



**DEC 19 2014**

Mr. Jerome N. Gregoire  
Redbird Flight Simulations  
2301 East St. Elmo Rd., Suite 100  
Austin, Texas 78744

Dear Mr. Gregoire:

The Federal Aviation Administration (FAA) last qualified and approved your airplane LD, SD, FMX, and MCX device as an Advanced Aviation Training Device (AATD) on February 14, 2013 in accordance with Title 14 Code of Federal Regulations (14 CFR) section (§) 61.4(c). This training device was found to meet the criteria for an AATD as described in FAA Advisory Circular AC 61-136.

Starting January 1, 2015, the FAA requires all Letters of Authorization (LOA) to contain the correct training allowances to remain valid. Based on the previous approval and review of the qualification and approval guide dated February 7, 2013, the FAA has determined that this device continues to meet the current standards for approval. The Redbird model LD, SD, FMX, and MCX is authorized for use in satisfying the following sections of Title 14 of the Code of Federal Regulations parts 61 and 141:

**Redbird Model LD, SD, FMX, MCX version 4.4  
Airplane Single and Multi-Engine Land  
Advanced Aviation Training Device (AATD)**

- § 61.51(b)(3) – Logbook entries;
- § 61.51 (h) – Logging training time;
- § 61.57(c) – Instrument experience;
- § 61.57(c)(4)(iii) – Instrument experience;
- § 61.57(c)(5)(ii) – Instrument experience;
- § 61.57(d)(1)(ii) – Instrument proficiency check, per the Instrument PTS;
- § 61.65(i) – Instrument rating;
- § 61.109(k)(1) – Private Pilot Certificate Aeronautical experience: up to 2.5 hours;
- § 61.129(i)(1)(i) – Commercial Pilot Certificate: up to 50 hours;
- § 61.159(a)(3)(i) – Airline Transport Pilot Certificate: up to 25 hours; and
- § 141.41(b) – Approved for use under the part 141 appendices as follows:
  - *Appendix B* – Up to 15% toward the total Private Pilot flight training time requirements;

- *Appendix C* – As allowed under 4(b) toward the total instrument flight training time requirements;
- *Appendix D* – Up to 20% toward the total Commercial Pilot flight training time requirements;
- *Appendix E* – Up to 25% toward the total Airline Transport Pilot flight training time requirements;
- *Appendix F* – Up to 5% toward the total Flight Instructor flight training time requirements;
- *Appendix G* – Up to 5% toward the total Flight Instructor instrument flight training time requirements;
- *Appendix I, Private Pilot Airplane Single Engine or Multiengine Class Rating Course* – Up to 3 hours toward the flight training time requirements;
- *Appendix I, Commercial Pilot Airplane Single Engine or Multiengine Class Rating Course* – Up to 11 hours toward the required flight training time requirements;
- *Appendix I, Airline Transport Pilot Airplane Multiengine Class Rating Course* – Up to 6.25 hours toward the flight training time; and
- *Appendix M, Combined Private Pilot Certification and Instrument Rating* – Up to 25% toward the total flight training time requirements

**Note:** Training or experience requirements such as cross country, night, solo, takeoffs and landings, or the 3 hours of training within 2 calendar months of the practical test must be accomplished in an aircraft. Private Pilot Airplane applicants must also complete the requirement for 3 hours of control and maneuvering of an airplane solely by reference to instruments specified in §61.109 in an airplane. Additionally, practical tests cannot be conducted in an AATD.

**Exemption Notice:** This device qualifies for the exemption from 14 CFR section 61.65(i) and part 141 Appendix C under the terms and conditions described in the FAA Notice of Policy Change for the Use of FAA Approved Training Devices in the Federal Register (Docket No.: FAA-2013-0809). This exemption allows pilots applying for an instrument rating to credit up to 20 hours of time obtained in this device toward the aeronautical experience requirements in § 61.65(d)(2). In addition, this exemption allows training providers with a training course outline approved under part 141 Appendix C, to continue to train under that program with up to a 40% credit of the training time requirement obtained in this device. This exemption will expire as noted in the Federal Register policy notice.

