

Airport Survey and Mapping

Automation of Airport Diagrams

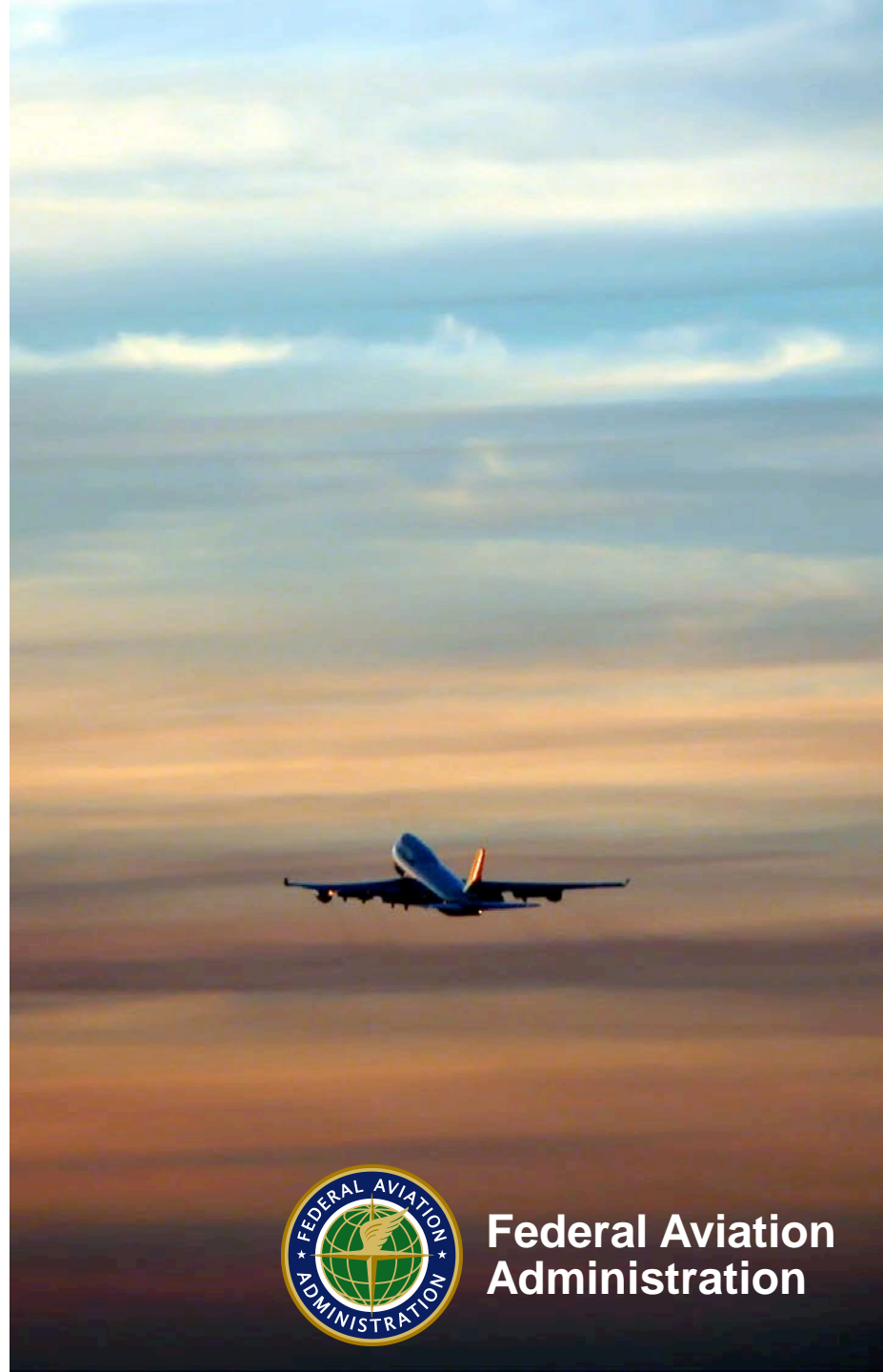
Presented to: Aeronautical Charting Meeting

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Date: April 25, 2018



**Federal Aviation
Administration**



Airport Survey and Mapping (ASM)

