

Consultation on the Application of UK Regulatory Requirements to Foreign Registered Aircraft Based Permanently in the UK

Position Paper by G A Alliance

Executive Summary

The DfT's consultation on this matter admits that no significant safety issues have come to light in relation to aircraft registered on the US, Bermudan and Cayman Islands registers operating and being based in the UK. In other words there is no safety case to require a transfer of an aircraft from a foreign register to the UK register.

The requirement appears to stem from the lack of knowledge of the numbers of foreign registered aircraft based in the UK. We contend there are other methods by which the numbers could be ascertained, for example by requiring operators of such aircraft to advise the CAA of their details.

Concerns have been expressed by DfT over varying maintenance standards. However these could be addressed between non EU member States via EASA and it is known EASA are already discussing bi-lateral agreements with the USA's FAA in particular; in relation to USA registered aircraft it is well known there is very little difference in standards. The aircraft insurance industry appears not to differentiate between UK and USA registered aircraft based in the UK; accordingly it can be accepted they consider there is no increased risk from such registration.

In view of the great majority of foreign registered aircraft based in the UK being on the FAA register this paper only deals with the position arising from a proposal to require them to be transferred and, as a result, FAA licensed pilots to obtain JAA licences to fly them.

The CAA already has powers to investigate maintenance standards of any aircraft in the UK at any time and also to ban any aircraft it considers should not be permitted to enter UK airspace. By such methods an aircraft on a register about which the CAA has concerns can effectively be stopped from entering the UK and the public can be protected. The CAA has implemented such procedures in the recent past in relation to commercial aircraft.

The DfT consultation paper seriously underestimates the costs associated with a requirement to transfer an aircraft to the UK register. The total cost of transfer of the estimated 1,000 aircraft affected by this proposal (including helicopters) exceeds **£12,500,000**. In addition the costs of FAA licensed pilots acquiring a JAA licence is at least **£13,902,000** ignoring unproductive time and loss of earnings. Costs for larger business type turboprop and jet aircraft are unknown but will clearly be substantial as will be the costs for retraining and re-licensing of Engineers.

This major policy change, which seems disproportionate to any risks involved together with such high levels of potential costs, demands a full regulatory impact assessment (RIA) be carried out in accordance with the Cabinet Office requirements.

The RIA will need to include information on the negative impact on businesses of aircraft importers, maintenance and supplier organisations, airfields and, most importantly, effects on current owners of such aircraft.

There could be positive impacts on the UK flying training industry if it were made simpler for pilots to obtain JAA IRs rather than them resort to the FAA IR licences as most do currently; this would remove the main reason for aircraft being placed on the N register.

It is not at all clear what is intended post the analysis of responses. As a result there is considerable uncertainty over the future changes / requirements (if any). This uncertainty is adversely affecting values and sales of owners and prospective purchasers N registered aircraft, maintenance organisations, suppliers (SMEs), pilots wishing to upgrade their qualifications and hence safety.

The DfT have advised it will be perhaps three months to review the results and is unable to state when any decisions will be made as to any further proposals. If changes are to be progressed a second consultation would be required with a full impact analysis accompanying any ANO amendment proposal. It is therefore grossly unfair that such uncertainty will adversely affect owners and pilots for an unknown period.

Note – All references in quotes are from the DfT Consultation paper introductory letter or Annex A

1. Stated reason for the consultation

The DfT Consultation paper states in the introductory letter and Annex A:

“A significant proportion of private aircraft based in the UK by UK residents and companies are registered in other states. The majority of these aircraft appear to be operated mainly or exclusively for flights within the UK.”

However, we consider that this assessment is incorrect. Paragraph 7 of Annex A adds:

“... the majority of such aircraft are mainly operated on flights within or originating in the UK.”

That latter statement is correct but to refer to the numbers representing a significant proportion is not accurate. Reference to the CAA's own published information on UK registration shows the figures to be:

Aeroplanes requiring a Cert. of Airworthiness	7,529
Helicopters & Gyroplanes	1,052
Historic & Vintage aircraft	<u>1,100</u>
Total	<u>9,681</u>

Data is UK Registered GA Aircraft as at 1st Jan 2004 (source CAA), except Gliders, Hang Gliders, Paragliders and Foot Launched Powered Aircraft as no Registration is required.