**This approval is contingent upon the following:**

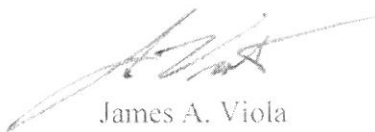
- 1) This aviation training device must continue to maintain its performance and function without degradation. The minimum instrument requirements specified under 14 CFR part 91, § 91.205 for day visual flights rules (VFR) and instrument flight rules (IFR) must be functional during the training session:

- 2) Only the configurations that are in the FAA approved Qualification and Approval Guide are utilized during training;
- 3) A copy of this authorization and approval letter must be readily available in a location near the device when in use. Additionally, a copy of this authorization must be provided to the person using the above credits for pilot certification or ratings;
- 4) An authorized instructor must provide and certify the above instructional use;
- 5) Any changes or modifications to this aviation training device which have not been reviewed, evaluated, and approved by AFS-800 will terminate this letter of approval; and
- 6) The FAA reserves the right to revoke this authorization at any time if the Administrator determines that this training device is used contrary to FAA regulation, guidance, or safety.

**This approval is valid for sixty (60) calendar months from the date of this letter and supersedes any previous approvals for this training device. Renewal requests should be made prior to the expiration (90 days in advance) by letter to AFS-800 and the above contingencies (1) through (6) must remain valid. At the time of application AFS-800 will conduct (at a minimum) a review of the QAG, to verify compliance with the current AC 61-136 for their approval and use, before a new Letter of Authorization (LOA) can be provided.**

**This authorization expires on 11/30/2019**

Sincerely,



James A. Viola  
Manager, General Aviation and Commercial Division  
Flight Standards Service



JUL - 1 2010

Mr. Jerome N. Gregoire  
Redbird Flight Simulations, Inc.  
8313 W Highway 71  
Suite 300  
Austin, Texas 78735-8107

Dear Mr. Gregoire:

This is in response to your request for Federal Aviation Administration (FAA) approval of the revised Qualification and Approval Guide (QAG) for the Redbird Flight Simulations, Inc. (Redbird) "LD" model, "SD" model, "FMX" model advanced aviation training device (AATD) dated March 1, 2010. Based on the previously approved QAG dated March 1, 2010 and the on-site functionality evaluation of SR20/22-XX-G001 configuration conducted by the FAA Consensus Evaluation Team on June 29 - 30, 2010, the Redbird "LD", "SD" and "FMX" model training device is approved as AATD with all of the additional configurations as identified on the QAG dated March 1, 2010.

As an AATD, this device is authorized for use in satisfying Tasks/Maneuvers, and Procedures under the following sections of Title 14 Code of Federal Regulations parts 61 and 141:

**Redbird "LD," "SD" and "FMX" models  
Advanced Aviation Training Device**

**Configurations: Generic Complex Single-Engine Land, C172-XX-S001, C172-XX-G001, C182-XX-S001, C182-XX-G001, PA28A-XX-S001, PA28R-XX-S001, BE58-XX-S001, PA34-XX-S001, PA44-XX-S001, SR22-XX-G001, and SR20-XX-G001.**

- Section 61.51(b)(3) - Logged Flight Experience
- Section 61.57(c)(2) - Instrument Experience
- Section 61.57(d)(1)(ii) - Instrument Proficiency Check, per FAA-S-8081-4 (latest version)
- Section 61.65(c)(2) - Instrument Rating: Maximum 20 Hours
- Section 61.65(a)(8) - Instrument Rating: Practical Test, as allowed under FAA-S-8081-4 (latest version)
- Section 61.109(k)(1) - Private Pilot Certificate: Maximum 2.5 Hours
- Section 61.129(i)(1)(i) - Commercial Certificate: Maximum 50 Hours
- Section 61.159(a)(3)(i) - Airline Transport Pilot Certificate: Maximum 25 Hours
- Section 141.31(b) - Approved for use as limited by Part 141 Appendices
- Section 141.55(d) - Approved for use to the extent as allowed within the FAA-approved training curricula
- Section 141.57 - Approved for use to the extent as allowed within the FAA-approved special training curricula

