



APPENDIX E CORRESPONDENCE WITH THE FAA REGARDING INM SUBSTITUTE



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HARRIS MILLER MILLER & HANSON INC.

77 South Bedford Street
Burlington, MA 01803
T 781.229.0707
F 781.229.7939
www.hmmh.com

May 8, 2013

Ms. Katherine S. Delaney
Community Planner
Federal Aviation Administration
Detroit Airports District Office
11677 B South Wayne Road, Room 107
Romulus, MI 48174

Subject: INM Aircraft Type Substitution Request
Reference: CAK Part 150 Noise Exposure Map Update, HMMH Project 305231

Dear Ms. Delaney:



As you are aware, HMMH, in association with R.W. Armstrong (RWA), is preparing a 14 C.F.R. Part 150 Update for Akron-Canton Airport (CAK). The study will address aircraft noise and land-use compatibility projections for 2014 and 2019, based on Day-Night Average Sound Level contours developed using the most current release of the Integrated Noise Model (INM); i.e., Version 7.0c. This letter presents a request, on behalf of CAK, for FAA approval of a modeling substitute for the Eurocopter UH-72 "Lakota," which is not addressed in the INM 7.0c database.

Background

The Ohio Army National Guard has four UH-72s based at the "Army Aviation Support Facility No. 1" at CAK. The UH-72 is an unarmed militarized version of the Eurocopter EC145. The INM 7.0c database does not include either the EC145 or the UH-72, nor does the model identify a preapproved modeling substitute for either aircraft type. Therefore, we require FAA approval of a "non-standard" modeling substitute.

Proposed Substitution

Consistent with established practice, we offer for FAA consideration the INM 7.0c Bell B222 aircraft type as a modeling substitute for the UH-72. Our proposal is based on comparison of B222 and UH-72 specifications, and on recent FAA approvals for other Part 150 studies.

Comparison of Specifications

The following table compares the aircraft specifications of the UH-72 version based at CAK to the proposed B222 INM 7.0c substitute. It also presents specifications for the EC145 (the civilian version of the UH-72) for reasons discussed under "Recent Comparable FAA Approvals."

Manufacturer	Type Designation	Maximum Takeoff Weight (pounds)	Number Engines and Type	Shaft Horsepower per Engine	Fast Cruise Speed (knots)
American Eurocopter	UH-72	7,903	2 Turbomeca Arriel 1E2	738	133
American Eurocopter	EC145	7,903	2 Turbomeca Arriel 1E2	738	133
Bell	B222	7,850	2 Lycoming LTS-101-650C-3	618	147

Sources: "UH-72A Lakota Specifications." *American Eurocopter*. Web. 29 Apr 2013. <<http://www.eurocoptersusa.com/products/UH-72A-specifications.asp>>.
 "EC145 specifications." *American Eurocopter*. Web. 29 Apr 2013. <<http://www.eurocoptersusa.com/products/EC145-specs.asp>>.
 "Bell 222." *Wikipedia*. Wikimedia Foundation, Inc., 23 Mar 2013. Web. 29 Apr 2013. <http://en.wikipedia.org/wiki/Bell_222>.



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Recent Comparable FAA Approvals

The preceding table includes the specifications for the EC145 (the civilian version of the UH-72), because the FAA provided HMMH with guidance to use the B222 as a modeling substitute for that aircraft in the following recent Part 150 noise studies:

- Van Nuys (CA) Airport (VNY) Part 150 Update with INM 7.0b, HMMH Project No. 304380, FAA approval issued March 14, 2011.
- Martin County (FL) Airport / Witham Field (SUA) Part 150 Update with INM 7.0b, HMMH Project No. 303880, FAA approval issued June 11, 2010.

We can provide copies of the above documents upon request.

Request

Based on the preceding information, we request FAA approval to use the B222 as the modeling substitute for the UH-72 in the CAK Part 150 Update, or designation of an alternate substitute, if the FAA believes another aircraft type in the INM 7.0c database would be a better surrogate.



In accordance with FAA policy, we understand that FAA's Airport Planning and Environmental Division (APP-400) and Office of Environment and Energy Noise Division (AEE-100) will review this request. We would be pleased to respond to any questions that you or staff in either of those headquarters groups may have regarding this request.

Thank you for your assistance on this matter.

Sincerely yours,

HARRIS MILLER MILLER & HANSON INC.

Justin Divens
Consultant

c: Mr. McQueen (CAK)
Mr. Clarke (RWA)
Mr. Baldwin (HMMH)



U.S. Department
of Transportation
**Federal Aviation
Administration**

Office of Environment and Energy

800 Independence Ave., S.W.
Washington, D.C. 20591

Date: June 11, 2013

Lindsay Butler-Guttilla, MPA
Regional Environmental Specialist
FAA-Great Lakes Region

Dear Ms. Guttilla:

The Office of Environment and Energy (AEE) has received your email dated June 3rd, 2013, requesting review of the proposed substitution for modeling the UH-72 helicopter. The request addresses aircraft noise and land-use compatibility projections for 2014 and 2019 in preparing Part 150 Update for Akron-Canton Airport (CAK). The Integrated Noise Model (INM) Version 7.0c is used in this study.

AEE does not approve the proposed use of the Bell B222 helicopter as substitution in modeling noise of the UH-72 helicopter. Instead, AEE recommends that the Bell B429 helicopter be used. The B429 helicopter data was added to the INM version 7.0c at the end of 2011. Like the UH-72, the B429 has four rotor blades as well. This recommendation is also consistent with the helicopter substitution list in the INM Version 7.0d that was released on May 31, 2013.

Please understand that this approval is limited to the Part 150 study at CAK. Any additional projects or non-standard aircraft input will require separate approval.

Sincerely,

P.P. Rebecca Cointin, Manager
AEE/Noise Division

cc: Jim Byers



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