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# TAKEOFF

By Cyril M. Kornbluth

Conclusion

**NEW WORLDS**  
**Science Fiction**

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## Conclusion

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## FOREWORD

*Michael Novak, ceramic engineer, working in the Nuclear Energy for the Propulsion of Aircraft (NEPA), Division of the U.S. Atomic Energy Commission, is inexplicably transferred to the Argonne National Laboratory in Chicago where his particular talents are entirely wasted in the field of pure nuclear theory. Attempting in vain to get a suitable transfer he forcibly resigns and attempts to get a job elsewhere. The fact that he had struck the Research Director when handing in his resignation goes against him wherever he applies, and he is getting more than despondent when he receives a curious letter from a Los Angeles office offering him full-time work in refractories research and development with high-altitude jet aircraft.*

*With Prototype completed the American Society for Space Flight only requires the fuel to make the ship ready for takeoff. But time has just about run out for Novak and his assistants as power politics and pressure groups close in for the kill.*

*Intrigued by the apparent mystery he travels to Los Angeles and is appalled to find that the office belongs to an obscure amateur organisation known as the American Society for Space Flight. He meets Mr. Friml, the Secretary, and Mr. MacIlheny the President, who assure him that the Society has a progressive programme of development, plus laboratories and a proving ground and unlimited capital, but refuse to disclose where their funds are obtained. Sceptical but still intrigued, Novak goes with Friml to the Society's launching ground and is amazed to find a full scale steel mock-up of a space ship standing on the field.*

*He is introduced to Clifton the engineer in charge of construction and Friml explains that the one thing lacking is a suitable fuel. He has already been to see Daniel Holland, chief of the U.S. Atomic Energy Commission, in Washington, but the Government were not interested in producing a fuel for the Society. Their plan, states Friml, is to complete the ship and then the Government would be forced to do something about the propulsion unit before any other World power became too interested in the project.*

*Novak accepts the position, is assigned a workshop and laboratory, and commences work on the firing chambers and throat linings for the Prototype, as the rocket had been named. He soon finds out that most of the 'technicians' working on the project are part-time enthusiasts, and meets Amelia Stuart, daughter of the chief of Western Aircraft, who, apart from being attractive, also holds numerous scientific degrees.*

*Studying the plans for the fuel chambers, Novak gets the idea that the Society is being financed by foreign backers and tells his suspicions to Clifton. The two of them make a report to Anheier of the A.E.C. Security Office in the local Federal Building, who seems to know more about everyone concerned in the space project than could be expected. He infers that they mind their own business.*

*Later that same day Clifton is murdered while attending a meeting of the Rocket Society, his assailant escaping during the showing of a science fiction film. Overcome by the shock of his death his wife Lilly is taken to the Beverly Hills home of Amelia Stuart where Novak visits them and informs the two girls that he has accepted the position left vacant by Clifton's death. While there he meets Wilson Stuart, Amelia's father, and sharp words are passed between them—Stuart apparently thinking that Novak's project was typical of cranks.*

*Meanwhile, in Washington, Daniel Holland of AEC is apparently being singled out by political opponents for public attack—treason is hinted at.*

*Proto nears completion, both Amy and Lilly assisting Novak in his final work. One afternoon, following a series of unsuccessful tests, Novak goes into Town for relaxation and calls up Friml. The two have a few drinks and Novak becomes suspicious of the little Secretary. He feels sure that he knows something about Clifton's death. He arranges with Lilly to use her feminine wiles upon Friml and leaves him at her home and returns to the field.*

*Soon after this, work is completed on Proto and Novak leaves for Los Angeles with the final equations for computing. He is confronted by a changed Friml—pugnacious and bullying.*

### XIII.

"Somebody's been feeding you raw meat, Friml. And I think I know who." Friml looked smug for a moment. "EBIC is I.B.M.'s Electronic—Binary—Integrating—Calculator. Get it? It's the only major electronic calculator available to the private citizen or firm, thanks to I.B.M.'s generosity and sense of public relations."

The secretary-treasurer said petulantly: "You might have made your request clear, Novak."

"Doctor Novak to you," said the engineer, suddenly very sick of the new Friml. It was such a stinking, messy thing to run into after such a beautiful spell of research work. "Now just get me lined up for a crack at EBIC. It's I.B.M., New York. One hundred and thirty-two partial differential equations. Just get it done and stay out of my hair until then."

He walked out of the office, boiling, and picked up a pint of bourbon at a drugstore before he went to his hotel. Swear to God, he thought, this deal's as lousy as A.E.C. and you don't get a pension either.

There were several slips in his pigeonhole at the hotel mail desk. They all said to call Miss Wynekoop at such and such a number as soon as he could, please. He had never heard of Miss Wynekoop, and the phone number didn't ring any bells. He took off his shoes when he got to his room, had a drink of the bourbon, and called the number.

A woman's brightly noncommittal voice said: "Hello?"

"This is Michael Novak, Miss Wynekoop?"

"Oh, Dr. Novak. I wonder if I might see you this evening about employment?"

"I'm not hiring."

She laughed. "I meant employment for you. I represent a firm which is adding to its technical and executive staff."

"I have a job. And a one-year contract with options."

"The contract would be our legal department's worry," she said cheerfully. "And if you meet our firm's standards, I think you'd hesitate to turn down our offer. The pay is very, very good." Then she was crisp and businesslike. "Are you free this evening? I can be at your hotel in fifteen minutes."

"All right," he said. "Why not? I suppose from the way you're putting all this that you're not going to tell me the name of your firm?"

"Well, we do prefer to keep such things quiet," she apologized. "There's speculation and wasted time and broken hearts for the people who think they're going to get it and don't. I'm sure you understand. I'll see you very soon, Dr. Novak." She hung up and he stood for a moment at the phone, undecided. More funny business? Wait and see.

He put his shoes on again, grunting, and chain-smoked until Miss Wynekoop knocked on his door. She was tall, thirty-ish and engaging in a lantern-jawed way. "Dr. Novak. I could tell you were a scientist. They have a look——It was very good of you to let me see you on a moment's notice like this. But I hesitated to contact you through the A.S.F.S.F. In a way I suppose we're trying to steal you from them. Of course our legal people would buy out your contract with them so they'd suffer no financial loss in retraining a man to take your place."

"Sit down, please," he said. "What are these standards your firm wants me to meet?"

She settled herself comfortably. "Personality, for one thing. Our technical people have looked over your record and decided that you're the man for the job if you're available—and if you'll fit in. Our department head—you'd recognize the name, but of course I can't tell you yet—our department head would like me to check on some phases of your career. We're interested, for example, in the events that led up to your separation from A.E.C."

"Oh, are you?" he asked grimly. "As far as anybody is concerned, I resigned without notice after a short, hot discussion with Dr. Hurlbut, the director of the Argonne National Lab."

She giggled. "I'll say. You socked him."

"Well, what about it? If you people thought that means I'm incurably bad-tempered you wouldn't be here interviewing me now. You'd be trying the next guy on the list."

Miss Wynekoop became serious again. "You're right. Naturally we don't want a man who's going to flying off the handle over a trivial difference of opinion. But we certainly wouldn't hold it against you if you had actually been pushed to the breaking point by intolerable conditions. It could happen to anybody. If you will, I'd like you to tell me what brought the disagreement about."

The thing was sounding more legitimate by the minute—and is there anybody who doesn't like to tell his grievance? "Fair question, Miss Wynekoop," he said. "What brought it about was several months of being assigned to a hopelessly wrong job and being stymied every time I tried to get back to my proper work. That's not just my subjective opinion; it's not a gripe but a fact. I'm a ceramics engineer. But they put me into nuclear physics theory and wouldn't let me out. Hurlbut apparently didn't bother to acquaint himself with the facts. He insulted me viciously in public. He accused me of logrolling and incompetence. So I let him have it."

She nodded. "What are the details?"

"Details. What details?"

"Things like, when were you transferred and by whose authority. Your relationship with your superiors generally."

"Well, last August, about mid-month, my transfer order came through without warning or explanation. It was signed by the director of the Office of Organization and Personnel—one of the Washington big shots. And don't ask me about my relationship with him; I didn't have any. He was too high up. My orders before that had always been cut by my working directors."

She looked understanding. "I see. And the working directors: did they ride you? Keep you short of supplies? Stick you on the night-side? That kind of thing?"

*Night-side.* He had known reporters, and that was newspaper talk. They said without thinking: day-side, night-side, city-side, sport-side. "*Smear us, Novak,*" Anheier had grimly said, "*and we'll smear you back.*" He tried not to panic. "No," he said evenly. "There never was anything like that."

"What was your relationship with, say, Daniel Holland?"

Novak didn't have to fake a bewildered look. "Why, I had nothing at all to do with anybody on his level," he said slowly. "Maybe there's been a mistake. Do you have it clear that I was just a Grade 18? I wasn't in the chain of command. I was just hired help; why should I have anything to do with the general manager?"

She pressed: "But we understand that your transfer order was put through by the director of the Office of Organization and Personnel on the direct suggestion of Mr. Holland."

He shook his head. "Couldn't be. You've been misinformed. Holland wouldn't have known me from Adam's off ox."

