



DEATH DERIVATION

by MAJOR T.A.B. DITTON

Murder in the skies. The slain pilot lay slumped in his cockpit—the blue mark of a pistol shot on his forehead. A mysterious killing in the air that will keep you guessing.

IT'S QUEER, anyway you look at it!" Len Hartshorn, Manager of the Western Airways Express slumped in his chair with a gesture that bespoke despair.

"Can't say that I see anything queer about an overdue plane. Chief. Ever hear of forced landings?" Dick Hull flung his helmet on the executive's desk and fished a cigarette from the pocket of his leather jumper.

The Manager smiled grimly. "Yes, Dick, I've heard of forced landings and overdue planes many, times since I've been in this racket. But I repeat that when a ship, carrying a half million dollars' worth of cash and negotiable securities, piloted by a man who has never

in his career been off schedule, is overdue, something is queer!"

Dick stiffened. Larry Sewell, the pilot of the overdue plane, happened to be his buddy. They had been cadets together at Kelly Field; had gone overseas, and were assigned to the same Camel squadron in France. And many a sweet scrap they had fought together. "You're not hinting—"

"Be your age, Dick," the Manager cut in, "I'm not hinting anything. But you must admit I've good cause to worry. Larry knew the route to Pascal like a book. He could fly it blindfolded. When he took off last night he had a following wind, and the simplest of dead reckoning should have landed him at the northern drome."

"Pretty black last night, Chief," Dick replied. "Maybe he went off his course."

"Don't see how he could. Pascal lies due north, and with the wind behind him there was nothing to it"

"How about his compass," Dick persisted.

"The ship was swung just before he took on the mail, and the compass tested okey."

"Hmm," Dick grunted. And yet the boys say they have flown over every inch of the route and can find no trace of him."

"You agree, then, that it looks fishy?" There was a harsh note in Hartshorn's voice which Dick didn't like.

"See here, Chief, I don't like the way you say that. I can't read what's back of your mind, and moreover I'm not going to try. But let me set you straight on this. There isn't a finer, straighter guy than Larry made, and there won't be for some time!

"It's a cinch that he didn't vanish into thin air just to set us sweating and worrying. No sir! Something has happened to him and it's up to us to find out what!"

Dick's outburst had its effect upon the manager. "Hell, Dick," he said apologetically, "I didn't say that Larry—"

Dick cut him short. "No! You didn't say anything, but you were thinking a whole lot. And those thoughts weren't any credit to you or to Larry!"

Dick snatched up his helmet and strode toward the door. "Well," he said with an air of finality, "all our gassing won't solve the mystery. Let's take the air."

Hartshorn agreed and together they left the office.

DICK'S FACE carried a worried look as he climbed into the cockpit of the DeHaviland that served the Western Airways as a general utility ship. He had racked his brains for a solution to Larry Sewell's disappearance and could find none. That something serious had happened he was certain. But what?

Larry wasn't the kind of pilot that is phased by a failing motor. The route to Pascal was a fairly comfortable one in case of forced landings, and Larry was a past master in the art of setting his ship down easily without his engine. In any case, had he been down on the route, the boys would have spotted him that morning.

With the compass working true, and a following wind, there was no reason in the world why he should go off his course. Larry was a wizard at dead reckoning, too. So that even in the event of a cross-wind he could quite easily navigate his ship. And yet, whether by accident or design, he must have left the ordinary route.

Dick turned to Hartshorn, who had taken a place in the rear cockpit. "Guess I'm stumped as to direction, Chief. Got any special preference?"

"Better swing northeast to Three Forks and then cut back into Pascal," the manager replied. "We can fill up there and cover the western arc on the way back to the drome. That ought to give us quite a look at things."

Dick nodded his approval. He threw the throttle wide open and sent the ship roaring to a takeoff.

Gaining height, the DeHaviland flew steadily in the direction of Three Forks. Hartshorn, his eyes glued to a pair of binoculars, was carefully scanning the country beneath them. Neither he nor Dick made any attempt to communicate with each other and only an occasional shrug of their shoulders told that so far their search had been fruitless.

