

## Helicopter Values: What is it Worth?

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When many of us invested in helicopters, we did so on the basis that these were long-lived assets that held their value remarkably well. Indeed, we could point to helicopters over 50 years of age that were still widely found in commercial use, and to numerous examples of helicopters selling for more than what they were bought for after decades in service. Those of us that did our research found that by and large, after 20 years in operation, the best industrial-use helicopters could be expected to hold 70 to 90 percent of their initial value when resold.

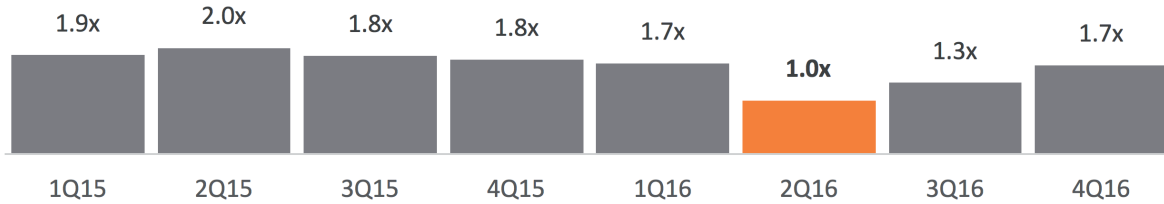
It was with this information in their pockets that operating lessors sprung up, seeking to purchase as many medium and heavy helicopters as they could handle. These machines, highly-sought for use in the increasingly challenging offshore oil and gas markets around the world, would surely represent the latest generation of helicopters whose values would not decline, and hopefully would increase.

Then, an oil and gas downturn began, again. And with it, helicopter values began to decline. Or did they? Certainly, appraisal values for helicopters have declined, depending on type, from down 10% for S-92s to 25% for S-76C++s and over 70% for older Super Pumas. But, while appraisal values may have fallen precipitously for certain types over the last 18 months, these value (or appraisal) declines by in large took place despite an utter lack of significant trading of aircraft at recorded discounted rates.

This is somewhat surprising given the significant upheaval that the industry has experienced of late – the CHC bankruptcy in the midst of the longest slowdown in oil and gas activity in recent memory, all on the heels of a roughly five-year period where trades were rampant. So, even as the market sank and some asset owners were pressured by financiers' demands as appraisal values declined, we still haven't seen trades occurring at even the reduced values that have been offered by the appraisal firms. That helicopter owners largely held onto their assets instead of fire-selling them as values declined is a signal of owners' faith in the long-term value of the assets.

When trades do occur, it is often difficult or impossible to ascertain the value at which a helicopter has traded hands. Given the lack of trading data and general market opaqueness, how can we accurately measure what a helicopter is worth? Lease rates are one important measure. And we've seen lease rates increase 50% from their market lows over the last year for AW139s (see Figure 1, below). Yes, lease rates remain below their historical highs, but it's not only softer demand that has led to lower lease rates – there are at least two other significant factors: 1) there are more lessors active in the market, and 2) financing costs for helicopter lessors were generally in decline through 2015, as debt costs declined due to interest rates remaining low. This financing remains in place today and can support the lower lease rates.

**Figure 1: Waypoint AW139 Lease Rates Through the O&G Downturn**

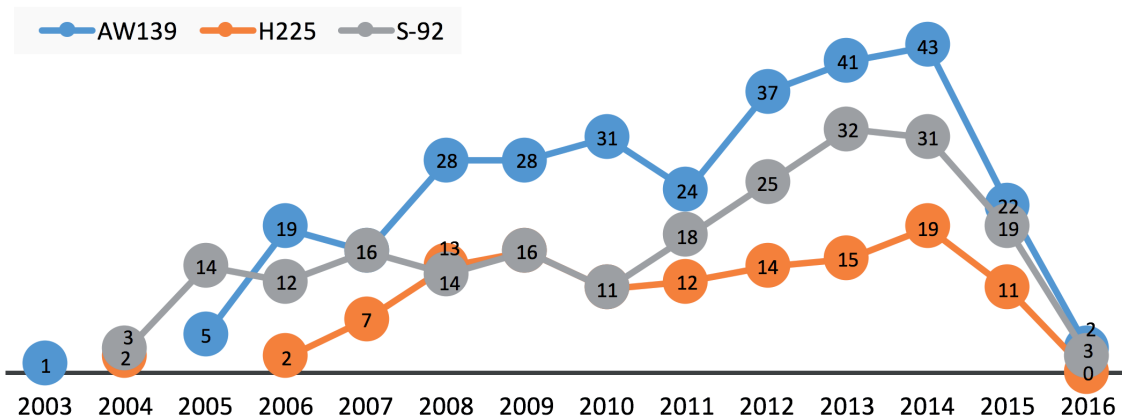


(Lease rates above are indexed to the monthly rents of leases signed in 2Q 2016)

Foreign exchange rates can also be a complicating factor – the U.S. Dollar’s relative strength compared to the Euro over the last two years has had the effect of making new aircraft that buyers have acquired in Euro cheaper, in Dollar terms, than in the recent past.

