



LONDON GATWICK



## VORTEX STRIKE AND ICE FALLS FROM AIRCRAFT POLICY

### Introduction – The Legal Context

Legal responsibility for damage caused by aircraft, including vortex damage and ice falls, rests with the operator of the aircraft concerned; this is governed by Section 76 (2) of the 1982 Civil Aviation Act and promulgated in Section 2.1.23 of the Gatwick Airport: Conditions of Use. Identification of the operator concerned is not always possible in the case of such occurrences. This is mainly due to the fact that the precise time of the vortex making contact with the roof, or an ice fall may not be known, and thus may be potentially attributable to a number of aircraft within a given time period. In recognition of this circumstance, and in the interests of being a good neighbour, Gatwick Airport Ltd commits to providing an ex-gratia response to reported vortex damage and ice falls in accordance with the conditions described in this policy document. The provision by Gatwick Airport Ltd of the assistance set out in this policy does not constitute acceptance of liability.

### Who is Covered by this Policy

Every house, school, church or hospital affected by a vortex strike or ice fall is eligible for repair under this policy, provided always that the owner and/or occupier of the residential property shall take all reasonable precautions to prevent such property damage. This includes homes situated above commercial properties. The scheme does not cover damage to other property, such as cars, from roof tiles dislodged by a vortex or ice fall. The above provisions relating to ex gratia payments will only apply to the types of properties listed above. Gatwick Airport Ltd will not pay for any repairs to commercial properties. However, Gatwick Airport Ltd will provide any available information on flights operating during the time of roof damage incidents that may be required by owners of commercial properties affected.

### Wake Turbulence and Wingtip Vortices

Wake turbulence is a disturbance in the atmosphere that forms behind an aircraft as it passes through the air. It includes various components, the most important of which are wingtip vortices and jetwash:

- Jetwash refers simply to the rapidly moving gases expelled from a jet engine.
- Wingtip vortices, are spiralling cones of air generated by the wingtips as the aircraft flies through the air. The vortices can remain in the air for several minutes after the passage of an aircraft.

Closer to the ground, although aircraft travel much slower, and the vortices dissipate quickly there are occasions when the vortex can reach the ground. The vortex can then damage roof tiles on properties under the flight path.

### The Main Risk Factors

The risks of being affected by an aircraft wake vortices can be assessed by looking at various known factors, namely:

- **Is the location of the building under the flight path** into the airport? The potential impact can also be experienced up to 10 degrees either side of the centre line and up to 6km from the touchdown point.
- **Is it an arrival or departure?** In comparison to departures which use a steep rate of climb to take-off, arrivals which are preparing for landing are typically lower. This can bring aircraft into a position when the vortex may reach the ground.
- **The size and weight of the aircraft** will affect the speed at which the aircraft lands which can affect the strength of the vortex generated.

## Vortex Strikes

Unlike wind, wingtip vortices will typically affect the perimeters of the roof, especially the ridge and verge. This is because the vortex is typically relatively small, slow moving and is likely only exert its force on the roof for a very short period.

On a tiled roof, the small vortex can affect individual tiles and can potentially break, dislodge and in some cases, lift tiles off the roof if they are not fixed securely. To resist the force of the vortices it is recommended that the tiles and slates are securely fixed and cannot rotate. This can be achieved by nailing the head of the tile and clipping the tail with a rigid clip.

Roofs clad with metal sheeting or built-up systems do not appear to be vulnerable to aircraft wake vortices damage as the small footprint of a vortex relative to the large surface area of the panel.

### What should you do if you Suspect Vortex Damage?

Please provide the following information when contacting us at: [vortex.damage@gatwickairport.com](mailto:vortex.damage@gatwickairport.com)

- The exact time the damage occurred and details of the aircraft concerned, if known. If you are not able to make such identification, please supply an approximate time.
- The extent and nature of the damage (front, rear or side of property and what damage is visible? If it is possible, and safe to do so, photographs should also be supplied).
- If you are the property owner, your name, address and telephone number.
- If you are not the property owner, the name, address and telephone number of the owner.
- Why you think vortex damage was responsible for the incident.

When we receive your email we will review the information and appoint a specialist contractor to inspect and report on your roof. We will liaise with the property owner to arrange this visit as soon as practicable following the event.

