#### **BIRD STRIKE OUTSIDE AIRPORT BOUNDARIES**

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#### Abstract

Most often, bird strike happens within airport area, i.e. inside strictly fenced and bounded area that is up to certain reasonable height under direct control and management of airport operator. However, it is known that bird strikes also happen outside airport boundaries, consequently in the area that is not under direct airport operator control.

As serious threat to air traffic safety, bird strike often causes direct aircraft damages, whereas, in certain cases, it may cause higher degree consequences (total destruction of aircraft, injuries or death of passengers, crewmembers or third persons on the ground, different indirect and hidden damages to aircraft operator, etc.). Under such circumstances, air traffic participants, particularly airports and aircraft operators and their insurers, may face the seriousness of different compensation claims regarding property damages, profit losses and eventual injuries or death of persons.

Consequently, along with a moment the damage occurs, very often the damage liability is stated, and the damaged party is entitled to claim repair or financial compensation, while the other party is liable to realise the repair or to pay the determined amount.

The subject of this paper is consideration of liability concerning damage occurred as consequence of bird strike happened outside airport area, and on basis of existing law practice and legal regulative in the Republic of Croatia.

Key words: damage liability, damage compensation, airport area, around airport land use

### 1. Introduction

In the past years, the words very often mentioned in a field of air traffic are "SAFETY" and "SECURITY". Safety & Security are surely among the most important segments of total air traffic complexity. Therefore, these segments today attract more attention then ever, and all in purpose of property and persons protection. Mr. David Collenette, the Minister of Transport of Canada, in his opening speech on the occasion of 33<sup>rd</sup> ICAO Assembly held in Montreal, from 25<sup>th</sup> Sep to 5<sup>th</sup> Oct 2001, on the occasion of the event happened on 11<sup>th</sup> Sep 2001, said the following:



"The unthinkable happened and we must now determine how we can continue to enhance the safety and security of our civil aviation systems so it never happens again. ....

Together we must take the time for a measured response, but we must not hesitate in our resolve to do what is necessary to minimise the threats to aviation security and safety around the world."

The above said may serve as the basis of implementation of all measures and activities that refer to any form of air traffic safety and security. Therefore, it is extremely important that all direct or indirect air traffic participants (airport operators, aircraft operators, Air Traffic Control personnel, Police, Customs et al.) follow and apply carefully and thoroughly all legal regulations, proscribed measures, recommendations and stated standards that refer to safety matters.

In the air traffic safety as a whole, particular place is reserved for special measures and activities in connection with appearance of birds at or in the vicinity of airports and threats that they may represent for air traffic safety. Namely, birds are potential danger to aircraft from the very beginning of air traffic. They are particularly dangerous in the present time of increasing technological progress, when aircraft speed increases and aircraft engine noise significantly decreases, especially with development of turbo engines. Aircraft are too fast and too silent for birds to sense and to avoid them, so they became very serious threat to aircraft safety, and thus to air traffic safety in general.

In case of bird strike, damages of aircraft very often occur. But, besides aircraft material damage, bird strike may cause more serious consequences such as injuries or death of passengers, crewmembers or third persons on the ground. When this happens, air traffic participants (particularly airport and aircraft operators and their insurers) may face the seriousness of different compensation claims regarding property damages, as well as regarding eventual injuries or death of persons. So, the mentioned claims may have very serious financial consequences for mentioned parties.

It is actually possible that bird strike happens inside and outside airport area. If bird strike happens outside bounded and strictly determined airport area, who is then responsible for occurred damage?

# 2. Why is this question of interest for all air traffic participants?

For the third joint Bird Strike Committee USA / Bird Strike Committee Canada Conference held in Canada, Calgary, from 27<sup>th</sup> to 30<sup>th</sup> Aug 2001, I elaborated and presented a paperwork entitled "Damage Liability and Compensation in Case of Bird Strike". Basic condition for establishing someone's damage liability and for enabling someone's damage compensation claim in the mentioned paper is the fact that bird strike happened within an airport area in the Republic of Croatia.

I elaborated damage liability and damage compensation in case of bird strike with particular regard to:

- 1. Republic of Croatia Legal Regulations:
  - Air Traffic Law Rules;
  - Obligation and Proprietary Legal Relations Law in the Air Transport;
  - Law on Civil Procedure;
  - Obligation Law;
  - Law on Settlements in Conflict of Domestic Law and Foreign Regulations in Defined Relations;

and

- 2. International Private Air Traffic Law Regulations:
  - Warsaw Convention with Additional Protocols and Supplementary Conventions;
  - Montreal Convention of 28<sup>th</sup> May 1999;
  - Council Regulation (EC) No. 2027/97 of 9<sup>th</sup> October 1997 on Air Carrier Liability in the Event of Accidents.