Air Traffic & Terminal Products Group

Overview

I. Current Products

II. Proposed Product

III. Automation and Information



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I. Current products

ASM develops, updates and maintains the following products

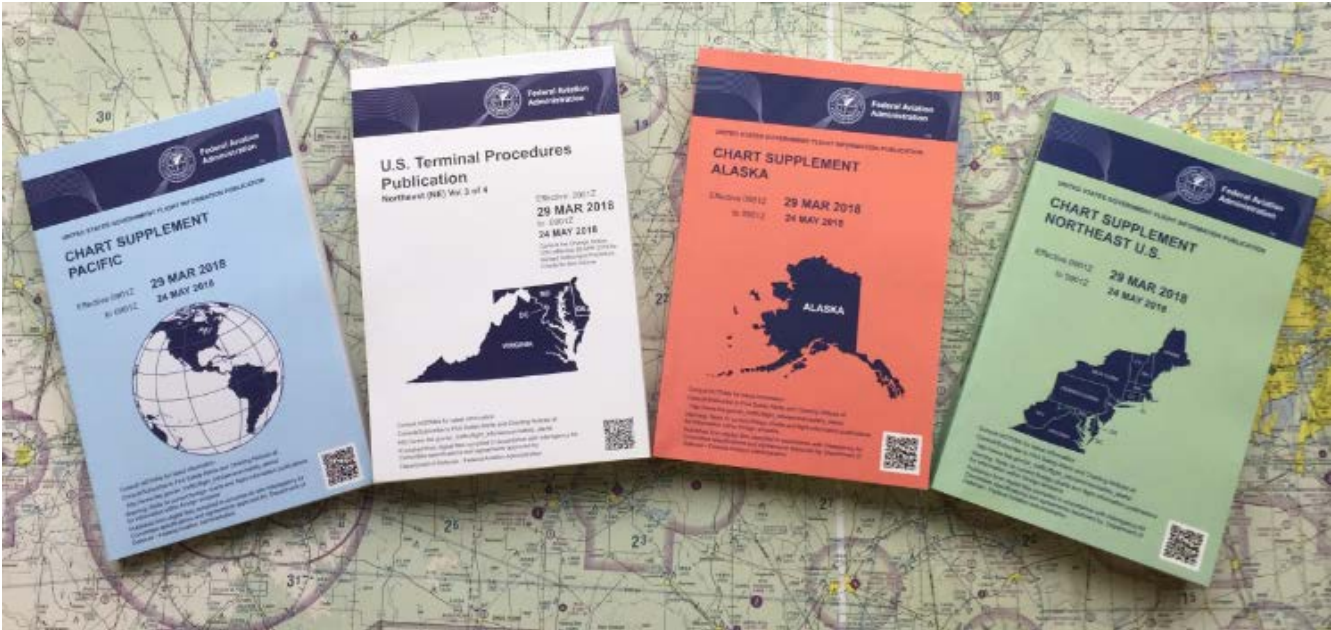
- Airport Diagram : 700
- Chart Supplement Sketch : 3000
- Terminal Sketch : 3000

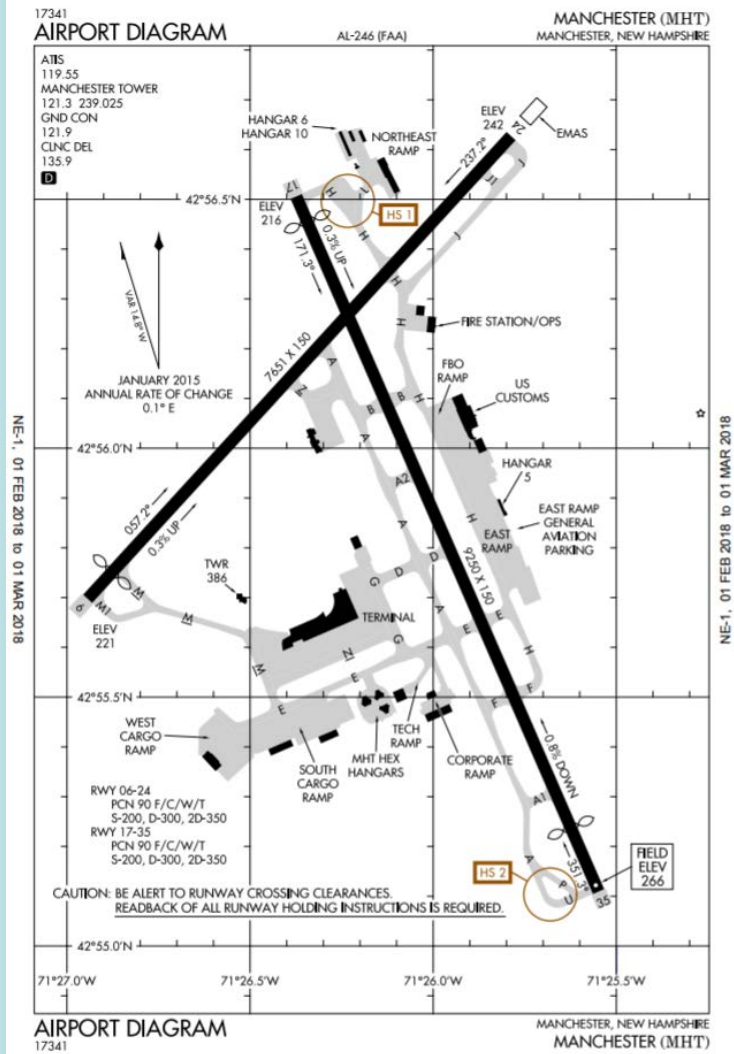
The following are some of ASM product update sources

