



Regulations

Flight Simulators for Currency and Proficiency

What counts, what doesn't
and what works

Today's Bootcamp+ Network Programming

What's on for Today?



Live Show – 1st Hour – Wings Credit
Open Mic – 2nd Hour – End
Monitor the Chat – Links/Info
No Wings Credit for This Presentation

Today's Bootcamp+ Network Programming

What's New?



PH Rebroadcasts Wed – 8 pm EDT
Power Hour Podcasts – Full shows
Gaps Course and SmartStudy Pro

Special Announcement



The 300th Power Hour Show is Next Week – August 8th

Special deals, Free Stuff, Games and More

What We Will Cover

- FSTD – Flight Simulation Training Devices – FAR 60.1
- Full Flight Simulators - FFS
- Flight Training Devices - FTD
- Aviation Training Devices – AATD, BATD
- Part 61 and the use of FSTDs



What We Will Cover

- AC 61-136B
- Letter of Authorization - LOA
- What AATD time counts for what?
- Notes on Fidelity – Use for VFR/Maneuvers



Flight Simulation Training Devices - FSTDs

- Big Umbrella for all Devices
- FAR Part 60 regulates all FSTDs
- Part 61 regulates approved used for credit towards a rating or IPC
- Other Parts regulate use and credit – 121/135/141/142

Full Flight Simulators - FFS

- Most credit
- Most realistic
- Full motion
- Can be used for type rating



Flight Training Devices - FTD

- Represent a specific aircraft configuration
- Usually doesn't have motion
- Some older FRASCA 141's were FTDs



Advanced Aviation Flight Training Devices – AATD and BATD

- More realistic
- Must model aerodynamic changes with flight controls
- Defined in AC 61-136B

Basic Aviation Flight Training Devices – BATD

- Must meet certain criteria
- Defined in AC 61-136B appendix B
- Limited credit



Advanced Aviation Flight Training Devices – AATD

- Most of our devices are AATDs
- Defined in AC 61-136B appendix C
- More available credit – For example, Private, Inst, Comm, IPC, ATP



AC 61-136B

- Specifies approval of FTDs
- Specifies how to log time for credit under FAR 61 and 141
- Defines what a student and instructor should have available (QAG, LOA, Performance Info for the A/C configuration)
- [Advisory Circular AC 61-136B](#)



U.S. Department
of Transportation
Federal Aviation
Administration

Advisory Circular

Subject: FAA Approval of Aviation Training
Devices and Their Use for Training
and Experience

Date: 9/12/18

Initiated by: AFS-800

AC No: 61-136B

Change:

Part 61 and the Use of AATDs

- LOA specifies what experience can be obtained.
- LOA is good for 5 years – Device needs to be revalidated/new LOA
- Device type and LOA dictate allowed experience/uses
- Part 61 specific references:
 - 61.1 Aeronautical Experience, Aviation Training Device, Pilot Time, Training Time
 - 61.4 – Qualifications and approvals of flight simulators and flight training devices

Letter of Authorization (LOA)



800 Independence Ave., SW
Washington DC 20591

February 8, 2017

Mr. Mike Altman, CEO
Precision Flight Controls, Inc.
2747 White Rock Road, Suite 100
Rancho Cordova, CA 95742

Dear Mr. Altman:

The Federal Aviation Administration (FAA) last qualified and approved your airplane Precision Flight Controls, Inc. model DCX, DCX ProMotion, DCX MAX, and DCX MAX ProMotion as an Advanced Aviation Training Device (AATD) on October 6, 2014 in accordance with Title 14, Code of Federal Regulations (14 CFR) section (§) 61.4(c).