This approval is contingent upon the following:

- (1) This device, when in use, continues to maintain its performance, function, and other characteristics to ensure its ability to adequately perform the listed tasks/maneuvers or procedures authorized have not deteriorated;
- (2) The jurisdictional Flight Standards District Office's receipt of annual reports regarding the status and continued use of the device from the operator;
- (3) A copy of this authorization and approval must be posted in a location near the device when in use so as to be readily available to the users when operated as authorized;
- (4) An authorized instructor must certify the above instructional use;
- (5) Any changes or modifications to these devices which have not been reviewed, evaluated, and approved by the FAA's General Aviation and Commercial Division (AFS-800) will cause FAA's approval to become null and void; and,
- (6) This authorization is valid until modified or rescinded by AFS-800.

The enclosed QAG is marked FAA-approved and a copy of this letter and approved materials are retained in our files.

Sincerely,

  
Melvin O. Cintron  
Manager, General Aviation and Commercial Division



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

Flight Standards District Office  
3196 Kraft Avenue SE, Suite 103  
Grand Rapids, Michigan 49512-2065  
(616) 954-6657, Fax: (616) 940-3140

August 30, 2010

Mr. Thomas Grossman  
Western Michigan University  
College of Aviation  
237 North Helmer Road  
Battle Creek, MI 49015

Dear Mr. Grossman:

After an evaluation of your Redbird Flight Simulations, Inc.'s "FMX" model Advanced Aviation Training Device (A-ATD), by representatives of the Administrator, the Federal Aviation Administration (FAA) has determined that Redbird "FMX" model, serial number FMX0096 contains sufficient features to permit its use under Title 14 of the Code of Federal Regulations (14 CFR) part 61 and/or 141 as follows:

This revised Letter of Authorization is issued to reflect the succeeding regulatory amendments at 14 CFR parts 61 and 141:

- a. section 61.51(b)(3) & (h) - Logged Flight Experience
- b. section 61.57(c)(2) - Recent Flight Experience: instrument
- c. section 61.57(c)(4)(ii) - Recent Flight Experience: instrument
- d. section 61.57(c)(5)(i) - Recent Flight Experience: instrument
- e. section 61.57(d) - Recent Flight Experience: instrument proficiency check required and permitted tasks in accordance with the instrument rating practical test standards (FAA-S-8081-4 latest version)
- f. section 61.65(g)(2) - Instrument Rating: not more than 20 hours
- g. section 61.65(a)(8)(2) - Instrument Rating Practical Test: tasks as required and permitted by FAA-S-8081-4 latest version
- h. section 61.109(k)(l) - Private Pilot Certificate: not more than 2.5 hours

- i. section 61.129(i)(1)(i) - Commercial Certificate: not more than 50 hours
- j. section 61.159(a)(3)(i) - Airline Transport Pilot Certificate: not more than 25 hours
- k. section 141.41(b) - As allowed within the FAA-approved part 141 training course
- l. section 141.55(d) & (e) - As allowed within the FAA-approved part 141 reduced hours training course
- m. section 141.57 - As allowed within the FAA-approved part 141 special training curricula

This authorization is contingent upon the following:

1. These devices, when in use, continue to maintain their performance, function, and other characteristics to ensure its ability to adequately perform the listed tasks/maneuvers or procedures authorized have not deteriorated;
2. The jurisdictional Flight Standards District Office's (FSDO) receipt of annual reports regarding tile status and continued use of these devices from the operator;
3. A copy of this authorization and approval must be posted in a location near these devices when in use so as to be readily available to the users when operated as authorized;
4. An authorized instructor must certify the use of these devices when the experience logged is used towards obtaining a pilot certificate or rating or for the conduct of portions of an instrument proficiency check; and
5. This authorization is valid until modifies or rescinded by the Federal Aviation Administration.