- NASR
- NFDD (National Flight Data Digest)
- ACC (Aeronautical Chart Change)
- ADC (Aeronautical Data Change)
- RD (Requirement Document)
- EC (Editorial Change)
- Specification changes..... etc...!!

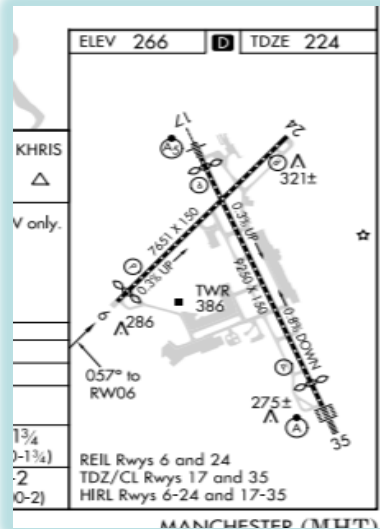


ASM PRODUCTS





Airport Diagram



Terminal Sketch

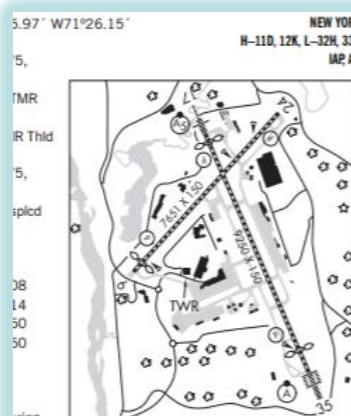
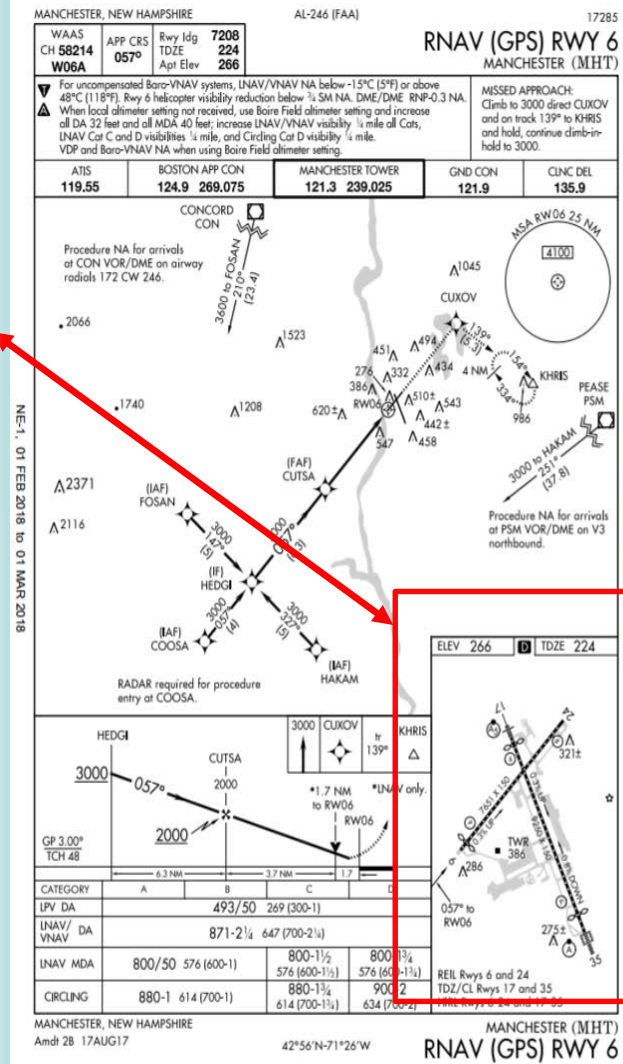


