

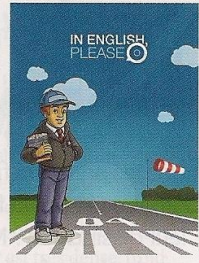
IN ENGLISH, PLEASE



L'Anglais pour voler
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"In English, please" articles from June 2007 to July 2015,
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Behind the hangar doors - 1 AIRCRAFT MAINTENANCE

This month's "In English, please" is a shortened version of an article written in December 2015 by Jerry Parr for *Flyer*, one of the UK's general aviation magazines (www.flyer.co.uk). Keep in mind that the original article was written more than a year ago for the UK reader. There may be some differences between the UK's and France's maintenance requirements – despite EASA attempts at standardisation – and the regulations on the subject have changed over the past year. However, these differences or evolutions don't impact vocabulary, grammar or language structure, which are essentially what "In English, please" is all about.

Scheduled maintenance

Currently, the majority of light aircraft undergo a scheduled maintenance check every six months or 50 flying hours, whichever occurs sooner, plus the biggy, the Annual Inspection every 12 months. As a rule of thumb, the 50-hour check is normally slated as being an eight man-hour job. This is for the basic scheduled tasks – defect rectification would be in addition. It's not just the inspection that has to be done – logbooks often have to be completed and Certificates of Release to Service filled in at the end of the check; this is after the work is finished and a ground run has been carried out. The Annual Inspection is an in-depth, labour-intensive task. The inspection process and scheduled maintenance tasks (including removing and refitting access panels, etc.) could in theory be achieved in approximately four working days with two people working on the job. But remember, there are the logbooks to sort, as well as sifting through

current airworthiness data for applicable Airworthiness Directives and Service Bulletins. Due to the depth of the inspection, the chances are that defective parts will be found that will need to be rectified. To allow for time taken to source replacement parts, plan on two weeks (ten working days) to complete the Annual. Often, obtaining replacement parts is the biggest single delay in completing maintenance tasks.

Owner assistance

It often comes up when discussing GA aircraft maintenance that owners should assist during the scheduled maintenance, especially the Annual, not only to learn about their aircraft but also to reduce the downtime. In reality, unless an owner is well versed in welding tools at mechanical devices, it is not going to speed up the maintenance check. If an engineer has to take time to explain what work needs to be done and then check it has been completed correctly, he might as well have done the work himself! And the vast majority of aircraft owners do not have the time, inclination or, by their own admission, the skill to carry out these tasks. Add to that a suitable environment in which to complete the work and the correct tools and technical information and it can be understood why most owners are content to leave it to the approved organisations and engineers. One valuable process that an owner may want to get involved in, is when an aircraft fitted with retractable undercarriage has its undercarriage functional checks. When the aircraft is up on jacks in the hangar, the owner can operate the normal extension and retraction procedures as well as the

emergency procedure – and see what is happening from the outside as well.

Extended downtime

As with many things in life, there are plenty of ways the maintenance plan can go awry. Many aircraft are maintained at their home base, so getting the aircraft to the maintenance organisation and into the hangar on the due date is not an issue. For aircraft which have to travel for their maintenance, weather (or airfield conditions) can get in the way of keeping a maintenance appointment, so a bit of advanced planning is required. If the start of an aircraft's inspection is delayed, it may have a knock-on effect on other aircraft's maintenance plans. There is an allowance for scheduled maintenance variations if, for example, a long period of inclement weather prevents an aircraft's delivery on time. It should be noted however that Airworthiness Directives have to be done at the due time – no extension allowed on ADs.

Parts procurement is becoming an issue for some of the older GA aircraft, even though the manufacturer still supports the aircraft and in theory, still produces spare parts. Even with current aircraft types there can be delays waiting for spares to arrive and some tasks may have to be put on hold until the new part has been installed.

There may also be a sudden requirement for unplanned work on another aircraft, such as a punctured tyre, a flat battery or a failed starter motor, meaning work is temporarily suspended on an aircraft undergoing an Annual. Even other aircraft's 50 and 150-hour checks may cause a slight interruption as they cannot be planned with any degree of certainty.

Next month: Engine overhauls

Vocabulary

TO ASSIST.....aider
THE DOWNTIME.....le temps d'immobilisation
A DUE DATE.....une date limite, une échéance
TO GO AWRY.....aller de travers
A GROUND RUN.....un essai moteur au sol

A KNOCK-ON EFFECT.....une répercussion, un effet domino
A JACK.....un cric, un vérin
A PART, A SPARE PART.....une pièce, une pièce détachée
A RULE OF THUMB.....une règle générale, approximative
TO SIFT THROUGH.....passer au crible

SLATED.....prévu
TO SOURCE.....se procurer
TO WIELD.....manier