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W.G. BIRD-MOVEMENT

LOW LEVEL FLIGHT BIRD STRIKE RISK MAP FOR BELGIUM

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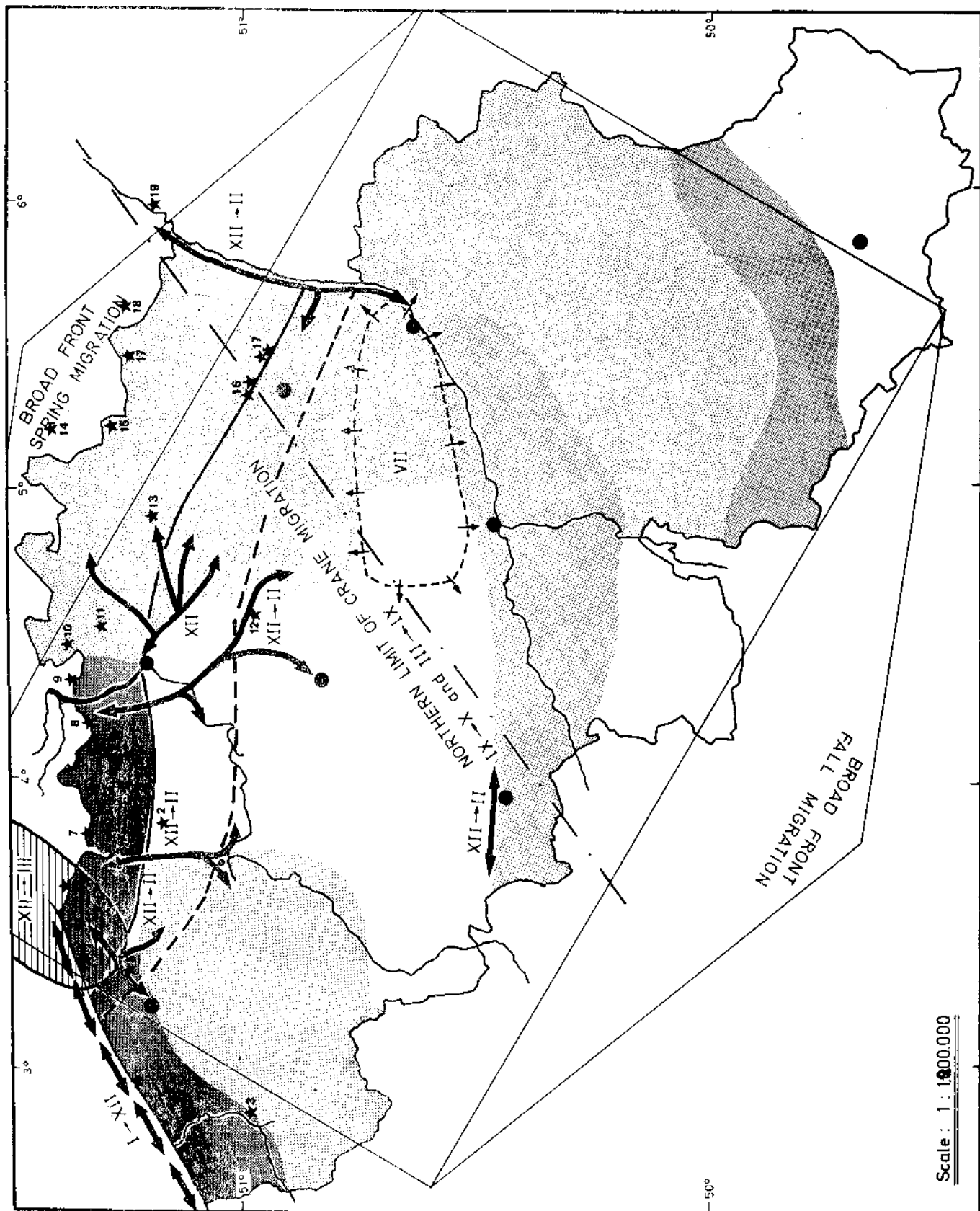
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## LLF BIRD-STRIKE RISK MAP FOR BELGIUM

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1. This new Belgian Low Level Flight bird-strike risk map contains the main concentrations and movements of birds over Belgium which are considered to be hazardous to aircraft.  
The map is completed with indications giving details on flight level, time and period. A separate list deals with those areas with a high risk (red spots).
2. The map has been drawn up by the Belgian Bird Strike Committee at the request of the Belgian Air Force.  
It has been distributed to all elements of the command and control structure in the BAF and to all the flying units.
3. Special care was taken to meet the requirements of the activities of the BSCE Bird-Movement Working Group, so that this map can easily be integrated into a European bird hazard map.  
Therefore mean bird-density areas and red spots have been defined.
4. The map is based on scientific research but has been simplified and adapted to operational purposes. This has been done in collaboration with ornithologists and aircrew.