Below, stretched out in panorama, lay a sparsely settled country that, except for a patch of white, studded here and there, gave the appearance of being thickly wooded. It was to these patches that the flyers directed their gaze. Years of experience had taught them that such markings, as seen from the air meant clearings in the woods which even at night were plainly visible from aloft, and likely places for a forced landing under any conditions.

If Sewell was down on this side of the Pascal route, and it was inconceivable that a pilot of his ability had strayed so far from his course, they hoped he had made a safe landing in one of those clearings.

Dick was pushing the DeHaviland at about two thousand feet—he figured at this height they could command a fairly good view of the country and at the same time easily pick out objects on the ground—when Three Forks came into view, just a blur, it seemed, connected to civilization by a lone white road that wound itself through the ragged contours of the surrounding country like a white serpent.

Directly in front and paralleling the road Hartshorn picked a clearing that had attracted him because of its size. Through the binoculars his keen eyes detected an object that claimed his whole attention. Scarcely visible against the whitish hue of the ground about it he discerned the outline of a plane. Excitedly he thumped on the fuselage to attract Dick's attention.

Dick nosed down and cut his engine.

"Ahead and to the right," Hartshorn yelled.

Dick glanced overside, and nodded his head. "One of our ships, too, or I'll eat the old hat!"

He banked sharply, right wing down, and turned

into a spiral. Then he leveled out, glided into the clearing, and set the ship down within a few feet of the plane they had spotted from the air.

It was the missing Boeing.

THE DEHAVILAND had barely stopped when Hartshorn leaped from the rear cockpit and raced to the truant ship. It was setting, nose into the wind, in perfect landing position. There was no sign of a crash.

Hartshorn's spirits reached their highest point since the ship was reported overdue. He was sure that Larry, true to the airmen's code, would not desert his plane.

"Larry," he called out almost joyously.

There was no answer.

"Larry." His voice echoed through the clearing and the ominous silence which followed grated on his nerves.

He reached the ship and hoisted himself to the cockpit.

A startled exclamation escaped him. Slumped in the cockpit, his head face downward on the instrument board, was Larry Sewell.

Hartshorn gently shook the inert figure. "Larry," he said soothingly. "You're alright. Look up, boy. It's Len!"

The pilot's head flopped grotesquely. Hartshorn jumped to the ground with an expression of horror.

Sewell was dead, and a small blue "mark on his forehead was mute evidence that he had met with foul play.

Dick rushed up to his chief. "What's the trouble?"

Hartshorn was feverishly tearing open the doors of the mail cabin. "Murder," he replied tensely, "and robbery!"

Dick was stunned. "You don't mean Larry," he faltered.

Hartshorn nodded. "Larry has made his last flight, boy," he said and indicated the cockpit. "And whoever washed him out stole the bank shipment. The skunks shot him as he sat. He didn't have a chance!"

Dick became calm again. "Chief," he said quietly, "I'm going to get the yellow-backed dogs that did this job if I have to write myself off in doing it! Got any ideas?"

"None except that I think this was done from the air." Hartshorn had been taking stock of the ground, and his gaze was focused on the plainly distinguishable marks of a second tailskid that had ripped into the surface of the clearing.

"There's been another plane here, alright," Dick agreed, "but that wouldn't explain how Larry got

here. Judging from appearances he made a pretty neat landing, so he must have come down voluntarily."

"That's where the rub comes," Hartshorn replied. "He was off his course considerably, and the devil only knows how he got over this far! But, in any case, I don't see why he should choose to land here. And, furthermore, how in blazes did the crooks know he would?"

"Don't know, chief, but it's a cinch they had a pretty good idea. About the only thing I can suggest is that they used a flood light to attract his attention and then bumped him the moment he sat down."

HARTSHORN pointed out the wheel marks of a heavy truck that led into the surrounding woods. "That's about the size of it," he agreed, "and the light was mounted on a truck. But even that doesn't explain how Larry came to be a hundred miles or so east of Pascal."

Dick inclined his head whimsically. "Chief, if we could answer that we'd know the story. Those crooks had it figured out somehow, but it's my life against a bad spark plug that Larry Sewell wasn't wise to it! How about the mail?"

