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INSTITUTE FOR DEFENSE ANALYSES

**Army TOE and TDA Personnel
FY 1979–FY 1999**

John R. Brinkerhoff

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PREFACE

This paper was prepared by the Institute for Defense Analyses in partial fulfillment of the task entitled "Organization and Manning of the Institutional Army." Duane Pace and Mike Dove of DMDC were very helpful in providing data from the FORMIS files. Mike Leonard of IDA reviewed the document.

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SUMMARY

This paper describes the allocation of military and civilian personnel strength of the Army between TOE and TDA units over a period of 20 years from the end of FY1979 to the end of FY1999. The purpose of the analysis was to determine if there was evidence that the Institutional Army had expanded significantly in recent years and to evaluate the use of the TOE-TDA distinction in explaining the composition of the Institutional Army. The results fail to establish that the Institutional Army has grown disproportionately in the past 20 years. The results also indicate that the distinction between TOE and TDA units does not provide an adequate basis for understanding and explaining the size and composition of the Institutional Army.

ARMY TOE AND TDA PERSONNEL FY1979–FY1999

This document is an interim report on a project to investigate the Institutional Army, which is that part of the Army that includes the training establishment, medical care facilities, depots, arsenals, garrisons, and similar activities in CONUS and overseas theaters. The Institutional Army is ill defined, and it has been necessary at the outset of the study to find a way to distinguish between the Institutional Army and the Expeditionary Army that goes off to war in the various theaters of operations as needed. There are several ways to do this. One way to identify the Institutional Army is to use the Future Years Defense Program (FYDP) structure. Another way is to use the Defense Mission Categories (DMC) that realign the FYDP elements into different categories. Still another way is to reallocate FYDP elements into new categories that are designed specifically to define the Expeditionary Army from the Institutional Army. Finally, it might be possible to define the Expeditionary Army as the set of TOE units and the Institutional Army as the set of TDA units. This paper reports on the results of using the last method.

TOE AND TDA UNITS

The Army distinguishes between units that perform specific tasks and tactical units that operate in the field.¹ In the 19th century, the distinction was between staff and line. The staff consisted of the bureaus, departments, and corps, such as the Adjutant General's Department, the Quartermaster Department, the Medical Department, and the Corps of Engineers. The line consisted of cavalry, infantry, and artillery regiments. Staff organizations were manned by permanent military personnel, military personnel detailed from line organizations, and civilian employees. Line organizations consisted entirely of military personnel.

Tables of organization that prescribed the organization and personnel for line units were initially published in Field Service Regulations starting about 1905. Separate

¹ This section is based largely on an information paper by John B. Wilson, "History of Tables of Distribution and Allowances (TDA) Units," Center of Military History, 30 May 1995.

tables of organization were first published in 1914. Tables of organization (for personnel) and tables of equipment were published separately until 1943, when they were consolidated into combined Tables of Organization and Equipment (TOE).

In 1936, the Army adopted the term “table of distribution” to describe the document that authorized personnel for the “staff” units. A table of allowances was used to describe the equipment and supplies authorized for these units. In 1943, the table of distribution and the table of allowances were combined to form a single establishment document, called the “table of distribution and allowances” (TDA).

TDA units are organized to perform specific missions for which there are no appropriate TOEs. In some cases, TDA units are discontinued after the mission for which they were formed has been accomplished. TDA units are considered non-deployable even when located in an overseas theater. Their mission generally ties them to a specific location. TDA units are staffed by both military personnel and civilian employees. In some cases, provisional units are organized initially under TDAs until proper TOEs can be established. TDA units tend to be multifunctional and are sized according to estimated workload. As workload fluctuates, TDA units expand or contract as appropriate.

TOE units are constituted and activated to provide deployable units with a relatively fixed amount of combat or support capability. TOE units are staffed entirely by military personnel, but some TOE units (such as a headquarters) may have a non-deployable TDA augmentation that includes civilian employees. For the army in the field, more or less capability is achieved by adding or removing entire TOE units or parts of TOE units.

There are some instances in which a unit could be formed either under a TOE or a TDA. For example, the military police company at an installation could be either a TOE or TDA unit. A TOE MP company would be deployable; if deployed, it would leave the garrison without a security capability. A TDA MP company, on the other hand, would remain with the installation regardless of other contingencies.

Thus, simply distinguishing between the deployable TOE units and the non-deployable TDA units might provide a way to separate the Expeditionary Army from the Institutional Army. This was the purpose of the investigation described below.

TOE VERSUS TDA PERSONNEL STRENGTH

The analysis described in this paper compares the assigned personnel strength in TOE units with the assigned personnel strength in TDA units at 5-year intervals for the past 20 years. Data were obtained for strengths as of the end of fiscal years 1979, 1983, 1987, 1991, 1995, and 1999. The data for this paper, obtained from the FORMIS of the Defense Manpower Data Center, are based on Service reports of unit types.

