

Singaporean firm hopes its craft will take wing in China

Keith Wallis in Singapore

Cruising at 90 knots, six metres above Qinghai Lake or the Yangtze River as an alternative to a choppy ferry ride could become reality if a Singaporean company realises its ambitions.

WigetWorks, the Singapore-based manufacturer of the Wing-in-Ground effect AirFish 8, is targeting mainland entrepreneurs and ferry operators with its aircraft-like amphibian craft, which is forecast to enter commercial production by the end of this year.

Kenneth Tan Khoon Tuan, general manager of WigetWorks, says the craft rides on an air cushion between two and six metres above the water. High pressure under the wing keeps the craft aloft, while drag is reduced by up to 70 per cent. This means the craft is more economical than a conventional ship or helicopter because it can carry relatively more passengers or cargo for less fuel.

A prototype craft that can carry up to eight passengers was certified by Singaporean maritime authorities about a year ago after well publicised flight trials. United Nations body the International Maritime Organisation approved interim rules for Wing-in-Ground effect craft nine years ago,

which govern the design and operation of craft such as the AirFish.

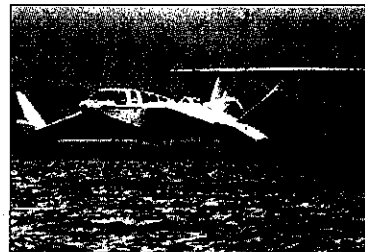
Tan said WigetWorks had "just stated production of an advanced prototype" to be used as the basis of the commercial craft. "We are looking at the later part of this year when we start taking orders," he said.

Tan said that although the external appearance of the craft would remain the same, the aim was to improve the design so commercial craft were lighter, can carry more payload and are easier to maintain.

Powered by a V8 car engine, the carbon fibre craft has a range of 300 nautical miles, runs on 92-octane fuel and cruises at 90 knots. Tan believes the craft will appeal to high-net-worth individuals and firms seeking to replace ferries or helicopters.

"China has thousands of lakes. Assuming 1,000 of these have two ferry operators, we are talking about 2,000 craft," Tan said, adding that the AirFish also has coastal applications. With a take-off run of 500 metres and capable of operating in waves up to 1.5 metres high, these could include operations in the Pearl River Delta, Bohai Bay or Yangtze River Delta. The Middle East and Southeast Asia were also potential markets, Tan said.

WigetWorks, which bought the



WigetWorks is targeting mainland entrepreneurs with its amphibian craft. Photo: SCMP Pictures

intellectual property of the AirFish design – developed by Germany's Airfoil Development in the 1990s – could assemble about 50 AirFish a year in Singapore.

The company plans to use carbon fibre hulls made in Thailand and components from other countries.

Asked about the price tag, Tan said: "Based upon our internal business model, we will position it just below that for an amphibian aircraft with a similar carrying capability." This would put the price at under US\$500,000 based on the cost of a six-seat Lake Amphibian made in the United States.

Tan said that because the craft was already governed by international maritime safety and related stan-

dards, it could operate anywhere in the world.

The existing AirFish is registered on the Singapore ship register and safety approvals were given by Lloyd's Register following an intensive testing process. Tan said it probably take a local rule change before owners could register the other jurisdictions including Hong Kong, but he did not think this would be a big issue.

WigetWorks has teamed with the Singapore Maritime Academy to produce a programme – awaiting approval from the Maritime Authority of Singapore – to train Fish captains.

The company has also linked with the National University of Singapore to carry out research and development on future Wing-in-Ground effect craft.

This included a larger craft for 20 to 40 people which could be built in the next few years. Funding for this research is coming from WigetWorks, the National University and the Maritime and Port Authority.

"We hope that in three years' time the research will be completed to enable a prototype to be built," he said.