Gatwick Airport Ltd will contribute towards roof repairs as described below provided there is clear evidence that the roof damage was caused by vortex strike. It is therefore essential that the damage to the roof can be illustrated by means of photographs prior to any replacement or movement of broken or dislodged tiles. No contribution will be made in the absence of such evidence.

Please do not undertake any repairs before the appointed contractor attends to your roof, as homes are only eligible for the scheme if the damage has been officially verified. If you have a valid claim, arrangements will be made for repairs to your roof. If your property falls within the area identified as most at risk; a new roof covering, with a greater resistance to aircraft vortices, may also be offered to prevent future issues; this will be at the sole discretion of Gatwick Airport and the airport's associated insurers.

### Introduction - Ice Falls from Aircraft <sup>1</sup>

Annually more than 2.5 million flights travel through UK airspace and in the same period, on average, 25 ice fall incidents are reported (countrywide) to the Civil Aviation Authority; the likelihood of experiencing property damage due to falling ice from an aircraft is extremely low.

It is usually assumed that ice falling from the sky is aviation related but incidences have been reported worldwide of large lumps of ice, known as megacryometeors, falling from the sky, despite there being no clouds and no aviation activity nearby. This phenomenon is under investigation by scientists, currently the origin of these megacryometeors is still unknown. Whilst ice falls from aircraft are rare, ice can form on the outside of an aircraft when it is cruising at high altitude and as it descends into warmer air, these chunks may break away and fall to the ground.

Contrary to popular misconception, modern aircraft do not have the facility to eject toilet waste whilst they are airborne. Waste collection happens when the aircraft lands at an airport and is removed from the aircraft by specialist ground handling equipment and subsequently disposed of through the airport sewerage system. However, there have been reported incidents where the hose valve that is used to empty the aircraft has been

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<sup>1</sup> Any item falling from an aircraft in flight that causes damage will be dealt with in the manner detailed in this policy.

faulty and leaked fluid which has frozen at altitude. This rare occurrence usually results in discoloured ice and is commonly referred to as “blue ice.”

### **What should you do if you Suspect an Ice Fall?**

Please provide the following information when contacting us at: [vortex.damage@gatwickairport.com](mailto:vortex.damage@gatwickairport.com)

- The exact time the damage occurred and details of the aircraft concerned, if known. If you are not able to make such identification, please supply an approximate time.
- The extent and nature of the damage (front, rear or side of property and what damage is visible? If it is possible, and safe to do so, photographs should also be supplied).
- If you are the property owner, your name, address and telephone number.
- If you are not the property owner, the name, address and telephone number of the owner.
- Why you think an ice fall from an aircraft was responsible for the incident.

In line with our vortex repair scheme, we will appoint a specialist contractor to inspect and report on the damaged property. We will liaise with the property owner to arrange this visit as soon as practicable following the event. If you have a valid claim, arrangements will be made for repairs to your property.

Gatwick Airport Ltd will contribute towards roof repairs provided there is clear evidence that the roof damage was caused by an ice fall. It is therefore essential that the damage to the roof can be illustrated by means of photographs prior to any replacement or movement of broken or dislodged tiles.

No contribution will be made in the absence of such evidence. Please do not undertake any repairs before the contractor attends to your roof, as homes are only eligible for the scheme if the damage has been officially verified.

### **Liability**

Gatwick Airport Ltd will have no liability for any work carried out. Any liability in contract or tort and any guarantees of workmanship and roof performance will be owed by the appointed roofing contractor to the owner of the property. Gatwick Airport Ltd will not be liable for any damage to a roof which has been designed for extra vortex protection as described above. Although such works give greater protection to the roof against damage by aircraft vortices, and other climatic events, they do not give a guarantee of no further damage.

### **Arranging Own Repairs**

Nothing in this policy prevents owners of property affected by a vortex strike or ice fall from arranging either their own repairs or claiming on their buildings insurance policy.

In these cases, Gatwick Airport Ltd may, at its sole discretion make an ex-gratia payment towards the costs incurred. Any such payment would be dependent on the full provision of the information detailed previously in this document, proof of the damage that has occurred and an invoice for works that have taken place to make good the damage caused.

### **Managing Your Data**

In providing these schemes, Gatwick Airport Ltd will be collecting your personal data. When we collect personal data, we are obliged legally to provide you with certain information, it is called the “right to be informed”. That information is set out below.

