

2001 OGP WORLD-WIDE OIL INDUSTRY HELICOPTER OPERATIONS AND SAFETY REVIEW

2001 WORLD-WIDE HELICOPTER OPERATIONAL DATA SUMMARY

2001 YEAR	TYPE & NUMBER OF HELICOPTERS					PASSENGERS CARRIED	HOURS FLOWN	NUMBER OF FLIGHTS
	SINGLE ENGINE (SE)	LIGHT TWIN (LT)	MEDIUM TWIN (MT)	HEAVY TWIN (HT)	TOTAL FLEET			
OFFSHORE	441	107	379	158	1099	8,959,216	925,214	2,763,113
SEISMIC	73	2	19	1	96	49,694	45,576	215,738
GEOPHYSICAL	18.7	0.2	0.1	0	19	0	8,115	6,250
PIPELINE	39	6	5	0	50	20,879	26,451	18,110
OTHER SUPPORT	27	7	11	13	58	201,692	38,304	39,655
2001 World-Wide	638	123	424	173	1372	9,393,177	1,058,496	2,985,979
2000 WORLD-WIDE	514	118	437	183	1,252	10,093,928	975,395	2,944,651
1999 WORLD-WIDE	598	114	430	191	1,333	8,910,469	917,457	3,101,319

2001 WORLD-WIDE HELICOPTER OPERATIONAL DATA DETAILS

2001 YEAR	HOURS PER TYPE HELICOPTER					PASSENGERS (PAX) PER TYPE HELICOPTER					NUMBER OF FLIGHTS PER TYPE HELICOPTER				
	SINGLE ENGINE (SE)	LIGHT TWIN (LT)	MEDIUM TWIN (MT)	HEAVY TWIN (HT)	TOTAL FLEET	SINGLE ENGINE (SE)	LIGHT TWIN (LT)	MEDIUM TWIN (MT)	HEAVY TWIN (HT)	TOTAL FLEET	SINGLE ENGINE (SE)	LIGHT TWIN (LT)	MEDIUM TWIN (MT)	HEAVY TWIN (HT)	TOTAL FLEET
OFFSHORE	351,029	44,697	329,984	181,959	925,214	2,278,515	225,671	3,704,413	2,667,273	8,959,216	1,359,507	146,100	932,788	202,478	2,763,113
SEISMIC	39,009	685	5402	480	45,576	27,625	3,130	18,099	840	49,694	197,090	890	17,518	240	215,738
GEOPHYS.	8,030	70	15	0	8,115	Not Normally Carried					6,200	35	15	0	6,250
PIPELINE	23,639	1,243	1,351	218	26,451	12,178	1,872	5,557	1,272	20,879	15,748	692	1,566	104	18,110
OTHER SPT	8,930	5,826	4,473	19,075	38,304	15,051	109,086	61,531	16,024	201,692	10,840	1,821	17,479	9,515	39,655
2001	454,642	52,520	349,176	202,158	1,058,496	2,355,708	339,759	4,011,201	2,686,509	9,393,177	1,598,669	149,537	1,024,84	212,927	2,985,979
2000	407,283	58,960	327,480	181,672	975,395	3,188,860	420,863	4,056,699	2,427,507	10,093,928	1,572,745	200,212	918,537	253,157	2,944,651
1999	381,474	52,070	306,895	177,018	917,457	2,223,792	305,432	4,006,764	2,374,482	8,910,469	1,449,221	156,686	1,088,68	315,729	3,010,319

2001 WORLD-WIDE HELICOPTER FLEET OPERATIONAL DATA

Averages Per Helicopter	Offshore	Seismic	Geo Physical	Pipe-line	Other Support	World -Wide	Averages Per Helicopter	Offshore	Seismic	Geo Physical	Pipe-line	Other Support	World -Wide
Pax per Day/5 Day Week	34,549	191	0	80	776	36,218	Annual Hours Per Aircraft	842	476	436	528	658	772
Flights Per Day	7,570	591	17	50	109	8,181	Flights Per Aircraft	2,515	2,254	366	361	681	2,177
Avg. Flight Duration in Min.	20	13	78	88	58	21	Pax Flown Per Year	8,154	519	0	417	3,465	6,848

Data Extracted from the Following: 1. Helicopter Safety Advisory Conf (HSAC) & Int'l Airborne Geophysics Safety Assoc. (IAGSA) Annual Helicopter Activity Reports.
2. Annual activity for helicopter operations generated by members of the Oil and Gas Producers Association and from 91 helicopter operators.

