

## BSCE/13 AERODROME WORKING GROUP W.P.

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Garbage dumps in the Vicinity of Airports

(presented by the Vice Chairman of Aerodrome Working Group)

1. INTRODUCTION

In accordance with a recommendation of the 12th BSCE Meeting in Paris in October 1977 the Vice Chairman asked by letter of January 3, 1978, participants to the Aerodrome Working Group Meeting from 18 countries to give information on the following subject:

Are there in your country local or/and national regulations which prevent the existence of garbage dumps in the vicinity of airports ?

2. Answers have till April 14, 1978 been received from the following countries:

Austria, Belgium, Canada, Czechoslovakia, Denmark, the Federal Republic of Germany, France, Hungary, Israel, the Netherlands, Poland, South Africa, Sweden, Switzerland, United Kingdom, and USA

and are as follows:

Austria:

No regulations. All garbage dumps in the vicinity of the Austrian airports - where existing - have been removed.

Belgium:

No. However, after an investigation called "de commodo et incommodo" the local authorities are able to take a decision for the implantation at this location. Within 10 days an appeal to this decision is possible, e.g. by the airport authorities.

Canada:

Garbage dumps shall not be located on land owned by Transport Canada. On lands surrounding the airport, and not owned by Transport Canada, the local municipal officials shall be made aware of the bird hazards to aircraft associated with garbage dumps. Transport Canada guidelines state that "garbage dumps should not be located within an area contained within a circle having its centre at the airport reference point and a radius of 5 miles".

The Aeronautics Act provides for the enforcement of the above guideline in the event that a garbage dump near an airport causes a bird strike problem.

Czechoslovakia:

There is a national aviation regulation ICAO - Annex 14, generally saying that the airport authority is obliged to do all measures that are necessary for bird reduction at airports and their surroundings. In 1976 and 1977 there were worked out regulations and instruction within our airports comprising concrete measures and methods how to reduce existing birds at airports and food resources for birds; these regulations also ban the existence of garbage dumps in the vicinity of airports.

