

**BY ORDER OF THE
SECRETARY OF THE AIR FORCE**

AIR FORCE INSTRUCTION 65-503

4 FEBRUARY 1994

Financial Management

**US AIR FORCE COST AND PLANNING
FACTORS**



COMPLIANCE WITH THIS PUBLICATION IS MANDATORY

ACCESSIBILITY: This publication is available for downloading or ordering on the e-publishing website at: www.e-publishing.af.mil.

RELEASABILITY: There are no releasability restrictions on this publication.

OPR: SAF/FMCCF (Capt Rhonda L. Schneider)

Certified by: SAF/FMC (Mr L.T. Baseman)

Pages: 9

Supersedes: AFR 173-13, 31 October 1989.

This instruction implements AFR 65-5, *Cost and Economics*. It contains official USAF cost and planning factors that Air Force activities use to estimate resource requirements and costs associated with Air Force force structures, missions, and activities. The instruction addresses operating and support (O&S) cost estimates for Air Force weapon systems, primarily aircraft. The factors, which reflect Air Force and command-unique actual or projected operations costs, are for general estimates. Replace or combine them with more specific programming, operational, or activity data when it is available.

SUMMARY OF CHANGES

This is the initial publication of AFI 65-503, substantially revising AFR 173-13. Cost factors and narratives previously contained in AFR 173-13 are available electronically on the Financial Management Analysis Bulletin Board.

Section A—Functional Area Responsibilities

1. Related Publications. See [Attachment 1](#).

2. Office of the Secretary of the Air Force:

2.1. SAF/FMC. The Deputy Assistant Secretary of the Air Force (Cost and Economics) oversees the Cost and Planning Factor Program for the Air Force, including logistics, personnel, programming, inflation, and attrition factors.

2.2. SAF/FMCCF. Cost Factors Division personnel develop logistics cost factors, issue guidance for the development of other factors, and validate factors prior to publication. Changes are published as required (when new information is available), but not less than once a year. Factors and detailed explanatory notes are available electronically on the Financial Management Analysis Bulletin Board. If you develop cost estimates or need to build your own cost factors follow the instructions in the tables on the bulletin board. For information on accessing the bulletin board, call DSN 286-5850 or (703) 746-5850.

2.3. Offices of Primary Responsibilities. [Attachment 2](#) lists several other units that develop cost and planning factors.

2.4. HQ USAF, Major Commands (MAJCOM), Field Operating Agencies (FOA), and Direct Reporting Units (DRU) Implement Cost and Planning Factor Policy. These organizations may publish unique factors as supplements to this instruction. One copy of any supplement should be sent to SAF/ FMCCF.

2.5. Air Force Cost Analysis Improvement Group (AFCAIG). The AFCAIG approves logistics cost factors for use by US Air Force units.

Section B—General Information

3. Operating and Support (O&S) Costs. This instruction presents cost and planning factors primarily used to develop and estimate O&S costs or resources needed for Air Force weapon systems. The O&S cost category is a major part of the Life-Cycle Cost (LCC) of a weapon system. Develop O&S cost estimates by accumulating personnel and material costs, both of a direct and indirect nature, which the Air Force incurs while operating, maintaining, and supporting the hardware and software of a weapon system. Use cost factors to predict the resources needed by a weapon system for a budget year, or for a weapon system's economic life.

3.1. Use of Factors. The five types of cost and planning factors can be used in a variety of studies or analyses; they are generally used for budget year or LCC purposes. Current Air Force policy is to use budget year factors over the estimated life of the program, with the exception of Contractor Logistics Support (CLS) as described below.

3.2. Budget Year Factors. Use Factors**.exe file on the Financial Management Analysis Bulletin Board to get Budget Year logistics factors in developing the Air Force budget submission for a given fiscal year for the Future Years Defense Program (FYDP).

3.3. LCC Factors. O&S LCC factors attempt to account for the flow of costs throughout the economic life of a system. Life-cycle factors represent the cumulative average of actual prior year data, from initial operation through an average economic life, projected out to some future budget year. LCC factors are available for Contractor Logistic Support (CLS) aircraft only due to the wide fluctuations in CLS costs over the life of these weapon systems.

Section C—Cost and Planning Factors

4. Logistics Factors. Use variable logistics cost factors for programming and budgeting to increase and decrease baseline programs when the force structure changes. Fixed and variable factors build Program Objective Memorandums (POM) and Budget Estimate Submissions at HQ USAF. Use the detailed instructions in each table to build your changes or estimates.

