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THE GREEN RAY

A Novelet of the
Twenty-First
Century

By ARTHUR L.
ZAGAT

A THRILLING
PUBLICATION



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THE GREEN RAY

A Complete Novelet of the Future

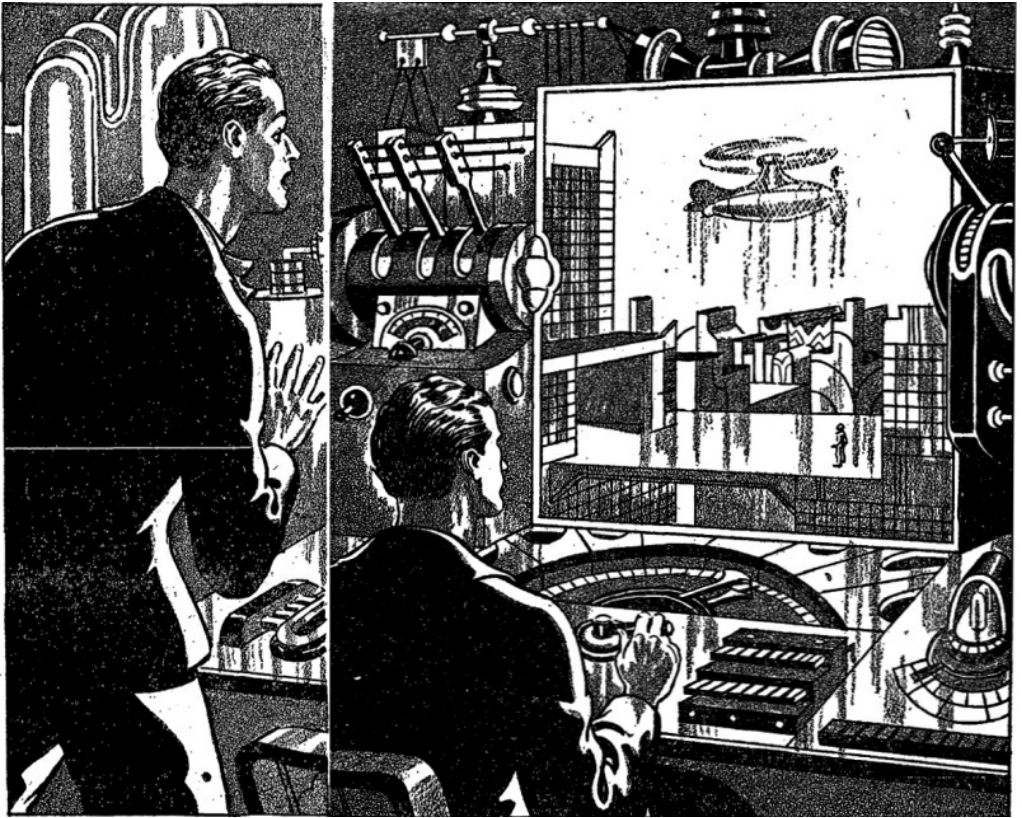
Under the Curtain of the Aurora Borealis Two Men Struggle for a Lethal Formula!

By

ARTHUR LEO ZAGAT

Author of "The Lanson Screen," "Cavern of the Shining Pool," etc.

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The imaged plane blurred as its vanes gathered speed

CHAPTER I

The Weapon

“**Y**ou’ve been working too hard, Greg,” Dean Thorkel, chief editor of New York *Newscast Central* said. “This Paris trip will set you on your feet.”

Professor Gregory Vance stared at his friend out of glowing eyes.

“I’m not going to Paris, Dean,” he said quietly. “Maybe by tomorrow I won’t be able to go anywhere.”

The atmosphere of the white-tiled laboratory was suddenly heatless with the chill of some brooding dread.

“Not going!” The newsman gasped. “Passing up the Einstein Award Convocation! Hell, man! When it was announced in nineteen ninety-six you told Cliff Hoskins and me you would devote your life to winning it. That’s why you’ve been slaving here at National U. for seven years while I’ve been keeping an eye on seven seas and five continents, and Cliff’s been risking his life in the Military Intelligence. You—”

“Risking his life.” The words trickled from between the scientist’s white lips. “Risking—” A sharp *burr* cut him off, the attention call of the wireless teleautograph in a corner of the lab. He twisted—and then his voice was a thin thread, wire-edged with terror. “There it is again!”

Thorkel leaped to the machine whose silver pencil danced eerily across white, unrolling paper. “*Vance!*” The salutation was abrupt. “*Final warning. You speak before you reach Paris, willingly or—unwillingly.*”

The newsman, his massively sculptured countenance chalky, whirled to the disc of a verbal communications transmitter, but Vance’s hand closed on his shoulder.

“No use, Dean,” the physicist whispered. “I’ve tried to trace those messages before. He taps in from some unauthorized station of his own, and it can’t be located.”

“But—but—who—”

“Ho-Lung.”

“Good Lord!” Thorkel breathed the exclamation. “He—”

Vance’s thin lips quirked in a humorless smile.

“You’ve heard of him?”

“Who hasn’t. He’s the lone-wolf ace of the Asiatic Secret Service. He’s got ears and eyes everywhere. He’s killed more enemies of the Yellow Coalition than their armies. But no one knows who or what he is. Sometimes I think he’s

a myth. But you're no soldier or diplomat. What can he want of you?"