"Mail's untouched," Hartshorn told him. "The crooks were in too much of a hurry to bother about that."

"Those guys were certainly well informed," Dick remarked.

Hartshorn glanced wearily at the cockpit of the Boeing. "Guess we'd better figure a way of getting out of here with these ships. Gotta get the mail back to the drome and on its way again." He made no direct reference to Larry's position in the cockpit, but Dick understood.

"You're right, Chief," Dick said quietly, "we'll have to put Larry in the DeHaviland. You can fly her back and I'll take care of the Boeing."

Tenderly they lifted the murdered flyer from the mail plane and carried him to the other ship.

Dick's face was a grim study as they deposited their burden in the rear cockpit of the DeHaviland. He felt keenly the loss of his buddy, and the intense fierceness burning in his keen eyes boded ill for the perpetrators of the deed, should they ever come within striking distance. And Dick Intended that they should.

THE RETURN journey to the drome was a sad one. To Dick it seemed unreal that Larry, who had driven the Huns from his tail in the good old days, was riding,

stark and cold, in the DeHaviland that was whirring its way through the atmosphere, just ahead. The steady purring of its motor seemed like a funeral dirge that both saddened and infuriated Dick.

Ordinarily he was no instrument pilot. He flew by air sense. Trained ears told him, unfailingly, when his motor was hitting the required revolutions. And thousands of hours of experience had given him an uncanny judgment of height. Except in unusual circumstances, he seldom looked at the instrument board that had proved the savior and the undoing of many good pilots.

Dick reasoned that delicate instruments were susceptible to many things which might throw them out of adjustment, whereas good eyes, working in complete unison with a highly developed air sense, were infallible.

It was quite a coincidence, then, that he glanced at the compass of the Boeing. There was no real reason for this action, since he was following in the wake of Hartshorn who was setting the course back to the drome. He had made no connection between the compass and the happening of the night before, because of Hartshorn's assurance that the instrument had been tested and found O.K.

The compass indicated that he was flying due south.

"That's blamed funny," Dick muttered. "Here the old bubble says I'm heading south when I know we're flying in a direct line from Three Forks. And that's southwest."

To satisfy himself that his deduction was correct he banked the ship sharply, and aimed her nose at Three Forks. The compass read due north.

"That explains a lot," he declared between set teeth.

He brought the ship around again with the same result. The compass swung to due south and remained steady.

ASSURED that it was not a temporary condition, the realization came to him that Larry had been deliberately led off his course the night before. Flying, as he had been, in the blackness of a starless night, he had no other recourse than his compass with which to navigate his ship. Dead reckoning would have to be computed on the basis, then, of flying time to Pascal, and Larry, thinking that he was traveling due north, had figured that about two hours of flying time would bring him to his goal.

Dick whistled softly. "That explains some more," he thought.

The clearing where they had found the Boeing was about two hours flight from the drome.

Soon they were over the Western Airways Drome and the planes lost no time in landing.

Leaping from the cockpit Dick hastened to Hartshorn in order to tell him of the discovery. Meanwhile the handlers busied themselves unloading the mail from the Boeing.

"Say, Chief," Dick asked, "didn't you tell me the compass on the Boeing tested O.K. before Larry took off?"

"Sure I did," Hartshorn replied. "Well, how come? As near as I can tell there is about forty-five degrees deviation to the Northeast on that bubble right now!"

"Can't be, Dick," Hartshorn said incredulously. "I saw that ship swung myself."

"Yeah? Well take another look at it!"

The ship had been trundled to the front of the hangar and her nose was pointing toward Pascal. Hartshorn climbed onto the fuselage and studied the compass. It gave a correct reading of due north.

"Say, Dick," he said, "You're all wet! The blamed thing's right to a degree!"

Dick could scarcely believe his eyes as he verified Hartshorn's statement. But quick as a flash the answer came to him. The handlers were carting away the mail on a trolley.

"Bring back the mail," he bellowed. "And stow it aboard that Boeing."

The men did as he bade them. Together Hartshorn and Dick noted the result. The compass immediately took on a deviation to Northeast.

