



# **Heliport 5010 Database & Form Discussion**

**Presented to:**

**USHST Infrastructure Summit**

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**Federal Aviation  
Administration**

A close-up, low-angle view of the cockpit of a helicopter, showing the rotor hub and blades at the top, and the cockpit windows and instruments below. The helicopter is white with blue and red accents. The background is a clear blue sky.

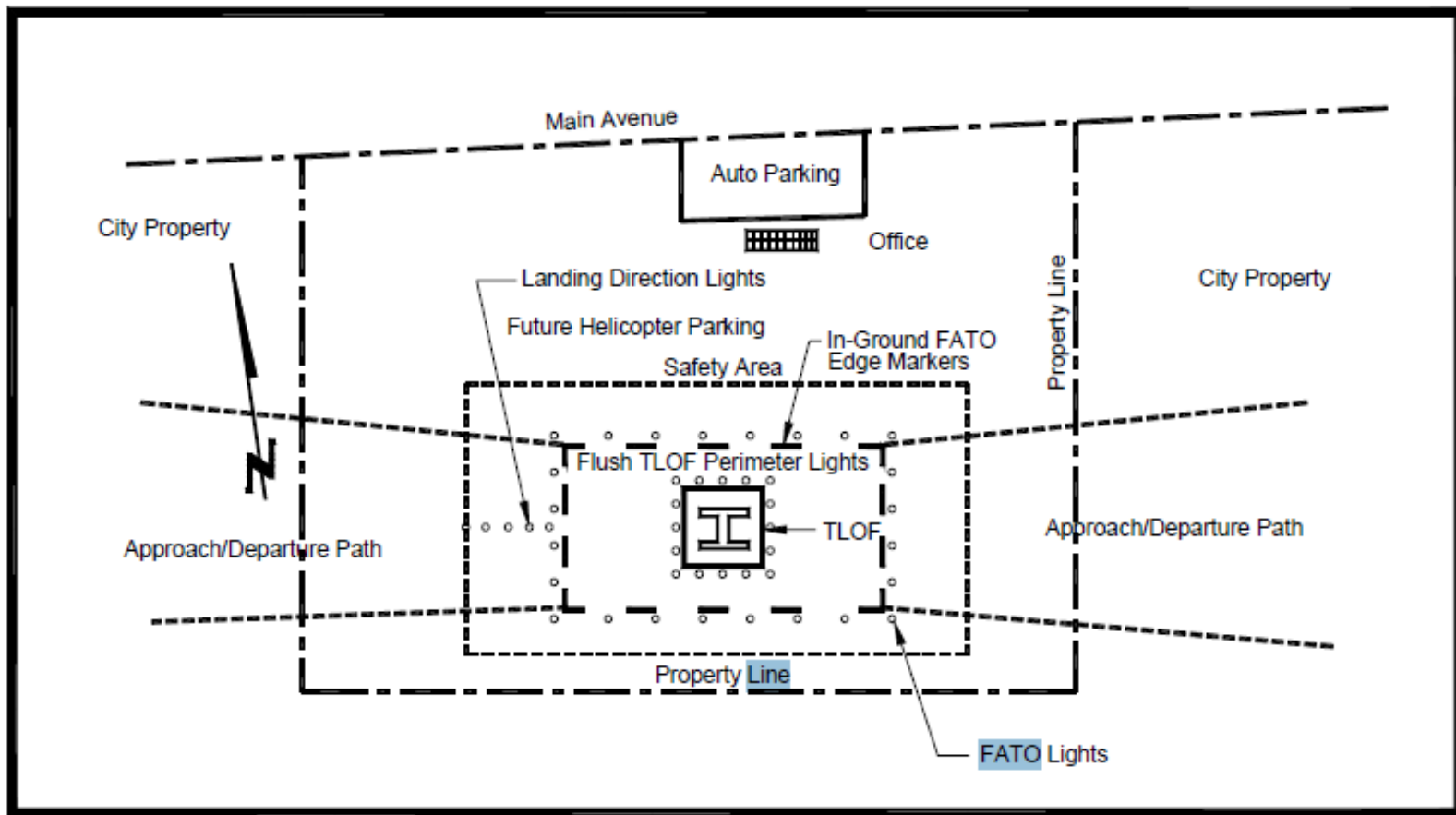
# FAA Airport Master Record 5010

- Designed for Airports not Heliports
- Limited Heliport information collected
- Not intuitive to find information
- Prone to inaccuracies
- Does not include all U.S. heliports

