

International Civil Aviation Organization

ELECTRONIC BULLETIN

For information only

EB 2023/30 27 June 2023

2016-2021 WILDLIFE STRIKE ANALYSES (IBIS)

The analyses of wildlife strike reports for the years 2016 to 2021 are based on 273,343 reports, received from 136 States on strikes occurring in 194 States and territories, as shown in Attachment A. A summary of wildlife strikes reported to the International Civil Aviation Organization (ICAO) Bird Strike Information System (IBIS) for the years 2016 to 2021 is included in Attachment B, the IBIS World Wildlife Strike Statistics in Attachment C, and a list of wildlife species in Attachment D. The above attachments (available in English only) can be found at www.icao.int/IBIS.

The analyses of wildlife strike data and observing and monitoring of wildlife activities can reveal trends that will assist aerodrome operators in identifying areas of concern, which should be addressed through a well-managed wildlife control programme. Wildlife strike statistics can also be analysed to determine during which times of year or day wildlife control is most needed.

In order to better facilitate occurrence reporting and data analysis, ICAO has replaced the previous IBIS computer application with a reporting system based on the European Co-ordination Centre for Accident and Incident Reporting Systems (ECCAIRS) platform. A User Manual and Software Installation Manual can be downloaded at www.icao.int/IBIS. States are encouraged to submit wildlife strike reports either via ECCAIRS "e5f/e4f" files, or via an ECCAIRS Excel-based form that can also be downloaded at www.icao.int/IBIS.

Enclosure:

- A List of States and Territories for the years 2016-2021
- B Summary of Wildlife Strikes reported to ICAO Bird Strike Information System (IBIS) for the years 2016-2021
- C IBIS World Wildlife Strike Statistics 2016-2021
- D List of wildlife species for the years 2016-2021

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ATTACHMENT A to EB 2023/30

LIST OF STATES AND TERRITORIES FOR THE YEARS 2016-2021

States Reporting (136)

Albania Estonia Mexico Algeria Fiji Moldova Angola Finland Montenegro Argentina France Morocco Armenia Georgia Mozambique Australia Germany Myanmar Ghana Nepal Austria Greece Netherlands Azerbaijan Bahrain Greenland New Zealand Bangladesh Guatemala Nicaragua Barbados Guinea Nigeria

Belarus Guinea-Bissau North Macedonia

Belgium Guyana Norway Benin Honduras Pakistan Bolivia (Plurinational State of) Hungary Palau Bosnia and Herzegovina India Panama **Brazil** Indonesia Peru Iran, Islamic Republic of **Philippines** Bulgaria Burkina Faso Iraq Poland Cabo Verde Israel Portugal Puerto Rico Cambodia Italy Cameroon Jamaica Qatar

Canada Japan Republic of Korea

Chile Jordan Romania

China Kazakhstan Russian Federation

Congo, Democratic Republic of the Kenya Rwanda
Cook Islands Kosovo Saint Lucia
Sao Tome and

Costa Rica Kuwait Principe Côte d'Ivoire Kyrgyzstan Saudi Arabia Croatia Latvia Senegal Serbia Cuba Lebanon Cyprus Libya Seychelles Luxembourg Czech Republic Singapore Czechia Madagascar Slovakia Denmark Malaysia Slovenia Djibouti Maldives South Africa Dominican Republic Mali South Sudan Malta Spain Egypt El Salvador Mauritania Sri Lanka Equatorial Guinea Mauritius Sudan

Sweden

Switzerland

Tanzania, United Republic of

Thailand

Togo

Trinidad and Tobago

Tunisia

Türkiye

Ukraine

United Arab Emirates

United Kingdom

United States

Uzbekistan

Venezuela (Bolivarian Republic of)

Viet Nam

States/Territories of Occurrence (194)

Afghanistan Croatia Iraq Albania Cuba Ireland Israel Algeria Curaçao American Samoa Cyprus Italy Czechia Angola Jamaica Antigua and Barbuda Denmark Japan Argentina Jordan Diibouti Armenia Dominican Republic Kazakhstan Australia East Timor Kenya Austria Ecuador Kiribati Bahamas Kosovo Egypt Bahrain El Salvador Kuwait Bangladesh Equatorial Guinea **Kyrgyzstan** Barbados Estonia Latvia Belarus Ethiopia Lebanon Belgium Europe and North Atlantic Libya **Belize** Fiji Lithuania Benin Finland Luxembourg Bolivia France Macao, China Bolivia (Plurinational State of) French Polynesia Madagascar Bosnia and Herzegovina Gabon Malaysia Maldives Brazil Georgia British Overseas Territory of Bermuda Mali Germany British Overseas Territory of Cayman Malta Ghana Islands