"The answer to a lot of things is in one of those bags. Chief," Dick said simply.

A U.S. mail clerk was approaching them. Dick indicated the bags. "Can you bust the seals on those bags, buddy?" he asked.

The mail clerk shook his head. "I'd need a real good reason for doing that, Mr. Hull."

"Murder is reason enough, isn't it?" Dick queried.

The mail clerk looked quizzically at the grim faces of the flyers, then silently fell to removing the seals from the mail bags.

DICK Poured their contents on the ground and began sorting the packages of letters. Suddenly his hands encountered a package that was unusually heavy to be included in the air mail. He flung it unceremoniously into the pilot seat of the Boeing. The result was instantaneous. The compass immediately deviated to the Northeast again.

Dick grunted in satisfaction. "The baby that thought this out sure knew his stuff," he said.

He thoughtfully weighed the offending package in his hands. "Soft iron, I'll bet And planted in the mail on the same theory that held good with the old General Service compass during the war.

"Remember how we used to put those little sticks of soft iron in the stem of the compass to compensate for the presence of mineral deposits, or the metallic attraction of the plane? Well, using their knowledge in this direction the crooks, by placing this little gadget in the mail, made reasonably sure that the plane carrying the express shipment would fly in a northeasterly course and thus arrive over the spot they had selected to pull the stunt. You know the rest, Chief."

Hartshorn shrugged his shoulders despairingly. "A clever move, Dick. And now that we know how the trick was turned, what are we going to do about it?"

"We're going to do nothing but wait, Chief. What those crooks pulled once they are likely to try again, particularly if they are led to believe that the method remains a mystery. Let's shoot this package to where it's addressed and announce that Larry, off his course, was forced down by engine trouble. We'll say he was murdered by some itinerant thugs who happened to be hiding in the woods. In a few days we'll arrange a fake shipment of valuables and see what happens.

"Meanwhile there's work to be done. I'll rig up that old gun gear on the DeHaviland because I've a hunch we're going to use it"

He turned to the mail clerk. "You keep an eye on the mail, buddy, and if you see another package like this, let us know . . . pronto!"

THEY WERE BUSY days that followed. The newspapers had published the fact that on a certain day Western Airways would transport a bank shipment, by air. And the Post Office authorities, in keeping with Dick's plan, had withheld action in attempting to run down the crooks.

Dick had mounted a synchronized gun on the DeHaviland rigged with an old CC gear, to fire through the propeller. The rear cockpit contained a deadly-looking Browning. Dick hoped he was soon going to hear both of those guns bark revenge for his slain buddy.

His whole plan of action was based upon the supposition that the crooks would attempt a coup similar to the one which brought about Larry Sewell's death. And in this he was not disappointed. On the

night of the supposed shipment the mail delivered to the Western Airways for transportation contained the sinister package upon which the crooks engineered their plans.

Dick burst into the executive office of the line. "It's here, Chief," he shouted to Hartshorn, "they mean business!"

Hartshorn jumped up from his desk and hastily pulled on a flying helmet. "The Post Office people are going to cover the road running out of Three Forks. If the thing works out as we expect the ground crew will be nabbed on their getaway. Our job is to get the plane and its pilot!"

"That's easy, chief," Dick assured him. "I'll land into their lights, and the moment I set the ship down you spray that clearing with the Browning. But for the love of Pete watch yourself. They're bad eggs. You know what happened to Larry!"

They ran to the DeHaviland and climbed aboard. The mail clerk was standing beside the plane. He offered Dick a package which was waved aside. "Don't need it, buddy. This time we know all about it."

The roar of the DeHaviland's exhaust drowned out further conversation.

Dick taxied out into the darkness from the drome, maneuvered into a light wind and took off with a thunderous roar into the blackness of the night. He pulled into a sharp climbing turn, flattened out, and set his course toward Three Forks. His face set in a grim smile, he glanced at the dimly lighted compass. It read Northeast.

"And no deviation," he muttered.

PURRING A STEADY song the DeHaviland cut its way through the night. Dick sat sphinx-like at the controls. Behind him Len Hartshorn, his lips gripped tightly in a thin straight line, was fiddling with the Browning gun. But Dick paid no attention to him. From his altitude he might have been unaware of the Manager's presence in the rear cockpit.

