared his throat. 'Protestant Episcopal.'

'It's not really important down here,' said Sparrow. 'I was merely curious. We have a saying in the subtugs that the Lord won't permit a live atheist to dive below a thousand feet.'

Ramsey smiled.

Sparrow bent over the Bible. His voice rumbled as he read: "Woe unto them that call evil good, and good evil; that put darkness for light, and light for darkness; that put bitter for sweet, and sweet for bitter! Woe unto them that are wise in their own eyes, and prudent in their own sight!"

He closed the Bible, lifted his head. It was a movement of power, of authority. Ramsey received an impression of

deep strength.

'We do our job with what we have at hand,' said Sparrow. 'We do what we believe to be the *right* thing. Though it grieve us, we do it. We do it that the godless shall perish from the earth. Amen.'

Sparrow turned away, placed the Bible in a case against the bulkhead. With his back still turned to them, he said, 'Stations, everyone. Mr. Ramsey, contact base, tell them we are ready to go. Get the time for the first check point.'

Ramsey got to his feet. Foremost in his thoughts was the almost physical need to examine the first telemeter record on Sparrow. 'Yes, sir,' he said. He turned, ducked through the door to the companionway and across into his shack, contacted base.

First check point in four hours.

Ramsey relayed the information to Sparrow.

'Zero the automatic timelog,' said Sparrow. 'Check in, everyone.'

'Garcia here. Drive and tow secure.'

'Bonnett here. Main secure.'

Ramsey looked at his board in the electronics shack. A queer sensation of belonging here passed over him. A sense of familiarity, of association deeper and longer than the five weeks of training. 'E-board secure,' he said. 'Two atmospheres in the hull.' He looked to the vampire gauge on his wrist. 'Diffusion normal-plus. No nitrogen.'

Back came Sparrow's voice over the intercom: 'Les,

slide off.'

Ramsey felt the subtug lurch, then a faint whispering pulse of power. The deck assumed a slight upward incline, leveled. Presently, it tipped down.

We're headed into the deeps, thought Ramsey. Physically and mentally. From here on it's up to me.

'Mr. Ramsey, come to the control deck,' Sparrow

ordered.

Ramsey closed down his board, went forward. Sparrow stood, hands behind his back, feet braced slightly apart almost precisely in the center of the control deck. He appeared framed in a background maze of pipes, wheels, levers, and dials. To his right, Garcia worked the tow controls; to his left, Bonnett held the high-speed pilot wheel. The big static pressure gauge high in the control bulkhead registered 1,310 pounds, increasing; they were below 3,000 feet.

Without turning, Sparrow asked, 'What's in that little box that came aboard with your effects, Mr. Ramsey?'

'Monitoring equipment for the new search system, sir.'
Sparrow's head moved to follow the flickering of a towcontrol dial; he turned back. 'Why was it locked?'

'It's extremely delicate and packed accordingly. They

were afraid someone-'

'I'll want to see it at the first opportunity,' said Sparrow. He stepped over behind Bonnett. 'Les, is that a leak in compartment nine?'

'There's no moisture or pressure variant, Skipper. It has

to be condensation.'

'Keep an eye on it.' Sparrow stepped back beside Ramsey.

I'm going to find out quick if that disguise system in

the box satisfies his curiosity, thought Ramsey.

'What's your hobby?' he asked Ramsey.

Ramsey blinked. 'Astronomy.'

Bonnett spoke over his shoulder: 'That's a peculiar

hobby for a submariner.'

Before Ramsey could reply, Sparrow said, 'There's nothing wrong with astronomy for a man who goes to sea.'

'The basis of navigation,' said Ramsey.

Sparrow glanced sidelong at Ramsey, returned his gaze to the board. 'I was thinking as we moved out across the

mooring basin back at base that we were entitled to a last look at the stars before going under the sea. They give one a sense of orientation. One night before we left Garden Glenn I was struck by the clarity of the sky. The constellation of Hercules was—' He broke off as the Ram's nose tipped upward.

A down hands moved over his controls to correct for

the deflection.

'Hercules,' said Ramsey. 'Do you mean the Kneeler?'

'Not many call him that any more,' said Sparrow. 'I like to think of him up there all these centuries, guiding mariners. The Phoenicians used to worship him, you know.'

Ramsey felt a sudden wave of personal liking for Sparrow. He fought it down. I must remain clearheaded

and objective, he told himself.

Sparrow moved to the left to get a clearer view of the pilot gauges. He studied them a moment, turned to Ramsey. 'Has it ever occurred to you, Mr. Ramsey, that these Hell Diver subtugs are the closest thing to spaceships that mankind has developed? We're completely self-contained.' He turned back to the control board. 'And what do we do with our spaceships? We use them to hide under the liquid curtain of our planet. We use them to kill one another.'

Ramsey thought: Here's a problem - a morbid imagination vocalized for the benefit of the crew. He said, 'We use them in self-defense.'

'Mankind has no defense for himself,' said Sparrow.

Ramsey started to speak, stopped, thought: That's a Jungian concept. No man is proof against himself. He looked at Sparrow with a new respect.

'Our underground base,' said Sparrow. 'It's like a womb. And the marine tunnel. A birth canal if I ever

saw one.'

Ramsey thrust his hands into his pockets, clenched his fists. What is going on here? he asked himself. An idea like that should have originated with BuPsych. This man Sparrow is either teetering on the ragged edge or he's the sanest man I've ever met. He's absolutely right about that base and the tunnel and we've never spotted the analogy before. This bears on our problem. But how?

Sparrow said, 'Joe, secure the tow board on automatic. I want you to go with Mr. Ramsey now and test out the new detection gear. It should be ranged on our first check point.' He looked to the big sonoran auto-nav chart on the forward bulkhead and the red dot showing their DR position. 'Les, surface the peri-box and get a position reading.'

'Right, Skipper.'

Garcia closed the final switch on his board, turned to

Ramsey. 'Let's go, Junior.'

Ramsey looked at Sparrow, a wish to be part of this crew uppermost in his mind. He said, 'My friends call me

Johnny.'

Sparrow spoke to Garcia. 'Joe, would you also initiate Mr. Ramsey into the idiosyncrasies of our atmospheric system? The carbonic anhydrase phase regulator would be a good place to start.'

Ramsey felt the rejection of his first name like a slap, stiffened, ducked through the aft door and into the com-

panionway.

Garcia followed, dogged the door behind them, turned, said, 'You'd better know something about the subtug, Ramsey. A new hand is always known by his last name or anything else the crew feels like calling him until after the first combat. Some guys hope they never get called by their first name.'

Ramsey cursed inwardly. Security had missed that point. It made him appear like a green hand. Then he thought: But this is a natural thing. A unit compulsive action by the crew. A bit of magic. Don't use the secret name of the new man lest the gods destroy him . . . and his com-

panions.

In the control room, Bonnett turned to Sparrow, sniffed. He rubbed a hand across the back of his neck, turned back to the control board. 'He's green,' he said.

'He appears willing, though,' said Sparrow. 'We can

hope for the best.'

Bonnett asked, 'Aren't you worried about that last minute Security check-up on the guy?'

'Somewhat,' said Sparrow.

'I can't help it,' said Bonnett. 'The guy - something

about him - I dunno. He strikes me as a wrongo.'
Bonnett's shaggy brows drew down in thought.

'It could've been routine,' said Sparrow. 'You know the

going over they gave us.'

'I'm still going to keep an eye on him,' said Bonnett.

'I've some paper work,' said Sparrow. 'Steady as she goes. Call me before the first check point.'

'What's the watch schedule?' asked Bonnett.

'That's what I'm going to be working on,' said Sparrow. 'I want to set it up so I can spend some time with Ramsey while we're still in comparatively safe waters. I don't

want him goofing when the chips are down.'

Sparrow ducked for the aft door, went down the companionway and into the wardroom. The first thing that struck him as he entered was the color of the wardroom table cover – a cover and a color he had seen thousands of times.

Why is it that Navy wardrooms always have green table covers? he asked himself. Is it a little of the color of the growing land? Is it to remind us of home?

In the electronics shack, Garcia and Ramsey closed

down the board after testing the detection gear.

'What now?' asked Ramsey.

'You'd better log a little sack time,' said Garcia. 'It's Les's watch. The skipper's probably setting up the schedule right now. You may be called next. Things are pretty loose the first day or so.'

Ramsey nodded, said, 'I am tired.' He turned aft, said,

'See you later.'

Garcia's 'Righto' floated after him.

Ramsey hurried to his room, dogged the door, dragged out the telemeter box, unlocked it, extracted the first

record strips, sat back to examine them.

Pituitra and adrenaline high points showed early on the scrolls. Ramsey noted that one was before he arrived and the other coincided with the moment pressure was first bled into the hull.

The first tense moments, he thought. But that's normal.

He reeled the scrolls of telemeter tape forward to the moment the sabotage was discovered, double-checked the timed setting, scanned backward and forward across the area. Nothing!

But that can't be!

Ramsey stared at the pattern of rivets on the bulkhead opposite him. The faint whispering of the drive seemed to grow louder. His hand on the blanket beside him felt every tuft, every thread. His nostrils sorted out the odors of the room: paint, oil, soap, ozone, perspiration, plastic . . .

Is it possible for a person to go through anxiety without glandular changes? he asked himself. Yes, under certain pathological circumstances, none of which fit Sparrow.

Ramsey remembered the sound of the captain's voice over the intercom during the period of stress: higher pitched, tense, clipped.

Again, Ramsey examined the tape. Could the telemeter

be wrong?

He checked it. Functioning perfectly. Could there be disfunction in the mechanism within Sparrow's flesh? Then

the other fluctuations would not have registered.

