AN INTRO TO

Understanding Aviation Training Devices

An introductory guide to the definitions and regulations of ATDs

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A Publication of Redbird Flight

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1/ Basic Terms

Aviation Training Device (ATD)

ATD is sometimes used to group the approval levels of BATD and AATD together, however there is some confusion with this term. ATD is used in AC61-136B, 14 CFR part 61, and 14 CFR part 141. The definition of an ATD is listed under §61.1.

Aviation training device means a training device, other than a full flight simulator or flight training device, that has been evaluated, qualified, and approved by the Administrator.

Redbird recommends using the specific approval level (BATD or AATD) in all written records or logbooks.

Basic Aviation Training Device (BATD)

This is a device approval level introduced in AC61-136 and updated by the FAA. The current version is AC61-136B.

Advanced Aviation Training Device (AATD)

This is a device approval level that was introduced in AC61-136 and is higher than BATD. A device approved as an AATD must meet and exceed the requirements of a BATD. The current version is AC61-136B.

Basic Terms (cont).

AC61-136B	An update to Advisory Circular to AC61-136A which was originally initiated by AFS-800 as AC61-136. It removed the PCATD and FTD levels 1-3 and created the device approval levels BATD and AATD. AC 61-136B provides the updated requirements for each level, the process for seeking device approval, and guidance on the usage of BATDs and AATDs.
Qualification and Approval Guide (QAG)	The document, created by Redbird and submitted to the FAA, that describes how the device meets the requirements of AC61-136B. Each aero model configuration is listed. This document is amended and resubmitted to the FAA as new configurations are added.
Letter of Authorization (LOA)	The letter issued by AFS-800 that grants approval for the Redbird device and its configurations. The LOA is tied to a specific QAG version.
Flight Training Device (FTD)	Regulatory group of devices controlled by FAR part 60 and approved by the FAA, National Simulator Program located in Atlanta, GA. After the rewrite of Part 60, FTDs currently include Levels 4-7.
Flight Navigation and Procedural Trainer (FNPT)	Regulatory group of devices controlled by EASA and approved by many European Civil Aviation Authorities.

2/ Training With ATDs

What type of training can I conduct in a Redbird <u>BATD</u>?

The Redbird <u>TD</u> and <u>TD2</u> Basic Aviation Training Devices (BATD) may be used for meeting Private Pilot Aeronautical Experience, Instrument Rating Requirements, and Instrument Currency.

Private Pilot Training Requirements

<u>Part 61</u>: Up to 2.5 hours can be logged toward Aeronautical Experience Requirements

<u>Part 141</u>: Up to 15% towards the total Private Pilot training time requirements

Instrument Training Requirements

<u>Part 61</u>: Up to 10 hours can be logged toward an Instrument Rating

<u>Part 141</u>: Up to 25% towards the total Instrument training time requirements

What type of training can I conduct in a Redbird AATD?

Redbird LD, SD, FMX, MCX, AMS, and MX2 Advanced Aviation Training Devices can be used for Private Pilot, Instrument Rating, Commercial Pilot, ATP, Multi-engine, and CFI/II training requirements, as well as Instrument Currency and Instrument Proficiency Checks.

Private Pilot Training Requirements

Part 61: Up to 2.5 hours can be logged toward Aeronautical Experience Requirements

Part 141: Up to 15% towards the total Private Pilot training time requirements

Instrument Training Requirements

Part 61: Up to 20 hours can be logged toward an Instrument Rating

Part 141: Up to 40% towards the total Instrument training time requirements

Instrument Proficiency Check

The Redbird LD, SD, FMX, MCX, AMS, and MX2 AATDs can be utilized for the majority of the IPC (except for the circling approach, the landing Task, and the multiengine airplane Tasks) – as specified in the Letter of Authorization issued for the device per FAA-S-ACS-8A.

Commercial Pilot Training Requirements

Part 61: Up to 50 hours can be logged toward a Commercial Pilot Certificate

Part 141: Up to 20% towards the total Commercial Pilot training time requirements

Multi-Engine Class Rating Courses

Private Pilot ASEL/AMEL Class Rating Course: Up to 3 hours can be logged toward the total training time requirements

Commercial Pilot ASEL/AMEL: Up to 11 hours can be logged toward the total flight training time requirements

Airline Transport Pilot AMEL: Up to 6.25 hours can be logged toward the total flight training time requirements

Airline Transport Pilot Training Requirements

Part 61: Up to 25 hours can be logged toward the ATP Certificate

Part 141: Up to 25% towards the total Airline Transport Pilot training time requirements

Certified Flight Instructor Requirements

Certified Flight Instructor: Up to 5% towards the total Flight Instructor training time requirements

Certified Flight Instructor (Instrument): Up to 5% towards the total Flight Instructor Instrument training time requirements

What if I am conducting training in a combination of BATD, AATD, FFS, and aircraft?