As a service to OGP membership, this World-Wide Helicopter Statistical Report is compiled annually from information submitted voluntarily by the membership and helicopter operators. The information is neither verified nor reviewed for accuracy and should be treated as unofficial. The data is believed to be representative; however, the OGP assumes no liability for accuracy or completeness.

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2001 WORLD-WIDE HELICOPTER ACCIDENT DATA

NUMBER OF ACCIDENTS				INJURY CLASSIFICATION				AIRCRAFT DAMAGES			AVIATION ACCIDENT			
Aircraft Category				Injuries		Severity		Classification			Rates			
Type Aircraft	# Accidents	# Fatal	# Eng Related	Pax	Crew	Injured	Fatal	Minor	Major	Total Loss	# Acc 100k Hours	# Fatal Acc 100k Hours	# Fatal 1M Occupants	# Acc 100k Flt Stages
Single Piston	5	0	1	4	4	8	0	0	4	1	5.28	0.00	0.00	1.50
Single Turbine	19	0	4	8	3	11	0	1	12	6	4.18	0.00	0.00	1.19
Light Twin	0	0	0	0	0	0	0	0	0	0	0.00	0.00	0.00	0.00
Med Twin	4	1	0	1	0	0	1	2	1	1	1.15	0.29	0.16	0.39
Heavy Twin	1	0	0	0	1	1	0	0	1	0	0.49	0.00	0.00	0.47
2001 Totals	29	1	5	13	8	20	1	5	16	8	2.74	0.09	0.07	0.97
2000Totals	28	9	4*	24	28	35	17	2	5	21	2.87	0.92	1.20	0.95
1999Totals	25	8	6	61	18	29	50	1	10	14	2.72	0.87	3.80	0.83

2001 WORLD-WIDE HELICOPTER ACCIDENT DATA BY ACTIVITY

NUMBER OF ACCIDENTS				INJURY CLASSIFICATION				AIRCRAFT DAMAGES			AVIATION ACCIDENT				Industry Fatal Rates per 100M Exposure Hrs Passengers & Crew	
Aircraft Category				Injuries		Severity		Classification			Rates				Accidents (IFAR)	Incidents (IFAIR)
Type Aircraft	# Accidents	# Fatal	# Eng Related	Pax	Crew	Injured	Fatal	Minor	Major	Total Loss	# Acc 100k Hours	# Fatal Acc 100k Hours	# Fatal 1M Occupants	# Acc 100k Flt Stages		
Offshore	11	1	0	8	4	11	1	4	3	4	1.19	0.11	0.08	0.40	23	23
Seismic	8	0	3	0	0	0	0	1	4	3	17.55	0.00	0.00	3.71	0	0
GeoPhysic	No Accidents Reported															
Pipeline	1	0	1	0	0	0	0	0	1	0	3.78	0.00	0.00	5.52	0	0
Other Spt	9	0	1	5	4	9	0	0	8	1	5.22	0.00	0.00	5.04	0	0
2001Totals	29	1	5	13	8	20	1	5	16	8	2.74	0.09	0.07	0.97	20	20
2000Totals	28	9	4	24	28	35	17	2	5	21	2.87	0.92	1.20	0.95	352	186
1999Totals	25	8	6	61	18	29	50	1	10	14	2.72	0.87	3.80	0.87	1214	194

2001 WORLD-WIDE HELICOPTER ACCIDENT CAUSES/INFO

	Ttl	Engine Related	Other Tech	Lightning	Flight Into Terrain, Water	Tie Down Proced.	Hostile Fire	External Load Proced.	Control Malf.	Obstacle Strike	Mid Air	Pilot Proc.	Fuel Starv.	Refuel Proc.	Pax Cont.	Wx	Acft Over Load	Hard Ldg	Helideck Design or Size Issues	#Fatal Due To Engine Malf.
Single Pist.	5	1	1	0	1	0	0	0	0	1	0	1	0	0	0	0	0	0	0	0
Single Turb	19	4	1	0	1	0	0	1	0	3	0	7	0	2	0	0	0	0	0	0
Light Twin	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Med. Twin	4	0	0	0	0	0	1	0	0	0	0	2	0	0	1	0	0	0	0	0
Hvy. Twin	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0
2001 Ttl	29	5	2	0	2	0	1	1	0	4	0	10	0	2	1	1	0	0	0	0
2000 Ttl	28	4	5	1	5 (2 night)	1		1	1	3	0	6	1	0	0	0	0	0	0	1