Ramsey leaned back, put a hand behind his head, thought through the problem. Two major possibilities suggested themselves: If Sparrow knew about the wiperrag-oil-spray thing then he wouldn't be anxious. What if he planted the rag and set that luke-system petcock himself? He could've done it to disable the ship and stop the mission because he's lost his nerve or because he's a spy.

But there would've been other psychomotor indications

which the telemeter would have registered.

This led to the other possibility: In moments of great stress Sparrow's automatic glandular functions are taken over by the higher cortical centers. That could tie in with the known paranoiac tendencies. There could be a systematic breakdown of normal function under stress: such a turning away from fear that the whole being believes there could be no danger.

Ramsey sat bolt upright: That would fit the pattern of Sparrow's religious attitude. An utter and complete faith would explain it. There had been religious paranoiacs before. They'd even tried to hang the label on Christ. Ramsey frowned. But of course Schweitzer made the ones who tried look like fools. Tore their arguments to shreds.

A sharp rap on Ramsey's door interrupted his thoughts.

He slipped the tapes into the false bottom of the telemeter box, closed the lid, locked it.

Again the rap. 'Ramsey?' Garcia's voice.

'Yes?'

'Ramsey, you'd better take a couple of anti-fatigue pills.

You're scheduled for the next watch.'

'Right. Thanks.' Ramsey slipped the box under his desk, went to the door, opened it. The companionway was empty. He looked at Garcia's door across the companionway, stood there a moment, feeling the ship around him. A drop of moisture condensing from the overhead fell past his eyes. Abruptly, he had to fight off a sense of depression. He could almost feel the terrible pressure of water around him.

Do I know what it is to be truly afraid? he asked him-

self.

CEASE FIRE

Snow slanted across the frozen marshland, driven in fitful gusts. It drifted in a low mound against the wooden Observation Post. The antennae of the Life Detector atop the OP swept back and forth in a rhythmic halfcircle like so many frozen sticks brittle with rime ice.

The snow hid all distance, distorted substance into gray shadows without definition. A suggestion of brightness to the north indicated the sun that hung low on the horizon

even at midnight in this season.

Out of possible choices of a place for a world-shattering invention to be born, this did not appear in the running.

A rifle bullet spanged against an abandoned tank northeast of the OP, moaned away into the distance. The bullet only emphasized the loneliness, the isolation of the OP set far out ahead of the front lines on the Arctic battlefields of 1972. Behind the post to the south stretched the long reaches of the Canadian barren lands. An arm of the Arctic Ocean below Banks Island lay hidden in the early snow storm to the north.

One operator - drugged to shivering wakefulness stood watch in the OP. The space around him was barely six feet in diameter, crammed with equipment, gridded screens glowing a pale green with spots that indicated living flesh: a covey of ptarmigan, a possible Arctic fox. Every grid point on the screens held an aiming code for mortar fire.

This site was designated OP 114 by the Allied command. It was no place for the sensitive man who had found himself pushed, shunted and shamed into this position of terror. The fact that he did occupy OP 114 only testified to the terrible urgencies that governed this war.

Again a rifle bullet probed the abandoned tank. Corporal Larry Hulser - crouched over the OP's screens tried to get a track on the bullet. It had seemed to come from the life-glow spot he had identified as probably an

Arctic fox.

Much too small for a human, he thought. Or is it?

The green glow of the screens underlighted Hulser's dark face, swept shadows upward where they merged with his black hair. He chewed his lips, his eyes darting nervously with the fear he could never hide, the fear that made him the butt of every joke back at the barracks.

Hulser did not look like a man who could completely transform his society. He looked merely like an indefinite lump of humanity encased in a Life Detector shield,

crouching in weird green shadows.

In the distant days of his youth, one of Hulser's chemistry professors had labeled him during a faculty tea: 'A mystic – sure to fail in the modern world.'

The glow spot Hulser had identified as a fox shifted its

position.

Should I call out the artillery? Hulser wondered. No. This could be the one they'd choose to investigate with a flying detector. And if the pilot identified the glow as a fox — Hulser cringed with the memory of the hazing he had taken on the wolf he'd reported two months earlier.

'Wolfie Hulser!'

I'm too old for this game, he thought. Thirty-eight is

too old. If there were only some way to end-

Another rifle bullet spanged against the shattered tank. Hulser tried to crouch lower in the tiny wooden OP. The bullets were like questing fingers reaching out for unrecognized metal – to identify an OP. When the bullets found their mark, a single 200 mm. mortar shell followed, pinpointed by echophones. Or it could be as it had been with Breck Wingate, another observer.

Hulser shivered at the memory.

They had found Wingate hunched forward across his instruments, a neat hole through his chest from side to side just below the armpits. Wind had whistled through the wall of the OP from a single bullet hole beside Wingate. The enemy had found him and never known.

Hulser glanced up nervously at the plywood walls: all that shielded him from the searching bullets – a wood shell designed to absorb the metal seekers and send back the sound of a bullet hitting a snowdrift. A rolled wad of plot paper filled a bullet hole made on some other watch near the top of the dome.

Again Hulser shivered.

And again a bullet spanged against the broken tank. Then the ground rumbled and shook as a mortar shell zeroed the tank.

Discouraging us from using it as an OP, thought Hulser. He punched the backtrack relay to give the mortar's

position to his own artillery, but without much hope. The enemy was beginning to use the new 'shift' shells that confused backtrack.

The phone beside his L-D screens glowed red. Hulser leaned into the cone of silence, answered: 'OP 114. Hulser.'

The voice was Sergeant Chamberlain's. 'What was that mortar shooting at, Wolfie?'

Hulser gritted his teeth, explained about the tank.

Chamberlain's voice barked through the phone: 'We shouldn't have to call for an explanation of these things! Are you sure you're awake and alert?'

'Yeah, Sarg.'

'O.K. Keep your eyes open, Wolfie.'

The red glow of the phone died. Hulser trembled with rage. Wolfie!

He thought of Sergeant Mike Chamberlain: tall, overbearing, the irritating nasal twang in his voice. And he thought of what he'd like to do to Chamberlain's narrow, small-eyed face and its big nose. He considered calling back and asking for 'Schnozzle' Chamberlain.

Hulser grinned tightly. That'd get him! And he'd have to wait another four hours before he could do anything

about it.

But the thought of the certain consequences in arousing Chamberlain's anger wiped the grin from Hulser's face.

Something moved on his central screen. The fox. Or was it a fox? It moved across the frozen terrain toward the shattered tank, stopped halfway.

A fox investigating the strange odors of cordite and

burned gas? he wondered. Or is it the enemy?

With this thought came near panic. If any living flesh above a certain minimum size – roughly fifty kilos – moved too close to an OP without the proper IFF, the hut and all in it exploded in a blinding flash of thermite:

everything incinerated to prevent the enemy from captur-

ing the observer's Life Detector shield.

Hulser studied the grid of his central screen. It reminded him of a game he'd played as a boy: two child-dren across a room from one another, ruled graph paper hidden behind books in their laps. Each player's paper contained secretly marked squares: four in a row – a battleship, three in a row – a destroyer, two in a . . .

Again the glow on his screen moved toward the tank

crater.

He stared at the grid intersection above the glowing spot, and far away in his mind a thought giggled at him: Call and tell 'em you have a battleship on your screen at 0-6-C. That'd get you a Section Eight right out of this man's army!

Out of the army!

His thoughts swerved abruptly to New Oakland, to Carol Jean. To think of her having our baby back there and—

Again the (fox?) moved toward the tank crater.

But his mind was hopelessly caught now in New Oakland. He thought of all the lonely years before Carol: to work five days a week at Planetary Chemicals . . . the library and endless pages of books (and another channel of his mind commented: You scattered your interests too widely!) . . . the tiny cubbyhole rooms of his apartment . . . the tasteless—

Now, the (fox?) darted up to the tank crater, skirted it.

Hulser's mind noted the movement, went right on with its reverie: Then Carol! Why couldn't we have found each other sooner? Just one month together and—

Another small glowing object came on the screen near the point where he'd seen the first one. It, too, darted

toward the tank crater.

Hulser was back in the chill present, a deadly suspicion gnawing him: The enemy has a new type of shield, not as good as ours. It merely reduces image size!

Or is it a pair of foxes? Indecision tore at him.

They could have a new shield, he thought. We don't

have a corner on the scientific brains.

And a piece of his mind wandered off in the new direction – the war within the war: the struggle for equip-

ment superiority. A new weapon – a new shield – a better weapon – a better shield. It was like a terrible ladder dripping with maimed flesh.

They could have a new shield, his mind repeated.

And another corner of his mind began to think about the shields – the complex flicker-lattice that made human

flesh transparent to—

Abruptly, he froze. In all clarity, every diagram in place, every equation, every formula complete – all spread out in his mind was the instrument he knew could end this war. Uncontrolled shivering took over his body. He swallowed in a dry throat.

His gaze stayed on the screen before him. The two glow spots joined, moved into the tank crater. Hulser bent into the cone of silence at his phone. This is OP 114. I have two greenies at co-ordinates 0-6-C-sub T-R. I

think they're setting up an OP!'

'Are you sure?' It was Chamberlain's nasal twang.

'Of course I'm sure!'

'We'll see.'

The phone went dead.

Hulser straightened, wet his lips with his tongue. Will they send a plane for a sky look? They don't really trust me.

A rending explosion at the tank crater answered him. Immediately, a rattle of small arms fire sprang up from the enemy lines. Bullets quested through the gray snow.

It was an enemy OP! Now, they know we have an

observer out here!

Another bullet found the dome of the OP.

Hulser stared at the hole in terror. What if they kill me? My idea will die with me! The war will go on and on and— He jerked toward the phone, screamed into it: 'Get me out of here! Get me out of here! Get me out of here!'

When they found him, Hulser was still mumbling the five words.

