Attachment 4



2015 HELICOPTER SAFETY ADVISORY CONFERENCE (HSAC) GULF OF MEXICO OFFSHORE HELICOPTER OPERATIONS AND SAFETY REVIEW

May 8, 2016

HSAC Members:

Please find attached the Helicopter Safety Advisory Conference (HSAC) "2015 Gulf of Mexico (GoM) Offshore Helicopter Operations and Safety Review". The membership support and response from 10 helicopter operators (down from 13 last year and 11 from 2013) for this review is not only appreciated, but vital in establishing a meaningful report.

The level of annual flying activity has declined as compared to the past several years. The number of single engine helicopters continues to experience a slow decline, while the number of heavy twin engine helicopters continues to increase slightly. For 2015 over 2014 there also continues to be a decline in the number of medium twin engine helicopters operated.

The average number of accidents per year in the GoM since 1984 has been 7.8 per year with the last 10 years averaging 5.0 per year, with 3 for 2015. The 2015 GoM oil industry helicopter accident rate per 100,000 flight hours was 1.31 with a total of 3 accidents compared to a 32-year annual average accident rate of 1.72. The fatal accident rate per 100,000 flight hours during 2015 was 0.00 compared to a 32-year average of 0.42.

Since 1999, there have been 26 accidents of which 5 were fatal (19%), resulting in 13 fatalities and 16 injuries. The leading causes, not all inclusive, of the accidents since 1999 are listed below, and secondary causes of these events include 13 related to helideck size or design related issues.

- 21 engine related,
- 25 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. 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.

Respectfully,

Terry Duprie

HSAC Committee Member

HELICOPTER SAFETY ADVISORY CONFERENCE (HSAC) 2015 GULF OF MEXICO OFFSHORE HELICOPTER OPERATIONS AND SAFETY REVIEW



GULF OF MEXICO OFFSHORE HELICOPTER OPERATIONAL DATA SUMMARY

		NUMBER	S by TYPE HEL	LICOPTER	PASSENGERS	HOURS	NUMBER OF FLIGHTS	
YEAR	SINGLE ENGINE	LIGHT TWIN	MEDIUM TWIN	HEAVY TWIN	TOTAL FLEET	CARRIED FLOWN		
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
2015*	179	37	80	50	346	1,769,630	228,905	589,078

^{*} Data extracted from voluntary input of 10 helicopter operators in the Gulf of Mexico

GULF OF MEXICO OFFSHORE HELICOPTER OPERATIONAL DATA DETAILS

		HOURS b	y TYPE HELIC	COPTER	OPERATIONS (Takeoff/Landings) by TYPE HELICOPTER						
YEAR	SINGLE ENGINE	LIGHT TWIN	MEDIUM TWIN	HEAVY TWIN	TOTAL FLEET	SINGLE ENGINE	LIGHT TWIN	MEDIUM TWIN	HEAVY TWIN)	TOTAL FLEET	
	ENGINE	IVVIIN	IVVIIN	IVVIIN	FLEET	ENGINE	IVVIIN	IVVIIN	I WIIN)	FLEET	
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	
2015	127,325	17,003	48,471	35,746	228,905	392,814	54,895	88,257	62,110	549,078	

GULF OF MEXICO HELICOPTER FLEET OPERATIONAL DATA

Averages Per Helicopter	2013	2014	2015
Passengers per Day per 5 Day Week	8,638	7,860	6806
Flights Per Day	2,217	2,031	1614
Average Flight Duration in Min.	23	24	24

Averages Per Helicopter	2013	2014	2015
Annual Hours Per Aircraft	668	713	662
Flights Per Aircraft	1,767	1,786	1703
Passengers Flown Per Year	4,904	4,924	5129

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 2015 GULF OF MEXICO OFFSHORE HELICOPTER OPERATIONS AND SAFETY REVIEW



2015 GULF OF MEXICO OFFSHORE HELCOPTER ACCIDENT DATA

NUME	NUMBER OF ACCIDENTS				URY CLAS	SSIFICAT	ON	AIR	CRAFT DAMA	GES	AVIATION ACCIDENT					
Ai	ircraft Categ	ory		Occupa	ant Type	Seve	rity		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.	3	0	0	5	3	1	0	0	2	1	1.31	0	0	.51		
Light Twin	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	0	0		
Heavy Twin	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
2015 Totals	3	0	0	5	3	1	0	0	2	1	1.31	0	0	.51		

2015 GULF OF MEXICO OFFSHORE HELICOPTER ACCIDENT CAUSES/INFO

	Power Loss, multi- cause	Other	Tie- down Proc.	Loss Control or Improper	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.
				Proced.				Helideck	Other						
_	Tech	nical			Pilot	Procedure Re	ated	OTHER				MISC			
Single Eng	0	0	1	1	0	0	0	0	0	0	1	0	0	0	0
Light Twin	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	0	0	0
Hvy Twin	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
2015	0	0	1	1	0	0	0	0	0	0	1	0	0	0	0
99-2015 Ttls	21	11	4	25	6	11	6	17	1	4	3	7	4	11	6

FIVE YEAR GULF OF MEXICO OFFSHORE HELICOPTER ACCIDENT DATA

N	lumber Of Ac	cidents			Injury Clas	ssification	1	Ai	rcraft Damage	S	Aviation Accident				
-	Aircraft Cate			Occup	ant Type	Sev	erity		Classification		Rates				
Year	# Accidents	# Fatal	# Eng Related	Pax	Crew	Injured	Fatal	Minor	Substantial	Total Loss	# Acc 100k Hrs	# Acc 100k Flt Stages			
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	
2014	2/2*	1	0	2	2	0	2	0	1	1	0.68/1.35*	0.34	0.67	0.27/0.54*	
2015	3	0	0	5	3	1	0	0	2	1	1.31	0.00	0.00	0.51	
5 Yr. Avg.	3.6/3.4*	8.0	0.4/0.4*	2.8	2.6	3.2	1.0	0.2	2.0	1.4	1.23/1.22* 0.26 0.32 0.45/0				

^{*} Note - There were no ditchings in 2012, 2013, or 2015 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.