Table 1

Reportable aircraft occurrences

	July			Year to date (July)		
	2019	2018	2014-2018 average	2019	2018	2014-2018 average
Number of reportable accidents	52	36	36	141	128	141
Accidents in Canada involving Canadian-registered aircraft	48	30	34	131	114	130
Accidents outside Canada involving Canadian-registered aircraft	1	3	1	3	8	6
Accidents in Canada involving foreign-registered aircraft	3	3	1	7	7	5
Number of accidents by operator type ¹	52	36	36	141	128	141
Commercial	19	11	11	54	41	47
Airliner (CAR 705)	1	1	1	4	4	3
Commuter (CAR 704)	0	0	0	3	0	2
Air taxi (CAR 703)	5	6	4	15	14	16
Aerial work (CAR 702)	6	4	4	15	11	11
Foreign air operator (CAR 701)	0	0	0	0	1	0
Flight training units (CAR 406)	7	0	2	17	10	15
Other commercial	0	0	0	0	1	1
Private	32	25	25	85	88	92
Private operators (CAR 604)	8	0	0	10	3	2
Recreational	22	25	24	72	82	87
Other private	2	0	1	3	4	4
State	0	0	0	0	0	1
Other/Unknown	1	0	0	2	0	2
Number of accidents by aircraft type ¹	52	36	36	141	128	141
Aeroplane	42	25	27	108	99	108
Helicopter	6	4	5	20	14	17
Ultralight	3	7	4	10	12	13
Other ²	2	0	1	4	3	4
Number of aircraft involved in accidents 1,3	53	36	36	142	132	144
Aeroplanes	42	25	27	108	103	110
Helicopters	6	4	5	20	14	17
Ultralights	3	7	4	10	12	13
Other ²	2	0	1	4	3	4
Number of fatal accidents by aircraft type ¹	7	9	4	17	13	11
Aeroplane	6	6	3	14	9	9
Helicopter	0	1	0	1	2	1
Ultralight	1	2	1	2	2	2
Other ²	1	0	0	1	0	0
Reportable accident fatalities	12	12	5	30	23	18
Reportable accident serious injuries	6	5	5	15	17	15
Accidents in Canada involving foreign-registered aircraft	3	3	1	7	7	5
Fatal accidents	1	0	0	3	0	1
Fatalities	1	0	0	4	0	2
Serious Injuries	0	0	0	1	2	1
Occurrences with a dangerous good release	1	2	1	3	5	3
Number of reportable incidents ⁴	71	91	87	520	498	476
Incidents in Canada involving Canadian-registered aircraft	53	64	69	369	351	364
Incidents outside Canada involving Canadian-registered aircraft	11	17	11	107	95	62
Incidents in Canada involving foreign-registered aircraft	11	13	9	64	66	63
Number of reportable incidents by category ⁴	71	91	87	520	498	476
Risk of collision / Loss of separation	10	16	14	73	82	74
Declared emergency	27	23	29	204	198	190
Engine failure	6	19	14	63	59	60
Smoke / Fire	5	8	8	53	50	51
Collision	5	3	3	23	11	9
Other	18	22	18	104	98	92

Data extracted 15 August 2019

Breakdowns may not add up to totals. For example, when an occurrence involves an airplane and a helicopter, the occurrence is counted in each type, but only once in the total.

Includes balloons, gyroplanes, gliders, airships, hang gliders, unmanned aerial vehicles (UAV) and similar aircraft types.

³ "Number of aircraft involved in accidents" are aircraft counts, all other data are accident counts.

⁴ New TSB regulations came into effect on 1 July 2014. Under new reporting requirements aviation incidents include: a) aircraft having a maximum certificated take-off weight greater than 2 250 kg (formerly 5 700 kg); b) aircraft being operated under an air operator certificate issued under CARs Part VII.