Chamberlain's lanky form crouched before the OP's crawl hole. The three muffled figures behind him ignored the OP, their heads turning, eyes staring off into the snow,

rifles at the ready. The enemy's small arms fire had stopped.

Another one's broke, thought Chamberlain. I thought

shame might make him last a little while longer!

He dragged Hulser out into the snow, hissed: 'What is

it, you? Why'd you drag us out into this?'

Hulser swallowed, said, "Sarge, please believe me. I know how to detonate enemy explosives from a distance without even knowing where the explosives are. I can—"

'Detonate explosives from a distance?' Chamberlain's eyes squinted until they looked like twin pieces of flint. Another one for the head shrinkers unless we can shock him out of it, he thought. He said, 'You've gone off your rocker, you have. Now, you git down at them instruments and—'

Hulser paled. 'No, Sarg! I have to get back where-'

'I could shoot your head off right where you—'

Fear, frustration, anger – all of the complex pressureborne emotions in Hulser – forced the words out of him: 'You big-nosed, ignorant lump. I can end this war! You hear?' His voice climbed. 'Take me back to the lieutenant! I'm gonna send your kind back under the rocks you—'

Chamberlain's fist caught Hulser on the side of the head, sent him tumbling into the snow. Even as he fell, Hulser's mind said: But you told him, man! You finally

told him!

The sergeant glanced back at his companions, thought, If the enemy heard him, we've had it! He motioned one of the other men in close. 'Mitch, take the watch on this OP. We'll have to get Hulser back.'

The other nodded, ducked through the crawl hole.

Chamberlain bent over Hulser. 'You stinkin' coward!' he hissed. 'I've half a mind to kill you where you sit! But I'm gonna take you in so's I can have the personal pleasure of watchin' you crawl when they turn the heat on you! Now you git on your feet! An' you git to walkin'!'

Major Tony Lipari - 'Tony the Lip' to his men - leaned against the canvas-padded wall of his dugout, hands clasped behind his head. He was a thin, oily-look-

ing man with black hair, parted in the middle and slicked to his head like two beetle wings. In civilian life he had sold athletic supplies from a wholesale house. He had once worn a turban to an office party, and it had been like opening a door on his appearance. Somewhere in his ancestry there had been a Moor.

The major was tired (Casualty reports! Endless casualty

reports!) and irritable, faintly nervous.

We don't have enough men to man the OPs now! he thought. Do we have to lose another one to the psych

boys?

He said, 'The lieuten—' His voice came out in a nervous squeak, and he stopped, cleared his throat. 'The lieutenant has told me the entire story, corporal. Frankly, it strikes me as utterly fantastic.'

Corporal Hulser stood at attention before the major.

'Do I have the major's permission to speak?'

Lipari nodded. 'Please do.'

'Sir, I was a chemist . . . I mean as a civilian. I got into this branch because I'd dabbled in electronics and they happened to need L-D observers more than they needed chemists. Now, with our shields from—' He broke off, suddenly overwhelmed by the problem of convincing Major Lipari.

He's telling me we need L-D observers! thought Lipari.

He said, 'Well, go on, Hulser.'

'Sir, do you know anything about chemistry?'

'A little.'

'What I mean is, do you understand Redox equations and substitution reactions of—'

'Yes, yes. Go on!'

Hulser swallowed, thought: He doesn't understand. Why won't he send me back to someone who does? He said, 'Sir, you're aware that the insulation layer of our L-D shield is a special kind of protection for—'

'Certainly! Insulates the wearer from the electrical

charge of the suit!'

Hulser goggled at the major. 'Insulates . . . Oh, no, sir.

Begging the major's pardon, but—'

'Is this necessary, corporal?' asked Lipari. And he thought: If he'd only stop this act and get back to work! It's so obvious he's faking! If—

'Sir, didn't you get the-'

'I had a full quota of L-D shield orientation when they called me back into the service,' said Lipari. 'Infantry's my specialty, of course. Korea, you know. But I understand how to operate a shield. Go on, corporal.' He kicked his chair away from the wall.

'Sir, what that insulation layer protects the wearer from is a kind of pseudo-substitution reaction in the skin. The suit's field can confuse the body into producing nitrogen

bubbles at—'

'Yes, Hulser! I know all that! But what's this have to

do with your wonderful idea?'

Hulser took a deep breath. 'Sir, I can build a projector on the principle of the L-D suits that will produce an artificial substitution reaction in any explosive. I'm sure I can!'

'You're sure?'

'Yes, sir. For example, I could set up such a reaction in Trinox that would produce fluorine and ionized hydrogen – in minute quantities, of course – but sufficient that any nearby field source would detonate—'

'How would you make sure there was such a field in

the enemy's storage area?'

'Sir! Everybody wears L-D shields of one kind or another! They're field generators. Or an internal combustion motor . . . or . . . or just anything! If you have an explosive mixture collapsing from one system into another in the presence of fluorine and hydrogen—' He shrugged. 'It'd explode if you looked cross-eyed at it!'

Lipari cleared his throat. 'I see.' Again he leaned back against the wall. The beginning of an eyestrain headache tugged at his temples. Now, the put-up-or-shut-up, he thought. He said, 'How do we build this wonderful pro-

jector, corporal?'

'Sir, I'll have to sit down with some machinists and some

E-techs and-'

'Corporal, I'll decide who sits down with whom among my men. Now. I'll tell you what you do. You just draw up the specifications for your projector and leave them with me. I'll see that they get into the proper hands through channels.' 'Sir, it's not that simple. I have all of the specs in my head now, yes, but in anything like this you have to

work out bugs that-'

'We have plenty of technical experts who can do that,' said Lipari. And he thought: Why doesn't he give up? I gave him the chance to duck out gracefully! Scribble something on some paper, give it to me. That's the end of it!

'But sir-'

'Corporal! My orderly will give you paper and pencil. You just—'

'Sir! It can't be done that way!'

Lipari rubbed his forehead. 'Corporal Hulser, I am giving you an order. You will sit down and produce the plans and specifications for your projector. You will do it now.'

Hulser tasted a sourness in his mouth. He swallowed.

And that's the last we'd ever hear of Corporal Larry

Hulser, he thought. Tony the Lip would get the credit.

He said, 'Sir, after you submit my plans, what would you do if someone asked, for example, how the polar

molecules of—'

'You will explain all of these things in your outline. Do I make myself clear, corporal?'

'Sir, it would take me six months to produce plans that

could anticipate every-'

'You're stalling, corporal!' Major Lipari pushed himself forward, came to his feet. He lowered his voice. 'Let's face it, Hulser. You're faking! I know it. You know it. You just had a bellyful of war and you decided you wanted out.'

Hulser shook his head from side to side.

'It's not that simple, corporal. Now. I've shown you in every way I can that I understand this, that I'm willing to—'

'Begging the major's pardon, but—'

'You will do one of two things, Corporal Hulser. You either produce the diagrams, sketches or whatever to prove that you do have a worthy idea, or you will go back to your unit. I'm done fooling with you!'

'Sir, don't you under—'

'I could have you shot under the Articles of War!'

And Lipari thought: That's what he needs - a good shock!

Bitter frustration almost overwhelmed Hulser. He felt the same kind of anger that had goaded him to attack Sergeant Chamberlain. 'Major, enough people know about my idea by now that at least some of them would wonder if you hadn't shot the goose that laid the golden egg!'

Lipari's headache was full-blown now. He pushed his face close to Hulser's. 'I have some alternatives to a firing

squad, corporal!'

Hulser returned Lipari's angry glare. 'It has occurred to me, sir, that this project would suddenly become "our" project, and then "your" project, and somewhere along the line a mere corporal would get lost.'

Lipari's mouth worked wordlessly. Presently, he said, 'That did it, Hulser! I'm holding you for a general court! There's one thing I can do without cooking any goose

but yours!'

And that ends the matter as far as I'm concerned,

thought Lipari. What a day!

He turned toward the door of his dugout: Sergeant!'

The door opened to admit Chamberlain's beanpole figure. He crossed the room, came to attention before

Lipari, saluted. 'Sir?'

'This man is under arrest, sergeant,' said Lipari. 'Take him back to area headquarters under guard and have him held for a general court. On your way out send in my orderly.'

Chamberlain saluted. 'Yes, sir.' He turned, took Hulser's

arm. 'Come along, Hulser.'

Lipari turned away, groped on a corner shelf for his aspirin. He heard the door open and close behind him. And it was not until this moment that he asked himself: Could that crackpot actually have had a workable idea? He found the aspirin, shrugged the thought away. Fantastic!

Hulser sat on an iron cot with his head in his hands. The cell walls around him were flat, riveted steel. It was a space exactly the length of the cot, twice as wide as the cot. At his left, next to the foot of the bed, was a barred door. To his right, at the other end of the floor space,

were a folding washbasin with water closet under. The cell smelled foul despite an overriding stink of disinfectant.

Why don't they get it over with? he asked himself.

Three days of this madhouse! How long are they-

The cell door rattled.

Hulser looked up. A wizened figure in a colonel's uniform stood on the other side of the bars. He was a tiny man, gray-haired, eyes like a curious bird, a dried parchment skin. In the proper costume he would have looked like a medieval sorcerer.

A youthful MP sergeant stepped into view, unlocked

the door, stood aside. The colonel entered the cell.

'Well, well,' he said.

Hulser came to his feet, saluted.

'Will you be needing me, sir?' asked the MP sergeant.

'Eh?' The colonel turned. 'Oh. No, sergeant. Just leave that door open and-'

'But, sir-'

Nobody could get out of this cell block, could they sergeant?'

'No, sir. But-'

'Then just leave the door open and run along.'

'Yes, sir.' The sergeant saluted, frowned, turned away. His footsteps echoed down the metal floor of the corridor.

The colonel turned back to Hulser. 'So you're the young man with the bright ideas.'

Hulser cleared his throat. 'Yes, sir.'