Miss Wynekoop smiled briefly and said: "We were pretty sure of our facts. There's another matter. Your AEC Personnel Form Medical 11305 was altered by some means or other last September. Were you retested by the psychologists before that happened?"

"What the deuce is my Personnel Form Medical whatever-it-was?"

"'Personality card' is what they call it unofficially."

Oh. Personality cards he knew about; they were an A.E.C. joke. You took a battery of tests during employment processing and a psychologist evaluated the results and filled out the card with attention to such things as "attitudes," "anxieties," "responses," and other items supposed to give your working director an idea of how to handle you. Your personality card went everywhere with you and it was never, never altered. It was a very peculiar question and it was becoming a very peculiar interview. "Yes," Novak lied. "They ran me through the works again at N.E.P.A. It was some psychologist's brilliant idea of a controlled experiment."

That rocked Miss Wynekoop back on her heels. She smiled with an effort and said, rising: "Thanks very much for your co-operation, Dr. Novak. I'll call you early next week. Thanks *very* much."

When he saw the elevator door at the end of the corridor close on her, Novak called Information. He asked: "Do you have Directory Service in this city? What I mean is, I have a phone number and I want the name and address of the subscriber."

"Yes, sir," said Information. "Just dial the exchange of the number and then dial 4882." Same routine as Chicago.

Directory Service said Miss Wynekoop's phone was an unlisted number and that was that. He called Miss Wynekoop's number again and a man with a pleasant voice answered, saying: "Howard here."

"Let me talk to the editor, Howard," Novak said.

There was a long pause and then: "Who is this, please?"

Novak hung up. "Editor" had meant something to Howard—or maybe Howard just wasn't a quick thinker.

Novak had last seen Anheier, agent in charge for the Los Angeles Regional A.E.C. Security and Intelligence Office, at the inquest on Clifton. Novak had woodenly stood and recited his facts while Anheier's calm eyes were on him, with their threat of instant and total ruin if he voiced his suspicion that Clifton had been murdered in some shadowy atomic intrigue. The verdict had been suicide ...

The engineer hesitated a long minute and called the Security Office in the Federal Building. "Mr. Anheier, please," he said. "This is Dr. Michael Novak."

A man said: "Mr. Anheier's gone home, sir. I'll give you his home phone if it's important, or take a message."

Novak said: "It's important," and got Anheier's home phone number.

The agent in charge was as placid as ever. "Good to hear from you, Dr. Novak. What can I——"

Novak cut him off. "Shut up. I just want to tell you something. You were afraid of my ideas getting into the papers. You said you'd smear me if I did anything to publicize them. I want you to know that the newspapers are coming to me." He proceeded to tell Anheier what had been said, as close to verbatim as he could. At the end of the recital he said: "Any questions?"

"Can you describe this woman?"

He did.

Anheier said: "It sounds like somebody who hit town today. I'm going into the Federal Building office now. Will you come down and look at some pictures? Maybe we can identify this Wynekoop."

"Why should I?"

Anheier said grimly: "I want your co-operation, Dr. Novak. I want to be sure you aren't leaking your story to the papers and trying to avoid retaliation in kind. The more co-operation we get out of you, the less likely that theory will seem. I'll be waiting for you."

Novak hung up the phone and swore. He drank again from the bottle of bourbon and took a taxi to the Federal Building.

There was a long wait in the dimmed hall for the single after-hours elevator. When its door rolled open on the eighth floor, Novak saw that the Security office glass door was the only one on the floor still lit from inside. Twenty-four hours a day, he had heard, with the teletype net always up.

He gave his name to the lone teletype operator doubling at night as receptionist.

"Mr. Anheier's in his office," said the operator. "You see it there?"

Novak went in. The tall, calm man greeted him and handed him a single eight-by-ten glossy print.

"That's her," he said without hesitation. "A reporter?"

Anheier was rocking gently in his swivel chair. "An ex-reporter," he said. "She's Mary Tyrrel. Senator Bob Hoyt's secretary."

Novak blinked uncomprehendingly. "I don't see what I can do about it," he said, shrugging, and turned to leave.

"Novak," Anheier said. "I can't let you out of here."

There was a gun in his hand, pointed at the engineer.

"Don't you know who killed Clifton?" Anheier asked. "I killed Clifton."

#### XIV.

Night of a bureaucrat.

The bachelor apartment of Daniel Holland was four rooms in an oldish Washington apartment house. After six years in residence, Holland barely knew his way around it. The place had been restrainedly decorated in Swedish modern by the wife of a friend in the days when he'd had time for friends. There had been no changes in it since. His nightly track led from the front door to the desk, and after some hours from the desk to the dressing closet and then the bed. His track in the morning was from the bed to the bathroom to the dressing closet to the front door.

Holland was there in his second hour of paper work at the desk when his telephone rang. It meant a wrong number or—trouble. His eyes slid to the packed travelling bag he always kept beside the door; he picked up the phone and gave its number in a monotone.

"This is Anheier in L.A., chief. Let's scramble."

Holland pushed the scrambler button on the phone's base and asked: "Do you hear me all right?"

"I hear you, chief. Are you ready for bad news?"

The general manager felt a curious relief at the words; the moment had arrived and would soon be past. No more night sweats .... "Let me have it."

"Hoyt's got the personnel angle. Tyrrel's been grilling Novak. The questions showed that she had just about all of it on ice."

"What does Novak know?"

"Too much. I have him here." The Security man's voice became embarrassed. "I have a gun on him, chief. I've told him I shot Clifton to let him know I mean business. And we can't leave him wandering around. Hoyt would latch on to him, give him a sugar-tit, listen to all he knows and then—we're done."

"I don't doubt your judgment, Anheier," Holland said heavily. "Put him in storage somewhere. I'll fly out to the coast. I've got to talk to him myself."

"You can't fly, chief. It'd be noticed."

"Too much has been noticed. It's a question of time now. Now we must ram it through and hope we're not too late. Good-bye." He hung up before Anheier could protest, and went to get his hat and coat.

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Novak listened to the Los Angeles end of the conversation, watching the gun in Anheier's big, steady hand. It never wavered.

The Security man put his odd-looking telephone back into his desk drawer. "Get up," he said. "You won't be killed if you don't make any foolish moves." He draped a light raincoat over the gun hand. If you looked only casually it would strike you as nothing more than a somewhat odd way to carry a raincoat.

"Walk," Anheier told him.

In a fog, Novak walked. It couldn't be happening, and it was. Anheier guided him through the office. "Back late tomorrow, Charles." Yell for help? Break and run? Charles was an unknown, but the big black gun under the coat was a known quantity. Before the thing could be evaluated they were in the corridor. Anheier walked him down the lonesome stairs of the office building, sadly lit by night bulbs, one to a landing. Swell place for a murder. So was the parking lot back of the building.

"I know you drive," Anheier said. "Here." He handed him car keys. "That one."

Use your head, Novak told himself. He'll make you drive to a canyon and then you'll get it without a chance in the world of witnesses. Yell here, and at least somebody will know——

But the big gun robbed him of his reason. He got in and started the car. Anheier was beside him and the gun's muzzle was in his ribs, not painfully.

The Security man gave him laconic traffic directions. "Left. Left again. Right. Straight ahead." Aside from that, he would not talk.

After an hour the city had been left behind and they were among rolling, wooded hills. With dreamlike recognition he stopped on order at the police sentry box that guarded the wealthy from intrusion by kidnapers, peddlers, and thieves. The gun drilled into his ribs as he stopped the car, painfully now. Anheier rolled down his window and passed a card to the cop in the handsomely tailored uniform.

Respectfully: "Thank you, Mr. Anheier. Whom are you calling on?" The best was none too good for the rich. They even had cops who said "whom."

"Mr. Stuart's residence. They'll know my name." Of course. The gun drilled in.

"Yes, sir," said the flunky-cop. "If you'll wait just a moment, sir." The other man in the booth murmured respectfully into his wall phone; he had his hand casually on an elegant repeating shotgun as he listened. He threw them a nod and smile.

"Let's go, Novak," Anheier said.

The gun relaxed a little when the booth was behind them. "You're all in it," Novak said at last, bitterly.

Anheier didn't answer. When they reached the Stuart place he guided Novak up the driveway and into the car port. Lights in the rangy house glowed, and somebody strode out to meet them. Grady, the Stuart chauffeur. "Get out, Novak." For the

first time, the gun was down.

"Grady," Anheier said, "keep an eye on Dr. Novak here. We don't want him to leave the grounds or use the phone or anything like that." He stowed the gun in a shoulder holster. "Well, let's get into the house, shall we?"

The old man was waiting for them in his wheel chair. "What the hell's going on, Anheier? You can't turn this place into an office."

"Sorry," said the Security man briefly. "It can't be helped. The chief's coming out to see Novak. He's found out too much. We can't leave him wandering around."

Wilson Stuart glared at Novak. "My daughter thinks you're intelligent," he said. "I told her she was crazy. Anheier, when's all this going to happen?"

"I don't know. Overnight. He said he'd fly. I tried to talk him out of it."

"Grady," the old man said, "put him in a bedroom and lock the door. I'll have Dr. Morris mix something to give him a good night's sleep."