"Want of me?" Gregory Vance's slim white hands curled into curiously ineffectual looking fists. "I'll show you."

He moved to the lab table, lifted a cylindrical graduate from the stone slab of the laboratory table. From shelves on which hundreds of bottles were ranged, each labeled with a number only, he selected a half dozen vials. He carefully measured their contents into the etched glass until he had a liquid compound that was purplish and fuming. Somehow it seemed alive in the cold light of the beta-argon bulb in the ceiling.

The physicist picked up a lens-shaped but hollow crystal, dripped the solution he had concocted through a tiny opening until it filled the cavity. Then he fitted the lens he had made over the miniature bulb of an ordinary flashlight.

"Get down one of those cages with a white mouse in it, and place it on the table." Thorkel obeyed.

"Watch!"

Vance aimed the flashlight at the cage, pressed the button. A green beam flashed out, uncannily bright even in the mock daylight of the windowless room. It struck the mouse. An exclamation of horror escaped from the newsman.

An instant before the tiny animal had been there, instinct with life. Now—a glittering, viscid pool of iridescent oil glittered at the bottom of the cage!

The virescent light clicked out. Vance extracted the lens that had converted an ordinary flashlight into an instrument of annihilation, smashed the glass in the sink, watched the purple liquid disappear, fuming, down the drain.

"Imagine searchlight beams fanning that green ray through the skies and over the seas, trapping the oncoming hosts of an enemy and melting them, melting human beings into oily nothingness as that mouse was melted.

"Imagine their rocket-ships dropping uncontrolled from the heavens, their surface craft colliding, sinking into a boiling sea. What price invasion then?"

"And all that is needed to make the weapon ready is the compound to fill the hollow lenses. Every glass factory in the country is now busy casting for the searchlights with which our coasts are lined, for the aircraft beacons which dot the continent."

"But—but how can mere light produce such an effect?"

"It's simple. You know that matter is the result of a disturbance in the sub-ether, just as light is a vibration of the ether. And that ether and sub-ether are intimately interconnected. I have discovered a light vibration that steps up the vibrations of material atoms one micron. It transmutes elements, in other words. It acts only on organic matter, so far—transmutes the elements of any

living body to others a little higher in the scale. And that—" Vance nodded at the oily pool that had been a living thing moments before—"is the result of the transmutation. Now do you know why Ho-Lung has been after me for weeks?"

"For weeks!" Thorkel exclaimed in surprise. "But—your life hasn't already been attempted. Surely I should have heard."

"No," the other replied. "He wants the secret for his country. The ray is as formidable a weapon of offense as of defense. His messages have taken me up on high mountains and offered me the earth and the fullness thereof. He has resorted to threats only in the past week, as I neared perfection."

"Nearing perfection! It looks pretty damn perfect to me."

"The effects, yes. But adjustments are necessary so that the target of the ray may not be shielded. My ray will penetrate any material except a certain ferro-beryllium alloy. Unfortunately, that alloy is the very one used to armor the Oriental rocket ships. I am on the track of the solution. In a few days I hope to have it. Otherwise—the thing is useless."

"But the Army laboratories! Surely they must be helping you on this. You must have given them some idea of the thing, so that they should be able to proceed if anything should happen to you."

"No. The War Department has ordered the hollow lenses purely on blind faith in me. The basic principle of the ray is known by myself alone. Our service is honeycombed with spies.

"Cliff Hoskins flew in from Manchukuo six months ago. Just a week before that I had got in touch with the War Secretary and given him in strictest confidence the barest outline of what I was working on. Three days later, Hoskins, eavesdropping on a conference of the Asiatic General Staff, had heard a full report of every detail of my talk!"

"Then if you are killed the whole thing is lost."

"Wiped out!" Vance's hand erased a chalk mark on the table-top. "Like that. If they can get the formula from me, well and good. But as soon as they are convinced that I will not yield it to them they will make sure the American Government does not get it either. That is why I cannot go to Paris, why I must hide. I have a place prepared, and I can get there unobserved. I shall show you how later. There is only one chance in a hundred of their getting me, once I'm away, but I want to guard against that one chance."

Vance pulled a paper from his pocket, handed it to Thorkel. The other saw figures at the top, map co-ordinates of some point in the Far North. Then there was a long line of curious symbols, symbols that were vaguely familiar.

"The location of my hiding place," Vance explained. "And the formula, in our old code."

Thorkel remembered. How clearly that brought back the old student days, when he, Greg, and Cliff Hoskins had been inseparable. Hoskins had been reading treatises on cryptography and had challenged the other two to devise a code he could not decipher. They had accepted, and won. Hoskins had accused them of being unfair when he learned that three keywords were necessary to the solution.

“The keywords are these.” Vance wrote three words on a bit of paper, displayed them to Thorkel, then tore the scrap of paper into tiny fragments. “You know how much depends on the safety of that formula. If you don’t hear from me within a week, take it to the Secretary of War—to no one else.” Greg gripped Thorkel’s arm, his fingers digging deep in emphasis. “Remember, Dean, give the formula to no one else, whoever he is, no matter what the circumstances.”

Vance turned to the door.

“Now come out to the hangar with me and I shall show you how I shall get away, literally unseen.”

