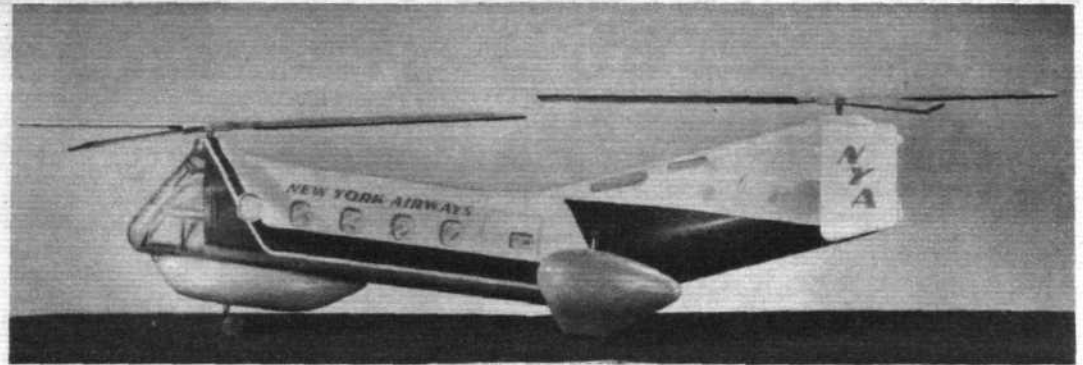


WHO BELIEVES IN HELICOPTERS? . . .

The striking blue, grey, white and red livery designed for New York Airways' Vertol H-44s. The "rocket red" is in Day-Glo fluorescent paint, intended to make the aircraft easily visible to the pilots of others.



1965, bringing in over \$9 million revenue and enabling them to dispense with a subsidy. It is interesting to conjecture what the results would be if 48-seat Rotodynes were substituted for the smaller, slower and less economical "Ship X."

If 2½ million passengers a year in one city sounds fantastic, it is well to remember that studies conducted by the Port of New York Authority and other competent organizations have put the anticipated helicopter traffic even higher. In fact, the U.S. Aircraft Industries Association has predicted an "almost explosive" growth in traffic between 1961 and 1965, to the extent that it expects some 30 million civil helicopter landings and take-offs by that year. By comparison, there was a total of 20,384,000 landings and take-offs by civil and military aircraft at all airports with C.A.A. control towers in 1956. It is anticipated that ten million of the helicopter landings and take-offs will be made by commercial operators, which exceeds U.S. domestic air carrier operations in 1956 by 50 per cent. This estimate is based on the anticipated use of 800 transport helicopters, which would be equivalent numerically to the U.S. domestic fixed-wing airline fleet in 1947.

The other 20 million landings and take-offs would be contributed by non-scheduled carriers, business helicopters and operations that come under the category of "general aviation," and which are expected to account for 25-30 per cent of future helicopter sales. This must also seem terribly optimistic to anyone living in the United Kingdom, sans scheduled helicopter services, sans helicopter-minded businessmen (except for a few pioneers like Richard Fairey) and sans much initiative or encouragement from Government, industry or manufacturers. But again it is worth while turning our eyes westward, for there were 65 helicopters engaged solely on business flying in America a year ago, and since then one or two bright operators have been cashing in on the vast untapped potential of this market.

Typical is Helicopter Air Lift of Chicago, whose founder, Hal Conners, decided in the autumn of 1955 that there must be several senior executives in the city's 6,000-odd industries who would be willing to pay a reasonable annual fee for the convenience of having a helicopter permanently at their disposal for business trips. He was so persuasive that four leading companies—Motorola, Shell Oil, Texas-Illinois Natural Gas and Union Tank—soon agreed to use 200 hours of helicopter taxi service apiece each year. This enabled him to buy a three-seat Bell 47 at \$35,000 and to be assured of an annual profit from operating it. Then the idea snowballed. In a few months he had four 47s, to which he has since added a four-seat 47J, and his list of subscribers now reads like a directory of Chicago's top industry.

