



2019 HELICOPTER SAFETY ADVISORY CONFERENCE (HSAC) GULF OF MEXICO OFFSHORE HELICOPTER OPERATIONS AND SAFETY REVIEW

May 28, 2020

HSAC Members:

Please find attached the Helicopter Safety Advisory Conference (HSAC) "2019 Gulf of Mexico (GoM) Offshore Helicopter Operations and Safety Review". The membership support and response from eight (8) helicopter operators for this review is not only appreciated, but vital in establishing a meaningful report. Thank you for your timely responses and continued support.

The level of annual flying activity for 2019 has continued to decrease as compared to the past several years with the total number of flights decreasing from 435,528 in 2018 to 411,308 in 2019. The overall number of the total fleet for 2019 decreased by approximately 18 percent from 2018 with decreases in each type helicopter. Aircraft utilization appears to have increased evidenced by more hours, more flights, and more passengers carried in 2019 than in 2017 or 2018.

Very unfortunately, there were two (2) accidents in 2019, which were both fatal accidents, resulting in four (4) fatalities and total loss of two (2) BH407. The resulting 2019 accident rate therefore increased to 1.22 from the previous 0.55 and the fatal accident rate increased to 1.22 from the previous 0.00. Due to the accidents the five-year average for GoM offshore helicopter accident rates have now increased. The National Transportation Safety Board has published Preliminary Reports for both (available on the [ntsb.gov](https://www.ntsb.gov) website), however the Final Investigation Reports have not yet been published. These accidents reflect the unforgiving nature of offshore helicopter operations and provide an opportunity to pause, reflect, assess, train, and continue the charge to improve our Gulf of Mexico operations.

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,
- 13 controlled flight into terrain, and
- 12 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

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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			
2015	179	37	80	50	346	1,769,630	223,545	589,076
2016	188	39	69	48	344	1,498,418	196,484	526,981
2017	182	29	80	43	334	1,322,160	188,799	491,688
2018	176	25	97	38	336	1,234,195	182,338	435,528
2019	142	20	83	31	276	1,138,433	163,286	411,308

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
2015	127,325	17,003	43,471	35,746	228,905	392,814	54,895	88,257	62,110	549,078
2016	118,695	11,308	39,846	26,635	196,484	377,781	34,356	69,785	45,059	526,981
2017	116,408	10,880	38,027	23,484	188,799	373,773	22,474	57,410	38,031	491,697
2018	109,647	7,186	41,096	24,409	182,337	315,592	18,045	64,644	37,247	435,528
2019	92,093	5,852	42,441	22,900	163,286	297,387	13,255	66,697	33,969	411,308

GULF OF MEXICO HELICOPTER FLEET OPERATIONAL DATA

Averages Per Helicopter	2017	2018	2019	Averages Per Helicopter	2017	2018	2019
Passengers per Day per 5 Day Week	5,124	4,747	4,379	Annual Hours Per Aircraft	565	543	592
Flights Per Day	1,347	1,193	1,127	Flights Per Aircraft	1,472	1,296	1,490
Average Flight Duration in Min.	23	25	24	Passengers Flown Per Year	3,989	3,673	4,125

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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HSAC 2019 GULF OF MEXICO OFFSHORE HELICOPTER OPERATIONS AND SAFETY REVIEW



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.	2	2	0	2	2	0	4	0	0	2	0	0	0	0
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
2019 Totals	2	2	0	2	2	0	4	0	0	2	1.22	1.22	2.42	0.49

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	0	0	0	0	0	0	0	0	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
*2019															
*99-2018 TtIs	21	13	4	25	6	13	6	17	1	4	3	7	4	11	6

*Awaiting accident investigation results to update

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
2015	3	0	0	5	3	1	0	0	2	1	1.31	0.00	0.00	0.51
2016	0	0	0	0	0	0	0	0	0	0	0.00	0.00	0.00	0.00
2017	3	2	0	7	3	2	2	1	0	2	1.59	1.06	1.05	0.61
2018	1	0	0	0	0	0	0	0	1	0	0.55	0.00	0.00	0.23
2019	2	2		2	2	0	4	0	0	2	1.22	1.22	2.42	0.49
5 Yr. Avg.	1.8	0.8	0.0	2.8	1.6	0.6	1.2	0.2	0.6	1.0	0.93	0.46	0.69	0.37