On the supply side of the equation, capacity has come out of the offshore market over the past 18 months. The EC225 grounding has taken ~50% of the heavy capacity out of the market, and that has kept almost all the S-92s flying. Older Super Pumas had already been exiting the market before the EC225 grounding. On the medium side, older S-76s have been exiting the market in big numbers – hundreds of S-76s that were flying in 2013 have been grounded four years later, many (particularly the older A and straight-C models that enjoyed elongated O&G lifecycles) will never fly offshore again. Further, the helicopter manufacturers have drastically reduced the amount of new aircraft they are producing and that are thus entering the market, preventing a possible supply overhang from developing (see Figure 2, below). In 2014, AW139, EC225 and S-92 aircraft produced for the offshore oil and gas market totaled 93 aircraft; in 2016, fewer than ten of these aircraft entered the market. The manufacturers have focused on the continuation of parts sales to the existing fleet (with higher profit margins), rather than producing incremental machines, as they are keenly aware that aggravating a potential supply overhang of offshore helicopters could be counterproductive to the long-term value of their products.

**Figure 2: O&G Helicopters Produced per Year**



Source: Ascend

While capacity has come out of the market, we are also seeing a considerable uptick in interest and actual demand, particularly for the AW139. Where it once could take months to place an AW139, Waypoint now has a backlog of potentially interested lessees for the type backed by an increasing number of tenders and projects. Demand for some offshore helicopters has recovered enough such that many of the leading lessors can place aircraft with customers that have a demonstrable commercial need and will thus pay a reasonable rent. In 2015 and early 2016, there was a period where rates for new helicopter leases were declining as demand for aircraft fell below the increased supply brought on by the aircraft ordered by many new lessors. The increased supply, together with competition amongst the lessors for a shrinking pool of deals, led to rates in early 2016 that were well below those seen in the heady days up to 2014. But as that capacity has been placed, coupled with the OEM supply correction, we are seeing far fewer deals being offered at what we would consider discount rates, and overall rates have stabilized accordingly. The strongest lessors do not need to place an aircraft with an operator at “any rent”, and that has strengthened their negotiating position.

One can understand why the appraisal firms have reduced appraisal values for certain aircraft types as demand slackened in the oil and gas market. However, given a significant lack of trades, together with reduced capacity preventing a severe supply & demand imbalance from developing and asset owners’ discipline, we believe the magnitude of helicopter value declines over the long term will be muted and will likely reverse on the most in-demand models, particularly if the oil and gas uptick that has begun in 2017 brings with it a continued increase in demand for helicopters. We know this has happened in past cycles; a comparable helicopter portfolio held by a commercial bank in the mid-2000s declined 17.5% in one calendar year during the Great Recession, but then increased 27% the following year, such that it was ultimately worth 5% more than the pre-decline baseline.

Setting appraisal values aside, what other measures can we use to determine what a helicopter is worth? Perhaps most basically, we can look at a helicopter as a complex machine, the value of which is the sum of its many parts. As helicopter aftermarket parts prices tick up at a constant 3% to 5% per year, by this measure a helicopter’s value is always increasing. We can also measure a helicopter’s value by comparing its discounted replacement value—that is, the expectation that a used helicopter will trade at some discount to a new replacement of equal or similar capability and utility. As there has been no significant discounting for new helicopters, and pricing remains stable or increasing, again by this measure a helicopter’s value is stable or increasing as well. A more complex metric of an industrial helicopter’s value is its revenue generation capability over its life cycle. In the oil and gas industry, E&P companies’ significant cost-cutting and efficiency optimization initiatives have changed their entire supply cost curve, and helicopters have not been spared. But as noted above, helicopter capacity has come out of the market, such that the supply side has largely corrected itself and thus, each remaining core helicopter’s revenue generating ability is stronger today than it was at depths of the downturn a year ago.

In conclusion, we see that the major factors that drive true helicopter valuations all point to stable or even increasing helicopter values in the near-future.