



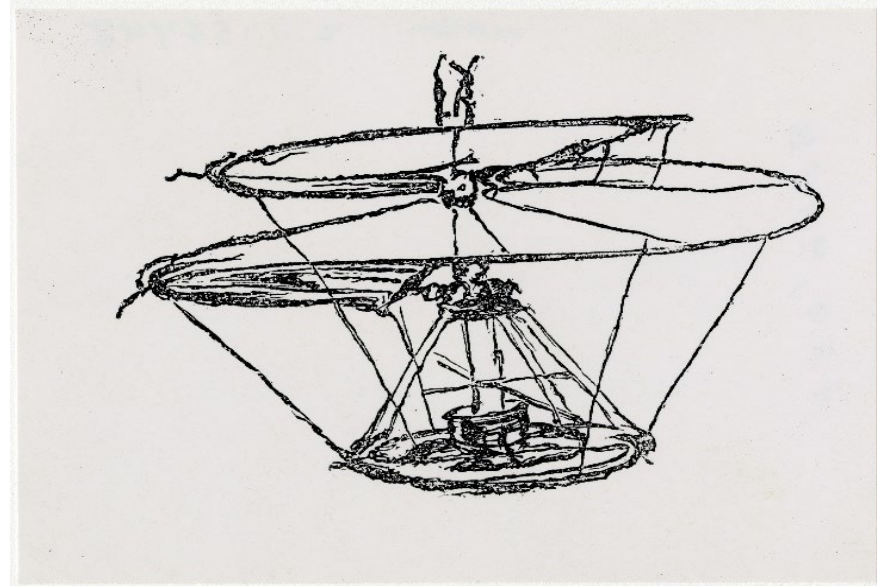
Federal Aviation
Administration

FAA Helicopter Modernization Team (HMT)

Presented to: **USHST IWG**

By: Nolan Crawford

Date: Feb 07, 2023



Helicopter Modernization Team Mission Statement

To provide management with the information and tools necessary to bring all aspects of helicopters, new entrant aircraft, and infrastructure into the future. The team will work with all FAA Lines of Businesses and industry in developing and updating ACs, Orders and FARs relevant to helicopter and new entrant operations.



HMT Team Member / Divisions

- **AFS-200 Air Transportation Division**
- **AFS-400 Flight Technologies and Procedures Division**
- **AFS-800 General Aviation & Commercial Division**
- **Aviation Research Division, Atlantic City, NJ**
- **Aircraft Certification (future)**

Lines of Business communicated with regularly:

- **Office of Airports**
- **Air Traffic Organization**
- **Aircraft Certification**

Our Goal: Open the lines of COMMUNICATIONS:



Projects that HMT Members are involved

- **Special Instrument Flight Procedures**
- **FAA Orders/Criteria**
- **Low Level IFR Route Structure**
- **Heliport Evaluation**
- **Heliport Surveys Standards**
- **Vertiports Engineering Brief (EB) / Vertiport Tiger Team**
- **Airport Data and Information Portal (ADIP)**
- **Notice for Construction, Alteration and Deactivation of Airports (7480-1) Process**
- **5G Guidance for Helicopter**
- **Rural Weather- Visual Weather Observation System (VWOS)**
- **Procedure Adaptation Requirements (ATC Automation)**

Helicopter Instrument Flight Procedures

VFR

- Lack of established procedure in less than ideal conditions
- Increased IIMC possibility

Point in Space (PinS)

- Proceed VFR Approaches and Departures
- Proceed Visually Approaches and Departures

Future IFR Procedures

- Non-Precision Approach to IFR Heliport
- Precision Approach to an IFR Heliport
- AC 150/5390-2 IFR Table
- Heliport Surveys Standard

Low Altitude IFR Infrastructure

- Developing a standard for a repeatable low altitude route infrastructure
- Analogous to a metroplex for helicopters
- Integrated into ERAMS/ERIDS
- TK / ZK routes (RNAV 2 or RNP 0.3)
- Operationally advantageous in keeping Part 27/29 aircraft below the icing levels
- Repeatable for Air Traffic Control
- Repeatable for Operators
- ADS-B (low-level surveillance coverage analysis)
- Low altitude communication gap analysis

