

de Havilland Handover

Brian Hope looks at the rescinding of Type Certificates for de Havilland and Bulldog aircraft. This affects 400+ aircraft and could see many joining the LAA fleet

Photos courtesy of de Havilland Support Ltd

> On 5 December, de Havilland Support Ltd (DHSL) sent a shockwave through the light aviation world when it announced that from April 2012 it intended to rescind the Type Certificates for all of its de Havilland aircraft types, and also for the Scottish Aviation Bulldog, and set up Type Responsibility Agreements (TRAs) for a selected number of the types instead. This gives some aircraft owners the opportunity to remain on a Certificate of Airworthiness, or cross over to an LAA or CAA Permit to Fly. The models that will have this choice are the Tiger Moth, the Chipmunk, the Rapide and the Bulldog.

Under the new arrangements, there will be no TRAs for the less numerous DH heritage types; owners of these aircraft will only be able to elect for a Permit to Fly. Certificates of Airworthiness will not be issued or renewed

after April 2012 as DHSL does not consider that this remains viable, either for airworthiness or commercial reasons. Those types include the original DH 60 Moth, Moth Major, Puss Moth, Fox Moth, Leopard Moth, Hornet Moth, Moth Minor and the post-war Thruxton Jackaroo, and of their larger aircraft, the Dragon, Dragonfly, Dove and Heron.

Of the fleet coming under DHSL's remit, more than 400 light aircraft are involved; though some of the Tigers, Chipmunks and Bulldogs will need to stay on a C of A because they are engaged in aerial work – they may be being used for flight training for instance – it is believed that many of the privately-operated aircraft will come onto an LAA Permit. I asked Francis Donaldson, the LAA's Chief Engineer, what this would entail for both the Association and the owners of the aircraft involved.

"We will be particularly delighted to welcome vintage de Havilland and Bulldog owners into the LAA system as we believe that for private

owners, our Association's long-embedded craftsman mentality and freedom from the requirement for fully-released parts provides the scope for enthusiasts to care for and maintain these much-loved aircraft in a manner appropriate to the aircraft's age and orphaned status. If a worn-out part needs replacing, then in the LAA system there's an established route to having a replacement made either by the maintainer or through the various specialists on hand, and with a simple aircraft, LAA Engineering can generally assess and approve the part with a minimum of fuss. In the certificated world, spare parts are only supposed to be made by organisations holding formal aircraft manufacturing approvals. These approvals are often outside of the reach of the little guy, so there's a tendency for substitutions to go unrecorded and unchecked, or to repair a worn out or broken part which would be better replaced with new.



"We look forward to working with de Havilland Support to make the transfer of these aircraft types as seamless as possible so that they can take their place alongside all the vintage Moths, Stamps, Austers and Jodels etc that are already in the LAA fleet.

"As with the transition of orphans in the past, the changeover is effectively phased because it usually takes place as each particular aircraft's annual or C of A expires. This enables us to co-ordinate bringing the new aircraft into the system over a three-year timescale, enabling the existing Engineering Department staff to deal with the additional workload more easily.

"Each aircraft is dealt with as a separate entity; we are not able to simply transfer a 'type' en bloc. Briefly, transfer to a Permit to Fly follows an in-depth inspection of the aircraft by a suitably approved LAA inspector, a detailed check on its conformity with applicable service information and usually a flight test." ►►

> de Havilland

TECHNICAL BACK-UP

As the news spread, I was able to garner the views of some of the leading figures involved with the DH scene in the UK, and reassuringly the general consensus is that the ability for private owners to move their aircraft onto a Permit will be a positive.

Ron Souch of Aero Antiques in Hampshire, one of the country's leading vintage aircraft restorers, said, "It is indeed great news that the de Havilland fleet of light aircraft is to be free to move over to the LAA – if that's what owners desire. For many years we've wished for this to happen, particularly in the case of the DH 60. But for so much to happen so quickly, and for so many types, can, I feel, only be a good thing for the old aeroplane movement. What is vitally important is that standards do not slip. Personally, I think there's good reason to believe that they will in fact improve. It's a very good opportunity for the LAA membership to be able to show what excellent standards it's capable of and hopefully make these old aeroplanes accessible to more people."

Henry Labouchere operates a specialist maintenance operation in Norfolk, and his only concern is that these old aircraft demand more maintenance as the years pass and he hopes that owners realise that a change in maintenance regime doesn't mean a change in the level of required maintenance. "I'm sure that things will soon find an appropriate balance," he explained, "and the existing experienced vintage engineers will I am sure be only too willing to offer advice and help when required."

Bill Taylor, CEO of DHSL and a member of the LAA for 40 years, added, "It has taken a lot of behind-the-scenes work to bring about the possibility of the celebrated de Havilland and Bulldog aircraft transferring to LAA Permits to Fly, while still allowing the principal types to operate commercially. This is a one-off

opportunity for us to show that the LAA is sufficiently mature to take on these and perhaps other additional responsibilities in future."

The ability for owners of orphan aircraft to choose their preferred maintenance regime is relatively new. Until early 2011, when a Type Certificate was relinquished, they could only move to a Permit if no individual or organisation chose to set up a TRA with the CAA. You therefore had a situation where two or three owners might set up a TRA because they wanted to retain the ability to do aerial work with their aircraft, but the majority who flew their aircraft for recreation would have preferred to have transferred to a Permit. Fortunately the CAA, realising that this situation was fundamentally unfair, had a change of heart and we are now in a position where, if a TRA is established, the recreational owners can choose which maintenance regime they wish to operate under.

