

The information included within this document is intended to provide an overview of the risks involved in flying historical, vintage, ex-military aircraft (also referred to as warbirds) in the UK and to reassure those looking to undertake a Flight by explaining the measures in place to mitigate against these risks.

THE HISTORY BEHIND FLYING IN EX-MILITARY AIRCRAFT IN THE UK

Historically, the UK Civil Aviation Authority (CAA) had erred on the side of caution when it came to permitting non-pilots to fly in vintage ex-military aircraft such as Spitfires, Hurricanes, Mustangs, Lysanders and Blenheims. The belief was that the average non-pilot has insufficient knowledge to understand the levels of risk associated with flying in a vintage warbird. With success within other industries of adventure sports such as bungee jumping and motor racing, there was a change of policy which requires aircraft operators to take sufficient time to explain the risks to participants and minimise these risks as far as possible. These flights are now permitted under the Safety Standards Acknowledgment and Consent (SSAC).

AIRCRAFT DIFFERENCES TO THOSE THAT PROVIDE HOLIDAY / TRAVEL FLIGHTS

Most ex-military aircraft or warbirds are not built for carrying passengers. Spitfires, Hurricanes, Mustangs, Lysanders and Blenheims were all built for combat purposes in contrast to the Boeing or Airbus manufactured aircraft which are used within the travel industry today. Boeing and Airbus design and produce their aircraft solely with passenger safety in mind, so there is a clear difference in design philosophy that affects safety. This is compounded by the fact that there are differences in technology often decades apart and older aircraft are mechanically less predictable, making unexpected failures more likely.

THE RISKS AND WHAT HAS BEEN DONE TO MINIMISE / REDUCE THESE RISKS

Our aircraft are maintained regularly by the Aircraft Restoration Company (ARCo), a world leading organisation in the restoration and maintenance of warbirds, responsible for the continued care of over 40 historical vintage aircraft including the Royal Air Force's Battle of Britain Memorial Flight.

ARCo's highly trained engineers perform thorough checks prior to each day of flying and remain on hand throughout the day.

Further to this, each year our aircraft undergo a period of deep maintenance known as an 'Annual Check', during which panels are removed to reveal the control systems, engine and aircraft structure, all of which are thoroughly inspected. On top of this, throughout the flying season, the

aircraft undergo interim servicing consisting of 25 hour and 50 hour examinations, again the engine, undercarriage and controls systems are all inspected.

Our pilots are all highly experienced professionals, from either commercial and/or military backgrounds. They undergo regular competency checks and recurrency training provided by ourselves in addition to any other professional training that they receive. Our pool of pilots largely consists of the most experienced and renowned warbird display pilots within the industry. Being a good pilot is about making constant, well-informed, safe decisions throughout a flight that will avoid any of the potential scenarios which are discussed during our safety briefings. In the event of an incident of any sort, pilots are trained to act calmly and apply their professional training to achieve the best outcome possible.

You will be provided with a comprehensive safety brief which will include briefings on the equipment you will be provided for your flight. This equipment will include a Flight Suit, Gloves, Helmet, Parachute and in some instances a Lifejacket. All of this equipment is fire retardant and is inspected regularly.

Engine Failure – In the event of an Engine Failure in flight, our pilots have been trained to identify a suitable landing place, preferably an airfield or airport. In all circumstances, the aircraft can glide without the engine providing power, nonetheless the pilot's aim will be to get the aircraft on the ground as safely as possible. Should the pilot perform a 'forced landing' within a field, the aircraft will stop in approximately 100 metres, and whilst there may be cosmetic and minimal structural damage to the aircraft, you will walk away.

Fire – There are several potential sources of fire with each of the aircraft that we operate. Examples of these include the engine, electrical systems, and wheel brakes. Your safety briefing will explain in detail the procedure to be followed in the event of a fire occurring either on the ground or in flight. In any event, your pilot will assess the best course of action and instruct you accordingly. On the ground, this is likely to involve stopping the aircraft and commanding you (the participant) to evacuate the aircraft. In flight, if attempts to extinguish the fire are not successful, it may be necessary to force land the aircraft away from the airfield or abandon the aircraft by parachute.

Ground Collision - Visibility from the aircraft while manoeuvring on the ground can be limited. For example, with the aircraft tailwheel on the ground, the view directly ahead can be restricted by the engine and cowling. Pilots mitigate this to some extent by clearing the area ahead through weaving side-to-side while taxiing. Clear communications with Air Traffic Control and other aircraft can be used to enhance situational awareness and you can assist your pilot with this by minimising distraction for them on the ground. If a ground collision does occur, your pilot will bring the aircraft to a stop and shut down the engine. It is likely that the safest place for you to be is in your seat, so listen carefully to the pilot's instructions.