Notice for Construction, Alteration and Deactivation of Airports (7480-1) Process

Current

- LOC-IDs potential delays long to process
- Information not specific to heliports
- Some information incorrect / Airport Master Record/5010

Future

- Tied to Airport Data and Information Portal (ADIP) to improve processing timeliness
- Heliport Data Centric (reduces errors)
- Reduce touch points
- Transparency between Proponent & FAA

Orders and Criteria

Establish criteria and infrastructure to enable IFR operations to/from IFR and VFR designated heliports.

- Update Directives
- Improve Infrastructure
- Define Airspace, Data, IFP Automation requirements

Efforts designed to:

- Support HR Bill 302 Sec 314 and other Agency needs
- Allow for LEVEL OF SERVICE directed process

Orders and Criteria to evolve

FAA Order 8260.42: United States Standard for Helicopter Area Navigation (RNAV)

- Incorporated into FAA Order's 8260.3, 8260.19, 8260.46, and 8260.58
- **Cancellation upon incorporation into other FAA Orders**

FAA Order 8260.3: United States Standard for Terminal Instrument Procedures (TERPS)

- Incorporated applicable approach and departure design criteria for general and conventional helicopter requirements

FAA Order 8260.19: Flight Procedures and Airspace

- Authorized RNP 0.3 (Terminal Routes and ATS Routes "TK")

FAA Order 8260.46: Departure Procedure (DP) Program

- Updated to add PBN RNP 0.3 Departure requirements

FAA Order 8260.58: United States Standard for Performance Based Navigation (PBN) Instrument Procedure Design

- Incorporated Helicopter Point in Space approach and departure criteria
- Updated to FAA Performance Based Navigation criteria

Heliport / Vertiport Evaluation

Heliport Course

- Heliport course is being updated for -2D and EB

Proponent

- FAA Form 7480-1 Notice for Construction, Alteration, and Deactivation of Airports

Flight Technologies and Procedures Division (FT&PD)

- Heliport Evaluation Guidance / Checklist - FAA Order 8900.1 (Volume 8, Chapter 3, Section 3)

Flight Standards District Office (FSDO)

- Heliport Evaluations – utilizing the FAA Order 8900.1 guidance

Procedure Evaluation Pilot (PEP)

- Heliport Evaluation – utilizing the 8900.1 and approved checklist



Facility Data

CMMC AIR AMBULANCE LANDING SITE (ME95)

Site No. 08075.01*

View active [NOTAMS](#) | View in [Map](#)

- General Information
- Runways / Helipads
- Services & Facilities
- Based Aircraft & Operations
- Remarks

Helipad H1

Helipad Coordinates	H1
Latitude	44°6'11.640"N
Longitude	70°12'54.260"W
Elevation	241

General Helipad Information

30. Helipad ID	H1	Ingress / Egress Orientation	
31. TLOF Length	40	Safety Area Length	
32. TLOF Width	40	Safety Area Width	
TLOF Elevation		Elevated Height (AGL)	
FATO Length		33. Surface Type	CONC-Portland Cement Concrete
FATO Width		Surface Condition	
FATO Elevation		34. Surface Treatment	