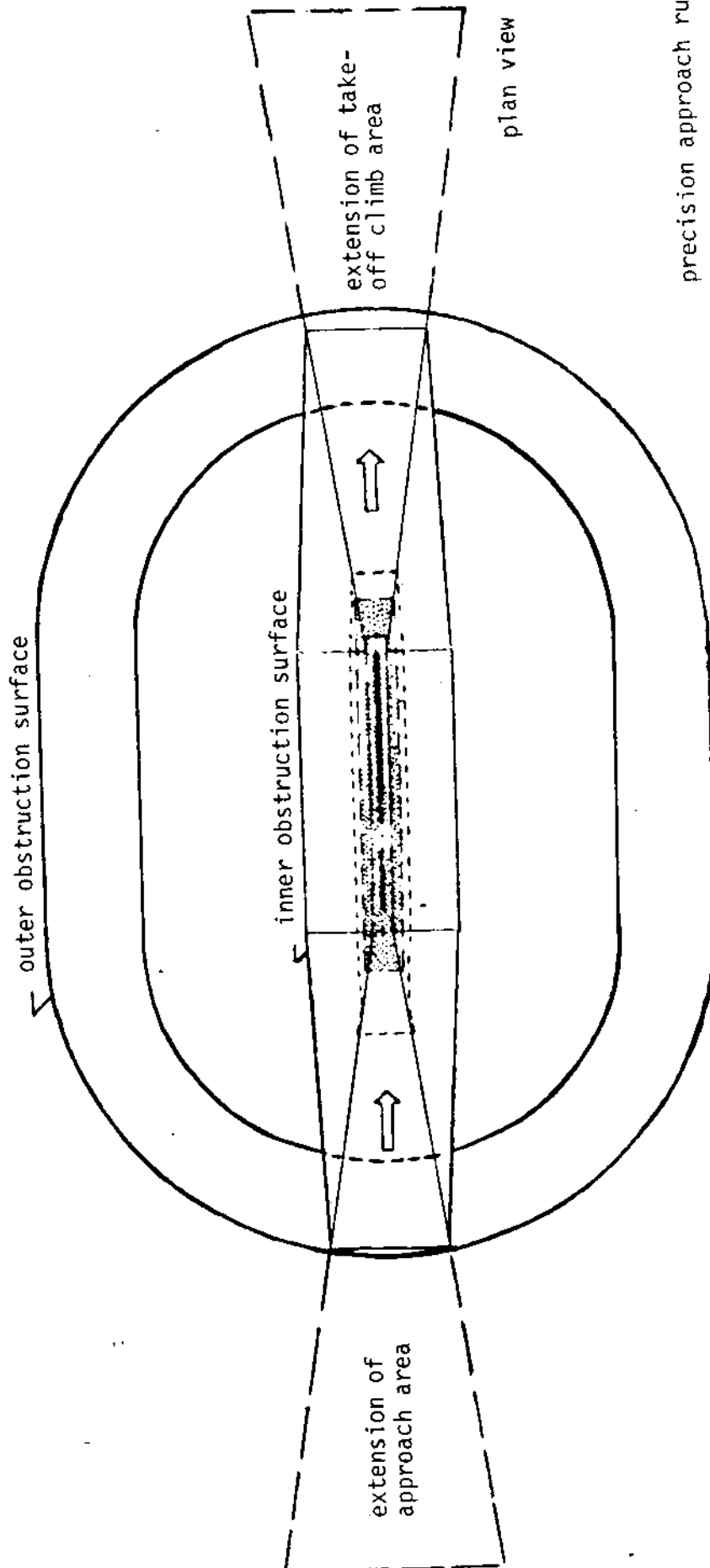
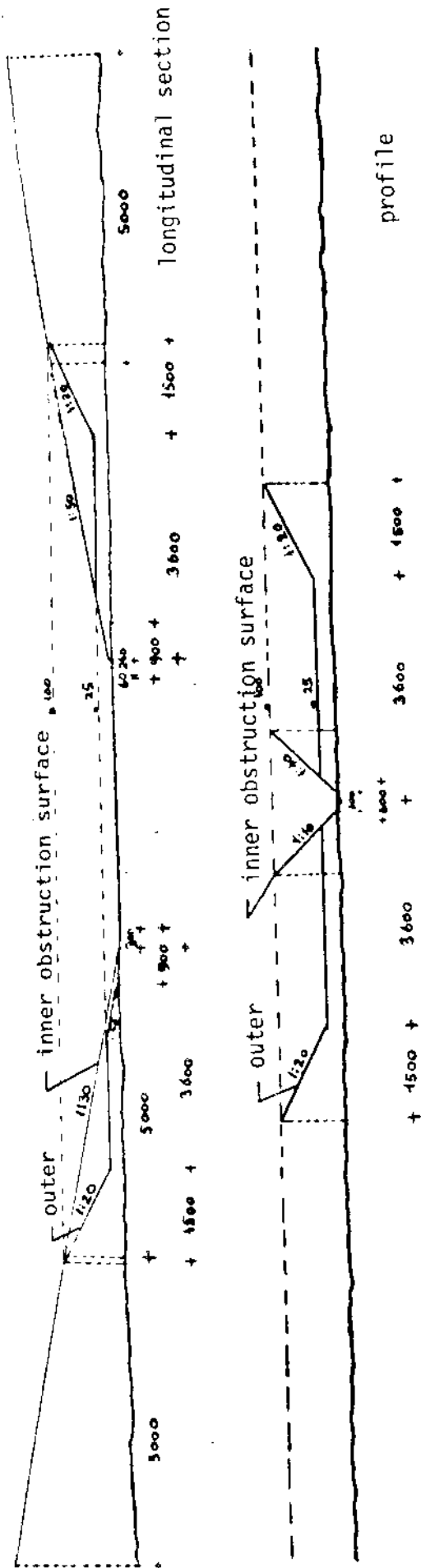
Denmark:

Although there are no regulations, there are legal ways in the Community Planning Act to prevent installation of new garbage dumps, either by dealing directly with the local authorities or through the Ministry of Planning, and existing dumps may be removed by expropriation.

In a circular issued by the Ministry of Environment and Planning of August 1977 to all communities it is, however, stated that garbage dumps should not be installed less than 6.5 km from airports or aerodromes or in such a way that overflying will take place between the dump and the hatching place.

The Federal Republic of Germany:

According to "Regulations for the Prevention of Collisions between birds and aircraft" issued on February 13, 1974, by the Ministry of Transport there shall be no waste areas or garbage dumps or compost places etc., which could attract birds or other animals on the airport ground. In the vicinity of airports it should be tried to remove already existing garbage dumps on the ground below the inner and outer obstruction surface and on the surface of the landing and take-off areas extended by 5 km as shown below and the installation of new waste places should not be permitted



France:

4.

A circular from the Ministry of the Interior asks the Prefects to inform the mayors in the neighbourhood of airports of the bird strike risks connected with the existence of garbage dumps in the neighbourhood of airports and further asks them to move these garbage dumps when the airport authorities deem it necessary.

Hungary:

No such regulations exist.

Israel:

Except for regulations preventing bird hazards we do not have specific regulations against garbage dumps in the proximity of airports.

The Netherlands:

There is no regulation in the Netherlands that prevents existence of garbage dumps in the vicinity of airports. There are legal ways of protesting against the installation of new garbage dumps, and there are ways of coming to an agreement with the local authorities to remove existing dumps either by dealing directly with the local authorities or through the appropriate Agency of Civil Aviation Department.

Poland:

No regulations.

South Africa:

No. We do have, however, the fullest co-operation from local authorities, municipalities, provincial administrations, etc. and have had no difficulty up to the present in preventing the establishment of garbage dumps near airports, or in having offending dumps removed.