Table	Descriptive Title
A2-1	Logistics Cost Factors (Current Year)
A3-1	Logistics Cost Factors (Budget Year)
A4-1	Logistics Cost Factors (Budget Year + 1)
A5-1	Reserved for Future Use
A6-1	Contractor Logistics Support (Budget Year)
A7-1	Contractor Logistics Support (Budget Year +1)
A9-1	Contractor Logistics Support (Life Cycle)
A10-1	Unit Flyaway Costs
A11-1	Munitions Acquisition Costs
A12-1	Munitions Training Costs
A13-1	Aviation Fuel Factors and Prices
A14-1	Ground Vehicle O&M Costs
A15-1	Aircraft Reimbursement Rates
A16-1	Tuition Rate Factors

4.1. Personnel Factors. Use these factors for cost studies, economic analyses, component cost analyses, Military Construction Projects (MCP), POM process, Fast-Payback Capital Investment Program (FASCAP), A-76 studies, as well as programming, budgeting, accounting, and recording payments from other government agencies. Detailed instructions on the use of these factors are included in the following tables:

Table	Descriptive Title
A17-1	Typical Acquisition and Training Costs
A18-1A/B	Enlisted/Officer Personnel Acquisition Cost Per Graduate by Air Force Specialty Code
A19-1	Standard Composite Rates by Grade
A20-1	Military Pay Rates Per Unit of Time
A21-1	Military Pay Rates by Flying Status/ Location
A22-1	ANG/AGR Composite Pay Factors/Turnover Rates
A23-1	AFRES Composite Pay Factors/Turnover Rates
A24-1	PCS Cost Per Move
A25-1	PCS Cost Per Work-year

Table	Descriptive Title
A26-1	Civilian Standard Composite Pay Rates, by Grade
A27-1	Civilian Standard Composite Pay Rates, Major Categories
A28-1	Civilian Standard Composite Pay Rates, by MAJCOM/FOA
A29-1	Dependents Per Military Sponsor
A30-1	Retirement and Other Personnel Benefits Acceleration Factors
A31-1	Application of Civilian Base Pay Acceleration Factors
A32-1	Application of Military Std Comp Rate Acceleration Factors
A33-1	FASCAP Military Pay and Benefit Factors
A34-1	Representative Officer Aircrew Training Costs
A35-1	Representative Enlisted Aircrew Training Costs

4.2. Programming Factors. Use Programming factors when you need to identify the manpower compositions of various aircraft for costing purposes. Detailed instructions on the use of these factors are included in these tables:

Table	Descriptive Title
A36-1	Authorized Aircrew Composition - Active
A37-1	Authorized Aircrew Composition - Guard
A38-1	Authorized Aircrew Composition - Reserve
A39-1	Aircraft/Missile factors - Active
A40-1	Aircraft Program Factors - Guard
A41-1	Aircraft Program Factors - Reserve
Table	Descriptive Title
A42-1	Typical Aircraft Squadron Strengths - Active
A43-1	Typical Aircraft Squadron Strengths - Guard
A44-1	Typical Aircraft Squadron Strengths - Reserve
A44-2	Typical Aircraft Squadron Strengths - Reserve
(A44-1 continued)	

4.3. Inflation Factors. Use the following inflation tables to generate inflation rates for the five major categories of funds: Procurement (PROC); Military Construction (MILCON); Research, Development, Test and Evaluation (RDT&E); Operation and Maintenance (O&M); and Fuel. Each rate reflects the particular economic characteristics of the corresponding category.

<u>Table</u>	Descriptive Title
A45-1 to A45-10	USAF Raw Inflation Indices
A46-1	Category Definitions
A47-1 to A47-10	USAF Weighted Inflation Indices
A48-1 to A48-6	Guide to Using Inflation Indices
A49-1	OSD Outlay Rates
A50-1	Historical Aircraft Inflation Indices

4.4. Attrition Factors. Use attrition factors to estimate the number of aircraft remaining after a certain number of years of operation, thus allowing decrements over time in the number of aircraft being costed for operating and support purposes. Attrition factors are also used to determine initial numbers of aircraft needed to fulfill operational needs. Detailed instructions for using attrition factors are included in these tables:

<u>Table</u>	Descriptive Title
A51-1	Attrition Data/Estimated Aircraft Losses
A52-1	Air Peace Attrition Loss Flying Hour Levels
A53-1	Average Attrition Rates/USAF/Reserve/Guard