Additional USA registered GA a/c in UK have been widely estimated at c1,000 which represents only approximately 10% of the total registrations and is therefore not a “significant proportion”.

There will be some other aircraft on other EU States registers but as EASA standards are being required throughout the EU it is considered they should be permitted to remain on their existing registers and indeed if owners wish to register on another EU State register that should be permitted in the context of the European ideal of free movement. If the CAA has concerns over maintenance standards of any foreign State's aircraft it can already prevent them being flown in the UK.

It is accepted there may be a few GA aircraft registered on other than UK, USA or EU State registers but the numbers are considered to be so small as to be inconsequential for this paper and hence are not further referred to.

2. Background

a) International Civil Aviation

“In accordance with the Convention, the International Civil Aviation Organisation (ICAO) establishes safety standards and recommended practices (SARPs) covering the airworthiness and operation of aircraft and the licensing of flight crew. Therefore the Convention provides for minimum rather than harmonised international standards.”

We consider this comment is not correct. The Chicago Convention explicitly provides harmonised international standards and not a minimum standard. ICAO standards around the world have provided a global system of harmonised air safety regulation.

National Regulation of Civil Aviation in the UK

“It is expected that European standards for aircraft operations and flight crew licensing will be established within 2 or 3 years. The CAA exercises oversight of the UK industry to ensure that the majority of these requirements are met although some issues are the direct responsibility of EASA. In establishing these requirements the CAA, JAA and EASA are obliged to take account of ICAO SARPs. However, the requirements are more detailed than the ICAO standards and often impose a higher standard, although occasionally the requirements may be less restrictive than the ICAO standards.”

“In other contracting states the national aviation authority will fulfil a similar function to the CAA and establishes safety requirements for civil aviation. Again these requirements are largely based on ICAO standards but as in the UK, the requirements can differ from the ICAO standards. Therefore there can be significant differences between the requirements of the UK and those of other non European contracting states.”

Whilst the requirements of the UK may be higher than other ICAO contracting States we are unaware of any safety case having been made for adoption of the UK requirements above those of other EC States and particularly those of the FAA in the USA. We understand EASA standards are gradually moving nearer to equivalence with FAA standards and an agreement to accept either on a reciprocal basis would resolve any concerns over standards of maintenance.

3. Issue

“It has become apparent that there is a growing trend for UK residents to acquire foreign registered aircraft and base them in the UK. It appears that the majority of such aircraft are mainly operated on flights within or originating in the UK. The exact number of foreign aircraft based in the UK is unknown

but estimates range from 500 to 1,500. This equates to between 11% and 21% of privately operated certificate of airworthiness category aircraft based in the UK. For turbine engined business aircraft the percentage appears to be much higher.”

We dispute the percentage of foreign registered aircraft based in the UK is 11% to 21% using the CAA’s own published figures and that it is approximately 10% (see paragraph 1 above).

“It appears that private and corporate aircraft based in the UK have been placed on foreign registers to take advantage of what are perceived as less onerous regulatory requirements. The use of foreign registered aircraft to opt out of the UK regulatory system undermines the harmonised European standards that have been or are being established under the JAA and EASA system.....

In conclusion, while no significant safety issues have come to light in relation to aircraft registered on the US, Bermudan and Cayman Islands registers, the Department does not know what other registers are involved or the safety risks associated with those registers.”

It should be understood that there are some aircraft, mostly manufactured in the USA, that cannot be placed on the UK register because their manufacturers have been unable to obtain certification approvals. This does not mean they are unsafe operating on the N register. North America has the largest fleet of aircraft plus the greatest experience in manufacturing, operating and regulation of G A aircraft of any Country in the world. To suggest that their standards are any less safe than those of the UK is unsustainable. Their GA aircraft industry has prospered whilst that in the UK has almost wholly disappeared due mainly to over regulation.