U.S. DEPARTMENT OF TRANSPORTATION FEDERAL AVIATION ADMINISTRATION		AIRPORT MASTER RECORD		OMB CONTROL NUMBER: 2120-0015 EXPIRATION DATE: 3/31/2016	
1 ASSOC CITY: 2 AIRPORT NAME: 3 CBD TO AIRPORT (NM):		4 STATE: 5 COUNTY: 6 REGION/ADO:		LOC ID: 7 SECT AERO CHT: FAA SITE NR:	
GENERAL		SERVICES		BASED AIRCRAFT	
10 OWNERSHIP: 11 OWNER: 12 ADDRESS: 13 PHONE NR: 14 MANAGER: 15 ADDRESS: 16 PHONE NR: 17 ATTENDANCE SCHEDULE: MONTHS      DAYS      HOURS		70 FUEL: 71 AIRFRAME RPRG: 72 RWY PLANT RPRG: 73 BOTTLE OXYGEN: 74 BULK OXYGEN: 75 TONT STORAGE: 76 OTHER SERVICES:		90 SINGLE ENG: 91 MULTI ENG: 92 JET: TOTAL 0 93 HELICOPTERS: 94 GLIDERS: 95 MILITARY: 96 ULTRA-LIGHTS:	
18 AIRPORT USE: 19 ARPT LAT: 20 ARPT LONG: 21 ARPT ELEV: 22 ACRAGE: 23 RIGHT TRAFFIC: 24 NON-COMM LANDING: 25 NPAS/FEDERAL AGREEMENTS: 26 PART 139 INDEX:		80 ARPT BCN: 81 ARPT LGT SKED: 82 UNICOM: 83 WIND INDICATOR: 84 SEGMENTED CIRCLE: 85 CONTROL TWR: 86 FSS: 87 FSS ON ARPT: 88 FSS PHONE NR: 89 TOLL FREE NR:		100 AIR CARRIER: 101 INTENTIONALLY LEFT BLANK: 102 AIR TAXI: 103 G A LOCAL: 104 G A ITRNRT: 105 MILITARY: TOTAL 0 OPERATIONS FOR 12 MONTHS ENDING	
RUNWAY DATA					
30 RUNWAY IDENT: 31 LENGTH: 32 WIDTH: 33 SURF TYPE-COND: 34 SURF TREATMENT: 35 GROSS WT: 0 36 (IN THSDS) 0 37            20 38            2D/2D2 39 PCN: LIGHTING/APCH AIDS					
40 EDGE INTENSITY: 42 RWY MARK TYPE-COND: 43 VGS: 44 THR CROSSING HGT: 45 VISUAL GUIDE ANGLE: 46 CNTRLN-TDZ: 47 RVR-RV: 48 REIL: 49 APCH LIGHTS:					
OBSTRUCTION DATA					
50 PART 77 CATEGORY: 51 DISPLACED THLD 52 CTLG OBSTN: 53 OBSTN MARKED/LGTD: 54 HGT ABOVE RWY END: 55 DIST FROM RWY END: 56 CNTRLN OFFSET: 57 OBSTN CLNC SLOPE: 58 CLOSE-IN OBSTN:					
DECLARED DISTANCES					
60 TAKE OFF RUN AVBL (TORA) 61 TAKE OFF DIST AVBL (TODA) 62 ACLT STOP DIST AVBL (ASDA) 63 LNDG DIST AVBL (LDA)					
10- ARPT MGR PLEASE ADVISE F88 IN ITEM 86 WHEN CHANGES OCCUR TO ITEMS PRECEDED BY-					
110 REMARKS:					
111 INSPECTOR ( )		112 LAST INSP:		113 LAST INFO	



# Heliport/Helipad Diagram



Note: Layout diagrams should be drawn to scale with key dimensions shown such as TLOF size, FATO size, Safety Area size, distances from safety area perimeter to property edges, etc.

# Current 5010 Heliport Information Placement

- **TLOF Length: Currently stored in A31 (Runway Length)**
- **TLOF Width: Currently stored in A32 (Runway Width)**
- **Maximum Gross Weight: Currently stored in A35 (Runway GW)**
- **Surface Type: Currently stored in A33 (Runway Surface-Cond)**
- **FATO Length: Currently not stored.**
- **FATO Width: Currently not stored.**
- **Helipad Location(Ground/Elevated): Currently not stored.**
- **Heliport Variation: Currently not stored.**
- **Preferred Approach/Departure Path(s): Currently not stored.**
- **Maximum Rotor Diameter: Currently not stored.**
- **Hazards: Currently not stored.**
- **Address: Currently stored in A12 (Owner's Address)**



