

Hook Overhauls by Rotor and Wing

Helicopters and lifting hooks are synonymous with New Zealand aviation and an inspection of a new helicopter will often include the question "Where does the hook go and how much will it lift?"

KIWI PILOTS do love to lift objects with their helicopters. There comes a time though when the hook reaches its service interval and that is where Taupo based Rotor and Wing Maintenance Limited come into the picture.

John Hobday's business has been servicing hooks as a part of their wider platform of general helicopter overhaul work for some years now. Their experience has provided them with a very comprehensive grasp on the hook requirements of operators and through their interaction with hook manufacturers, Rotor and Wing can offer some very attractive hook support and overhaul packages.

Currently the process usually revolves around the client returning their existing hook for inspection and overhaul. Depending on the type and requirements this process can take up to a month and more often than not, a loan or exchange hook is arranged.

Concentrating on the products of two common hook manufacturers, Breeze Eastern and On Board Systems, has seen Rotor and Wing work with a modest stock of models suiting the lower and mid range order of capacity. This market is broad and Rotor and Wing have their sights set on providing hook supply and services to the wider Australasia Pacific region.

Breeze Eastern Overhauls

John explains; "Breeze Eastern hooks have only limited support from the manufacturer and as there are a lot of these units still in service in New Zealand and Australia we have resolved to manufacture our own overhaul kit to keep these hooks in service. Flight Structures Limited have been instrumental in drafting the necessary regulatory proposals and to date we have established a small pool of exchange hooks. Our intention is to widen this and have off-

the-shelf stock and to take customer hooks back as reusable cores."

Some operators are attached to their hooks, figuratively speaking, and do not want an exchange hook. They would prefer to have 'their' hook returned following overhaul. In the case of the Breeze Eastern hooks Rotor and Wing offer a number of repair schemes for A25LT, 2A20B and 2A15E hooks including locally manufactured side plates, fillers, keepers and pivots. Collectively these hooks cover the range in the Light Series which are those most commonly found in New Zealand and Australia.



Above: a stripped Breeze Eastern 2A20B hook.
At right: On Board Systems Big Mouth, Keeperless and Talon LC hooks ready for despatch

For those machines operating on an approved maintenance programme and not undertaking continuous heavy lifting the company offers an alternative to the Breeze Eastern three year overhaul in the form of a detailed inspection carried out within the Rotor and Wing facility. This programme cannot be certified as a 'stand alone' document and is required to be incorporated into the operator's exposition. A copy of that programme must be submitted with the hook and technical directive in order for Rotor and Wing to carry out the certification.

On Board Systems Overhauls

On Board Systems hooks have a five year inspection period and John Hobday is very complimentary of the support the manufacturer provides for their product. On Board Systems manufacture overhaul kits for their hooks and Rotor and Wing has the capability to overhaul Talon LC,

Keeperless and Big Mouth hooks and their attachment fittings. The company store holds a wide range of parts and overhaul kits that enable them to provide an average turnaround time of two weeks. Exchange hooks are also available if requested, such that an overhauled hook may be despatched as soon as the request is made.

What's in it for the operator?

On the face of it the transaction is simple and involves one fee. This assumes of course that the returned hook is reusable. A benefit for Rotor and Wing customers is that all hook overhauls include a strip report which can provide useful knowledge for minimising problems and cost next time around. Efforts are being made to bring down the level of rejected parts with Rotor and Wing identifying techniques on how to minimise corrosion related defects which are commonly observed on hooks presented.

A pool of in-service and out of time hooks exists within the region and for John Hobday the next step is to create an on-line register for hooks where the operator and overhauler can see when a particular hook is due for overhaul so that a replacement unit can be then guaranteed to be available. Sudden surges in replacement hooks or requests to overhaul can put pressure on the pool of existing hooks.

"We just want to streamline the whole process," says John Hobday. "In an ideal situation the client will call and request an overhauled hook from our shelf stock which is sealed and certified, ready to go. It is sent off in its box with a courier pack to return the existing unit. It's all really quite simple and that's all it needs to be."

For more information

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