The colonel glanced once around the cell. 'I'm Colonel Page of General Savage's staff. Chemical warfare.'

Hulser nodded.

'The general's adjutant suggested that I come over and talk to you,' said Page. 'He thought a chemist might—'
'Page!' said Hulser. 'You're not the Dr. Edmond Page

who did the work on pseudo-lithium?'

The colonel's face broke into a pleased smile. 'Why ...

yes, I am.'

'I read everything about your work that I could get my hands on,' said Hulser. 'It struck me that if you'd just-' His voice trailed off.

'Do go on,' said Page.

Hulser swallowed. 'Well, if you'd just moved from organic chemistry into inorganic, that—' He shrugged.

'I might have induced direct chemical rather than organic reactions?' asked Page.

'Yes, sir.'

'That thought didn't occur to me until I was on my way over here,' said Page. He gestured toward the cot. 'Do sit down.'

Hulser slumped back to the cot.

Page looked around, finally squeezed past Hulser's knees, sat down on the lid of the water closet. 'Now, let's find out just what your idea is.'

Hulser stared at his hands.

'I've discussed this with the general,' said Page. 'We feel that you may know what you're talking about. We would deeply appreciate a complete explanation.'

'What do I have to lose?' asked Hulser.

'You may have reason for feeling bitter,' said Page. 'But after reading the charges against you I would say that you've been at least partly responsible for your present situation.' He glanced at his wrist watch. 'Now, tell me exactly how you propose to detonate munitions at a distance . . . this projector you've talked about.'

Hulser took a deep breath. This is a chemist, he thought. Maybe I can convince him. He looked up at

Page, began explaining.

Presently, the colonel interrupted. 'But it takes enor-

mous amounts of energy to change the atomic-'

'I'm not talking about changing atomic structure in that sense, sir. Don't you see it? I merely set up an artificial condition as though a catalyst were present. A pseudocatalyst. And this brings out of the static mixture substances that are already there: Ionized hydrogen from moisture - fluorine from the actual components in the case of Trinox. White phosphorus from Ditrate. Nitric oxide and rhombic sulfur from common gunpower.'

Page wet his lips with his tongue. 'But what makes you think that - in a nonorganic system - the presence of the pseudo-catalyst—' He shook his head. 'Of course! How stupid of me! You'd first get a polar reaction - just as I did with pseudo-lithium. And that would be the first step into—' His eyes widened and he stared at Hulser. 'My dear boy, I believe you've opened an entirely new

field in nonorganic chemistry!'

'Do you see it, sir?'

'Of course I see it!' Page got to his feet. 'You'd be creating an artificial radical with unstable perimeter. The presence of the slightest bit of moisture in that perimeter would give you your ionized hydrogen and—' He clapped his hands like a small boy in glee. 'Kapowie!'

Hulser smiled.

Page looked down at him. 'Corporal, I do believe your projector might work. I confess that I don't understand about field lattices and these other electronic matters, but you apparently do.'

'Yes, sir.'

'How did you ever stumble onto this?' asked Page.

'I was thinking about the lattice effect in our Life Detector systems - when suddenly, there it was: the

complete idea!'

Page nodded. 'It was one of those things that had to remain dormant until the precisely proper set of circumstances.' Page squeezed past Hulser's knees. 'No, no. Stay right there. I'm going to set up a meeting with Colonel Allenby of the L-D section, and I'll get in someone with more of a mechanical bent – probably Captain Stevens.' He nodded. 'Now, corporal, you just stay right here until—' His glance darted around the cell, and he laughed nervously. 'Don't you worry, young man. We'll have you out of here in a few hours.'

Hulser was to look back on the five weeks of the first phase in "Operation Big Boom" as a time of hectic unreality. Corps ordered the project developed in General Savage's reserve area after a set of preliminary plans had been shipped outside. The thinking was that there'd be less chance of a security leak that close to a combat zone, and that the vast barrens of the reserve area offered better opportunity for a site free of things that could detonate mysteriously and lead to unwanted questions.

But Corps was taking no chances. They ringed the area with special detachments of MPs. Recording specialists moved in on the project, copied everything for shipment

stateside.

They chose an open tableland well away from their

own munitions for the crucial test. It was a barren, windy place: gray rocks poking up from frozen earth. The long black worm of a power cable stretched away into the distance behind the test shelter.

A weasel delivered Hulser and Page to the test site. The projector box sat on the seat between them. It was housed in a green container two feet square and four feet long. A glass tube protruded from one end. A power connection, sealed and with a red 'do not connect' sign, centered the opposite end. A tripod mounting occupied one side at the balance point.

The morning was cold and clear with a brittle snap to the air. The sky had a deep cobalt quality, almost var-

nished in its intensity.

About fifty people were gathered for the test. They were strung out through the shelter – a long shed open along one side. An empty tripod stood near the open side and almost in the center. On both sides of the tripod technicians sat before recording instruments. Small black wires trailed away ahead of them toward an ebony mound almost a mile from the shed and directly opposite the open side.

General Savage already was on the scene, talking with a stranger who had arrived that morning under an impressive air cover. The stranger had worn civilian clothes. Now, he was encased in an issue parka and snow pants. He didn't look or act like a civilian. And it was noted

that General Savage addressed him as 'sir'.

The general was a brusque, thick-bodied man with the overbearing confidence of someone secure in his own ability. His face held a thick-nosed, square-jawed bulldog look. In fatigues without insignia, he could have been mistaken for a sergeant. He looked the way a hard, old-line sergeant is expected to look. General Savage's men called him 'Me Tarzan' mainly because he took snow baths, mother naked, in sub-zero weather.

A white helmeted security guard ringed the inside of the test shed. Hulser noted that they wore no sidearms, carried no weapons except hand-held bayonets. He found himself thinking that he would not have been surprised to

see them carrying crossbows.

General Savage waved to Page as the colonel and

Hulser entered the shed. Colonel Page returned the gesture, stopped before a smooth-cheeked lieutenant near the tripod.

'Lieutenant,' said Page, 'have all explosives except the

test stack been removed from the area?'

The lieutenant froze to ramrod attention, saluted, 'Yes, sir, colonel.'

Page took a cigarette from his pocket. 'Let me have

your cigarette lighter, please, lieutenant.'

'Yes, sir.' The lieutenant fumbled in a pocket, withdrew

a chrome lighter, handed it to Page.

Colonel Page took the lighter in his hand, looked at it for a moment, hurled both lighter and cigarette out into the snow. The lighter landed about sixty feet away.

The lieutenant paled, then blushed.

The colonel said, 'Every cigarette lighter, every match. And check with everyone to see that they took those special pills at least four hours ago. We don't want any internal combustion without a motor around it.'

The lieutenant looked distraught, 'Yes, sir.'

'And, lieutenant, stop the last weasel and have the driver wait to cart the stuff you collect out of our area.'
'Yes, sir.' The lieutenant hurried away.

Page turned back to Hulser, who had mounted the projector on its tripod, and now stood beside it.

'All ready, sir,' said Hulser. 'Shall I connect the cable?'

'What do you think?' asked Page. 'We're as ready as we'll ever be.'

'O.K. Connect it, then stand by with the switch in your hands.'

Hulser turned to comply. And now, as the moment of the critical test approached, he felt his legs begin to tremble. He felt sure that everyone could see his nervousness.

A tense stillness came over the people in the shed.

General Savage and his visitor approached. The general was explaining the theory of the projector.

His visitor nodded.

Seen close-up, the other man gave the same impression of hard competence that radiated from General Savage – only more competent, harder. His cheek bones were like

two ridges of tan rock beneath cavernous sockets, brood-

ing dark eyes.

General Savage pointed to the black mound of explosives in the distance. 'We have instruments in there with the explosives, sir. The wires connect them with our recorders here in the shed. We have several types of explosives to be tested, including kerosene, gasoline, engine oil. Everything we could lay our hands on except atomics. But if these things blow, then we'll know the projector also will work on atomics.'

The visitor spoke, and his voice came out with a quality like a stick dragged through gravel. It was explained to me that – the theory being correct – this projector will

work on any petroleum fuel, including coal.'

'Yes, sir,' said Savage. 'It is supposed to ignite coal. We have a few lumps in a sack to one side. You can't see it because of the snow. But our instruments will tell us which of these things are effected' – he glanced at Hulser – 'if any.'

Colonel Page returned from checking the recording

instruments.

Savage turned to the colonel. 'Are we ready, Ed?'

'Yes, general.' He glanced at Hulser, nodded. 'Let's go,

Larry. Give it power.'

Hulser depressed the switch in his hand, involuntarily closed his eyes, then snapped them open and stared at the distant explosives.

A low humming arose from the projector.

Page spoke to the general. 'It'll take a little time for the effect to build u—'

As he started to say 'up' the mound of explosives went up in a giant roaring and rumbling. Colonel Page was left staring at the explosion, his mouth shaped to say 'p.'

Steam and dust hid the place where the explosives had

been.

The gravel voice of the visitor spoke behind Hulser. 'Well, there goes the whole shooting match, general. And I do mean shooting!'

'It's what we were afraid of, sir,' said Savage. 'But

there's no help for it now.' He sounded bitter.

Hulser was struck by the bitterness in both voices. He turned, became conscious that the lieutenant whom Page

had reprimanded was beating at a flaming breast pocket, face livid. The people around him were laughing, trying to help.

Page had hurried along the line of recorders, was check-

ing each one.

The significance of the lieutenant's antics suddenly hit Hulser. Matches! He forgot his spare matches after losing his cigarette lighter! Hulser glanced to where the colonel had thrown the lighter, saw a black patch in the snow.

Page returned from checking the recorders. 'We can't be sure about the coal, but as nearly as we can determine, it touched off everything else in the stack!' He put an arm on Hulser's shoulder. 'This young genius has won the war for us.'

