Appendix

A. Methodology for Sizing the Officer Requirements Options

This appendix provides a short discussion of the initial data and the methodology used to model our various officer requirements options. It explains the relationship of the option to existing historical or projected officer requirements of the military services and states the modeling processes performed. The specific data on each officer requirements options have been archived and retained at the Logistics Management Institute.

The officer grade and skill data provided by the military services were the bases for the modeling of the Baseline Force presented in Chapter 2, and the Options 0 through 5 were officer forces introduced in Chapter 3. In particular, projected end Fiscal Year (FY) 1994 service data were the foundation of the Baseline Force. An historical end FY 1990 data set was the starting point for Option 2. Projected end FY 1999 data served as the initial underpinnings for the Option 0. The remaining Options 1, 3, 4 and 5 were then alternatively modeled using the data set established in Option 0.

Option 2 is the largest officer requirements option of those examined. The end FY 1990 data set contained nearly 240,000 officer requirements corresponding to an active force end strength of approximately two million. Also, the FY 1994 data consisted of active officer requirements corresponding to a 1.6 million total military end strength. Accordingly, Option 2 was modeled as a force midway between the FY 1990 and FY 1994 forces. To accomplish this, the FY 1990 data were decremented by approximately half the drawdown indicated between the FY 1990 and FY 1994 forces.

The active end strength associated with FY 1999 is 1.4 million as specified in the Bottom-Up Review.¹ The data set provided by the military services projected to this year did not contain all of the reductions necessary to achieve the directed end strength. Only the Marine Corps requirements were consistent with that service’s DoD projected end strength. Consequently, the projected FY 1999 data (about 197,000 officer requirements) were downsized for the Army, Navy, and

Air Force to 177,000, a level consistent with a 1.4 million end strength. These reductions of about 10 percent were taken in grades and skills commensurate with the drawdown pattern projected for each particular service. This sizing of 177,000 became the officer requirements for the Notional Force in Option 0. Lastly, the officer positions were grouped by selected DoDOCs into the four skill groupings defined in Chapter 2 and used in Chapter 3.

The decision rules we developed for Option 0 assigned all officer requirements in each standard two-digit DoDOC occupational group to one of our four major skill groupings. The assignments were decided based upon reviews of current service practices. In most cases, the assignment of each occupational group to one of the four skill groupings is representative of the service(s) that most closely parallels separate or special management of that group. For instance, the Navy is the primary model for the specialist and support groupings, since that department currently practices separate management for those type skills. In some cases where no current pattern could be established, such as behavioral scientists, the judgment on assignment to a particular occupational group was arbitrary. For instance, where the primary service management experience was in the line, those skills were retained in the line skill grouping. This is particularly the case where the occupational group involved a small population. In these latter cases, the arbitrary assignment made no significant shift in the overall makeup of requirements. Our primary objective was to demonstrate, at an aggregate level, officer requirements that are largely homogeneous in nature for separate management policies. There is no intention to imply a high degree of precision to this regime. These assignments are described in specific detail below for line, specialist, support and professional skill groupings.

The line skill grouping consists of the following two-character DoDOC groups:

1B  Executives, (not elsewhere covered)
2   All tactical operations officers
3   All intelligence officers
4J  Safety
5D  Social scientists
5E  Behavioral scientists
7B  Training administrators
7H  Police
7L  Inspection
9   Nonoccupational
The *specialist* skill grouping contains the following DoDOCs:

- 4B Electrical/electronic
- 4C Communications and radar
- 4D Aviation maintenance and allied
- 4G Ship construction and maintenance
- 4H Ship machinery
- 4N Other engineering
- 5A Physical scientists
- 5B Meteorologists
- 5C Biological scientists
- 5J Mathematicians and statisticians
- 5K Educators and instructors
- 5L Research and development coordinators
- 5N Scientists and professionals N.E.C.
- 8D Procurement and production

The *support* skill grouping consists of the following DoDOCs:

- 4A Construction and utilities
- 4E Ordnance
- 4F Missile maintenance
- 4K Chemical
- 4L Automotive and allied
- 4M Surveying and mapping
- 5M Community activities officers
- 7A Administrators, general
- 7C Manpower and personnel
- 7D Comptroller and fiscal
- 7E Data processing
- 7F Pictorial
- 7G Information
- 7N Morale and welfare
- 8A General logistics
- 8B Supply
- 8C Transportation
8E Food service
8F Exchange and commissary

The professional skill grouping is defined to consist of the following DoDOCs:

5F Legal
5G Chaplains
6 All health care officers

The same modeled data, Option 0, including skill groupings, became the starting point for Options 4 and 5 directly. It was also the precivilianizing size for Option 3 and the starting point for the further downsize for Option 1.

For Option 1, it was necessary to generate officer requirements consistent with an active end strength of 1.0 million. Observations of officer content at active strengths of 2.0, 1.8, 1.6 and 1.4 million led to an estimate of 128,000 for the officer requirements of a 1.0 million force. As above, the FY 1999 data were reduced in a fashion reflecting an additional drawdown comparable in grade and skill content to that indicated by the pattern established by the FY 1990 and FY 1999 data sets. This was an additional 28 percent reduction beyond FY 1999 modeled levels. At variance from earlier options, the Marine Corps shared a proportion of the officer reductions for Option 1.

For the Streamlined and Reengineered Force in Option 3, the Option 0 data set was first subjected to civilianization—removal of selected officer requirements—using a prescribed set of percentages and common DoDOC areas.

From support: 50 percent of 4A, 7C, 7D, 7E, 7F, and 7G; all of 8F and 8G
From specialist: 50 percent of 5L and 8D (R&D and procurement)
From professional: 50 percent of 5F and 5G (Legal and chaplain); 25 percent of Area 6 (health care)

The remaining officer requirements were then modeled to downgrade some 4,000 field-grade officer position requirements—about 25 percent of the total field-grade officer requirements—in service management headquarters activities and centralized logistics DPPCs to O-3 position requirements. The resulting officer requirements in Option 3 were both smaller and with reduced field-grade content than Option 0.

Options 4 and 5 were modeled directly from Option 0. They retain the same size and service shares of the officer requirements. Simply put, selected officer requirements by specific DoDOC were moved from either the line skill grouping
in Option 4 to the specialist skill grouping or in just the opposite manner for Option 5. In Option 4, the Specialized Force option, fighter and bomber aircrew officers and submarine officers requirements in Option 0 were moved from the line to the specialist skill grouping using the following DoDOCs:

2A Fixed-wing fighter and bomber pilots
2D Aircraft crews
2E(-) Ground and naval arms (submariner positions only)

In Option 5, the Generalist Force option, selected engineering officer positions within the officer requirements of Option 0 were moved from the specialist to the line skill grouping using the following DoDOCs:

4B Electrical/electronic
4C Communications and radar
4G Ship construction and maintenance
4H Ship machinery

Grade and specific skills associated with archived service officer billets files were unaffected by the skill group changes in both Options 4 and 5.