The raw data show three categories: TOE, TDA, and Unknown. The number of personnel in the unknown category is small compared with the other two categories, and all unknowns have been combined with the TDA unit totals. Also, individuals accounts for the Active Army have been included in the active military TDA unit totals. Finally, the National Guard and Army Reserve data are for Selected Reservists only. Non-selected reserve personnel are trained individuals in the IRR, ING, or the Retired Reserve. For the purpose of this paper, these data are not included in TOE or TDA unit totals.

There are some problems with this convenient categorization. For example, a small but significant number of civilians (circa 24,000) are shown in the TOE units. This is not only against Army practice but is misleading because TOE units are supposed to be deployable to a theater of operations, and civilians are not considered deployable in the same sense as military personnel. The available data do not provide enough detail to determine the TOE units to which these civilians are assigned.

The remainder of this paper consists of six pairs of charts showing the TOE/TDA unit composition of the Active Army military personnel, Active component military personnel and civilian employees, National Guard military personnel, Army Reserve military personnel, total military personnel (in all three components), and total military and civilian personnel. The data are shown for each of these personnel types in both absolute terms (numbers of personnel) and proportional terms (percentage of personnel). A short commentary is provided for each personnel type, and some general observations are provided at the end of the paper.

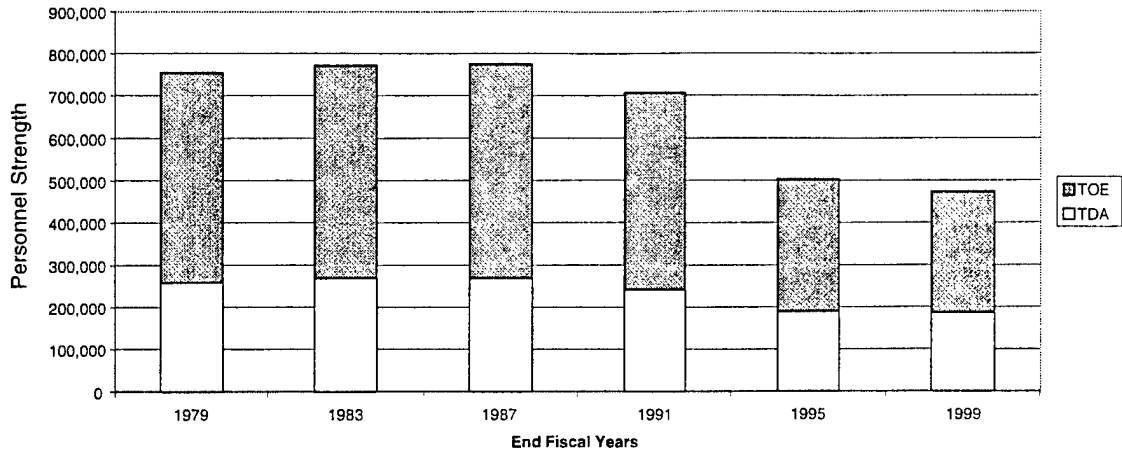


Figure 1. Active Army Military Personnel

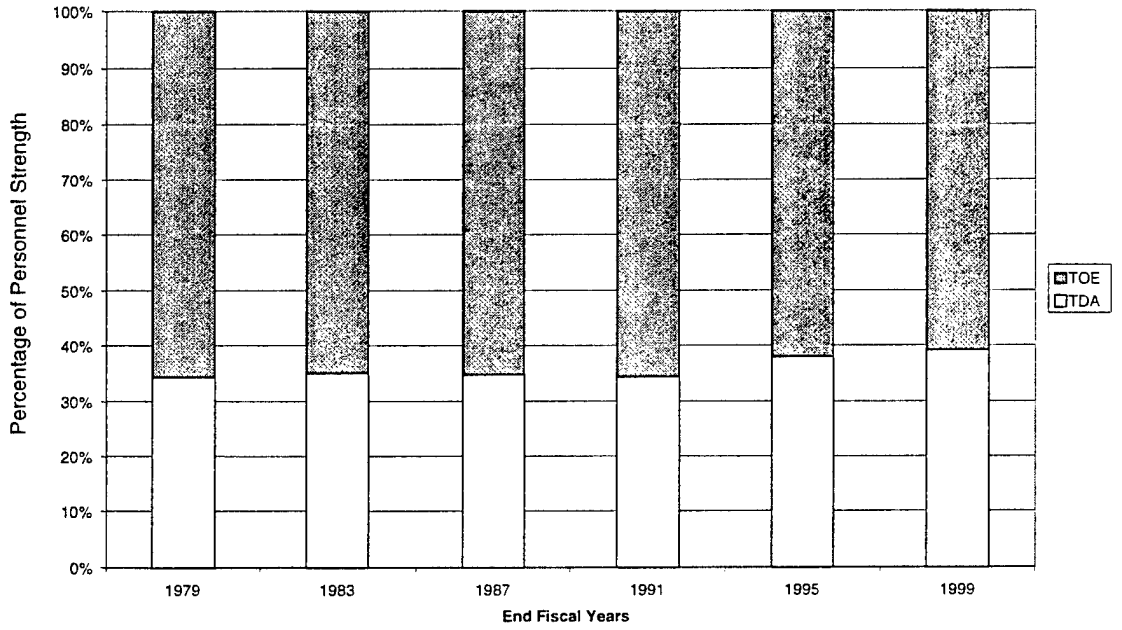


Figure 2. Active Army Military TOE/TDA Mix

Figures 1 and 2 show the absolute personnel strengths and percentages of Active Army military personnel assigned respectively to TOE and TDA units. Although the number of Active component military personnel in TDA units has declined since the end of FY1979, the percentage of Active military personnel in TDA units has increased from 35 percent to almost 40 percent.