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2001 WORLD-WIDE OFFSHORE HELICOPTER OPERATIONAL DATA SUMMARY

YEAR	NUMBERS of HELICOPTERS by TYPE					PASSENGERS CARRIED	HOURS FLOWN	NUMBER OF FLIGHTS
	SINGLE ENGINE (SE)	LIGHT TWIN (LT)	MEDIUM TWIN (MT)	HEAVY TWIN (HT)	TOTAL FLEET			
N SEA	0	0	34	79	114	2379697	162431	243304
GOM	407	87	121	17	632	3,127,449	451,712	1,473,057
OTHER	34	20	224	62	353	3,452,070	311,071	2,507,758
2001 WORLD_WIDE	441	107	379	158	1,099	8,959,216	925,214	2,763,113
2000 WORLD-WIDE	433	102	403	162	1,100	9,337,352	891,844	2,657,031
1999 WORLD-WIDE	473	95	386	152	1105	8,097,983	828,911	2,767,737
1998 WORLD-WIDE	465	117	444	181	1208	9,764,538	1,029,503	3,029,243
1997 WORLD-WIDE	479	165	398	164	1206	9,771,259	950,343	3,184,797

2001 WORLD-WIDE OFFSHORE HELICOPTER OPERATIONAL DATA DETAILS

YEAR	HOURS PER TYPE HELICOPTER					PASSENGERS (PAX) PER TYPE HELICOPTER					NUMBER OF FLIGHTS PER TYPE HELICOPTER				
	SINGLE ENGINE (SE)	LIGHT TWIN (LT)	MEDIUM TWIN (MT)	HEAVY TWIN (HT)	TOTAL FLEET	SINGLE ENGINE (SE)	LIGHT TWIN (LT)	MEDIUM TWIN (MT)	HEAVY TWIN (HT)	TOTAL FLEET	SINGLE ENGINE (SE)	LIGHT TWIN (LT)	MEDIUM TWIN (MT)	HEAVY TWIN (HT)	TOTAL FLEET
N SEA	0	0	42,754	119,677	162,431	0	0	629,552	1,750,145	2,379,697	0	50	138,611	104,643	243,304
GOM	309,429	35,318	96,548	10,417	451,712	1,823,241	187,127	932,877	184,204	3,127,449	1,123,393	125,832	204,285	19,547	1,473,057
OTHER	41,600	9,279	190,782	51,865	311,071	455,274	38,544	2,141,984	732,924	3,452,070	1,357,890	146,036	784,779	96,812	2,507,758
2001	351,029	44,697	329,984	181,959	925,214	2,278,515	225,671	3,704,413	2,667,273	8,959,216	1,359,507	146,100	932,788	202,478	2,763,113
2000	361,933	53,894	308,615	167,402	891,844	3,064,516	404,985	3,679,401	2,188,451	9,337,352	1,414,035	195,493	833,004	214,499	2,657,031
1999	326,514	47,341	287,584	167,472	828,911	2,173,924	277,607	3,624,427	2,022,025	8,097,983	1,376,632	147,406	981,547	262,152	2,767,737
1998	372,688	68,152	404,058	184,605	1,029,503	2,442,448	361,797	4,598,209	2,362,044	9,764,538	1,404,852	213,711	1,204,177	269,503	3,029,243
1997	359,341	96,270	301,671	193,061	950,343	2,753,768	686,145	4,159,934	2,171,412	9,771,259	1,561,146	330,917	1,050,120	242,614	3,184,797

2001 WORLD-WIDE OFFSHORE HELICOPTER FLEET OPERATIONAL DATA

Averages Per Helicopter	N SEA	GOM	World	Averages Per Helicopter	N SEA	GOM	World
Passengers per Day per 5 Day Week	9,153	12,029	34,549	Annual Hours Per Aircraft	1,431	715	842
Flights Per Day	667	4,036	7,570	Flights Per Aircraft	2,144	2,333	2,515

Average Flight Duration in Min.	40	18	20	Passengers Flown Per Year	20,966	4,952	8,154
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N SEA = NORTH SEA

