

# Making Waves

## CH-148 Cyclone Encounters Head Winds

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A zapper that went the rounds a few years ago depicted a Sea King and read “Flying yesterday’s aircraft tomorrow.” This is a rather unkind, but accurate, reflection of the state of Canada’s maritime helicopter fleet which, according to recent press reports, is slated to be extended in service even further into the future and may well reach beyond 2013 – 50 years after the Sea King entered Canadian service.

There has been a recent public brouhaha between Sikorsky Aircraft Corporation and the government of Canada about the replacement for the Sea King Helicopter, the CH-148 Cyclone. According to a May 2008 article in *The Globe and Mail*,<sup>1</sup> this brouhaha apparently revolves around delays in the Cyclone delivery schedule and whether the Cyclone can meet the requirement for an endurance of two hours and 50 minutes in an anti-submarine (dipping) mission. The article states that Sikorsky’s solution is to upgrade the engines and transmission and install a five-bladed (rather than four) main rotor at an increased cost of \$200-500 million CAD and a further delay of up to 30 months in aircraft delivery.

The Cyclone is a militarized version (H-92) of Sikorsky’s S-92 Helibus which was designed as a medium-lift utility helicopter and intended primarily for civilian roles. The S-92 is currently operational with a variety of commercial operators and civil government agencies in offshore oil support, VIP transport and search and rescue missions. Sikorsky has promised that the S-92 will reduce routine maintenance requirements by 80% and operating costs by 40% from the norms of previous-generation helicopter fleets.<sup>2</sup> Commercial operations of the S-92 began in 2004 and Canadian operators include CHC Helicopter Corporation and Cougar Helicopters Inc., a subsidiary of VIH Aviation Group. The aircraft has had a successful introduction and, as reported in *Fortune* magazine, there is a two



Flying yesterday’s aircraft yesterday; a Sea King helicopter operating with the fleet during CARIBOPS in the mid-1980s.

year backlog in orders for the S-92 which is described as “the favourite of the oil industry.”<sup>3</sup>

So if the S-92 is meeting the requirements of commercial operators, why is there a problem with the delivery of the Cyclone and why is the discussion of these problems taking place in public?

Regarding the delays in the delivery of the Cyclone, the simple fact is that the militarized H-92 is a much more complex platform than the civilian S-92 from which it is derived. This is not only due to the requirement to provide an operational mission suite, no mean feat in itself, but also due to a variety of engineering changes such as the introduction of a fly-by-wire flight control system and a blade-fold system. That such a complicated weapon’s system has encountered delays should be no surprise, as regrettable as that may be.

If the article in *The Globe and Mail* is correct, Sikorsky’s motivation in combining an extension of delivery dates with a promise of increased performance (and a request for further funding) appears to be an attempt to rectify a situation in which it may have over-promised on its delivery schedule and will be obliged to incur the penalties spelled out in the contract. This is none too appetizing a prospect given that Canada is the lead military customer for the H-92.

As to why Sikorsky’s attempt to re-negotiate the Cyclone contract has been leaked to the press, apparently by Public Works and Government Services Canada (PWGSC), there is no easy answer. PWGSC’s conversion to the concept that a contract is a contract, while laudable, is more than a little



Artist’s impression of the Cyclone helicopter.



Still flying yesterday's aircraft; a Sea King in the Persian Gulf.

suspicious and probably has a great deal more to do with the funding situation of the government than any interest in ensuring that taxpayers get what they contracted for. As Senator Colin Kenny, among others, has repeatedly pointed out, DND is seriously under-funded in its capital account and crunch time is rapidly approaching as the bills are due to be paid on a variety of items on the department's shopping list.<sup>4</sup> Modifying or delaying any capital project could free up funds to address other concerns.

The reported threat by the former Minister of Public Works, Michael Fortier, to find "another way to replace the Sea Kings" opens the truly nightmarish possibility that the whole Maritime Helicopter Project (MHP) process could be resurrected – yet again! This smacks of previous attempts to shut down MHP altogether or to find an alternative (cheaper) platform to fill the requirement rather than any attempt to resolve the current Sea King situation.

Extending the life of the Sea Kings would no doubt be an administrative and logistical challenge and will perpetuate the current weakness in the operational capability of the Sea King. However, the estimated life expectancy of the Sea King has been extended a number of times in the past and while operational systems have reached or exceeded their 'best by' date, the Sea King can continue to operate at sea albeit with limits on its availability and operational relevance. In other words, maintaining the Sea King in service for up to another 30 months is not a show-stopper.

So whither the Cyclone? The S-92 is demonstrating a commendable record in commercial service around the world. With the militarized H-92 program, Sikorsky is experiencing difficulty in meeting an ambitious delivery schedule due to the complexity of the platform as noted above. While regrettable, a delay in delivery, even of up to 30 months, is an inconvenience rather than a true impediment. As to the merits of the alleged Sikorsky proposal to improve performance at an increased price, the pros and cons are best left to those who have the full picture.

The threat to re-open MHP and choose another platform is a fruitless exercise fraught with peril. It opens the

possibility of a flood of lawsuits and is guaranteed to cause even further delays. It also appears to be a move designed more to address the shortfall in capital accounts than the operational capability of the Sea King.

It is time for both sides of this dispute to take a deep breath and, if necessary, return to the bargaining table, this time in private, to ensure that the Canadian Armed Forces and the Canadian taxpayer get the aircraft that they need. 🙏

#### Notes

1. Daniel Leblanc, "Ottawa refuses to pay extra for helicopters; Sikorsky must live up to \$5-billion contract, Public Works Minister says," *The Globe and Mail*, 1 May 2008, p. A8.
2. Sikorsky Aircraft Corporation, Press Release, 3 April 2007, available at <[http://www.sikorsky.com/sik/about\\_sikorsky/news/2007/20070403\\_1.asp](http://www.sikorsky.com/sik/about_sikorsky/news/2007/20070403_1.asp)>. Eugene Buckley, President of Sikorsky Aircraft, also promised that he would build a helicopter that didn't leak.
3. Telis Demos, "Copter Crisis," *Fortune*, Vol. 157, Issue 10 (12 May 2008), p. 20.
4. See Colin Kenny, "Our military badly needs repair," *The Globe and Mail*, 10 June 2008, p. A17; and David Pugliese, "Military contracts fizzle," *The Ottawa Citizen*, 10 June 2008.