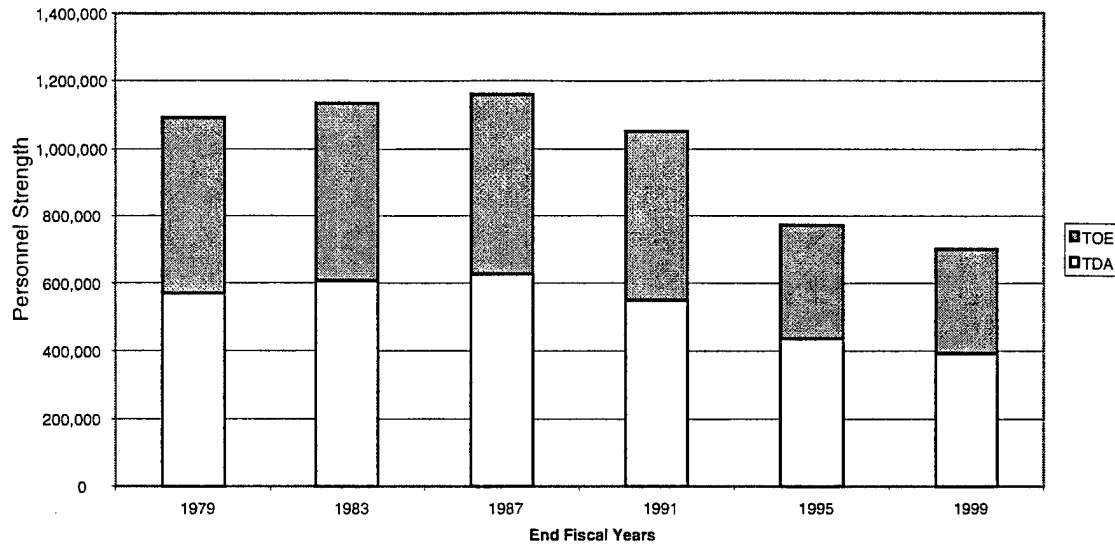


Figure 3. Active Army Military and Civilian Personnel

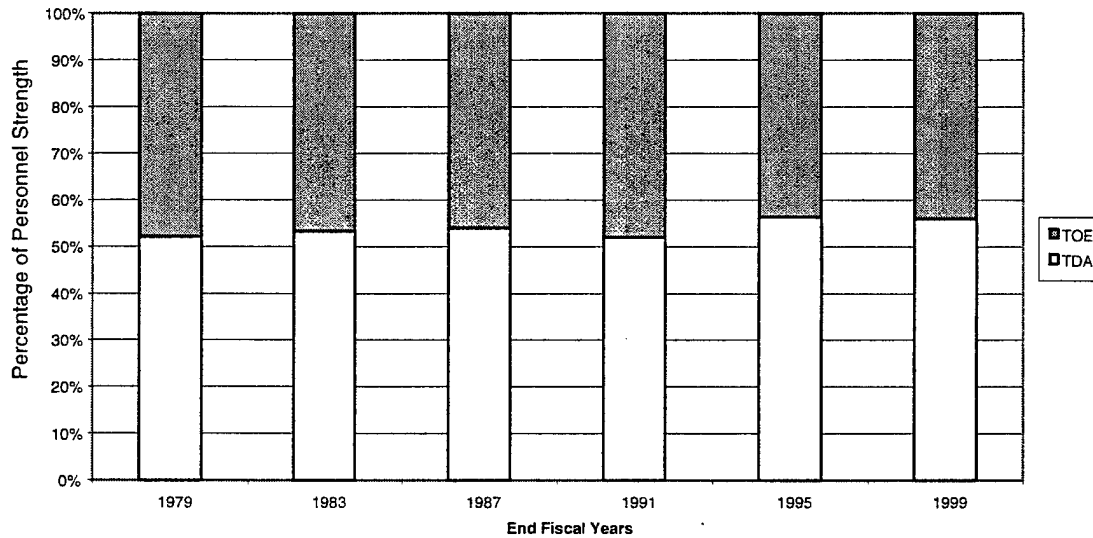


Figure 4. Active Military Civilian TOE/TDA Mix

When the civilian employees are combined with Active Army military personnel, the number and percentage of personnel in TDA units increase (Figures 3 and 4). The percentage chart indicates that the percentage of Active personnel in TDA units has increased from just over 50 percent to about 56 percent since FY1979.