GOM = Gulf of Mexico

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2001 WORLD-WIDE OFFSHORE HELICOPTER ACCIDENT DATA

NUMBER OF ACCIDENTS				INJURY CLASSIFICATION				AIRCRAFT DAMAGES			AVIATION ACCIDENT			
Aircraft Category				Injuries		Severity		Classification			Rates			
Type Aircraft	# Accidents	# Fatal	# Eng Related	Pax	Crew	Injured	Fatal	Minor	Major	Total Loss	# Acc 100k Hours	# Fatal Acc 100k Hours	# Fatal 1M Occupants	# Acc 100k Flt Stages
Single Eng	7	0	0	7	3	10	0	2	1	4	1.99	0.00	0.00	0.51
Light Twin	0	0	0	0	0	0	0	0	0	0	0.00	0.00	0.00	0.00
Med Twin	3	1	0	1	0	0	1	2	1	0	0.91	0.30	0.18	0.32
Heavy Twin	1	0	0	0	1	1	0	0	1	0	0.55	0.00	0.00	0.49
2001 Totals	11	1	0	8	4	11	1	4	3	4	1.19	0.11	0.08	0.40
2000 Totals	16	7	2	7	17	11	13	1	2	13	1.79	0.78	1.00	0.60
1999 Totals	17	5	3	38	11	23	26	1	7	9	2.05	0.60	2.10	0.61

2001 GOM OFFSHORE HELICOPTER ACCIDENT DATA

NUMBER OF ACCIDENTS				INJURY CLASSIFICATION				AIRCRAFT DAMAGES			AVIATION ACCIDENT			
Aircraft Category				Injuries		Severity		Classification			Rates			
Type Aircraft	# Accidents	# Fatal	# Eng Related	Pax	Crew	Injured	Fatal	Minor	Major	Total Loss	# Acc 100k Hours	# Fatal Acc 100k Hours	# Fatal 1M Occupants	# Acc 100k Flt Stages
Single Eng	6	0	0	7	3	10	0	2	0	4	1.94	0.00	0.00	0.53
Light Twin	0	0	0	0	0	0	0	0	0	0	0.00	0.00	0.00	0.00
Med Twin	2	1	0	1	0	0	1	1	1	0	2.07	1.04	0.75	0.98
Heavy Twin	0	0	0	0	0	0	0	0	0	0	0.00	0.00	0.00	0.00
2001 Totals	8	1	0	8	3	10	1	3	1	4	1.77	0.22	0.21	0.54
2000 Totals	9	3	2	3	8	8	3	0	1	8	2.04	0.68	0.59	0.65
1999 Totals	9	1	2	7	4	9	2	2	2	5	2.29	0.25	0.50	0.62

2001 NORTH SEA OFFSHORE HELICOPTER ACCIDENT DATA

NUMBER OF ACCIDENTS				INJURY CLASSIFICATION				AIRCRAFT DAMAGES			AVIATION ACCIDENT			
Aircraft Category				Injuries		Severity		Classification			Rates			
Type Aircraft	# Accidents	# Fatal	# Eng Related	Pax	Crew	Injured	Fatal	Minor	Major	Total Loss	# Acc 100k Hours	# Fatal Acc 100k Hours	# Fatal 1M Occupants	# Acc 100k Flt Stages
Single Eng	No Activity													
Light Twin	No Activity													
Med Twin	1	0	0	0	0	0	0	1	0	0	2.34	0.00	0.00	0.72
Heavy Twin	1	0	0	0	1	1	0	0	1	0	0.84	0.00	0.00	0.96

2001 Totals	2	0	0	0	1	1	0	1	1	0	1.23	0.00	0.00	0.82
2000 Totals	1	0	0	0	0	0	0	1	0	0	0.68	0.00	0.00	0.41
1999 Totals	2	0	0	0	0	0	0	0	2	0	1.37	0.00	0.00	0.74