Review of the revised Qualification and Approval Guide (QAG) dated January 27, 2017, and the functional evaluation conducted on January 27, 2016, 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 Precision Flight Controls, Inc. model DCX MAX airplane AATD is authorized for use in satisfying the following sections of parts 61 and 141:

Precision Flight Controls, Inc. Model DCX MAX
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)(ii) – 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(j)(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 flight training time requirements;
 - *Appendix C* – Up to 40% toward the total Instrument flight training time requirements
 - *Appendix D* – Up to 20% toward the total Commercial Pilot flight training time requirements;

Part 61 and the Use of AATDs

- Part 61 specific references:
 - 61.51(b) – Logbook entries
 - 61.51(g) (4-5) – Logging instrument time
 - 61.51(h) – Logging training time

Part 61 and the Use of AATDs

- Part 61 specific references:
 - 61.64(a) – Use of a flight simulator or flight training device
 - 61.65(a)(5) – Instrument Rating - Training time for the instrument rating
 - 61.65(a)(8)(ii) – Instrument Rating - Use of the FTD on a practical test
 - 61.65(h)(i-ii) – Instrument Rating - Use of FFS, FTDs and ATDs – Time allowed

Part 61 and the Use of AATDs

- Part 61 specific references:
 - 61.109(k) – Private Pilot - Use of a flight simulator or flight training device – 2.5 hrs
 - 61.129(i) – Commercial Pilot - Permitted credit for FTDs for Aeronautical Experience – 50hrs but must be obtained from an authorized instructor
 - 61.159(4)(i) – ATP - 25 hours of the 75 hrs instrument flight time can be counted on FTD

Redbird Article

[The A to Z of ATDs](#)

A banner for the Redbird NXi website. The top half has a solid red background with white text. The bottom half shows a cockpit simulation with various instruments and a pilot's hand on the yoke.

Introducing
Redbird NXi

Next-Generation G1000 Simulation:
Top-Tier Training for Technically Advanced Aircraft

Home Technology Regulations

The A to Z of ATDs

What the Student and Instructor Need

Have the following documents available for review by the student and instructor (being able to retrieve these documents electronically is acceptable):

- LOA for authorized use of the ATD.
- FAA-approved QAG for the ATD being used.
- Performance information for the aircraft configurations being represented.

Logging Time Correctly

All flight time columns remain blank

Log the following:

1. Total time
2. Instruction received
3. Simulated instrument time

[Precision Flight Controls Recommendations for Logging Time](#)

Notes on Fidelity

Considerations:

1. Designed as procedural trainers originally
2. Aerodynamic models are poor at slow speeds and near the ground
3. Visual fidelity changes with monitor size/placement
4. Things are changing quickly

Precision Flight Controls Recommendations for Logging Time

What Time can be Counted?

	Allowances Under 14 CFR	BATD <i>Basic Aviation Training Device</i>	AATD <i>Advanced Aviation Training Device</i>	FTD <i>Flight Training Device</i>	FFS <i>Full Flight Simulator</i>
		Maximum Credit for Minimum Requirements			
Private Pilot Certificate	Part 61	2.5 hrs	2.5 hrs	2.5 hrs	2.5 hrs
	Part 141	5.25 hrs	5.25 hrs	7 hrs	7 hrs
Instrument Rating	Part 61	10 hrs	20 hrs	20 hrs	20 hrs
	Part 141	8.75 hrs	14 hrs	14 hrs	17.5 hrs
Combined Private Pilot Certificate & Instrument Rating	Part 61	20 hrs	20 hrs	20 hrs	20 hrs
	Part 141	17.5 hrs	17.5 hrs	17.5 hrs	24.5 hrs
Commercial Pilot Certificate	Part 61		50 hrs	50 hrs	50 hrs
	Part 141		24 hrs	24 hrs	36 hrs
Flight Instructor Certificate	Part 61				
	Part 141		1.25 hrs	1.25 hrs	2.5 hrs
Instrument Flight Instructor Certificate	Part 61				
	Part 141		0.75 hrs	0.75 hrs	1.5 hrs
Airline Transport Pilot Certificate	Part 61		25 hrs	25 hrs	25 hrs
	Part 141		6.25 hrs	6.25 hrs	12.5 hrs

Special Announcement!

Reminders!



CFI Study Group on Facebook



National Association of
Flight Instructors

Join SAFE, NAFI and the CFI Study Group by Clicking on the Images Above

CFI Bootcamp
Flight Instructor Training