Incongruously the chauffeur said: "This way, sir."

The bedroom was the same one Lilly had been put up in. Its solid door closed like the door of a tomb. Novak dashed to the long, low window and found it thoroughly sealed to the wall. The place was air-conditioned. Of course he could smash it with a table lamp and jump. And be brought down by a flying tackle or a bullet.

Grady was back in five minutes with a yellow capsule in a pillbox. "Dr. Morris sent this for you, Dr. Novak," he said. "Dr. Morris said it would help you rest." Grady stood by expectantly as Novak studied the capsule. After a moment he said pointedly: "There's water and a glass in the bathroom, sir."

Put on a scene? Refuse to take their nassy ole medicine? He cringed at what would certainly happen. These terrifying competent people would stick him with a hypodermic or—worse—have their muscle man hold him while the capsule was put in his mouth and washed down. He went silently to the bathroom and Grady watched him swallow.

"Good night, Dr. Novak," the chauffeur said, closing the door solidly and softly.

The stuff worked fast. In five minutes Novak was sprawled in the bed. He had meant to lie down for a minute or two, but drifted off. His sleep was dreamless, except that once he fancied somebody had told him softly that she was sorry, and touched his lips.

A man was standing beside the bed when he awoke. The man, middle-aged and a little fleshy, was neither tall nor short. His face was a strange one, a palimpsest. A scholar, Novak fuzzily thought—definitely a pure-research man. And then over it, like a film, slipped a look so different that the first judgment became inexplicable. He was a boss-man—top boss-man.

"I'm Daniel Holland," he said to Novak. "I've brought you some coffee. They told me you shouldn't be hungry after the sleeping capsule. You aren't, are you?"

"No, I'm not. Daniel Holland. A.E.C.? You're——"

The top-boss face grinned a hard grin. "I'm in this too, Novak."

What was there to do? Novak took the coffee cup from the bedside table and sipped mechanically. "Are you people going to kill me?" he asked. The coffee was helping to pull him together.

"No," said Holland. He pulled up a chair and sat. "We're going to work you pretty hard, though."

Novak laughed contemptuously. "You will not," he said. "You can make me or anybody do a lot of things, but not that. I guess just a few clouts in the jaw would make me say anything you wanted me to. Those Russian confessions. The American police third degree. If you started to really hurt me I suppose I'd implicate anybody you wanted. Friends, good friends, anybody. You can do a lot of things to a man, but you can't make him do sustained brainwork if he doesn't want to. And I don't want to. Not for Pakistan, Argentina, the Chinese, or whoever you represent."

"The United States of America?" asked Holland.

"You must think I'm a fool," Novak told him.

"I'm working for the United States," said Holland. "God help me, but it's the only way left. I was hemmed in with this and that——" There was an appeal in his voice. He was a man asking for absolution.

"I'll tell it from the beginning, Novak," he said, under control again.

"In 1951 a study was made by A.E.C. of fission products from the Hanford plutonium-producing reactors. Properties of one particular isotope were found to be remarkable. This isotope, dissolved in water and subjected to neutron flux of a certain intensity, decomposes with great release of energy. It is stable except under the proper degree of neutron bombardment. Its level of radioactivity is low. Its half-life is measured in scores of years. It is easy to isolate and is reasonably abundant. Since it is a by-product, its cost is exactly nothing."

"How much energy?" asked Novak, guardedly.

"Enough to flash the solvent water into hydrogen and oxygen by thermolysis," Holland said. "You've seen the drawings for *Prototype's* fuel tanks, as we called them ..."

Anheier came into the room and Novak barely noticed him. His engineer's mind could see the blue print unrolled before him again. The upper tank containing the isotope-water solution ... the lower tank containing a small heavy-water "fish-bowl" reactor for the neutron source ... the dead-end control systems completed, installed, one metering the fuel solution past the neutron spray of the reactor, the other controlling flux level by damper rods run in and out on servomechanisms ... the fuel solution droplets flashing into hell's own flame and roaring from the throat with exhaust velocity unobtainable by merely chemical reaction ...

Holland was talking again, slowly. "It was just numbers on paper, among thousands of other numbers on paper. It lay for years in the files until one of the high-ranking A.E.C. technical people stumbled on it, understood its implications and came to me. His exact words were: 'Holland, this is space-flight.'"

"It is," Novak breathed. His voice became hoarse. "And you sold it ..."

"*I saved it.* I saved it from the red-tape empire builders, the obscurantists, the mystagogues, the spies. If I had set it up as an A.E.C. project, the following things would have happened. First, we would have lost security. Every nation in the world would shortly have known the space-flight problem had an answer, and then what the answer was. Second, we would have been beaten to the Moon by another nation. This is because our personnel policy forbids us to hire the best men we can find merely because they're the best. Ability ranks very low in the category of criteria by which we judge A.E.C. personnel. They must be conservative. They must be politically apathetic. They must have no living close-relatives abroad. And so on. As bad as the personnel situation, interacting with and reinforcing it, is the fact of A.E.C.'s bigness and the fact of its public ownership. They mean accounting, chains of command, personnel-flow charts—the jungle in which third-raters flourish. Get in the A.E.C., build yourself a powerful clique and don't worry about the work; you don't really have to do any."

The words were fierce; his tone was dispassionate. Throughout his denunciation he wore the pure-research man's face, lecturing coolly on phenomena which he had studied, isolated, linked, analyzed endlessly. If any emotion was betrayed it was, incongruously, the residual affection of a pure-research man for his subject. When the pathologist calls it a beautiful carcinoma he is being neither ironical nor callous.

"As you know," Holland lectured quietly, "the nation that gets to the Moon first has the Moon. The lawyers will be arguing about it for the next century, but the nation that plants the first moon base need not pay any attention to their arguments. I wanted that nation to be the United States, which I've served to the best of my ability for most of my life.

"I became a conspirator.

"I determined to have a moon ship built under non-Government auspices and, quite frankly, to rob the Government to pay for it. I have a long reputation as a dollar-honest, good-government man, which I counted on to help me get away with quite outrageous plundering of the Treasury.

"A study convinced me that complete assembly of a moon ship by a large, responsible corporation could not be kept secret. I found the idea of isolated parts manufactured by small, scattered outfits and then a rush assembly was impractical. A moon ship is a precision instrument of huge size. One subassembly under par would wreck the project. I admit I was toying with the idea of setting up a movie company and building the moon ship as, ostensibly, a set for a science-fiction film, when the A.S.F.S.F. came to my attention.

"Psychologically it seems to have been perfect. You deserve great credit, Dr. Novak, for stubbornly sticking to the evidence and logic that told you *Prototype* is a moon ship and not a dummy. You are the only one who has. Many people have seen the same things you did and refused to believe it because of the sheer implausibility of the situation.

"Hoping that this would be the case, I contacted my old friend Wilson Stuart. He and his company have been the pipeline for millions of Government dollars poured into the A.S.F.S.F. I've callously diverted thousands of A.E.C. man-hours into solving A.S.F.S.F. problems. I had you transferred within the A.E.C. and had your personality card altered so that Hurlbut would goad you into resigning—since the moon ship needed a full-time man with your skills."

"You dared——" choked Novak, stung with rage.

"I dared," Holland said matter-of-factly. "This country has its faults, but of all the nations in the world I judge it as least disqualified to operate a moon base. It's the power of life and death over every nation on the face of the earth, and some one nation has got to accept that power."

Suddenly his voice blazed with passion and the words came like a torrent. "What was I to do? Go ahead and do it the wrong way? Go to the commissioners, who'd go to the congressmen, who'd go to their good friends on the newspapers? Our secrecy would have been wiped out in twelve hours! Set up a Government project staffed with simon-pure but third-rate scientists? Watch the thing grow and grow until there were twenty desk men for every man who got his hands dirty on the real work—and all the desk men fighting like wild beasts for the glory of signing memos? Was I to spare your career and let those A-bomb racks on the Moon go by default to the Argentines or Chinese? Man, what do you think I am?"

"A killer," Novak said dully. "Your man Anheier murdered my friend Clifton."

Anheier's voice was cold. "Executed," he said. "You were there when I warned him, Novak. The penalty for espionage is death. I told him so and he smiled at me to tell me that I wouldn't dare. I told him: 'The penalty is death.' And he went to his home and telephoned his contact, Mr. Boris Chodorov of Amtorg, that he'd have something for him in a day or two. God almighty, Novak be reasonable. Should I have written Clifton a letter? I told him: 'Import-export used to be a favourite, but it was too obvious.' So he smiled at me and went home to call his contact. He had something juicy, something out of the general run-of-the-mill industrial-preparedness information he collected for the Soviets.

"*He* may have thought he was just augmenting his income, that it wasn't *really* espionage, that the United States hasn't got the guts to hit back anyway——" His voice trailed off. "I killed him," he said.

"Clifton a spy," Novak said stupidly. He began to laugh. "And Lilly?"

"Just a stupid woman," Anheier said. "We monitored the Cliftons for a long time, and nothing ever emanated from her."

Novak couldn't stop laughing. "You're quite wrong," he said. A hundred little things slipped suddenly into place. "There is no doubt in my mind that Lilly was the brains of the outfit. I can see now that Lilly was leading me by the nose for weeks, getting every scrap of information I possessed. And when she got just one chance she landed Friml and is now milking him."

