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## THESIS

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A STUDY OF THE ARMY'S WORD PROCESSING PROGRAM  
WITH CASES

by

John M. Hardesty

June 1980

Thesis Advisor: K. J. Euske

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A Study of the Army's Word Processing Program  
With Cases

by

John M. Hardesty  
Captain, United States Army  
B.S., Eastern Kentucky University, 1973

Submitted in partial fulfillment of the  
requirements for the degree of

MASTER OF SCIENCE IN MANAGEMENT


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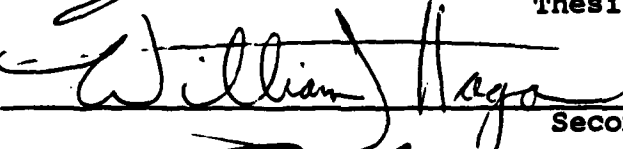
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## ABSTRACT

The purpose of this study is to demonstrate potential advantages and disadvantages that could result from the implementation of a Word Processing/Administrative Support System. A model is presented on planning, implementing, and maintaining a Word Processing/Administrative Support System. A comparison is made of the guidance contained in AR 340-8 and the guidance contained in the current Word Processing literature as pertains to the activities presented in the model. Recommendations are made for improving AR 340-8 based on an analysis of the material presented in the regulation and the Word Processing literature. In addition, two teaching cases were developed which deal with Word Processing/Administrative Support problems.

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## I. INTRODUCTION

The cost of written communications has increased more rapidly than the productivity of the typist [Smith, 1979]. Law and Pereira [1976] reported that the cost of the typed page rose 40% from 1971 to 1974 while the productivity of the typist has increased minimally since World War II. Trends have been reported which have impacted either directly or indirectly on the cost of word processing (WP) and administrative support (AS) services in private and public institutions:

- A secretary spends 18.4% of the time waiting for work [Petrovich, 1978].
- Only 56.9% of the duties performed by secretaries were for tasks for which they were hired [Petrovich, 1978].
- In a sample taken by Law and Pereira [1976], only 3% of all documents were longer than 50 pages but they constituted 58% of the workload.
- In 1975, administrative costs constituted 40% to 50% of total company costs, an increase from 20% to 30% reported a decade earlier ["The Office of the Future," 1975].
- Labor costs in the nonmanufacturing sector have been rising at twice the rate experienced in the typical factory [Law and Pereira, 1976].

- Law and Pereira [1976] estimated that seven out of ten workers will be in service related jobs by 1980.

Lack of investment in capital equipment for WP/AS functions has been cited as a causative factor for many of these trends. Investment in capital equipment per office worker was reported at \$2,000 annually, while \$25,000 was spent for each manufacturing employee during the same period. However, the acquisition of capital equipment for some of the WP/AS functions has started to increase because of competition in the WP market and technological advancements have driven down the cost of WP/AS equipment ["The Office of the Future," 1975].

#### A. DEFINING WORD PROCESSING AND ADMINISTRATIVE SUPPORT

For the purpose of this study, the definitions of WP and AS provided by the Army [DA, 1979] will be used. Word Processing is defined as a system that covers the activities involved in typing, transcribing, proofreading, editing, and performing other related tasks. Administrative Support is defined as a system that covers the activities involved in filing, copying, duplicating, and distributing written communications; handling telephone inquiries; and performing other secretarial functions in support of a principal. A principal is defined as a person who can influence or direct the tasks performed by WP/AS personnel.

Thomas [1975] reported that the integrated approach developed by the government laid the groundwork for viewing

WP/AS as a system. The federal government views WP/AS as the efficient and effective production of WP/AS services at the lowest possible cost through the combined use of systems management procedures, automated technology, and accomplished personnel [Thomas, 1975].

#### B. POTENTIAL ADVANTAGES OF WP/AS SYSTEMS

As technology advances, improvements in the means by which tasks are performed are often realized [Webber, 1979]. This has been the case with the recent advancements made in WP/AS equipment. Wohl [1977] reported that with the introduction of IBM's Magnetic Tape Selectric Typewriter (MT/ST) in 1964, the traditional method for performing WP/AS functions began to be questioned. He stated that the trend to review traditional WP/AS procedures has continued because of industry desire to reduce costs and the equipment makers' marketing efforts.

A review of the current literature revealed that organizations in both the private [Burns, 1979] and public sectors [Thomas, 1975] have realized advantages from the implementation of WP/AS systems. The most common criteria used for determining advantages resulting from system implementation are reduced costs, increased services and flexibility, increased career opportunities, and other intangible benefits [Malone, 1976].

Increases in productivity that resulted from centralization and/or improved WP/AS equipment have been reported as a significant factor in reducing WP/AS costs [Primrose, 1975].

Research conducted by Law and Pereira [1976] reported that a secretary only produced ten typed words per minute on the average when errors, telephone interruptions, and other disruptions were taken into account. However, in WP/AS Centers operating in the same environment, 30 words per minute were produced. Other reports of increased productivity and reduced operating costs that resulted from the use of WP/AS systems were reported by Smith [1979], Straham [1976], and Adams [1978].

Burns [1979] predicted technological trends which will result in additional increases in productivity. He reported that an 8K processor capable of performing text editing would drop from \$200 to \$50 in price over the next ten years. By 1986 a typewriter could be equipped with 256K memory for less than \$100. He predicted that mainframe computer systems will begin to manage correspondence and other text files in addition to their data processing chores, thereby reducing paper costs even further.

Burns (1979) reported that as organizations grow more complex, there is a greater need for more responsive administrative support. Carls [1978] reported that large scale on-line WP/AS systems were developed to meet this need by accessing other subsystems, supporting concurrent users and accommodating growth, processing large documents more easily, providing access to a large volume of documents, and making massive or frequent changes easier to accomplish. Schanstra

[1979] argues that the more flexible the system, the more economical it is in terms of corporate investment.

Smith [1975] reported that, potentially, one of the greatest impacts of introducing a WP/AS system is the development of a hierarchical structure through which a secretary can advance. He stated that many WP/AS systems were developed with this structure in hope of increasing career inducements. Instead of advancement being directly related to a principal's professional growth, there is now potential for promotion of the WP/AS staff to jobs of increased responsibility such as WP/AS Center Manager [Smith, 1975].

Burns [1979], Kreighbaum [1975], Oman [1977], Sweet [1975], and Williams [1977] have reported other benefits that were attributed to the implementation of WP/AS systems. Sweet [1975] reported that new WP/AS equipment has helped the poor typist because of the equipment's revision features. This is a significant feature considering the reported increased need for erasure-free correspondence [Kreighbaum, 1975]. Burns [1979] reported that WP/AS systems reduce the time required to assemble information or files. Other reported benefits were the reduction of the routine aspect of retyping and time spent by professional personnel in proofing successive drafts of a document [Oman, 1977; Williams, 1977].

#### C. MAJOR REASONS FOR WP/AS SYSTEM FAILURE

Although institutions have realized reduced WP/AS costs, increased WP/AS services and flexibility, increased WP/AS



career opportunities, and other intangible benefits which resulted from a newly implemented WP/AS system; other institutions have failed to realize such benefits. Malone [1976] reported that WP/AS systems resulted in increased costs, reduced productivity, and management and employee dissatisfaction which resulted in abandonment of newly implemented systems.

Five major reasons for WP/AS systems not realizing their full range of possible benefits are found in the literature: lack of top management support, improper planning or equipment selection, lack of adequate training and personnel selection, failure to recognize human needs, and failure to develop control systems.

1. Lack of Top Management Support

Malone [1976] reported that most WP/AS experts agree that lack of top management support is the most common reason for a WP/AS system failure. The most common explanation given for this lack of support was that many principals viewed their secretary as a symbolic reward for having climbed the corporate ladder [Gottheimer, 1978]. He stated that without this support WP/AS systems are more likely to fail.

2. Improper Planning or Equipment Selection

Burns [1979], Malone [1976], and Law and Pereira [1976] have identified improper planning or equipment selection as reasons for WP/AS system failure. WP/AS planners have stated that the task of planning for a WP/AS system is more difficult than it was in the early days of the computer revolution ["The

Office of the Future," 1975]. Burns [1979] and Malone [1976] stated that planning for the equipment aspects of the system is often overemphasized while personnel considerations are frequently overlooked. Law and Pereira [1976] reported that failures resulted from purchasing the wrong or too much equipment. They attributed over-reliance on the vendor in determining equipment requirements as the source of the problem. They warn of vendors pushing for equipment sales, not viable systems. Smith [1979] reported that large, bureaucratic, unresponsive WP/AS systems were created because of over-reliance on the vendor for implementation planning and equipment selection.

### 3. Lack of Adequate Training and Personnel Selection

Wohl [1977] reported that even if the best hardware was selected, systems failed because management did not simultaneously hire and train qualified people. However, Christensen [1977] concluded that there is a lack of qualified WP/AS personnel because many colleges and universities do not recognize the need for WP/AS management and skill courses. In addition, Burns [1976] warns of increased costs because of failure to train principals in new WP/AS techniques. He reported that dictated letters have a marked tendency to be longer and less efficient than handwritten versions and because of revisions, they sometimes cost more to produce.

### 4. Failure to Recognize Human Needs

Failure to recognize human needs by designing systems around equipment, not people, has resulted in system failures. Arnstein [1977] reported a case where the WP/AS Center personnel

were kept apart from the rest of the office community. Problems developed from too much regimentation and no direct involvement with principals. The result was an atmosphere which prompted numerous employee complaints which caused management to revert back to the former WP/AS system [Arnstein, 1977]. Smith [1975] stated that a system that had been in operation for more than three years failed because management couldn't continue to motivate the secretaries. Failures were also reported because management did not add variety to job tasks. Christensen [1977] states that some WP/AS experts recommend no more than four hours at a time in front of a full page Cathode Ray Tube (CRT). He reports that reduced eyesight has been attributed to prolonged use of the CRT.

##### 5. Failure to Develop Control Systems

Malone [1976] reported that failure to develop systems to measure and control productivity, quality, and turn-around time has caused system failures. He reported that even if care was taken to develop a measurement system, if the system is not monitored failure can result. Other reports indicated that if the evaluation system uncovered inefficiencies, there was a tendency to blame the equipment even if the problem was the people or the office organization [Malone, 1976]. In addition, Phillips [1978] warned that productivity should be closely monitored because the same nontyping tasks that once required six hours to perform can be extended to eight if not checked.

#### D. SUMMARY

There are several advantages that can be realized from the intelligent use of WP/AS equipment. However, without a sound evaluation process for WP/AS system acquisition and management these advantages may not be realized.

#### E. PURPOSE OF THE STUDY

The Army has recognized the need for an evaluation criteria for WP/AS system acquisition and management and in July, 1977 published AR 340-8, the Army Word Processing Program. Prior to that time, Army users of WP/AS equipment did not receive guidance through official channels on how to determine equipment requirements, implement and evaluate systems, or determine the savings that could be realized through the use of WP/AS equipment. Users often relied on vendor recommendations for equipment selection and implementation procedures which resulted in few agencies recovering their investment costs [Larkin, 1979]. AR 340-8 was developed to preclude future deficiencies and provide a costing model for system proposals. Because the regulation contains an excellent cost efficiency model, it has been used by private institutions to aid in their WP/AS equipment selection ["Army Targets on WP Cost Effectiveness," 1975]. However, it may be possible to strengthen and expand AR 340-8 in the areas that pertain to preliminary activities, feasibility study procedures, implementation procedures, and system maintenance procedures which are important to the success or failure of a WP/AS system.

The purpose of this study is to investigate possible ways of strengthening the Army's WP/AS guidance. Areas to be covered in the study are: preliminary activities that need to be considered; establishment of feasibility study procedures; system implementation procedures; and system maintenance procedures.

