

# DIGGING FOR THE TRUTH

A part arriving at Part 145 Argus Aviation in Motueka with some odd-looking documentation had the engineers saying, ‘just hang on one minute’. Their due diligence has led to a four-country investigation.



Argus Aviation is a Part 145 maintenance organisation and, in accordance with its procedures, it formally inducts parts into its store.

A recent software upgrade had introduced a few more checks and balances on the authenticity of parts, including those provided by customers.

The part – an output flange<sup>1</sup> – worth more than \$US2000 – was brought to the maintainers by a helicopter customer.

Director Mark Stagg said he was alerted by the store’s controller and the engineering manager that the part’s documentation looked iffy.

“The part was initially presented without release documentation. All it had was a ‘pick ticket’ with a scannable barcode on it.

“So the part was initially rejected while we waited on the release document.”

When that arrived, the history of the part became even more mysterious.

“The electronic copy of the release document – FAA 8130-3 – really got my attention,” says Mark.

Someone had noted on the certificate that it met the ‘special [airworthiness] requirements of New Zealand’ and the date was for the middle of July 2020.

“We only had the helicopter into maintenance very late in August and at that time nobody knew we needed that particular part for the helicopter.

“I have seen that wording on certificates before, but combined with the date, it all seemed a bit peculiar.”

Argus Aviation began digging. They discovered that the Malaysian company, the name of which appears on the form in the ‘organization’ block, does exist, but it’s not an FAA-qualified repair station, so could not have issued the certificate.

“We don’t even know if the certificate came from that company. It was supplied to us electronically by the customer. No-one seems to know where it originally came from.”

They continued investigating. David Richards is an FAA-designated airworthiness representative and his signature appears to be at the bottom of the certificate.

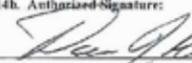
“There’s a directory on the internet of all the FAA representatives, so I emailed him to confirm if the certificate was genuine,” says Mark.

“He came back within a couple of hours saying he’d never approved the part or certificate, so we realised by then we had a big can of worms.”

Mark says while the signature on the form appears genuine, “it could have been originally from an authentic certificate that was subsequently modified”.

While he cannot say so categorically, Mark believes the part is, in fact, genuine. He says it may have lost its paperwork at some point and someone was just trying to rid themselves of it by selling it internationally.

<sup>1</sup> An output flange sits in the main rotor gearbox which in turn connects to the tail rotor driveshaft. It provides direct drive to the tail rotor gearbox.

1. Approving Civil Aviation Authority/Country: FAA/United States		2. <b>AUTHORIZED RELEASE CERTIFICATE</b> FAA Form 8130-3, AIRWORTHINESS APPROVAL TAG			3. Form Tracking Number: 2020-2001-03 Export	
4. Organization Name and Address: [Redacted]				5. Work Order/Contract/Invoice Number: Project 356-2020-EUR		
6. Item:	7. Description:	8. Part Number:	9. Quantity:	10. Serial Number:	11. Status/Work:	
1	FLANGE OUTPUT	C632A2158201	1	S/N: PPT627	INSPECTED	
12. Remarks:  Export Airworthiness Approval- This article meets the special requirements of New Zealand						
13a. Certifies the items identified above were manufactured in conformity to: <input type="checkbox"/> Approved design data and are in a condition for safe operation. <input type="checkbox"/> Non-approved design data specified in Block 12.			14a. <input checked="" type="checkbox"/> 14 CFR 43.9 Return to Service <input type="checkbox"/> Other regulation specified in Block 12 Certifies that unless otherwise specified in Block 12, the work identified in Block 11 and described in Block 12 was accomplished in accordance with Title 14, Code of Federal Regulations, part 43 and in respect to that work, the items are approved for return to service.			
13b. Authorized Signature:		13c. Approval/Authorization No.:		14b. Authorized Signature: 		14c. Approval/Certificate No.:
13d. Name (Typed or Printed):		13e. Date (dd/mm/yyyy):		14d. Name (Typed or Printed): David J Richards		14e. Date (dd/mm/yyyy): 14/ July /2020
<b>User/Installer Responsibilities</b>						
It is important to understand that the existence of this document alone does not automatically constitute authority to install the aircraft engine/propeller/article. Where the user/installer performs work in accordance with the national regulations of an airworthiness authority different than the airworthiness authority of the country specified in Block 1, it is essential that the user/installer ensures that his/her airworthiness authority accepts aircraft engine(s)/propeller(s)/article(s) from the airworthiness authority of the country specified in Block 1. Statements in Blocks 13a and 14a do not constitute installation certification. In all cases, aircraft maintenance records must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.						
FAA Form 8130-3 (02-14)				NSN: 0052-00-012-9005		

// The faked FAA 8130-3 form that accompanied the output flange.

And what if the part wasn't genuine?

"Well," says Mark, "it drives the tail rotor on the helicopter. If it had failed, or hadn't been made to spec, the pilot would have had a tricky situation, trying to keep the aircraft under control."

Mark contacted CAA Airworthiness Chief Advisor Warren Hadfield who has, in turn, notified the FAA.

"We did have documentation showing the part originally came from Canada, so I've contacted Transport Canada as well," says Warren.

"This is a great example of a maintenance organisation carrying out due diligence in assessing the documentation of incoming parts," he says, "and questioning a document that didn't seem quite right."

"In the case of safety-critical components and high-value items, purchasers should ask to see a copy of the release documentation before committing to a purchase."

Mark Stagg has spent time overseas in the last decade and is quite aware of the possibility of bogus parts being passed off as genuine.

He advises other maintenance providers who may not have come across such a situation before, to "know your supplier and where your part is coming from."

"Customers are certainly entitled to supply a part. But if it's not from your known supplier, do due diligence, and be a bit curious. It's quite easy these days to manufacture documents on the computer so you do have to cross-check them."

Mark says that even customer-supplied parts have to be properly inducted into their store before they're approved and fitted to aircraft.

"And that's how the faulty document was identified. The good thing about all this was that it showed our procedures work. Surprisingly well actually," he says. 