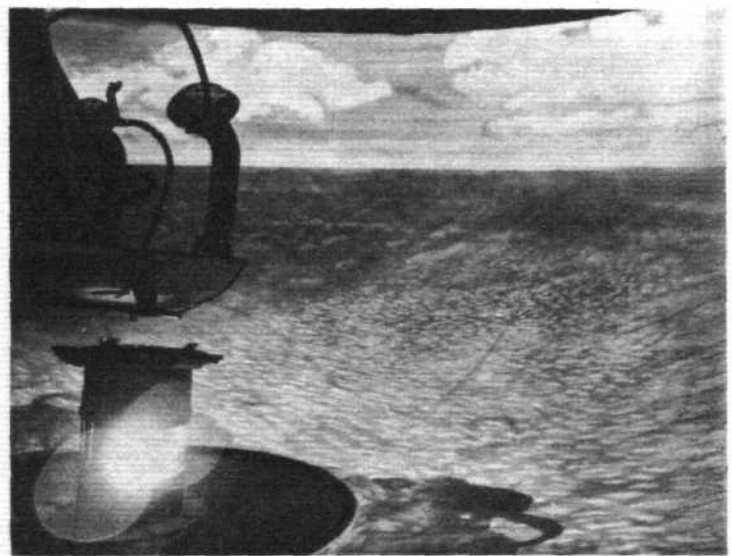
Customers can buy as little as 25 hours' flying at \$75 an hour. The rate drops to \$65 for 100 hours and even less for larger users. Nor is such a service practicable only in places with proper heliports, for H.A.L. helicopters operate regularly into 60 factory and office landing sites in Chicago, where it has been found that almost any roof strong enough to bear the sort of snowfall the city gets can also support a Bell 47.

This is only one bright idea, and only one way in which the helicopter is being used by industry and commerce in America. A single operator in Canada, Okanagan Helicopters, is able to find charter work for a fleet of 57 helicopters, made up of 36 Bells,

Social call: Back garden possibilities of the Gyrodyne XRON-1.

20 S-55s and one S-58, on work ranging from geological surveying and power line patrol to "flying crane" operations into sites perched frighteningly on mountain ledges. A U.S. operator, flying for the oil industry, carried some 150,000 people between off-shore drilling rigs and shore installations last year. In this respect, the variety of work that has been undertaken by helicopters is well known. Almost every one could be developed from dabbling to dividends by an operator with imagination.

What is the potential for the future? It is impossible to say; but the U.S. oil industry alone operates well over 1,700 aircraft at the present time; and the helicopter will do anything that a fixed-wing aeroplane can do, and more besides, except where high airport-to-airport speed is the prime need. To the business and commercial market must be added the unknown "personal helicopter"



Much work is being done, on both sides of the Atlantic, in the development of helicopter flight simulators. This is Short Brothers' new equipment, with dual-control cockpit (at left) and, below it, a horizon projector. Another projector, above the cockpit, gives the seascape.

market that may await a cheap, easy-to-fly machine like the Rotor-Craft Sky Hook, or a mass-produced tip-driven Skeeter, or a development of the ducted-propeller Piasecki 59X, which is only a different kind of helicopter.

These are markets that will endure even if the armed Services and airlines progress one day to some other form of VTOL or STOL design such as the tilt-wing aircraft, because there are literally millions of potential customers for a cheap, safe, easy-to-fly "family car of the air." Perhaps they are best typified by an 87-year-old Belgian harness-maker named Fleune DeCroupet, whose simple, moving little story was told in a recent issue of the United Aircraft Corporation's magazine, *Bee-Hive*.

It seems that last summer a relative presented DeCroupet with the winnings of a lottery so that the old man could fulfil a lifelong wish to see the Cathedral of Cologne. There, generations ago, a member of his family had been honoured for service to his church.

Shortly after he took off from Liege in a Sabena S-58, DeCroupet's eyes lit with excitement. He sat silently, seemingly transfixed by his novel experience. Fifty-one minutes after take-off the helicopter was over Cologne. As the old man looked down on the twin spires of the beautiful Cathedral almost at his fingertips, his eyes filled with tears and he spoke for the first time during the flight. In deep, resonant tones, he said:

"Voici comment Dieu voit." (This is how God sees.)