Damage compensation claims are described in details for:

- 1. Domestic airline aircraft;
- 2. Foreign aircraft (on international flight, because there is no cabotage in the Republic of Croatia);
- 3. Passengers:
  - with domestic air carrier on domestic flight;
  - with domestic air carrier on international flight (as Republic of Croatia citizens or as foreign citizens);
  - with foreign air carrier on international flight.

It is also elaborated and described the following:

- 1. Aircraft damage (direct, indirect, unexpected et al.);
- 2. Damage suffered by passengers as Republic of Croatia citizens on domestic or international flight; and
- 3. Damage suffered by passengers as foreign citizens on flight of air carrier under Croatian flag or on foreign air carrier flight.

After the presentation, in time provided for comments and questions, one of the participants of the Conference briefly commented the presentation and posed roughly the following question: *"If bird strike happens inside airport area, someone's liability may be stated highly accurately. But, what if it happens outside airport area? Who is then responsible, and who is liable for eventual damage compensation?"* 

It is very interesting question from juridical and legal point of view, particularly for us working at airports whose activities are closely connected to legal regulations. Therefore, in the view of Republic of Croatia legal regulations and parallel legal practice, I decided to try to indicate some elements that might be the basis for giving an adequate answer to the above question.

### 3. Liability in general

In legal practice, damage liability is defined as obligational – legal relation in which one side is liable to repair damage caused to other side, and the other side is entitled to demand such reparation. There are different criteria for damage liability classification such as:

- Non-contractual and contractual liability;
- Subjective and objective liability;
- Proper liability and liability for others.

Among stated kinds of liabilities, we are especially interested in objective liability which is, in practice, called liability according to objective criterion, or according to causal criterion, i.e. according to causal principle. To be able to talk about stating someone's liability in case of bird strike happened outside airport area and to understand why this kind of liability is applied, it is indispensable to indicate in detail the legal definition of objective liability from the formal – legal aspect. Regulations regarding this kind of liability are contained in Obligatory Relations Law, Article 154, Par. 2 (in the following text: ORL), according to which one is, regardless actual guilt, responsible for damage caused by things or activities that originate greater danger of damage. Considering this kind of liability, more convenient is a position of the side that suffered damage (damage sufferer) than of the side that caused damage (damage doer), because the burden of argumentation of irresponsibility for damage is transferred to damage doer. Considering objective liability, damage doer is responsible on basis of mere fact that damage is caused. In other words, it is essential to proof is there a causal relation between damaging act and damage itself. It is enough to proof the existence of damage and state that it originates from dangerous thing or damaging act. Dangerous thing or damaging act liability is stated with regulations of ORL, Articles 173 – 179. According to ORL, Article 173, damage suffered in connection with dangerous thing is considered to be originated by that particular thing, unless it is proved that that particular thing did not cause that damage. ORL does not determine what is considered dangerous thing. That enables court practice to determine, from case to case, taking into consideration all circumstances, should certain thing be considered dangerous or not.

In the Republic of Croatia legal practice, animals are also considered dangerous things. In that context, domestic animals may also sometimes be considered dangerous things (for example: dog, horse). Unlike domestic animals, wild animals are, as a rule, considered dangerous things and responsibility in connection with them is stated according to objective liability. So, for example, for damage caused by wild animals (boars, deers, foxes etc.) that run into motor vehicle on public road, a hunting society is liable according to general damage liability regulations for dangerous things (Supreme Court verdicts: Rev-2101/86 of 29<sup>th</sup> Jan 1987, Rev-1816/90 of 5<sup>th</sup> Dec 1990, Rev-537/88 of 5<sup>th</sup> Oct 1998).

However, in one case, a court in the Republic of Croatia judged that for damage occurred by accidental run of hawk into driving vehicle neither road maintenance firms or their insurers nor hunting society, regardless acceptance of the fact that hawk's standard behaviour and characteristics represent dangerous thing in given circumstances, are liable.

In other words, does it mean that an airline whose aircraft suffers damage due to a bird strike outside an airport area does have no legal grounds for damage compensation claim and would that airline gain success in legal proceedings with regard to its damage compensation claim respectively?