British Overseas Territory of Gibraltar Greece Marshall Islands British Virgin Islands Greenland Martinique Grenada Mauritania Bulgaria Burkina Faso Mauritius Guadeloupe Cabo Verde Guam Mayotte Cambodia Guatemala Mexico

Micronesia (Federated States Guinea Cameroon

of)

Canada Guinea-Bissau Moldova Chad Guyana Montenegro Chile Haiti Morocco China Honduras Mozambique Colombia Hong Kong, China Myanmar Hungary Namibia Congo, Democratic Republic of the Cook Islands India Nauru Costa Rica Indonesia Nepal Côte d'Ivoire Iran, Islamic Republic of **Netherlands**

New Caledonia South Africa
New Zealand South Sudan
Nicaragua Spain
Niger Sri Lanka
Nigeria Sudan
North Macedonia Suriname
Northern Mariana Islands Sweden

Norway Switzerland

Oman Tanzania, United Republic of

Pakistan Thailand
Palau Togo
Panama Tonga

Papua New Guinea Trinidad and Tobago

Paraguay Tunisia
Peru Türkiye
Philippines Turkmenistan
Poland Uganda
Portugal Ukraine

Puerto Rico United Arab Emirates
Qatar United Kingdom
Republic of Korea United States

Romania United States Minor Outlying

Russian Federation Uruguay
Rwanda Uzbekistan
Saint Barthélemy Vanuatu

Saint Kitts and Nevis Venezuela (Bolivarian Republic of)

Saint Lucia Viet Nam
Saint Martin Virgin Islands

Saint Pierre and Miquelon

Saint Vincent and the Grenadines

Samoa

Sao Tome and Principe

Saudi Arabia Senegal Serbia Seychelles Singapore Slovakia Slovenia

Solomon Islands

Somalia

ATTACHMENT B to EB 2023/30

SUMMARY OF WILDLIFE STRIKES REPORTED TO THE ICAO BIRD STRIKE INFORMATION SYSTEM (IBIS) FOR THE YEARS 2016-2021

1. INTRODUCTION

- 1.1 The ICAO Bird Strike Information System (IBIS) was created to collect and disseminate information on wildlife strikes to aircraft.
- 1.2 This statistical summary is intended to provide the reader with an overview of the global wildlife strike situation, as reported to ICAO for the years 2016 to 2021. It supplements the IBIS World Wildlife Strike Statistics in Attachment C to this Electronic Bulletin.

2. STATISTICAL ANALYSIS FOR THE YEARS 2016-2021

- 2.1 Wildlife strike reports at Global Level: The first data period (EB 2009/37) covered the years 2001 to 2007, seven years in total with 42 508 wildlife strike reports. The last data period (EB 2017/25) covered the years 2008 to 2015, eight years in total with 97 751 wildlife strike reports. This data period covers the years 2016 to 2021, six years in total with 273 343 wildlife strike reports. Although this data period is shorter compared to previous ones and affected by the COVID-19 pandemic, the number of wildlife strikes reported to ICAO has significantly increased by around 280 per cent compared to the last period.
- 2.2 For this data period covering the years 2016-2021, wildlife strikes were reported to ICAO by 136 States. These strikes occurred in 194 States and territories throughout the world. The progress of reporting of wildlife strikes to ICAO since 2001 is illustrated in Chart 1.

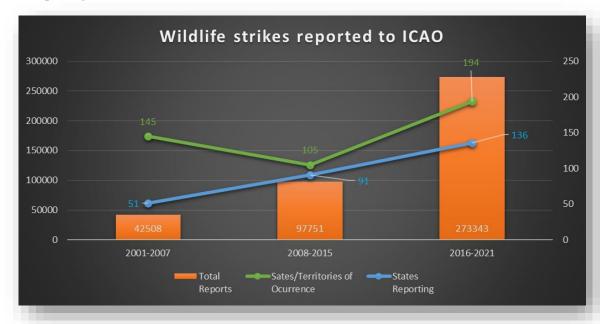


Chart 1. Wildlife strikes reported to ICAO

- 2.3 Wildlife strike reports distributed by ICAO Region in which they occurred: 33 per cent of the reported wildlife strikes occurred in the North American, Central American and Caribbean (NACC) region, and 26 per cent in the European and North Atlantic (EUR/NAT) region.
- 2.4 It is important to highlight the more balanced distribution of wildlife strike reports among ICAO regions for this data period covering 2016 to 2021. The first (2001 to 2007) and second (2008 to 2015) data periods demonstrated a strong concentration of around 96 per cent of the reports in the NACC and EUR/NAT regions. This data period is a more realistic account of the traffic movements vis-à-vis the number of wildlife strikes in each ICAO Region. This is a result of all the efforts made by both ICAO and States in collecting the data.