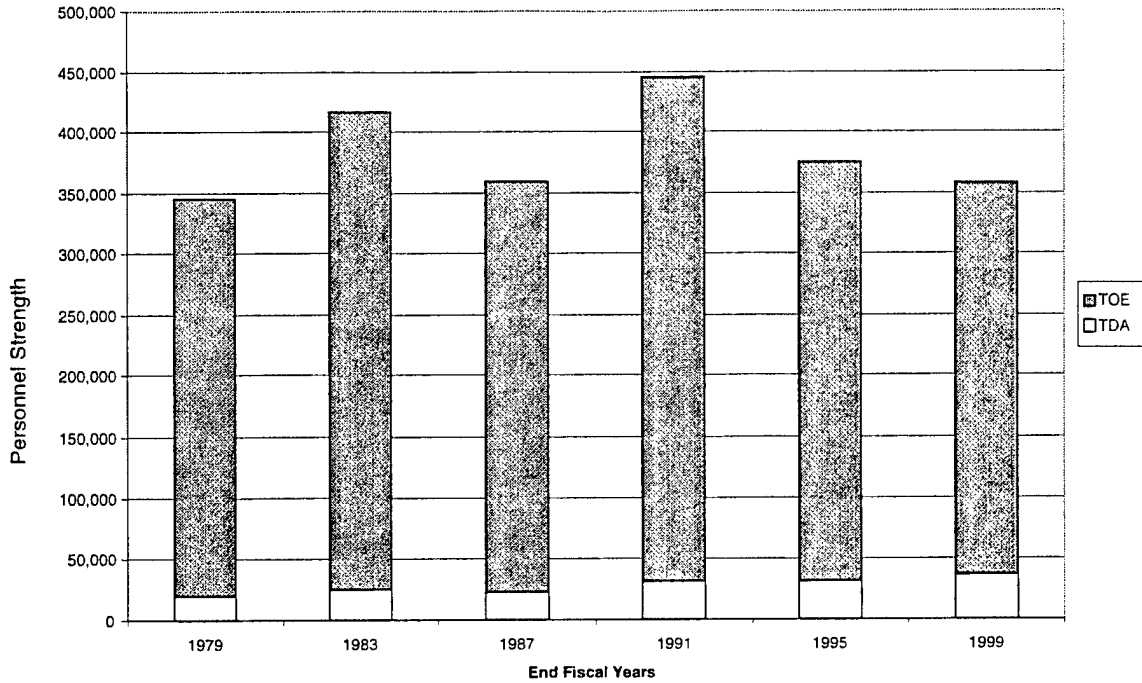


Figure 5. Army National Guard Military Personnel

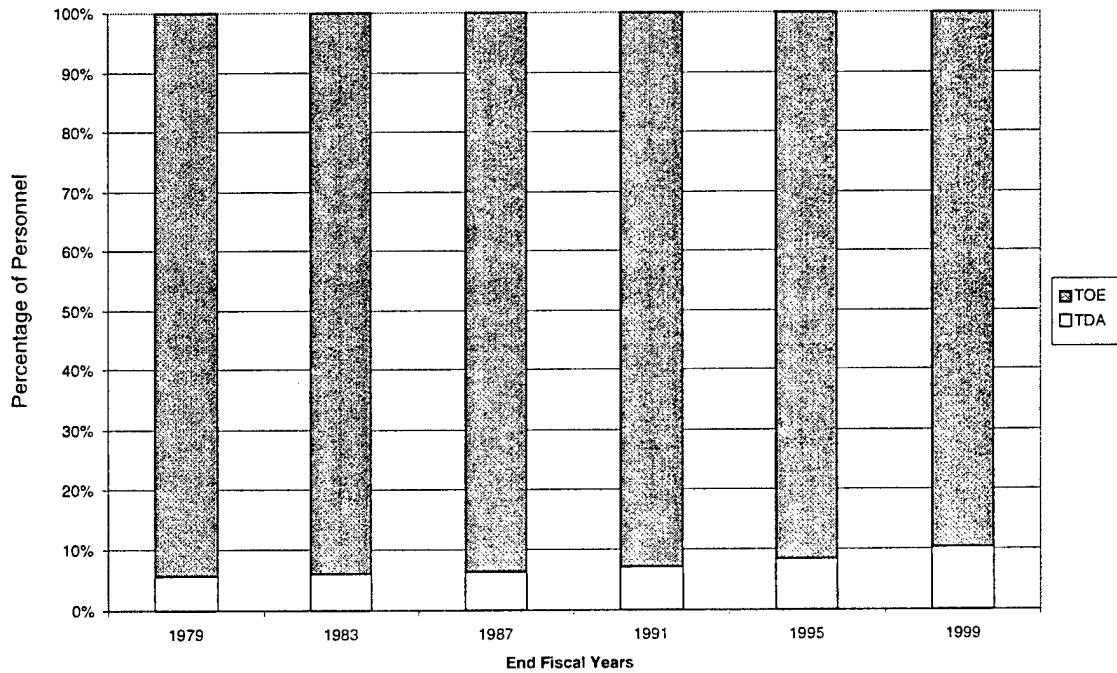


Figure 6. Army National Guard Military Personnel TOE/TDA Mix

As Figures 5 and 6 indicate, the bulk of Army National Guard military personnel are in TOE units. In FY1999, however, about 36,500 were in TDA units, and the percentage of National Guard military personnel in TDA units increased from 5 percent to 10 percent.