Furthermore to require a transfer of existing N registered aircraft based in the UK would mean that many such aircraft could not be transferred due to them having FAA STC’d equipment, approved in the USA, but which has not been approved in the UK. Such equipment would have to be approved at vast cost and with considerable time implications and quite possibly not achievable in any event. Examples would be vortex generators on certain aircraft, ballistic parachutes, de-icing equipment and primary instrumentation.

If the Department accepts there are no safety issues affecting the N register (in particular) there would seem to be no case for requiring the aircraft to be placed on the UK register but rather that a method of notification of those aircraft be devised (see 6. below).

It is also the case that certain gliders which operate in Germany on special arrangements and which are currently imported to the UK and remain on the German register could not be operated on the UK register.

Implementing the proposals as indicated would lead to a reduction in the ability of persons to use private aircraft for both private and business travel thereby forcing them to use other means of transport of a less convenient nature often adding to congestion and certainly to inconvenience. This would lead to a reduction in efficiency and effectiveness of many SME businesses.

Airfield operators would also lose business as less aircraft would use their facilities resulting in an inevitable increase in costs of use for other users as the airfield operators would doubtless have to continue to recoup their fixed costs.

4. DfT Proposal

“The Department considers that it would be appropriate to take steps to ensure that all private aircraft permanently based in the UK are operated under requirements equivalent to those contained in the appropriate harmonised European standards.....”

It may also be possible to permit foreign registered aircraft to be based in the UK if compliance with the European requirements can be achieved by a different route eg, by a transfer of regulation functions from the State of Registry of the aircraft to the UK in accordance with Article 83*bis* of the Chicago Convention.”

Currently those aircraft on the N register based in the UK are subject to maintenance requirements of the FAA and maintained by engineers who have been carrying out such maintenance for many years; indeed they are usually the same engineers who maintain similar UK registered aircraft.

They are subject to licence approvals and oversight by the FAA in the same manner as are the UK licensed engineers. Furthermore the CAA has the opportunity of checking maintenance standards of any aircraft in the UK.

It is most unlikely the FAA would agree to transfer its regulation functions to the UK.

5. Cost implications

“There would be cost implications involved with the implementation of such a restriction. The aircraft concerned would either have to leave the UK or have to transfer to the UK register. It is assumed that the vast majority of the aircraft would transfer to the UK register although some may not be able to do so easily for type certification reasons.”

Issues of type certification have been dealt with above. Stating aircraft would have to leave the UK is understating the issues associated with such a need. The costs of export would be considerable and the market in other countries may mean considerable losses to the owner. Furthermore even if a transfer to the UK register is possible, and ignoring the cost and time delays in dealing with STCs (as referred to above) owners/pilots of such aircraft transferring may well not be able to gain equivalent UK licence ratings on a replacement aircraft. This is due to them possibly having medical issues which are accepted on a FAA licence yet not accepted on a UK licence. In addition the costs and time taken to obtain an equivalent licence are considerable and may well be unachievable in some cases.

The consultation document seriously understates the direct costs and time delays in transferring to the UK register. It is regrettable that the Department has circulated a consultation document without adequate research to establish the facts, and has made grossly misleading estimates, which understate the costs of the DfT proposals by a factor of about 100.

Meanwhile and until a decision is made as a result of the analysis of the consultation considerable uncertainty is being created thereby affecting the whole sector. Values of owners' aircraft and sales thereof are effectively stopped until the position is clarified. This will also affect many SMEs engaged in brokerage of such aircraft, maintenance thereof and supply of parts and other services to them.

Safety will also be affected as owners and pilots will be unable to progress their potential acquisition of additional FAA licence ratings (particularly the Instrument Rating).

We understand the assessment of the consultation responses will likely take three months (dependent upon other work in the department) and if further proposals are progressed requiring amendment to the ANO, a second consultation will be required together with a full impact assessment. This would add a considerable additional amount of time to the period of uncertainty and hence adverse effect on owners etc.

i) **Aircraft Registration** – Whilst the bare cost of registration might be only £50 - £100 there is significant cost to make the aircraft acceptable for registration.

For the transfer of a typical single engine aircraft with a full avionics fit the process of recertification could take 12 months and, not counting loss of use, could easily cost £12,500 or more. Standing costs would need to be considered as additional costs; these would be hangarage, insurance and interest plus essential maintenance whilst in a non-flyable state.