Sweden:

There are no local or/and national regulations in Sweden which prevent the existence of garbage dumps in the vicinity of airports. However, according to the Building Law (for building works and other types of establishment) new constructions are not allowed to be located in a way that they interfere with earlier establishments and activities originating from them.

Furthermore, the location of an establishment for refuse has to be examined by a Board of Powers for the protection of the environment. If the establishment is proposed to be located within 8 miles radius of an airport the Board of Civil Aviation of Sweden has always the right to

declare its opinion about the flight safety risks depending on possible anticipated concentrations of birds or/and future flying routes of birds. The Board of Powers has during the last few years started to consider our opinions very seriously. One year ago it prohibited a municipality to locate an establishment for refuse (of the type garbage dump) near the Kristianstad/Everöd airport in the most southern part of Sweden. The municipality of Kristianstad protested against the decision and recently the Government of Sweden, Department of Agriculture, has dissolved the verdict and admitted the localization of the establishment but under very rigid conditions: "It must be a compost establishment and all handling of garbage (grinding and intensive composting etc.) has to be performed in a way that no birds can be attracted to the establishment". We construe this decision as if the handling of garbage must be done under roof and we look upon the verdict as prejudicing for future, similar cases. - Such types of establishments are not garbage dumps so therefore we are in fact in the same situation as if garbage dumps were prohibited in the vicinity of airports.

#### Switzerland:

In a regulation issued by the Swiss Office for the Protection of Environment there is a paragraph requesting consultation of the Swiss Air Office in case of garbage dumps in the vicinity of airports indicating that such dumps should not be established in the vicinity of airports without consultation with the Swiss Air Office. This paragraph may, if necessary, also be applied in case of existing garbage dumps. Yet, these regulations are not part of a law, but only part of an official guideline; thus they are open to discussion and agreements in each case.

#### United Kingdom:

There are no national or local regulations in U.K. which prevent the existence of garbage dumps in the vicinity of airports. The "Town and Country Planning (Aerodromes) Direction, 1972" requires local authorities to consult with our Civil Aviation Authority (CAA) concerning development of land within designated areas on or around aerodromes. This covers various bird attractive developments, such as garbage dumps within approximately 7 miles radius of the airport. The CAA would obviously strongly advise against any development, but under some circumstances the advice could be overruled.

#### USA:

There are no national regulations to prevent the existence of garbage dumps or sanitary landfills in the vicinity of airports. The primary guidance

that the Federal Aviation Administration (FAA) has regarding such landfills is contained in an internal FAA Order 5200.5.

According to this order sanitary landfills will be considered as an incompatible use if located within areas established for the airport through the application of the following criteria:

a. Landfills located within 10,000 feet of any runway used or planned to be used by turbojet aircraft.

b. Landfills located within 5,000 feet of any runway used only by piston type aircraft.

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c. Landfills outside of the above perimeters but within the conical surfaces described by FAR Part 77 and applied to an airport will be reviewed on a case-by-case basis.

d. Any landfill located such that it places the runways and/or approach and departure patterns of an airport between bird feeding, water, or roosting areas.

The Agency does not have the regulatory power to prohibit the construction of such landfills outside the jurisdiction of the airport management. There are several states that have or are in the process of passing State Requirement concerning the placement of such fills near airports. The Environmental Protection Agency (EPA) of the U.S. Government currently is considering a federal regulation that would adopt as a regulatory requirement the criteria in the above identified order. This is still in the notice of proposed rulemaking stage and we have no indication of its final disposition.

3. Three courses of action should be considered by the Aerodrome Working Group.

a) Due to the differences in the local conditions at each airport and each country, no recommendation should be made and the problem be left in abeyance after the above material has been made available to the competent authorities.

b) A recommendation from the meeting should be worked out.

c) Based on the discussion on the Working Paper the Chairman should be asked to draft a recommendation to be presented at the next meeting of the Working Group for approval.

BSCE/13 AERODROME WORKING GROUP WP  
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Homing Pigeons in the Vicinity of Airports

(presented by the Vice Chairman of the Aerodrome Working Group)

1. INTRODUCTION

In accordance with the recommendation of the 12th BSCE Meeting in Paris in October 1977 the Vice Chairman asked by letter of January 3, 1978, participants to the Aerodrome Working Group Meeting from 18 countries to give information on the following subject:

Are there in your country local or/national regulations which prevent racing of homing pigeons in the vicinity of airports ?

If yes, indicate the regulations and give information as to what legal measures can be taken against existing homing pigeons etc. in the vicinity of airports.

2. Answers have till April 14, 1978 been received from the following countries: Austria, Belgium, Canada, Czechoslovakia, Denmark, the Federal Republic of Germany, France, Hungary, Israel, the Netherlands, Poland, South Africa, Sweden Switzerland, United Kingdom, and USA  
and are as follows:

Austria:

No regulations. Homing pigeons are met very seldom in Austria.

