



## 2014 HELICOPTER SAFETY ADVISORY CONFERENCE (HSAC) GULF OF MEXICO OFFSHORE HELICOPTER OPERATIONS AND SAFETY REVIEW

April 19, 2015

HSAC Members:

Please find attached the Helicopter Safety Advisory Conference (HSAC) "2014 Gulf of Mexico (GoM) Offshore Helicopter Operations and Safety Review". The membership support and response from 13 helicopter operators (up from 11 last year) for this review is not only appreciated, but vital in establishing a meaningful report.

The level of annual flying activity has remained relatively constant for the last several years. The number of single engine helicopters continues a slow decline, while the number of heavy twin engine helicopters continues to increase. For 2014 over 2013 there was also a 21 percent decline in the number of medium twin engine helicopters operated.

The average number of accidents per year in the GoM since 1984 has been 7.9 per year with the last 10 years averaging 4.7 per year, with 2 for 2014. The 2014 GoM oil industry helicopter accident rate per 100,000 flight hours was 0.68 with a total of 2 accidents compared to a 31-year annual average accident rate of 1.74. The fatal accident rate per 100,000 flight hours during 2014 was 0.34 compared to a 31-year average of 0.44.

*\*\*\*Note – There were two (2) ditchings in 2014 -> both due to loss of engine power 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 1.35 per 100K hours and 0.54 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.*

Since 1999, there have been 23 accidents of which 5 were fatal (22%), resulting in 13 fatalities and 15 injuries. The leading causes, not all inclusive, of the accidents since 1999 are listed below, and secondary causes of these events include 12 related to helideck size or design related issues.

- 21 engine related,
- 23 loss of control or improper procedures,
- 18 helideck obstacle strikes,
- 11 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,

Terry Duprie  
HSAC Committee Member

# HELICOPTER SAFETY ADVISORY CONFERENCE (HSAC) 2014 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			
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
2012	275	67	111	28	481	2,278,780	316,685	894,439
2013	248	54	122	34	458	2,245,928	305,755	809,346
2014*	271	52	96	46	415	2,043,649	296,001	741,201

\* Data extracted from voluntary input of 13 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
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
2012	189,758	29,522	65,743	31,662	316,685	618,437	96,759	121,265	57,978	894,439
2013	172,211	24,812	79,394	29,338	305,755	536,284	81,339	142,754	51,525	809,346
2014	159,859	22,933	76,188	37,021	296,001	477,117	81,734	121,820	60,530	741,201

## GULF OF MEXICO HELICOPTER FLEET OPERATIONAL DATA

Averages Per Helicopter	2012	2013	2014	Averages Per Helicopter	2012	2013	2014
Passengers per Day per 5 Day Week	8,762	8,638	7,860	Annual Hours Per Aircraft	637	668	713
Flights Per Day	2,451	2,217	2,031	Flights Per Aircraft	1,800	1,767	1,786
Average Flight Duration in Min.	21	23	24	Passengers Flown Per Year	4,584	4,904	4,924

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 2013 GULF OF MEXICO OFFSHORE HELICOPTER OPERATIONS AND SAFETY REVIEW



## 2014 GULF OF MEXICO OFFSHORE HELICOPTER ACCIDENT DATA

NUMBER OF ACCIDENTS				INJURY CLASSIFICATION				AIRCRAFT DAMAGES			AVIATION ACCIDENT			
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.	1/2*	1	0/2*	1	1	0	2	0	0/2*	1	0.63	0.63	1.56	0.21
Light Twin	1	0	0	1	1	0	0	0	1	0	4.36	0.00	0.00	1.22
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>2014 Totals</b>	<b>2/4</b>	<b>2</b>	<b>0/2</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>1/3</b>	<b>1</b>	<b>0.68/1.35</b>	<b>0.34</b>	<b>0.67</b>	<b>0.27/0.54</b>
2013 Totals	3	1	0	5	2	6	1	0	1	2	0.98	0.33	0.31	0.37

## 2014 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	U N K	Pax Control or HLO Proced.	Helideck Design or Size Issues	Fatalities Due To Engine Malf.
								Helideck	Other						
	Technical			Pilot Procedure Related						OTHER				MISC	
Single Eng	0	0	0	1	1	0	0	0	0	0	0	0	0	0	0
Light Twin	0	0	0	0	0	0	0	1	0	0	0	0	0	1	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>2014</b>	<b>0</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>0</b>	<b>1</b>	<b>0</b>
99-2013 Ttls	21	11	3	22	4	11	6	16	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			
	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
2010	0	0	0	0	0	0	0	0	0	0	0.00	0.00	0.00	0.00
2011	5/7*	0	1/2*	0	3	3	0	1/2*	4/5*	0	1.58/2.21*	0.00	0.00	0.56/0.71*
2012	5	2	1	2	3	3	2	0	2	3	1.58	0.63	0.60	0.56
2013	3	1	0	5	2	6	1	0	1	2	0.98	0.33	0.31	0.37
<b>2014</b>	<b>2/2*</b>	<b>1</b>	<b>0</b>	<b>2</b>	<b>2</b>	<b>0</b>	<b>2</b>	<b>0</b>	<b>1</b>	<b>1</b>	<b>0.68/1.35*</b>	<b>0.34</b>	<b>0.67</b>	<b>0.27/0.54*</b>
<b>5 Yr. Avg.</b>	<b>3/3.4*</b>	<b>0.5</b>	<b>0.4/0.6*</b>	<b>1.8</b>	<b>2.0</b>	<b>2.4</b>	<b>1.0</b>	<b>0.2</b>	<b>1.6</b>	<b>1.2</b>	<b>0.96/1.22*</b>	<b>0.26</b>	<b>0.32</b>	<b>0.35/0.44*</b>

\* Note - There were no ditchings in 2012 or 2013 that were not reported as accidents. Previous ditchings recorded as incidents if they had been classified as accidents are included in the red text as combined data inclusive of all accidents and ditchings. 2011 was the first year this comparison is shown on the report.