DHSL stresses that it has taken the decision to relinquish the Type Certificates because it feels that the Certificated environment is becoming ever more incompatible with the majority needs of private operators. Owners of these essentially simple aircraft should be able to maintain them to an equally high standard within the more flexible Permit scheme, which will allow more ready availability of spares, and the dwindling number of released items can be saved for those aircraft that continue to operate on a Certificate of Airworthiness. DHSL, which maintains a comprehensive archive of drawings and manuals at its Duxford HQ, and enjoys a close working relationship with both the CAA and the LAA, will continue to provide technical back-up for all its heritage types, whether on C of A or Permit.

LAA RESPONSE

The announcement came after much negotiation between DHSL, BAE Systems

(which contracts DHSL to look after the de Havilland heritage types) and the UK CAA.

In response to the news, LAA Engineering is writing to the owners of the aircraft which may move to the LAA system in future, and is busily preparing for a substantial influx of some of this country's most highly-prized vintage aircraft onto the LAA fleet.

In a letter to owners of Chipmunk aircraft, Francis Donaldson welcomes owners who may wish to transfer but stresses that though there are areas where cost savings may be made, the Permit to Fly system is definitely not an option for reduced maintenance.

"We are particularly delighted to welcome DH owners into the LAA system as we believe that due to the age of these aircraft and the way in which the majority are used, the LAA provides the best way to operate them and they will complement all the vintage Moths, Jungmanns, Ryan PT22 and other vintage types already in the LAA fleet.

"Operating your aircraft on an LAA Permit to Fly means that you have more flexibility in maintaining it than if it were on a C of A, in that the Permit to Fly system does not require the use of fully released spares. This is not intended to be a passport to reduced safety standards, and all parts used must still be fit for purpose. Modifications to the aircraft may not be made unless approved by LAA Engineering's Turweston Office.

"Irrespective of whether it is on a Permit or a C of A, the aircraft will need to be equally carefully maintained. The engine's exhaust manifold will corrode just the same whether the aircraft has a Permit or a C of A, so regular pressure tests of the cabin heat muff will still be needed. Likewise flight instruments must be kept in calibration, engine compressions checked, fabric strength tested, etc. Lived parts need to be changed at the appropriate time irrespective of Permit or C of A. Airworthiness

AIRCRAFT TYPE	EASA C OF A	CAA C OF A	LAA PERMIT	CAA PERMIT
PERMIT TO FLY ONLY				
DH60, 60G, 60M			*	*
DH60III MOTH MAJOR			*	*
DH80A PUSS MOTH			*	*
DH83 FOX MOTH			*	*
DH85 LEOPARD MOTH			*	*
DH87/87A HORNET MOTH			*	*
DH94 MOTH MINOR			*	*
THRUXTON JACKAROO			*	*
PERMIT TO FLY OR C OF A				
DH82, 82A TIGER MOTH		*	*	*
DHC-1 CHIPMUNK		*	*	*
SAL BULLDOG		*	*	*
PERMIT TO FLY OR C OF A, NO LAA INVOLVEMENT				
DH89A DRAGON RAPIDE		*		*
CAA PERMIT ONLY, NO LAA INVOLVEMENT				
DH84 DRAGON				*
DH90 DRAGONFLY				*
DH104 DOVE				*
DH114 HERON				*
EASA RESTRICTED C OF A ONLY				
B.121 PUP	*			

Directives continue to apply. The CAA's LAMS (Light Aircraft Maintenance Schedule) remains a well-tested means of keeping these aircraft airworthy, or you can use the LAA's Generic Maintenance Schedule specially customised to suit your aircraft by including such items as the mandatory replacement of lifed parts at specified intervals. The bottom line is that owners and inspectors must maintain the aircraft to an appropriate maintenance schedule and maintain the aircraft in an airworthy condition.

'With Permit aircraft, compliance with service bulletins is recommended where appropriate, but only mandatory when enforced by an Airworthiness Directive or MPD (Mandatory Permit Directive). We are very fortunate that de Havilland Support maintains an up-to-date system of TNSs (in effect, de Havilland's name for service bulletins) as well as a full set of drawings, ADs and so on. This makes the availability of service information much better than for other types like the Stampe, Jodel and some limited production machines where many of the old bulletins are simply no longer available and their content but a distant memory.

'Contrary to common misconception, the extent of 'pilot-maintenance' that can be carried out by the aircraft owner without needing inspector sign-off is almost identical whether the aircraft is on a Permit or a Private Cat C of A. The difference is that the LAA system encourages owners to get involved in aircraft maintenance and, once he is satisfied with your skills, your LAA inspector may well be more willing than his LAE counterpart to supervise – and eventually certify – your own work on the aircraft. Alternatively of course you may prefer to have all your maintenance carried out by professionals on a commercial basis, and this is equally catered for by the LAA scheme.' ■



The beautifully restored DH89A Dragon Rapide of Mark and David Miller can remain on a C of A or transfer to a CAA Permit



DH87B Hornet Moth G-ADKK prepares to move off. Now over 75 years old, parts availability is a problem



There are around 160 Tiger Moths in the UK and it is anticipated that a large proportion of them will transfer to an LAA Permit to Fly

Right: the rare DH83 Fox Moth first flew in 1933. It is seen arriving at the 2011 LAA Rally



DHSL selection. Clockwise from back left, Tiger Moth, Hornet Moth, Chipmunk, Beagle Pup (must stay on an EASA C of A) and two Scottish Aviation Bulldogs