## II. WORD PROCESSING PLANNING, IMPLEMENTATION AND MAINTENANCE

In order to analyze AR 340-8, a standard of comparison is needed. Lucas [1978] presents a framework for the analysis of planning, implementing, and maintaining a data processing system. This chapter presents a model derived from Lucas' framework which is adapted for WP/AS applications. The model is broken down into the following interdependent activities: preliminary activities, feasibility study procedures, implementation procedures, and system maintenance procedures. A comparison will then be made of the guidance contained in Army Regulation (AR) 340-8 and the guidance contained in the current WP/AS literature as it pertains to these activities.

### A. PRELIMINARY ACTIVITIES

The preliminary activities contained in this section are broken down into the following elements: selecting the criteria for evaluating system proposals and acquiring top management's support, charter, and participation.

#### 1. Selecting the Criteria for Evaluating System Proposals

Doades [1979] argues that knowing the strengths and weaknesses of an organization's present WP/AS system will help management determine both the qualitative and quantitative factors to be used as criteria for evaluating WP/AS system proposals. The Army takes primarily a quantitative approach and

uses a least cost alternative for achieving a given mission with the same level of benefit as the selection criteria. Although the Army recognizes the qualitative measures, little guidance is presented on how to evaluate these factors and present them in a WP/AS system proposal.

Doades [1979] reported that while quantitative criteria need to be emphasized, it is the qualitative aspects of such factors as job satisfaction and ability to satisfy principal needs that are usually the causative factors for the success or failure of planned change in an organization.

2. Acquiring Top Management Support, Charter, and Participation

Malone [1976] reported that the success of a new WP/AS system is directly proportional to the commitment and leadership received from top management. He stated that before a survey can be adequately conducted, there has to be a charter granted by top management and a commitment to support a change in the traditional methods of performing WP/AS tasks. The Army's WP regulation proponent, the Adjutant General Center, assumes that top management is committed to a WP/AS proposal since the request must go through the chain of command prior to proponent approval. However, no guidance is given in the regulation on how to acquire this support or what top management's role in system design, implementation, and maintenance should be.

Smith [1974] stated that it is easy to gain top management support if one can get them to accept certain basic assumptions about the traditional WP/AS functions. These assumptions were reported to be: (1) Traditional WP/AS systems are inefficient, misuse professional talents, and stifle the potential of WP/AS personnel which results in service that is not responsive to the principal's needs. (2) The traditional WP/AS system does not have a standard evaluation system which results in poor productivity. (3) Users will delay changing traditional WP/AS procedures as long as possible even if a new procedure is proven to be more efficient.

Once top management's concurrence is given to conduct the feasibility study, Traux and Strong [1976] recommended that a charter for the study group be attained. They recommended that the study group's charter be broad enough to analyze the following questions: (1) Should the WP/AS functions be centralized? (2) How do you develop adequate staffing to balance AS and WP functions? (3) What will be the effects on responsiveness and productivity if a new WP/AS system is implemented? (4) What influence will a new WP/AS system have on morale? (5) Will flexibility be lost under a new system? Traux and Strong contended that in order for a WP/AS proposal to meet the stated objectives, these questions have to be considered when a system is designed.



Once the charter is granted by top management, Gottheimer [1978] suggested that a memorandum from the top be sent to all affected line and staff personnel. He stated that the memorandum should announce the study and explain why the organization perceives it as a necessity for improving WP/AS operations. In addition, he recommended a thorough question and answer period to be conducted by a top management official and the WP/AS system project manager for the principals and users to make clear what WP/AS is all about and how it can help them.

Webber [1979] stated that top management should play an active role in reducing the resistance to change that occurs when any new procedure is being studied for possible implementation. He reported that the following sources of resistance to change impede goal attainment and progress: inertia of groups and organizations; preference for the present system; fear of loss of security, status, and power; rejection of change source; and fear of the unknown.

#### B. FEASIBILITY STUDY PROCEDURES

The feasibility study procedures presented in this section are broken down into the following segments: study group member selection and definition of functions, workload and attitude survey of the current system, system design and identification of costs, and study preparation and presentation to management.

## 1. Study Group Member Selection and Definition of Functions

Although the Army recognizes the need for a study group when considering the acquisition of a complex WP/AS system, little guidance is given concerning study group member selection and functions to be performed by the study group.

Gottheimer [1978] reported that the key to success of any WP/AS system is that it performs satisfactorily for the principals and the WP/AS staff. Because these groups determine if a system succeeds or fails, he stated that members from each group should be included on the study group. Lederer [1979] reported that most WP/AS theorists and practitioners agree that job satisfaction is the secretary's major need while convenience, responsiveness, productivity, and quality are the principal's needs. Because of these needs, he also contended that representative members from each group be included on the WP/AS study group.

Lucas [1978] takes a similar approach and recommends the formation of a steering committee consisting of users, principals, and information system specialists. The steering committee's function would be to develop hardware and software applications, establish priorities for the operation and implementation of the system, ensure that sufficient resources are set aside for making the study, and ensure that designers have considered the multiple roles of information for the different decision makers.

Cornell [1978] reported that data processing (DP) and WP/AS equipment is already difficult to tell apart at some levels. If the system being studied for possible implementation has many related DP features, Schanstra [1979], like Lucas, recommends that the DP manager be included in the study group. He states that the DP manager can aid in equipment selection, implementation, and provide training in supervisory techniques. Bierly [1977] reported that the DP manager is frequently overlooked as an information source which can be very useful in aiding in the planning, implementing and maintenance process.

2. Work Load Survey and Attitude Survey of the Current System

The Army has developed WP/AS survey forms such as the WP Typing Survey Task Data Sheet (Figure 2-1) and the WP Administrative Survey Form (Figure 2-2). These forms are designed to identify how much work is performed and what kind of jobs the WP/AS personnel perform [DA, 1979]. A typing survey (see Figure 2-1) is required for all WP/AS systems regardless of class of the system while an administrative survey (Figure 2-2) is optional.

There are three classes of systems defined by the Army. Class I systems are defined as systems or revisions to systems with proposed equipment purchase value and related costs of \$100,000 or more. Class II systems have related costs between \$20,000 and \$100,000, and Class III systems have related costs of less than \$20,000 [DA, 1979].

| WORD PROCESSING TYPING SURVEY<br>TASK DATA SHEET   |           |
|--|-----------|
| For use of this form, see AR 340-8. the proponent agency is TAGCEN   |           |
| 1. DATE RECEIVED   | 2. TYPIST |
| 3. AUTHOR OR DOCUMENT ORIGINATOR   |           |
| 4. HOW WAS THE DOCUMENT ORIGINATED?  |           |
| <input type="checkbox"/> LONGHAND<br><input type="checkbox"/> SHORTHAND<br><input type="checkbox"/> MACHINE DICTATION<br><input type="checkbox"/> COMPOSED BY TYPIST<br><input type="checkbox"/> COPY TYPE (Previously typed or printed material)<br><input type="checkbox"/> PRE RECORDED ON MAGNETIC MEDIA |           |
| 5. HOW WAS THE FINAL TYPED DOCUMENT PRODUCED?  |           |
| <input type="checkbox"/> ORIGINAL<br><input type="checkbox"/> REVISION (Change to an original document)<br><input type="checkbox"/> REPETITIVE (Standard letter to different addressees)   |           |
| 6. HOW LONG WAS THE FINAL TYPED DOCUMENT?  |           |
| <input type="checkbox"/> 1 - 3 PAGES<br><input type="checkbox"/> 4 - 15 PAGES<br><input type="checkbox"/> OVER 15 PAGES<br><input type="checkbox"/> OTHER (Envelopes, cards, labels, etc.)   |           |
| 7. WHAT SPECIAL REQUIREMENTS DID THIS DOCUMENT HAVE?   |           |
| <input type="checkbox"/> STATISTICAL TYPING (Tabular)<br><input type="checkbox"/> CLASSIFIED INFORMATION (Per AR 380-5)<br><input type="checkbox"/> COMPUTER INPUT<br><input type="checkbox"/> TO BE PRINTED OR PUBLISHED<br><input type="checkbox"/> OTHER (Specify)  |           |
| 8. NUMBER OF LINES   |           |
| REMARKS  |           |

Figure 2-1. Word Processing Typing Survey Task Data Sheet  
(From AR 340-8)

| WORD PROCESSING ADMINISTRATIVE SURVEY   |                      |
|---|----------------------|
| For use of this form, see AR 340 B, the proponent agency is TAGCEN.   |                      |
| NAME  | DATE                 |
| ACTIVITY  | DUTY HOURS           |
| Compute activities listed below in terms of estimated total time (in minutes) spent daily in the performance of each activity.<br>(NOTE - If you have reason to believe that any of the activities you perform should not be carried out by clerical personnel, indicate on the reverse side the specific activity (ies) and reason(s) supporting your belief.) |                      |
| ACTIVITIES  | TIME<br>(IN MINUTES) |
| <b>SECTION A - (TO BE COMPLETED BY THE TYPIST)</b>  |                      |
| 1. DICTATION  |                      |
| 2. TYPING/TRANSCRIPTION   |                      |
| 3. PROOFREAD TYPED MATERIAL   |                      |
| 4. MACHINE COPYING  |                      |
| 5. ASSEMBLING & COLLATING DOCUMENTS<br>(To include other actions involved in preparation of outgoing correspondence.)   |                      |
| 6. TELEPHONE CALLS  |                      |
| 7. MAIL (Open, read, distribute, etc.)  |                      |
| 8. FILING/RETRIEVAL   |                      |
| 9. VISITORS (Receptionist-type duties)  |                      |
| 10. RECEIVING INSTRUCTIONS<br>(Indicate Instructors' name on reverse side.)   |                      |
| 11. SCHEDULING AND RECORD KEEPING<br>(To include appointment calendars, itineraries, TDY, leave & attendance records, etc.)   |                      |
| 12. COMPOSING MATERIAL<br>(To include drafting routine correspondence, etc.)  |                      |
| 13. INFORMATION GATHERING   |                      |
| 14. PREPARATION OF STATISTICAL DATA   |                      |
| 15. ERRANDS (To include obtaining supplies, handcarrying paperwork, etc.)   |                      |
| 16. OTHER (To include making coffee, arranging conferences, etc. - Describe on reverse side.)   |                      |
| <b>TOTAL</b>  |                      |
| <b>SECTION B - (TO BE COMPLETED BY ACTION OFFICER)</b>  |                      |
| 17. INITIAL PHONE CALLS ANSWERED<br>(These are calls which you answered first - other personnel did not refer the caller to you - Do not include intercom calls.)   |                      |
| 18. VISITORS<br>(Those not first greeted or referred by other pers.)  |                      |
| 19. MACHINE COPYING   |                      |
| 20. ASSEMBLING & COLLATING DOCUMENTS  |                      |
| 21. FILING/RETRIEVAL  |                      |
| 22. SCHEDULING AND RECORD KEEPING   |                      |
| 23. ERRANDS (To include obtaining supplies, handcarrying paperwork, etc.)   |                      |
| 24. OTHER (Describe on reverse side.)   |                      |
| <b>TOTAL</b>  |                      |

Figure 2-2. Word Processing Administrative Survey Form  
(From AR 340-8)

The Army recommends that the survey be conducted for at least two weeks when workload is considered normal. The data which resulted from the survey is then required to be categorized by document length, method of input, type of output, and specialized needs using a Workload Summary Form which is presented in Figure 2-3. The information derived from the survey is intended to be used to determine equipment requirements, staffing requirements, and aid in WP/AS system design [DA, 1979].

Although the Army recognizes the need for surveys, primary emphasis is given to an analysis of the typing functions which, in a survey conducted by Traux and Strong [1976], only constituted 19.4% of the time spent in the typical secretary's day. Phillips [1978] reported that the objective survey should place equipment in the background and secretary's and principal's needs in the foreground because in reality, little time is spent by the secretary typing.

The Army's recommended survey procedures also fails to take into account the principal's attitude of the current system which Gottheimer [1978] stated was essential in designing a new system. He developed a Principal Attitude Survey Form, presented in Figure 2-4, which can be used to determine the principal's attitude of the current system.