Belgium:

No.

Canada:

There are no regulations which prevent the racing of homing pigeons near airports

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and are as follows:

Austria:

No regulations. Homing pigeons are met very seldom in Austria.

Belgium:

No.

Canada:

There are no regulations which prevent the racing of homing pigeons near airports



Czechoslovakia:

In Czechoslovakia there are no regulations that would prevent racing of homing pigeons in the vicinity of airports. For holding such a race it is sufficient to get a permission from the owner of the ground.

Denmark:

There are no regulations which prevent the racing of homing pigeons near airports. The existence of that kind of bird species is, however, recognized as a hazard to aircraft. On October 3, 1976 a Boeing 727 had a collision with a flock of pigeons resulting in the total damage of one engine. The Airports Authority of Copenhagen Airport where the bird strike took place, has urged the Danish Homing Pigeons' Association to request their members to keep the pigeons away from the airport, possibly by suitable feeding as it has been indicated from biologists that there is a possibility to feed pigeons in such a way that they do not need to forage in the open to be able to cover the need for the different nutrients.

The Federal Republic of Germany:

According to the "Regulations for the Prevention of Collision between birds and aircraft", issued on February 13, 1974, by the Ministry of Transport, pigeons should not be kept on the airport ground and preventive measures should be taken that no pigeons fly within the area below the inner obstruction surface. At present, however, there are no legal remedies in the Federal Republic of Germany to forbid that pigeons are kept in the vicinity of airports. Take-off by a DC-8 SWISSAIR aircraft was interrupted on January 18, 1978, at Hamburg Airport. Pigeons colliding with the aircraft were responsible for this interruption. Meanwhile, the Council of Hamburg has made efforts to prohibit the existence of pigeons in the vicinity of airports on the same lines as those laid down by the Ministry.

France:

It is forbidden to send up homing pigeons at French airports according to a regulation concerning homing pigeons of 22nd April, 1958 without permission of the Airport Authorities. On the other hand, there is at present no regulation saying that it is forbidden to have breeding of domestic or homing pigeons in the vicinity of airports.

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Hungary:

No such regulations exist.

Israel:

We have no specific regulations or laws regarding homing or racing pigeons in the vicinity of airports.

The Netherlands:

No national or local regulations prevent the racing of homing pigeons. Consequently, no legal measures can be taken. However, homing pigeons do not seem to create a specific hazard at Schiphol Airport.

Poland:

It is not allowed to breed and race pigeons in the radius of ca. 5 km. Owners of pigeons should be fined by municipal authorities, but it is not always executed.

South Africa:

No. We have, to date, experienced no difficulty from racing pigeons activity.

Sweden:

There are in Sweden no regulations preventing the racing of homing pigeons. So far, we have, however, had no or very little difficulties for the air safety with homing pigeons.

Switzerland:

There are no regulations which prevent racing of homing pigeons or the establishment of a pigeon loft in the vicinity of an airport. Yet, having no problems with racing pigeons at the moment and seeing no increase in the attractiveness of this hobby in Switzerland, we see no necessity of regulations.

United Kingdom:

There are no legally binding regulations, but there is a satisfactory informal agreement with the Royal Pigeon Racing Association whereby at specific, busy aerodromes all releases are banned within 7 miles' radius. Also Air Traffic Control (ATC) at other aerodromes are notified 14 days in advance of impending releases likely to affect them. This agreement is reviewed annually, but to date has worked well.

USA:

We have no regulations regarding the racing of homing pigeons in the vicinity of airports.

3. Three courses of action should be considered by the Aerodrome Working Group.
  - a) Due to the differences in the local conditions at each airport in each country, no recommendation should be made, and the problem be left in abeyance after the above material has been made available to the competent authorities.
  - b) Recommendation from the meeting should be worked out.
  - c) Based on discussion on the working paper the Chairman should be asked to draft a recommendation to be presented at the next meeting of the working group for approval.

1.

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## BSCE/13 AERODROME WORKING GROUP WP

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Use of Land in the Vicinity of Airports

(presented by the Vice Chairman of the Aerodrome Working Group)

1. INTRODUCTION

In accordance with the recommendation of the 12th BSCE Meeting in Paris in October 1977 the Vice Chairman asked by letter of January 3, 1978, participants to the Aerodrome Working Group Meeting from 18 countries to give information on the following subject:

Are there any regulations that prevent the use of land within a certain distance from any runway ?

If yes, give any details, and indicate what legal measures you have to bring such a use of land to an end.

2. Answers have till April 14, 1978 been received from the following countries: Austria, Belgium, Canada, Czechoslovakia, Denmark, the Federal Republic of Germany, France, Hungary, Israel, the Netherlands, Poland, South Africa, Sweden, Switzerland, United Kingdom, and USA  
and are as follows:

Austria:

No regulations. The airport operators initiate measures with due regard to local circumstances and interest of competent authorities.