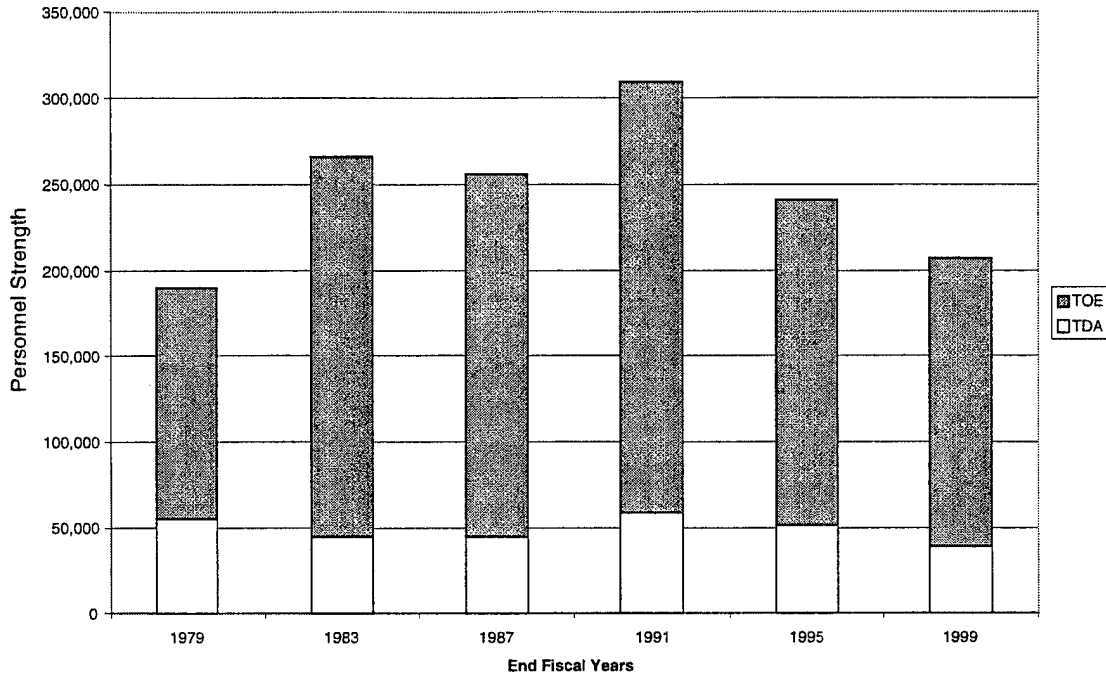


Figure 7. Army Reserve Military Personnel

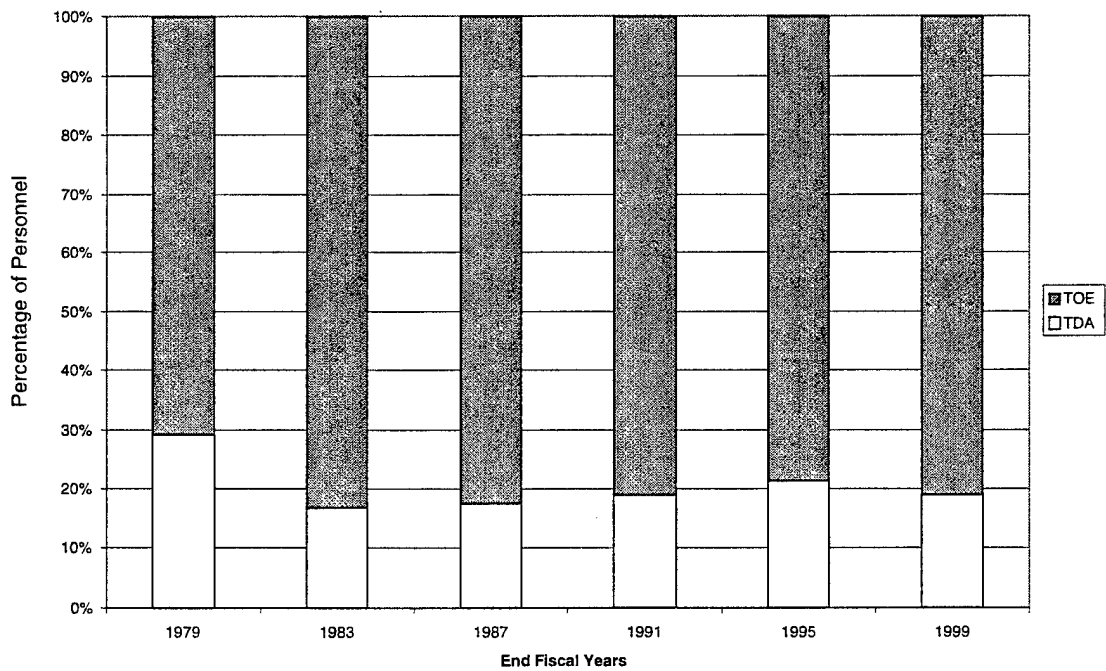


Figure 8. Army Reserve Military Personnel TOE/TDA Mix

The Army Reserve has a significant number of military personnel in TDA units. This number has fluctuated slightly above and below 50,000 personnel in the 20-year period shown. Because of a larger number of TOE units, the percentage of Army Reserve military personnel in TDA units went from 30 percent in FY1979 to about 20 percent in FY1999.