In addition to the types of data gathered from utilization of the forms previously discussed, Schanstra [1979]

**WORKLOAD SUMMARY**  
 (Data Provided by Word Processing Survey)

|  | Average Weekly<br>Lines |
|--|-------------------------|
| <b>A. Document Length Analysis</b>                             |                         |
| 1 - 3 Pages  | _____                   |
| 4 - 15 Pages   | _____                   |
| 15 or More Pages   | _____                   |
| Other (envelopes, labels,<br>cards, etc.)                      | _____                   |
| <b>Total</b>   | _____                   |
| <b>B. Work Input Analysis</b>                                  |                         |
| Longhand   | _____                   |
| Shorthand  | _____                   |
| Machine Dictation  | _____                   |
| Composed by Typist   | _____                   |
| Copy Type  | _____                   |
| Pre-Recorded   | _____                   |
| <b>Total</b>   | _____                   |
| <b>C. Work Output Analysis</b>                                 |                         |
| Original Typing  | _____                   |
| Revision Typing  | _____                   |
| Repetitive Typing  | _____                   |
| <b>Total</b>   | _____                   |
| <b>D. Specific Workload Analysis</b><br>(Not a total of above) |                         |
| Statistical Typing   | _____                   |
| Classified Typing  | _____                   |
| Computer Input   | _____                   |
| Typing for Typesetting   | _____                   |
| Printing or Publication  | _____                   |
| Other  | _____                   |

Figure 2-3. Workload Summary (From AR 340-8)

ATTITUDE SURVEY FORM

Principals' Name \_\_\_\_\_  
Department \_\_\_\_\_  
Date \_\_\_\_\_ Ext. \_\_\_\_\_

Instructions: Please rate the following support services on a scale from 0 to 5 where 0 is no service and 5 is optimum

CURRENT SUPPORT      REQUIRED SUPPORT

1. Telephone services--placing, answering calls; directory services.
2. Typing services--text, statistical, all other types.
3. Dictation, transcription and stenographic services.
4. Receptionist and other visitor services.
5. Conferences, meetings, travel arrangements and related services.
6. Mail services--incoming (receipt, opening, time-stamping, etc.) and outgoing (assembly, enveloping, stamping, pick-up, etc.).
7. Message services--telegraph, TWX, facsimile, etc.
8. Messenger/errand services--(deliveries, pick-ups, special errands, etc.).
9. Maintenance of files, manuals, libraries, etc.
10. Reference or research services--retrieval from file or storage, library searches, etc., for documents or specific material.



ATTITUDE SURVEY FORM (Cont'd)

CURRENT    REQUIRED  
SUPPORT    SUPPORT

11. Audial visual aid services--chart making, photography, recording, projection.
12. Printing services, including photocopy, reproductions, etc.

Figure 2-4. Attitude Survey Form (From "Developing a System Suited to Your Needs" by D. Gottheimer, Administrative Management, April 1978, pp. 78-87.

recommends a detailed study of those functions that lend themselves to DP.

### 3. System Design and Identification of Costs

This section contains a discussion of the following areas that need to be taken into consideration when designing a WP/AS system: structure of the WP/AS system, office environmental considerations, equipment selection, identification of staffing requirements, identification of training requirements, and identification of start-up costs [DA, 1979; Orneals, 1976].

#### a. Structure of the WP/AS System

Under the Army's current procedures, the structure of the WP/AS system is to be determined by the requesting agency. No guidance is given on the benefits or problems that can result from a centralized or decentralized structure. A centralized structure is defined as a WP/AS system that requires all tasks to be performed in a central location and a decentralized structure allows tasks to be performed in multiple locations [Traux and Strong, 1976].

Traux and Strong state that there are sound economic reasons for centralization. They report that centralization allows staffing requirements to be determined by the average workload rather than the peak workload. Also special typing applications such as rough drafting and repetitive documents are handled with greater efficiency. In

addition, Petrovich [1978] reported that the secretary's unproductive time can be eliminated by centralization.

Although centralization has worked well in many organizations, in other organizations centralization has failed to meet the needs of the secretaries and principals [Smith, 1979]. Smith [1979] reported the following alternatives to centralization that have been proven successful when implemented within the private sector: (1) WP/AS centralization by department or functional unit, (2) WP centers are installed to handle overflow typing, (3) The traditional WP/AS system is retained but job machines are strategically located throughout the organization, (4) No change to the present system except the addition of a WP keyboard at the individual typing station.

b. Office Environmental Consideration

Army regulation 340-8 does not give any guidance on office environmental considerations, while studies reported by Smith [1975] indicated that the environment of WP/AS Centers contributed to the needs of the users and impacted on the effectiveness of the operation. He reported that furnishing manufacturers have designed many of the nonmachine solutions to problems intrinsic to WP/AS center environments such as new work patterns, noise, wire management, and new storage needs. Other reports have indicated that work station furniture components use existing space in new ways which facilitates the sharing of equipment, thereby reducing costs

["From Typing Pool to Word Processing Center," 1977]. In addition, Smith [1975] reported that creating a livable as well as a functional workplace can increase job satisfaction and cut costly staff turnover.

c. Equipment Identification and Selection

Although the Army separates the type of WP equipment into dictation and transcription/output categories, guidance has not been given on how to determine if a piece of equipment is efficient for a given application. Also guidance regarding other factors that may need to be considered in selecting equipment has not been given.

(1) Dictation Equipment Selection. Lawson [1979] reported that the input system is the key to realizing cost savings of a WP/AS system. He stated that the study group should concentrate on the selection of a good user oriented dictation system. Research conducted by Traux and Strong [1976] confirms Lawson's statement by indicating that machine dictation can be about five to six times faster than long hand, and two to three times faster than dictating in-person to a secretary. In addition, machine dictation does not tie up the simultaneous time of two people. Traux and Strong [1976] reported that in addition to providing typing input, the dictation system could be used to enhance other functions such as communicating instructions and/or delegating tasks to the secretary.

(2) Transcription and Output Equipment Selection.

Wohl [1977] reported that there are three basic categories of WP equipment for transcription and output: stand alone hardcopy WP equipment, stand alone display WP equipment, and shared logic WP equipment. The stand alone hardcopy equipment consists of an output device connected to some type of magnetic memory and is employed for such tasks as automatic typing of repetitive letters, merging of prerecorded paragraphs, and revisions of short documents [Wohl, 1977].

The stand alone display equipment consists of a display device (normally a CRT) married to magnetic media and some type of letter quality printer [Wohl, 1977]. She reports that such equipment may have its text editing and other functions hardwired or in fact, be a small computer. She reported that this category of equipment normally uses a combination of soft and hard functions and extensive use is made of read/write, read-only, and programmable read-only memory.

The shared logic WP category consists of two types. The first category consists of a number of terminals without memory or logic (usually printer terminals or display terminals) sharing the capability and storage of a central processing unit. The other type of shared equipment is a distributed logic type where at least some of the intelligence resides at the terminals and the sharing that is done is basically through the use of peripherals

or jointly accessed storage [Wohl, 1977]. She states that shared logic equipment may be used for performing WP/AS functions that can be provided by the stand alone equipment in addition to functions that lend themselves to automation [Wohl, 1977].

(3) Selection Criteria. Carls [1978] developed a simple equation to determine whether a piece of WP hardware is cost justified for a given application:

$$\frac{\text{WP system fixed costs}}{\text{Manual system cost - proposed system cost per page}} = \text{Crossover Point}$$

Dividing the annual cost of the WP system by savings per page results in the number of pages per year that must be produced before the system is cost justified.

Carls used an example to demonstrate the calculation of the crossover point in which it was assumed that the current typewriter was paid for and the only costs of producing a typed page was the typist's salary. The following time estimates per page were given for typing under the manual system and proposed system:

PRESENT MANUAL SYSTEM

|                    |                         |
|--------------------|-------------------------|
| first draft        | 30 minutes              |
| coordination draft | 30 minutes              |
| final copy         | <u>15 minutes</u>       |
| Total time/page    | 75 minutes = 1.25 hours |

PROPOSED SYSTEM

|                    |          |                     |
|--------------------|----------|---------------------|
| first draft        | 14       | minutes             |
| coordination draft | 7.5      | minutes             |
| final copy         | <u>6</u> | minutes             |
| total time/page    | 27.5     | minutes = .46 hours |

Fixed costs associated with the proposed WP/AS system were given as \$1,900 per year and the secretarial salary cost per hour including fringe benefits was \$9.00. The cost per manual page of \$11.25 was found by multiplying the secretarial cost of \$9.00 per hour by 1.25 hours. The cost per page under the proposal of \$6.43 was found by multiplying the secretarial cost of \$9.00 per hour by .46 hours then adding an average rental charge per page of \$2.29. The crossover point was then determined:

$$\frac{\$1,900}{11.25 - 6.43} = 394 \text{ pages}$$

In this example, it is cheaper to use word processing instead of manual typing if at least 395 pages per year were produced [Carls, 1978].

As a general guide, Lederer [1979] stated that simpler machines are cost effective where few revisions are made; video display text editors are cost effective for companies with heavy editing and formatting needs; and shared

logic systems are cost effective where certain data processing functions can be integrated with WP/AS functions.

In addition to cost, Bergeizon [1975] identified other factors that must be considered in the equipment selection process. These factors were reported as standardization, reliability of equipment, hardware and software capabilities, and ease of operation.

d. Identification of Staffing Requirements

The Army's method for projecting the non-supervisory typing personnel staffing requirements is presented in the Personnel Projection Worksheet shown in Figure 2-5. Staffing requirements for the AS type functions can be determined by analyzing the results of the survey conducted using the Army's WP Administrative Survey Form (Figure 2-2).

The Army's guidance is consistent with the information contained in the WP literature. For example, Bierly [1977] reported that when determining staffing requirements, all the tasks that are performed under the present system have to be planned prior to implementing a new system. This is the same recommended procedure contained in AR 340-8. However, the Army has failed to give guidance on creating a career path for WP/AS personnel.

When developing career paths, Arnstein [1977] included separate career paths for personnel performing primarily WP functions and those who worked primarily in the AS field. However, Christensen [1977] stated that not all secretaries want to type all day and a variety of tasks adds



Personnel Projection Worksheet

| Type of Work Performed | Average Weekly Lines | ÷ Production Factor | X Factor for Absences | = Projected Personnel |
|------------------------|----------------------|---------------------|-----------------------|-----------------------|
| Original Typing        |                      | 3500 (3500)*        | X 1.11                | =                     |
| Revision Typing        |                      | 5000 (7,000)        | X 1.11                | =                     |
| Repetitive Typing      |                      | 7000 (10,000)       | X 1.11                | =                     |

\*Use the factor in parenthesis when shared-logic equipment or micro processors with CRT displays and independent printers are being proposed.

Total Number Word Processing Personnel Required Per Week: \_\_\_\_\_

Personnel Projection - Total System

(1) Word Processing Personnel

| Grade/Step | Annual Individual Salary | X | Number of Employees | = | Total Annual Salary |
|------------|--------------------------|---|---------------------|---|---------------------|
|------------|--------------------------|---|---------------------|---|---------------------|

Figure 2-5. Personnel Projection Worksheet (From AR 340-8)

to job enlargement and satisfaction. Although Arnstein [1977] reported that establishing separate career paths can prove successful, she stated that this normally occurred as a result of varying interests among the WP/AS Center personnel.

e. Identification of Training Requirements

Although the Army's guidance does not contain recommended training areas, it can be assumed that this

requirement will be identified in a WP/AS system request since most WP/AS hardware vendors have a standard training package.

Christensen [1977] reported that there will be a training period required before WP/AS personnel will be knowledgeable and accustomed to the new equipment. He reported that most vendors have standard training packages that are sold with the equipment. He also reported that supervisors should learn a little finance, economics, accounting, administrative management, and data processing to improve their management skills. He stated that many more colleges have started classes in these subjects which are less expensive than companies training their own personnel.

f. Identification of Other Costs

Before the effectiveness and efficiency of a proposed system can be examined, the Army's guidance states that all costs and savings associated with a WP/AS system must be identified. AR 340-8 provides the following checklist to aid in the identification of these costs:

- Personnel Costs
- Equipment rental or purchase costs
- Maintenance Costs
- Supplies cost
- Furniture costs
- Installation costs

- Consultant Fees
- Facility Modification costs
- Telephone Installation costs
- Moving expenses

However, the Army's checklist failed to include training costs and the new and old equipments salvage value.