Costs of transferring a helicopter from the N register to the G register are significantly greater than for a single engine aircraft. It can cost c£35,000 just to instruct an approved design office to review compliance against UK regulations on a complex machine. Any resultant work required would cost extra and there are CAA charges to pay in addition.

Costs of recertifying larger business type turbo prop and jet aircraft will be significantly higher than the small aircraft but the level of costs is not known as types and requirements differ greatly.

Some individuals and businesses have extensive borrowings relating to foreign registered aircraft and some aircraft mortgages expressly require the aircraft to be maintained on the United States register. Accordingly a transfer to the UK register would not be achievable in such cases.

ii) **Certificates of Airworthiness** – The costs of a CAA airworthiness certificate are incurred every 3 years whereas the FAA system grants a certificate which remains valid throughout the life of the aircraft provided annual maintenance is carried out in accordance with their agreed schedules. The direct maintenance costs are little different in either system.

However the maintenance organisations that have expended considerable sums to accord with the FAA maintenance requirements would find those costs having to be written off.

iii) **Pilots licences and ratings** – This is an area of major difficulty. Pilots with a standard FAA PPL rating would be able to continue using it to fly a UK registered aircraft provided they maintain the currency and medical requirements associated with it. However, they would not be able to fly a UK registered aircraft outside the UK with an FAA licence unless they sought and obtained specific approval from each State within which they wish to fly. The FAA registry shows there are some 1342 holders of PPL IRs in the UK and some 8,500 across Europe and the Middle East. There are some 14,579 pilots registered with one or more FAA licence in the UK and more than 75,000 across Europe. Accordingly this proposal will affect a significant number of individuals and emphasises the need to most carefully assess the impact on GA across the whole of Europe.

In the USA some 50% of pilots have an instrument rating whereas in the UK the figure is less than 2% and in recent years very few private pilots have acquired a UK JAA IR licence, only 25 in 2004.

Major contributions to safety could be made if many more pilots in the UK (and other EC States) had such ratings. The current JAA licence requirements for gaining an instrument rating discourage its acquisition due to the high commitment required in time and costs terms. This is a main reason for pilots migrating to the FAA system to gain an instrument rating and thereafter transferring their aircraft to the FAA register.

A more realistic JAA instrument rating licence training requirement would almost certainly solve a major part of the perceived problem of aircraft remaining on the N register whilst being based in the UK by providing a means for UK pilots to gain the rating within realistic training requirements. Changes required are mainly to the ground school training syllabus needing exclusion of subjects particular to commercial aircraft flying (eg CAT aircraft systems that will never be encountered by a private pilot). The flying training part of the syllabus needs little, if any, amendment.

A revised syllabus requirement would also provide more business to the currently struggling UK flight training schools many of whom have lost IR training business, mainly to schools in the USA, in recent years.

Some pilots will be ineligible for a medical issued by the CAA yet comply with the FAA requirements. There is no evidence of any adverse safety implication from private pilots having the FAA medical licence rather than the JAA medical licence.

However, pilots with existing FAA IR licences would need to undertake considerable further study, training and testing to meet the current JAA theoretical knowledge requirements which, unlike the FAA, require knowledge of aircraft systems and similar requirements that the PPL will never encounter.

The theoretical training required for the rating is a long and expensive process as is the flying training and CAA testing requirements with variable credit given for their current FAA IR licence resulting in a need for a further probable 20 hours flying training hours requirement.

It is conservatively estimated the costs of obtaining the JAA IR on transfer from a FAA IR licence are at least £10,500 ignoring any loss of earnings during the process.

See Appendix A for full details of FAA to JAA licence conversion requirements.

In addition there are 1639 registered Airplane and Powerplant Mechanics with FAA licences who would have to retrain and acquire JAA equivalent licences to enable them to continue in business; the associated costs are not known but would be considerable.

Summary of costs position:

“As previously stated the total number and types of foreign registered aircraft based in the UK are uncertain. However, it seems unlikely that the total cost of reregistering the aircraft affected by the proposal will exceed £0.25m. It is difficult to estimate the number of foreign licence holders who might be affected by a change in registration of these aircraft. The major cost to them would be in obtaining the relevant ratings for a UK licence.”

