The Great Ice Floe

Though it meant risking \$500,000, Ralph Cox was just too stubborn to admit his crippled bird was dead. And so the fantastic Arctic haylift began



Ralph Cox (right), youthful boss of U.S. Overseas Airlines, aboard hay drop plane as salvage effort starts.



Sister plane flies over crippled N90407 in Hudson Bay dropping salvage equipment pontoons to go beneath wings, sawdust for hardening ice.

Gamble

To insurance company which investigated plane, ice-locked N90407 was beyond salvage. Cox said it could be saved.

The navigator stared into his drift-meter. and could hardly believe his eye. Either the ice field below him was speeding

southwest at 160 mph., or the DC-4 cargo plane was standing still, held locked in place by the winds at 5,000 feet. A violent gust slammed the airplane, blacking the navigator's eye on the eye-piece.

"How are we doing?"

"Captain Bale, we aren't. We just aren't doing at all."

Only the Arctic could produce conditions like that. On a bright spring day, with visibility unlimited, winds out of nowhere were making the flight plan meaningless. Already the United States Overseas Airlines aircraft N90407 was an hour overdue at Churchill, Manitoba, with no land in sight. Only the ice of Hudson Bay, and that ice pressured

by George Scullin in

into great ridges up to 50 feet high in a chaotic pattern.

Two hours later, at 11:45, the crew felt a momentary surge of hope. Capt. Bale had picked up some speed by sliding down on a gradual descent, and now the huge grain elevator that is a Churchill landmark could be seen as a dot on the southwest horizon. But at noon it was still a dot, and No. 3 motor was coughing that starved splutter that can mean only one thing. No gas.

A thousand feet below, in the midst of a jumble of pressure ice, was one oasis of floe ice less than half a mile in diameter.

"Fasten your safety belts," said Captain Bale, and started down.

With luck, full flaps, and good brakes, it might be done.

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Crucial moment during sawdust bombing was snapped by Cox's camera. Burlap sawdust bag snagged on door frame, hits left elevator squarely as pilot pulls up. Plane dipped violently, barely escaped joining sister plane on the ice.

The tiny floe rumbled and they got out fast. Then a cold front, with zero weather, moved in. When it lifted, the plane was gone. Had they lost the gamble?



"Kickers" in flying plane unload hay and sawdust as they try to convert floe into insulated island that would resist Arctic spring thaw.

But as he turned into the final leg of his approach at 500 feet, the wind glancing off the pressure ridges created such turbulence that he dared not lower his flaps least a sudden gust boost him 100 feet and then drop him like a pancake. It was knife through or nothing—and pray the brakes would hold.

There was no way of seeing the small, drifted-over ridge of ice that crossed the floe. It was only three feet high, and N90407 almost had it made when the ridge tripped it up. Almost gently the right landing gear folded. For only a second the propellers of No. 1 and No. 2 engines chewed ice, and there was only a faint droop in the right wing when the plane slithered to a stop. Technically, it was a perfect landing, and the crew walked out unscratched.

And technically, too, that should be a happier-than-most end of the story. When the Arctic claims an airplane, it is usually for keeps, and it has claimed many. Even hardheaded insurance companies not normally free with their money do not try to buck the Arctic. The insurance company covering 407 sent up its experts, and they unanimously agreed on two points—first, that the plane could never clear the ice ridges enclosing it, not even with a rocket-assisted take-off—and second, that there was a less than 50-50 chance the plane could be repaired before the ice around it melted. The plane had made its crash landing on May 10th, in the midst of the abnormally warm spring of 1955, and while the investigation was being conducted during the following week, lakes of melted ice began to spread over the surface of the floe. In the meantime the freak gale that had caused 407's trouble in the first place had started powerful movements in the floe ice, and all around the doomed plane pressure ridges were groaning and straining to even greater heights, and threatening to erupt beneath the very plane itself. So the insurance company paid off in full—a half-million dollars. It could have been worse, for at least they did not have to pay life insurance on the six-man crew. This relief was avidly shared by the crew.

In any other business, that would have been the end of it. When coldly scientific, money-wise insurance experts prefer parting with a half-million dollars to facing the risks and possible losses of a salvage operation, the conservative business man can sensibly conclude that those risks are insurmountable. But airmen have always been a different breed, or they wouldn't be flying half-million dollar investments over the ice floes in the first place. When word finally caught up to Ralph Cox in Paris that 407 was down on the ice off Churchill, a crippled duck that could not be saved, he simply refused to accept it.

At 39, the medium-sized, sandy-haired, blue-eyed Ralph-Cox was the hard-driving founder of U. S. Overseas Airlines, and executive-in-charge, as he still is. N90407 meant a lot to him in a variety of ways. It was virtually irreplaceable, the independent operators having to stand in line for months to get new equipment. He needed the plane desperately. And then, it was an airplane, and that to a

Winging north from New England, at \$375 per day plus \$20-anhour flying time for pilot, is helicopter. Joining it were two small planes and a DC-4.