#### 4. Study Preparation and Presentation to Management

The method used by the Army to document WP/AS system proposals is contained in AR 340-8. The Army's suggested format is contained in the Word Processing System Proposal Guide shown in Figure 2-6. This guide requires, as enclosures, the Workload Summary (Figure 2-3), the Personnel Projection Worksheet (Figure 2-5), the System Costs and Savings Worksheet (Figure 2-7) and the Rent Purchase Analysis Worksheet (Figure 2-8).

As can be seen from Systems Costs and Savings Worksheet (Figure 2-7), alternatives are compared against each other by determining the present value of the life cycle costs of each proposal then computing the payback period. A maximum payback period of four years is used as a criterion for approving WP/AS system requests based on a five year economic life. As a minimum for Class I Systems, the Army requires a review of the following alternatives (see Rent Purchase Analysis Worksheet showed in Figure 2-8): present system (do nothing), proposed system purchased during

### Word Processing System Proposal

1. Requesting agency:
2. Unit Identification Code:
3. Project Officer:
4. Telephone number:
5. Class of system: (I, II, or III)
6. Narrative of present system:
7. Narrative of proposed system:
8. List of vendors contacted:
9. Tell why the vendors selected can best meet your needs:
10. List of special features and why each is needed:
11. Number of personnel space reductions that will result if this proposal is approved:
12. Note that Army security aspects have been considered:
13. Enclosures: include Workload Summary (Figure 2-3), Personnel Projection Worksheet (Figure 2-5), System Costs and Savings Worksheet (Figure 2-7), and Rent-Purchase Analysis Worksheet (Figure 2-8).

Figure 2-6. Word Processing System Proposal Guide  
(From AR 340-8)

**SYSTEMS COSTS AND SAVINGS WORKSHEET**

**A. Cost of Current System**

| Cost Category    | Annual Cost |
|------------------|-------------|
| Personnel        |             |
| Overtime         |             |
| Maintenance      |             |
| Supplies         |             |
| Equipment Rental |             |
| Other (Specify)  |             |

Total Cost

**B. Estimated Cost of Proposed System**

| Cost Category             | 1st Year | 2nd Year | 3rd Year | 4th Year | 5th Year |
|---------------------------|----------|----------|----------|----------|----------|
| Personnel                 |          |          |          |          |          |
| Automatic Typewriters     |          |          |          |          |          |
| Dictation Equipment       |          |          |          |          |          |
| Maintenance               |          |          |          |          |          |
| Supplies                  |          |          |          |          |          |
| Facility Modification     |          |          |          |          |          |
| Furniture                 |          |          |          |          |          |
| Rugs & Drapes             |          |          |          |          |          |
| Moving Expense            |          |          |          |          |          |
| Telephone<br>Installation |          |          |          |          |          |
| Consultant Fees           |          |          |          |          |          |
| Others (Specify)          |          |          |          |          |          |

Total Cost

SYSTEMS COSTS AND SAVINGS WORKSHEET (Cont'd)

C. Cost Analysis

|                             | 1st Year | 2nd Year | 3rd Year | 4th Year | 5th Year |
|-----------------------------|----------|----------|----------|----------|----------|
| Total Current System Costs  |          |          |          |          |          |
| Total Proposed System Costs |          |          |          |          |          |
| Difference (+/-)            |          |          |          |          |          |
| Cumulative Difference       |          |          |          |          |          |

D. Payback Period

Show the number of years to the nearest 1/12 of a year required before the accumulated savings will pay back the investment in a WP system \_\_\_\_\_.

Figure 2-7. System Costs and Savings Worksheet  
(From AR 340-8)

**RENT-PURCHASE ANALYSIS WORKSHEET**

Option 1 - Continued rental during full economic life.  
Includes WP equipment rental charges and maintenance.

Optino 2 - Purchase during economic life. Includes rental payments prior to purchase, purchase price of WP equipment minus rental applied to purchase price, & maintenance contract price.

**A. Procurement Analysis**

|              | Option 1 |                 |   |                               |  |
|--------------|----------|-----------------|---|-------------------------------|--|
| Annual Costs | X        | Discount Factor | = | Present Value of Annual Costs |  |
| 1st Year     | X        |                 | = |                               |  |
| 2d Year      | X        |                 | = |                               |  |
| 3d Year      | X        |                 | = |                               |  |
| 4th Year     | X        |                 | = |                               |  |
| 5th Year     | X        |                 | = |                               |  |
|              |          |                 |   | Total Cost of Option 1 = \$   |  |

|              | Option 2 |                 |   |                               |  |
|--------------|----------|-----------------|---|-------------------------------|--|
| Annual Costs | X        | Discount Factor | = | Present Value of Annual Costs |  |
| 1st Year     | X        |                 | = |                               |  |
| 2d Year      | X        |                 | = |                               |  |
| 3d Year      | X        |                 | = |                               |  |
| 4th Year     | X        |                 | = |                               |  |
| 5th Year     | X        |                 | = |                               |  |
|              |          |                 |   | Total Cost of Option 2 = \$   |  |

**B. Cost Difference Between Options: (Option 1 minus Option 2)**

\$ \_\_\_\_\_

**C. Recommended Procurement Plan: (Explain what option is recommended, why, and what point(s) in time that option(s) should be exercised.)**

Figure 2-8. Rent-Purchase Analysis Worksheet  
(From AR 340-8)

economic life, and proposed system with continuous rental during full economic life [DA, 1979].

DOD Instruction 7041.3, "Economic Analysis and Program Evaluation for Resource Management," offers an alternative method for presenting investment proposals. The DoD guide entitled "Systematic Method for Structuring Analysis" is shown in Figure 2-9. This guide varies from the Army's guide in that it allows for a discussion of the effectiveness of the proposed system and a discussion of the non-quantifiable factors.

**A SYSTEMATIC METHOD FOR STRUCTURING ANALYSIS**

1. Complete definition of the problem as viewed by the analyst.
2. Statement of objectives of the analysis with an explanation of the relationship of the objectives to the overall problem.
3. Description of all alternatives analyzed.
4. Criterion selected for ranking alternatives and reasons for the selection.
5. Effectiveness analysis including measures, data, and estimating procedures.
6. Cost analysis including measures, data, and estimating procedures.
7. Evaluation of alternatives complete with all points relevant to the decision.
  - a. Discussion of quantifiable factors.
  - b. Discussion of non-quantifiable factors.
8. Recommendations derived from the analysis.

Figure 2-9. Systematic Method for Structuring Analysis  
(From DOD Instruction 7041.3)



### C. IMPLEMENTATION PROCEDURES

The purpose of this section is to review the Army's guidance on implementation procedures and compare it to the guidance contained in the current WP/AS literature.

Although AR 340-8 places the responsibility of system implementation functions on the requesting activity, the only guidance contained in AR 340-8 pertains to developing word standards.

Smith [1975] states that the implementation schedule should contain a calendar of events with identification of a responsible group or person for each event. He stated that the schedule should contain a pre-install phase and an implementation phase. The pre-install phase should consist of developing standards, modifying facilities, preparing manuals, conducting training seminars, selecting WP/AS personnel, conducting orientations, ordering needed supplies, and rearranging telephones. The implementation phase involves the actual start-up of the new WP/AS procedures.

#### 1. Pre-Install Phase

AR 340-8 contains the following forms which can be used to establish standards and determine the performance of a WP/AS Center: Input Volume (Figure 2-10) for determining total line input, Output Volume (Figure 2-11) for determining total line output, Miscellaneous Output (Figure 2-12) for determining output such as labels and fill-in forms,

| Input Volume (Lines)                |        |        |        |        |        |        |       |
|-------------------------------------|--------|--------|--------|--------|--------|--------|-------|
|                                     | Volume |        |        |        |        |        |       |
| Categories                          | 1st Mo | 2nd Mo | 3rd Mo | 4th Mo | 5th Mo | 6th Mo | Total |
| Machine Dictation                   |        |        |        |        |        |        |       |
| Handwritten                         |        |        |        |        |        |        |       |
| Copy Type (25% or less handwritten) |        |        |        |        |        |        |       |
| Pre-recorded <sup>1</sup>           |        |        |        |        |        |        |       |

<sup>1</sup>Material previously recorded by automatic typewriter.

Figure 2-10. Input Volume Worksheet  
(From AR 340-8)

| Output Volume (Lines) |        |        |        |        |        |        |       |
|-----------------------|--------|--------|--------|--------|--------|--------|-------|
|                       | Volume |        |        |        |        |        |       |
| Categories            | 1st Mo | 2nd Mo | 3rd Mo | 4th Mo | 5th Mo | 6th Mo | Total |
| 1-3 Pages             |        |        |        |        |        |        |       |
| 4-15 Pages            |        |        |        |        |        |        |       |
| More than 15 Pages    |        |        |        |        |        |        |       |

Figure 2-11. Output Volume Worksheet  
(From AR 340-8)

| Miscellaneous Output                     |        |        |        |        |        |        |       |
|--|--------|--------|--------|--------|--------|--------|-------|
| Categories                               | 1st Mo | 2nd Mo | 3rd Mo | 4th Mo | 5th Mo | 6th Mo | Total |
| Fill in<br>Material<br>(Forms)           |        |        |        |        |        |        |       |
| Other<br>(Labels,<br>Envelopes,<br>etc.) |        |        |        |        |        |        |       |

Figure 2-12. Miscellaneous Output Worksheet  
(From AR 340-8)

Quality Control (Figure 2-13) for determining number of errors, and User Information (Figure 2-14) for determining the number of WP/AS system users.

| Quality Control<br>(number of errors) |        |        |        |        |        |        |       |
|---------------------------------------|--------|--------|--------|--------|--------|--------|-------|
| Volume                                |        |        |        |        |        |        |       |
| Categories                            | 1st Mo | 2nd Mo | 3rd Mo | 4th Mo | 5th Mo | 6th Mo | Total |
| Centers<br>Errors per<br>1,000 Lines  |        |        |        |        |        |        |       |

Figure 2-13. Quality Control Worksheet  
(From AR 340-8)

| User Information            |        |        |        |        |        |        |       |
|-----------------------------|--------|--------|--------|--------|--------|--------|-------|
|                             | Volume |        |        |        |        |        |       |
| Categories                  | 1st Mo | 2nd Mo | 3rd Mo | 4th Mo | 5th Mo | 6th Mo | Total |
| Total<br>Potential<br>Users |        |        |        |        |        |        |       |
| Total<br>Actual<br>Users    |        |        |        |        |        |        |       |

Figure 2-14. User Information Worksheet  
(From AR 340-8)

Although the Army relies heavily on line counts as a measure of productivity, Christensen [1977] states that line counts have been overused. He cites an example where the type of work performed each month varied greatly which resulted in misleading results when the line-count standards were applied. What he recommended was defining standards for the various types of WP/AS tasks performed within the WP/AS Center by personnel who have knowledge of work measurement techniques and the type of work involved.

Other elements of the pre-install phase which are presented are factors that need to be considered when selecting the WP/AS Center's supervisor and items that need to be included in the WP/AS Center manual.

Caplinger [1974] stated that a basic item necessary for a WP/AS system to succeed is the selection of a qualified

supervisor. She states that the supervisor should be able to maintain high morale, productivity, and be able to train personnel to handle the varied type of work within the center.

