1999

HELICOPTER SAFETY ADVISORY CONFERENCE (HSAC) GULF OF MEXICO OFFSHORE HELICOPTER OPERATIONS AND SAFETY REVIEW

Gentlemen: April 17, 2000

Please find attached the Helicopter Safety Advisory Conference (HSAC) "1999 Gulf of Mexico Offshore Helicopter Operations and Safety Review". The membership support and response from 25 helicopter operators for this review is not only appreciated, but vital in establishing a meaningful report. Continued support is encouraged for the future.

The Gulf of Mexico oil industry helicopter accident rates per 100,000 hours was the highest at 2.29 that it has been since 1986 with 9 accidents compared to the 16 year average of 6.7 accidents. The U.S. accident rates per 100,000 hours for all commercial helicopter operations was 3.87 and the fatal rate was 0.92, while the HSAC rates were 2.29 and 0.25 respectively. There was 1 fatal accident with 2 fatalities

In the last 3 years there have been 18 accidents resulting in 3 fatal accidents (14% fatal) with 4 fatalities. The leading causes of accidents have been engine related and flight into terrain, water or obstacles with 4 accidents each (22% each), followed by tail rotor malfunction and mid-air collision with 2 accidents each (11% each). The 2 midairs and previously mentioned skid hazard accidents resulted in 2 fatalities each.

We are optimistic that by sharing this information with all operators and other oil industry groups safety initiatives may be developed to reduce accidents.

Bob Williams
Industry Liaison Committee Member

GULF OF MEXICO OFFSHORE HELICOPTER OPERATIONAL DATA SUMMARY

YEAR	TYPE HELICOPTER					PASSENGERS CARRIED	HOURS FLOWN	NUMBER OF FLIGHTS
	SINGLE ENGINE	LIGHT TWIN	MEDIUM TWIN	HEAVY TWIN	TOTAL FLEET			
1995	313	117	133	0	563	3,483,152	413,314	1,527,318
1996	321	102	117	0	540	3,579,345	441,797	1,668,401
1997	380	114	131	11	636	3,759,642	471,513	1,705,629

1998	392	89	94	13	588	2,725,682	454,280	1,390,773
1999 *	***413***	***81***	***93***	***14***	***601***	***2,664,848***	***392,712***	***1,459,781***

*** Data extracted from voluntary input of 21 helicopter operators in the Gulf of Mexico**

GULF OF MEXICO OFFSHORE HELICOPTER OPERATIONAL DATA DETAILS

YEAR	HOURS PER TYPE HELICOPTER					OPERATIONS PER TYPE HELICOPTERS HELICOPTER				
	SINGLE ENGINE	**LIGHT TWIN**	**MEDIUM TWIN**	**HEAVY TWIN**	**TOTAL FLEET**	**SINGLE ENGINE**	**LIGHT TWIN**	**MEDIUM TWIN**	**HEAVY TWIN)**	**TOTAL FLEET**
1997*	288,443	69,142	109,631	4,297	471,513	1,113,151	249,595	320,023	22,860	1,705,629
1998	303,434	54,509	88,470	7,867	454,280	1,025,105	183,133	167,255	15,280	1,390,773
1999	***280,150***	***38,218***	***66,071***	***8,273***	***392,712***	***1,161,888***	***124,480***	***158,175***	***15,238***	***1,459***

*** Detailed data for helicopter types not available prior to 1997**

GULF OF MEXICO HELICOPTER FLEET OPERATIONAL DATA

Averages Per Helicopter	**1997**	1998	1999	Averages Per Helicopter	**1997**	1998	***1999***
Passengers per Day per 5 Day Week	14,460	10,483	10,249	**Annual Hours Per Aircraft**	741	773	653
Flights Per Day	4,673	3,810	3,999	**Flights Per Aircraft**	2,682	2,365	2,429
Average Flight Duration in Min.	17	20	16	**Passengers Flown Per Year**	5,911	4,636	4,434

As a service to the Helicopter Safety Advisory Conference (HSAC) membership, this Gulf of Mexico Offshore 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 HSAC assumes no liability for accuracy or completeness.

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2000 GULF OF MEXICO OFFSHORE HELCOPTER 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	Substantial	Total Loss	# Acc 100k Hours	# Fatal Acc 100k Hours	# Fatal 1M Occupants	# Acc 100k Flt Stages
Single Eng.	7	1*	2	5	4	2	5	2	2	1	4	2.50	0.36	0.07	0.60
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
1999 Totals	9	1	2	7	4		9	2	2	2	5	2.29	0.25	0.05	0.62
1998 Totals	3	1	1	0	2	1	0	2	0	1	3	0.66	0.22	0.02	0.22

*** One engine related** **Note, there was one single engine ditching in 2001, not recorded as an accident.**

19990 GULF OF MEXICO OFFSHORE HELICOPTER ACCIDENT CAUSES/INFO

Type	**Engine Related**	**Tiedown Procedure**	**Bird Strike**	**Flight Into Terrain, Water or Obstacle**	**Tail Rotor**	**Adverse Weather Start Procedure**	**Helideck Surface Hazard**	**Passenger Control**	**Mid Air**	**Helideck Design or Size Issues**	**Injuries Due To Engine Malfunction**
Single Eng	2	0	0	2	0	1	1	1	0	0	0
Light Twin	0	0	0	0	0	1	0	0	0	0	0

Medium Twin	0	0	0	0	1	0	0	0	0	0	0
Heavy Twin	0	0	0	0	0	0	0	0	0	0	0
1999 Totals	***2***	***0***	***0***	***2***	***1***	***2***	***1***	***1***	***0***	***0***	***0***
1998 Totals	1	1	0	0	0	0	0	0	1	0	

FIVE YEAR GULF OF MEXICO OFFSHORE HELICOPTER ACCIDENT DATA **Injuries**

Number Of Accidents			**Injury Classification**					**Aircraft Damages**			**Aviation Accident**				
Aircraft Category			**Injuries**		**Severity**			**Classification**			**Rates**				
Year	# Accidents	# Fatal	# Eng Related	Pax	Crew	Minor	Serious	Fatal	Minor	Substantial	Total Loss	# Acc 100k Hrs	# Fatal Acc 100k Hrs	# Fatal 100k Occupants	# Acc 100k Flt Stages
1995	5	3	NR	7	3	1	1	8	1	1	3	1.21	0.73	0.14 E	0.33
1996	7	4	NR	7	4	0	0	11	1	2	4	1.58	0.91	0.19 E	0.42
1997	6	1	1	6	6	7	4	1	1	2	4	1.27	0.21	0.02	0.35
1998	3	1	1	0	2	1	0	1	0	1	3	0.66	0.22	0.02	0.22
1999	***9***	***1***	***2***	***7***	***4***	***4***	***5***	***2***	***2***	***2***	***5***	***2.29***	***0.25***	***0.05***	***0.62***
5 Yr. Avg.	**6.0**	**2.0**	**0.6**	**5.4**	**3.8**	**2.6**	**2.0**	**4.6**	**1.0**	**1.6**	**3.8**	**1.40**	**0.46**	**0.08**	**0**

NR = Not Reported **E = Estimated**