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SEVEN YEAR WORLD-WIDE OFFSHORE HELICOPTER ACCIDENT DATA

Number Of Accidents				Injury Classification				Aircraft Damages			Aviation Accident				Industry Fatal Rates Per	
Aircraft		Category		Injuries		Severity		Classification			Rates				100M Exposure Hrs Passengers & Crew	
Year	# Accidents	# Fatal	# Eng Related	Pax	Crew	Injured	Fatal	Minor	Major	Total Loss	# Acc 100k Hrs	# Fatal Acc 100k Hrs	# Fatal 1M Occupants	# Acc 100k Flts	Accidents (IFAR)	Incidents (IFAIR)
1995	10	6	NR	35	8	19	24	0	5	5	1.36	0.82	2.10 E	0.41	671	168
1996	15	7	NR	8	8	0	16	1	3	11	1.82	0.85	1.20 E	0.59	432	189
1997	11	5	2	41	13	12	42	1	3	8	1.16	0.53	2.90	0.35	963	115
1998	11	6	2	25	16	6	35	0	2	11	1.07	0.58	2.40	0.36	709	122
1999	17	5	3	38	11	23	26	1	7	9	2.05	0.60	2.10	0.61	701	135
2000	16	7	2	7	17	11	13	1	2	13	1.79	0.78	1.00	0.60	289	155
2001	11	1	0	8	4	11	1	4	3	4	1.19	0.11	0.08	0.40	23	23
7 Yr Avg	13.0	5.3	1.8	23.1	11.0	11.7	22.4	1.1	3.6	8.7	1.49	0.61	1.70	0.47	541	130

SEVEN YEAR GOM OFFSHORE HELICOPTER ACCIDENT DATA

Number Of Accidents				Injury Classification				Aircraft Damages			Aviation Accident			
Aircraft		Category		Injuries		Severity		Classification			Rates			
Year	# Accidents	# Fatal	# Eng Related	Pax	Crew	Injured	Fatal	Minor	Major	Total Loss	# Acc 100k Hrs	# Fatal Acc 100k Hrs	# Fatal 1M Occupants	# Acc 100k Flt Stages
1995	5	3	NR	7	3	2	8	1	1	3	1.21	0.73	1.40 E	0.33
1996	7	4	NR	7	4	0	11	1	2	4	1.58	0.91	1.90 E	0.42
1997	6	1	1	6	6	11	1	1	2	4	1.27	0.21	0.20	0.35
1998	3	1	1	0	2	1	1	0	1	3	0.66	0.22	0.20	0.22
1999	9	1	2	7	4	9	2	1	4	4	2.29	0.25	0.50	0.62
2000	9	3	2	3	8	8	3	0	1	8	2.04	0.68	0.59	0.65
2001	8	1	0	8	3	10	1	3	1	4	1.77	0.22	0.21	0.54
7 Yr Avg	6.7	2.0	1.2	5.4	4.3	5.9	3.9	1.0	1.7	4.3	1.55	0.46	0.34	0.45

SEVEN YEAR NORTH SEA OFFSHORE HELICOPTER ACCIDENT DATA

Number Of Accidents				Injury Classification				Aircraft Damages			Aviation Accident			
Aircraft		Category		Injuries		Severity		Classification			Rates			
Year	# Accidents	# Fatal	# Eng Related	Pax	Crew	Injured	Fatal	Minor	Major	Total Loss	# Acc 100k Hrs	# Fatal Acc 100k Hrs	# Fatal 1M Occupants	# Acc 100k Flt Stages
1995	2	0	0	0	0	0	0	0	2	0	1.65 E	0.00	0.00	0.85 E
1996	2	0	0	0	0	0	0	0	1	1	1.26 E	0.00	0.00	1.20 E

1997	3	2	1	11	2	0	13	0	1	2	1.78	1.19	4.90	1.08
1998	1	0	0	0	0	0	0	0	1	0	0.61	0.00	0.00	0.39
1999	2	0	0	0	0	0	0	0	2	0	1.37	0.00	0.00	0.74
2000	1	0	0	0	0	0	0	1	0	0	0.68	0.00	0.00	0.41
2001	2	0	0	0	1	1	0	1	1	0	1.23	0.00	0.00	0.82
7 Yr Avg	1.9	0.3	0.1	1.6	0.4	0.1	1.9	0.3	1.1	0.4	1.13	0.17	0.70	0.69

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2001 WORLD-WIDE OFFSHORE HELICOPTER ACCIDENT CAUSES/INFO

	Engine Related	Bird Strike	Light -ning	Flight Into Terrain, Water Or Obstacle	Tie Down Proc.	External Load Proc.	Obstacle Strike	Tail Rotor	Unk.	Fuel Proc	Control Malf.	Wx	Pax Cont.	Pilot Proc	Mid Air	Helideck Design or Size Issues	# Fatal Due To Single Eng. Malf.
Single Eng	0	0	0	0	0	0	1	1	0	2	0	0	0	3	0	0	0
Light Twin	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Med. Twin	0	0	0	0	0	0	0	0	0	0	0	0	1	2	0	0	0
Heavy Twin	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0
2001 Totals	0	0	0	0	0	0	1	1	0	2	0	1	1	5	0	0	0
97-00 Totals	9	1	4	14 (8 night)	2	1	1	5	2	2	5	3	1	2	3	0	2