4.5. Cost Models. The Cost-Oriented Resource Estimating (CORE) model and the Systematic Approach to Better Long-Range Estimating (SABLE) model are two primary models which use factors referenced in this instruction. Reference the following tables for more detail:

<u>Table</u>	Descriptive Title
A54-1 (Figure)	CORE Model Input Information
A55-1	CORE Model
A56-1	Installation Support Non-Pay Cost Factors
A57-1	SABLE Model Squadron Typical Cost Summary
A58-1	SABLE Model Input Example

JOHN W. BEACH
The Acting Assistant Secretary of the Air Force for
Financial Management and Comptroller

Attachment 1**RELATED PUBLICATIONS**

AFI 65-601, USAF Budget Policies and Procedures

AFR 800-11, Life Cycle Cost Management Program

AFM 67-1, USAF Supply Manual

AFR 57-4, Modification Approval and Management

AFR 50-21, Munitions Requirements for Aircrew Training

AFI 65-502, Inflation

AFI 65-504, Independent Review of Commercial Activity Cost Comparisons

AFI 65-505, Economic Analysis and Program Evaluation for Resource Management

Attachment 2

OFFICE OF PRIMARY RESPONSIBILITIES LISTING

A2.1. Logistics Factors:

Factor Area	Data Source	Phone No. Area Code (703)
CLS Factors	HQ AFMC/FMA	DSN 787-4622
	OC-ALC/FMF	DSN 339-7378
Munitions Factors	HQ USAF/ACP/LIWBC	DSN 458-5152
	Hill AFB, Utah	
	HQ USAF/XOOTT	DSN 225-2822 695-2822
Ground Vehicle Factors	HQ USAF/LGTV	DSN 227-3371 697-3371
All Other Logistics	SAF/FMCCF	DSN 227-0141 697-0184

A2.2. Personnel Factors:

Acquisition & Training	HQ ATC/FMA	
Cost Factors	Randolph AFB	DSN 487-6322
Officer Accessions	HQ USAF/DPPP	DSN 227-8917 697-8917
	HQ AU/FMA	DSN 493-5535
Military Pay Tables (Active Forces)	HQ Air Force Academy	DSN 259-2319
	SAF/FMBOP	DSN 225-0036 695-0036 697-0081
	NGB/FMPC	DSN 227-0186 697-0186
Military/Civilian Pay Factors (Guard)		
Military/Civilian Pay Factors (Reserve)	HQ USAF/RECB	DSN 223-2676 613-2676
	HQ USAF/DPPP	DSN 227- 697-3670 695-3594
Officer/Enlisted Turnover Factors		
Turnover Factors (Air Force Reserves)	HQ USAF/REPP	DSN 225- 695-5841

Turnover Factors (Air National Guard)	HQ USAF/REPX ANGRY/DPD	695-6220 DSN 858-8354 (301)981-8354
Permanent Change of Station (PCS) Factor	SAF/FMBOP	DSN 225-4875 695-4875
Dependents Per Military	HQ USAF/DPPP	DSN 225-3594 695-3594
Aircrew Training	ATC/FMA	DSN 487-6322

A2.3. Programming Factors:

Air Crew Composition (Active)	HQ USAF/XOOT	DSN 227-1810 697-1810
Aircrew Composition (Guard)	NGB/FMRP	DSN 227-0186 697-0186
Aircrew Composition (Reserves)	HQ USAF/REXP	DSN 225-9056 695-9056
Aircraft and Missile Factors (Active)	HQ USAF/XOOT	DSN 227-1810 697-1810
Aircraft Factors (Guard)	NGB/FMPE	DSN 225-2061 695-2061
Aircraft Factors (Res)	HQ USAF/REXP	DSN 225-5057 695-5057
Typical Squadron Strength (Active)	HQ USAF/PEMP	DSN 225-4534 695-4534
Typical Squadron Strength (Reserves)	HQ USAF/REXP	DSN 227-8004 697-8004

A2.4. Inflation Factors:

Inflation Indices	SAF/FMCE	DSN 223-9347 613-9347
Guide to Indices	SAF/FMCCF	DSN 227-0184

697-0184

A2.5. Attrition Factors:

HQ USAF/PED

DSN 227-4494

697-4494

A2.6. CORE/SABLE Models:

SAF/FMCCA

DSN 227-0791

697-0184