Anheier had gone white. "How much does Friml know?" asked Holland.

The Security man said: "Friml knows he's employed by Wilson Stuart. And he can guess at a lot of the rest. The way there's always enough material on hand when we order it from a jobber—even grey-market stuff like copper and steel. Our work. And he knows there are calls to and from Washington that have a connection. Between his brains and Mrs. Clifton's, I think we'd better assume that secrecy is gone." He looked and sounded sick.

"Novak," the general manager asked softly, "are you in this too?"

Novak knew what he meant. "Yes," he said. "It looks like the right side of the fence to me."

Holland said: "I'm glad ... how close to finished is the moon ship?" He was the boss-man again.

"Is the fuel solution ready and waiting?"

"It is. Waiting for word from me. I've also oiled the ways for the diversion of a fish-bowl reactor for your neutron source. It's going to go astray on its way to Cal Tech from Los Alamos."

"EBIC's got to work out my math and I've got to fabricate the liner and vane. At the same time, the ship could be stocked with water, food, and the pressure dome. At the same time the dead-end circuits can be completed. Do you have the food and water and airtanks and lockers?"

"Yes. Give me a figure!" Holland snapped.

Novak choked on it, terrifyingly aware that no man ever before had borne such tidings as he spoke in the bedroom of a rich man's house in Beverly Hills. "It could take off in two weeks," he said. Here we are at last, Novak thought. Time to close the old ledger on man. Add it up, credit and debit, and carry your balance forward to the first page of the next ledger ...

"And now," said Holland grimly, "we ought to go and see some people. They'd both be at her house?"

Novak knew what he meant, and nodded. "I suppose so. It's Saturday."

He led the way to the garage. Amy Stuart's little sports car was at home.

"Mr. Holland," Novak said, "there's going to be a hell of a smash when this comes out, isn't there?"

"We hope not," the general manager said shortly. "We have some plans of our own if they try to jail me for fraud and Anheier for murder and the rest of the crew for whatever they can think of."

"Why should Amy be mixed up in this?"

"We need her," Holland snapped. His manner ruled out further questions. They got into Anheier's car and the Security man drove them to the house in Cahuenga Canyon.

## XV.

Lilly met them at the door in a housecoat. "Hallo, Mike," she said. "Who're these people? Oh, you' Anheier, ain't you?"

"My name is Daniel Holland, Mrs. Clifton," the general manager said. She didn't move a muscle. "Do you mind if I come in?"

"I t'ink I do," she said slowly. "Mike, what is all this?"

Novak looked at Holland, who nodded. "Espionage," he said.

She laughed tremulously and told him: "You cra-a-azy!"

"Lilly, you once asked me to find out who killed Cliff. I found out. It was Anheier. Cliff was a spy."

Her expression didn't change as she said: "Cliff was a damned bad spy. Come on in. I got somet'ing to tell you too."

They filed into the living room. "Where's Friml?" Novak asked. She jerked her thumb carelessly toward the bedroom door.

"He's a lot smarter than any of you t'ought," she said, making a business out of lighting a cigarette. "He telled me what he saw and figgered out, and I did some figgering too. You' a very smart man, Mr. Holland. But what I got to tell you is I got this stuff to a friend of mine already. If he don't hear from me by a certain time, he sends it on to the newspapers. How you like that, killer?" She blew a plume of smoke at Anheier.

The large, calm man said: "That means you've got it to your employers by now."

"Does it?" she asked, grinning. "It doesn't matter. All I got to do is sic the papers on you, and you' democra-a-atic country does the rest for us like always. I don't know you' rocket fuel yet. Prob'ly wouldn't know what to do vit' it if Friml brought me a bottleful; I don't know science. But it don't matter; I don't worry. The papers and the Congress raise hell vit' you and lead us right to the rocket fuel so our people that do know science can move in and figger it out."

Stirred by a sudden, inappropriate curiosity, Novak couldn't help asking: "Are you a Communist? Your husband reported to an Amtorg man."

She was disgusted. "Communist, hell! I'm a European."

"I don't see what that——"

"Listen, Mike," she said flatly. "Before you' friends kill me or t'row me in jail or whatever they gonna do. You fat-belly people over here don' begin to know how we t'ink you all a bunch of monkeys vit' the atom bombs and movies and at'letes and radio comics and two-ton Sunday newspapers and fake schools where the kids don' work. Well, what you guys going to do vit' me? Shoot me? Prison? Drop an atom bomb? Solve everyt'ing? Go ahead. I been raped by Yerman soldiers and sedooed vit' Hershey bars by American soldiers. I had the typhus and lost my hair. I walked seventy-five kilometers on a loaf of sawdust bread for a job that wasn't there after all. I speak t'ree languages and understand t'ree more a liddle and you people call me dumb because I got an accent. You people that don' even know how to stand quiet in line for a bus or kinema and t'ink you can run the world. I been lied at and promised to by the stupid Americans. Vote for me and end you' troubles. I been lied at and promised to by the crazy Russians. Nah, vote for me and end you' troubles."

"*Sheissdrek*. So I voted for me-myself and now go ahead and drop you' damned atom bomb on the dumb squarehead. Solve everyt'ing, hey boys? *Sheissdrek*."

She sprawled in the chair, a tight grin on her face, and deliberately hoisted the skirt of her housecoat to her thighs. "Any of you guys got a Hershey bar?" she demanded sardonically, and batted her eyes at them. "The condemned European's la-a-ast request is for a Hershey bar so she can die happy."

Friml was standing there with his thinnish hair tousled, glasses a little crooked on his face, wrapped in a maroon bathrobe. His skinny, hairy legs shook with a fine tremor.

"Hallo, sugar," she said to him with poisonous sweetness. "These yentleman and I was discussing life." She turned to them and lectured elaborately: "You know what happen in Europe when out came you' Kinsey report? This will kill you. All the dumb squareheads and the dumb dagoes and the dumb frogs and krauts said we knew it all the time. American men are half pa-a-ansy and the rest they learn out of a marriage book." She looked at Friml and laughed.

"P-p-pull your skirt down, Lilly," Friml said in a weak, hoarse voice.

"Go find you'self a *nice* girl, sugar," she said carelessly. "May be you make her happy, because you sure as hell don'——" Friml's head bobbed as though he'd been slapped. Moving like an old man, not looking at anything, he went to the bathroom and then to the bedroom and closed the door.

"Like the yoke!" giggled Lilly half-hysterically. "He'll do it too; he's a manly liddle feller!"

"I think——" said Novak starting to his feet. He went to the bedroom door with hurried strides and knocked. "Friml! I want to—to talk to you for a minute!"

The answer was a horrible, low, roaring noise.

The door was locked; Novak lunged against it with his shoulder repeatedly, not feeling the pain and not loosening the door. Anheier pulled him back and yelled at him: "Cut that out! I'll get the window from outside." He rushed from the house, scooping up a light, toy-like poker from the brass stand beside the fireplace.

Holland said at his side: "Steady. We'll be able to help him in a minute." They heard smashing glass and Novak wanted to run out and look through the window. "Steady," Holland said.

Anheier opened the door. "Get milk from the kitchen," he snapped at Novak. The engineer got a brief glimpse of dark red blood. He ran for the kitchen and brought a carton of milk.

While Holland phoned for a doctor, Novak and Anheier tried to pour the milk into Friml. It wouldn't go down. The thrashing thing on the floor, its bony frame and pallid skin pitifully exposed by the flapping, coarse robe, wasn't vomiting. They would get a mouthful of milk into it, and then the milk would dribble out again as it choked and roared. Friml had drunk almost two ounces of tincture of iodine. The sickening, roaring noises had a certain regularity. Novak thought he was trying to say he hadn't known it would hurt so much.

By the time the doctor arrived, they realised that Lilly was gone.

"God, Anheier," Novak said white-faced. "She planned it. A diversion while she made her getaway. She pushed the buttons on him and—is it possible?"

"Yes," the Security man said without emotion. "I fell down badly all around on that one."

"Damn it, be human!" Novak yelled at him.

"He's human," Holland said. "I've known him longer than you have, and I assure you he's human. Don't pester him; he feels very badly."

Novak subsided.

An ambulance with police pulled up to the house as the doctor was pumping morphine into Friml's arm. The frightful noises ebbed, and when Novak could look again Friml was spread laxly on the floor.

"I don't suppose——" Novak said, and trailed off.

"Relation?" the doctor asked. He shook his head. "He'll linger a few hours and then die. I can see you did everything you could, but there was nothing to be done. He seared his glottis almost shut."

"Joel Friml," Novak told the sergeant, and spelled it. It was good to be doing something—anything. "He lives at the Y in downtown L.A. This place is the home of Mrs. August Clifton—widow. He was spending the night here. My friends and I came to visit. Mrs. Clifton seems to have run out in a fit of nerves." He gave his name, and slowly recognition dawned on the sergeant's face.

"This is, uh, kind of funny," the cop told him. "My brother-in-law's in that rocket club so I happen to remember—it was her husband, wasn't it? And wasn't there an Anslinger——"

"Anheier," said the Security man. "I'm Anheier."