### 4. Situation in the Republic of Croatia with special review on Split Airport

Air traffic is of extreme economic and strategic importance for the Republic of Croatia being a significant tourist destination. Therefore, there are eight airports opened for international traffic. These are Zagreb, Split, Dubrovnik, Zadar, Pula, Rijeka, Osijek and Isle of Brać Airport and they are all, as a rule, settled in the vicinity of biggest cities or tourist regions.



Airports in the Republic of Croatia

Split Airport, the most important airport on eastern Adriatic coast, is a site where economic activities, very important not only for its area but also for the whole region, its hinterland, and the Republic of Croatia in general are performed. It is situated in western part of Kaštela Bay, confined with town of Trogir from the west, town of Kaštela from the east, Adriatic Sea from the south, and mild hillsides of Kozjak from the north. With regard to vicinity of settlements, sea, Pantan marshland, as well as to vicinity of rubbish-heap, the area around Split Airport is highly likely a very interesting habitat for considerable number of birds.



Split Airport location

Split Airport area is schematically shown at a picture bellow through two zones: Zone A and Zone B. Within the area that according to ICAO standards and recommendations is defined as Zone A we also find some things expected exclusively in Zone B. Concretely, these are: individual agricultural farms planted with different vegetables and orchards, livestock and poultry farms that produce manure very attractive for birds because of animals that live in it and serve as food, rubbish-heaps and large areas belonging to firm whose exclusive activity is agriculture. Consequently, all these, along with natural resources (sea, streams and marshland) create convenient conditions for bird habitats, for their everyday activities like food searching, flying over (from sea and marshland to rubbish-heap and agriculture, livestock or poultry farms and back), as well as for their resting in open areas (particularly in airport area) suitably protected from bigger predator birds or other enemies.



Legend:

- zone A
- zone B
  - ARP Airport Referential Point
- Flight Path Area
  Airport Property Boundaries and Area Controlled by Airport Bird Controlled Personnel

From the brought up, it is obvious that it is highly likely that bird strike happens outside airport area, because the areas of aircraft movements may coincide with areas of birds movements.



Approach 05

Such possibility is particularly expressed when descending and/or climbing operations are performed from or into direction 05, especially when flying over Pantan marshland (at about 1,5 km from runway 05 threshold), because in that moment (particularly during descending) the height of aircraft is not big. Taking into consideration both, low height and relatively small speed of aircraft and usual behaviour of birds, sea gulls in particular, a high level of bird strike danger is present. It is important to point out that all pilots using Split Airport are, by permanent NOTAM, acquainted with possibility of bird appearances at or in the vicinity of the airport. On the pictures bellow, the approximate heights of aircraft on behalf of mentioned operations is shown.



According to Croatia Airlines total number of bird strikes involving that company's aircraft data, from the year 1994 to 2001, the following is visible:

- Biggest number of bird strikes, 58, happened inside airport areas in the Republic of Croatia and out of it;
- 11 bird strikes happened outside airport areas;
- 6 bird strikes happened on locations that cannot be strictly determinated.



## 5. Liability YES or NO?

Taking into account actual conditions in the Republic of Croatia regarding legal regulating of damage liability and absence of court practice related to these proceedings, it is very difficult to answer this Hamlet type question. Consequently, at this moment, it is really impossible to answer decidedly to a question whom an airline may claim damage compensation from in case of bird strike outside an airport area. Concretely, in case bird strike happens during descending to Split Airport from 05 direction over Pantan marshland area, at height of approx. 100 m AGL, and if on that behalf some part of aircraft is damaged, whom the user of that aircraft may claim damage compensation from?

On one hand, there is Pantan marshland that is under special protection as natural area in which protected bird species live. On the other hand, there is a rubbish-heap in immediate vicinity of airport, at about 3 to 3,5 km, in the area of settlement called Plano. Because of both, birds often fly through aircraft descending or climbing corridors flying from the sea to rubbish-heap and back. Is it possible, with regard to marshland and rubbish-heap locations, and in case of eventual legal proceedings, to include firm that manage rubbish-heap, or some of ecological associations that take care about Pantan area protection, or town of Trogir authority on the territory of which Pantan and rubbish-heap are situated, or ministry in charge of air traffic safety, or someone that is not mentioned here, into respective proceedings? As it is pretty hard to give an answer to this question, it would be very interesting to see an accusation related to eventual bird strike damage compensation claim, and particularly whom the accusation would be addressed to, as well as what the eventual final court decision would be.