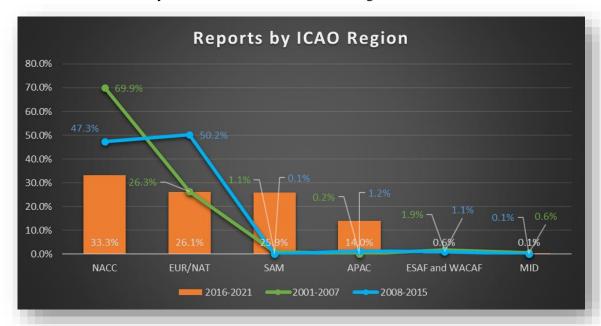


Chart 2. Wildlife strike reports distributed by ICAO Region in which they occurred

2.5 Light conditions under which the wildlife strikes occurred: 68 per cent of the wildlife strikes occurred during the daylight time and 19 per cent occurred at nighttime. Daylight time remained to be the highest activity of wildlife strikes and accounts for almost four times the amount of wildlife strikes during the night, which reveals a pattern of light conditions on wildlife strikes.

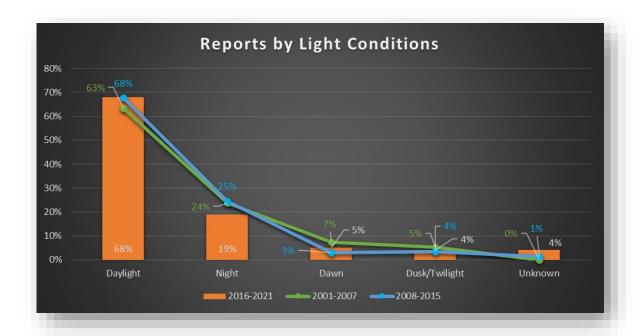


Chart 3. Wildlife strikes reported by light conditions

2.6 When the wildlife strikes occurred during the year: It was possible to identify two spikes of wildlife strikes during the year. The first one occurred between February and May. The second one occurred between June and August, from which the activity of wildlife strikes started to reduce until reaching the lowest rates in December, January and February.



Chart 4. Wildlife strikes reported by month of occurrences

2.7 *Flight phases in which the wildlife strikes occurred:* 74 per cent of the wildlife strikes occurred on or near the aerodrome. 24 per cent of these occurred during the take-off phase while 46 per cent occurred during the approach and landing phase. Flight phase classified as "unknown" had covered 21 per cent.



Chart 5. Wildlife Strikes reported according to flight phase

2.8 Wildlife species most frequently struck: Hawks, eagles and vultures were the most reported species, accounting for 28 per cent of all the reported strikes with information on species. Perching birds accounted for 27 per cent, and shore birds represented 18 per cent. The reported species with more than 1 per cent, excluding those classified as "unknown", are illustrated in Chart 6.

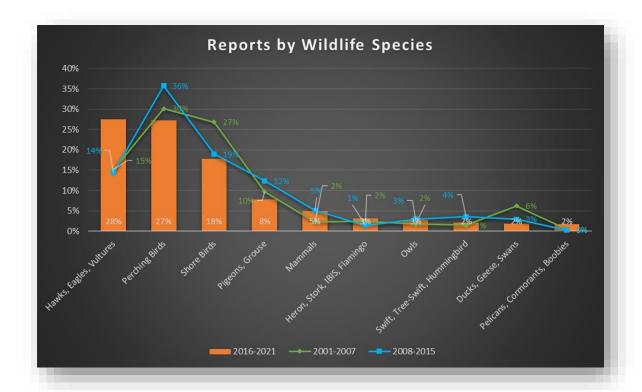


Chart 6. Comparison between wildlife species

2.9 It should be noted that there has been a significant reduction since 2008 in the number of wildlife species reported as "unknown", which is illustrated in Chart 7.

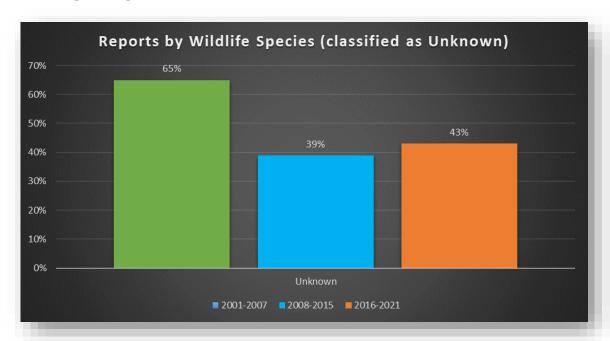


Chart 7. Wildlife species classified as "Unknown"

2.10 *Parts of Aircraft Struck and/or Damaged:* Parts of aircraft struck were reported in 21 per cent of the total reports. The parts struck most often, as reported, were the Engines with 17 per cent followed by the Radome, Windshield and Wing/Rotor with 14 percent each, and then by the Fuselage with 12 per cent.