Chart Supplement Sketch



Terminal Procedure



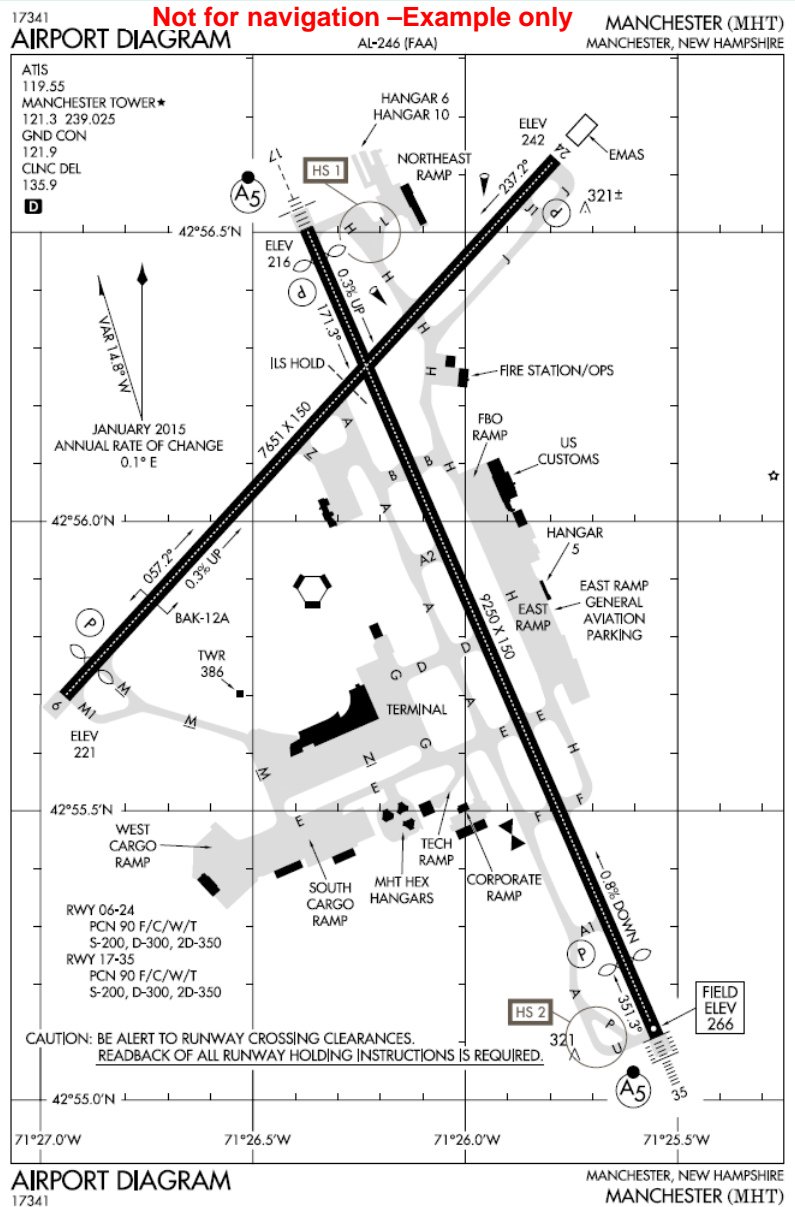
II. Proposed product

- Eliminate Terminal and Chart Supplement Sketches.
- All hard-surfaced runway public use airports with IFR procedures will have a published airport diagram.
- Eliminate cultural features such as trees, creeks, water and power lines etc.
- Change diagram specifications to incorporate sketch aeronautical features information.
- Revise FAAO 7910.4D and IAC4 to reflect all proposed changes.
- Adding geo-referenced information for real world location and for future data driven product development.





Proposed Combined Diagram and Sketch Elements



Proposed Product Benefits

- Eliminate maintenance of three types of airport layouts.
- Creation of a single standard Airport Diagram for all airports.
- Print one diagram in one publication (currently printed 4 ways).
- Free up space in the TPP plate for more relevant procedural information.
- Provide a more robust product to better serve our customer.
- Streamlined internal production processes allowing us to automate faster.
- Deliver a more accurate and updated product.