Belgium:

Civil Airports: The zones of 150 m from the centre line of each runway and 60 m over both ends of each runway may not be used for agriculture.

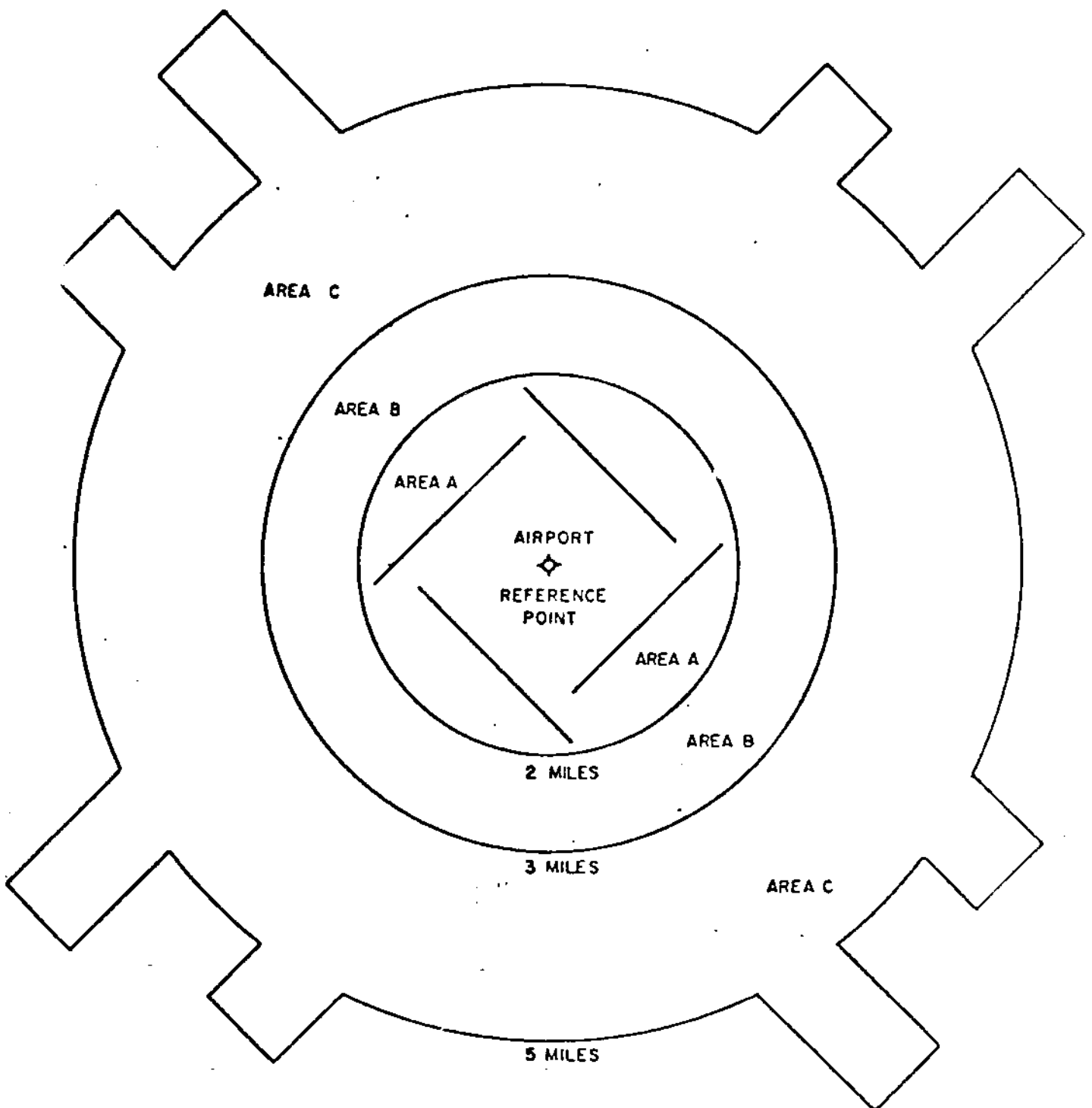
Military airports: The farmers have to follow for each airport the recommendation given by the military authorities, e.g. choice of cultures, working periods, and times, etc.

Canada:

The standards and guidelines contained in WP/12 to BSCE "Planning and Control of Land Hazards' Reduction at airports in the Transport Canada System" are at pre-

sent the only land use regulations and forced on Transport Canada owned land to reduce the number of bird strikes to aircraft at Canadian airports. The Bird Hazard Avoidance Standards used in planning the zoning of land on the periphery of new airports are shown on the below fig.

### BIRD HAZARD AREAS



These standards were used in the planning of Mirabel International Airport and Edmonton (Villeneuve) Airport which are recently constructed Canadian airports.