"Funnier and funnier," said the sergeant. "Doc, could I see you for a——"

The doctor had been listening, and cut him off. "Not necessary," he said. "This is suicide. The man drank it like a shot of whisky—threw it right straight down. (Was he a drinker, by the way?" "Yes." "Thought so.) There aren't any smears on the lips or face and only a slight burning in the mouth, which means he didn't try to retain it. He drank it himself, in a synchronized toss and gulp."

The sergeant looked disappointed, but brightened up to ask: "And who's this gentleman?"

Holland took out a green card from his wallet and showed it to the sergeant. Novak craned a little and saw that it was a sealed, low-number White House pass. "Uh," said the sergeant, coming to something like attention, "I can't see your name, sir. Your finger——"

"My finger stays where it is, sergeant," said Holland. "Unless, of course, you *insist*——?" He was all boss.

"No, no, no, not at all, sir. That's quite all right. Thank you." The sergeant almost backed away as from royalty and began to snarl at his detail of two patrolmen for not having the meat loaded yet.

They rushed into action and the sergeant said to nobody in particular and very casually: "Think I'd better phone this in to headquarters." Novak wasn't surprised when he heard the sergeant say into the phone, louder than he had intended: "Gimme the city desk, please." Novak moved away. The thing had to come out sooner or later, and the tipster-cop was earning a little side money honestly.

After completing his call, the sergeant came up beaming. "That wraps it up except for Mrs. Clifton," he said. "She took her car? What kind?"

"Big maroon Rolls Royce," Novak said. "I'm not sure of the year—maybe early thirties."

"Well, that don't matter. A Rolls is a Rolls; we'll be seeing her very soon, I think."

Novak didn't say what he thought about that. He didn't think any of them would be seeing Lilly again. He thought she would vanish back into the underworld from which she had appeared as a momentary, frightening reminder that much of the world is not rich, self-satisfied, supremely fortunate America.

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In Anheier's car on the road back to the Wilson Stuart place, the Security man asked tentatively: "What do you think, chief?"

"I think she's going to release everything she's got to the newspapers. First, as she said, it means we'll lose secrecy. Second, it would be the most effective form of sabotage she could practice on our efforts. The Bennet papers have been digging into my dirty work of the past year for circulation-building and for Hoyt, whom they hope to put in the presidency. The campaign should open in a couple of days, when they get Lilly's stuff as the final link.

"I've got to get to Washington and contract a diplomatic illness for the first time in my life. Something that'll keep me bedridden but able to run things through my deputy by phone. Something that'll win a little sympathy and make a few people say hold your horses until he's able to answer the charges. I can stall that way for a couple of weeks—no more. Then we've got to present Mr. and Mrs. America with a *fait accompli*. Novak!"

"Yessir!" snapped Novak, surprising himself greatly.

"Set up a *real* guard system at the moon ship. If you need any action out of Mr. MacIlheny, contact Mr. Stuart, who will give him your orders. MacIlheny—up to now—doesn't know anything about the setup beyond Stuart. Your directive is: *build us that moon ship. Fast.*"

"Yes, sir."

"And another thing. You're going to be busy, but I have some chores for you nevertheless. Your haircut is all wrong. Go to a really good barber who does theatrical people. Go to your dentist and have your teeth cleaned. Have yourself a couple of good suits made, and good shoes and good shirts. Put yourself in the hands of a first-rate tailor. It's on the expense account and I'm quite serious about it. I only wish there were time for ..."

"How's that, sir?" Novak couldn't believe he had heard it right.

"Dancing lessons," snapped Holland. "You move across a room with all the grace of a steam thresher moving across a Montana wheatfield. And Novak."

"Yes?" said the engineer stiffly.

"It's going to be rough for a while and they may drag us down yet. Me in jail, you in jail, Anheier in the gas chamber, Stuart fired by his board—if I know the old boy he wouldn't last a month if they took Western away from him. You're going to be working for your own neck—and a lot of other necks. So work like hell. Hoyt and Bennet play for keeps. This is a bus stop? Let Novak out, Anheier. You go on downtown and let's see production."

Novak stood on the corner, lonely, unhappy, and shaken, and waited for his downtown bus.

His appetite, numbed by last night's sedative, came on with a rush during the ride. After getting off, he briskly headed for a business-district cafeteria, and by reflex picked up a newspaper. He didn't go into the cafeteria. He stood in the street, reading.

DEATH STRIKES AT 2nd ROCKET-CLUB CHIEF:

## POISONED ON VISIT TO 1st VICTIM'S WIDOW

Post *Special Correspondent*

*Violent death struck late today at a leader of the American Society for Space Flight, nationwide rocket club, for the second time in less than a month. The first victim was club engineer August Clifton, who committed suicide by shooting in a room next door to a meeting of the club going full blast. Today club secretary-treasurer Joel Friml, 26, was found writhing in pain on the floor of a Cahuenga Canyon bungalow owned by Clifton's attractive blonde widow Lilly, 35. Both bodies were discovered by club engineer Michael Novak. A further bizarre note lies in the fact that on both occasions A.E.C. Security agent J. W. Anheier was on the scene within seconds of the discovery.*

*Police Sergeant Herman Alper said Novak and Anheier paid a morning visit to Mrs. Clifton's home and chatted with her and Friml, who had arrived earlier. Friml disappeared into the bedroom, alarming the other guests. They broke into the bedroom by smashing a window and found Friml in convulsions, clutching a two-ounce bottle of a medicine meant for external use. They called a doctor and tried to give milk as an antidote, but according to the physician the victim's throat had been so damaged that it was a hopeless try.*

*Friml was taken by ambulance under sedation to Our Lady of Sonora hospital, where no hope was given for his recovery. In the confusion Mrs. Clifton fled the house, apparently in a state of shock, and had not returned by the time the ambulance left.*

*Friends could hazard no guess as to the reason for the tragedy. Friml himself, ironically, had just completed auditing the rocket club's books in a vain search for discrepancies that might have explained the Clifton suicide.*

It was bad. Worse was coming.

### XVI.

Novak moved out to the field, bag and baggage, that night and worked himself into a pleasant state of exhaustion. He woke on his camp cot at nine to the put-put of an arriving jalopy. It was a kid named Nearing. He made a beeline for Novak, washing up in a lab sink.

"Hi, Dr. Novak." He was uncomfortable.

"Morning. Ready for business?"

"I guess so. There's something I wanted to ask you about. It's a lot of nonsense, of course. My brother's in the C.B.S. newsroom in L.A., and he was kidding me this morning. He just got in from the night shift and he said there was a rumour about *Proto*. It came in on some warm-up chatter on their teletype."

Already? "What did he have to say?"

"Well, the A.S.F.S.F. was—'linked' is the word, I guess—with some big-time Washington scandal that's going to break. Here." He poked a wad of paper at Novak. "I thought he was making it up. He doesn't believe in space flight and he's a real joker, but he showed me this. He tore it off their teletype."

Novak unfolded the wad into a long sheet of cheap paper, torn off at the top and bottom.

BLUE NOSE AND A PURPLE GOATEE.

HA HA THATS A GOOD ONE. U KNOW ABT BISHOP OF BIRMINGHAM???

SURE WHO DONT. OGOE THREE AM AND THREE HOURS TO GO.

LOOK WHOS BITCHING. HERE ITS SIX AM AND SIX HOURS TO GO. WISH ID LEARNED A TRADE OR STAYED IN THE NAVY.

WHAT U DO IN NAVY???

TELETYPE OPR. CANT GET AWAY FROM DAM PTRS SEEMS AS IF.

MIN FONE

WHO WAS IT???

ELEANOR ROOSEVELT ASKING FOR A DATE U NOSY BASTRD

HA HA OGD WOTTA SLO NITE. ANY NUZ UR SIDE???

NOT YET. FIRST CAST HALF HOUR. NUZMAN CAME IN WITH RUMOR ABT SOME UR LOCAL SCREWBALLS TO WIT LOS ANGELES SPACE FLITE CLUB.

HEY HEY. NUZRITER HERE GOT KID BROTHER IN CLUB. WOT HE SAY???

SAID STRICTLY PHONY OUTFIT WITH WA TIEUP TOP ADMININXXX

ADMINISTRATION GOT IT FINALLY FIGURES.

GOVT MONEY GOES TO CLUB AND CLUB KIX BACK TO GOVT OFFICIALS. SWEET RACKET HUH.

MORE???

NO MORE. MIN I ASK. SAYS GOT IT FM BENNET NUZ SVC MAN.

NO MORE.

TNX. COFFE NOW.

WELCM. DONT SPILL IT.

HA HA U R A WIT OR MAYBE I AM ONLY HALF RITE.

Nearing said as Novak looked up from the paper: "Of course Charlie may have punched it out himself on a dead printer just to worry me." He laughed uncomfortably. "Oh, hell. It's just a rumour about a rumour. But I don't like them tossing *Proto's* name around. She's a good girl." His eye sought the moon ship, gleaming in the morning sun.

"Yes," Novak said. "Look, Nearing. I'm tightening up the guard schedule and I'm going to be very busy. I'd like to turn the job of handling the guard detail over to you. I'll put you on salary, say fifty a week, if you'll do it."