Table 2

Occurrences involving Canadian-registered aircraft

	July			Year to date (July)			
	2019	2018	2014-2018 average	2019	2018	2014-2018 average	
Number of accidents by aircraft and operator type	46	26	31	124	110	123	
Aeroplane accidents	39	22	26	102	93	103	
Commercial	17	8	7	44	31	33	
Airliner (CAR 705)	1	1	1	4	4	3	
Commuter (CAR 704)	0	0	0	3	0	2	
Air taxi (CAR 703)	4	4	2	12	11	9	
Aerial work (CAR 702)	5	3	3	8	5	6	
Flight training units (CAR 406)	7	0	2	17	10	13	
Other commercial	0	0	0	0	1	0	
Private	21	14	18	56	63	69	
Private operators (CAR 604)	7	0	0	8	3	1	
Recreational	13	14	17	47	60	65	
Other private	1	0	1	1	0	2	
State	0	0	0	0	0	1	
Other/Unknown	1	0	0	2	0	1	
Helicopter accidents	6	4	4	19	14	17	
Commercial	2	3	4	10	9	13	
Private	4	1	1	9	5	4	
State	0	0	0	0	0	0	
Other/Unknown	0	0	0	0	0	0	
Other aircraft accidents ³	2	0	1	4	3	4	
Number of fatal accidents by aircraft and operator type ^{1,2}	5	7	3	12	11	9	
Aeroplane accidents	5	6	3	11	9	9	
Commercial	2	1	1	3	1	2	
Airliner (CAR 705)	0	0	0	0	0	0	
Commuter (CAR 704)	0	0	0	0	0	0	
Air taxi (CAR 703)	1	0	0	2	0	1	
Aerial work (CAR 702)	0	1	0	0	1	1	
Flight training units (CAR 406)	1	0	0	1	0	1	
Other commercial	0	0	0	0	0	0	
Private	3	5	2	8	8	7	
Private operators (CAR 604)	0	0	0	0	0	0	
Recreational	3	5	2	8	8	6	
Other private	0	0	0	0	0	0	
State	0	0	0	0	0	0	
Other/Unknown	0	0	0	0	0	0	
Helicopter accidents	0	1	0	1	2	1	
Commercial	0	0	0	0	0	0	
Private	0	1	0	1	2	0	
State	0	0	0	0	0	0	
Other/Unknown	0	0	0	0	0	0	
Other aircraft accidents ³	1	0	0	1	0	0	
Accident fatalities ²	9	10	4	22	21	15	
Accident serious injuries ²	5	4	5	10	13	12	
Number of incidents by category ^{2,4}	64	81	80	476	446	426	
Risk of collision/Loss of separation	10	15	14	69	79	68	
Declared emergency	23	22	27	179	174	167	
Engine failure	4	17	13	57	51	54	
Smoke/Fire	5	8	8	48	44	46	
Collision	5	1	3	21	7	8	
Other	17	18	16	102	91	83	
Number of accidents involving ultralight aircraft	3	7	4	10	12	12	
Fatal accidents	1	2	1	2	2	1	
ratai accidents				_			
Fatalities	2	2	1	4	2	1	

Data extracted 15 August 2019

Breakdowns may not add up to totals. For example, when an occurrence involves an airplane and a helicopter, the occurrence is counted in each type, but only once in the total.

2 Evaluate ultraliable algorithms

Excludes ultralight aircraft

Includes balloons, gyroplanes, gliders, airships, hang gliders, unmanned aerial vehicles (UAV) and similar aircraft types.

New TSB regulations came into effect on 1 July 2014. Under new reporting requirements aviation incidents include: a) aircraft having a maximum certificated take-off weight greater than 2 250 kg (formerly 5 700 kg); b) aircraft being operated under an air operator certificate issued under CARs Part VII

Table 3

Accidents involving Canadian-registered fixed-wing and rotary-wing aircraft by type of operation

		July		Year to date (July)			
	2019	2018	2014-2018 average	2019	2018	2014-2018 average	
Number of accidents by operation type	45	26	30	121	107	120	
Aeroplane accidents	39	22	26	102	93	103	
Training	7	0	2	20	11	15	
Pleasure/Travel	17	12	16	49	53	60	
Business	1	1	0	3	5	3	
Forest fire management	1	0	0	1	0	1	
Test/Demonstration/Ferry	0	0	0	0	1	1	
Aerial application	5	3	3	5	4	4	
Inspection	0	0	0	0	0	0	
Air transport	5	5	3	17	16	13	
Air ambulance	0	0	0	1	0	0	
Sightseeing	0	0	0	0	1	1	
Other/Unknown	3	1	1	6	3	6	
Helicopter accidents	6	4	4	19	14	17	
Training	0	0	0	1	0	2	
Pleasure/Travel	3	1	1	7	3	4	
Business	1	0	0	1	1	0	
Forest fire management	0	1	1	1	2	1	
Test/Demonstration/Ferry	0	0	0	0	0	0	
Aerial application	0	1	1	2	1	1	
Inspection	0	0	0	0	0	0	
Air transport	2	1	2	5	2	4	
Air ambulance	0	0	0	0	0	0	
Sightseeing	0	0	0	0	0	0	
Other/Unknown	0	0	0	2	5	4	
Number of fatal accidents by operation type	5	7	3	12	11	9	
Training	0	0	0	0	0	1	
Pleasure/Travel	3	6	2	8	10	6	
Business	0	0	0	1	0	0	
Forest fire management	0	0	0	0	0	0	
Test/Demonstration/Ferry	0	0	0	0	0	0	
Aerial application	0	1	1	0	1	1	
Inspection	0	0	0	0	0	0	
Air transport	1	0	0	2	0	1	
Air ambulance	0	0	0	0	0	0	
Sightseeing	0	0	0	0	0	0	
Other/Unknown	1	0	0	1	0	1	
Fatalities	9	10	4	22	21	15	
Serious injuries	5	4	5	10	13	11	

Data extracted 15 August 2019

Reportable accidents and incidents are reported in accordance with the TSB's regulations for mandatory reporting of occurrences.

Breakdowns may not add up to totals. For example, in the total "Number of accidents by operation type", when an occurrence involves an airplane and a helicopter, the occurrence is counted in each category, but only once in the total.

Canadian-registered aircraft, excluding ultralights, balloons, gyroplanes, gliders, dirigibles, hang gliders and similar aircraft types New TSB regulations came into effect on July 1, 2014, changing some reporting requirements.