In addition to providing these standards as constraints to our planners, we asked Dr. Solman to review proposed building designs from the stand-point of avoidance of Bird Hazards. In the case of Mirabel Airport the initial building design had to be completely revised because Dr. Solman was able to convince us that it would have constituted an extremely dangerous bird hazard.

#### LAND USE STANDARDS

Land Use (Note 1)	ALLOWABLE LAND USE		
	Area A	Area B	Area C
<u>NATURAL</u>			
coniferous forest reserves (Note 2)	Yes	Yes	Yes
deciduous forest reserves	No	No	Yes
fish reserves	No	No	Yes
bird sanctuaries	No	No	No
swamp land	No	No	No
flood and flood control areas	No	No	No
game preserves	No	No	No
<u>AGRICULTURAL</u>			
landscape nurseries (Note 2)	Yes	Yes	Yes
tree farming (Note 2)	Yes	Yes	Yes
stock farming (Note 3)	Yes	Yes	Yes
dairy farming (Note 3)	Yes	Yes	Yes
sod farming	No	No	Yes
seed farming	No	No	Yes
crop farming	No	No	Yes
piggeries	No	No	No
fruit tree farming	No	No	No
stock feedlots	No	No	No
stockyards	No	No	No
fur farms	No	No	No

NOTE No. 1 In the case of international airports, radius of the circles delineating Area A and B should be increased by one mile. Because of the length and orientation of runways at these sites, runways will be further protected by mile wide corridors extending five miles from runway ends. Where these corridors project beyond the five mile circle, the area will be designated as "C". Caution should be exercised to prevent incompatible uses from being located on both sides of these projections to discourage bird traffic from crossing these areas.

NOTE No. 2 Provided the method of management does not create or maintain bird populations which create hazards to aircraft safety.

NOTE No. 3 Provided feed is not accessible to birds and that precautions are taken to ensure that the disposal of excrement does not attract birds.

## LAND USE STANDARDS

Land use	ALLOWABLE LAND USE		
	Area A	Area B	Area C
<u>RECREATIONAL</u>			
golf courses (Note 4)	Yes	Yes	Yes
parks (Note 4)	Yes	Yes	Yes
playgrounds (Note 4)	Yes	Yes	Yes
athletic fields (Note 4)	Yes	Yes	Yes
riding trails (Notes 3, 4)	Yes	Yes	Yes
tennis, lawn bowling (Note 4)	Yes	Yes	Yes
picnic and camp grounds	No	Yes	Yes
riding academies	No	No	Yes
racetracks	No	No	Yes
fair grounds	No	No	No
outdoor theatres	No	No	No
<u>COMMERCIAL</u> (Notes 4, 5)			
offices	Yes	Yes	Yes
retail sales	Yes	Yes	Yes
hotels and motels	Yes	Yes	Yes
restaurants	Yes	Yes	Yes
parking lots	Yes	Yes	Yes
indoor theatres	Yes	Yes	Yes
warehouses	Yes	Yes	Yes
shopping centres	Yes	Yes	Yes
service stations	Yes	Yes	Yes
cemeteries	Yes	Yes	Yes
drive-in restaurants	No	No	Yes

NOTE No. 3 Provided feed is not accessible to birds and that precautions are taken to ensure that the disposal of excrement does not attract birds.

NOTE No. 4 Provided areas are kept clean and free of box lunch remains, restaurant garbage and other waste edible to birds.

NOTE No. 5 Flat roof buildings which may, by design or by accident, retain water on their surface, are not recommended within Area A unless the water is not accessible to birds.

## LAND USE STANDARDS

Land Use	ALLOWABLE LAND USE		
	Area A	Area B	Area C
<u>INDUSTRIAL</u> (Note 5)			
quarries (if seldom worked, abandoned and containing water)	No	No	No
food processing plants	No	No	Yes
manufacturing facilities	Yes	Yes	Yes
<u>MUNICIPAL UTILITIES</u> (Note 5)			
sanitary landfill	No	No	No
garbage disposal	No	No	No
sewage treatment	No	No	No
water treatment	Yes	Yes	Yes
water storage (reservoirs)	No	No	No
<u>TRANSPORTATION</u>			
highways	Yes	Yes	Yes
railroads	Yes	Yes	Yes
port facilities	No	No	No

NOTE No. 5 Flat roof buildings which may, be design or by accident, retain water on their surface, are not recommended within Area A unless the water is not accessible to birds.

Airport Operational Standards for Bird Hazard Control

Another responsibility for Ottawa Headquarters Management (i.e. Corporate Management) is to publish airport operational standards which serve as controls on airport site management. Again our Operational Standards for Bird Hazard Control are based on the 76 Research reports published by the National Research Council Associate Committee on Bird Hazard to Aircraft. The contents of these Airport Operational Standards are as follows:

Operational Standard No. 1      Land Within 1200 Feet of Runway and Within Infield Areas

Any land within 1200 feet of any runway centre line, or runway end, and within infield areas, shall not be used for the growing of oats, corn, sunflowers, rye, barley, wheat and other cereal crops, market garden crops, fruit bearing trees or plants. Hay, clover, or alfalfa may be grown in this area, except at those airports where the annual bird strike rate is greater than five strikes a year.