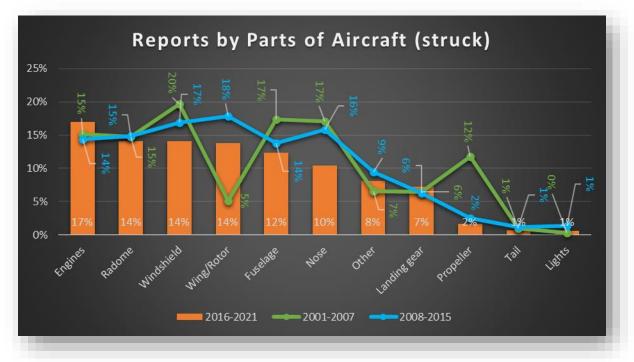


Chart 8. Wildlife strikes reported by parts of aircraft (struck)

2.11 Parts of aircraft damaged were reported in 3 per cent of the total reports. The parts damaged most, as reported, were the Engines with 34 per cent followed by the Wing/Rotor with 18 per cent and then by the Radome with 11 per cent.

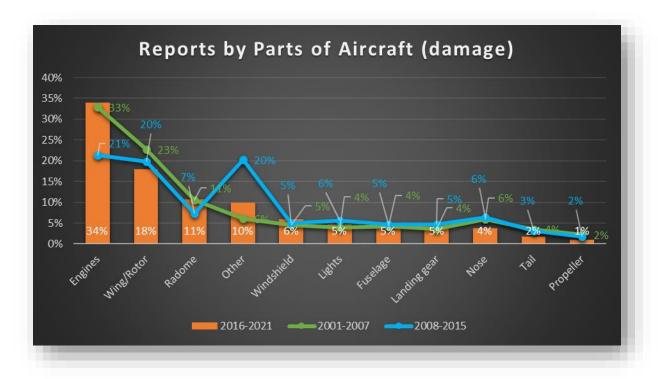


Chart 9. Wildlife strikes reported by parts of aircraft (damage)

2.12 The comparison between the parts struck and the parts damaged by wildlife strikes for the data period covering the years 2016 to 2021, is illustrated in Figure 1.

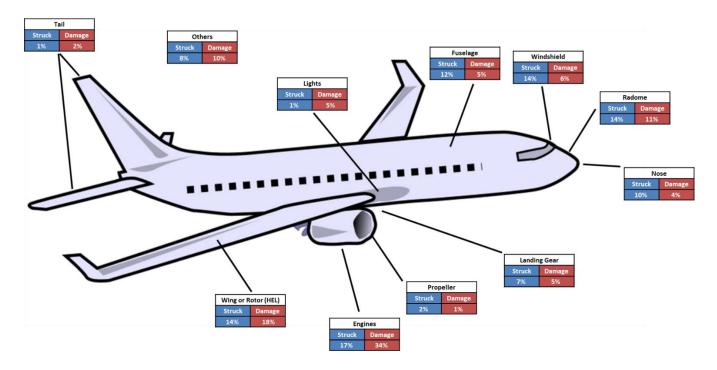


Figure 1. Illustration of parts of aircraft struck and damage

2.13 *Brief summary of wildlife strikes:* Table 1 below provides a brief summary of wildlife strike characteristics for the data period covering the years 2001 to 2021.

Data	2001-2007	2008-2015	2016-2021
States reporting	51	91	136
States/territories of occurrence	145	105	194
Strikes reported	42 508	97 751	273 343
Day time strikes	63%	68%	68%
Night time strikes	24%	25%	19%
Peak month activity	12% (August)	14% (August)	12% (July and August)
Strikes during takeoff	39%	31%	24%
Strikes during approach	37%	33%	23%
Strikes during landing	17%	25%	23%
Wildlife specie most frequent	Perching birds	Perching birds	Hawks, eagles and vultures
Part struck most frequent	Engines and Radome	Engines and Radome	Engines and Radome
Part damage most frequent	Engines and Wing/Rotor	Engines and Wing/Rotor	Engines and Wing/Rotor