CHAPTER II

The Stolen Cipher

Dean Thorkel strode through the high-ceilinged dispatch room of New York *Newscast Central*, his heels clicking sharply on the rotunda's marble floor. He was oblivious of the intermingled voices of the announcers droning to a million listeners their running commentary on the televised picturing of world events. He climbed stairs to his bright metal desk atop a raised platform at the center of the hall. Beneath his chestnut thatch his brown eyes were almost black with foreboding.

"Good morning, Mr. Thorkel."

"Morning, Haley. How'd the night go?"

"Fairly smoothly, sir." Randall Haley, night editor, was short, emaciated, completely bald. His tiny eyes, uncannily bright behind slitted, lashless lids; his sharp, hooked nose, gave him the appearance of a bird—a vulture. "The Aurora Borealis is kicking up again and Transcontinental Air's Arctic refueling fields are cut off. But nothing ever happens up there."

"All right. I'll take over." Behind his expressionless features a band seemed to constrict about Thorkel's brain. The electrical disturbance might last for days. Suppose Greg wanted to communicate with him. . . . He grunted vaguely. Sinking into his swivel chair, he bent as if to fasten the lace of his shoe. There was the slither of steel on steel, barely perceptible. In a moment Vance's cryptic formula was safe in a secret drawer.

Thorkel straightened, switched the foot-square monitor screen before him to the wave-length of a newscopter that hovered above the hundred-story Science Tower of National University.

On the screen's shimmering surface a tiny figure emerged from the penthouse laboratory where, to quote the Einstein Award Citation, "science has leaped forward a century in five years." It moved to a blue, toylike one-man gyrocopter that had been rolled out of its hangar.

"Professor Vance is entering his 'copter, folks," the reporter's voice droned. "In seconds he will take off—"

"Mr. Dean Thorkel, I believe," suave tones drawled from the stairhead. Thorkel twisted around.

"Cliff Hoskins, you tramp," he roared, jumping up. "Where the hell did you drop from?"

The stocky, dark man in quiet gray came across the platform.

"Hell's right," he responded, low-toned. "I tried to get here in time to slap

old Greg on the back before he left for Paris, but skin-friction held my rocket plane up and I'm too late. I—"

"You're just in time," Thorkel snapped. "He's taking off. Look." He turned back to the screen.

The imaged plane blurred as its vanes gathered speed. It lifted from the roof, gained altitude in vertical ascent—and vanished!

"My God!" the reporter cried. "That wasn't a static blot, folks. Professor Vance is—gone. Blotted out. I can't see his plane anywhere."

Low words thudded from Thorkel's lips. "It works. By all that's holy, it works!"

"What works, Dean?" Hoskins questioned. "What's happened to Greg?"

"He's skipped. He's putting himself out of harm's way until he finishes his job."

"So you know about that!" Cliff Hoskins slid the seat of his trousers onto the desktop. "Where did he go?"

"Sorry, Cliff. I can't tell even you."

"But you know. It's on something hidden in your desk." The Secret Service man grinned. "It's okay with me, Dean, but you want to be more careful. You looked down just then. That was a dead give away. An Asiatic spy would not have missed it."

Thorkel, startled, swiveled about to where Haley, behind him, was washing up. The little man's face was a mass of soap suds; he could have heard, seen, nothing.

"I've got about a half hour to chin with you," Hoskins said. "Then I've got to get back to Manchukuo. Big doings there."

For thirty minutes the Intelligence man told a rapt listener of an East buzzing with activity, of new explosives by the hundred thousand tons pouring from smoking factories, of vast arrays of rocket planes and hordes of surface-craft, of all the gigantic thunderbolt Asiatica was forging to launch at America, the only nation strong enough to resist the Mongolian dream of world domination.

"I tell you, Dean, we haven't a ghost of a show unless Greg comes through. Even then—" Hoskins shrugged. "But I've got to go." He rose, then paused. "Say—I may have to get in touch with you, in a hurry. How?"

Thorkel reached for a memorandum pad, jotted some numbers on it. "Here's the wave-length combo of my private line. I've just changed it. Greg's the only other who knows it. That'll be the safest for you to use."

Hoskins took the slip, studied it briefly.

"This may be foolish, but it's a habit," he said. He grinned, crumpled the memo into a ball and popped it into his mouth. Then, with an insouciant wave

of the hand, he was gone, returning with a smile on his face to the alien land where death stalked always at his elbow.

“No report on Professor Vance’s whereabouts. . . . No trace has been found of Professor Gregory Vance.” All the rest of that day, all the next morning, the recurring phrase from the busy operators pounded at Dean Thorkel, thumped into his brain. The total absence of news from Greg meant that his plan was working, that he was safe. But—

Mid-morning, a low, insistent *burr* pulled his eyes to the serried row of phonejacks on his desktop. A red glow showed above the furthest one on his private line. Only two men knew that combination. Greg! It must be Greg! Thorkel slammed on his headphones, jammed the dangling plug into its receptacle.

“Hello.”

“Dean?” A flat voice, monotonous, unfamiliar. “Greg speaking. Greg Vance.” It didn’t sound like Greg. Thorkel jerked down two cupped discs from the headband across his skull, fitted them over his eyes.

“What’s up?” It was Greg Vance. The visor eyepieces brought his image clearly, his high-domed head, the patch of premature gray at its temples. But—it must have been the effect of the Borealis—a greenish tinge filmed the televised face and the eyes seemed glazed, expressionless.