1998-2001 GOM OFFSHORE HELICOPTER ACCIDENT CAUSES/INFO

	Engine Related	Bird Strike	Flight Into Terrain Water or Obstacle	Tail Rotor	Tie Down Proced.	Fuel Starv.	Fuel Qual.	Severe Weather	Pax Con.	Pilot Proc	Mid Air	Unk.	Obstacle Strike	Helideck Design or Size Issues	# Fatal Due To Single Eng Malf.
Single Eng	0	0	0	1	0	0	2	0	0	3	0	0	0	0	0
Med. Twin	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0
2001	0	0	0	1	0	0	2	0	1	4	0	0	0	0	0
1997-2000	6	1	6	3	1	1	0	2	1	2	2	1	0	0	1

1998-2001 NORTH SEA OFFSHORE HELICOPTER ACCIDENT CAUSES/INFO

	Engine Related	Lightning	Flight Into Terrain Or Water	Pilot Procedure	Severe Weather	Helideck Design or Size Issues
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Medium Twin	0	0	0	1	0	0
Heavy Twin	0	0	0	0	1	0
2001	0	0	0	1	1	0
1997-2000	1	4	1	0	1	0

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2001 SEISMIC HELICOPTER ACCIDENT DATA

NUMBER OF ACCIDENTS				INJURY CLASSIFICATION				AIRCRAFT DAMAGES			AVIATION ACCIDENT			
Aircraft		Category		Injuries		Severity		Classification			Rates			
Type Aircraft	# Accidents	# Fatal	# Eng Related	Pax	Crew	Injured	Fatal	Minor	Major	Total Loss	# Acc 100k Hours	# Fatal Acc 100k Hours	# Fatal 1M Occupants	# Acc 100k Flt Stages
Single Eng	7	0	3	0	0	0	0	1	4	2	17.94	0.00	0.00	3.55
Light Twin	0	0	0	0	0	0	0	0	0	0	0.00	0.00	0.00	0.00
Med. Twin	1	0	0	0	0	0	0	0	0	1	18.51	0.00	0.00	5.71
Heavy Twin	0	0	0	0	0	0	0	0	0	0	0.00	0.00	0.00	0.00
2001 Totals	8	0	3	0	0	0	0	1	4	3	17.55	0.00	0.00	3.71
2000 Totals	7	1	2	5	4	6	3	1	2	4	24.80	3.54	13.75	5.49
1999 Totals	6	2	3	1	4	1	4	0	3	3	16.91	5.64	22.50	6.97
1998 Totals	7	0	3	3	4	7	0	0	3	4	8.91	0.00	0.00	1.59

2001 SEISMIC HELICOPTER ACCIDENT CAUSES/INFO

	Engine Related	Cable in TR	Tail Rotor	Obstacle Strike	Flight into Terrain	Snagged Load	Rapid Refuel Proc.	Fuel Proc.	Hostile Fire	Unk .	Pilot Proc.	Hard Landing	Over Load Acft	# Fatal Due To Single Eng Malf.
Single Eng	3	1	0	1	0	0	0	0	0	0	2	0	0	0
Med. Twin	0	0	0	0	0	0	0	0	1	0	0	0	0	0
2001	3	1	0	1	0	0	0	0	1	0	2	0	0	0
1998-2000	8		1	2	1	2	1	1		1	2	1	1	0

2001 GEOPHYSICAL HELICOPTER ACCIDENT DATA

NUMBER OF ACCIDENTS				INJURY CLASSIFICATION				AIRCRAFT DAMAGES			AVIATION ACCIDENT				
Aircraft		Category		Injuries		Severity		Classification			Rates				
Type Aircraft	# Accidents	# Fatal	# Eng Related	Pax	Crew	Minor	Serious	Fatal	Minor	Major	Total Loss	# Acc 100k Hours	# Fatal Acc 100k Hours	# Fatal 1M Occupants	# Acc 100k Flt Stages
2001 Totals	NO ACCIDENTS														
1999-2000	NO ACCIDENTS														
1998 Totals	1	1	0	1	1	0	0	2	0	0	1	8.88	8.88	22.48	12.66

1998-2001 GEOPHYSICAL HELICOPTER ACCIDENT CAUSES/INFO

	Engine Related	Injuries Due To Engine Malfunction	Flight Into Terrain, Water Or Obstacles
Single Eng (98)	0	0	1