Gottheimer [1978] reported that the following items should be included in a WP/AS Center manual:

- " - Purpose of the center
- Hours of operation
- How to handle questions
- Priorities for handling the work
- Storage systems
- Sample formats with margins, tabs, and pitch
- Proofreading methods
- Proof reader's marks
- Grammar and punctuation guidelines"

## 2. Implementation Phase

Although the Army leaves the method of implementation up to each requesting agency, Gottheimer [1978] states that it is best to implement a WP/AS system slowly. He states that the WP/AS Center manager should constantly monitor the Center's performance and the principals and WP/AS equipment operator's reactions to the new system. He states that gradual implementation allows the WP/AS system manager to work out any problems in the system before other sections or elements within an organization convert to the new system. In addition, Caplinger [1976] suggests immediate reduction of the secretarial staff and equipment that results from the

implementation of the new system. If the reduction is not accomplished principals will revert to their old methods. She stated that reverting to the old methods will undermine the effectiveness of the newly implemented system.

#### D. SYSTEM MAINTENANCE

The purpose of this section is to review recommended WP/AS system maintenance procedures contained in the current literature. AR 340-8 does not contain any recommended procedures.

Doades [1976] stated that one may want to use the same tools in systems follow-up as were used in the study portion. For example, she stated that if you surveyed the staff for their perceptions of the previous system then the same survey may be given to evaluate the new system. She states that by comparing answers given after the WP/AS system is implemented with the answers given before the WP/AS system was implemented it should help determine the systems success and identify problem areas.

Smith [1975] reports that systems maintenance should encompass operational and problem area checks, a review of the system in terms of productivity and efficiency, and continuous verification of the procedures manual.

Arnstein [1977] states that WP/AS is more than doing a survey, putting in equipment and letting the systems run. She contends that it is a continuing program of checking

and researching new equipment and procedures that will meet the requirements of the user.

E. SUMMARY

This chapter introduced a model for planning, implementing and maintaining a WP/AS system. A comparison was then made of the Army's guidance and the guidance contained in the current WP/AS literature as it pertains to the activities presented in the model. Chapter Three will present an algorithm for planning, implementing, and maintaining a WP/AS system based on an analysis of the material contained in this chapter.

### III. RECOMMENDATIONS AND CONCLUSIONS

The purpose of this chapter is to make recommendations concerning the Army's procedures pertaining to WP/AS system planning, implementation, and maintenance; review the constraints contained in this study; and present implications for additional research.

#### A. RECOMMENDED PROCEDURES FOR PLANNING, IMPLEMENTING, AND MAINTAINING A WP/AS SYSTEM

This section provides recommendations for planning, implementing, and maintaining a WP/AS system based on an analysis of the procedures contained in AR 340-8 and the procedures contained in the current WP literature. It should be noted, however, that all of the recommended procedures contained in this chapter only apply when it can be determined that the level of effort required by following these procedures would be worth the benefits to be gained [DoD, 1972]. As a general rule, all of the recommendations contained in this chapter apply to Class I systems as defined in Chapter II.

##### 1. Selecting the Criteria for Evaluating System Proposals

The Army's [DA, 1979] least cost criteria for providing WP/AS services and Doades' [1979] qualitative criteria of ability to satisfy the principals needs and the ability to provide user satisfaction while holding service levels constant are recommended. Using these criteria considers



the needs of top management, the principals, and the users. The consideration of the needs should result in a successful WP/AS system. Holding service levels constant is recommended because it aids in the analysis by allowing the study group to evaluate alternatives according to multiple criteria from a common base.

2. Acquiring Top Management Support, Charter, and Participation

The Army's guidance concerning the role of top management in planning, implementing, and maintaining a WP/AS system can be strengthened if expanded to include how the study group can go about receiving top management's support, what the study group's charter should include, and defining top management's responsibilities in reducing the resistance to change. As pointed out by Malone [1976], without top management support a new WP/AS system will more than likely fail. For this reason, the procedures of Smith [1979], Traux and Strong [1976], and Gottheimer [1978] presented in Chapter II are recommended.

A suggested management memorandum for Army use, as recommended by Gottheimer [1978], is contained in Appendix

A. Four major goals of the suggested memorandum are:

(1) To state why the WP/AS feasibility study is necessary, thereby reducing preference for the present system, (2) To help reduce the group inertia problem by placing affected WP/AS personnel on the study group, (3) To help reduce fear of the unknown by involving principals and users,

(4) To show that actions are being taken to minimize personnel turnover, thereby reducing the fear of loss of security.

3. Study Group Member Selection and Definition of Functions

The Army's guidance concerning study group member selection and definition of functions could be strengthened. A recommended method of strengthening the guidance would be to include the selection of principals and users on the study group and a DP expert where appropriate. As was discussed by Gottheimer [1978] and Cornell [1978], a WP/AS system designed by principals and users with technical expertise provided by a DP expert stands a much better chance of being successful than a system designed by a single person. In addition, functions of the study group should be clearly defined. The procedures described by Lucas [1978] and presented in Chapter II serve as an excellent guide in defining these functions.

4. Work Load Survey and Attitude Survey of the Current System

The Army's surveying requirements could be improved if expanded to require, rather than recommend, an AS survey for Class I systems and require an attitude survey of the principals. Although AR 340-8 provides excellent forms (see Figure 2-1 through Figure 2-3) for use in determining equipment and staffing requirements, it does not give guidance on how to determine user and principals needs. Gottheimer's [1978]

Attitude Survey Form (see Figure 2-4) is recommended because it can be used to gather the principals stated attitudes which then can be taken into account when designing a system. As Gottheimer [1978] pointed out, input from principals is essential in designing a new system.

5. System Design and Identification of Costs

The purpose of this section is to provide specific recommendations pertaining to selecting the proper: WP/AS system structure, WP/AS system environment, WP/AS equipment, WP/AS staffing, and WP/AS training. In addition, a guide to identification of all other WP/AS system start-up costs will be provided.

a. WP/AS System Structure Requirements

The following question needs to be answered before a proper structure for a WP/AS system can be identified - If the structure is centralized, can the needs of user and principal still be met? This question needs to be contained in AR 340-8 because all of the advantages that can be realized from centralization may not be, if the system does not provide for the needs of the principal and user. In addition, the alternatives to centralization discussed by Smith [1979] should be contained in AR 340-8 so that potential regulation users will have some alternatives to draw upon.

b. WP/AS System Environment

Guidance should be provided in AR 340-8 concerning the environmental factors that need to be considered when

designing a WP/AS system. If environmental factors are not considered in a proposal, then the user morale problems and increased costs discussed by Smith [1975] could occur.

c. WP/AS Equipment Selection

The Army's guidance concerning equipment selection could be strengthened: if guidance were provided on how to determine if a piece of equipment is efficient for a given application and if other factors that needed to be considered in selecting equipment were identified.

Carl's [1978] crossover point equation that was discussed in Chapter II is recommended as a guide in determining if a piece of WP hardware is cost justified for a given application. Although Carl's equation has limited applications to large scale shared logic systems where terminals are shared along with a CPU, it can be used successfully where clear-cut WP/AS applications can be measured. In the latter case, an aggregate cost-benefit analysis should be conducted. In addition, it would be useful if Lederer's [1979] guide to equipment selection were included in AR 340-8. This would allow the study group to narrow down the type of equipment to be considered for a given application.

The additional factors of standardization, reliability of equipment, hardware and software capabilities, and ease of operation discussed by Bergeizon [1975] and presented in Chapter II should be required as part of the analysis in the system request so that these factors are not overlooked in the selection process.

d. WP/AS Staffing Requirements

The Army provides excellent guidance concerning the identification of WP/AS staffing requirements which is consistent with the recommendations contained throughout the WP literature. For this reason, no changes are recommended in the method of determining staffing requirements.

Although AR 340-8 does not provide guidance on how to create a career path structure, each field activity has the option of creating a structure designed to fit its own needs best. In this respect, it can be concluded from the discussion in Chapter II of the work by Arnstein [1977] and Christensen [1977] that the career path structure should be a function of the desires and needs of the users.

e. WP/AS Training Requirements

Although the Army recognizes the need for training requirements, AR 340-8 could be improved if guidance were provided on the areas where lack of adequate training has caused system failure. These areas, as reported by Christensen [1977], include training of both users and principals in new WP/AS techniques and a continuing education program for the WP/AS Center Manager. In addition, TAGCEN should review each WP/AS system request to insure that adequate training is provided.

f. Identification of Other Costs

As stated in Chapter II, all costs associated with a system proposal must be identified before the

effectiveness and efficiency of a proposed system can be examined. The Army has developed an excellent checklist which will be complete with the addition of training costs and salvage values.

6. Study Preparation and Presentation to Management

It is recommended that the procedure contained in the Systematic Method For Structuring Analysis Form (see Figure 2-9) be used for the study preparation and presentation to management rather than the Army's current method. This method is recommended because it is a standard format which can be easily incorporated into AR 340-8. In addition, this procedure allows for a criteria for evaluating how the WP/AS system proposal can contribute to enhancement of job satisfaction and how the system meets the principals needs. Specific items and rationale behind the selection of the items to be included in each section of Systematic Method for Structuring Analysis are presented in Appendix B.

7. Implementation Procedures

The Army's procedures pertaining to implementation could be enhanced if expanded to include other areas besides means by which to develop standards. The implementation procedures should be broken down into a pre-install phase and implementation phase as recommended by Smith [1975] and discussed in Chapter II.

a. Pre-Install Phase

The Army's procedures pertaining to developing standards which were discussed in Chapter II are recommended. The Army's procedures of gathering data (see Figures 2-10 through 2-14) from which realistic standards can be developed is consistent with the recommendations contained throughout the WP literature. Other pre-install phase areas that need to be covered in the regulation of modifying facilities, preparing manuals, conducting orientations, ordering needed supplies, and rearranging telephones. The specific procedures recommended by Caplinger [1974] and Gottheimer [1978] and presented in Chapter II are recommended for the reasons stated.

b. Installation Phase

Although the Army does not recommend any method for implementing a WP/AS system, guidance pertaining to implementing a system slowly as recommended by Gottheimer [1978] should be included in AR 340-8 for the reasons given in Chapter II.

8. System Maintenance

AR 340-8 could be improved by including system maintenance procedures. This author recommends the modification of the WP/AS Alternatives Rating Forms (see Figures B-1 and B-2) to reflect only the newly implemented system. This is recommended so that before and after results can be compared as recommended by Doades [1976] and presented

in Chapter II. In addition, the maintenance procedures recommended by Smith [1975] and presented in Chapter II should be included as a guide in AR 340-8.

9. Summary

The preceding section contained recommendations for expanding the guidance included in Ar 340-8 pertaining to planning, implementing, and maintaining a WP/AS system. Recommendations were also made for proposal preparation in accordance with the Systematic Method for Structuring Analysis (see Appendix B). In addition, Fort Saxon's Separation Transfer Section Case (Appendix C) was developed to aid students in determining alternative methods of performing WP/AS tasks. Fort Saxon's Word Processing System Request Case (Appendix D) was developed for student use in evaluating the effectiveness and efficiency aspects of a WP/AS system.

B. STUDY CONSTRAINTS

The recommendations for planning, implementing, and maintaining a WP/AS system contained in Chapter II have been proven successful in the private and public sectors. However, the author introduced WP/AS Alternative Rating Forms for Principals and Users (see Figures B-1 and B-2) and recommended modification of these forms for systems maintenance where no field testing was conducted to determine the effectiveness of these forms. Even though the survey's instructions and



questions (many of which were taken from Gottheimer [1978]) were carefully analyzed and reviewed; the forms should be field tested prior to incorporation into AR 340-8.

Another constraint contained in this study is determining what recommended planning, implementation, and maintenance procedures can or should be applied to Class II and Class III systems as defined by the Army [DA, 1979]. Although it was stated that, in general, the procedures contained in this chapter apply to Class I systems; field testing of these recommendations could result in additional refinements for improving AR 340-8.

#### C. IMPLICATIONS FOR ADDITIONAL RESEARCH

Because of the rapid technological advancements that are being realized in WP equipment that incorporates the use of microcomputers, the number of applications for Army use is almost unlimited. By simply examining Fort Saxon's WP System Request Case presented in Appendix D, one could spend a considerable amount of time defining other personnel functions which lend themselves to automation, electronic mail services, and electronic files management. Because of the Army's interest in furthering the automation of personnel functions, additional research is recommended in these areas.