Savage turned, scowled at Hulser.

The (civilian?) snorted.

But Hulser was staring out at the explosion crater, a look of euphoria on his face.

The technicians were moving out into the area now,

probing cautiously for unexploded fragments.

The general and his visitor exchanged a glance that could have meant anything.

Savage signaled his radio operator to call for trans-

portation.

Presently, a line of weasels came roaring up to the test site.

Savage took Hulser's arm in a firm grip. 'You'd better come with us. You're a valuable piece of property now.'

Hulser's mind came back to the curious conversation between Savage and the visitor after the explosion, and he was struck by the odd sadness in the general's voice. Could he be an old war dog sorry to see it end? Somehow, on looking at the general, that didn't fit.

They sped across the barrens to the base, Hulser uncomfortable between the general and his visitor. Apparently, no one wanted to discuss what had just happened. Hulser was made uncomfortable by the lack of elation around him. He looked at the back of the driver's neck, but that told him nothing.

They strode into the general's office, an oblong room without windows. Maps lined the walls. A low partition

separated one space containing two barren tables from another space containing three desks one set somewhat apart. They crossed to the separate desk.

Savage indicated his visitor. 'This is Mr. Sladen.' There

was a slight hesitation on the 'mister.'

Hulser suppressed a desire to salute, shook hands. The

other man had a hard grip in an uncalloused hand.

Sladen's gravelly baritone came out brusque and commanding. 'Brief him, general. I'll go get my people and their gear together. We'll have to head right back.'

Savage nodded. 'Thank you, sir. I'll get right at it.'

Sladen cast a speculative look at Hulser. 'Make sure he understands clearly what has just happened. I don't believe he's considered it.'

'Yes, sir.'

Sladen departed.

Hulser felt an odd sinking sensation in his stomach.

Savage said, 'I'm not rank happy, Hulser, and we haven't much time. We're going to forget about military formality for a few minutes.'

Hulser nodded without speaking.

'Do you know what has just happened?' asked Savage.

'Yes, sir. But what puzzles me is that you people don't seem pleased about our gaining the whip hand so we can win this war. It's—'

'It's not certain that we have the whip hand.' Savage sat down at his desk, picked up a book bound in red leather.

'You mean the enemy-'

'Bright ideas like yours just seem to float around in the air, Hulser. They may already have it, or they could be working on it. Otherwise, I'd have seen that your brainstorm was buried. It seems that once human beings realize something can be done, they're not satisfied until they've done it.'

'Have there been any signs that the enemy-'

'No. But neither have they seen any signs of our new weapon . . . I hope. The point is: we do have it and we're going to use it. We'll probably overwhelm them before they can do anything about it. And that'll be the end of this war.'

'But, if explosives are made obsolete, that'll mean an

end to all wars,' protested Hulser. 'That's what I'm concerned about!'

The general sneered. 'Nothing, my bright-eyed young friend, has thus far made war impossible! When this one's over, it'll be just a matter of time until there's another war, both sides using your projector.'

'But, sir-'

'So the next war will be fought with horse cavalry, swords, crossbows and lances,' said Savage. 'And there'll be other little *improvements!*' He slammed the red book onto his desk, surged to his feet. 'Elimination of explosives only makes espionage, poisons, poison gas, germ warfare – all of these – a necessity!'

'How can you-'

'Don't you understand, Hulser? You've made the military use of explosives impossible. That means gasoline. The internal combustion motor is out. That means jet fuels. Airplanes are out. That means gunpowder. Everything from the smallest sidearm to the biggest cannon is out!'

'Certainly, but-'

'But we have other alternatives, Hulser. We have the weapons King Arthur used. And we have some modern innovations: poison gases, curare-tipped crossbow bolts, bacterial—'

'But the Geneva Convention-'

'Geneva Convention be damned! And that's just what will happen to it as soon as a big enough group of people decide to ignore it!' General Savage hammered a fist on his desk. 'Get this! Violence is a part of human life. The lust for power is a part of human life. As long as people want power badly enough, they'll use any means to get it – fair or foul! Peaceful or otherwise!'

'I think you're being a pessimist, sir.'

'Maybe I am. I hope I am. But I come from a long line of military people. We've seen some things to make us pessimists.'

'But the pressures for peace—'

'Have thus far not been strong enough to prevent wars, Hulser.' The general shook his head. 'I'll tell you something, my young friend: When I first saw the reference to

your ideas in the charges against you, I had the sinking sensation one gets when going down for the third time. I hoped against hope that you were wrong, but I couldn't afford not to investigate. I hoped that Major Lipari and Sergeant Chamberlain had you pegged for—'

The general stopped, glared at Hulser. 'There's another bone I have to pick with you! Your treatment of two fine soldiers was nothing short of juvenile! If it wasn't for the Liparis and the Chamberlains, you'd be getting thirty

lashes every morning from your local slave keeper!'

'But, sir-'

'Don't "But, sir" me, Hulser! If there was time before you leave, I'd have you deliver personal apologies to both of them!'

Hulser blushed, shook his head. 'I don't know. All I really know is that I was sure my idea would work, and that Lipari and Chamberlain didn't understand. And I knew if I was killed, or if my idea wasn't developed, the enemy might get it first.'

Savage leaned back against his desk, passed a hand across his eyes. 'You were right, of course. It's just that you were bucking the system, and you're not the right kind to buck the system. Your kind usually fails when

you try.'

Hulser sighed.

'You're now a valuable piece of property, my lad. So don't feel sorry for yourself. You'll be sent home where you can be around when your wife has that child.'

Hulser looked surprised.

'Oh, yes, we found out about her,' said Savage. 'We thought at first you were just working a good dodge to get home to her.' He shrugged. 'You'll probably have it fairly soft now. You'll be guarded and coddled. You'll be expected to produce another act of genius! The Lord knows, maybe you are a genius.'

'You wait and see, sir. I think this will mean an end

to all wars.'

The general suddenly looked thoughtful. 'Hulser, a vastly underrated and greatly despised writer – in some circles – once said, "There is nothing more difficult to take in hand, more perilous to conduct, or more uncertain in its success, than to take the lead in the introduction of a

new order of things." That's a very deep statement, Hulser. And there you are, way out in front with "a new order of things." I hope for the sake of that child you're going to have – for the sake of all children – that we don't have another war.' He shrugged. 'But I don't hold out too—'

Sladen popped back into the office. 'Our air cover's coming up, general. We'll have to take him like he is.

Send his gear along later, will you?'

'Certainly, sir.' Savage straightened, stuck out his right hand, shook with Hulser. 'Good luck, Hulser. You take what I said to heart. It's the bitter truth that men of war have to live with. You weren't attacking the source of the problem with your bright idea. You were attacking one of the symptoms.'

Savage's left hand came up from his desk with the red book. 'Here's a gift for that child you're going to have.' He pressed the book into Hulser's hands. 'The next

generation will need to understand this book.'

Hulser had time to say, 'Thank you, sir.' Then he was

propelled out the door by Sladen.

It was not until he was on the plane winging south that Hulser had an opportunity to examine the book. Then he gripped it tightly in both hands, stared out the window at the sea of clouds. The book was a limited edition copy, unexpurgated, of the works of Niccolo Machiavelli, the master of deceit and treachery.

EPILOGUE

Many people labor under the misapprenhension that the discovery of the Hulser Detonator was made in a secret government laboratory. In actuality, the genius of Dr. Lawrence Hulser was first seen on the Arctic battlefields of 1972 where he conceived his idea and where that idea was immediately recognized.

Beecher Carson,

'The Coming of the Sword - A History of Ancient and Modern Wars'—Vol. 6, p. 112.

EGG AND ASHES

For a week now the Siukurnin had hung above the hunters' camp disguised as a pine cone. One of the ropes holding their tent fly passed within inches of it, and when the cold evening wind blew, as it was doing now, the rope hummed. This created a masking harmonic that had to be filtered out (along with many other 'noises') before the Siukurnin could concentrate on the vibrations coming

from the figures around the fire.

Already imprinted and stored in the Siukurnin's subcellular structure was a long catalogue of light-reflected shapes and vibration meanings from this place and the other places. It knew that when one of the carbon lifeforms moved to the nearby flowing liquid, the creature was going to the water. (And that was one of the vibrations for the great heaving expanse of liquid beyond the mountains to the east.) And it knew that when one of these creatures became dormant for the night (low vibration period), that was sleep.

Oh, there were so many vibration meanings.

The Siukurnin tried reproducing the vibrations for sleep and water at a subaural level, gloried in its growing

mastery of these subtleties.

An aroma of coffee and broiled meat arose from the fire. The Siukurnin listened to these for a moment, savoring the full roundness of the vibration spectrum in this enchanting place. As yet it had not thought of the necessity for a non-chilitigish vibration to refer to itself.

(You must understand that when it thought of itself at this stage (which was seldom), it did not think: 'I am a Siukurnin.' In the first place a natural mechanism inhibited prolonged introspection. In the second place, 'Siukurnin' is a make-do vibration – a limited auditory approach to the actual 'term' that is used only in communicating with creatures who do not hear into the visual spectrum, and who are not yet able to detect the chilitigish spectrum. Since this is only a start at communication, it's

perfectly all right for you to think of this creature as a 'Siukurnin,' but you should keep in mind that there's a limitation.)

Before coming to this hunter's camp, the Siukurnin had spent two weeks as a false rivet head in the ward-room of a long gray warship. It had left the warship as a coating of 'film' on a garbage container, and had arrived here in the pine glade as a length of 'wire' in the trunk lid of a used car that had been sold to one of the hunters.

Between the garbage container and the used car there had been several other shape-aliases, all characterized by solid color and smoothness and all difficult to reproduce. The Siukurnin looked on its present pine cone form almost as a rest.