1. Why we need it - the purpose of processing.

We will need your personal data at the time of the suspected Wake Vortex / Ice Fall damage to be able to contact you to track the progress of the works as well as dealing with any matters arising during the delivery of the repairs and any follow-up activity.

2. Why we’re allowed to process your personal information in this way – the legal basis.

Performance of a contract – to repair damage arising from vortex strikes or ice falls arising from aircraft operating at Gatwick Airport.

3. Who we will share your personal information with.

Your data will be shared with Gatwick Airport's appointed contractors for the purpose of completing the agreed works.

Your data may on occasion also be shared with insurer's who represent the airport.

We may also share your information with the Civil Aviation Authority and/or the Department of Transport for reporting purposes, our external advisors to the extent we need to in order to obtain advice from them, for instance on remediation plans and also with our IT service providers, for instance the companies that host our database and operate our email delivery system.

#### 4. Where your personal information will be stored or transferred to.

Gatwick Airport generally stores and processes personal data inside the European Economic Area. However, in some circumstances its service providers may transfer personal data outside the European Economic Area.

Where they do so, Gatwick Airport requires its service providers to do so in compliance with data protection law, typically requiring them to enter into standard contractual clauses approved by the European Union as providing equivalent protection to what would be in place had the personal data remained in the European Economic Area. We can provide more information on the non-EEA countries to which we transfer your personal data this on request.

#### 5. How long we will keep your personal information for.

Once your property has received remedial works under the scheme your data will then be kept for a period of 7 years. After this time, we will minimise the personal data we hold on you by securely deleting all but your address and if the works were accepted and completed.

This residual information will be held on record for a maximum of 7 years or until the scheme is closed (whichever comes first). This information is required to allow the scheme to be phased and ensure that an accurate record is kept of properties that have had remedial works undertaken.

#### 6. Your rights.

##### Access

With some exceptions designed to protect the rights of others or in respect of airport security, you have the right to a copy of the personal data that we hold about you. We may make a reasonable charge for additional copies of that data beyond the first copy, based on our administrative costs. Where the data is data that you have given to us, you have the right to receive your copy of it in a common electronic format, and to provide copies of it to other people if you wish.

##### Correction

You have the right to have the personal data we hold about you corrected if it is factually inaccurate. This right does not extend to matters of opinion.

##### Deletion

In some limited circumstances, you have the right to have personal data that we hold about you erased ("the right to be forgotten"). This right is not generally available where we still have a valid legal reason to keep the data (for example, for security reasons or because we are obliged to do so by law).

##### Right to object

The right to object is particularly important if we are processing your information under the conditions of a "public task", or "legitimate interests", and you can check that information above in section 2. These are because these conditions must be based on not overriding your rights and freedoms against our purposes for using your personal information. If we are using your personal information on these grounds and you wish to object, please contact us on [dpo@gatwickairport.com](mailto:dpo@gatwickairport.com)

##### Temporary restriction

You also have the right in some circumstances to request that temporary restrictions are placed on how we process your personal data, For example if you contest its accuracy or where we are processing it on the basis of our legitimate interest and you contest our assessment that our interest overrides your rights.

##### Withdrawing consent

If we are processing your personal data on the basis of your consent, you have the right to withdraw that consent at any time, in which case we will stop that processing unless we have another legal basis on which to continue.

#### Data Controller

The data controller of your information is:

Gatwick Airport Limited  
5th Floor, Destinations Place  
Gatwick Airport  
West Sussex RH6 0NP

If you have any questions or concerns about the information on this page, or about what we do with personal data, you should email us at [dpo@gatwickairport.com](mailto:dpo@gatwickairport.com), or to write to us at the above address, for the attention of the Data Protection Officer.

You can also find further information on our webpages at: [www.gatwickairport.com/privacy-policy/](http://www.gatwickairport.com/privacy-policy/)

7. If you are unhappy with the way in which we use your personal information.

Whilst we would always ask that you contact us first, you also have the right to lodge a complaint about our handling of your personal data with the Information Commissioner's Office (The UK's Data Protection Regulator), the details are below. However, the Information Commissioner does prefer that you have contacted Gatwick Airport first with your concerns before you then take those concerns to the Regulator. Postal Address:

Information Commissioners Office  
Wycliffe House, Water Lane  
Wilmslow  
Cheshire SK9 5AF

Email: [casework@ico.co.uk](mailto:casework@ico.co.uk)

Telephone number: 0303 123 1113 for local rate calls or 01625 545745 for the national rate.