



## 2011 HELICOPTER SAFETY ADVISORY CONFERENCE (HSAC) GULF OF MEXICO OFFSHORE HELICOPTER OPERATIONS AND SAFETY REVIEW

HSAC Members:

April 9, 2012

Please find attached the Helicopter Safety Advisory Conference (HSAC) "2011 Gulf of Mexico (GoM) Offshore Helicopter Operations and Safety Review". The membership support and response from 14 helicopter operators for this review is not only appreciated, but vital in establishing a meaningful report.

There continues to be a slight decline in annual overall flying activity to the lowest levels recorded since data gathering began. The number of single engine helicopters also continues a slow decline. Most significant is there have been no fatal accidents in the GoM for two years – which is a first milestone for the GoM.

The average number of accidents per year in the GoM since 1984 has been 8.1 per year with the last 10 years averaging 6.7 per year, with 5\* for 2011. The 2011 GoM oil industry helicopter accident rate per 100,000 flight hours was 1.58 with a total of 5 accidents compared to a 28-year annual average accident rate of 1.75. The fatal accident rate per 100,000 flight hours during 2011 was 0.00 with no fatal accidents compared to a 28-year average of 0.44.

*\*Note - There were two (2) ditchings in 2011 -> 1 due to loss of power and 1 due to fuel management that were not recorded as accidents by the NTSB. Had these been classified as accidents by the NTSB (as would have been the case in most other countries), the accident rate would have been 2.21 per 100k hours and 0.79 per 100k flights. In this report the combined data for all events recorded as accidents and ditchings is shown in red text for comparative purposes.*

In the last 5 years, there have been 22 accidents of which 4 were fatal (18%), resulting in 16 fatalities and 12 injuries. The leading causes, not all inclusive, of the accidents since 1999 have been:

- 20 engine related,
- 18 loss of control or improper procedures,
- 16 helideck obstacle strikes,
- 10 controlled flight into terrain, and
- 11 other technical failures

HSAC has published a number of Recommended Practices to address these issues and they can be reviewed at [www.HSAC.org](http://www.HSAC.org). We are optimistic that by widely and openly sharing this information with all operators and other oil industry groups that additional safety initiatives may be developed and implemented to further reduce accidents and incidents with an ultimate goal of zero events.

Respectively,

Bob Williams  
Industry Liaison Committee Member

# HELICOPTER SAFETY ADVISORY CONFERENCE (HSAC) 2011 GULF OF MEXICO OFFSHORE HELICOPTER OPERATIONS AND SAFETY REVIEW



## GULF OF MEXICO OFFSHORE HELICOPTER OPERATIONAL DATA SUMMARY

YEAR	NUMBERS by TYPE HELICOPTER					PASSENGERS CARRIED	HOURS FLOWN	NUMBER OF FLIGHTS
	SINGLE ENGINE	LIGHT TWIN	MEDIUM TWIN	HEAVY TWIN	TOTAL FLEET			
2007	387	61	123	35	606	2,953,484	410,797	1,294,141
2008	365	49	107	30	551	2,936,772	410,321	1,245,770
2009	312	41	103	39	495	2,477,834	344,817	1,195,667
2010	314	43	103	23	483	2,330,527	334,067	938,690
2011*	286	55	108	25	474	2,202,894	316,785	891,172

\* Data extracted from voluntary input of 14 helicopter operators in the Gulf of Mexico

## GULF OF MEXICO OFFSHORE HELICOPTER OPERATIONAL DATA DETAILS

YEAR	HOURS by TYPE HELICOPTER					OPERATIONS (Takeoff/Landings) by TYPE HELICOPTER				
	SINGLE ENGINE	LIGHT TWIN	MEDIUM TWIN	HEAVY TWIN	TOTAL FLEET	SINGLE ENGINE	LIGHT TWIN	MEDIUM TWIN	HEAVY TWIN	TOTAL FLEET
2007	280,683	27,617	81,895	20,602	410,797	1,019,611	90,109	153,402	31,019	1,294,141
2008	282,958	25,939	79,291	22,133	410,321	976,611	82,233	152,235	34,691	1,245,770
2009	240,507	23,878	62,195	18,237	344,817	957,756	87,771	117,438	32,702	1,195,667
2010	226,379	25,941	66,096	15,651	334,067	699,968	86,331	125,112	27,279	938,690
2011	205,354	27,412	67,976	16,043	316,785	636,058	92,762	131,368	30,984	891,172

## GULF OF MEXICO HELICOPTER FLEET OPERATIONAL DATA

Averages Per Helicopter	2009	2010	2011
Passengers per Day per 5 Day Week	9,530	8,964	8,473
Flights Per Day	3,276	2,572	2,442
Average Flight Duration in Min.	17	21	21

Averages Per Helicopter	2009	2010	2011
Annual Hours Per Aircraft	697	692	668
Flights Per Aircraft	2,415	1,941	1,880
Passengers Flown Per Year	5,006	4,825	4,647

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.