It can be seen from i) above that the costs of registration are insignificant in the process of transfer and the major costs are associated with the recertification of the aircraft and its systems plus pilot licence transfer.

“The consultation paper outlines the likely cost implications if such steps are taken and a full regulatory impact assessment will be conducted if necessary in the light of responses to consultation paper.....”

We have not included a Regulatory Impact Assessment (RIA) as there is little evidence that this policy will have an impact on the aviation industry. If such an impact is identified as a result of this consultation an RIA will be prepared.”

Costs of recertification of even small single engine aircraft (per (ii) above) **£12,500**
As there are c1,000 in the UK, total costs would equate **£12,500,000**
(NB recertification of helicopters would add to the total significantly as would larger business jets)

Costs of pilot conversion to JAA IR licence (per (iii) above) **£10,500**
Assuming all 1324 UK FAA IR licence holders were to retrain for a
JAA IR the cost would be **£13,902,000**

The FAA registry also shows that there are some 2833 CPLs and 638 ATPLs UK based serving, one assumes, the Corporate Jet / Helicopter market and the costs of them acquiring JAA equivalent licences would clearly be very significant. **£?m**

Cost of retraining and licensing for mechanics/engineers is unknown **£?m**

Except for the latter category these costs are likely to have to be paid by private individuals out of taxed income.

It is clear that the costs (and time) associated with this policy would have a significant negative impact on the aviation industry and if the proposal is to be further considered a Regulatory Impact Assessment in accordance with Cabinet Office guidelines should be carried out forthwith

6. Outcome of the Consultation

“Once we have had the opportunity to analyse the responses we will publish a summary of the results of this consultation exercise.....”

It is not at all clear what is intended post the analysis of responses.

It should be noted that EASA and USA are already discussing joint arrangements for the future in relation to certification / maintenance (viz Cologne conference held in June 2005).

In addition Claude Probst Head of Rulemaking at EASA recently gave an aviation press interview (to Aviation & Pilote Magazine, France) in which he responded to questions on the N registration issue as follows:

“1/ Q: We understand that there is a will within EASA to have the aircraft based in Europe, but on a foreign register (ICAO compliant), to move to the national register of the country where the aircraft is based.

A: Yes, there is, as it would be logical for planes to conform to the same kind of rule that exist for cars. Any plane based permanently in Europe would have to go on the national register.

2/ Q: What about planes that are certified in an ICAO compliant country, but not in Europe or in the country of residence.

A: We would have to accept the certification of the foreign state, provided that the certification was done seriously. (Examples: Jetprop DLX, Mooney Ovation II GX etc etc etc)

3/ Q: It is next to impossible to obtain an IR rating for a non professional pilot or for a person that has a job not allowing him to sit the ground school for an extended period of time. Furthermore, the written exams are meant for pilots pursuing commercial licenses and include subjects that are of no interest to private pilots (mach number, flights above FL 195, aircraft systems based on B737 or A320 etc etc) What is EASA's position to allow private pilots to gain access to an IR rating that would reflect their needs.

A: there is a need to adapt the current rules for private pilots. Study groups will be formed to work on a IR suitable for private pilots Furthermore, for private pilots and them only, we are willing to envision the conversion of their US or Canadian IR to an European IR, so they can continue to fly their plane, formerly registered in the US or Canada.”

EASA appears to understand the issues involved in such a change and accepts it will have to accommodate appropriate arrangements. Accordingly we consider it premature to impose a change of requirements in the UK when such changes are under consideration by the body that will control the whole process of maintenance and pilot licensing within Europe. Additionally it is clearly against the spirit of the SES to impose new requirements on UK based aircraft before consideration by EASA.

Furthermore the CAA has just started a Strategic and Regulatory review of GA in the UK and to propose major changes to the registration requirements before that study is complete would clearly be premature.

We consider there are other methods by which the DfT / CAA could find out details of the “keepers” of foreign registered aircraft based in the UK if that is the requirement.