"Fifty? Why sure, Dr. Novak. That's about what I'm getting at the shoe store, but the hell with it. When do I start and what do I do?"

"Start now. I want two guards on duty at all times. Not under twenty-one, either. At night I want one guard at the gate and one patrolling the fence. I want strict identification of all strangers at the gate. I want newspapermen kept out. I want you to find out what kind of no-trespassing signs we're legally required to post and how many—and then post twice as many. I want you to get the huskiest youngsters you can for guards and give them night sticks." He hesitated. "And buy us two shotguns and some shells."

The boy looked at Novak and then at the *Prototype* and then at Novak again. "If you think it's necessary," he said quietly. "What kind of shells—bird shot?"

"Buckshot, Nearing. They're after her."

"Buckshot it is, Dr. Novak," the shoe clerk said grimly.

He worked all morning in the machine shop, turning wooden core patterns for the throat liner on the big lathe. Laminated together and rasped smooth, they would be the first step in the actual fabrication of the throat liner. Half a dozen youngsters showed up, and he put them to work routing out the jacket patterns. Some of the engineer-members showed up around noon on their Sunday visits and tried to shop-talk with him. He wouldn't shop-talk.

At three in the afternoon Amy Stuart was saying to him firmly: "Turn that machine off and have something to eat. Nearing told me you didn't even have breakfast. I've got coffee, bologna on white, cheese on rye—"

"Why thanks," he said, surprised. He turned off the power and began to eat at a work-bench.

"Sorry they pulled rough stuff on you," she said.

"Rough?" he snorted. "That wasn't rough. Rough is what's coming up." Between bites of sandwich he told her about the teletype chatter.

"It's starting," she said.



The next day the dam broke.

Reporters were storming the gate by mid-morning. In due course a television relay truck arrived and from outside the fence peered at them with telephoto lenses.

"Find out what it's all about, Nearing," Novak said, looking up from his pattern making.

Nearing came back with a sheaf of papers. "They talked me into saying I'd bring you written questions."

"Throw 'em away. Fill me in in twenty seconds or less so I can get back to work."

"Well, Senator Hoyt's going to make a speech in the Senate today and he's wired advance copies all over hell. And it's been distributed by the news agencies, of course. It's like the rumour. He's going to denounce Daniel Holland, the A.E.C. general manager. He says Holland is robbing the Treasury blind by payments to the A.S.F.S.F. and Western Air, and getting kickbacks. He says Holland's incompetence has left the U.S. in the rear of the atomic weapons parade. Is my time up?"

"Yes. Thanks. Try to get rid of them. If you can't, just make sure none of them get in here."



There were days when he had to go into town. Sometimes people pointed him out. Sometimes people jostled him and he gave them a weary stare and they either laughed nervously or scowled at him, enemy of his country that he was. He was too tired to care deeply. He was working simultaneously on the math, the controls, installation of the tanks, and the setup for forming the liner and vane.

One day he fainted while walking from the machine shop to the refractories lab. He came to in his cot and found Amy Stuart and her father's Dr. Morris in attendance.

"Where did you come from?" he asked dimly.

Dr. Morris growled: "Never mind where I came from. You ought to be ashamed of yourself, Novak. Playing the fool at your age! I'm telling you here and now that you are going to stay in bed for forty-eight hours and you are not going to use the time to catch up on your paper work either. You are going to sleep, eat, read magazines—not including the *Journal of Metallurgical Chemistry* and things on that order—and nothing else."

"Make it twenty-four hours, will you?" said Novak.

"All right," Dr. Morris agreed promptly and Novak saw Amy Stuart grin.

Novak went to sleep for twelve hours. He woke up at eleven p.m., and Amy Stuart brought him some soup.

"Thanks," he said. "I was thinking—would you get me just the top sheet from my desk? It won't be *work*. Just a little calculation on heat of forming. Really, I'd find it relaxing."

"No," she said.

"All right," he said testily. "Did the doctor say you had to keep a twenty-four hour guard on me?"

"He did not," she told him, offended. "Please excuse me. There are some magazines and newspapers on the table." She swept out and he wanted to call after her, but ...

He got out of the cot and prowled nervously around the room. One of the papers on the table was the Los Angeles paper of the Bennet chain.

### HOYT DARES "ILL" HOLLAND TO SHOW M.D. PROOF!

shrieked its banner headline. Novak swore a little and climbed back into the cot to read the paper.

The front-page first-column story was all about Hoyt daring "ill" Holland to show M.D. proof. Phrases like "since Teapot Dome" and "under fire" were liberally used. Also on the front page a prominent officer of a veterans' organisation was quoted as daring "ill" Holland to show M.D. proof. So were a strident and aging blonde movie actress, a raven-haired, marble-browed touring revivalist, and a lady Novak had never heard of who was identified as Washington's number-one hostess. The rest of the front page was given over to stories from the wire services about children rescuing animals from peril and animals rescuing children from peril.

Novak swore again, a little more strongly, and leafed through the paper. He encountered several pages of department store ads and finally the editorial page and feature page.

The double-column, heavily-leaded editorial said that no reasonable person could any longer ignore the cold facts of the A.E.C.-Western Air-rocket-crackpot scandal. Beyond any doubt the People's money and the People's fissionable material—irreplaceable fissionable material—was being siphoned into a phony front for the greed of one man.

For Bennet patrons who wanted just the gist of the news, or who didn't read very well, there was the cartoon. It showed a bloated, menacing figure, labelled "Dan Holland," grinning rapturously and ladling coins and bills from a shoe-box Treasury Building into his pockets. There was one ladle in each hand, one tagged "Western Aircraft" and the other "Rocket Crackpots." A tiny, rancid, wormy, wrinkled old man was scooting in a wheel chair in circles about the fat boy's ankles, picking up coins Holland carelessly let dribble from the overflowing ladles. That was Wilson Stuart, former test pilot, breaker of speed and altitude records, industrialist whose aircraft plants covered a major sector of America's industrial defence line. Other little figures were whizzing in circles astride July-fourth rockets. They also were grabbing coins. Wild-eyed and shaggy under mortar-board hats, they were the rocket crackpots.

On the opposite page there was something for everybody.

For the women there was a column that wept hot tears because all America's sons, without exception, were doomed to perish miserably on scorching desert sands, in the frozen hell of the Arctic, and in the steamy jungles of the Pacific, all because of Daniel Holland. "How long, O Lord, how long?" asked the lady who wrote the column.

For the economist there was a trenchant column headed: "This Is Not Capitalism." The business writer who conducted the column said it wasn't capitalism for Western Air's board of directors to shilly-shally and ask Wilson Stuart exactly where he stood vis-a-vis Daniel Holland and what had happened to certain million-dollar appropriations rammed through under the vague heading of "research." Capitalism, said the business writer, would be for Western Air's board to meet, consider the situation, fire Stuart, and maybe prosecute him. Said the business writer: "The day of the robber barons is past."

For the teen-ager there was a picture of a pretty girl, holding her nose at some wiggly lines emanating from a picture of the Capitol dome. Accompanying text:

"Joy-poppers and main-liners all, really glom onto what Mamaloi's dishing this 24. I don't too often get on the sermon kick because young's fun and you're a long time putrid. But things are happening in the 48 that ain't so great so listen, mate. You wolves know how to handle a geek who glooms a weenie-bake by yacking for a fat-and-40 blues when the devotees know it's tango this year. Light and polite you tell the shite, and if he doesn't dig you, then you settle it the good old American way: five-six of you jump him and send him on his meddy way with loose teeth for a soo-ven-war. That's Democracy. Joy-poppers and main-liners, there are grownups like that. We love and respect Mom and Dad even if they

are fuddy-duddy geeks; they can't help it. But what's the deal and hoddy feel about a grownup like Danny-O Holland? And Wheel-chair Wilson Stuart? And the crackpot cranks with leaky tanks that play with their rockets on dough from your pockets? Are they ripe for a swipe? Yeah-man, Elder. Are their teeth too tight? Ain't that man right! Sound off in that yeah-man corner, brethren and cistern! You ain't cackin', McCracken! So let's give a think to this stink for we, the youths of America today, are the adults of America tomorrow."

For those who vicariously live among the great there was the Washington column. "Local jewellers report a sharp, unseasonal drop in sales. Insiders attribute it to panic among the ranks of Dan (Heads-I-Win-Tails-You-Lose) Holland and his little Dutch Boys over the fearless exposé of his machinations by crusading Senator (Fighting Bob) Hoyt. Similar reports in the trade from the West Coast, where Wilson (Wheel-Chair) Stuart and the oh-so-visionary-but-where's-the-dough pseudo-scientists of the A.S.F.S.F. hang out. Meanwhile Danny Boy remains holed up in his swank ten-room penthouse apartment claiming illness. Building employees say however that not one of his many callers during the past week has carried the little black bag that is the mark of the doctor!... What man-about-Washington has bought an airline ticket and has his passport visaed to Paraguay, a country where officials are notorious for their lack of co-operation in extradition proceedings—if their palms are properly greased?"