APPENDIX A

SAMPLE TOP MANAGEMENT MEMORANDUM

Subject: Word Processing Feasibility Study

MEMORANDUM FOR: All Section Chiefs, Secretaries, and  
Support Personnel

I have recently designated CW3 Mike Sweedon as Project Manager of the Adjutant General Division, Word Processing Study. The purpose of this study is to review current Word Processing/Administrative Support procedures and to make recommendations on how these systems may be improved. In order for any recommendations to be approved, they must as a minimum: (1) reduce costs, (2) provide an atmosphere conducive to increasing career development and job satisfaction for secretarial/administrative support personnel. I established these goals because I am committed to them both.

In order for the study to be comprehensive and accurate, CW3 Sweedon will be assigning key secretarial/administrative support personnel from the various sections to serve on a study group. The study group's job will be to aid in the conduct of the workload survey, consider ways of improving the present system, and to make recommendations that meet the established criteria.

I am confident that the study will find ways to improve our present system and anticipate that several civilian positions will be eliminated to reduce costs. Because of this, I have placed a freeze on civilian hire within the Division so that no one will lose a job or have to be transferred elsewhere.

A question and answer period has been scheduled for 30 April, 1300 hours, in Room 200. All Secretarial/Administrative Support personnel and Section Chiefs are requested to attend.

William Cullen  
LTC AGC  
Adjutant General

## APPENDIX B

### SYSTEMATIC METHOD FOR STRUCTURING ANALYSIS

#### a. Definition of the Problem

The problem should be defined in detail as determined in the preliminary activities. It should be based on the weaknesses of the present system.

#### b. Statement of the Objectives

The statement of objectives should be presented in such a manner that explains the relationship of the objectives to the overall problem. This author recommends the following objectives for a proposed WP/AS system: cost reductions, enhancement of job satisfaction, and ability to satisfy the principals needs.

#### c. Description of Alternatives Analyzed

The alternatives recommended are: (1) continue with the present system; (2) improved modification of the present system; (3) proposed system purchased during economic life; and (4) proposed system with continuous rental during full economic life.

#### d. Criteria Selected For Ranking Alternatives and Reasons for Selection

The following criteria are recommended for system evaluation: required rate of return of 10% on a discounting basis, how the system proposals contribute to enhancement of user job satisfaction, and the proposals ability to satisfy principal needs.

The required rate of return criteria is recommended because the Army's required payback period of four years does not always provide a rate of return of 10% as recommended by the Department of Defense [DoD, 1972]. The other two listed criteria are recommended for reasons stated in Chapter II.

e. Effectiveness Analysis

This section of the study should be aimed at measuring the effectiveness of each alternative in accordance with the criteria established in the previous section. Effectiveness has been defined by Anthony and Herzlinger [1975] as the relationship between a responsibility center's output and objectives. Therefore, the effectiveness analysis should evaluate the systems ability to contribute to user job satisfaction and the ability to satisfy the principals needs.

Although the criteria of ability to contribute to user job satisfaction and the ability to satisfy the principals needs are subjective in nature, the author has developed the following WP/AS Alternatives Rating Forms (forms adapted from Gottheimer's [1978]) for principals and users (see Figures B-1 and B-2) to aid in the measurement of these criteria.

This author recommends that the WP/AS Alternatives Rating Form be given out to all principals and users. The survey should be conducted in a single session or by department by the person with the most knowledge of the alternatives so that any technical questions pertaining to each alternative

can be answered. Once the survey is completed, the results can be ranked and categorized by principal and user.

f. Cost Analysis

As discussed earlier, this author recommends the use of rate of return as a criterion of ranking each alternative. Utilization of this method is recommended because each alternative can easily be ranked and compared against the 10% rate of return on a discounting basis that is required by DoD. However, computing the rate of return is a more complicated task than computing the payback period. Therefore, the use of a calculator with this function is recommended.

g. Evaluation of Alternatives

This section of the study should contain a discussion of the quantifiable factors of each alternative presented, such as which alternative provides the highest rate of return. In addition, a discussion of each non-quantifiable factor such as the ability of each alternative to provide for the needs of principals and users.

h. Recommendation

This section should include a recommended alternative derived from the analysis.

WP/AS ALTERNATIVES RATING  
FORM FOR PRINCIPALS

Name:

Duty Position:

Telephone Number:

Date:

Instructions: Using the following scale of 0 to 5 rate each of the alternatives for the particular service provided:

|      |   |   |      |   |           |
|------|---|---|------|---|-----------|
| 0    | 1 | 2 | 3    | 4 | 5         |
| poor |   |   | good |   | excellent |

| Service Provided  | Current System | Alternative 1 | Alternative 2 | Alternative 3 |
|---|----------------|---------------|---------------|---------------|
| 1. Telephone Services                                   |                |               |               |               |
| 2. Typing Services                                      |                |               |               |               |
| 3. Dictation, transcription, steno services             |                |               |               |               |
| 4. Receptionist and other visitor services              |                |               |               |               |
| 5. Conference, Meeting, and travel arrangement services |                |               |               |               |
| 6. Incoming-Outgoing Mail Services                      |                |               |               |               |
| 7. Messenger errand services                            |                |               |               |               |
| 8. Maintenance of files, manuals, etc.                  |                |               |               |               |
| 9. Message Services                                     |                |               |               |               |
| 10. Reference or Research services                      |                |               |               |               |
| 11. Printing or duplicating services                    |                |               |               |               |
| Specific Comments:                                      |                |               |               |               |

Figure B-1. WP/AS Alternatives Rating Form for Principals



## APPENDIX C

Naval Postgraduate School

### FORT SAXON'S SEPARATION TRANSFER SECTION

On 2 February, Major Paul Martin met with Colonel William Cullen, the Adjutant General (AG) of Fort Saxon, to discuss Martin's new job as Chief of the AG Military Personnel Office, MILPO (see exhibit 1). He had been assigned to Fort Saxon after his recent graduation from the U.S. Army Command and General Staff College. During the discussion Martin realized that the job of managing the personnel within the sections was going to be more challenging than he had expected.

Cullen explained that Chief Warrant Officer (CW3) Jerry Anderson had been assigned as the Chief of the Separation Transfer Section on 12 July of last year. In Col. Cullen's opinion Anderson was the most technically proficient warrant officer working in the MILPO. However, there had been friction between Anderson, his non-commissioned officer in charge (NCOIC), Sergeant First Class (SFC) Thomas James and the 16 civilian employees in the section.

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This case was prepared by Captain John M. Hardesty under the supervision of Professors K. J. Euske and W. J. Haga. The case is intended as a basis for class discussion rather than to illustrate effective or ineffective handling of an administrative situation. Names and certain facts have been changed which, while avoiding the disclosure of confidential information, do not materially lessen the value of the case for educational purposes.



To help Martin get a feel for the problems in the Separation Transfer Section, Cullen handed him a copy of the latest employee grievance (exhibit 2), and the Civilian Personnel Office (CPO) endorsement to the AG (exhibit 3). Cullen said that he had resolved the grievance locally by holding a hearing concerning the grievance (exhibit 4) and taking remedial action (exhibit 5). The employee had subsequently been reassigned to the AG Reenlistment Branch.

Martin moved quickly into his new job. He initiated new procedures to improve the customer service in the MILPO operation; Col. Cullen had indicated that customer service was a problem. For example, he developed a survey of customer satisfaction, asking each person who used the MILPO Sections to fill out an opinion form. Whenever a customer rated a service as unsatisfactory, Martin had the responsible individual in that Section prepare a written reply to the disgruntled customer.

In Martin's judgement, the survey system was working well in the MILPO sections in Wright Hall because the number of unsatisfactory comments declined from 20 in March to four in September. However, he felt that it wasn't doing as well in the Bowers Hall building which housed the In-Processing and Separation Transfer Sections because he had received only three unsatisfactory comments during the same seven month period. Martin suspected that unsatisfactory ratings were not being forwarded to his office. He had expected a flood of unsatisfactory ratings in these offices because people are normally tired from the trip if they are incoming or frustrated with last minute red tape if they are separating from the Army.

In September, Fort Saxon was inspected by the Department of the Army's Personnel Management Assistance Team (PERMAST). The MILPO received satisfactory ratings in all areas. Martin was especially satisfied with the report's compliments on the effectiveness of the Separation Transfer Section. Since CW3 Anderson's assignment, the average time to process a separation had declined. In particular, the rate for expeditious discharges<sup>1</sup> had been cut from six days to less than three. Fort Saxon was only one of three Army installations which had met the Army's three day separation standard since the inception of the Expeditious Discharge Program.

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<sup>1</sup>The Expeditious Discharge Program is contained in AR 635-200. It is designed to administratively separate from the service those soldiers who are not fit for continued service and agree to the elimination action.

Morale in the Separation Transfer Section

While the inspection applauded the Separation Transfer Section, Major Martin was concerned about rumors of its low morale. SFC James had talked to Martin about CW3 Anderson's "iron fisted methods" and his effect on workers' satisfaction. In addition, a civilian supervisor, Ms. Davis, had retired. She had bridged the communication gap between the civilian employees and Anderson. Ms. Davis could not be replaced because of a freeze on hiring of civilian employees.

On 12 October, Mr. Bundy, Fort Saxon's Equal Employment Opportunity (EEO) officer and Mr. Keeble, the local representative for the National Association for the Advancement of Colored People (NAACP), visited the Separation Transfer Section in response to a complaint of discrimination submitted by a civilian employee, Ms. Perry. She alleged that the work she did was at a higher level than her job description. She felt that, since she assumed the duties of Ms. Davis, a GS-6, she merited a one pay grade increase from GS-5.

Bundy told Major Martin that three other civilians in the Section had asked how they could submit a joint complaint concerning their job descriptions.

Martin and Anderson scheduled a meeting for 13 October with all of the employees in the Separation Transfer Section. He instructed Anderson to ask the employees to submit any complaints that they had. Martin would then address their complaints during the meeting.

The following unsigned complaints were received before the meeting:

- "CW3 Anderson is a lot of the problem down here. How do you expect people to open up when he shuts them all off before they begin. He changes whatever you do say around to suit himself, not listening to what is actually said. Being a liar does not create respect."
- "You cannot possibly expect people to open up when CW3 Anderson begins a problem-solving meeting by saying, 'I am not going to ask you, I am going to tell you how it is to be.' He does not really listen to what you have to say. He does not understand the point that you are trying to get across."
- "Employees are treated like children, causing resentment. Questions should not be answered, 'Because I say so.' Yelling accomplishes nothing but anger and bad feelings."

Martin told Anderson that his performance was exemplary and that the employee problems would probably blow over after the position audit.

That afternoon Major Martin informed Col. Cullen of the latest developments in the Separation Transfer Section. Cullen said that he was receiving a lot of heat from the Chief of Staff because Mr. Keeble (the NAACP representative) had talked to the Commanding General of Fort Saxon about the discrimination complaint filed by Perry. Col. Cullen said that the Commanding General's Chief of Staff would like to have Anderson reassigned to another unit.

Martin asked Col. Cullen if Anderson could remain as the Section's chief. He said that Anderson was doing an outstanding job, as indicated by the statistics. He told Col. Cullen that the employee who had submitted the complaint was a habitual complainer and that the complaint had no substance. Col. Cullen replied that he could probably hold the Chief of Staff off long enough for the U.S. Army Civilian Appellate Review Office (USACARO) to complete their investigation on 15 December. Col. Cullen also reported that the three employees who had inquired about a joint complaint were no longer interested in view of the forthcoming position audit.

On 2 December, Anderson told Martin that he was upset because the civilian position audit was completed but Perry's position had not been upgraded. He said that, if the position had been upgraded, the discrimination complaint would have been dropped. Anderson was worried about the upcoming USACARO hearing. Martin told him not to worry because Perry's complaint would make the Civilian Personnel Office look bad.

On 15 December, a hearing on the discrimination complaint was held. Anderson told Maj. Martin his testimony (exhibit 8) went well and felt the investigation would not find racial discrimination.