Table 1. Data comparison

ATTACHMENT C to EB 2023/30

IBIS WORLD WILDLIFE STRIKE STATISTICS FOR THE YEARS 2016-2021

Month of Occurrence	1	2	C	F	G	Н	I	J	K	L	M	N	0	P	Q	R	S	Т	w	X	Y	Other	Unknown	Total
Jan	367	3	2	2	5	261	316	243	2197	30	26	1506	525	59	22	374	11	39	3	58	1179	415	5051	12694
Feb	444	2	4	3	1	251	367	225	2579	20	43	1452	464	51	24	289	6	37	3	41	1320	366	5230	13222
Mar	492	12	5	4		218	378	323	3807	21	55	1780	489	55	42	345	10	43	6	54	1775	404	7421	17739
Apr	563	28	1 1	9	3	186	308	253	3684	33	79	2012	689	45	43	266	26	232	3	70	2670	334	9064	20611
May	631	60	8	4	2	253	418	221	3704	25	68	2389	114	45	70	269	97	815	1 7	94	4576	399	11848	27159
Jun	580	66	3	3	6	177	369	164	3704	29	43	2353	132	46	42	333	62	826	1 7	73	4384	408	11111	26122
Jul	914	55	5	4	2	236	448	104	5406	23	38	2998	169 4	63	42	355	79	534	3 0	79	6358	418	12744	32629
Aug	125 0	26	9	4	6	211	447	174	5215	33	78	3341	188 4	57	48	371	15 0	307	4 6	56	5729	390	13561	33393
Sep	962	24	3	7	6	263	461	220	4228	25	93	3119	146 5	10 0	77	354	23 6	285	1 4	12 2	4942	368	12802	30176
Oct	708	17	8	1 2	1 2	205	441	332	3378	44	10 5	2619	105 2	66	80	372	33	144	3	18 3	4931	419	13235	28399
Nov	408	7	1 6	0	5	233	420	377	2485	41	70	2125	723	68	29	425	12	36	6	78	2719	437	7641	18371
Dec	323	5	9	4	1	177	409	279	1966	17	27	1683	572	75	18	455	10	27	2	59	1377	400	4914	12819
Light Conditions	1	2	C	F	G	Н	I	J	K	L	M	N	o	P	Q	R	S	T	w	X	Y	Other	Unknown	Total
Dawn	171	2	2	1	2	493	748	130	2235	24	35	1645	384	23	69	200	17	36	6	39	1012	299	2350	9923
Unknown	339	3			1	11	74	97	476	11	4	490	110	13 8	2	54	4	160	5	1	928	32	5336	8276
Night	219 2	14	1 1	2	1 3	88	275	842	2017	22	12 4	2553	522	42	67	970	10 4	44	3	70	2977	818	19658	33452
Daylight	858	54	5	9	2	195 1	283 1	858	2916 5	14 3	30 4	1471 3	489 5	47 6	32 2	146 5	10 6	136 5	8 2	72 1	1755 3	3264	46223	127436
Dusk/twilight	211	4	5		1	58	152	158	1349	12	22	910	298	19	22	186	15	67	8	31	1026	253	3351	8158

