



Heliport and Airways Committee



Lafayette, LA
17-18 May 2017



HSAC
Helicopter Safety Advisory Conference



Helideck and Airways WG

Agenda

- **Helideck RP Workgroup Update**
- **API RP 2L Update**
- **IOGP Adoption of RP 2016-2 into their Aircraft Management Guide (AMG)**
- **Legacy Helidecks RP 2016-2 Update**
- **New Build Helidecks RP 2016-1 Revision 2 Update**



Heliport and Airways WG Update

- **WG still needs a chairman – who is willing to lead the group?**
- **Need someone to lead RP 2016-3
“Management of Offshore Helidecks”**





API RP 2L Update

- **No noted change in API status on the API Draft RP.**
- **Last API Update:**

“I have elevated this matter to the SC 2 leadership and with the Offshore Operators Committee to see if they can determine a path forward. So far, a resolution has not been agreed upon and I'm not sure when that will happen. Ultimately we still want to publish a new edition but that won't happen soon.”
- **HSAC Actions:**
 - Letter sent to agencies recommending adoption of HSAC Helideck RPs. FAA agreed, USCG and BSEE no comment.
 - HSAC Members with API membership should continue to seek that API drop API RP 2L and instead support the HSAC RPs.



IOGP AMG

Adoption of HSAC RP 2016-2 Legacy Helidecks

Proposed changes to current AMG 590-F “Airfields, heliports, helidecks and facilities”

8 Helicopters and helidecks

8.1 General

ICAO Annex 14, Volume II, *Heliports* [2] should be used in all design considerations, new construction or major rework of existing helidecks if no local regulatory guidance exists. When re-published, the ICAO Heliport Manual will provide additional practical guidance not currently available in Annex 14, Volume II.

UK Civil Aviation publication (CAP) 437 [3] provides supplementary guidance and can be used in addition to ICAO Annex 14 if desired or required locally.

ICAO Annex 14 and CAP 437 compliant markings do not always work for existing helidecks that may have been built using API RP 2L or other outdated guidance. Helicopter Safety Advisory Conference (HSAC) Recommended Practice (RP) 2016-2 provides guidance for “Assessment, Upgrades, Modification, Replacement and Marking of Existing and Temporary Helidecks” [9] that do not meet the requirements of ICAO Annex 14, Volume II in regard to size of the helideck or obstacle clearances, etc. It is preferred that these helidecks be upgraded to meet the requirements of ICAO Annex 14, but this may not always be practicable due to engineering, economic, or other justifications, and a risk assessment (Annex A of HSAC RP 2016-2) should be performed by the facility owner/operator to document reasons for non-compliance. For major rework of these helidecks, ICAO Annex 14, Volume II should be used.



IOGP AMG

Adoption of HSAC RP 2016-2 Legacy Helidecks

8.2 Design references

All new helidecks should be designed to accommodate the largest helicopter anticipated for use during the life of the structure using [2]. For practical implementation guidelines and practices, use the ICAO Heliport Manual when available and [3].

Criteria for mobile offshore drilling unit (MODU) helidecks are contained in International Maritime Organization Code for the Construction and Equipment of Mobile Offshore Drilling Units [7].

Shipboard helidecks such as tankers and seismic vessels should conform to International Chamber of Shipping Guide to Helicopter/Ship Operations [8].

American Petroleum Institute (API) RP 2L for Helideck Design is not recognized as acceptable for either design of new build or marking/upgrade of existing helidecks.



HSAC RP 2016-2

Legacy Helidecks

- **Title: Assessment, Upgrades, Modification, Replacement and Marking of Existing and Temporary Helidecks.**
- **HSAC agreed with proposed API wording in the RP Scope and agreed to support hosting a revised helicopter data sheet providing necessary helideck design data such as helicopter dimensions, weights, etc. on the HSAC Web site. Proposed format has been drafted and will need to be have input from the manufacturers.**
- **Executive Committee has been given the final draft RP for endorsement and posting to the HSAC web site.**