Sincerely,



Amanda J. Theisen  
Principal Operations Inspector

# WESTERN MICHIGAN UNIVERSITY

College of Aviation



**COPY**

June 28, 2011

Ms. Amanda Theisen  
Grand Rapids FSDO  
3196 Kraft Ave., S.E.  
Suite 103  
Grand Rapids, MI 49512-2065

Dear Ms. Theisen,

Western Michigan University continues to use advance aviation training device Redbird Flight Simulations FMX, serial number FMX0096 in the Private, Instrument and Commercial courses as outlined in the Professional Flight TCO and for part 61 training and proficiency/currency in accordance with the current letter of authorization. The A-ATD has been maintained in accordance with the manufacturer's recommended maintenance criteria and schedule and the A-ATD continues to operate as it was originally designed.

Please feel free to contact me at (269) 964-4029 or [thomas.grossman@wmich.edu](mailto:thomas.grossman@wmich.edu) if you have any questions concerning this A-ATD.

Sincerely,

A handwritten signature in black ink that reads "Thomas C. Grossman".

Thomas C. Grossman  
Coordinator of Flight Instruction





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

800 Independence Ave., SW  
Washington DC 20591

JUN 15 2018

William Jen  
Certification Manager  
Redbird Flight Simulations, Inc.  
2301 E St Elmo Road Suite 100  
Austin, TX 78744

Dear Mr. Jen:

The Federal Aviation Administration (FAA) last qualified and approved your airplane Redbird Flight Simulations, Inc. model LD, SD, FMX, MCX as an Advanced Aviation Training Device (AATD) on December 19, 2014 in accordance with Title 14 of the Code of Federal Regulations (14 CFR) 61.4(c).

Review of the revised Qualification and Approval Guide (QAG) version 4.5E dated June 6, 2018 validates the current standards and criteria for approval as provided in Advisory Circular (AC) 61-136A, *FAA Approval of Aviation Training Devices and Their Use for Training and Experience*. The Redbird Flight Simulations, Inc. model LD, SD, FMX, MCX airplane AATD is approved for use in satisfying the following sections of parts 61 and 141:

Redbird Flight Simulations, Inc. Model LD, SD, FMX, MCX  
Airplane Single and Multiengine Land  
Advanced Aviation Training Device (AATD)

- § 61.51(b)(3) – Logbook entries;
- § 61.51 (h) – Logging training time;
- § 61.57(c) – Instrument experience;
- § 61.57(d)(1) – Instrument proficiency check, per the Instrument ACS;
- § 61.65(i) – Instrument rating; up to 20 hours;
- § 61.109(k)(1) – Private Pilot Certificate aeronautical experience: up to 2.5 hours;
- § 61.129(i)(1)(i) – Commercial Pilot Certificate: up to 50 hours;
- § 61.159(a)(4)(i) – Airline Transport Pilot Certificate: up to 25 hours; and
- § 141.41(b) – Approved for use under the part 141 appendices as follows:
  - *Appendix B* – Up to 15% toward the total Private Pilot training time requirements;
  - *Appendix C* – Up to 40% toward the total Instrument training time requirements;
  - *Appendix D* – Up to 20% toward the total Commercial Pilot training time requirements;
  - *Appendix E* – Up to 25% toward the total Airline Transport Pilot training time requirements;

- *Appendix F* – Up to 5% toward the total Flight Instructor training time requirements;
- *Appendix G* – Up to 5% toward the total Flight Instructor Instrument training time requirements;
- *Appendix I, Private Pilot adding Airplane Category and Single Engine or Multiengine Class Rating Course* – Up to 3 hours toward the total training time requirements;
- *Appendix I, Commercial Pilot adding Airplane Category and Single Engine or Multiengine Class Rating Course* – Up to 11 hours toward the total training time requirements;
- *Appendix I, Airline Transport Pilot adding Airplane Category and Single Engine or Multiengine Class Rating Course* – Up to 6.25 hours toward the total training time requirements; and
- *Appendix M, Combined Private Pilot Airplane Certification and Instrument Rating* – Up to 25% toward the total training time requirements

Note: Minimum training or experience requirements for cross country, night, solo, takeoffs and landings, and the 3 hours of training with an authorized instructor in preparation for the practical test within the preceding 2 calendar months from the month of the test must be accomplished in an aircraft. Private Pilot Airplane applicants must also accomplish the minimum requirement for 3 hours of control and maneuvering of an airplane solely by reference to instruments specified in § 61.109 in an airplane. Additionally, no portion of the practical test or type specific training credit can be conducted in an AATD.