*Dedicated to Safety Through Cooperation Since 1978*

# HSAC 2011 GULF OF MEXICO OFFSHORE HELICOPTER OPERATIONS AND SAFETY REVIEW



## 2011 GULF OF MEXICO OFFSHORE HELICOPTER ACCIDENT DATA

NUMBER OF ACCIDENTS				INJURY CLASSIFICATION				AIRCRAFT DAMAGES			AVIATION ACCIDENT RATES			
Aircraft		Category		Occupant Type		Severity		Classification			Rates			
Type Aircraft	# Accidents	# Fatal	# Eng Related	Pax	Crew	Injured	Fatal	Minor	Substantial	Total Loss	# Acc 100k Hours	# Fatal Acc 100k Hours	# Fatal 1M Occupants	# Acc 100k Flt Stages
Single Eng.	4/6*	0	1/2*	0	3	3	0	1/2*	3/4*	0	1.95/2.92*	0.00	0.00	0.63/0.94*
Light Twin	1	0	0	0	0	0	0	0	1	0	3.65	0.00	0.00	0.68
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
<b>2011 Totals</b>	<b>5/7*</b>	<b>0</b>	<b>1/2*</b>	<b>0</b>	<b>3</b>	<b>3</b>	<b>0</b>	<b>1/2*</b>	<b>4/5*</b>	<b>0</b>	<b>1.58/2.21*</b>	<b>0.00</b>	<b>0.00</b>	<b>0.56/0.79*</b>
<i>2010 Totals</i>	0	0	0	0	0	0	0	0	0	0	0.00	0.00	0.00	0.00

## 2011 GULF OF MEXICO OFFSHORE HELICOPTER ACCIDENT CAUSES/INFO

	Power Loss, multi-cause	Other	Tie-down Proc.	Loss Control or Improper Proced.	Loose Cargo	Flight Into Terrain, Water (CFITW)	Fuel Mgmt	Obstacle Strike		Fuel Qual	Weather non-CFIT	Unk	Pax Control or HLO Proced.	Helideck Design or Size Issues	Fatalities Due To Engine Malf.
								Helideck	Other						
	<b>Technical</b>		<b>Pilot Procedure Related</b>												
Single Eng	1/2*	0	0	3	0	0	1*	0	0	0	0	0	0	0	0
Light Twin	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0
Med. Twin	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Hvy Twin	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
<b>2011</b>	<b>1/2*</b>	<b>0</b>	<b>0</b>	<b>3</b>	<b>0</b>	<b>0</b>	<b>1*</b>	<b>1</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>	<b>0</b>
<b>99-2010 Ttls</b>	19	11	2	15	4	10	5	15	1	4	2	7	4	9	6

## FIVE YEAR GULF OF MEXICO OFFSHORE HELICOPTER ACCIDENT DATA

Year	Number Of Accidents			Injury Classification				Aircraft Damages			Aviation Accident Rates			
	Aircraft	Category		Occupant Type		Severity		Classification			Rates			
	# Accidents	# Fatal	# Eng Related	Pax	Crew	Injured	Fatal	Minor	Substantial	Total Loss	# Acc 100k Hrs	# Fatal Acc 100k Hrs	# Fatal 1 M Occupants	# Acc 100k Flt Stages
2007	7	2	0	4	5	6	3	0	5	2	1.70	0.49	1.02	0.54
2008	2	1	0	4	1	0	5	1	0	1	0.49	0.24	1.14	0.16
2009	8	1	1	7	4	3	8	2	4	2	2.32	0.29	2.09	0.67
2010	0	0	0	0	0	0	0	0	0	0	0.00	0.00	0.00	0.00
<b>2011</b>	<b>5/7*</b>	<b>0</b>	<b>1/2*</b>	<b>0</b>	<b>3</b>	<b>3</b>	<b>0</b>	<b>1/2*</b>	<b>4/5*</b>	<b>0</b>	<b>1.58/2.21*</b>	<b>0.00</b>	<b>0.00</b>	<b>0.56/0.79*</b>
<b>5 Yr. Avg.</b>	<b>4.4</b>	<b>0.8</b>	<b>0.4</b>	<b>3.0</b>	<b>2.6</b>	<b>2.4</b>	<b>3.2</b>	<b>0.8</b>	<b>2.8</b>	<b>0.8</b>	<b>1.22</b>	<b>0.20</b>	<b>0.85</b>	<b>0.34</b>

\* Note - There were two (2) ditchings in 2011 -> 1 due to loss of power and 1 due to fuel management not recorded as accidents by NTSB. NTSB GoM accident and ditching incident data had these ditchings been classified as accidents (as is the case in most of the world) by the NTSB is shown in red text as the combined data inclusive of all accidents and ditchings. 2011 is first year this comparison is shown on the report.