Part 61: No more than 20 hours can be logged by combining an AATD, BATD, FTD, and/or FFS for an Instrument Rating

Part 141: No more than 50% of the required course hours can be logged by combining an AATD, BATD, FTD, and/or FSS for an Instrument Rating

BATDS, AATDs, and Instrument Experience Requirements

BATDs and AATDs can be used to meet instrument experience requirements. Using an ATD as the sole means to maintaining instrument currency now provides a six-month window of currency. As of July 27, 2018, pilots seeking to maintain instrument currency in an ATD also no longer need to have an authorized instructor present.

Required tasks include - § 61.57(c):

1) Six Instrument approaches
2) Holding procedures and tasks
3) Interception and tracking courses through the use of navigational electronic systems

What type of training can be conducted in an FNPT II?

Redbird devices certified under EASA Flight Navigation and Procedural Trainer (II) can be used toward EASA pilot training requirements for each module.

Basic Instrument Flight Instruction: Up to 5 hours can be logged toward flight training requirements

Flying Training Single Engine Instrument Instruction: Up to 35 hours can be logged toward flight training requirements

Flying Training Multi-Engine Instrument Instruction: Up to 40 hours can be logged toward flight training requirements

How do I log training time in a Redbird Aviation Training Device?

When using the Redbird to complete training for a certificate or rating, an instructor must be present and the time should be logged in the pilot's logbook.

Sample logbook entry

REDBIRD FLIGHT SIMULATIONS, INC.

Year	2010		Route of			Category and Class				Conditions of Flight						Type of Piloting Time					
Date	Aircraft M&M	Aircraft Ident	From	To	Total	ASEL	AESS	AMEL	Landing	Night	Actual	Simula	APP	Flight	FTD/A	X-	Solo	PIC	Dual	As CFI	Notes
9/1/2010	C172-Steam	Redbird FMX 1139	AUS-	AUS	0	0	0	0	0	0	0	0.8	1ILS	0	1.3	0	0	0	1.3		AATD for IR
10/25/2010	BE58-G1000	Redbird FMX 1139	AUS	AUS	0	0	0	0	0	0	0	1.2	2ILS	0	1.2	0	0	0	1.2		AATD for IR
10/26/2010	cC172-G1000	Redbird FMX 1139	AUS	AUS	0	0	0	0	0	0	0	2.1	4ILS	0	2.3	0	0	0	2.3		AATD for Instrument Currency

Time spent in a AATD does not count for Total Duration or Category and Class

It does count for Simulated Instrument and Approaches Flow can be recorded, but if you have extra colums, you may wish to separate the time between "simulated instrument flight" and "simulated instrument ATD".

Time also counts for Dual Received, but we also recommend separating (flight vs. ATD dual) if possible.

Note if time is for a Certificate, Rating, or currency

3/ Resources

AC 61-136B	FAA Approval of Aviation Training Devices and Their Use for Training and Experience
AC 61-98D	Currency Requirements and Guidance for the Flight Review and Instrument Proficiency Check
FAA-S-ACS-6B	Private Pilot - Airplane Airman Certification Standards
FAA-S-ACS-8B	Instrument Rating Airman Certification Standards
FAR Part 61	Certification of Pilots, Flight Instructors, and Ground Instructors
FAR Part 141	Certification of Pilot Schools
FAA Redbird Letter of Authorization(s)	TD/TD2, LD/SD/FMX/MCX, AMS, MX2

4/ About Redbird

Redbird Flight Simulations of Austin, TX was established in 2006 with the specific purpose of making aviation more accessible by using modern technology and careful engineering.

Since its inception, Redbird has delivered innovative, reliable, and high-quality training devices to flight schools, colleges, universities, and individual pilots around the world. With more than 2,000 devices in service worldwide, Redbird has quickly become the fastest growing and most innovative simulator provider in the industry. For more information, please visit www.redbirdflight.com.

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