This approval is contingent upon the following conditions and limitations:

- 1) This AATD must maintain its performance and function without degradation. The minimum instrument requirements specified under § 91.205 for day visual flight rules (VFR) and instrument flight rules (IFR) must be functional during the training session;
- 2) Only the aircraft make/model and configurations that are in the approved QAG can be utilized. A copy of the FAA approved QAG detailing the approved makes, models, and configurations must be provided to the operator and be readily available when the AATD is in use;
- 3) A copy of this letter of authorization (LOA) must be readily available in a location near the device when in use. Additionally, a copy must be provided to the person using the above credits for pilot certification or ratings;
- 4) When used for instructional purposes, only an appropriately qualified FAA-certificated flight instructor may make any subsequent endorsements and/or pilot logbook entries;

- 5) Any changes or modifications to this AATD which have not been individually reviewed, evaluated, and approved in writing by the General Aviation and Commercial Division will terminate this LOA; and
- 6) The FAA reserves the right to withdraw this LOA at any time if the Administrator determines that this AATD has been used in a manner contrary to the conditions and limitations described within this LOA, FAA regulation, guidance, or safety.

This approval is valid for sixty (60) calendar months from the date of this letter. Any requests for a new LOA should be made in writing to The General Aviation and Commercial Division at least 90 days in advance of expiration. The General Aviation and Commercial Division may require a review of the QAG, an on-site functional evaluation, and verification of all the requirements as described in the current publication of Advisory Circular 61-136, *FAA Approval of Aviation Training Devices and Their Use for Training and Experience* before a new LOA can be issued.

This approval expires on 06/30/2023.

The enclosed signed QAG is approved and a copy of this letter is retained in our files.

Sincerely,

**SHAWN M  
HAYES**

Digitally signed by  
SHAWN M HAYES  
Date: 2018.06.15  
13:00:13 -04'00'

Shawn M. Hayes  
Manager, Airman Training and Certification Branch  
General Aviation and Commercial Division



October 21, 2021

William Jen – Certification Manager  
Redbird Flight Simulations, Inc.  
2301 E. St. Elmo Rd., Suite 100  
Austin, TX 78744

Dear Mr. Jen:

The Federal Aviation Administration (FAA) last qualified and approved your airplane Redbird Flight Simulations, Inc. model LD, SD, FMX, MCX as an Advanced Aviation Training Device (AATD) on September 10, 2020, in accordance with Title 14 of the Code of Federal Regulations (14 CFR) § 61.4(c).

Review of the revised Qualification and Approval Guide (QAG) version 4.9 dated October 8, 2021 validates the current standards and criteria for approval as provided in Advisory Circular (AC) 61-136, *FAA Approval of Aviation Training Devices and Their Use for Training and Experience*. The Redbird Flight Simulations, Inc. model LD, SD, FMX, MCX airplane AATD is approved for use in satisfying the following sections of parts 61 and 141:

Redbird Flight Simulations, Inc. Model LD, SD, FMX, MCX  
Airplane Single and Multiengine Land  
Advanced Aviation Training Device (AATD)