He held the ship on a steady course and stared ahead as though to pierce the inky gloom that surrounded them. Of the fact that he was literally poking into danger he was unconcerned. He thought only of the cowardly manner in which the robbers had disposed of Larry. And the thought spurred him to greater effort. He was flying now, not only to engage in combat, but to avenge.

A dull red glow on the horizon ahead announced the town of Three Forks, perched, it seemed, between

the dark line where earth met sky. Dick nosed his ship up and down repeatedly to attract Hartshorn's attention, then cut his engine.

"Pretty close now." Dick turned his head and strove to make himself heard above the moaning of the wind through the DeHaviland's sturdy frame. Hartshorn signalled his understanding and Dick again gunned the ship. Then he tripped the switch of the signal lights on the wing tips.

He was wondering whether the crooks would take the bait, when a shaft of white light suddenly stabbed its way through the darkness. An exclamation of satisfaction escaped him. He switched his own lights on and off as a signal to those below that he was going to land.

Immediately a flood of bluish-white light illuminated a space beneath.

Dick chuckled. "The spider and the fly. Only this time the fly is going to sting!"

He cut his motor and went into a tight spiral. Then he pulled out and slipped for landing position. A thumping on the fuselage told him that Hartshorn was ready.

At the edge of the clearing he banked into the slip and leveled ship, holding the DeHaviland off until she settled nicely in the full glare, of the lights that had been used to attract him.

AS THE SHIP glided in some figures detached themselves from a group standing by a second plane, drawn up at the side of the improvised drome, and started toward the DeHaviland. Its motor just ticking over, Dick's plane came to a full stop. Instantly the report of a rifle made itself heard above the droning of the engines.

A bullet whipped through the air with a vicious whinny. Dick ducked and yell to Hartshorn. "Let 'er go, Chief!"

Hartshorn brought the Browning into play immediately. Coughing a steady staccato Len's gun poured a stream of lead and steel across the clearing at the advancing members of the gang.

Taken by surprise at the unexpectedness of the sudden attack they were easy victims for the Manager's first burst. As though stricken by some invisible force the men who had started toward the DeHaviland toppled over and lay still.

A fusilade of shots hummed about the Western Airways ship. Unmindful of their droning death-song Hartshorn swiveled his gun at the bandits visible to

him in the ghost-like rays of their own landing lights.

A hoarse command was heard above the chaos that ensued. At once the clearing was plunged into darkness. The bandits had extinguished the flood light

The roar of a motor as it sprang to life sounded through the gloom. A golden line of fire streaked by the DeHaviland and hurtled into the air.

Dick grasped the situation immediately. "Sit tight Chief, the skunks have taken off!" he yelled.

He gunned his ship and roared down the clearing in the wake of the fleeing plane.

The old DeHaviland lunged into the air and headed into the darkness. Ahead Dick could see the tree-tops faintly discernible against the pall-like sky. He held the DH down until it seemed inevitable that the ship must crash headlong into the ominous blackness of the woods. Then he zoomed.

His ship shot skyward, climbing vertically until she was literally hanging on the prop. In the fractional second that splits flying speed from stall he caught her and nosed down. The ship hovered for a split second, caught the controls, and roared its way forward, the landing gear almost skimming the trees beneath.

"And that," breathed Dick, "is a takeoff on any man's field."

THE BANDIT SHIP was streaking into the night, invisible except for the thin line of flame darting from its exhaust. Dick climbed his DH sharply and swung its nose at the cone-like trail which betrayed the other's position. As the ships came into line he pressed the trigger release and let loose a burst from the timed gun. Instantly the bandit answered. Little shafts of reddish fire stabbed the intervening space and ripped a vicious path through the fabric of the DH.

Dick smiled grimly. "Tracers, by golly! And thanks for the information about that rear gun. Guess I'll have to be real careful about sitting on your tail."

The bandit, by reason of the takeoff, had the advantage of the ceiling. And he intended to make use of it. He Immelmanned suddenly and came down in a vertical dive. A glowing stream of tracers thudded furiously into the cowling of Dick's ship.