For lovers of verse there was a quatrain by one of the country's best-loved kindly humourists. His whimsical lines ran:

*They say Dan Holland will nevermore  
Go anywhere near a hardware store.  
He'll make a detour by train or boat  
Because he knows he should cut his throat.*

Novak smiled sourly at that one, and heard a great tooting of horns. It went on, and on, and on, and on. Incredulously he clocked it for three solid minutes and then couldn't take any more. He pulled on his pants and strode from the prefab into a glare of headlights. There were jalopies, dozens of them, outside the fence, all mooing.

Nearing ran to him. "You ought to be in bed, Dr. Novak!" he shouted. "That doctor told us not to let you——"

"Never mind that! What the hell's going on?" yelled Novak, towing Nearing to the gate. The two guards were there—husky kids, blinking in the headlights. They'd been having trouble filling the guard roster, Novak knew. Members were dropping away faster every day.

"Kids from L.A.!" Nearing shouted in his ear. "Came to razz us!"

A rhythmical chant of "*O-pen up!*" began to be heard from the cars over the horns.

Novak bawled at them: "Beat it or we'll fire on you!" He was sure some of them heard it, because they laughed. One improbably blonde boy in a jalopy took it personally and butted his car into the rocket field's strong and expensive peripheral fence. It held under one car's cautious assault, but began to give when another tanker joined the blonde.

"All right, Eddie!" Novak shouted to the elder of the gate guards. "Take your shotgun and fire over their heads." Eddie nodded dumbly and reached into the sentry box for his gun. He took it out in slow motion and then froze.

Novak could understand, even if he couldn't sympathize. The glaring headlights, the bellowing horns, the methodical butting of the two mastodons, the numbers of them, and their ferocity. "Here," he said, "gimme the goddam thing." He was too sore to be scared; he didn't have time to fool around. The shotgun boomed twice and the youth of America shrieked and wheeled their cars around and fled.

He handed back the shotgun and told Eddie: "Don't be scared, son." He went to the phone in the machine shop and found it was working tonight. People had been cutting the ground line lately.

He got the Stuart home. "Grady? This is Dr. Novak. I want to talk to Mr. Stuart right away and please don't tell me it's late and he's not a well man. I know all that. Do what you can for me, will you?"

"I'll try, Dr. Novak."

It was a long, long wait and then the old man's querulous voice said: "God almighty, Novak. You gone crazy? What do you want at this time of night?"

Novak told him what had happened. "If I'm any judge," he said, "we're going to be knee-deep in process servers, sheriff's deputies, and God-knows-what-else by tomorrow morning because I fired over their heads. I want you to dig me up a real, high-class lawyer *and fly him out here tonight.*"

After a moment the old man said: "You were quite right to call me. I'll bully somebody into it. How're you doing?"

"I can't kick. And thanks." He hung up and stood irresolutely for a moment. The night was shot by now—he'd had a good, long rest anyway——

He headed for the refractories lab and worked on the heat of composition. He cracked it at six a.m. and immediately started to compound the big batch of materials that would fuse into the actual throat-liner parts and steering vane. It was a grateful change of pace after working in grams to get going on big stuff. He had done it by ten-thirty and got some coffee.

The lawyer had arrived: a hard-boiled, lantern-jawed San Francisco Italian named DiPietro. "Don't worry," he grimly told Novak. "If necessary, I'll lure them on to the property and plug 'em with my own gun for trespassing. Leave it in my hands."

Novak did, and put in an eighteen-hour stretch on fabricating pieces of the throat liner. Sometime during the day Amy Stuart brought him some boxes and he mumbled politely and put them somewhere.

With his joints cracking, he shambled across the field, not noticing that his first automatic gesture on stepping out of the shop into the floodlight area was to measure the *Prototype* with his eye in a kind of salute.

"How'd it go?" he asked DiPietro.

"One dozen assorted," said the lawyer. "They didn't know their law and even if they did I could have bluffed them. The prize was a little piece of jail-bait with her daddy and shyster. Your shotgun caused her to miscarry; they were willing to settle out of court for twenty thousand dollars. I told them our bookkeeper will send his bill for five hundred dollars' worth of medical service as soon as he can get around to it."

"More tomorrow?"

"I'll stick around. The word's spread by now, but there may be a couple of die-hards."

Novak said: "Use your judgment. Believe I can do some work on the servos before I hit the sack."

The lawyer looked at him speculatively, but didn't say anything.

## XVII.

A morning came that was like all the other mornings except that there was nothing left to do. Novak wandered disconsolately through the field, poking at this detail or that, and Amy came up to him.

"Mike, can I talk to you?"

"Sure," he said, surprised. Was he the kind of guy people asked that kind of question?

"How are the clothes?"

"Clothes?"

"Oh, you didn't even look. Those boxes. I've been shopping for you. I could see you'd never have time for it yourself. You don't mind?"

There it was again. "Look," he said, "have I been snapping people's heads off?"

"Yes," she said in a small voice. "You didn't know that, did you? Do you know you have a week-old beard on you?"

He felt it in wonder.

"I've never seen anything like it," she said. "The things you've accomplished. Maybe nobody ever saw anything like it. It's finished now, isn't it?"

"So it is," he said. "I didn't think—just installing the last liner segment and hooking on the vane. Mechanical oper—"

"*God, we've done it!*" He leaned against one of *Proto's* delta fins, shaking uncontrollably.

"Come on, Mike," she said, taking his arm. She led him to his camp cot and he plunged into sleep.

She was still there when he woke, and brought him coffee and toast. He luxuriated in the little service and then asked abashedly: "Was I pretty bad?"

"You were obsessed. You were a little more than human for ten days."

"Holland!" he said suddenly, sitting full up. "Did anybody—"

"I've notified him. Everything's going according to plan. Except—you won't be on the moon ship."

"What are you talking about, Amy?"

She smiled brightly. "The counter-campaign. The battle for the public being waged by those cynical, manipulating, wonderful old bastards, Holland and my father. Didn't you guess what my part in it was? I'm a pretty girl, Mike, and pretty girls can sell anything in America. I'm going to be the pilot—hah! pilot!—of the first moon ship. So gallant, so noble, and such a good figure. I'm going to smile nicely and male America will decide that as long as it can't go to bed with me, the least it can do is cheer me on to the Moon."

She was crying. "And then I showed I was my father's daughter. The cynical Miss Stuart said we have a fireworks display in the takeoff, we have conflict and heroism, we have glamour, what we need is some nice refined sex. Let's get that dumb engineer Novak to come along. A loving young couple making the first trip to the Moon. Irresistible. Pretty girl, handsome man—you *are* handsome without that beard, Mike." She was crying too hard to go on. He mechanically patted her shoulder.

Her sobs abated. "Go on," he said.

"Nothing to go on about. I told 'em I wouldn't let you go. I love you too much."

His arm tightened around her. "That's all right," he said. "I love you too much to let you go without me."

She turned her tear-stained face to him. "You're not going to get noble with *me*—" she began. And then: "Ouch! Mike, the beard!"

"I'll shave," he said, getting up and striding to the lab sink.

"Don't cut yourself, Mike," she called after him. "But—please hurry!"

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There was one crazy, explosive week.

There was something in it for everybody. It was a public relations man's dream of heaven.

Were you a businessman? "By God, you have to give the old boy credit! Slickest thing I ever heard of—right under the damn Reds' noses, stuck right out there in the desert and they didn't realise that a rocket ship was a rocket ship! And there's a lot of sense in what Holland had to say about red tape. Makes you stop and wonder—the armed services fooling around for twenty years and not getting to first base, but here this private club smacks out a four-bagger first time at bat. Illegal? Illegal? Now mister, be sensible. Don't get me wrong; I'm not any admirer of the late F.D.R., but he did get us the atom bomb even if he did practically hand it to the Reds right after. But my point is, F.D.R. didn't go to Congress with a presidential message that we were going to try to make an atomic bomb. He just quietly diverted the money and made one. Some things you have to do by the book; others you just plain can't. For my money, Dan Holland's a *statesman*."

Were you a girl? "Oh, that dreamy man Mike! It just chills me when I think of him flying all the way to the Moon, but it's kind of wonderful, too. Did you ever notice the way he's got kind of a dimple but not quite on the left when he smiles?"

Were you a man? "Amy's got real looks and class. Brains, too, they tell me, and God knows, she's got guts. The kind of girl you'd want to *marry*, if you know what I mean. He's a lucky guy."

Were you old folks? "Such a lovely couple. I don't know why more young people aren't like that nowadays. You can see how much they're in love, the way they look at each other. And the idea of them going to the Moon! I certainly never thought I'd see it in my time, though of course I knew that some day ... Perhaps their rocket ship won't work. No, that's absurd. Of course it'll work. They look so nice when they smile at each other!"

Were you young folks? "I can't get over it. Just a pair of ordinary Americans like you and me, a couple of good-looking kids that don't give a damn and they're going to shoot off to the Moon. I saw them in the parade and they aren't any different from you and me. I can't get over it."