## Operational

Standard No. 2      Land Within 1200 Feet of Runways

Any land which is within 1200 feet of any runway centre line or runway end, and within infield area, shall not be used for the grazing of beef or dairy cattle, or for feedlots for cattles, pigs, sheep, or other animals, and such land shall not be used for sod farming, fur farms or stock-yards. Hay, clover, or alfalfa may be grown in this area except at those airports where the annual bird strike rate is greater than five strikes a year.

## Operational

Standard No. 3      Land Within 500 Feet of Runways

No trees shall be allowed on land within 500 feet of runway centre lines, nor on land within 500 feet of runway ends.

## Operational

Standard No. 4      Plowing Land on Airport Property

No plowing of land on one side of a runway shall be allowed within 24 hours of plowing of land on the other side of the runway.

## Operational

Standard No. 5      Leases and Grass Height Within 1200 Feet of Runways

For those airports where the average number of bird strikes over the previous five years is greater than five strikes a year

- a) there shall be no agricultural leases for the use of land within 1200 feet of runway centre lines or runway ends.
- b) for land within 1200 feet of runway centre lines or runway ends, the grass should be kept free of weeds and should be maintained between 5" and 7" high. The grass may be maintained lower than 5" where small birds are not a problem.

## Operational

Standard No. 6      Agricultural Lease Contracts

The restrictions contained in Operational Standards No. 1, 2, 3, and 4 must be included in any agricultural lease contracts covering any part or all of the land referred to in those operational standards.

## Operational

Guideline No. 1      Flattening of Drainage Ditch Slopes

Drainage ditches with banks too steep to allow for regular cutting of grass cover by airport grass-cutting equipment should be graded to a 4 to 1 slope and maintained with grass cover.

## Operational

Guideline No. 2      Elimination of Water Bodies

Grading and earthwork should be undertaken to eliminate all bodies of water within the airport boundaries.

## Operational

Standard No. 7      Sewage Lagoons

In cases where there is no municipal sewage system to connect with, sewage lagoons may be constructed within airport boundaries. In such cases, they shall not be located within 1200 feet of either runway centre lines or runway ends.

Operational  
Standard No. 8    Cleaning of Drainage Ditches

Drainage ditches shall be cleaned periodically so that water flow shall not be impeded.

Czechoslovakia:

A regulation of the Ministry of Agriculture and Food states conditions about hunt in hunting grounds at the airport areas; it also modifies legal relations between the airport authority and the user of hunting. If airports belong to non-hunting grounds, the airport authority is obliged to ask for a permission to shoot exceptionally animals at the airport (keeping the law No. 23/62). The areas in the vicinity of runways are used for growing grass.

Denmark:

Military Airports: The zones of 600 m from the border of the runway may not be used for agriculture. Exceptions have been made for private owned land to a distance of 300 m from the border of the runway.

Civil Airports: The Civil Aviation Authorities have issued no regulations, but try to persuade the local airport authorities to buy up land in order to lay it out in zones of 600 m (for smaller airports 300 m) from the border of the runway. As the licence to operate a non-state owned airport shall be renewed every year, the Civil Aviation Administration has within its power to make renewal of the licence conditional on establishment of zones that may not be used for agriculture.

The Federal Republic of Germany:

Unfortunately, there are no regulations that confine the agricultural use of land in the vicinity of airports. Should the occasion arise, the parties involved will try to come to terms directly. In the very airport area agricultural and horticultural use of land are not allowed. Civil airports act in conformity with this prohibit, too.

France:

Certain cultivations and methods of cultivation are forbidden or at least very inadvisable according to the below catalogue:

LIST OF CULTIVATIONS ATTRACTIVE AND NON-ATTRACTIVE TO BIRDS

NON-ATTRACTIVE (ADVISABLE)	LESS ATTRACTIVE	VERY ATTRACTIVE (INADVISABLE)
<p>Most of the cultivations to be weeded, i.e.:</p> <ul style="list-style-type: none"> <li>- beet</li> <li>- turnip</li> <li>- sugar beet</li> <li>- potatoes</li> <li>- outdoor carrots</li> <li>- turnip (cattle feeding)</li> <li>- celery</li> <li>- tomato</li> <li>- radish</li> <li>- asparagus</li> <li>- swede</li> <li>- leek</li> </ul> <p>Inedible seeds and fruits - tended cultivations other than for the pleasures of the table</p> <ul style="list-style-type: none"> <li>- flax, line</li> <li>- soya bean</li> </ul>	<ul style="list-style-type: none"> <li>- Spring wheat</li> <li>- Spring barley (winter barley)</li> <li>- rape</li> <li>- lucerne, alfalfa</li> <li>- oat</li> </ul> <p>(treat the seeds with anthraquinone choose the dwarfish sorts of wheat and barley)</p>	<ul style="list-style-type: none"> <li>- Winter wheat (especially, when these sorts are lodged by wind, storm ...)</li> <li>- Winter barley</li> <li>- lupin</li> <li>- corn</li> <li>- peas</li> <li>- cabbage</li> <li>- clover</li> <li>- mustard, vetches</li> <li>- beans, horse beans</li> <li>- one-grained wheat, radish for feeding</li> <li>- salade</li> <li>- millet (Panicum miliaceum,)</li> <li>- millet (Panicum germanicum)</li> <li>- sunflower</li> <li>- sorghum</li> <li>- buckwheat</li> </ul>
<p>Other possibilities:</p> <ul style="list-style-type: none"> <li>- Flower cultivations</li> <li>- Horticulture, laurels, thuja</li> </ul>		
<ul style="list-style-type: none"> <li>- Lawns with grass seeds only</li> </ul>		<ul style="list-style-type: none"> <li>- Lawns with half grass seeds and half clover seeds</li> </ul>

Usually, the airport manager submits a plan of recommended cultivations to the competent authorities who approve or modify the plan after having considered carefully the local rate of bird hazards. This rule applies only to areas belonging to airports.

Only grass-cutting and appurtenant gleaning, as occasion requires, is allowed up to 75 m from the centre line of the runway and up to 25 m from the centre line of taxiways; it is possible to cultivate certain low plants between this limit of 75 m and up to 150 m from the runway centre line; other exploitations of the soil are allowed outside (ornamental bushes bearing no berries, having formation of seeds, having no connection with horticulture, etc.).

#### Hungary:

Land use control only in respect of obstacles.

#### Israel:

We have specific laws that enjoin proper care of the land within the area of airports. According to this law, only the Director of the airport is authorized to issue a permit for the use of the land to outsiders. The conditions over there are that farmers have so far received permits to farm the land, and it is difficult today to prevent them from doing so, or to force them to grow specific agricultural crops, since there are other government authorities involved that strongly protect these farmers.

#### The Netherlands:

There are no regulations that prevent the use of land within a certain distance from the runway in respect to the bird strike problem. At Schiphol the area of approximately 500-1000 m at each end of the runway is property of the airport as is the land on 500-1000 m on each side of the runway.

In these areas any desirable bird reducing measure can be taken.

#### Poland:

No general regulations.

#### South Africa:

The provincial authorities have powers to zone land usage in accordance with proclaimed noise contours around airports. In addition local authorities can control the use to which land in the areas under their jurisdiction is put in accordance with town-planning principles. The civil aviation authority is thus dependent on the authorities mentioned above for influencing land use.

Sweden:

There are in Sweden no regulations preventing the use of land within a certain distance from any runway. Yet some of the "Operational Standards" included in WP/12 to BSCE on bird hazards to aircraft are fulfilled. The Swedish Board of Civil Aviation owns in most of its airports a considerable area of land outside the 500 feet boundary line from the runway centre lines and farming is permitted there only in "non sensitive areas" and accordingly agricultural lease contracts stating that some crops attractive to birds are not permitted.

Switzerland:

## Military airfields:

In the cases where the Military Department is the owner of the land there are new regulations with the following main points:

- no sheep grazing within 150-200 m on both sides of the runways
- grass to be kept longer than 10-12 cm within these stripes
- no natural fertilizer within the confines of the airport. When necessary is fluid natural fertilizer allowed from 1600 hrs or on Saturdays.

## Zürich Airport:

- agricultural use of land is forbidden within 50 m on both sides of the runway and in a narrow stripe of final approach to each runway.
- long-term contracts with the farmers will successively be altered in order to prevent sheep grazing and growing of cereals within the confines of the airport.

United Kingdom:

There are no national or local regulations in U.K. which regulate the use of land in the vicinity of airports. The "Town and Country Planning (Aerodromes) Direction, 1972" requires local authorities to consult with our Civil Aviation Authority (CAA) concerning development of land within designated areas on or around aerodromes. Where the "Local Planning Authority" and CAA cannot agree on land usage proposal, an inquiry could result leading to a Ministerial decision concerning the land usage.

USA:

Presently there are no regulations regarding the use of land in the vicinity of airports as contained in the Canadian Publication WP-12.

3. Three courses of action should be considered by the Aerodrome Working Group.
  - a) Due to the differences in the local conditions at each airport in each country no recommendation should be made, and the problem be left in abeyance after the above material has been made available to the competent authorities.
  - b) A recommendation from the meeting should be worked out.
  - c) Based on the discussion on the Working Paper the Chairman should be asked to draft a recommendation to be presented at the next meeting of the Working Group for approval.