“Dean!” the unnatural voice whispered. “Come to me. I need—” A sudden shadow loomed behind Greg’s head. It was gone. There was a thud in Thorkel’s ears, the soft thud of a fallen body. Then—nothing.

Someone had found Greg! Some enemy. Thorkel ripped the headpiece away, crouched below the screen of his desk. He pulled out the lowermost drawer. His hand slid within it, pressed against the upper-edge of one side-piece, forced the apparently solid metal down and to the rear. The steel slid. Thorkel’s fingers fumbled within the revealed cavity.

The concealed niche was empty. The paper that meant Vance’s safety, the nation’s safety, was gone.

Thorkel lunged to his feet, leaped the stairs to the floor below, ran in great, bounding strides to the exit. His ’copter was parked, sleekly yellow, in the open roof-square. In a few seconds he was in its driving seat.

Above, the traffic beam showed red, and a green police plane hovered watchfully. But Dean Thorkel thrust over the throttle, and the gyro shot up from its berth, zoomed through the thick cross-streams overhead.

Thorkel had a momentary glimpse of a white-faced pilot at the controls of a lumbering bus-flier as he shot across its prow. His stubby wings scraped a rusting flivver’s wings. A woman’s shrill scream came thinly up to him. The traffic cop’s siren was in his ears and the green plane was diving for him.

A twisted grin relieved the grimness of Thorkel's face for an instant. His horizontal-flight propeller screamed as it bit the air. The yellow gyro darted north. The police boat banked and was after him. Dead ahead another green plane appeared, steadied, waited ominously.

On the dashboard before the newsman a foot-square metal box was fastened, crudely. Fine wires led from the box, and made a meshwork on all the outer surfaces of Thorkel's gyro.

"You may have to reach me unobserved," Greg Vance had said, when he had worked to install the queer contrivance. "This will enable you to do so, as it will enable me to slip away unseen."

The first police craft was overhauling Thorkel, was fifty yards behind. Its siren shrilled again, and a black, metallic tube snouted at him. Thorkel jabbed at a button on the front of the box.

Two traffic officers rubbed amazed eyes, and looked again for the yellow gyro that had flicked into nonexistence between them. But there was nothing to be seen!

Everything outside his own little ship was nothingness to Thorkel's eyes. He was in a tiny world of his own, suspended in illimitable, empty space. Only sound beat in to him from the invisible world about him, the sough of the crowded air-lanes two thousand feet below, the muted roar of the great city still lower, the rattling thunder of the pursuer's prop, the police siren moaning into sudden silence.

On the fifteen thousand foot level, where chances of collision were at a minimum, Dean Thorkel drove on northward. Blind flying with a vengeance, this was, though broad daylight and an unclouded sky were all about him. For that same daylight was flowing *around* his gyro, the ether waves curved by the field of force the little box produced and the fine wires guided. No sight could come to Thorkel of things beyond that network, nor could anyone beyond that network see his plane. The light waves were warped.

"Good thing," Thorkel muttered, "that I've got a sound-wave robot pilot instead of the old style radio-reflector, or I'd sure be out of luck."

Cold crept into the yellow gyrocopter's cabin, cold that even the high altitude heat-coils could not combat. The position dot on the robot-pilot's map was close to the point where it became necessary for Thorkel to take over the manual control for the landing. He pressed a black button.

An illimitable expanse of snow and ice stretched desolate beneath him. Overhead the Aurora's macabre dance of sheeted light was eerie against night's black curtain. Far to the west an air-borne dot circled, minutely scarlet. Instinct, the call of kind to kind in the vast loneliness, told Dean Thorkel that

this was a plane, man-guided. It faded into the lurid dance of the Northern Lights.

The automatic control relinquished the plane's guidance. Moments later, Dean Thorkel stumbled across tumbled blocks of ice. He passed a blue plane, frost-whitened, hidden beneath the overarch of a pressure-ridge. His breath fell in snow before his mouth, and each inhalation was an agony. The snow-hill just ahead was a house. Its outlines wavered as the icy fingers of a forty-below temperature twisted his brain. The shape of a door was vague in the ice-encrusted wall.

He forced a numbed hand to it. But the door opened before he touched it. A tall figure stood in the jagged rectangle. Its long face was a white, expressionless mask. Gregory Vance lifted an arm, jerkily, beckoned Thorkel in.

"Greg!" Thorkel's intended shout was a frozen whisper. "Greg! You're all right! I thought—" Thorkel went across the threshold, reached for the statuelike figure of his friend, touched its shoulder. Suddenly Vance crumpled to the floor, slowly, horribly, as the man-form robots used in domestic service crumple when the power-cast fails.

"Greg!" Dead eyes stared up at Thorkel. Just beneath the hairline a threadlike scar circled, crimson on the gray-white forehead. Thorkel peered closer—

"Freeze. And keep your hands away from your body!" Dean Thorkel twisted to the sharp command behind him. He saw a squat apparition, formless in a loose black robe; the head a faceless black globe, a black-gloved hand thrusting at him the blued steel of a forty-shot Trinite gun. Thorkel stiffened, his arms grotesquely out from his body.

The voice came again through the swathings, flat, colorless.

"You are Dean Thorkel." It was not a question, it was a statement.

Eyes glittered through holes in the ebon fabric. The black figure was ten feet away. It was useless to attack him. Before Thorkel could possibly close with him the tiny Trinite projectiles from his gun would tear into the American, would explode, and he would be spattered flesh.