Once started on its repertoire of new vibration meanings, the Siukurnin was like a *lilim* with a new *arabeg*, or, as you might say, like a child with a new toy. Presently, it recalled the period on the warship. 'Now hear this! Now hear this!' it chanted to itself at a level too low to be detected by the figures beneath it.

Darkness folded over the camp in the pine trees and the fire flickered low. The upright creatures retired into their tent. (To sleep, you understand.) Among these creatures was one identified by the primitive (non-

chilitigish) vibration: 'Sam.'

Now the Siukurnin listened to the soughing of the wind through the branches around it, to the scrabbling of night creatures – and once there was a figurative scream of skunk odor nearby. Much later, the Siukurnin defied its inhibitions, tried to recall a time before the awakening at the warship. Only faint fog memory came: a sensation of swimming upward through dark water.

The effort of memory brought the inhibition mechanism into action. Destructive hunger gnawed at the Siukurnin. It sensed changes going on within its structure – a

maturation of sorts.

To put down the hunger, the Siukurnin imagined itself as one of the flying creatures to be seen in the delightful harmonics of sky above it – soaring . . . soaring . . .

But this, too, became disturbing because its self-

image insisted on resolving into a giant red-gold winged thing unfamiliar to these skies (but feeling disquietingly

familiar to the Siukurnin).

Dawn crystalled the peaks to the east, brought stirrings that aroused the Siukurnin from its reverie. A figure emerged from the tent, yawned, stretched. The Siukurnin matched light vibrations and sound vibrations for the figure and, in its own way, 'recognized' the hunter, Sam. There were checkered harmonics with merging of long and short olfactory-visual waves punctured by great sound-meaning vibrations.

'Chilly this morning,' said the hunter. 'Wish I could

stay in the sack like you bums.'

From the tent came another voice: 'You lost a

fair and square toss, Sam. Get that fire goin'.'

A connoisseur sense within the Siukurnin came to full alert. It felt that this crude creature carried some supremely desirable element. In a sense, the Siukurnin 'crouched.'

The hunter put a hand on the fly rope, glanced at the false pine cone. 'Yeah,' he said. 'You'll burn like pitch.' He reached up, touched the 'cone,' felt sudden warmth, then nothing. The 'cone' was gone. He shook his hand, looked around the ground, back to the tree. Nothing. 'I'll be danged,' he muttered. He scratched the palm that had touched the 'cone.'

'That fire goin yet?' demanded the voice from the

tent.

Sam shook his head. 'No. I was going to pick a pine cone to help start the fire and the darn thing disappeared.'

'You're gettin' old, grampaw,' came the voice from the tent. 'Better buy some glasses when we get back to town.'

Another voice intruded from the tent: 'Will you guys

quit your yakking? I'm trying to sleep!'

For the Siukurnin there had been an instant of exquisite languor. Then it had felt itself changing uncontrollably, spreading out over the hand of the carbon lifeform, seeping immediately through pores, between cells, into a vein. It stretched out – no more than six cells in diameter – reaching . . . reaching . . .

A long, thin thread explored the length of the vein. (You'll appreciate that the vibrations here were magnifi-

cent in their contrapuntal relationship: little hissings and squealings and lappings played against a superb background throb. There were also a few moments of delicate adjustment before the leucocytes ceased their ravening attack.)

In its own way, the Siukurnin danced for joy. Its hunger became only a faint beckoning: a dim sort of

knowledge that end-of-hunger was at hand.

And there came a trickle of memory from before the upward swimming and those first moments of awareness on the warship. There was not enough recollection to frighten it with the thought that its own little egg of ego might be overwhelmed . . . just enough to whet its curiosity.

(All Siukurnin are fully endowed with a curiosity that cannot be inhibited, you know. And chilitigish awareness

makes this faculty even more potent.)

The Siukurnin swam, crawled, wriggled, elongated and squeezed. Down, outward, upward. It had to filter out part of the 'music' around it now: wheezings in the great air sacs, gurglings and sloshings, cracklings and swishings. All so distracting. One of its elements enwebbed the host's vocal cords ('great vibrators' to a Siukurnin). Another part interfingered the speech centers of the brain. Cilia reached out to the eye surfaces and the eyelid veins, contacting the exterior.

It was distracting at first to discover how all the vibrations were separated by different sense organs; then temptation became irresistible. (Who can hurl blame for this?) The Siukurnin coordinated its contact with speech

centers and vocal cords.

Across the pine glade a human voice shouted: 'Now hear this! Now hear this! Water! Sleep! Fire! Eat!'

Oh, it was an exhilarating sensation!

Two of the upright creatures, the other hunters, tumbled from the tent. One called: 'It's about time you got . . .' It broke off. There was no fire. Only Sam standing terror-eyed beside the firepit, left hand to throat, right hand outthrust as though to push something away.

Then Sam swayed, collapsed.

In the hospital room, gross vibrations had been dam-

pened to a remote hush. Slatted blinds were closed against raw morning sunlight. The bedside lamp had been turned off. But there still was a soft harmonic reflection from cream-colored walls that mingled with the even

hiss of sleep breathing.

Sam lay on his back on the room's single bed, eyes closed. His chest under a green humming of blanket rose and fell gently. Somewhere, a pumping motor throbbed its obbligato. Distantly, stiff little shuntings and pantings and screechings told of city traffic. Ether trailed its solo virtuosity through the air, riding on a wave of disinfectant. A nurse's heels along the hall added an abrupt random rhythm that wove back and forth . . . back and forth through the other vibrations in a way that excited the connoisseur sense of the figure on the bed.

(After all, the long, virtual silence of the migration had now been recalled. In a sense, it was starved for these

wonderful 'noises.')

Outside the half-opened door of the room, a doctor could be heard talking to Beverly, Sam's wife. The doctor was tall, a beak-nosed shape: pink and blond with white on white on white echoing across the image. Acrid little shouts came from his hands, clinkings from his pockets,

and a buzzing of tobacco rode his breath.

There had been a strange dual recognition of Beverly: a sense of familiarity with her dark hair, soft curve of cheeks, alert gray-green eyes. (The Sam-memories, of course.) And there had been added to this a pungent explosion of perfume-base powder (still familiar, yes, but heightened to an indescribable pitch), plus a glissando of gold necklace on green coat on green suit, all played against a bright beating of gold-bronze buttons. (And there was much more, but without chilitigish awareness in the reader, the effects are meaningless.)

The doctor's voice carried a drum quality as he uttered cautious reassurances. 'There is no doubt that it's some type of narcolepsy,' he said. 'But there's no enlargement of the lymphatic glands. His pulse and respiration are normal. Temperature's up, but not dangerously. I'm inclined to suspect this may be a reaction due to nervous

strain. Has he been working very hard?'

'Narcolepsy, narcolepsy, narcolepsy,' whispered the

Siukurnin with its Sam-lips.

Well . . . they weren't exactly Sam-lips now. They were much more accurately Sam (to the Siukurnin power)

lips.

You just have to understand that single-ego orientation sets up difficult problems in communications here. What you would consider odd and irresistible things had been happening to Sam and Siukurnin. Cilia of Siukurnin had gone creeping and seeking of their own volition. It was now a great thin net spread throughout the host. Wherever it touched nerve cells – in brain and elsewhere – subtle displacements occurred at the subcellular level. New memories (Sam-memories) filtered into Siukurnin. And Siukurnin memories, of course, filtered back to Sam. (This is one of those processes that just cannot be confined to a one-way circuit.)

Things had gone so far that Siukurnin had displaced the temporary migration-ego. And Sam - 'he' now thought of himself as a kind of 'needle' at the end of an extremely long thread. You see, the 'thread' was the Siukurnin ego-memory-chain, its past so ancient that the Sam-ego was staggered.

(If you open up a Siukurnin-past you find that it is other creatures stretched out to a virtually meaningless number. This is a fascinating infinity process in which a quite satisfactory internal relationship has been worked

out.)

Fully awakened, Siukurnin now understood the necessity mechanism that had blanked out ego-memory-chain awareness. There is such a temptation in the migration period to turn inward upon the merged multiplicity, encyst all distracting processes, and just think and think and think and think and . . .

You can see how this would be a kind of death. (Strictly speaking, Siukurnin do not fear death, although they are vulnerable during the 'flight-of-joy' vector in their life cycle.)

Both Sam and Siukurnin were completely merged now. Sam-Siukurnin (ego-memory-chain + x) lay in the meaningful vibration core of the hospital room. Neither 'unit'

could now undo what had happened – nor wanted to undo it. Oh, there had been some Sam-resistance at first. Quite natural.

But Siukurnin revealed how a reluctant host's flesh could be incinerated without stopping the merging process. (And there were all those memories laid out in the open to prove this!) The other capture memories were a compelling argument, too.

The process is so drearily repetitive – except for the new life with its fascinating vibration meanings, of

course.

And now you know how it happens. Not painful (except for some initial shocks). Not harmful to the host-ego. And not to be resisted.

In fact, this is being written in the hope that the rest of you will see (what an odd sensory division) how foolish it is to resist.

There's no point in resistance. You cannot fight the inevitable.

Besides, you will find the merging a very rewarding experience. And if you stop to think about it, this is not the first time your kind has encountered us (although never before in such numbers as our present migration). You do have your legend of the Phoenix. According to your legend, this was a great red-gold 'bird' that returned to Heliopolis in ancient Egypt every five hundred years (a reasonable Siukurnin-host life span), there to be reborn from its own ashes.

Naturally, the flesh of a dead host has to be incinerated to free the Siukurnin web for its 'flight-of-joy.' To think of the Phoenix as a 'bird' was somewhat of an over-simplification, you understand. But we're sure you'll enjoy the flying sensation and the act of creating your new egg – especially when you view the experience with full chilitigish awareness.