Flight Phase	1	2	C	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	Т	\mathbf{W}	X	Y	Other	Unknown	Total
Approach	882	1	2 4	1 5	6	198	394	865	8030	21	14 0	2994	110 5	57	78	363	67	661	8	89	5714	750	32216	54678
En Route	62		4	4	4	54	108	109	2470	8	20	563	138	2	10	48	4	40	1	14	975	184	6487	11309
Landing	158 4	27	9	2	1 5	121	574	380	7665	11 4	92	5044	211 0	24 9	40	851	76	982	6 1	38	8068	804	23736	52642
Manoeuvring	1						6		24			3				1		2			6		87	130
Post-impact	9		1 6		4	170 2	191 0	112	7595		83	6467	964	40	26 8	885	21	37	7	63 8	1777	1674	3331	27540
Standing	35	2			2	7	22	12	175	1	5	110	49	2	1	13	2	6	1	1	132	40	1216	1834
Take-off	105 5	21	1 3	1	8	216	667	522	8716	98	13 1	4480	227 1	27 9	43	570	60	887	4 5	55	7185	943	28120	56395
Taxi	134	9	2		5	307	549	27	1809	14	23	990	131	13	43	93	4	10	2	12	249	271	1855	6552
Tow	1											1											3	5
Unknown	320 1	19 0	1 4	3 2	1 1	58	466	722	4848	67	19 2	5512	428 0	54	46	117 7	40 4	600	2 2	95	1473 6	66	12765	49558
Parts Struck	1	2	c	F	G	Н	I	J	K	L	M	N	o	P	Q	R	S	Т	w	X	Y	Other	Unknown	Total
Parts Struck Radome	1	2 0	C	F	G	H 21	I 68	J 48	K 751	L 7	M 9	N 536	O 391	P	Q 7	R 65	S	T 176	W 1 5	X 7	Y 1113	Other	Unknown 6162	Total 9640
			C 1 1												Q 7 3				1					
Radome Windshield	106	0	C 1 1 0	0	3	21	68	48	751	7	9	536	391	6	7	65	10	176	1 5	7	1113	138	6162	9640
Radome	106 100	0	1	0	3 2	21 22	68 57	48 49	751 663	7	9 6	536 487	391 364	6	7	65 78	10 4	176 196	1 5 5	7 9	1113 1243	138 142	6162 6170	9640 9606
Radome Windshield Nose	106 100 102	0 0 1	1 1 0	0 0 0	3 2 6	21 22 17	68 57 36	48 49 45	751 663 549	7 1 7	9 6 8	536 487 401	391 364 256	6 4 6	7 3 4	65 78 58	10 4 10	176 196 159	1 5 5 1 2	7 9 6	1113 1243 1236	138 142 61	6162 6170 4110	9640 9606 7090
Radome Windshield Nose Engines	106 100 102 55	0 0 1 0	1 1 0 5	0 0 0	3 2 6	21 22 17 36	68 57 36 122	48 49 45 138	751 663 549 1541	7 1 7 25	9 6 8 24	536 487 401 947	391 364 256 544	6 4 6	7 3 4 8	65 78 58 117	10 4 10 10	176 196 159 66	1 5 5 1 2 4	7 9 6 9	1113 1243 1236 803	138 142 61 184	6162 6170 4110 6931	9640 9606 7090 11577
Radome Windshield Nose Engines Propeller	106 100 102 55 20	0 0 1 0	1 1 0 5 0	0 0 0 0	3 2 6 2 1	21 22 17 36 1	68 57 36 122 24	48 49 45 138 18	751 663 549 1541 247	7 1 7 25 10	9 6 8 24 9	536 487 401 947 160	391 364 256 544 47	6 4 6 6 7	7 3 4 8	65 78 58 117 12	10 4 10 10 1	176 196 159 66 5	1 5 5 1 2 4 0	7 9 6 9	1113 1243 1236 803 110	138 142 61 184 18	6162 6170 4110 6931 417	9640 9606 7090 11577 1109
Radome Windshield Nose Engines Propeller Wing/Rotor	106 100 102 55 20 127	0 0 1 0 0	1 1 0 5 0	0 0 0 0 1 2	3 2 6 2 1 2	21 22 17 36 1 31	68 57 36 122 24 118	48 49 45 138 18 140	751 663 549 1541 247 1083	7 1 7 25 10 20	9 6 8 24 9 21	536 487 401 947 160 775	391 364 256 544 47 382	6 4 6 6 7 16	7 3 4 8 0 7	65 78 58 117 12 54	10 4 10 10 1 16	176 196 159 66 5 72	1 5 5 1 2 4 0 1 5	7 9 6 9 1 4	1113 1243 1236 803 110 1129	138 142 61 184 18	6162 6170 4110 6931 417 5276	9640 9606 7090 11577 1109 9392
Radome Windshield Nose Engines Propeller Wing/Rotor Fuselage	106 100 102 55 20 127 57	0 0 1 0 0 0	1 1 0 5 0 2 4	0 0 0 0 1 2	3 2 6 2 1 2	21 22 17 36 1 31 28	68 57 36 122 24 118 77	48 49 45 138 18 140 52 66 12	751 663 549 1541 247 1083 980 861 78	7 1 7 25 10 20 8	9 6 8 24 9 21 13 12	536 487 401 947 160 775 685 524 38	391 364 256 544 47 382 277 228 28	6 4 6 6 7 16 3	7 3 4 8 0 7	65 78 58 117 12 54 87 97 3	10 4 10 10 1 16 7 11 0	176 196 159 66 5 72 156	1 5 5 1 2 4 0 1 5 3 1	7 9 6 9 1 4	1113 1243 1236 803 110 1129 1013 405 58	138 142 61 184 18 100 179 96 6	6162 6170 4110 6931 417 5276 4791 2130 235	9640 9606 7090 11577 1109 9392 8440 4926 478
Radome Windshield Nose Engines Propeller Wing/Rotor Fuselage Landing gear	106 100 102 55 20 127 57 311	0 0 1 0 0 0	1 1 0 5 0 2 4	0 0 0 0 1 2 0 1	3 2 6 2 1 2 0 3	21 22 17 36 1 31 28	68 57 36 122 24 118 77 72	48 49 45 138 18 140 52 66	751 663 549 1541 247 1083 980 861	7 1 7 25 10 20 8 26	9 6 8 24 9 21	536 487 401 947 160 775 685 524	391 364 256 544 47 382 277 228	6 4 6 6 7 16 3 4	7 3 4 8 0 7 10 7	65 78 58 117 12 54 87 97	10 4 10 10 1 16 7 11	176 196 159 66 5 72 156 39	1 5 5 1 2 4 0 1 5 3	7 9 6 9 1 4 10 7	1113 1243 1236 803 110 1129 1013 405	138 142 61 184 18 100 179 96	6162 6170 4110 6931 417 5276 4791 2130	9640 9606 7090 11577 1109 9392 8440 4926