Stung by the flying fragments Dick became fighting mad. He forgot everything save the fact that he was in the air with an enemy to contend with. And what an enemy! The first maneuver had convinced him that the bandit knew his stuff when it came to aerial combat.

As the bandit whipped by them Dick's stick was pulled hard back and he kicked on full right rudder.

His machine shot into a vertical climb, turned on its wing tip, and came hurtling back. Dick let his stick go forward and the DH roared down.

The bandit straightened out and slipped off on one wing. The gun in his after cockpit poured a withering fire into the mail plane as it careened madly by.

With a sharp climbing turn Dick brought the nose of the DeHaviland around and flashed under his opponent. Hartshorn had been waiting for such an opportunity. His Browning belched a deadly greeting into the fuselage of the bandit ship.

Taken by surprise the other whipped upward until the machine was actually standing on its tail. The inevitable stall followed and the bandit, daring the fusilade from Hartshorn's gun, dived crazily and came tearing at the DeHaviland's tail. His forward gun spit a terrific stream of bullets that raked the Western Airways ship unmercifully.

Dick had not anticipated the maneuver, but unhesitatingly he pulled the stick hard back to loop out of danger. The DeHaviland zoomed upwards and over, hung, for an agonizing second, on its back, then swooped out of the loop, diving under full power.

The bandit plane continued to dive and Dick leaned forward for the kill. As the nose of his ship lined with the other he pressed the trigger release of the synchronized gun and loosed a hail of spurting lead into his opponent.

Instantly a great tongue of flame pierced the night. The burst had taken effect. The bandit's motor spluttered as though its feed line was punctured and the ship commenced to weave an erratic course across the sky. Its pilot was trying desperately to blow out the flames, first by stalling, then slipping off on alternate wings.

DICK THREW the DeHaviland into a spiral and circled around the stricken plane. Relentlessly Hartshorn swung his Browning into action again. A chattering shower of death ripped into the burning ship. The plane swerved crazily at this latest attack, then fell into a spin.

The increased momentum served to fan the fury of the flames that enveloped it and the plane went down, a helpless, blazing mass. Dick and Hartshorn watched it crash into the trees beneath, and a scattering of fire told them that the tank had exploded with the impact.

Dick throttled his motor and shouted to Hartshorn. "Guess we can write 'Finis' to that guy's career. That little conflagration ought to give poor old Larry some satisfaction."

"Right! Now what?" The Manager shouted back.

"The drome, pronto," Dick replied. "This crate wasn't built to combat work and diving under full power ain't the best exercise in the world for an old DH. If we don't give this baby a feel of the ground pretty soon she's liable to fold up."

"Let 'er go, boy," Hartshorn yelled.

In slightly more than an hour's time they were over the drome. Dick set his bullet-scarred ship down and taxied to the hangars. They crawled out of the cockpits and hastened to the executive office of the line. The telephone was ringing noisily as they entered. Hartshorn answered and spoke at some length. Dick smoked a cigarette in silence.

The Manager replaced the receiver and turned to Dick.

"That was the Post Office people, Dick. They have taken the entire ground crew with the exception of the bunch we knocked over, and they didn't need to worry about those."

"Did they put up much of a scrap?" Dick asked.

"The Inspector says not. They surrendered very easily."

"Can't blame 'em for that, Chief. The way you ripped that gun into them would take the fight out of anybody."

"The skunks had it coming!" Harshorn said tersely.

"That and more," Dick agreed. "Did the PO johnny say anything about the pilot?"

"Yes. He was a renegade Spaniard who learned his stuff in Morocco. His was the master mind of the gang that is responsible for quite a few of the crashes on the mail lines in the east. The Inspector said the line is to be congratulated for the way in which he was nailed. I think something was mentioned about you being a darned good pilot, too, but I didn't listen to that. Any boy who can throw a DeHaviland around the way you did is no slouch in my estimation. Oh, boy, I expected the old crate to fall to pieces any minute!"

"Me, too, Chief," Dick replied meaningly. "But the incentive was there. I had to get that baby. . . . for Larry."