Were you a newspaper publisher? "Baby, this is it! The perfect cure for that tired feeling in the circulation department. I want *Star-Banner-Bugle-and-Times-News* to get Mike-and-Amy conscious and stay that way. Pictures, pictures, pictures. Biographies, interviews with roommates, day-by-day coverage, our best woman for Amy and our best man for Mike. The hell with the cost; the country's on a Mike-and-Amy binge. And why shouldn't it be? A couple of nice young kids and they're going to do the biggest thing since the discovery of fire. A landmark in the history of the human race! And confidentially, this is what a lot of the boys have been waiting for with Bennet. Naturally only a dirty Red rag would attack a fellow-publisher, but I don't see any ethical duty to keep me from sawing off a limb Bennet crawled out on all by himself. He's mouse-trapped. To keep his hard core of moron readership he's got to keep pretending that *Proto's* still a fake and Holland's still a crook and only taper off slowly. I'm almost sorry for the dirty old man, but he made his bed."

Were you a congressman? "Hmmm. Very irregular. In a *strict* sense illegal. Congress holds the purse strings. Damn uppity agencies and commissions. Career men. Mike and Amy. Wonder if I could get photographed with them for my new campaign picture. Hmmm."

---

On the fourth day of the crazy week they were in Washington, in Holland's office.

"How's it going?" he demanded.

"I don't know how MacArthur stood it at his age," Amy muttered.

There was a new edition to Holland's collection of memorabilia on the wall behind his desk: a matted and framed front page from the New York *Times*.

HOLLAND BREAKS SILENCE, CALLS ASFSF NO FRONT SAYS CLUB HAS MOON  
SHIP READY TO MAKE TRIP WILSON STUART DAUGHTER, ENGINEER TO PILOT

The agitation of the *Times* was clearly betrayed in the awkwardly rhyming second line.

"The Air Force gentlemen are here, Mr. Holland," said the desk intercom.

"Send them in, Charlie."

Three standard-brand Air Force colonels, one general and an off-brand captain walked in. The captain looked lost among his senior officers, six-footers all. He was a shrimp.

"Ah, gentlemen. General McGovern, Colonels Ross, Goldthwaite, and Behring. And the man you've been waiting to meet, Captain Dilaccio. Gentlemen, you know Amy and Mike, of course. Please be seated."

They sat, and there was an ugly pause. The general exploded, almost with tears in his voice: "*Mister* Holland, for the last time. I will be perfectly frank with you. This is the damn'dest, most unreasonable thing I ever heard of. We have the

pilots, we have the navigators, we have the experience, and we ought to have the moon ship!"

Holland said gravely: "No, General. There's no piloting involved. The landing operation simply consists of putting the throat-vane servo on automatic control of the plumb bobs and running in the moderator rods when you hit. The navigation is child's play. True, the target is in motion, but it's big and visible. And you have no experience in moon ships."

"*Mister* Holland——" said the general.

Holland interrupted blandly. "And even if there were logic on your side, is the public deeply interested in logic? I think not. But the public is deeply interested in Amy and Mike. Why, if Amy and Mike were to complain that the Air Force had been less than fair with them——"

His tone was bantering, but McGovern broke in, horrified: "No, no, no, no, Mr. Holland! They aren't going to do anything like that, are they? Are you?"

Holland answered for them. "Of course not, General. They have no reason to do anything like that—do they?"

"Of course not," the general said glumly. "Captain Dilaccio, good luck." He and the colonels shook hands with the puny little captain and filed out.

"Welcome to the space hounds," Novak told Dilaccio, trying to be jovial.

The captain said indistinctly: "Pleasure'm sure."

On the flight back to Barstow he didn't say much else. They knew he had been chosen because he was (a) a guided-missile specialist, (b) single and with no close relations, (c) small and endowed with a singularly sluggish metabolism. He was slated for the grinding, heartbreaking, soul-chilling job of surviving in a one-man pressure dome until the next trip brought him company and equipment.

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On the seventh day of the crazy week, Daniel Holland heard somebody behind him say irritably: "Illegal? Illegal? No more illegal than Roosevelt taking funds and developing the atomic bomb. Should he have gone to Congress with a presidential message about it? It was the only way to do it, that's all."

Holland smiled faintly. It had gone over. The old clichés in their mouths have been replaced by new clichés. The sun blazed into his eyes from the polished shell of the moon ship, but he didn't turn or squint. He was at least a sub-hero today.

He caught a glimpse of MacIlheny as the band struck up the sedate, eighteenth-century "President's March." MacIlheny was on the platform, as befitted the top man of the A.S.F.S.F., though rather far out on one of the wings. MacIlheny was crying helplessly. He had thought he might be the third man, but he was big-bodied and knew nothing about guided missiles. What good was an insurance man in the Moon?

The President spoke for only five minutes, limiting himself to one humorous literary allusion. ("This purloined letter—stainless steel, thirty-six-feet, plainly visible for sixty miles.") Well, *he* was safely assured of his place in history. No matter what miracles of statesmanship in war or peace he performed, as long as he was remembered he would be remembered as President during the first moon flight. The applause was polite for him, and then slowly swelled. Amy and Mike were walking arm in arm down a hollow column of M.P.s, Marines and A.F.P.s. Captain Dilaccio trailed a little behind them. The hollow column led from the shops to the gantry standing beside *Proto*.

Holland felt his old friend's hand grip his wrist. "Getting soft, Wilson?" he muttered out of the corner of his mouth.

The old man wouldn't be kidded. "I didn't know it would be like this," he said hoarsely. Amy's jacket was a bright red patch as the couple mounted the stand and shook hands with the President. Senile tears were running down Wilson Stuart's face. Great day for weeping, Holland thought sullenly. All I did was hand the U.S. the Moon on a silver platter and everybody's sobbing about it.

The old man choked: "Crazy kid. Daniel, what if she doesn't come back?"

There was nothing to say about that. But——"She's waving at you, Wilson!" Holland said sharply. "Wave back!" The old man's hand fluttered feebly. Holland could see that Amy had already turned to speak to the President. God, he thought. They're *hard*.

"Did she see me, Dan?"

"Yes. She threw you a big grin. She's a wonderful kid, Wilson." Glad I never had any. *And* sorry, too, of course. It isn't that easy, ever, is it? Isn't this show ever going to get on the road?

The M.P.s, Marines, and A.F.P.s reformed their lines and began to press back the crowd. Jeeps roared into life and began to tow the big, wheeled reviewing stand slowly from the moon ship. With heartbreaking beauty of flowing line, Amy swung herself from the platform to the hoist of the gantry crane. Mike stepped lightly across the widening gap and Captain Dilaccio—Good God, had the President even spoken to him?—jumped solidly. Mike waved at the craneman and the hoist rose with its three passengers. It stopped twenty-five feet up, and there was clearly a bit of high-spirited pantomime, Alphonse-and-Gaston stuff, at the manhole. Amy crawled through first and then she was gone. Then Dilaccio and then Novak, and they all were gone. The manhole cover began to close, theatrically slow.

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"Why are we here?" Novak wondered dimly as the crescent of aperture became knifelike, razorlike, and then vanished. What road did I travel from Canarsie to here? Aloud he said: "Preflight check; positions, please." He noted that his voice sounded apologetic. They hunkered down under the gothic dome in the sickly light of a six-watt bulb. Like cave people around a magic tree stump they squatted around the king-post top that grew from the metal floor.

"Oxygen-CO<sub>2</sub> cycle," he said.

That was Dilaccio's. He opened the valve and said, "Check."

"Heater." He turned it on himself and muttered, "Check."

Novak took a deep breath. "Well, next comes fuel metering and damper rods—oh, I forgot. Amy, is the vane servo locked vertical?"

"Check," she said.

"Right. Now, the timers are set for thirty seconds, which is ample for us to get to the couches. But I'd feel easier if you two started now so there won't be any possibility of a tangle."

Amy and Dilaccio stood, cramped under the steep-sloping roof. The captain swung into his couch. Amy touched Mike's hand and climbed to hers. There was a flapping noise of web belting.

"Check."

"All secure," said Dilaccio.

"Very good. *One*—and *two*." The clicks and the creak of cordage as he swung into his couch seemed very loud.

Time to think at last. Canarsie, Troy, Corning, Steubenville, Urbana, N.E.P.A., Chicago, Los Angeles, Barstow—and now the Moon. He was here because his parents had died, because he had inherited some skills and acquired others, because of the leggy tough sophomore from Troy Women's Day, because Holland had dared, because he and Amy were in love, because a Hanford fission product had certain properties, because MacIlheny was MacIlheny——

Acceleration struck noiselessly; they left their sound far behind.

After a spell of pain there was a spell of discomfort. Light brighter than the six-watt bulb suddenly flooded the steeple-shaped room. The aerodynamic nose had popped off, unmasking their single port. You still couldn't pick yourself up. It was like one of those drunks when you think you're clearheaded and are surprised to find that you can't move.

She should have spent more time with her father, he thought. Maybe she was afraid it would worry him. Well, he was

back there now with the rest of them. Lilly, paying somehow, somewhere, for what she had done. Holland paying somehow for what he had done. MacIlheny paying. Wilson Stuart paying.

"Mike," said Amy's voice.

"All right, Amy. You?"

"I'm all right."

The captain said: "All right here."

A common shyness seemed to hold them all, as though each was afraid of opening the big new ledger with a false or trivial entry.

## THE END

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