"Yes, I'm Thorkel. What do you want?"

"The keywords of the cipher Vance left with you."

Then the formula was safe! The cipher was unreadable without the keywords. Thorkel shook his head, wordlessly.

The flat, cold voice was brittle.

"It will be better for you to give it to me willingly. I shall have it from you—be assured of that. And the process will not be—pleasant."

Torture! The Mongols were adepts at it. But torture could not make a dead man talk! Thorkel's knees dipped, his hands fisted. He sprang—straight at the

pointing gun!

Something caught his ankles, tripped him. Amazingly, Vance's body jerked toward him, headfirst across the floor! Thorkel fell—

CHAPTER III

Vance's Corpse

The newsman lifted slowly back to consciousness through a weltering purple darkness that was thick about him. His head pumped pain against a thin band tight around his skull. Fingers fumbled at his brow. His eyes opened. A black-swathed head floated before them, and glittering pupils in which glinted green flecks of light peered at him. A relentless, unhuman voice beat against his dulled ears.

“What is the code?”

Thorkel's lips tasted salty blood. But he forced words through them.

“No!”

The black head drifted upward as the Oriental straightened. The gun was gone from his hand, but there was something else in it, something metallic from which wires trailed. One filament came down to Thorkel's head, the other disappeared within the spy's robe.

The gloved hand twisted at that which it held. Fire bound Dean Thorkel's head in agony. Fire ran, a searing flood, through his veins. Sight, hearing, were gone. Feeling alone was left as every cell of his body quivered in anguish.

Then the fire died, and he was a limp, helpless mass on the floor.

“What is the keyword to the cipher?” Cold, pitiless, the inexorable question came down to him from the masked figure.

There was no escape, no hope of rescue. Greg Vance had chosen this location because of its isolation, its loneliness. Eventually human endurance would crumple and Thorkel would be compelled to divulge the keywords. Yet Thorkel still could say, through gritted teeth, “No, you scum,” and gather himself to withstand the return of hell.

It didn't come. The spy twisted to a frost-hazed window. The stutter of a descending plane was muffled by thick walls. The masked torturer bent to his victim, twitched the wire off. An inner door closed behind his retreating form.

The front door shoved in before the rush of bulked bodies.

“What's going on in here? What's all the delay?” Two men, formless in heavy furs, were inside the room. There were Trinite guns in their mittened hands. There were red tabs on their shoulders, the badges of the Northwest Flying Police!

“He's inside,” Thorkel gasped. “The killer's in there!” He poked a shaking hand at the inner door.

The Flyies whirled.

“Come on, Connors,” one yelled, “McKraken’s inside!” The two made a diving rush across the floor, were in the other room.

A wave of nausea rose, engulfed Dean Thorkel in a dizzy whirlpool. Air! He had to have air! He fumbled through the door, reeling. Intense cold struck at him, froze the mists from his brain. He saw a black shape flitting across the ice, saw it vanish behind a hummock. The slayer was escaping! He must—

Iron fingers gripped his arm, hauled him back into the house. A gun snouted in his face. “Not so fast, you!”

“He got out,” Thorkel yammered. “He’s getting away! Quick—you can still catch him!”

The Flyie’s reply was heavy with sarcasm.

“Oh yeah! We’ll chase shadows outside while you beat it. Say, we cops may be dumb, guy, but we don’t fall for the same stunt twice. Stick ’em up!”

“Hey, Daniels!” The one called Connors was standing over Greg’s body. He had a paper in his hand. “Guess who this stiff is! It’s that Professor Vance—missing since Monday. This ‘tele’ picture’s kind of blurred, but it’s him all right.”

Daniels swore picturesquely.

“An’ this is the bird that killed him. Well, Connors, that McKraken’s slipped us, but we’ve made a damn sight better catch. Here’s where we get our stripes.” Steel cuffs clicked over Thorkel’s wrists.

“You’re making a terrible mistake,” the newsman protested. “The murderer is escaping while—”

“Sure it’s terrible—for you,” the officer scoffed, heavily humorous. “I’ll say you’re running in tough luck. Here we’re out hunting a mechanic from Z40 refueling field that’s stabbed his boss. We see your gyro’s down here, think it’s the yellow boat he took to make his getaway, and come busting in—just in time to spoil your little party.”

“I tell you I’m not the murderer,” Thorkel pleaded. “The real killer is escaping, while you’re fooling around with me. Vance got a call for help through to me—I’m chief editor of *New York Newscast Central*—and I reached here just too late. Vance opened the door for me. He dropped just as I got in. It was that close. The killer jumped me and—”

“That’s all wet,” drawled Connors, kneeling to examine the dead Vance. “This corpse is stiffer than a poker—he’s been dead at least twelve hours.”

Hysteria edged Thorkel’s cry.

“But he talked to me not an hour ago. I saw him—”

The policeman’s big hand flicked out, slapped stingingly against his mouth. “Cut the fairy tales, you.” He shoved the bewildered man roughly into a chair, snapped another handcuff around one ankle and a chair-leg. “Let’s take

a look at the body.”