2001 OGP

2001 PIPELINE HELICOPTER ACCIDENT DATA

NUMBER OF ACCIDENTS				INJURY CLASSIFICATION				AIRCRAFT DAMAGES			AVIATION ACCIDENT			
Aircraft Category				Injuries		Severity		Classification			Rates			
Type Aircraft	# Accidents	# Fatal	# Eng Related	Pax	Crew	Injured	Fatal	Minor	Major	Total Loss	# Acc 100k Hours	# Fatal Acc 100k Hours	# Fatal 1M Occupants	# Acc 100k Flt Stages
Single Eng	1	0	1	0	0	0	0	0	1	0	4.23	0.00	0.00	6.35
Light Twin	0	0	0	0	0	0	0	0	0	0	0.00	0.00	0.00	0.00
Med Twin	0	0	0	0	0	0	0	0	0	0	0.00	0.00	0.00	0.00
Heavy Twin	0	0	0	0	0	0	0	0	0	0	0.00	0.00	0.00	0.00
2001 Totals	1	0	1	0	0	0	0	0	1	0	3.78	0.00	0.00	5.52
2000 Totals	4	1	0	8	5	12	1	0	0	4	30.99	7.75	8.37	19.29
1999 Totals	1	0	0	0	0	0	0	0	1	0	7.47	0.00	0.00	2.89
1998 Totals	2	1	0	3	1	0	4	0	0	2	17.48	8.74	4.92	2.86

1998-2001 PIPELINE HELICOPTER ACCIDENT CAUSES/INFO

	Engine Related	Pilot Procedure	Flight Into Terrain, Water Or Obstacles	Control Problems	# Fatal Due To Single Engine Malfunction

Single Engine 2001	1	0	0	0	0
Single Engine (2000)	0	2	2	0	0
Heavy Twin (99)	0	0	1	0	0
Medium Twin (98)	0	0	0	2	0

2001 OTHER INDUSTRY HELICOPTER ACCIDENT DATA

NUMBER OF ACCIDENTS				INJURY CLASSIFICATION				AIRCRAFT DAMAGES			AVIATION ACCIDENT			
Aircraft Category				Injuries		Severity		Classification			Rates			
Type Aircraft	# Accidents	# Fatal	# Eng Related	Pax	Crew	Injured	Fatal	Minor	Major	Total Loss	# Acc 100k Hours	# Fatal Acc 100k Hours	# Fatal 1M Occupants	# Acc 100k Flt Stages
Single Piston	5	0	1	4	4	8	0	0	4	1	5.28	0.00	0.00	1.50
Single Turbine	4	0	0	1	0	1	0	0	4	0	22.40	0.00	0.00	18.45
Light Twin	0	0	0	0	0	0	0	0	0	0	0.00	0.00	0.00	0.00
Med Twin	0	0	0	0	0	0	0	0	0	0	0.00	0.00	0.00	0.00
Heavy Twin	0	0	0	0	0	0	0	0	0	0	0.00	0.00	0.00	0.00
2001 Totals	9	0	1	5	4	9	0	0	8	1	5.22	0.00	0.00	5.04
1998-2000	3	2	0	31	6	11	26	0	0	3	2.70	1.83	1.39	0.87

Note, 2001 the first year in which single engine piston helos have activity reported (accidents only, no hours, etc))

1998-2001 OTHER INDUSTRY SUPPORT HELICOPTER ACCIDENT CAUSES/INFO

	Pilot Procedure	Engine Related	Flight Into Terrain, Water	Obstacle Strike	Other Technical	# Fatal Due to Single Engine Malfunction
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Single Piston	1	1	1	1	1	0
Single Turbine	2	0	1	1	0	0
2001	3	1	2	2	1	0
Heavy Twin (2000)	1	0	0	0	0	0
Heavy Twin (99)	0	0	1	0	0	0
Single Eng (98)	0	0	1	0	0	0

