

## AIR SAFETY

between jet and piston aircraft in this respect in that there were six reported jet undershoot ("crashed on approach") accidents but only one jet landing accident. The trend of piston-engined aircraft accidents was opposite—two in the approach phase but six on landing. Of these six landing accidents four were the outcome of engine failure on or after takeoff. The sole jet landing-accident resulted from an airborne cabin fire which dictated a desert forced-landing.

Whereas there is a random scatter of fatal accidents through all phases of flight, the major non-fatal incidents are predominantly in the landing phase (55 per cent) and of the 37 incidents listed as "landing", undercarriage collapse was a factor in 15.

Airborne collisions caused the loss of two passenger transport aircraft but a further three were successfully landed, although in one case the light aircraft involved was destroyed.

The total of fatalities in public transport operations in 1969 was 1,381 compared to 1,262 in 1968 and 1,115 in 1967, giving a constant annual rate of increase of 9.25 per cent.

## FATAL ACCIDENTS ON PUBLIC TRANSPORT OPERATIONS 1969

Date	Carrier	Aircraft	Location	Fatalities		Total Occupants		Circumstances
				Pass	Crew	Pass	Crew	
Dec 31	Servicios Aereos Especiales	DC-3 (XA-SAE)	48 miles east of Ciudad Victoria, Mexico	22	4	22	4	Hit high ground on charter flight.
Jan 2	China Air Lines	DC-3	Mt Paku, southern Formosa	19	5	19	5	Hit high ground.
5	Ariana Afghan Airlines	Boeing 727 (YA-FAR)	Nr Gatwick Airport, London	43	5	54	8	Struck ground on approach in poor visibility at night; two killed on ground.
5	Continental Air Services	Beech Baron (N522C)	North-east Thailand	1	1	2	2	Forced landing after engine trouble.
6	Allegheny Airlines	Convair 580 (N5825)	Nr Bradford Airport, Pa, USA	9	2	25	3	Hit ground on approach in bad weather at night.
13	SAS	DC-8-62 (LN-MDC)	Nr Los Angeles	15	5	36	9	Crashed into sea on approach at night.
18	United Air Lines	Boeing 727 (N7434U)	Nr Los Angeles	31	6	31	6	Crashed into sea soon after take-off when apparently returning to Los Angeles after engine fire and shut-down.
18	Air America	C-47	North of Da Nang, Vietnam	6	3	6	3	Hit high ground on cargo flight.
20	Northern Air Taxi	Aztec (G-ASTE)	Yendon	2	—	5	1	Crashed in fog on final approach.
Feb 18	Hawthorne Nevada	DC-3 (N15570)	Sierra Nevada region	32	3	32	3	Missing, presumed crashed, on flight from Hawthorne, Nevada, to Burbank, California.
24	Far Eastern	HP. Herald (B2009)	Nr Tainan, S. Formosa	32	4	32	4	Starboard engine fire reported after take-off on flight from Kaohsiung to Taipei; hit high ground.
March 5	Prinair	DH. Heron (N563P)	Nr San Juan, Puerto Rico	17	2	17	2	Struck high ground after being cleared under radar control to descend for initial approach.
16	VIASA	DC-9-30 (YV-C-AVD)	Marsabito Airport, Venezuela	74	10	74	10	Lost height after take-off. At least 70 persons killed or fatally injured in buildings on ground.
19	Yemen Airlines	DC-3	Nr Taiz Airport, Yemen	—	4	—	4	Crashed and burnt on test flight.
20	British Midland	Viscount (G-AVJA)	Ringway Airport, Manchester	—	3	—	4	Wing touched ground and aircraft cartwheeled on to back and burnt on training-flight take-off.
20	United Arab	il-18	Aswan Airport, Egypt	89	4	97	7	Struck ground on final approach in early morning darkness and burnt after pilgrim flight from Jeddah.
20	l	DC-3 (N142D)	New Orleans Airport, USA	14	2	24	3	Crashed and burnt when landing in fog for refuelling on charter flight from Memphis to British Honduras.
April 2	LOT	An-24 (SP-LTF)	SW of Cracow, Poland	46	5	46	5	On scheduled Warsaw-Cracow service.
7	Air Canada	Viscount 757 (CF-THK)	Seven Islands, Quebec	1	—	17	4	Engine fire after take-off; forced landing. Passenger killed when evacuating moving aircraft.
10	Ethiopian	DC-3	Nr Cairo	—	3	—	3	On charter flight for UAA from Addis Ababa to Cairo to pick up wing flap.
21	Indian Airlines	F.27 (VT-DOJ)	Nr Khubai, E. Pakistan	40	4	40	4	Crashed in bad weather on scheduled flight from Assam to Calcutta.
24	Ghana	DC-3 (9G-AAF)	Nr Takoradi, Ghana	1	—	29	3	Crash-landed after engine trouble after flight to Takoradi from Accra via Kumasi.
May 14	Mal Air	—	Nr Edmonton Canada	4	1	4	1	After take-off on Air Canada scheduled flight from Edmonton to Regina.
23	—	C-46 (N1247N)	Nr Barcelona Airport, Venezuela	—	1	?	2	Attempted emergency landing after engine failure en route from Paramaribo to Miami.
24	Union of Burma	DC-3 (XY-ACR)	Lashio Airport, Burma	2	4	?	4	Crashed 300 yd from runway after "mid-air explosion" on cargo flight.
June 4	Mexicana	B.727 (XA-SEL)	Nr Monterrey, Mexico	72	7	72	7	Struck high ground on approach to Monterrey on scheduled flight from Mexico City.
13	Wheeler Northland	Aztec (CF-LWY)	Nr Duxton Bay, F. Quebec	3	1	4	1	Struck high ground in bad weather on flight from Frobisher Bay to Duxton Bay.
23	Dominicana	Carvair (HI-168)	Miami, Florida	—	4	—	4	Crashed in Miami after engine trouble on take-off on cargo flight to Santa Domingo, Dominica; at least six persons killed on ground.
24	JAL	Convair 680 (JA-802B)	Grant County Airport, Moses Lake, Washington	—	3	—	5	On take-off on training flight.
July 6	Air South	Beech 99	Nr Winder, Georgia, USA	12	2	12	2	Uncertain; wreckage spread over wide area; aircraft was on charter flight from Atlanta to Greer, S. Carolina.
12	Royal Nepal	DC-3	Nr Hissouda, S. Nepal	31	4	31	4	Crashed into forest at 8,000ft on scheduled flight from Katmandu to Simra, S. Nepal.
15	NY Airways	Twins Otter	Kennedy Airport, New York	1	2	11	3	On take-off; probably upset by vortex from 707.
26	Air Algeria	Caravelle (7T-VAK)	190 miles south of Algiers	30	5	30	7	Forced landing because of cabin fire while on charter flight from Marseilles to oil terminal of Hassi Messaoud.
26	TWA	B.707 (N787TW)	Pomona, NJ, USA	—	5	—	5	Crashed during simulated engine-out overshoot on training flight.
Aug 26	Aeroflot	il-18	Vnukovo Airport, Moscow	16	—	102	10	Wheels-up crash landing and fire after flight from Norilsk, N. Siberia.

Continued at top of facing page