Thorkel buried his face in his linked hands. An hour ago Vance had called for help on the wave-lengths. Only Vance and Cliff Hoskins knew how to compose the combination of his private line. Minutes ago Vance had welcomed him at the door of his retreat. Now he was dead and the Flying Policeman, trained to determinations of that nature, his opinion not to be disputed, had pronounced the scientist to have been lifeless for twelve hours at least!

Talk penetrated.

“Man, look at this! What the hell has this bird been up to?” The prisoner lifted his head, saw that Greg’s body had been turned over on its face, saw Connors pointing to wires that coiled out of two tiny holes in the center of a shaved patch at the back of Vance’s head. They trailed across the floor and were kinked where Thorkel’s feet had caught in them in his mad, sacrificial rush at the black-swathed figure!

“We’d better send in a report, before we investigate further,” Connors was saying as Thorkel’s eyes clung bewilderedly to the metal threads. “Looks like the Borealis has quit. We ought to get the captain up here.”

“Check! There’s a communication set in the other room. And say, confirm this lad’s claim that he is editor of *New York Newscast*.” Connors went out, and his partner turned to the prisoner.

“What’s the idea of the wires?”

“I don’t know anything about them. Look here—” The policeman jerked about, his Trinite gun suddenly in his hand. The outer door was slowly opening! Thorkel went rigid in his chair, expecting again the squat, jet-draped torturer. The one who strode in, though short, was a fur-clad bulk. Thorkel glimpsed his face. An incredulous shout leaped to his lips—“Cliff!”

Daniels’ gun stabbed.

“Hands up, you! Up high!”

Cliff Hoskins’ arms reached ceilingward, but his voice was unperturbed. “Hello, Dean. Glad you, at least, are safe.” His calm tone steadied Thorkel, he was no longer friendless in an inimical world.

The police officer advanced threateningly.

“One of his gang, eh.” His voice rose. “Connors! Oh, Joe! Come in here. There’s another baby just popped in. Come in here and put the bracelets on him.”

“No, cop. You’re not putting any bracelets on me. On the contrary, you’re taking them off Dean Thorkel, here.”

Daniels’ jaw thrust out, and his eyes slitted. “Oh yeah? Mighty sure of yourself, aren’t you? Who the blazes do you think you are?”

“Lieutenant Hoskins, of the Army Intelligence Service. On special duty.”

“More fairy stories! You birds sure tell them high, wide, and handsome.”

“That will be enough low comedy from you. Take my thumbprints, check them with Headquarters.” Authority snapped in Hoskins’ voice. “Be quick about it too, if you want to save your jobs.”

The flying policeman’s tone was sullen as he saw credit for an important capture slipping from him.

“All right. All right. I’ll check your thumbprints. But there’s no need to get shirty. I’m just doing my duty.”

“Right. But try to do it less unpleasantly.” The thumbprinting was quickly accomplished, and Connors retreated to the televisophone. Daniels permitted Hoskins to lower his arms, but watched him wearily. Hoskins ignored him, spoke to Thorkel in low tones.

“We’ll have you out of those as soon as the checkup comes through. I got wind of what was going on up here only a couple of hours ago, and I sure burned the stratosphere getting here from Harbin. Just what has happened?”

Thorkel’s words tumbled over each other. Hoskins’ face was expressionless, but his eyes grew granite-hard. “I can’t figure it out at all,” Thorkel ended. “There’s something wrong, somewhere.”

“Greg was already dead when you got the first message.” Hoskins stated that humorlessly.

“Huh!”

“I’m not spoofing. The tip I got in Harbin gave me the picture. The Oriental spy reached here yesterday and tortured Vance to get the formula. Greg’s leaky heart gave way. The spy had the cipher, but he had to get you up here to read it. He posed Greg’s body in front of the visophone tube-eye and spoke from some hiding place nearby. The corpse started to topple, he had to pull the connection in a hurry. But he’d got what he wanted across.”

Thorkel objected, almost pleadingly.

“But Greg opened the door for me. He motioned me in.”

“That’s the meaning of those wires. The Asiatic scientists have found that by applying an electric current of a certain intensity to the proper brain areas they can produce muscular reactions in a dead body similar to those the same areas controlled in life. It is merely a refinement of the ancient experiment of making a dead frog kick by electrifying the muscles themselves. You disturbed the adjustment when you touched Greg, and he dropped.”

“He’s Hoskins, all right.” Connors’ reentry cut the friends’ colloquy short. “And H. Q. says we are to obey his orders to the letter.”

Daniels flushed brick red.

“I’m sorry, Lieutenant,” he stammered, “but I—”

“Forget it!” the Intelligence Man interrupted. “Unlock those cuffs. Then get out in your plane and scout for the killer.”

As the door closed behind the cops Hoskins swung back to Thorkel.

“But they haven’t the ghost of a show,” the latter said. “The spy is halfway back to Manchukuo.”

Hoskins shook his head.

“He must be hanging around. As long as you’re alive with the key to that formula he won’t give up. That’s why I sent the cops away. I’m sure he couldn’t have spotted my arrival. He’ll figure you’ve been left alone here, and return. We’ll be ready for him this time. He’s a sly fox, and we’ve got to be careful how we bait the trap. The stage must be set just right. Let’s see—” Hoskins’ eyes were glowing with a strange light. “Get back in that chair and play ’possum. I’ll hide in the other room.”

Thorkel sprawled in the chair, his head lolling.

“How’s that?”

“Great! But keep your eyes closed. And—I almost forgot! You had better give me the keywords to the cipher in case anything goes wrong. He may get one of us.”