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**MAIN BIRD CONCENTRATIONS AND MOVEMENTS**

**LEGEND**

This map includes known concentrations and movements of birds considered to be hazardous to aircraft.

- The following is of general importance :
  - LLF over colonies of Black-headed gull involve a very high risk, especially from April to June.
  - LLF along coast always involve a high risk.
  - LLF during Sept. and Oct. involve a higher risk than usual.

**MEAN BIRD DENSITY**



Gull and water coast movements (all year round) flight below 2000 ft will involve a risk.

Loading line of daily gull movements (Dec-Feb) flight below 500 ft in the morning (sunrise - 10 Hr) and in the evening (16 Hr - sunset) will involve a risk.

★ 3 Flights below 1500 ft will involve a risk (see listing).

— Southern limit of gull breeding range (April - June).

- - - Southern limit of gull feeding-flights (April - June).

Concentration of starlings during the day.

The arrows indicate the direction of group movements mainly after 17 Hr. Flights below 500 ft in July may involve a high risk (17 Hr - sunset).

Northern limit of Crane migration (Sept - Oct and March - April : 8000 ft).



Flights below 1500 ft, particularly in the morning and evening, will involve a risk (December - March).



Broad front migration, particularly important in March and October. Flights below 2000 ft (day) and 3000 ft (night) will involve a risk above the whole country in periods of high migration density.

I XII Months of the year.

**LOCAL AREAS WITH HIGH RISK FOR LLF BELOW 1500 FT (RED SPOTS)**

NUMBER	GEOGRAPHICAL COORDINATES L.N. Lat.	RISK PERIOD	BIRD SPECIES	AREA SPECIFICATION	ESTIMATED NUMBER OF BIRDS
1.	51°13'45" N 51°10'00" W	NOV - FEB	GULLS	ROOSTING AREA	↑ 30,000
2.	51°10'00" N 50°56'10" W	APR - JUL	HERONS	BREEDING COLONY	↑ 240
3.	50°56'10" N 42°51'45" W	ALL YEAR		BIRD CONSERVATION AREA	
4.	51°21'45" N 51°21'45" W	ALL YEAR		BIRD CONSERVATION AREA	
5.	51°15'10" N 51°15'10" W	NOV - FEB	GULLS	ROOSTING AREA	↑ 10,000
6.	51°24'00" N 51°24'00" W	NOV - FEB	GULLS	ROOSTING AREA	↑ 50,000
7.	51°21'00" N 51°21'00" W	NOV - FEB	GULLS	ROOSTING AREA	↑ 30,000
8.	51°20'30" N 51°20'30" W	NOV - FEB	GULLS	ROOSTING AREA	↑ 30,000
9.	51°23'00" N 51°23'00" W	NOV - FEB	GULLS	ROOSTING AREA	↑ 30,000
10.	51°23'15" N 51°23'15" W	NOV - FEB	GULLS	ROOSTING AREA	↑ 30,000
11.	51°19'00" N 50°55'20" W	NOV - FEB	GULLS	ROOSTING AREA	↑ 30,000
12.	51°12'05" N 51°26'00" W	NOV - FEB	GULLS	ROOSTING AREA	↑ 30,000
13.	51°12'05" N 51°26'00" W	NOV - FEB	GULLS	ROOSTING AREA	↑ 30,000
14.	51°17'10" N 50°59'35" W	NOV - FEB	GULLS	ROOSTING AREA	↑ 30,000
15.	51°17'10" N 50°59'35" W	NOV - FEB	GULLS	ROOSTING AREA	↑ 30,000
16.	51°15'10" N 50°57'00" W	NOV - FEB	GULLS	ROOSTING AREA	↑ 30,000
17.	51°15'10" N 50°57'00" W	NOV - FEB	GULLS	ROOSTING AREA	↑ 30,000
18.	51°16'00" N 51°16'00" W	NOV - FEB	GULLS	ROOSTING AREA	↑ 30,000
19.	51°12'00" N 51°12'00" W	NOV - FEB	GULLS	ROOSTING AREA	↑ 30,000