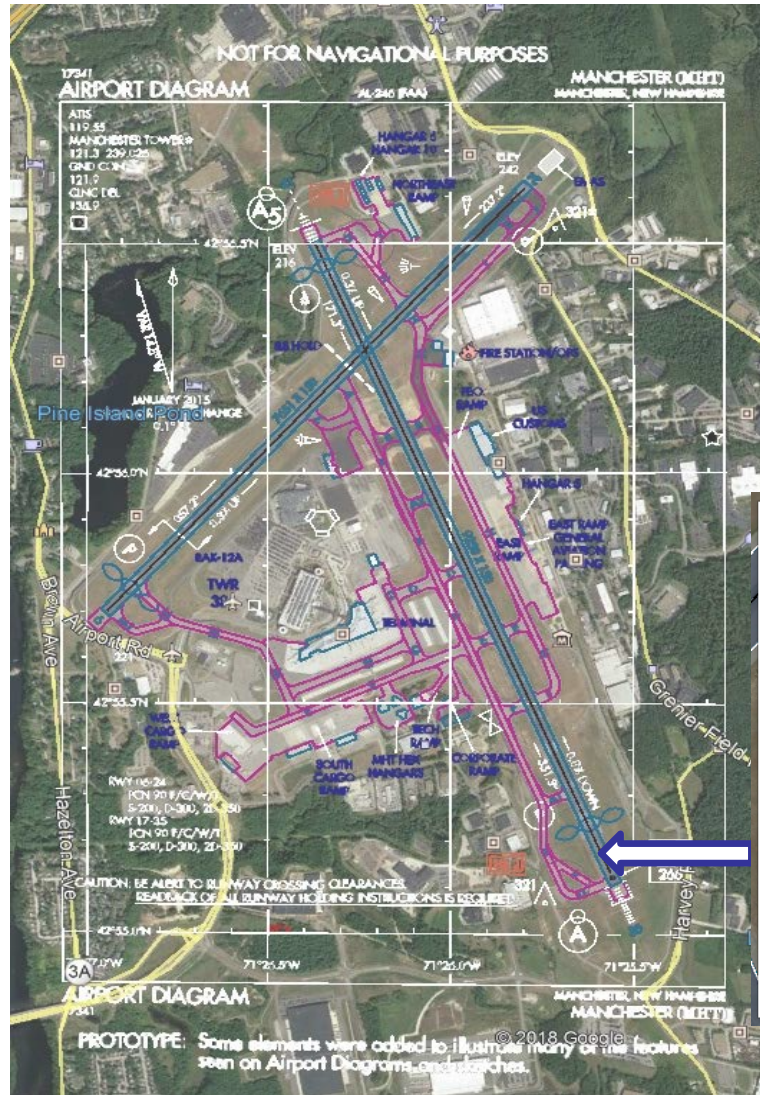
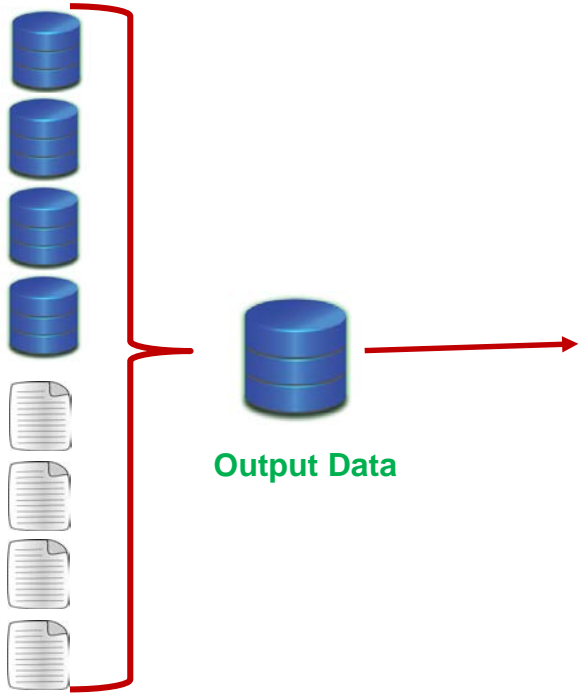


III. Automation and Information

- Develop tools to extract and store source aeronautical data to build and maintain consolidated file / database.
- Diagrams will be data driven through links to feature elements.
- All features that are linked and stored as data will be output in data delivery service format (TBD).
- No base features (cultural, topographic etc..) information will be part of this automation.



Data Delivery Service Example



06-24	
MHT	
IDENT	MHT
Description	MHT RWY 06-24
Status	ACTIVE
RWY Designator	06-24
Width	150
Length	7651
Surface Type	ASPH
RWY PCN WBC	90 F/C/W/T
PCN	90
Surface Condition	FAIR
SHAPE_Length	0.050453
SHAPE_Area	0.000012
IDRWY	06
SLOPERWY	057.2°
ID2RWY	24
ELEV2RWY	242
SLOPE2RWY	0.3% UP
WL	7651 X 150
RWYENDELEV1	221
RWYENDELEV2	242

Attributed georeferenced diagram (example : KMZ file) shown on Google earth





Do you
have any
questions ?



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