“The keywords are—” Thorkel cut off. Greg’s unclosed, dead eyes seemed eerily to signal a message to him. Words echoed within his brain. ‘Remember—give the formula to no one else, whoever he is, no matter what the circumstances.’ “Perhaps I had better not, Cliff,” he said slowly. “Greg enjoined me to give the secret only to the Secretary of War, no matter what happened. I’ve a queer feeling that I should not disobey him.”

Hoskins’ black eyes blazed sudden wrath. Then, with a visible effort, he was smiling.

“Don’t be a fool, old man. Greg could not have foreseen our present predicament. Besides, you know damn well that he would have entrusted the cipher to me, had I been available. He told me his plans months ago.”

“You’re right, Cliff. I’m a superstitious ass. The words are—” There was a jarring thud against the door, and sounds of a scuffle. A blast of cold swept in a struggling group. The two Flyies were back, and between them—Dean grunted in astonishment—between them was the wizened form of—Randall Haley!

Hoskins’ words were thick with inexplicable fury!

“What’s this?”

Daniels saluted.

“We spotted this guy going like blazes in one of them new one-man rocket

planes, but we couldn't get within two hundred miles of his speed. He landed about a quarter-mile from here, concealed his plane and sneaked right up to this house. He was trying to listen at the door when we jumped him!"

CHAPTER IV

Ho-Lung Unmasked

Thorkel stared at his assistant. Haley must have stolen the formula, must have known that he held the key. The damning facts tumbled into his brain chaotically. Information came to the *Newscast* editors' desks that was often suppressed—for the nation's good.

Haley's newscard would admit him where the general public was barred! Then Randall Haley was the Asiatic spy—Ho-Lung! He had returned to complete his crime, just as Cliff had predicted. Dean Thorkel leaped to his feet, flung out an accusing arm.

"Haley," he shouted. "Where's that paper? Where's the paper with the formula of the green ray?" His face was livid.

The little assistant editor appeared dazed. He retreated before Thorkel's fury, despite the Flyie's grasp on his arm.

"I don't understand, Mr. Thorkel," he twittered. "I—I came up here to get you out of trouble—to identify you. What—what paper are you talking about?"

"That acting won't get you anything, Haley, or Ho-Lung. You've got away with it for twenty years, but the game's up. You know what paper I mean; the paper you stole from my desk." Thorkel advanced on the man. Haley was against the wall, one foot was lifting, slowly, its sole scraping against the plaster. His lips trembled pathetically.

"—I don't know to what you refer. But—but if anything is missing from your desk, perhaps Mr. Hoskins can tell you about it. He looked through its drawers last night—said that you had sent him for something. I knew he was your friend and permitted it."

Thorkel thrust his face close to the birdlike countenance. "You lie, damn you."

"The whole night force will bear me out. Visophone them and ask."

There was ludicrous dignity in Haley's refutation, the ring of truth in his statement. Dean Thorkel wheeled to Hoskins, who had drawn a little apart. The chair was between, and Thorkel caught at it.

"What about it, Cliff?"

A faint sneer lifted the Secret Service man's lip. His hand hovered very close to the butt of his holstered gun. "He's just playing for time, Dean."

For an instant Thorkel was irresolute, then something snapped in his brain. The holes in Hoskins' smoothly spun story were suddenly caverns to his

sharpened perception. His fingers flattened against the metal of the chair.

“Maybe,” he barked, “maybe you’re right. You’re so damn pat with your explanations of everything, suppose you explain a few more things. For instance, how you got here right on the spot, moments after the spy escaped, without the Flyies’ having seen your plane. Why you were so all-fired anxious to get the keywords of the cipher out of me as soon as they were gone. And how it happened—I was a fool not to see it sooner—how on earth it happened that the faked call came in on my private line, the wave-length combination of which was known only to Greg, who was dead, *and to you!*”

Hoskins’ glance flicked past Thorkel. His gun leaped from its holder. His eyes were twin pinpoints of menace.

“I’ll explain, Thorkel,” his voice rang out. “And if anyone so much as twitches a finger I’ll explain with Trinite spray. *I am Ho-Lung!* Vance escaped me when his heart gave way, but I’ll get the formula from you, and all hell won’t stop me!”

Death vibrated in the room’s stunned silence. Hoskins—Ho-Lung—crouched, his lips retracted from white teeth. From the corner of his eye

Thorkel saw Daniels leap to one side, hunting the shelter of a cupboard, dragging at his weapon. Blue flame darted from Hoskins’ gun—once—twice—there was the spatter of pellets striking their target—and the flesh-muffled roar of the Trinite blast. The room rocked beneath Thorkel, and a warm liquid splashed across his face to haze his vision with a red mist.

As if of their own accord his hands jerked up the chair they grasped, hurled it at the momentarily distracted spy. Then he was off his feet, catapulting in its wake. *Crack!* The renegade’s face squashed under the newsman’s fist. *Crack!* Another hammer blow struck home. Hoskins was down, Thorkel swarming atop him.

He heard a faint cry—“Stop, Dean, stop it!”—but his hands were clamped about a soft throat, and berserk fury made his fingers a tightening vise.

Hands were pulling at Thorkel.

“Let up! Let go! Killing’s too good for him,” someone was shouting. He surged to his feet.