- § 61.51(b)(3) – Logbook entries;
- § 61.51 (h) – Logging training time;
- § 61.57(c) – Instrument experience;
- § 61.57(d)(1) – Instrument proficiency check, per the Instrument ACS;
- § 61.65(i) – Instrument rating; up to 20 hours;
- § 61.109(k)(1) – Private Pilot Certificate aeronautical experience: up to 2.5 hours;
- § 61.129(i)(1)(i) – Commercial Pilot Certificate: up to 50 hours;
- § 61.159(a)(4)(i) – Airline Transport Pilot Certificate: up to 25 hours; and
- § 141.41(b) – Approved for use under the part 141 appendices as follows:
  - *Appendix B* – Up to 15% toward the total Private Pilot training time requirements;
  - *Appendix C* – Up to 40% toward the total Instrument training time requirements;
  - *Appendix D* – Up to 20% toward the total Commercial Pilot training time requirements;
  - *Appendix E* – Up to 25% toward the total Airline Transport Pilot training time requirements;

- *Appendix F* – Up to 5% toward the total Flight Instructor training time requirements;
- *Appendix G* – Up to 5% toward the total Flight Instructor Instrument training time requirements;
- *Appendix I, Private Pilot adding Airplane Category and Single Engine or Multiengine Class Rating Course* – Up to 3 hours toward the total training time requirements;
- *Appendix I, Commercial Pilot adding Airplane Category and Single Engine or Multiengine Class Rating Course* – Up to 11 hours toward the total training time requirements;
- *Appendix I, Airline Transport Pilot adding Airplane Category and Single Engine or Multiengine Class Rating Course* – Up to 6.25 hours toward the total training time requirements; and
- *Appendix M, Combined Private Pilot Airplane Certification and Instrument Rating* – Up to 25% toward the total training time requirements

Note: Minimum training or experience requirements for cross country, night, solo, takeoffs and landings, and the 3 hours of training with an authorized instructor in preparation for the practical test within the preceding 2 calendar months from the month of the test must be accomplished in an aircraft. Private Pilot Airplane applicants must also accomplish the minimum requirement for 3 hours of control and maneuvering of an airplane solely by reference to instruments specified in § 61.109 in an airplane. No portion of the practical test or type specific training credit can be conducted in an AATD. Additionally, the flight portion of a flight review specified in § 61.56(a) cannot be accomplished in an AATD.

This approval is contingent upon the following conditions and limitations:

- 1) This AATD must maintain its performance and function without degradation. The minimum instrument requirements specified under § 91.205 for day visual flight rules (VFR) and instrument flight rules (IFR) must be functional during the training session;
- 2) Only the aircraft make/model and configurations that are in the approved QAG can be utilized. A copy of the FAA approved QAG detailing the approved makes, models, and configurations must be provided to the operator and be readily available when the AATD is in use;
- 3) A copy of this letter of authorization (LOA) must be readily available in a location near the device when in use. Additionally, a copy must be provided to the person using the above credits for pilot certification or ratings;
- 4) When used for instructional purposes, only an appropriately qualified FAA-certificated flight instructor may make any subsequent endorsements and/or pilot logbook entries. Pilot time in an ATD may be logged as instruction received, instrument time, or total time only. See FAA airman application 8710-1;

- 5) Any changes or modifications to this AATD which have not been individually reviewed, evaluated, and approved in writing by the General Aviation and Commercial Division will terminate this LOA; and
- 6) The FAA reserves the right to withdraw this LOA at any time if the Administrator determines that this AATD has been used in a manner contrary to the conditions and limitations described within this LOA, FAA regulation, guidance, or safety.

This approval is valid for sixty (60) calendar months from the date of this letter. Any requests for a new LOA should be made in writing to The General Aviation and Commercial Division at least 90 days in advance of expiration. The General Aviation and Commercial Division may require a review of the QAG, an on-site functional evaluation, and verification of all the AATD requirements as described in FAA Order 8900.1 Volume 11, Chapter 10, Section 1, *Approval, Oversight, and Authorized Use Under 14 CFR Parts 61 and 141* before a new LOA is issued.

This approval expires on October 31, 2026.

The enclosed signed QAG is approved and a copy of this letter is retained in our files.

Sincerely,

Everette C. Rochon, Jr.  
Manager, Training and Certification Group  
General Aviation and Commercial Division

Enclosure