On 23 December, before the Section was to have its annual Christmas party, Anderson was called by CW2 Todd, an agent in the Criminal Investigation Division (CID). Todd said he had been called by Ms. Perry, who reported that food taken from the Mess Hall without authorization was being stored at the Section for a Christmas party. She said the food had been acquired by Anderson and SFC James. Todd told Anderson that the CID does not normally investigate such matters but that, if there was any unauthorized food, it should be returned to the Mess Hall. Anderson had James return the food.

On 9 January, Major Martin called Anderson into his office to discuss a message that he had just received. Anderson had been selected by Department of the Army to serve

--- "It seems there is a constant uproar because we don't know what is expected of us. There seems to be a constant watch on us, as if we don't know what we are doing."

--- "I have no major complaint. After working at Trainee Personnel for two years, I think I died and went to heaven."

During the meeting, Martin discussed these complaints. He answered questions about Anderson's leadership style in a tactful manner, emphasizing that Anderson was still the boss who sets policy and procedures. Questions concerning work load pressures were answered by indicating that Department of the Army established the personnel separation time table and that these standards had to be met. He also announced that a pending staff reduction might eliminate one or two positions in the Section. At the conclusion of the meeting, Martin asked for suggestions on how the separation operation might be improved. No suggestions were made.

After the meeting Martin told Anderson that most of the questions were of little substance and asked him to make simplified work flow diagrams of the separation process. He also asked Anderson for any ideas he had that would resolve the conflict within the Section. Martin then remarked that it was odd that Ms. Perry had nothing to say during the meeting.

#### Job Description Analysis

On 14 October, Anderson handed Major Martin a Section organization chart (exhibit 6), and the work flow diagram for an Army separation that did not involve a retirement (exhibit 7). He also asked Martin if he could just discuss suggestions about the Section's problems rather than submit them in writing. Martin said yes and scheduled Anderson for a conference the following week.

At the meeting on 20 October, Anderson explained that some of the Section's job descriptions were not accurate. In his opinion, the entire Section needed a position audit. For example, Ms. Perry had taken over many of Ms. Davis' duties after her retirement but her job description still said she was a supervisor in charge of the write-up unit. Martin told Anderson to submit a request for position audits to the Civilian Personnel Office by 31 October. Anderson also said that he wanted to convert at least half of the civilian positions to military, especially the supervisory positions. He said the civilians were not interested in suggesting procedures to make the work flow better. He also said that the civilians were habitual complainers, probably because most of them were divorcees supporting a family. Martin agreed to let Anderson submit a conversion request even though he told Anderson that he feared additional civilian complaints.

on the staff of the Special Discharge Review Program<sup>2</sup> located in St. Louis for a five month period. Martin said that he would send someone else because he felt that the civilians might view his departure as a management retreat. Anderson, however, was disappointed in Martin's decision. He told his friends that it was time for him to move to another job; he was tired of being in charge of a bunch of complaining civilians.

Throughout January, Anderson made life difficult for Ms. Perry. He informed her in writing of every mistake she made. He circled her errors with red ink requiring entire documents to be retyped rather than simply corrected.

On 19 January, Anderson had an official counseling session with Perry about her unsatisfactory performance. Based upon what she viewed as harrassment, Perry submitted another discrimination complaint. This time the complaint was submitted to the Office of the Assistant Secretary of the Army for Equal Employment Opportunity (EEO).

On 22 January, Col. Cullen and Maj. Martin were informed by the Civilian Personnel Office of Ms. Perry's most recent complaint. They did not take this complaint seriously because the USACARO investigation report submitted to the Commanding General of Fort Saxon found no evidence to sustain Perry's first complaint of discrimination. In fact, they did not even bother to find out the details of the current complaint. The only action that the Commanding General took on the first complaint was to inform Ms. Perry of the finding and advise her of her right to appeal. He also directed that CW3 Anderson and SFC James attend the next CPO session of Position and Pay Management Training.

On 11 March, Ms. Perry received a letter from the Director of Equal Employment Opportunity, informing her of the results of her second complaint. The Director ruled that Ms. Perry was counseled and issued letters critical of her performance as acts of reprisal for previously filing an equal employment opportunity complaint in October. Based on this ruling, appropriate management officials were directed to remove and destroy all copies of counseling sessions. The letter also advised Ms. Perry that if she was not satisfied with this ruling, she could appeal the decision to the United States Civil Service Commission or file a civil action in an appropriate United States District Court.

A copy of the EEO Director's letter was also endorsed to the Fort Saxon Commanding General for other actions that he deemed appropriate.

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<sup>2</sup>The Special Discharge Review Program was established to process amnesty requests from military personnel who deserted during the Vietnam Conflict.

**Assignment:** What course of action should have been or should be taken by the AG, MILPO Chief concerning CW3 Anderson?

**Comment on the effectiveness and efficiency the Separation Transfer Section. What actions should have been taken to improve these areas?**

## EXHIBIT 1

## FORT SAXON'S SEPARATION TRANSFER SECTION

MILPO Organization Chart

|   |   |   |
|---|---|---|
|   | Military<br>Personnel<br>Office<br>(Bldg 1210)            |   |
| Personnel<br>Management<br>Section<br>(Bldg 1210) | Personnel<br>Actions<br>Section<br>(Bldg 1210)            | Personnel<br>Records<br>Section<br>(Bldg 1210)  |
| Redeployment<br>Section<br>(Bldg 1210)            | Customer Service/<br>Operations<br>Section<br>(Bldg 1210) | Standard Installation<br>Division Personnel<br>System (SIDPERS)<br>Section<br>(Bldg 1210) |
| Trainee<br>Personnel<br>Section<br>(Bldg 804)     | Separation<br>Transfer<br>Section<br>(Bldg 1202)          | One-Stop<br>Inprocessing<br>Section<br>(Bldg 1202)  |

## EXHIBIT 2

## FORT SAXON'S SEPARATION TRANSFER SECTION

Rodger's Grievance

AG Mil Pers Office  
Separation Transfer  
Section

Commander  
Fort Saxon  
Attn: Civilian Pers. Office

I am submitting this grievance in the Step three subject: Working under applied pressure which not only creates an unpleasant working atmosphere but is contributive to and aggravates my nervous problem, and is described as follows:

- 1) 100% accuracy - I work in this unit where the management constantly has urged us to strive for 100% accuracy and at great lengths. This is a form of applied pressure for there are few if any employees who can perform at this level.
- 2) False accusations of questioning Dr. Slip - On an occasion recently, when I returned to work with a Dr. Slip, I was questioned extensively about the authenticity of the handwriting as it apparently was suspect to them.
- 3) Constant nit-picking - There is constant nit-picking concerning inter-office movements and being observed closely while working at my desk for non-work.
- 4) Meetings of two management officials with one employee - When I have met with management either at their request or mine, recently the meetings have had two management officials present and I the only employee, leaving me at a disadvantage.
- 5) Utilization of first line supervisor - Much of the time our immediate supervisor is bypassed and much of the supervision assumed by the second line supervisor, thereby denying us a line of supervision which perhaps is more attuned to problems at the immediate level.

My representative is William A. Hanks of AFGE Local #8703.

William A. Hanks  
AFGE Local #8703

Thelma Rodgers



## EXHIBIT 3

## FORT SAXON'S SEPARATION TRANSFER SECTION

Grievance Endorsement to the AG

| <b>DISPOSITION FORM</b>   |                            |                     |                    |
|---|----------------------------|---------------------|--------------------|
| <small>For use of this form, see AR 240-11, the processing agency is TAGCDB.</small>  |                            |                     |                    |
| <small>REFERENCE OR OFFICE SYMBOL</small>   | <small>SUBJECT</small>     |                     |                    |
| APAA-PA-CP-M  | Grievance - Thelma Rodgers |                     |                    |
| <small>TO</small>   | <small>FROM</small>        | <small>DATE</small> | <small>CAT</small> |
| AG  | CPO                        | 19 Nov              |                    |
| <p>1. Ms. Thelma Rodgers, Military Personnel Clerk (Typing), GS-4, Separation Transfer Section, has submitted a grievance regarding working conditions.</p> <p>2. In accordance with the grievance procedures, every effort must be made to resolve the grievance locally. In addition, a final review and attempted resolution by the Activity Commander is required.</p> <p>3. Request consideration be given to the grievance and this office be furnished your specific and detailed comments and recommendations.</p> <p>FOR THE CIVILIAN PERSONNEL OFFICER:</p> <p style="text-align: right;">DOROTHEE SIMPSON<br/>Labor Management and Employee<br/>Relations Specialist</p> |                            |                     |                    |

DA FORM 2496

REPLACES DA FORM 10, WHICH IS OBSOLETE.

## EXHIBIT 4

## FORT SAXON'S SEPARATION TRANSFER SECTION

## Local Grievance Hearing

COL Cullen I have called this meeting because a Step three grievance has been submitted by Mrs. Thelma Rodgers. The responses will be recorded. Persons present are Ms. Rodgers, Ms. Smart, Ms. Jones, Ms. Hardy, Ms. Molen, Mr. Jeffers, (employees of Separation Transfer Section); Mr. Robert Lawson, Chief, AG Admin Services; and Ms. Carlsen, recorder. Mr. William B. Hanks, a representative of AFGE Local #8703, represents Ms. Rodgers. I would like to start this off by asking Ms. Rodgers to expound on her grievances and specify what they are. I have gone through Steps one and two and cannot find specific complaints. I have looked several times and cannot find specifics. If there are others of you here who are not dissatisfied, please feel free to excuse yourselves. Ms. Rodgers, would you please, for the record, reduce your grievance to specific items.

Mr. Hanks To start off with, we are not prepared for this. We are prepared only to answer questions. We were not given sufficient notice to prepare for a formal hearing.

COL Cullen Would you be able to speak for Ms. Rodgers?

Mr. Hanks I will not attempt to do that. We are not prepared to present it formally.

COL Cullen If this is the case, we will just cancel this right now. When did you find out about it?

Mr. Hanks I was not notified until 1:00 P.M. today.

Ms. Rodgers We were not aware that there was a meeting until just before lunch. I was asked if I would be back before one o'clock.

Ms. Molen I was told to go in to see Chief Anderson and they said "Just go into his office." About that time the rest of them said we were to come over to see Mr. Lawson and I did not know what it was about until then.

COL Cullen That being the case, what do you feel would be ample notice?

Mr. Hanks This is not the normal procedure for a grievance.

COL Cullen I have been advised that I am to conduct the Step three.

Ms. Rodgers But we are not prepared to make a formal presentation. I suppose I will have to take remedial action.

COL Cullen Remedial action, what does that mean? I have read your complaint and am taking remedial action. Number five is "utilization of first line supervisor." What does that mean?

Ms. Rodgers Procedures were set up as to who the records went to at what time--this procedure has not been followed. There may be steps and sometimes an error that everybody has missed and it does not go back through the same steps. You don't know who is responsible. The only thing that occurs is you get chewed out by Sgt James.

COL Cullen If an error exists and everybody has missed it, you think that it should go back through the same treadmill?

Ms. Rodgers Right, if everyone missed it, then maybe it was an oversight, but I feel that everyone should be aware of it.

COL Cullen Is there a written procedure established?

Ms. Rodgers To my knowledge I have not seen one.

COL Cullen Do you have a desk SOP?

Ms. Rodgers Yes, but since Sgt James has been there everything has been rearranged, and if there is a new one I have not seen it.

COL Cullen Whose responsibility is it?

Ms. Rodgers I guess it is management's, if they would stick to one.

COL Cullen I will see that they establish a written SOP.

Ms. Jones I think a lot of this stems from when you are dealing with records--we are not getting the changes--somebody gets them and sticks them in a file. The ones that are going to be affected by these changes should be notified and discuss the changes. So many times we are not aware and

things come back saying this is wrong, but they are not wrong if you were not told what to do in the first place.