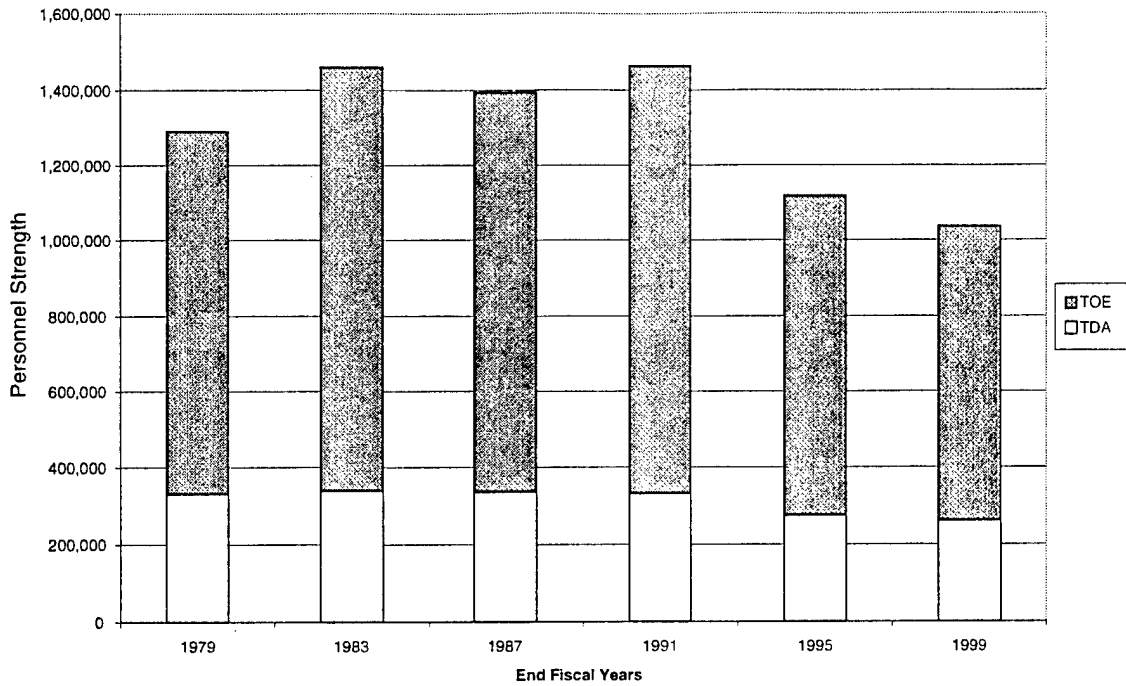


Figure 9. Total Army Military Personnel

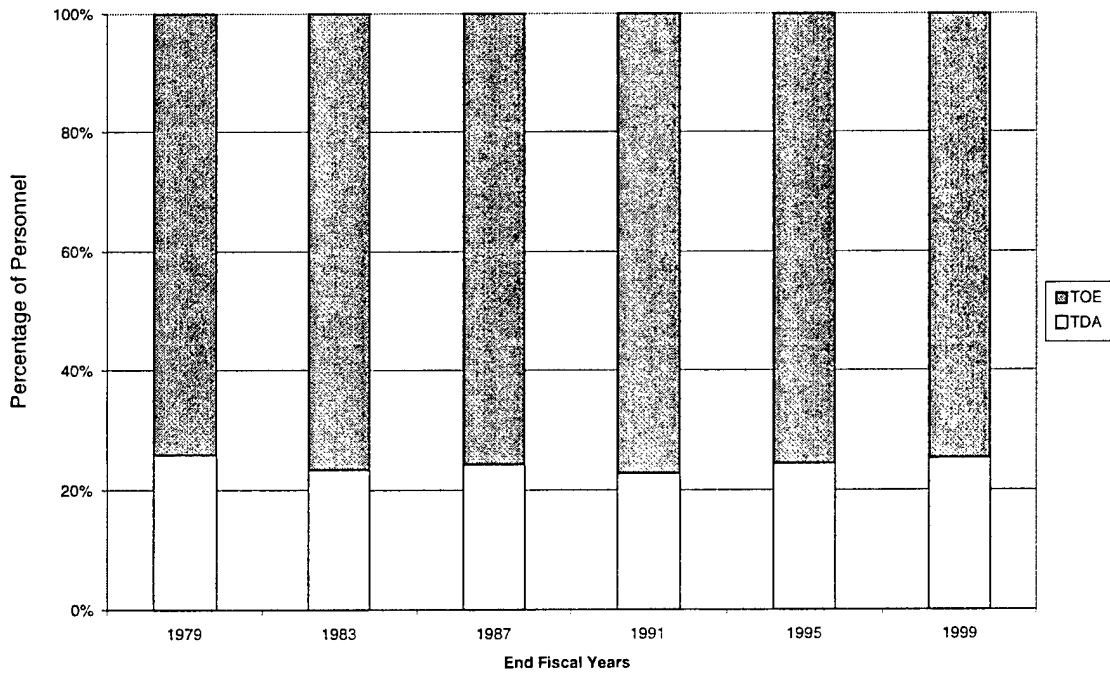


Figure 10. Total Military Personnel Mix

When all military personnel (Active, Guard, and Reserve) are aggregated, the trend becomes one of smaller numbers of military personnel in TDA units and a percentage of military personnel in TDA units that is between 25 percent and 30 percent during the entire period.