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pilot means as much as a good horse to a cowboy or a good ship to a captain. It was also worth \$500,000, which, to a young executive willing to take a chance can mean a lot more than it would to a conservative insurance company that can't afford to gamble on bad risks. If Cox *could* get the plane off the ice, he stood to make the difference between the salvage cost and the insurance money. If he failed, it meant company funds down the Arctic drain.

Two valuable days had already been lost in tracking Ralph to the Astra Hotel in Paris where he was conferring with officials over new regulations governing landing rights in French Morocco. For the past week he had been working up to 18 hours a day, sleeping on cargo during night flights, so that he could personally check the maintenance service his planes could get on runs to the Distance Early Warning Line, better known as the Dew-line, to the Arctic, to Casablanca, and to Frankfurt, Germany. This was what happened when Cox got word that his plane was down.

Message received at noon, Thursday, Paris time. Frankfurt that evening, Newfoundland by Friday evening, and home office in Wildwood, New Jersey at 3 a. m. Saturday, Eastern Standard Time. All north-bound planes on rush schedules for Dew-line, so no time available for detours by way of Churchill not even for the head man. On to Southhampton Island, and then east to Baffin Island. Dense fog. Finally an empty plane, southbound, that could pause just long enough in Churchill to dump him out. Time from receipt of message in Paris to arrival in Churchill, with detours to New Jersey and the Arctic Circle, 120 hours. Hours in bed, six.

"Coming into Churchill we spotted 407 on the ice," Ralph recounts. "We circled it once at 1,000 feet, and from that altitude it looked so ready to fly you just couldn't give it up. What really got me, though, was that Churchill was only 10 minutes flying time for the crippled plane. Talk about 'so near and yet so far.' All I could think of was that those 10 minutes were worth \$50,000 each."

What Ralph learned in Churchill only confirmed what the insurance experts had already discovered. The right landing gear was badly damaged, the propellers on No. 1 and 2 motors were bent beyond repair, and the right wing spar warped just enough to require the services of a major over-haul shop. And then there was the pressure of time The small lakes around 407 were deepening and already jagged ridges of ice around by the plane had reared so high that they blocked all access except by helicopter.

Airport officials and ground personnel of the Royal Canadian Air Force were pessimistic. "On a normal spring," Cox was told, "we have firm ice until well into June, and a large floe like the one your plane is on might float around until the middle of July. But this year, if the warm weather keeps up, well, maybe you have two or three weeks before the floe melts but what can you do with it?"

That killed any hope of using tractors to tow the plane over the ice to shore. And any possibility of repairing it for a rocket-assisted take-off. At least three weeks would be needed just to fly in the needed parts, let alone make the repairs.

Flying to Montreal in a cargo plane on the 18th, Ralph noted in his diary, "Feel very discouraged, and see no way to handle this thing."

After an exhausting three hours of telephoning engineers and salvage experts, and receiving not a word of encouragement in reply, Cox scaled down his big dream of a complete salvage job. In a night telegram he instructed his home office to offer the insurance company \$5,000 to buy back the salvage rights to whatever instruments and spare parts he might be able to reclaim before 407 sank for good. Then he collapsed on the bed of his Montreal hotel for his first good night's sleep in a week.

A good night's sleep restored Cox's optimism. How much time did he actually have? Did the long-range weather forecast indicate that the spring would continue to be abnormally warm? For the answer to that he was referred to the Canadian National Resources Board [Continued on page 87]



Eskimos and dog teams spread sawdust on floe, while another crew "mothballed" plane to protect it from salt water. Crew placed bridge pontoons under plane to float it if island broke up. Fickle Arctic ice was constant hazard.



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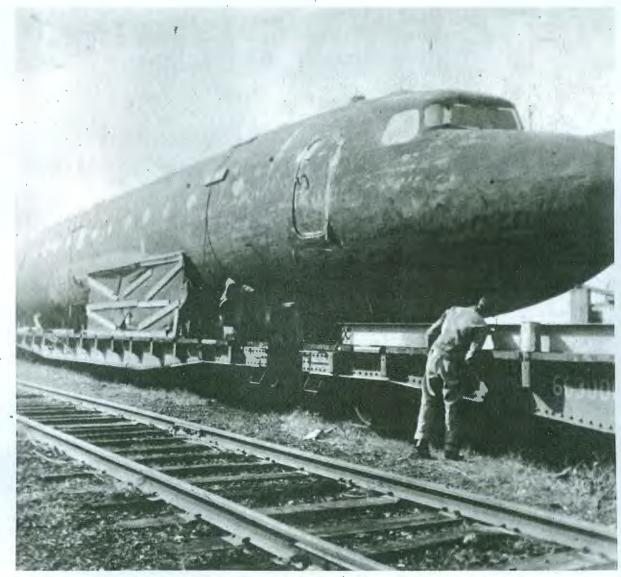
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Helicopter hurriedly evacuated island as ice gave way. One man had to ride outside cabin.



Loaded on seven flat-cars, the rescued, dismembered plane heads south to New Jersey, later to Brownsville, Texas. It is probably only plane in history with more railroad than flying time, cost almost \$500,000 to retrieve. For Cox, who got back his plane, the effort was easily worth it.

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