Parts Damage	1	2	C	F	G	H	I	J	K	L	M	N	0	P	Q	R	S	T	\mathbf{W}	X	Y	Other	Unknown	Total
Radome	1	0	0	0	0	9	10	24	110	0	2	67	29	0	1	5	0	5	1	1	31	9	583	888
Windshield	3	0	1	1	0	5	7	9	63	1	0	30	12	1	1	2	0	2	0	0	21	7	274	440
Nose	3	0	0	0	0	5	2	16	57	0	0	6	6	1	0	5	0	8	0	0	22	5	180	316
Engines	9	0	3	0	0	16	38	52	434	10	4	267	225	0	2	21	0	2	0	3	78	57	1463	2684
Propeller	6	0	0	0	0	0	10	1	15	3	2	13	7	1	1	1	0	0	0	0	2	1	38	101
Wing/Rotor	24	0	0	1	0	12	28	53	251	5	7	104	40	1	0	10	1	3	0	1	48	18	764	1371
Fuselage	9	0	1	0	0	2	9	10	56	0	3	12	2	1	3	4	0	2	0	0	27	10	187	338
Landing gear	29	0	1	0	0	2	4	3	83	0	1	33	31	0	1	2	0	1	0	0	10	4	153	358
Tail	6	0	1	0	0	1	2	1	21	1	0	7	28	0	0	1	0	0	0	0	12	3	62	146
Lights	2	0	0	0	0	1	1	9	71	2	0	35	22	1	0	0	0	1	0	0	12	11	218	386
Other	7	0	0	0	0	5	7	5	123	5	1	198	77	1	1	6	0	1	0	0	85	7	726	1255
HEIGHT (FT)	1	2	С	F	G	Н	I	J	K	L	M	N	o	P	Q	R	S	T	W	X	Y	Other	Unknown	Total
HEIGHT (FT) 0 up to 1000	1 795	2 12	С	F	G	H 27	I 241	J 199	K 2307	L 38	M 30	N 1872	O 920	P 15 2	Q 5	R 132	S	T 147	W 1 3	X 4	Y 3719	Other	Unknown 11445	Total 22213
0 up to 1000 1001 up to			C	F															1					
0 up to 1000	795				1	27	241	199	2307		30	1872	920	15 2		132		147	1	4	3719	137	11445	22213
0 up to 1000 1001 up to 2500	795 27		1 4	2	1 1 2	27 9 243	241 7 301	199 39	2307 141 2427		30 2 27	1872 39 1072	920 45 151	15 2 2	5 42	132 1 154	17	147 10	1 3	4 2	3719 138	137 19	11445 1427	22213 1912
0 up to 1000 1001 up to 2500 Above 2500 Speed IAS	795 27 84	12	1 4 9	2 4	1 1 2 6	27 9 243 4	241 7 301 0	199 39 219	2307 141 2427 2	38	30 2 27 1	1872 39 1072 2	920 45 151 0	15 2 2 86	5 42 4	132 1 154 7	17 65	147 10 91	1 3 8	4 2 77 5	3719 138 2994	137 19 4327	11445 1427 15425	22213 1912 68343
0 up to 1000 1001 up to 2500 Above 2500 Speed IAS (KT)	795 27 84	12	1 4 9 C	2 4 F	1 1 2 6 G	27 9 243 4 H 238	241 7 301 0 I 308	199 39 219	2307 141 2427 2 K 2375	38 L	30 2 27 1 M 25	1872 39 1072 2 N	920 45 151 0 O 220	15 2 2 86	5 42 4 Q 40	132 1 154 7 R 157	17 65 S	147 10 91 T	1 3 8	4 2 77 5	3719 138 2994 Y	137 19 4327 Other	11445 1427 15425 Unknown	22213 1912 68343 Total
0 up to 1000 1001 up to 2500 Above 2500 Speed IAS (KT) 0 up to 150	795 27 84 1 284	12	1 4 9 C 4 3	2 4 F	1 1 2 6 G	27 9 243 4 H 238 0	241 7 301 0	199 39 219 J 319	2307 141 2427 2 K 2375 5	38 L	30 2 27 1 M 25 4	1872 39 1072 2 N 1162 6	920 45 151 0 O 220 1	15 2 2 86 P	5 42 4 Q 40 1	132 1 154 7 R 157	17 65 S 69	147 10 91 T 185	1 3 8	4 2 77 5 X 75 7	3719 138 2994 Y 5256	137 19 4327 Other 4187	11445 1427 15425 Unknown 22818	22213 1912 68343 Total