Undercarriage Failure and Loss of Control on the ground – Once locked in the down position, it is extremely unlikely that an undercarriage will fail but there remains a small risk of the undercarriage collapsing on the ground. More likely but still only a small possibility, is the undercarriage failing to extend normally on return to the airfield at the end of a flight. In this scenario, your pilot will take time to fully assess the condition of the undercarriage and the likely effects on the subsequent landing. It may be that your

pilot decides that it's safer to perform a gear-up landing on the belly of the aircraft, rather than attempt a landing with only one leg locked down. In any event, it is likely that your pilot will get you to prepare for a forced landing as per the instructions provided to you during your safety briefing. If during landing, control of the aircraft is lost, it may come to rest in an unusual attitude. It may be that the aircraft comes to rest on its nose with the tail and rear cockpit very high off the ground. It is important that you remain in your seat with your harness fastened and await instructions from your pilot or ground personnel.

Mid-Air Collision and Loss of Control in flight – In most instances, the flight will be conducted within uncontrolled airspace, this means that once the aircraft has departed the airfield, the flight will not be directed by an Air Traffic Controller. It is therefore a key responsibility of your pilot to identify and avoid other aircraft, a task you will be asked to assist with once briefed by your pilot prior to the flight. Whilst incredibly rare, mid-air collisions do occur every year, however, this is balanced by the fact that there are also hundreds of thousands of safe flights every year. A mid-air collision has the potential to lead to a loss of aircraft control. Should this occur you still have options, one of those is bailing out and using the parachute as per the instructions you will receive during your safety briefing.

Pilot Incapacitation – All of our pilots hold Class 1 Medical Certificates, which entails having regular and thorough professional medical examinations to check that they meet the fitness requirements to fly passengers. There is still an extremely remote possibility that your pilot could become incapacitated during the flight. You will be instructed on what to do in this eventuality during your safety briefing.

Your Health – There are restrictions and limitations on who can fly. We are therefore obliged to ask a number of questions about your health, including your height and weight prior to your flight, these discussions will happen discretely and are done so with your safety in mind. We also reserve the right to make our own decision on your suitability for flight, and in some rare cases, we may decide that it is not suitable for you to fly. There are a number of medical conditions that can preclude you from undertaking the Flight. There is no upper age limit, however, we cannot fly anyone younger than 18 years of age.

STATISTICS

We have examined the risks involved and whilst it is difficult to provide any reliable figures that provided a basis for comparison, the indicated chances of a serious injury or death in General Aviation activities is less than 1 in 300,000. This is a generalised statistic which has been ascertained with the Civil Aviation Authorities guidance and support.

We have gone to every effort to minimise risk on your behalf, utilising experienced pilots, ensuring our aircraft undergo thorough maintenance, operating under robust procedures as well as providing you, the participant, with comprehensive safety briefings and safety equipment. We are therefore confident that our flight operations are probably safer than most other General Aviation activities.

ADDITIONAL RISKS – FORMATION FLYING

Whilst incredibly exciting, formation flying or flight activities that involve more than one aircraft attracts an increased level of risk. To mitigate against this, our pilots undertake elements of formation flying within their regular training and will have built up many hours of experience in formation flying before joining our team. All flying activities are well briefed prior to take off, this will include the careful planning of any expected formation flying. Furthermore, at no point during the formation elements of the flight will you / the participant be permitted to handle the aircraft.

ADDITIONAL RISKS – SPECIFIC TO AIRCRAFT TYPE : LYSANDER

The rear seat of the Lysander, which is the seat occupied by you the participant, is unusual in that it faces backwards/towards the rear of the aircraft. In order to mitigate against the risk of injury incurred in the event of rapid deceleration, a forced landing or turbulence, there is additional specific information provided during the safety briefing and in the form of a hard copy 'aide memoir'.

INSURANCE

The aircraft in which your flight will take place are fully insured for third party and passenger liability with a combined single limit of £25 million. If you hold personal life insurance or similar policies, you should make your own enquiries before the Flight as to the extent of cover whilst participating in adventurous activities such as this. It is your responsibility to ensure that the insurance cover provided by us or otherwise available to you is suitable and adequate for all your needs. If you decide that you or the person undertaking the Flight requires additional insurance cover, it is your responsibility to obtain such insurance at your own cost.