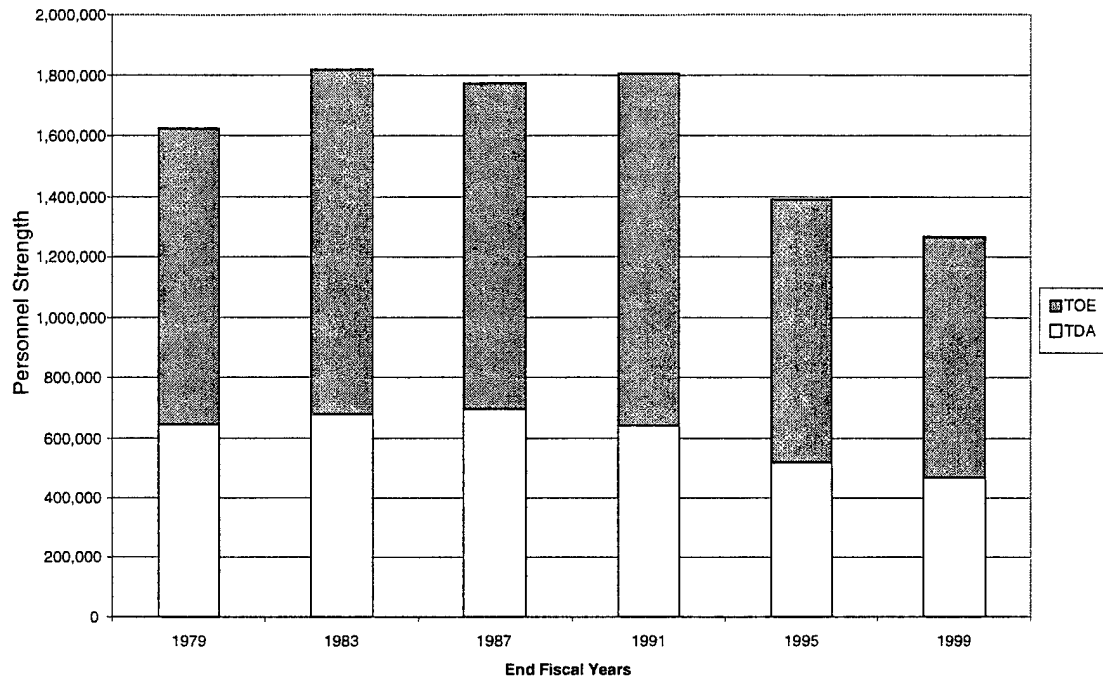


Figure 11. Total Army Military and Civilian Personnel

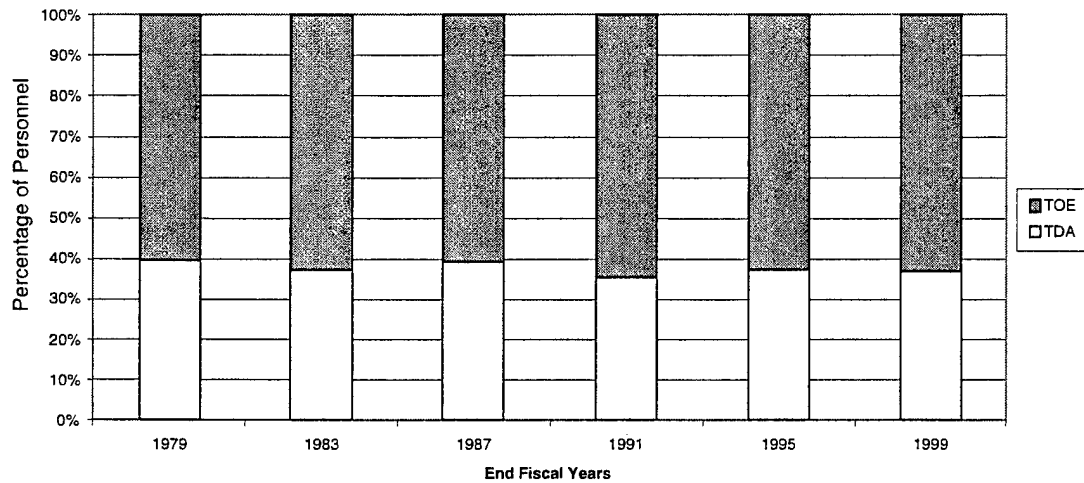


Figure 12. Total Army Military and Civilian Personnel TOE/TDA Mix

When the entire Army—military and civilian personnel—is divided into TOE and TDA units, the situation appears somewhat different than when only the Active Army military personnel are considered. The percentage of personnel assigned to TDA units remains at 40 percent or slightly less during the entire 20-year period of interest. This does not hide the fact that one of every three military and civilian personnel who work for the Army is in a TDA unit.

Table 1 shows the data upon which Figures 1 through 12 have been constructed.

Table 1. Defense Manpower Data from FORMIS

Category	1979	1983	1987	1991	1995	1999
Active Military Personnel						
TOE	496,143	504,700	506,408	464,587	313,034	288,073
TDA	258,286	220,560	270,253	241,630	191,676	185,677
Active Military & Civilians						
TOE	522,121	529,101	534,103	504,268	336,821	309,131
TDA	570,223	606,714	626,966	548,106	437,188	392,844
Army National Guard						
TOE	325,839	392,056	336,361	414,726	343,418	320,961
TDA	19,689	25,124	22,248	31,395	31,512	36,508
Army Reserve						
TOE	134,847	221,315	210,941	250,966	190,033	167,839
TDA	55,143	44,873	44,633	58,715	51,267	38,997
Total Military Personnel						
TOE	956,829	1,118,071	1,053,710	1,130,279	846,485	776,873
TDA	33,348	340,557	337,134	331,740	274,455	261,182
Total Army Personnel						
TOE	982,807	1,147,472	1,081,405	1,169,960	870,272	797,931
TDA	645,055	676,711	693,847	638,216	519,967	468,349

CONCLUSION

The data used in this paper do not provide a basis for making judgments about the appropriateness of the Army's allocation of personnel between TOE deployable units and TDA support units. There are no trends over the past 20 years that might be attributed to inefficiencies in the Army. It is true that a higher proportion of Active military personnel are in TDA units in FY1999 than during earlier years, but this may be because Active military strength has been reduced sharply in recent years.

Merely dividing the Army into TOE units and TDA units does not reveal the internal composition of either part. There are many TOE support units, and some TDA units provide important services for missions other than support of the TOE units. Lacking a decisive result from this analysis, it is necessary to find another way to determine the Army's composition and assess the composition of the Institutional Army.

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