Daniels, white-faced, leaned against the wall. His left hand was gripped tightly about his right. He stared dazedly at a pool of blood on the floor, a pool fed by a diminishing stream from Haley’s shattered, legless torso.

Suddenly the shambles disappeared from Dean Thorkel’s consciousness. He darted to the body, jerked at a bit of black fabric protruding from the rags that had been his assistant’s fur coat.

From his nerveless hand a black robe hung sleazily, and a long black bandage through which two eye-holes had been cut! Thorkel stooped again.

His fingers, searching, encountered wires, a Trinite gun. Then paper rustled. He stared at cryptic symbols that danced before his eyes, symbols in Greg Vance's familiar handwriting. It was the cipher—the cipher that held a nation's safety! The proof was complete. It was Randall Haley who had stolen the formula, Randall Haley who was the torturer! Then—what about Cliff Hoskins?

“God, Dean, you've got the kick of a mule,” the self-convicted traitor mumbled, painfully lifting himself to a sitting posture, his mauled features twisting into a battered grin.

Thorkel held the disguise out toward Hoskins. “Then—then you are not Ho-Lung,” he stammered.

Hoskins' grin became more pronounced. He wiped blood from his mouth.

“Oh yes, I am Ho-Lung,” he said calmly. “I didn't lie.”

“But—but—”

Hoskins laughed.

“It's a bit complicated. I am Ho-Lung, one of Asiatica's most famous spies, and yet I am not a renegade to the white race, nor a traitor to the American Intelligence Service.”

Thorkel's expression of dazed perplexity was pitiful. “I don't understand.”

“I don't blame you. I was born in Asiatica, the son of American missionaries who were both killed in an accident soon afterward. I was adopted by Ho-Chien, an Asiatic high in the Secret Service of that country. He sent me to America to study, with the very brilliant idea that close acquaintance with our country's ways and customs would make me a most efficient spy indeed.

“What Ho-Chien did not count on was the call of my own people. At the University I realized that I was an American, a white. I realized that I could be of tremendous service to this country by pretending to continue to play the part of an Asiatic spy, while being in actuality a member of the American Intelligence Service. I told Ho-Chien that I was doing to America what I was actually doing to the Asiatics, that I was acting as a member of the American Service in order to further my work for the Easterners.”

“But you—Ho-Lung—are notorious as a shrewd, cruel spy. The exploits with which Ho-Lung has been credited—”

Hoskins chuckled.

“Yes, I have built up quite a reputation for Ho-Lung, so much so that he has become a legend of terror. That, I imagine, is why Haley signed that name to his communications threatening Greg. And it was a sort of poetic justice. For the way Ho-Lung got his reputation was by stealing credit for the work of others.

“You see, the Oriental Service is so managed that no one agent is known to another. Each works independently, getting what aid he can manage if he needs help. It was easy, then, for me to drop hints that this, that, or the other deed was mine, careful hints that spread in just the right quarters. Of course, every so often I did turn in real information, obsolete plans of fortifications, specifications of armaments carefully altered so that they were useless, names of American spies whom I knew had already been discovered, or were in a place of safety.

“There was one operative, somewhere in America, who was particularly successful, and whose identity I could not ascertain. It was he who turned up what Greg Vance was doing, he who had charge of the operations in connection therewith.”

“Randall Haley!”

“Randall Haley. He got the wave-length combination of your private line by the old device of a waxed sheet hidden in the memo pad on which you jotted it for me.”

“But why did you denounce yourself as Ho-Lung?”

“Because if I hadn’t we’d all be shreds of pulped flesh now, blown to bits. I wondered why Haley shrank against the wall, why his foot was lifting, scraping against it. And then I saw a tiny bit of metal, there, that fine wire running out through the door-edge.” Hoskins pointed at it.

“I guessed what he was up to. The current he used for the torture wire came from a small but powerful battery concealed in his clothing, the circuit grounded through the sole-nails in his shoe. If Asiatica could not have the formula, he was determined no one should. If the contact in his shoe ever reached that wire, a spark would have set off a Trinite bomb he had previously buried beneath the ice just outside.

“My claim to be Ho-Lung confused him just long enough for me to get my gun out. The cop grabbed for his own gun. I had to shoot the gun out of his hands to save myself, and all of us. But I got Haley!”

“Great work,” Thorkel exclaimed. “Yet Haley won anyway. We’re alive and we’ve got the formula. But Vance is dead, and it will never be completed now.”

“I wonder. What’s on that other slip of paper? It fell out when you pulled the formula from the dead man’s clothing. You were too excited to notice it.”

Thorkel looked where his friend pointed. Then he snatched the bloody slip of paper up. Words were scrawled on it, five words that changed the history of the world.

“Increase third acid by 1.2%.”

Dean Thorkel’s voice dripped into the cold.

“Greg’s handwriting. He finished it. He finished the formula.” Thorkel pulled a sleeve across his forehead, clearing away a vision of blazing homes, of a yellow swarm pouring over a fair, happy land. “Let’s get going to Washington, Cliff. They’re waiting for the green ray.”

Cliff Hoskins stuck out a big paw.

“Go ahead, old man,” he rumbled. “I’ve got to get back to Manchukuo. There’s work waiting for me there.”

TRANSCRIBER NOTES

Mis-spelled words and printer errors have been fixed.
[The end of *The Green Ray* by Arthur Leo Zagat]