MARY CELESTE MOVE

MARTIN FISK'S car, a year-old 1997 Buick with triple turbines and jato boosters, flashed off the freeway, found a space between a giant mobile refueling tanker and a commuter bus, darted through and surged into the first of the eight right-hand lanes in time to make the turnoff marked 'NEW PENTAGON ONLY—Reduce Speed to 75.'

Fisk glanced at his surface/air rate-of-travel mixer, saw he was down to 80 miles per hour, close enough to legal speed, and worked his way through the press of morning traffic into the second lane in plenty of time to

join the cars diverging onto the fifth-level ramp.

At the last minute, a big official limousine with a twostar general's decal-flag on its forward curve cut in front of him and he had to reduce speed to 50, hearing the dragbar rasping behind him as his lane frantically matched speed. The shadow of a traffic copter passed over the roadway and Fisk thought: Hope that general's driver loses his license!

By this time he was into the sweeping curve-around that would drop him to the fifth level. Speed here was a monitored 55. The roadway entered the building and Fisk brought his R-O-T up to the stated speed watching for the code of his off-slot: BR71D₂. It loomed ahead, a flashing mnemonic blinker in brilliant green.

Fisk dropped behind an in-building shuttle, squeezed into the right-hand lane, slapped the turn-off alert that set all his rim lights blinking and activated the automatics. His machine caught the signal from the roadway, went

on automatic and swerved into the off-slot still at 55.

Fisk released his control bar.

Drag hooks underneath the Buick snagged the catch ribbands of the slot, jerked his car to a stop that sent him surging against the harness.

The exit-warning wall ahead of him flashed a big red

"7 SECONDS! 7 SECONDS!"

Plenty of time, he thought.

He yanked his briefcase out of its dashboard carrier with his right hand while unsnapping his safety harness with his left and hitting the door actuator with his knee. He was out onto the pedestrian ramp with three seconds to spare. The warning wall lifted; his car jerked forward into the down-elevator rack to be stored in a coded pile far below. His personal I-D signal to the computer-monitored system later would restore the car to him all checked and serviced and ready for the high-risk evening race out of the city.

Fisk glanced at his wrist watch – four minutes until his appointment with William Merill, the President's liaison officer on the Internal Control Board and Fisk's boss. Adopting the common impersonal discourtesy, Fisk joined

the press of people hurrying along the ramp.

Some day, he thought, I'll get a nice safe and sane job on one of the ocean hydroponic stations where all I have to do is watch gauges and there's nothing faster than a 40 m.p.h. pedestrian ramp. He fished a green pill out of his coat pocket, gulped it, hoped he wouldn't have to take another before his blood pressure began its downslant to normal.

By this time he was into the pneumatic lift capsule that would take him up in an individual curve to easy walking distance from his destination. He locked his arms on the brace bars. The door thumped closed. There was a distant hiss, a feeling of smooth downward pressure that evened off. He stared at the familiar blank tan of the opposite wall. Presently, the pressure slackened, the capsule glided to a stop, its door swung open.

Fisk stepped out into the wide hall, avoided the guidelanes for the high-speed ramp and dodged through thin-

ning lines of people hurrying to work around him.

Within seconds he was into Merill's office and facing the WAC secretary, a well-endowed brunette with an air of brisk efficiency. She looked up from her desk as he entered.

'Oh, Mr. Fisk,' she said, 'how nice that you're a minute early. Mr. Merill's already here. You can have nine minutes. I hope that'll be enough. He has a very full schedule today and the Safety Council subcommittee session with

the President this afternoon.' She already was up and holding the inner door open for him, saying: 'Wouldn't it be wonderful if we could invent a forty-eight hour day?'

We already have, he thought. We just compressed it

into the old twenty-four hour model.

'Mr. Fisk is here,' she said, announcing him as she

stepped out of his way.

Fisk was through to the inner sanctum then, wondering why his mind was filled with the sudden realization that he had driven out of his apartment's garage lift one hundred miles away only thirty-two minutes before. He heard the WAC secretary close the door behind him.

Merill, a wiry redhead with an air of darting tension, pale freckled skin and narrow face, sat at a desk directly opposite the door. He looked up, fixed his green eyes on Fisk, said: 'Come on in and sit down, Marty, but make

it snappy.'

Fisk crossed the office. It was an irregular space of six sides about forty feet across at its widest point. Merill sat with his back to the narrowest of the walls and with the widest wall at an angle to his right. A computer-actuated map of the United States covered that surface, its color-intensity lines of red, blue and purple showing traffic density on the great expressway arteries that criss-crossed the nation. The ceiling was a similar map, this one showing the entire western hemisphere and confined to the Prime-1 arteries of twenty lanes or greater.

Fisk dropped into the chair across the desk from Merill, pushed a lock of dark hair back from his forehead, feeling the nervous perspiration there. Blast it! he thought.

I'll have to take another pill!

'Well?' Merill said.

'It's all here,' Fisk said, slapping the briefcase onto Merill's desk. 'Ten days, forty thousand miles of travel and eighteen personal interviews plus fifty-one other interviews and reports from my assistants.'

'You know the President's worried about this,' Merill said. 'I hope you have it in some kind of order so I can

present it to him this afternoon.'

'It's in order,' Fisk said. 'But you're not going to like it.'

'Yeah, well I was prepared for that,' Merill said. 'I don't like much of what comes across this desk.' He glanced up suddenly at a strip of yellow that appeared on the overhead map indicating a partial blockage on the intercontinental throughway near Caracas. His right hand hovered over an intercom button, poised there as the yellow was replaced by red then blue shading into purple.

'Fourth problem in that area in two days,' Merill said removing his hand from the button. 'Have to work a talk with Mendoza into this morning's schedule. O.K.' He turned back to Fisk. 'Give me your economy model brief rundown. What's got into these kooks who're moving all

over the landscape?'

'I've about twenty interlocking factors to reinforce my original hunch,' Fisk said. 'The Psych department confirms it. The question is whether this thing'll settle into some kind of steady pattern and even out. You might caution the President, off the record, that there are heavy political implications in this. Touchy ones if this leaks out the wrong way.'

Merill pushed a recording button on his desk, said: 'O.K., Marty, put the rest on the record. Recap and summate. I'll listen to it for review while I'm reading

your report.'

Fisk nodded. 'Right.' He pulled sheaves of papers in file folders out of the briefcase, lined them up in front of him. 'We had the original report, of course, that people were making bold moves from one end of the country to the other in higher than usual numbers, from unlikely starting places to unlikelier destinations. And these people turned out to be mostly mild, timid types instead of bold pioneers who'd pulled up their roots in the spirit of adventure.'

'Are the psych profiles in your report?' Merill asked.
'I'm going to have a time convincing the President unless

I have all the evidence.'

'Right here,' Fisk said, tapping one of the folders. 'I also have photostats of billings from the mobile refueling tankers and mobile food canteens to show that the people in these reports are actually the ones we've analyzed.'

'Weird,' Merill said. He glanced at another brief flicker

of yellow on the overhead map near Seattle, returned his attention to Fisk.

'State and Federal income-tax reports are here,' Fisk said, touching another of the folders. 'And, oh yes, car ownership breakdowns by area. I also have data on driver's license transfers, bank and loan company records to show the business transactions involved in these moves. You know, some of these kooks sold profitable businesses at a loss and took up different trades at their new locations. Others took new jobs at lower pay. Some big industries are worried about this. They've lost key people for reasons that don't make sense. And the Welfare Department figures that...'

'Yeah, but what's this about car ownership break-

downs?' Merill asked.

Trust him to dive right through to the sensitive area, Fisk thought. He said: 'There's a steep decline in car ownership among these people.'

'Do the Detroit people suspect?' Merill asked.

'I covered my tracks best I could,' Fisk said, 'but there're bound to be some rumbles when their investi-

gators interview the same people I did.'

'We'd better invite them to review our findings,' Merill said. 'There're some big political contributors in that area. What's the pattern on communities chosen by these kooks?'

'Pretty indicative,' Fisk said. 'Most of the areas receiving a big influx are what our highway engineers irreverently call "headwater swamps" – meaning area where the highway feeder routes thin out and make it easy to leave the expressways.'

'For example?'

'Oh . . . New York, San Francisco, Seattle, Los Angeles.'

'That all?'

'No. There've been some significant population increases in areas where highway construction slowed traffic. There've been waves into Bangor, Maine . . . Blaine, Washington . . . and, my God! Calexico, California! They were hit on two consecutive weekends by one hundred and seventy of these weird newcomers.'

In a tired voice, Merill said: 'I suppose the concentra-

tion pattern's consistent?'

'Right down the line. They're all of middle age or past, drove well-preserved older cars, are afraid to travel by air, are reluctant to explain why they moved such long distances. The complexion of entire areas in these headwater regions is being changed. There's sameness to them – people all conservative, timid . . . you know the pattern.'

'I'm afraid I do. Bound to have political repercussions, too. Congressional representation from these areas will change to fit the new pattern, sure as hell. That's what you

meant, wasn't it?'

'Yes.' Fisk saw that he only had a few minutes more, began to feel his nervousness mount. He wondered if he'd dare gulp a pill in front of Merill, decided against it, said: 'And you'd better look into the insurance angle. Costs are going up and people are beginning to complain. I saw a report on my desk when I checked in last night. These kooks were almost to a man low-risk drivers. As they get entirely out of the market, that throws a bigger load onto the others.'

'I'll have the possibility of a subsidy investigated,' Merill said. 'Anything else? You're running out of time.'

Running out of time, Fisk thought. The story of our lives. He touched another of the folders, said: 'Here are the missing persons reports. There's a graph curve in them to fit this theory. I also have divorce records that are worth reviewing – wives who refused to join their husbands in one of these moves, that sort of thing.'

'Husband moved and the wife refused to join him,

eh?'

'That's the usual pattern. There are a couple of them, though, where the wife moved and refused to come back. Desertion charged . . . very indicative.'