# Additional 5010 Data Elements

- **Heliport Elevation**
- **Safety Area Dimensions (Length, Width, Height)**
- **FATO lights.**
- **TLOF lights.**
- **Heliport Instrument Lighting System (HILS) {Nonprecision}**
- **Heliport Approach Lighting System (HALS) or lead-in lights {Precision}**
- **Visual GlideSlope Indicator (VGSI)**
- **Windsock or windsock light(s)**
- **Heliport beacon**
- **Radio Communication Equipment/Frequencies**
- **Weather Reporting Stations/Sensors**
- **Navigation Equipment**
- **Other Elements???**



# 5010 Form Proposed Changes

Heliport Data			
Touchdown & Liftoff Area (TLOF)	Length:		Width:
Maximum Gross Weight (MGW)			
Surface Type			
Final Approach & Takeoff Area (FATO)	Length:		Width:
Helipad Location	Ground:		Elevated:
Variation			
Preferred Approach/Departure	Approach:		Depart:
	Approach:		Depart:
Maximum Rotor Diameter			
Hazards	1)		
	2)		
	3)		
	4)		
	5)		
	6)		
Address	Address1:		
	City:		State:



# Heliport Instrument Lighting System (HILS).

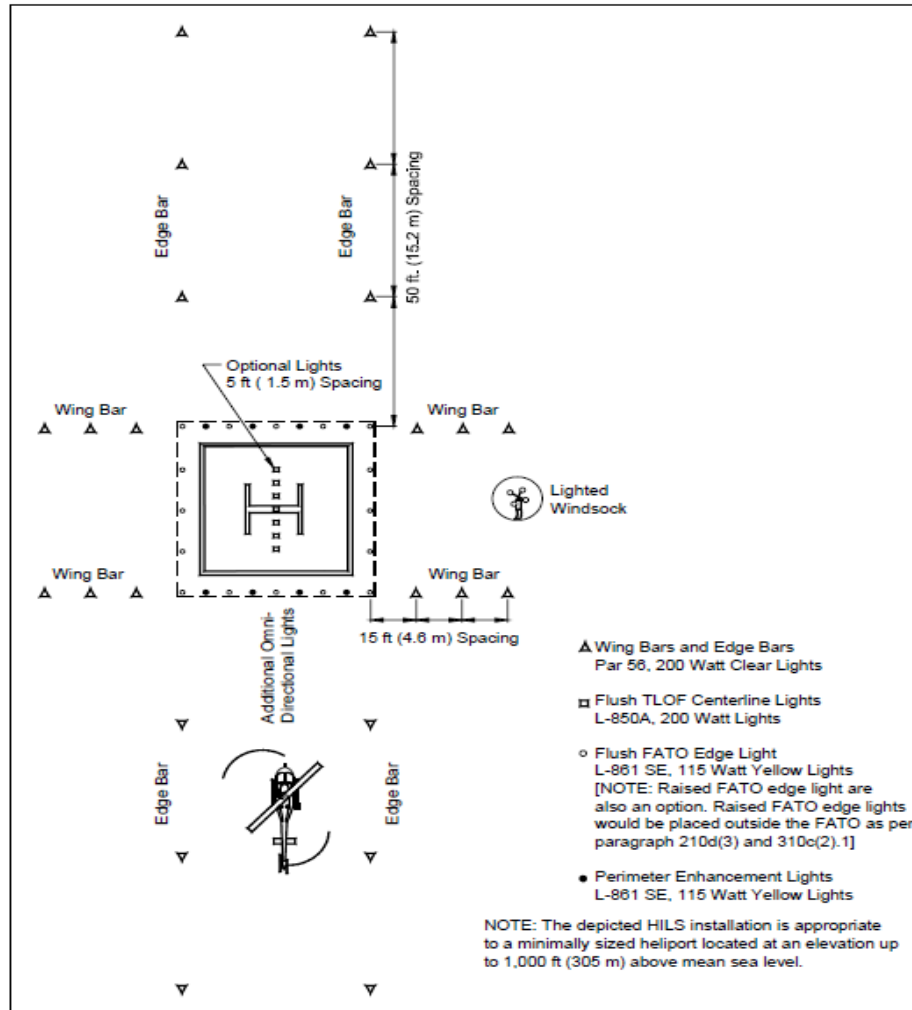
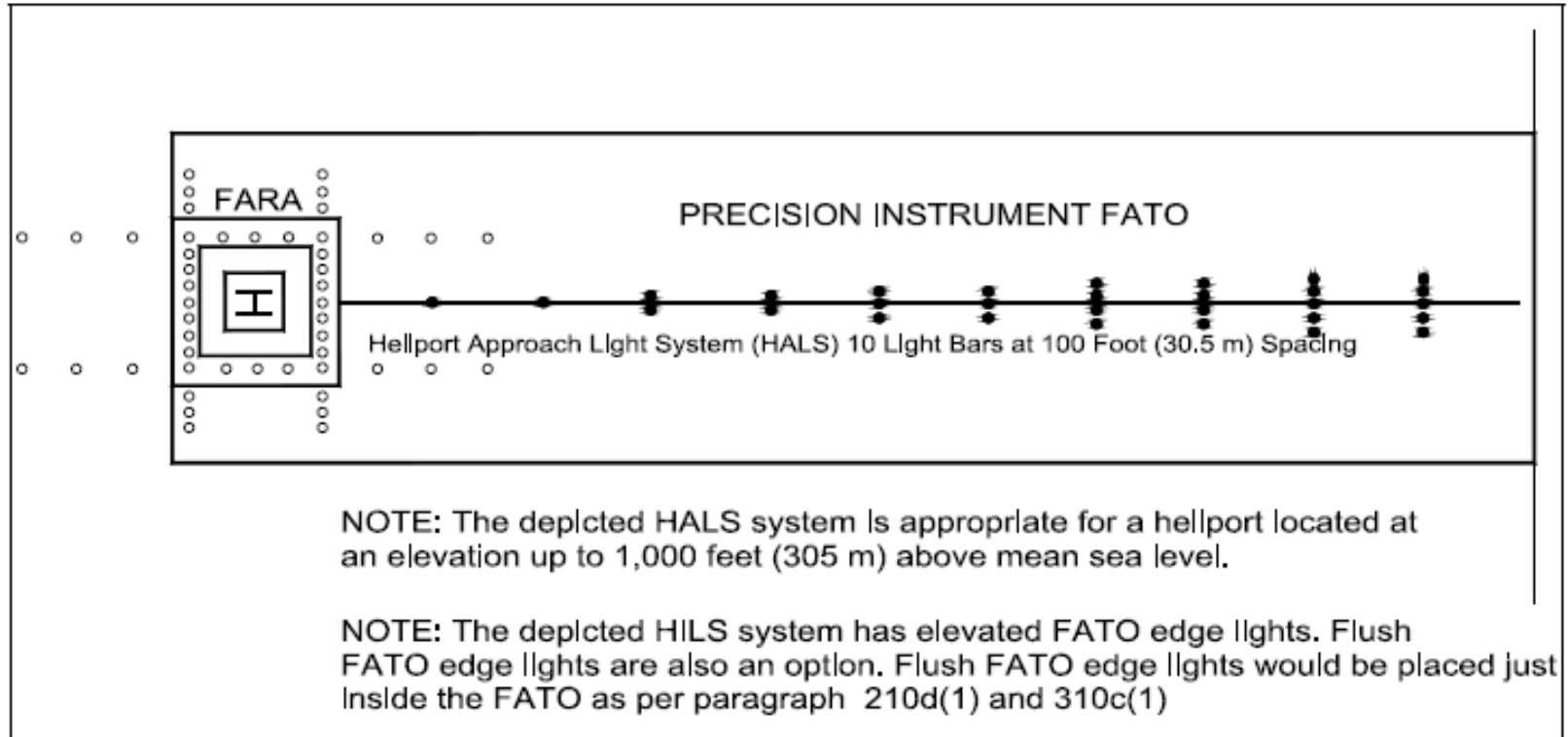


Figure 6-1. Heliport Instrument Lighting System (HILS):  
NONPRECISION

# Heliport Approach Lighting System (HALS) or lead-in lights.



**Figure 7-2. HALS Lighting System:  
PRECISION**



# Mobile Helicopter Safety Applications that Require 5010 Database Information



Foreflight



LZControl



HADRAS



Garmin Pilot



B4UFly

**General Aviation Airborne Recording Device (GAARD)  
Application for use by Helicopters Helicopter Airborne  
Data Recording and Analysis System (HADRAS) –  
Developed by MITRE and FAA**

# Recommendations

- **Update the Information Collected on the 5010 Form to include additional safety data**
- **Re-organize the data storage/database fields so queries are more transparent and heliport focused rather than aircraft focused**
- **Automate 5010 form data collection/submission (i.e. web-based) and establish an error-checking process to mitigate issues**
- **Look into closer collaboration with State Agencies (i.e. NASAO/NJDOT) that maintain their own repositories**
- **Work with developers of mobile safety applications**



# Discussion/Questions?