7. Responses to views sought

It should be noted the following responses do not mean that we support the proposal subject to them being amended to incorporate the suggestions

- i) Should the owners of aircraft based in the UK be able to opt out the UK regulatory system by placing aircraft on foreign registers? **Yes provided the register concerned has appropriate standards of maintenance as may be agreed by EASA.**
- ii) Are the estimates of the number of foreign registered aircraft based in the UK reasonable? **Yes except we consider the number to be nearer 1,000.**
- iii) If it is decided to bring foreign registered aircraft based in the UK into the UK regulatory system, is the proposed amendment of the Order the most appropriate method of doing so? **No.**
- iv) If the Order is amended as proposed, would a 90 day limit be appropriate? **No, 180 days would be more realistic.**
- v) What additional costs would fall on the owner of aircraft affected by the proposed amendment to the Order? **As noted above costs for the owner/pilot would be approximately £23,000.**

vi) Who, other than aircraft owners, might be affected by the proposed amendment to the Order? **Pilots without JAA licences and maintenance organisations plus suppliers and airfield operators.**

vii) If the Order were amended, what would be a reasonable transition period to allow aircraft owners to move their aircraft to the UK register? **Five years and subject to transfer of existing pilot licences and medical certificates of equal standard plus acceptance of FAA STC'd systems and equipment. Furthermore FAA medical standards should be accepted in future for pilots wishing to acquire instrument ratings and hence improve their safety.**

viii) Are there any aircraft that would be affected by the proposed amendment to the Order which would not easily be able to move to the UK register (eg because they are not type certified in Europe)? **Yes, aircraft such as some Cirrus types, Lancair, Javelin, Jetprop DLX, Mooney Ovation II GX, The PAC 750 XL, LET 410, GA8 Airvan, Nomad N22B. Augusta 109 helicopter.**

NB. It must be noted many existing N Registered aircraft in the UK could not transfer because of FAA STC'd equipment not currently being accepted by the CAA/EASA.

PRD

G A Alliance

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Attachment at Appendix A - Converting FAA PPL to JAA PPL

G A Alliance members include:

British Gliding Association (BGA)

British Hang Gliding and Para Gliding Association (BHPA)

British Microlight Aircraft Association (BMAA)

British Parachute Association (BPA)

General Aviation Safety Council (GASCo)

Helicopter Club of Great Britain (HCGB)

Popular Flying Association (PFA)

PPL/IR Europe – European Association of Instrument Rated Private Pilots

Royal Aero Club of the United Kingdom (RAeC)

Appendix A

Converting FAA PPL to JAA PPL

Interpreting LASORS, Section C, JAR-FCL PPL (A)

1. The holder of a current & valid FAA PPL(A), who has flown a minimum of 100 hours as pilot of aeroplanes, is credited with any experience/training requirements, but is required to pass the PPL(A) Skill Test. He/She is required to pass written examinations in Air Law and Human Performance & Limitations, and also the FRTOL (radio) theory and practical tests.
2. The holder of a current & valid FAA PPL(A), who has flown less than 100 hours as pilot of aeroplanes, but meets the JAR-FCL PPL(A) flying experience requirements, is credited the flying training, but required to pass the PPL(A) Skill Test. He/She is required to pass ALL JAR theoretical knowledge examinations including the FRTOL theory and practical tests.

Converting FAA IR to JAA IR

Interpreting LASORS, Section E, the Instrument Rating (Aeroplane)

The holder of an FAA IR(A), which is current or has expired by less than 5 years, will be required to fulfil the following.

1. Undertake JAR IR(A) theoretical knowledge instruction, as determined by the Head of Training of an approved training provider, and to pass ALL of the theoretical knowledge examinations.
2. Complete a minimum of 15 hours of instrument time under instruction including the 170A (at an approved FTO), of which 5 hours may be in an FNPT I or 10 hours in an FNPT II or Flight Simulator.
3. Pass the JAR IR(A) Skill Test.

The above applies to FAA SE IR to JAA SE IR, or FAA ME IR to JAA ME IR. FAA SE IR to JAA ME IR is slightly more complicated, including the additional requirement to obtain a JAA MEP Class Rating.

In addition to the above, the JAR PPL or PPL IR aspirant needs to obtain the relevant **JAR-FCL Medical Certificate**.