2001 OGP WORLD-WIDE OIL INDUSTRY ACCIDENTS

HELICOPTERS ACCIDENT					Fatal	Injury Data				Severity Injury			CAUSES								Narrative			
DATE	ACTIV.	MODEL	TYPE	Country	Yes = 1	Pax	Crew	# Inj.	# Fatal	Min	Subs	Lost	Tech	FITW	Fuel	Sling Load	Hostile Act	Obst. Strike	Pax Cntrl	Wx		Pilot Proc		
1-Jan-01	Other	R44	SEP	Canada	0		1	1			1											1	Helo left unattended while running, lifted and crashed	
21-Jan-01	Seismic	AS350B	SE	Canada	0						1							1					TR struck post, hard ldg	
21-Jan-01	Offshore	B206L	SE	US	0						1							1					TR struck handrail, then hard ldg	
20-Mar-01	Offshore	S76	MT	GOM	1	1			1	1										1			Pax walked into MR	
5-Apr-01	Offshore	B407	SE	GOM	0					1			TR										Flex Drive Shaft Failure	
13-Apr-01	Other	R44	SEP	Canada	0	2		2			1							1					Struck pipe on bldg at gas plant	
2-May-01	Other	R22	SEP	Canada	0							1	Eng										Loss of eng power enroute to gas plant	
6-May-01	Other	B206L	SE	Canada	0						1			1									External load for drill site, loss of reference in whiteout conditions	
11-May-01	Pipeline	B206B	SE	Sudan	0						1		Eng										Loose Air line - P3	
14-Jun-01	Other	B206B	SE	Canada	0						1											1	Pilot misdiagnosis of caution lights, during precautionary rolled on side	
27-Jun-01	Other	R44	SEP	Canada	0	1	2	3			1		Other											Centif Clutch Failure
10-Jul-01	Offshore	S76	MT	GOM	0						1											1	Pilot induced overtorque	
12-Jun-01	Offshore	S76	MT	UK	0					1												1	Strike to tail boom due to improper application of collective	
17-Jul-01	Seismic	AS315B	SE	US	0							1	Eng											Eng Failure
31-Jul-01	Other	AS350B	SE	Canada	0	1		1			1											1	Rolled on landing due to windy conditions on ridge	
6-Aug-01	Offshore	B206L1	SE	GOM	0	2	1	3				1										1	No tech fault found	
7-Aug-01	Other	B206B	SE	Canada	0						1							1						Rotor Strike
12-Aug-01	Seismic	H369	SE	US	0							1	Eng											Eng Failure
12-Aug-01	Seismic	AS350B	SE	US	0						1					1								Long line in tail rotor causing drive shaft failure and hard ldg
24-Aug-01	Offshore	B206L	SE	GOM	0	1	1	2				1			1									Fuel Contamination
5-Sep-01	Seismic	AS350B	SE	US	0						1											1		Loss of TR effectiveness
5-Sep-01	Seismic	H369	SE	US	0						1											1		Loss of TR effectiveness

HELICOPTERS ACCIDENT					Fatal	Injury Data					Severity Injury			CAUSES									
DATE	ACTIV.	MODEL	TYPE	Country	Yes = 1	Pax	Crew	# Inj.	# Fatal	Min	Subs	Lost	Tech	FITW	Fuel	Sling Load	Hostile Act	Obst. Strike	Pax Cntrl	Wx	Pilot Proc	Narrative	
18-Sep-01	Other	R44	SEP	Canada	0	1	1	2			1			1									Wx related, flew into trees
26-Sep-01	Offshore	B206L	SE	GOM	0					1											1	Rotor Tach Failure, pilot misdiagnosis	
18-Oct-01	Offshore	B206L3	SE	GOM	0	4	1	5				1			1								Fuel Contamination
10-Nov-01	Offshore	B407	Se	GOM	0							1										1	Tie down came out of baggage compartment and hit TR
10-Nov-01	Offshore	AS332L	HT	UK	0		1	1			1										1		Helo rolled on deck in heavy seas/wind
20-Jul-01	Seismic	B212	MT	Colombia	0							1					1						Acft burnt by guerillas, crew held for 9 months
21-Aug-01	Seismic	B206	SE	Canada	0					1			Eng										Eng Failure
				TOTALS 2001	1	13	8	20	1	5	16	8	7	2	2	1	1	4	1	1	10		
				Helos Ttl Accid	29																		
AIRPLANES 2001																							
26-Sep-01	Other	DC 6	MP	US	0							1									1	Hard Landing	
11-Oct-01	Other		TT	Spain	1	8	2		10			1		1									Suspect weather related
15-Oct-01	Other	PA31	TP	Canada	1	5	1	3	3			1		1									Suspect weather related
				Totals 2001	2	13	3	3	13	0	0	3	0	2	0	0	0	0	0	0	0	1	
				Airplane Total Accid.	3																		
				Fatal	3				14														
				Grand Totals	32	26	11	23	14	5	16	11	7	4	2	1	1	4	1	1	11		