

## **Flight Simulator Training. FAC: 1721**

CATCODE: 171212

OPR: AETC/A3, AETC/A3ZA

OCR: AETC/A3F/A5R, AMC/A3TR, AF/A3O-AT

1.1. **Description.** This facility houses aircraft flight simulators, and other special training devices. It also includes space for administration and records, classrooms, toilet facilities, trainer maintenance, and storage.

1.2. **Requirements Determination.** Flight simulator training facility requirements are normally determined during the weapon systems' conceptual and definition phases and revised as required by later revisions in the system.

1.3. **Scope Determination.** Flight simulator training facilities are normally sized according to the type of simulator installed and vary considerably in floor area from one system to another. **Table 1.1** and **Table 1.2** are examples of typical simulator training facilities and can be used for initial planning purposes before specific simulator systems and their associated space requirements are identified.

1.4. **Dimensions.** The Net Building Area facility requirement for flight simulator training is the sum of the following requirements.

1.4.1. Space is necessary for the simulator itself as determined by Standard Aircraft Flight Simulator Characteristics (Orange Book), Contract End Item (CEI)/Facility Contract End Item (FCEI), or Facility Design Criteria specifications for the specific simulator system under consideration.

1.4.2. Required space includes, but is not limited to, a simulator maintenance office, supply, and storage space; administration space; instructor office and counseling space; technical library; and security storage space. See **Facility Class 6** for administrative space standards

1.5. **Design Considerations.** Ensure design requirements include Air Force Occupational Safety and Health Standard AFOSH Std 91-118, *Training Systems Fire Protection*, and ETL 01-18, *Fire Protection Engineering Criteria - Electronic Equipment Installations*, at a minimum.

**Table 1.1 Space Requirements for Flight Simulator Training.**

	1 Bay		2 Bay <sup>1</sup>		3 Bay <sup>2,3</sup>	
	m <sup>2</sup>	ft <sup>2</sup>	m <sup>2</sup>	ft <sup>2</sup>	m <sup>2</sup>	ft <sup>2</sup>
<b>Net Building Area</b>	708	7,620	1,310	14,130	1,840	19,820
<b>Gross Area Total (Net-to-Gross Multiplier of 1.25%)</b>	885	9,525	164	17,663	2,300	24,775
NOTES: 1. When 4 simulator bays are needed, double the area for a 2-bay simulator. 2. When 5 simulator bays are needed, add the area for a 3 bay and a 2-bay simulator. 3. When 6 simulator bays are needed, double the area for a 3-bay simulator.						

**Table 1.2. Additional Space Requirements for Additional Aircrew Training Devices (ATD) within Flight Simulator Facilities Training (KC-10 BOT; KC-135 BOWST; KC-10 FTD, etc).**

	1 Bay		2 Bay		3 Bay	
	m <sup>2</sup>	ft <sup>2</sup>	m <sup>2</sup>	ft <sup>2</sup>	m <sup>2</sup>	ft <sup>2</sup>
<b>Net Building Area</b>	242	2,600	483	5,200	585	6,300
<b>Gross Area Total (Net-to-Gross Multiplier of 1.25%)</b>	303	3,250	604	6,500	731	7,875