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Update Data





ADIP

Lighting/Approach Aids

H1

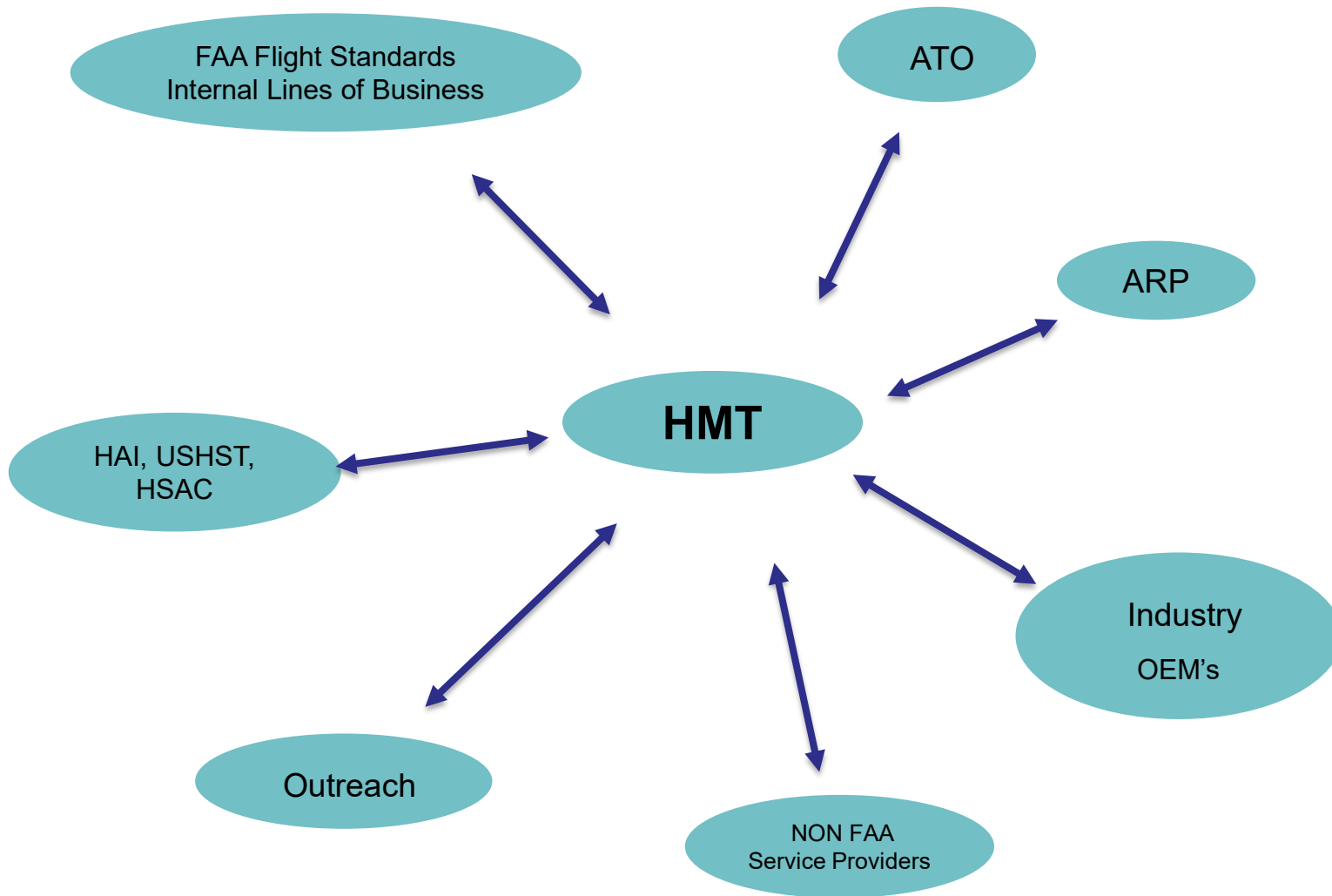
- 23. Right Traffic ⓘ 
- 42. Surface Marking Type ⓘ  
- Surface Marking Condition  
- 44. Heliport Crossing Height (HCH) ⓘ  
- 48. Heliport Lighting ⓘ

- | | |
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| <input type="checkbox"/> Taxiway Centerline Lights | <input type="checkbox"/> PCL |
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Combined FS and LOBs Deliverables

- Criteria update
- Improved Helicopter Approach/Departure Capabilities
- Improved 7480-1 Process
- Improved Heliport and Vertiport Inspection Process (8900.1)
- Improved Data Process (ADIP)
- Heliport Survey Standards
- Standards for instrument procedure added to Heliport Design AC
- Established Heliport Infrastructure
- Defined Automation Requirements
- Defining Helicopter Low Altitude Infrastructure Requirements
- Virtual reality simulation (ATD/FTD)



The FAA ask of Industry:

What else?