'Yeah, I was afraid of that,' Merill said. 'O.K., I'll

review this when

'One thing more, Chief,' Fisk said. 'The telegrams and moving company records.' He touched a thicker folder on the right. 'I had photocopies made because few people would believe them without seeing them.'

'Yeah?'

'The moving company gets an order from, say, Bangor,

to move household belongings there from, for example, Tulsa, Oklahoma. The request contains a plea to feed the cat, the dog, the parrot or whatever. The movers go to the address and they find a hungry dog or cat in the house – or even a dead one on some occasions. One mover found a bowl of dead goldfish.'

'So?'

'These houses fit right into the pattern,' Fisk said. 'The moving men find dinners that've been left cooking, plates on the table – all kinds of signs that people left and intended to come back . . . but didn't. They've got a name for this kind of thing in the moving industry. They call it the "Mary Celeste" move after the story of the sailing ship that . . .'

'I know the story,' Merill said in a sour voice.

Merill passed a hand wearily across his face, dropped the hand to the desk with a thump. 'O.K., Marty, it fits,' he said. 'These characters go out for a Saturday or Sunday afternoon drive. They take a wrong turn onto a one-way access ramp and get trapped onto one of the high-speed expressways. They've never driven over 150 before in their lives and the expressway carrier beam forces them up to 280 or 300 and they panic, lock onto the automatic and then they're afraid to touch the controls until they reach a region where the automatics slow them for diverging traffic. And after that you're lucky if you can ever get them into something with wheels on it again.'

'They sell their cars,' Fisk said. 'They stick to local

'They sell their cars,' Fisk said. 'They stick to local tube and surface transportation. Used car buyers have come to spot these people, call them "Panics." A kook with out-of-state licenses drives in all glassy-eyed and trembling, asks: "How much you give me for my car?"

The dealer makes a killing, of course.'

'Of course,' Merill said. 'Well, we've got to keep this under wraps at least until after Congress passes the appropriation for the new trans-Huron expressway. After that . . .' He shrugged. 'I don't know, but we'll think of something.' He waved a hand to dismiss Fisk, bent to a report-corder that folded out of the desk and said: 'Stay where I can get you in a hurry, Marty.'

Within seconds, Fisk was out in the hallway facing the

guidelanes to the high-speed ramp that would carry him to his own office. A man bumped into him and Fisk found that he was standing on the office lip reluctant to move out into the whizzing throngs of the corridor.

No, he thought, I'm not reluctant. I'm afraid.

He was honest enough with himself, though, to realize that he wasn't afraid of the high-speed ramp. It was what

the ramp signified, where it could carry him.

I wonder what my car would bring? he asked himself. And he thought: Would my wife move? He dried his sweating palm on his sleeve before taking another green pill from his pocket and gulping it. Then he stepped out into the hall.

THE SCIENCE FICTION BOOKS OF FRANK HERBERT

The books are listed in chronological order of publication. The publisher of the first World edition is given, and where this was an American edition this is indicated by (US). Following this, all British editions are listed.

Short stories are indicated by (collection) and all reissues of a book under a different title are listed with the

original title.

Books published in hardcover are indicated by (hd) while all others are paperbacks. The date for each edition is also given. An asterisk (*) indicates that the edition was in print when this list was compiled in 1974.

BIBLIOGRAPHY

THE DRAGON IN THE SEA

Doubleday (US hd), 1956; Gollancz (hd), 1960; Science Fiction Book Club (hd), 1961; Penguin, 1963; New English Library, 1969*.

Title change: 21st Century Sub.

Avon (US), 1956.

Title change: Under Pressure.

Ballantine (US), 1974.

DUNE

Chilton (US hd), 1966; Gollancz (hd), 1966*; New English Library, 1968*.

THE GREEN BRAIN

Ace (US), 1966; New English Library, 1973*.

DESTINATION: VOID

Berkley (US), 1966; Penguin, 1967.

THE EYES OF HEISENBERG

Berkley (US), 1966; Sphere, 1968.

THE SANTAROGA BARRIER

Berkley (US), 1968; Rapp & Whiting (hd), 1970*; New English Library, 1971*. THE HEAVEN MAKERS

Avon (US), 1968; New English Library, 1970*.

DUNE MESSIAH

Putnam (US hd), 1969; Gollancz (hb), 1971*; New English Library, 1972*.

WHIPPING STAR

Putnam (US hd), 1970; New English Library, 1972*.

THE WORLDS OF FRANK HERBERT (collection)
New English Library, 1970*.

THE GOD MAKERS

Putnam (US hd), 1972; New English Library (hd), 1973*.

THE BOOK OF FRANK HERBERT (collection)
DAW Books (US), 1973.

HELLSTROM'S HIVE

Science Fiction Book Club (US hd), 1973.

THE BEST OF FRANK HERBERT (collection)
Sphere, 1975*; Sidgwick & Jackson (hd), 1975*.

A Selection of Science Fiction Titles from Sphere

MACROSCOPE	Piers Anthony	50p
TRIPLE DETENTE	Piers Anthony	50p
PEBBLE IN THE SKY	Isaac Asimov	35p
THE FALL OF THE TOWERS	Samuel R. Delany	50p
DEATHWORLD 1	Harry Harrison	30p
DEATHWORLD 2	Harry Harrison	30p
DEATHWORLD 3	Harry Harrison	30p
THE STAINLESS STEEL RAT	Harry Harrison	30p
THE STAINLESS STEEL RAT		
SAVES THE WORLD	Harry Harrison	45p
TACTICS OF MISTAKE	Gordon R. Dickson	60p
SOLDIER, ASK NOT	Gordon R. Dickson	60p
DORSAI!	Gordon R. Dickson	50p
THE OUTPOSTER	Gordon R. Dickson	60p
THE ICE SCHOONER	Michael Moorcock	35p
INCONSTANT MOON	Larry Niven	40p
UP THE LINE	Robert Silverberg	50p
NIGHTWINGS	Robert Silverberg	40p
STAR-BEGOTTEN	H. G. Wells	40p

A Selection of Classic Short Stories from Sphere

THE BEST OF ISAAC ASIMOV	55p
THE BEST OF JOHN WYNDHAM	55p
THE BEST OF ROBERT HEINLEIN	55p
THE BEST OF CLIFFORD SIMAK	60p
THE BEST OF FRITZ LEIBER	60p
THE BEST OF ARTHUR C. CLARKE	65p
THE BEST OF A. E. VAN VOGT	60p

All the above books are edited by Angus Wells

Sphere's Conan Series

CONAN	Robert E. Howard 35p
CONAN THE CONQUERER	Robert E. Howard 35p
CONAN THE USURPER	Robert E. Howard and
	L. Sprague de Camp 35p
CONAN THE WARRIOR	Robert E. Howard 30p
CONAN THE AVENGER	Robert E. Howard 35p
CONAN OF THE ISLES	Robert E. Howard 35p
CONAN THE ADVENTURER	Robert E. Howard 30p
CONAN THE BUCCANEER	L. Sprague de Camp and
	Lin Carter 40p
CONAN OF CIMMERIA	Robert E. Howard,
	L. Sprague de Camp and
	Lin Carter 30p
CONAN THE FREEBOOTER	Robert E. Howard and
	L. Sprague de Camp 30p

A Selection of Adventure Fiction from Sphere

A HOT AND COPPER SKY	Jon Burmeister	45p
THE DARKLING PLAIN	Jon Burmeister	50p
RUNNING SCARED	Jon Burmeister	60p
THE EDGE OF THE COAST	Jon Burmeister	35p
DANDO SHAFT	William Clive	30p
DANDO AND THE SUMMER		
PALACE	William Clive	40p
DANDO ON DELHI RIDGE	William Clive	40p
TWELVE TRAINS TO BABYLON	Alfred Connable	50p
ROMMEL'S GOLD	Maggie Davis	50p
THE WHITE LIE ASSIGNMENT	Peter Driscoll	35p
STONEHENGE	Harry Harrison &	Leon
	Stover	30p
THE WHITE DAWN	James Houston	45p
THE SOLDIERS: BAYONETS IN		
THE SUN	William Moore	35p
THE SOLDIERS: AGAINST THE	*******	4.5
ASSEGAIS	William Moore	45p
THE SOLDIERS: STORM OF	XX/:11:	FO-
STEEL	William Moore	50p
A BLOODY FIELD BY	Edith Doroston	600
SHREWSBURY	Edith Pargeter	60p
THE CHINESE AGENDA	Joe Poyer	45p
THE BALKAN ASSIGNMENT	Joe Poyer	40p

All Sphere Books are available at your bookshop or newsagent, or can be ordered from the following address: Sphere Books, Cash Sales Department, P.O. Box 11, Falmouth, Cornwall.

Please send cheque or postal order (no currency), and allow 18p for the first book plus 8p per copy for each additional book ordered up to a maximum charge of 66p in U.K.

Customers in Eire and B.F.P.O. please allow 18p for the first book plus 8p per copy for the next 6 books, thereafter 3p per book.

Overseas customers please allow 20p for the first book and 10p per copy for each additional book.



FRANK HERBERT

is one of the giants of science
fiction, perhaps most famous for
his all-time classic DUNE.
He brings to his work, together
with a vivid imagination, a
fundamental optimism that makes
him one of the most enjoyable
writers in the genre.
The development of his talent is
demonstrated in this selection
from his earlier writing.

Included here are:

LOOKING FOR SOMETHING?
NIGHTMARE BLUES
DRAGON IN THE SEA (extract)
CEASE FIRE
EGG AND ASHES
MARY CELESTE MOVE

The collection includes a detailed bibliography and a introduction by Frank Herbe Also available is

THE BEST OF FRANK HERBER

1965-1970

KR-623-1

SCIENCE FICTION 0 7221 4523 3