However, for a solution of relations that emerge from eventual harmful event in the Republic of Croatia air traffic the application of Law on Settlements in Conflict of Domestic Law and Foreign Regulations in Defined Relations is essential. As in harmful events of this kind domestic and foreign affiliation aircraft may participate, it is important to emphasise:

- 1. Correct application of competent law choice;
- 2. Correct application of international jurisdiction rule;
- 3. Acknowledgement of foreign court decisions.
- As far as the choice of the competent law is concerned, when the situation involves Croatian air carrier the Republic of Croatia Law Regulations are, by all means, applied. When the situation involves foreign air carrier, in accordance with Law on Settlements in Conflict of Domestic Law and Foreign Regulations in Defined Relations, Article 28, that favours damaged side regarding non-contractual damage liability, if not otherwise determined for particular case, the competent facts are:
  - The law of the country where the action takes place, i.e. where the damage occurs, or
  - The law of the country where the consequence is perceptible, depending on which of the two laws is more convenient for the damaged side.

The provisions of this Law are not applicable if the relation in question is regulated by international convention.

- When applying jurisdiction rules in case where a Croatian air carrier is involved, the Republic of Croatia Law Court is always competent. In the theory of International Private Law with international element involved in legal proceedings, a general and a particular international jurisdiction is to be distinguished. When talking about general jurisdiction, it is stated that the Croatian Law Court is competent when defendant's head office is on the Republic of Croatia territory. When determining a particular jurisdiction, a place where a damage occurs is taken into consideration, i.e. the damaged side may institute legal proceedings in Croatian Law Court, regardless defendant's head office, if the damage occurred at the Croatian territory.
- The acknowledgement and realisation of compensation claim decisions brought by foreign law courts will be implemented only in case where passenger, or, in case of death, his successor acts as damaged side, and when the jurisdiction of the Law Court is determined on the basis of the current Warsaw Convention. Foreign Court decision is equalised with a decision of the Croatian Law Court decision and becomes legally effective only if acknowledged by the Republic of Croatia Law Court. Foreign Court decision may be acknowledged only on the basis of reciprocity.

In context of the safest overflight over mentioned area possible, an airport may initiate activities towards local authorities that would imply suggestions regarding manner of land use in its vicinity. In the long term, that would have effect on bird habitats conveniences, what could in the end result in a natural reduction of their total number. There is no problem to take actions for reducing of natural conveniences inside airport area, because that area is exclusively in competence of airport authority and respective services in charge. However, as airport representatives have no competence in out of airport boundary area control, it is really difficult to implement concrete activities and recommendations that exist in that context there. Progress in that field is very slow due to different organisational, legal, financial, political and other reasons. Therefore, an extremely important activity is the establishing of close connection between airport authority on one side and local authorities and their planners, i.e. experts of regional planning, on the other. Purpose of this kind of co-operation is to make,

through these documents, the area around airport the least attractive for birds possible. To realise that, planners must have special planning recommendations that would be useful for regional planning concerning around airport area. Despite efforts in making the around airport areas the least attractive for birds possible, some of the conveniences may not be eliminated or dislocated (sea side, rivers), while some others may be completely eliminated, their importance may be lessened, or they may be dislocated (live stock farms, fish ponds, rubbish heaps, streams, water-worns, ravines et al.).

Consequently, the correct way of land use in the immediate vicinity of airport may be very efficient means of lessening of number of bird strikes as inside so outside airport area, what we find particularly important. Correct and responsible approach to these activities may be the important factor that would help realisation of greater air traffic safety what would finally result in the lessening of bird strikes.

## 6. Conclusion

Because of impossibility of giving the concrete answer as to who is directly responsible for aircraft damage in case of bird strike outside airport area, it is indispensable to find some other solutions that will efficiently condition lessening of danger from bird strikes in general.

Very important element in this whole matter is the awareness of the fact that the conscience regarding danger of birds for air traffic is not yet sufficiently developed. Besides normative regulations (legal, sub legal), it is necessary to acquaint larger public (local population that live in around airport areas), local authorities, firms owned by local authorities and higher level authorities that directly gravitate and act in around airport areas with the most important air traffic safety elements by implementation of different educational measures.

On international level, it is more and more present the initiative to use a threat with damage claim compensation as the means of conditioning the application of adequate preventive methods in this segment of air traffic protection.

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