Helicopter Design Data

Web Site Table Format

New Build Helidecks HSAC RP 2016-1 US Units

Abbreviation Value	Manufacturer	Model	Manufacturer's Data							Design Values							Markings			
			Maximum Gross Weight	Overall Length	Rotor Diameter	Total Front Landing Gear Contact Area	Total Front Landing Gear Contact Pressure	Total Aft Landing Gear Contact Area	Total Aft Landing Gear Contact Pressure	0.05D Limited Obstacle 2d Sector Height	0.12D Limited Obstacle 1st Sector Width	0.21D Limited Obstacle 2d Sector Width	0.33D	0.415D Parking Area 1.0D FATO/0.83D TLOF / 1.0D Parking Area	0.83D	Max Obstacle Height 2d Sector Height (Includes 1:2 Slope)	D Value Marking (Nearest Foot)	D Value Marking (Nearest Foot)	Maximum Allowable Mass Marking (Nearest 100#)	Touchdown Position Marking Inner Width (0.5D)
			MGW	1.0D	RD					0.05D	0.12D	0.21D	0.33D	0.415D	0.83D	Obstacle Ht.	1. D TLOF	0.83D TLOF	MTOM	TDPM
			Pounds	Feet	Feet	Square In.	Psi	Square In.	Psi	Feet	Feet	Feet	Feet	Feet	Feet	Feet	Feet	1k Pounds	Feet	
	Agusta	A 109	5,997	43.0	36.1					2.2	5.2	9.0	14.2	17.8	35.7	20.2	43	36	6.0	21.5
	Agusta	A 119	6,600	43.0	36.1					2.2	5.2	9.0	14.2	17.8	35.7	20.2	43	36	6.6	21.5
	Aerospatiale	AS 350		42.6	35.1					2.1	5.1	8.9	14.1	17.7	35.4	20.0	42	35		21.3
	Aerospatiale	AS 355		42.6	35.1					2.1	5.1	8.9	14.1	17.7	35.4	20.0	43	35		21.3
	Bell	B 206B	3,350	39.2	33.3					2.0	4.7	8.2	12.9	16.3	32.5	18.4	39	33	3.5	19.6
	Bell	B 206L	4,450	42.8	37.0					2.1	5.1	9.0	14.1	17.8	35.5	20.1	43	36	4.5	21.4
	Bell	B 407	5,250	41.8	35.0					2.1	5.0	8.8	13.8	17.3	34.7	19.6	40	35	5.3	20.9
	Bolkow	BO 105D		39.4	32.3					2.0	4.7	8.3	13.0	16.4	32.7	18.5	39	33		19.7
	Eurocopter	EC 135		39.9	33.5					2.0	4.8	8.4	13.2	16.6	33.1	18.8	40	34		20.0
	Eurocopter	EC 155 B1		46.9	41.3					2.3	5.6	9.8	15.5	19.5	38.9	22.0	47	39		23.5
	Eurocopter	EC 120		37.8	32.9					1.9	4.5	7.9	12.5	15.7	31.4	17.8	38	32		18.9



Microsoft Excel
Worksheet



HSAC RP 2016-1 Revision 2

New Build Helideck Design Guidelines

- **2016-1 Revision 2 in progress:**
 - **Format aligned with RP 2016-2 and content where necessary being aligned with 2016-2**
 - **Ballot comments of value added, need to review those that were not added still open for adoption.**
 - **Format of figures are being standardized (assistance needed with PPT for final figures)**
 - **Finalize before next meeting Oct 2017**



Helideck Workgroup (plan forward)

- **HSAC RP 2016-2**: Assessment, Upgrades, Modification, Replacement and Marking of Existing and Temporary Helidecks (Legacy Helidecks) - publish, and withdraw HSAC RPS 2008-01 and 2013-01.
- **HSAC RP 2016-1 rev 1**: Helideck Design Guidelines (New Builds) - complete revision 2 and release at next HSAC meeting.
- **HSAC RP 2016-3**: Inspection, Maintenance and Management of Offshore Helidecks - Align the RP with current industry best practices. Patrick Bosman (Shell) was Chair, need new volunteer. Pending after RP 2016-1 and RP 2016-1 Rev 2 are issued.
- **Chair Heliports Committee**: Need new Chair – volunteers?



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Questions?