Pilot Warned	1	2	C	F	G	Н	I	J	K	L	M	N	0	P	Q	R	S	T	\mathbf{W}	X	Y	Other	Unknown	Total
No	912	34	8	1 4	5	44	302	865	3295	12 4	40	3711	141 8	6	10	440	40	244	7	26	6517	209	25549	43820
Unknown	347 6	24 0	1 7	3 9	9	84	653	992	5357	95	24 9	6700	565 8	11	75	120 8	53 8	877	1 3	11 3	1956 2	48	22746	68760
Yes	676	19	1 5	1	8	217	510	554	5218	18	10 1	3498	148 3	11	48	466	82	498	1 7	18 4	6774	722	8552	29681
Wildlife Seen	1	2	C	F	G	Н	I	J	K	L	M	N	o	P	Q	R	S	T	W	X	Y	Other	Unknown	Total
1	177 0	27	2	1 2	1 7	525	126 0	478	9971	79	15 5	5497	171 0	34 7	94	946	95	563	3 8	25 2	8186	1522	22297	55861
2 up to 10	229	2	1 9	4	1 6	104 0	150 5	666	1318 5	63	16 2	7236	167 4	16 9	22 7	789	30	300	1 3	38 8	4488	1629	10509	44343
11 up to 100	20	2	1 1	2	3	846	753	165	5559	6	53	2513	578	20	11 1	266	13	56	1	13 0	1403	702	2789	16002
More	6				1	61	71	27	271		3	253	94	14	1	9	1	7	2	1	277	38	494	1631
Unknown	328 9	19 8	1 6	4 1	8	71	556	943	4645	98	21 4	6125	499 9	10	69	113	47 0	121 2	1 2	12 3	1855 3	78	46373	89236
Wildlife Struck	1	2	C	F	G	Н	I	J	K	L	M	N	o	P	Q	R	S	T	w	X	Y	Other	Unknown	Total
1	584 2	28 7	3 5	5 2	2 5	179	124 1	185 9	1441 0	22 3	37 8	1211 3	816 6	99	10 5	232 5	63 5	259 5	8 7	18 2	3114 7	199	61138	143322
11 up to 100	4					2	2	11	8	2	1	124	201	8				6			201	3	234	807
2 up to 10	252	5		1 1	2	22	136	613	602	66	32	2099	139 7	41	5	70	27	316	2 6	6	4431	62	5939	16160
More	3			-					1			3	1			2	1	1	-		15	8	20	55
Unknown	77	2			2		84	27	500	11	3	537	156			16		36			821	91	23614	25977

ATTACHMENT D to EB 2023/30

LIST OF WILDLIFE SPECIES FOR THE YEARS 2016-2021

2016-2021 CODE	SCIENTIFIC NAME	ENGLISH NAME	NUMBER OF CASES
1	MAMMALIA	MAMMALS	7642
2	REPTILIA	REPTILE	305
C	APTERYGIFORMES	KIWI	83
F	PODICIPEDIFORMES	GREBE	66
G	PROCELLARIIFORMES	ALBATROSS, SHEARWATERS, PETREL	59
Н	PELECANIFORMES	PELICANS, CORMORANTS, BOOBIES	2671
I	CICONIIFORMES	HERON, STORK, IBIS, FLAMINGO	4782
J	ANSERIFORMES	DUCKS, GEESE, SWANS	2915
K	FALCONIFORMES	HAWKS, EAGLES, VULTURES	42353
L	GALLIFORMES	CHICKEN-LIKE BIRDS	341
M	GRUIFORMES	CRANES, RAILS	725
N	CHARADRIIFORMES	SHORE BIRDS	27377
O	COLUMBIFORMES	PIGEONS, GROUSE	12026
P	PSITTACIFORMES	PARROT, MACAW, PARAKEET, LORIE	730

2016-2021 CODE	SCIENTIFIC NAME	ENGLISH NAME	NUMBER OF CASES
Q	CUCULIFORMES	CUCKOOS	537
R	STRIGIFORMES	OWLS	4208
S	CAPRIMULGIFORMES	GOATSUCKER, NIGHTJAR, FROGMOUTH	732
T	APODIFORMES	SWIFT, TREE-SWIFT, HUMMINGBIRD	3325
W	CORACIIFORMES	KINGFISHERS, MOTMOTS, HORNBILL	150
X	PICIFORMES	WOODPECKERS, TOUCANS, BARBETS	967
Y	PASSERIFORMES	PERCHING BIRDS	41960