

Aircrane in action against the flames

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We wrote before about the fire fighters, which is a very actual subject in summer. This story concerns a helicopter type that is medium military. In Greece it is based on military bases, and also in the other countries that use the Aircrane it is sometimes situated on a military base or cooperates very close with the military.

The Sikorsky S-64 Skycrane was in the sixties a striking appearance. But the Skycrane is no longer Sikorsky's. Jack Erickson who ever ordered four examples himself, started a 'love affair' with this machine, and got the production rights in 1992 himself. He managed to construct a brand new concept: the 'Erickson S-64 E/F Aircrane Helitanker.

Base don the old Skycrane

The S-64 Skycrane, in military version called the CH-54 Tarhe had never been a success. Though everybody knows the pictures from the Vietnam war,, the success of the 'Tarhe' was overshadowed by the success of the Chinook helicopter within the United States Army. The load could not be pulled exactly between the legs of the helicopter many times, and for the transport of troops a special cabine had to be mounted on the CH-54 Tarhe. In the civil business the orders were limited so the numbers of production needed to make it a commercial success were not reached. Erickson improved the helicopter at 1350 (!) different points on fuselage and electronic systems and he earned the H6EA type certificate for production of the re-newed machine, which is based on the conversion of ex-US-Army frames.

Orange Fire estinguishing Cannon

Erickson Aircrane in Central Point, Oregon is owner and manufacturer of the largest S-64 fleet in the world (18 examples) . Besides the commitment in the woods such as lifting tree-tames and bringing in heavy materials in the construction business the major application is fire-fighting and for that goal the Heli-tanker is on just one (the MI-26) the largest fire-fighting helicopter in the world. A tank of 10.000 liters (2650 gallon) hanging on eight hardpoints can be mounted and filled up with water and/or retardant for fire fighting. Though certain foams can be used to take away the oxygene in the fire, in 90 % of all cases the helicopters fly with tanks that are filled with water. The fire-fighting is often done by a watercannon which is able to produce eight minutes about 1136 liters fire-fighting liquids every minute ! The helicopter flies at about 50 meters high over the flames with a water-reach of 60 meters. A new feature is that the pilot is able to dose wit a so called 'multi-drop variable flow system', controlled by a microprocessor. They fly with two pilots, who have the most modern communication and navigation equipment and an automatic flight control system. A third man eventually is able to control what happens behind the helicopter and if absolutely necessary two extra people can be taken aboard next to the pilots. The intense orange colored helicopters all have their own names, such as: 'The Incredible Hulk', 'Elvis', 'Gloria', 'Batman' or 'Rocky'.

Hanging over a small lake

A flexible tube under the tank fills it with water from for example a nearby lake in 45 seconds!

Condition is a minimum depth of 50 to 100 cm. where the helicopter hangs above the water and a free circle without any obstacles is available of 70 meters. Above sea, a special 'sea snorkel' (tube) is used which can fill up the tank using a speed of 35-45 knots through the water. This last method is used extremely during the summer fires in Greece where sea-water is available almost everywhere. The heli-tanker is also very capable of operating in city-environment for the fighting of very local fires, you can imagine that this helicopter has many advantages in such occasions over a fixed wing plane. We have seen these actions in Californie, Sydney and Melbourne and recently Athens.

No joke

Though a large helicopter as this helicopter is, there is also a certain kind of ease and freedom in the use of it. This was experienced once by the personell of the MacDonalds when a Skycrane crew was standing in line for some nice Big Mac hamburgers. The gentlemen needed a fat snack in between their work. Looking out of the window of the MacDonalds, you could see the helicopter properly parked on the parking-place between all the other cars !

Welcome in the world

Foreign countries slowly 'discovered' this helicopter, born from emergency situations. Though actual helicopters have been sold to for instance the South-Korean KFS (Korean Forest Services, 4 examples) and the Italian Corpo Forrestale Dello Stato (they bought three, later on another two) more and more helicopters are being supplied by a leasing-contract. Next to the own United States Forrest Service (USFS) it also concerns the Ministry of Home Affairs in Greece, Mexican Forest Service, British Columbia Forest Service in Canada. Also the machine operates in France, Indonesia and New Guinea and on the Islands of Borneo and Serawak in Malaysia. Last but not least we cannot forget the Australians ofcourse who operate the popular helicopter from Swanston Docks, Melbourne under the name 'Erick The Waterbomber'. Italy bases the helicopter on Sardinië (Cagliari) and near Naples while Greece flies from amongst others Tatoi AFB, Athens and Andravida on the Pelopponesos. Saillant detail is that a Greek contracted heli-tanker was once employed in Turkey, in the neighbourhood of Izmit, Istanbul. This way, 'Fire Fraternises.....'.

Kees Otten and Wim Das

S-64E in short:

Engines: 2 x Pratt & Whitney JFTD12A-4A (T73-P-1) turbo engines 4500 pk elk (3555 Kw)
Length: 26,6m.
Height: 7,6m.
Width: 6,5m.
Rotordiameter: 21.95m.
Weight empty: 8,724 kg.
Pay load: 9,072 kg.
Maximum speed: 203 km/u
Average speed: 169 km/u
Reach: 370 km
Ceiling: 4.200 m.