- COL Cullen Do you have middle management supervisors?
- Ms. Rodgers No. My immediate supervisor is Ms. Davis and quite often I have tried to talk to her and cannot get through because of Sgt James. A problem is not resolved because I cannot get through to her.
- COL Cullen Did this same problem exist under LT Sullivan before CW3 Anderson took over the Section?
- Ms. Rodgers Do you want the truth?
- COL Cullen I certainly do.
- Ms. Rodgers Then, yes Sir, it has been like this ever since Major Andrews left. (Replaced by Major Martin).
- COL Cullen So, the gripe is against Sgt James, is that right?
- Ms. Rodgers Well, these precedures. For instance, in December we got a message pertaining to a fraudulent enlistment. I went to my immediate supervisor with it. Sgt James walked by and overheard us and told us not to worry about it and informed us that there were no records in the office now. So later that day a record came into the office and no one was notified how to do it, so we did it like we always do. There is a lack of communication.
- COL Cullen How about the rest of you--is there a communication gap?
- Ms. Molen I find that at times, if we do have a problem, it is hard to sit down and explain to him the problem having to do with any individual in the office. He has told me that I am a perfectionist, which I am by no means. I feel that at times when I was brought to that office to do a job a certain way, and I tried to do it to the best of my ability--If I check a record and find something wrong--you get the feeling that you are checking on someone. I feel that it is hard to explain anything to Sgt James.
- COL Cullen Do you feel that if a written SOP were established and distribution made to everybody that it would solve the problem?

- Ms. Molen If one were written and it was followed, I think some of the lack of communication would end--but there are so many changes that its hard to keep up with them.
- COL Cullen Are you talking about regulation changes or procedures?
- Ms. Molen Both. When we get the records, if there was anything wrong, we send them back for corrections. When Sgt James came this was changed and we had to do the changes and sometimes it is hard to find them to correct--sometimes as many as ten records will come in at one time and seven will be wrong.
- COL Cullen What kind of errors are you talking about?
- Ms. Molen Orders are wrong--posting is wrong--AWOL's not posted--there may be three or four things wrong with the record at the same time. We were told to send them back if they were wrong. Since Sgt James came we have to stop whatever we're doing and correct them. Say you are working on a record and the last entry on the 2-1 was an individual was assigned to the Reception Station and had been reassigned twice--when you have a stack of records to do, it takes time. Stops the other work in the office. If we have the time to do it nobody minds doing it.
- Ms. Rodgers On cases we have found errors that one individual has made repeatedly--we will go back to see who made the mistake, but Sgt James will say, "Don't worry about it, just change it."
- Mr. Jeffers As far as really being unhappy, I can't say that I am. I think in my own personal view we are in a situation to where we get people saying "get these people out"--we're really pushed--I feel we stay reasonably busy. But we will get records with lots of mistakes and it takes time to fix the stuff. We have talked to Sgt James about it and he just says that they are short-handed too. They just kind of send the records down to us and then we are supposed to try to get all this stuff right. All this takes our minds off of what we are supposed to do. Going back to Maj. Andrews, he dictated the way to do it and it all went smoothly. I am saying that we know we have 72 hours to get this guy out and don't have time to discuss how we are going to do it. I think that a lot of times I get mad,

everybody does, but we are caught between a rock and a hard place. I think one thing that might alleviate the problem is to have one person decide what we are going to do and then maybe there wouldn't be time for questions and things. Maybe if we had a clear cut policy on the way to do things, maybe it would help. I don't think I could write a SOP and I think it would be very hard to do, and as far as who made the error--I make errors, everybody makes errors, and I think that if we took it back every time we would lose a lot of time, but the biggest thing that's wishy-washy is reenlistment codes. We have people on our backs wanting these things out--we just have lots of problems that I don't think there is a real easy solution to. Some problems are personalities between individuals. As far as being really unhappy down here, I am not.

Ms. Jones

I was in the Retirement Section and I went to retirement seminars with LT Sullivan and when we came back I was told I was no longer in Retirement, and I'll tell you one thing I think I should have been told why, and I think Sgt James goes at things in a heat and always not talking to the person concerned and I feel that I should have been told. You can take problems to Sgt James and when they concern certain ones nothing is done about it. Then you are told that you are a trouble maker. I feel that I do the best that I can, so I don't feel that seeking causes is being a trouble maker and I cannot get an answer from Sgt James. I try to do the best I can. I feel that I cannot get a plain answer from Sgt James. It's not the way you should be able to get advice from your supervisor. I don't know any way to straighten them out. So now when I have a problem I just go on and when the record comes through and there are conflicting things, little things, then there has been no effort to correct this and when they get to me, I don't know how to correct them because I don't know what is correct. Now, we cannot call to find out what is correct and then you wait until the man comes in and it's bad because you don't know what to do and when it's wrong you don't know what to do. The retiree goes to National Guard and they call me and tell me the record is wrong and so I say send it back. One in particular was on pay because the 214 was wrong. So I took it to Sgt James and he was very unhappy. He said I use the phone on personal business and you receive a lot of personal calls. I said I didn't use the

phone on personal business, they are people from State National Guards and they are strictly on business pertaining to 214's.

- COL Cullen How was it when Ms. Albey, the former civilian supervisor, was there?
- Ms. Jones Ms. Albey was a trouble maker, she would get the gist of anything and put it in her terms and her ways.
- Ms. Rodgers One certain incident, I had requested sick leave in advance. I was called into the office three days in a row pertaining to this. All three times my immediate supervisor was excluded. Accusations were made in these meetings that were entirely false.
- COL Cullen Is that in regard to Item two, in your grievance?
- Ms. Rodgers Right. That was one of them, but it had to do with a statement about another person that I did not make. She had walked past my desk and overheard just a few words and put in her own words and came up that I had been talking about this one girl. This was not true. I remember the whole thing and I had not said a word. I felt it was kind of two against one because Management had two people and my supervisor was not included. Then I was on leave for three weeks. I came back and the very day I came back the same thing happened again. Only since I started this grievance has Ms. Davis even been a part of this. They state clearly that she's part of management. Evidently she was not aware of any of it--any meetings. There was a statement that was made about drinking and I said if I did this I would turn into an alcoholic. I don't drink, but some way it got twisted around and that I had said that he was trying to make me an alcoholic. That was the excuse as to why I was called in there. Had they come to me and asked me, I would have told them and it was nothing at all like they interpreted it.
- Mr. Jeffers I was the one that said that. CW3 Anderson was trying to find out. I thought that was what you said, if not, then I am sorry.
- COL Cullen I am not sitting in judgment about whether anybody is an alcoholic. What's the complaint about having pressure reduced?

- Mr. Hanks That overall covers quite a large territory.
- COL Cullen Regulations stipulate what will be done. We have a workload to accomplish and I realize that it causes pressure. It would appear to me that if one is not able to cope with the pressure required by regulation then they would seek to go somewhere else.
- Ms. Rodgers They are normal pressures you are talking about. It is the other unnecessary pressure--the little nit-picking things that are said or done that you really can't put your finger on and they all kind of build around you. I realize that there are pressures for the normal work--it is unnecessary, that is, they try for 100% accuracy, but if you write up a work sheet and it contains errors, we are instructed that we would get the paper back to do it again instead of getting it back for correction of the error. We were told we would get it back without the record to redo--that is unnecessary pressure. You can't do your work right because of this pressure.
- Ms. Molen When we are backlogged with records and you know you have to get these records out, nobody is surprised if some are coming back for correction, but when the work is backed up--the main pressure is in the typing section--if any are rejected they have to go back to be typed over. I feel that typing is the most pressure. If there is something wrong they have to be retyped right then and it causes a lot of pressure because of this. They do strive for 100% accuracy, and its normal to make one or two small mistakes, but when you are under pressure you make more mistakes than usual.
- Ms. Smart I am one of the typists and we were short one individual and a slot was going to be filled so that we would have three typists. I think that we have most of the pressure because everything that goes through the office eventually comes back to typing and we have to have them done by time to go home. You do have a pressure job. One particular day one other girl and I were called into Sgt James' office and chewed out for not getting the records out. But I took that to my supervisor and we got that hashed out. I believe we definitely need one more individual in that section because now we have the officers and we were told that if there are any mistakes we have to take them to our supervisors. I think this is a waste of time, why can't I do



this myself?

- COL Cullen It appears to me you have a dichotomy amongst yourselves. Now, let's go on to item four of the grievance.
- Ms. Rodgers Each individual that works there maintains a separate folder and we were told to bring them to the office. All these are kept in a file. A copy of my grievance is kept in that office and I think that is wrong.
- COL Cullen We can get the grievance removed from the file.
- Ms. Rodgers I would like to read the one that's in their file. I think that some of the wording has been changed. They referred to my "mental condition" --I don't have a mental condition, I have a nervous condition.
- COL Cullen If the grievance is in the management file, I will get that removed. There might be others in the office that might have similar feelings that might like to talk to me. My door is always open.
- Ms. Rodgers I have been instructed by Ms. Ball, CPO, that if I saw an announcement to give her a call and she would put my name on it. I requested from Sgt James to make a call of that nature. First he refused, said he would make it. But finally, I had to agree to let him listen. To me, I think that is a violation of the Privacy Act. I think that if we decided to talk to you he would not let us.
- COL Cullen If your supervisor does not want you to talk to me, let me know. I don't think monitoring a phone call is a violation.
- Ms. Rodgers Another thing, I had gone for a job interview-- this happened over the holidays, the Wednesday before Christmas. I came back after the holidays and noticed that the paper sent to me by CPO concerning the job interview had been opened. I noticed that it had two staples in it. I picked it up and there was only one staple. Somebody felt it necessary to find out what I was getting. I am saying that somebody opened that and I feel that that is a violation or at least distasteful.
- COL Cullen You know what I would think of something like that. This almost gets down to petty animosi-

ties. I think it's trite when you count the holes in a piece of paper to find out if someone is spying. If you are that suspicious, then I will encourage you and try to help you find another job.

- Mr. Hanks Under the circumstances this is almost the rule rather than the exception there. This is only part of what is happening there. Why are these things happening?
- Ms. Smart One injustice I feel has been brought against Ms. Rodgers, she is no longer the Section head. Her capabilities should have nothing to do with it.
- COL Cullen Was she told why?
- Ms. Smart Not to my knowlegde.
- COL Cullen Was some else appointed?
- Ms. Smart Not to my knowledge. We were just told not to ask Ms. Rodgers--stay away from Thelma.
- COL Cullen You are making the allegation that because of her filing the grievance she has been changed from Section head?
- Ms. Smart Since the Grievance has been filed, she is no longer the Section head. The people have been informed not to ask her anything because she is no longer the Section head.
- COL Cullen That particular allegation, I will have to investigate with CW3 Anderson. We will go back to Item five of the grievance.
- Ms. Rodgers I usually get to work early and talk to Ms. Davis and have been told not to talk to her outside duty hours.
- Mr. Lawson If they are talking business they could file a claim for working overtime.
- Mr. Hanks I don't think that would be done.
- Ms. Rodgers Sgt James told Ms. Davis that we are not to discuss business before work. I think that might violate freedom of speech.
- Mr. Lawson The freedom of speech means they can talk about anything but work before work.

- Ms. Rodgers I have a question on flexitime. Maybe my understanding is not perfectly clear. I know we are authorized to change our working hours.
- COL Cullen Within certain limits. As far as I am concerned on assembly line processes you couldn't afford to use flexitime. Flexitime is available for people in a more or less fixed time. You either begin early and stop early or begin late and stop late, etcetera.
- Mr. Hanks There are two schools of thought. This is not all that we have been told. There is a question about it. We have had some instruction from CPO but then I am not clear on this myself.
- COL Cullen Would you say that if an individual has to leave early it is OK?
- Mr. Hanks Some flexitime can be changed from one day to the next.
- COL Cullen I would have to get an interpretation on that because I could not see any office run or allow any person to work that way.
- Mr. Lawson It is injected in there that if a person has an appointment then allow flexitime as the workload permits.
- Ms. Rodgers At first when it came into being that was the way it worked. Just recently we were informed that the flexitime was only for our beginning and ending, any other would be considered leave. In the section I am in, I come at 7:00, one at 7:15, and one at 8:00. There is no section left at any time without someone working.
- COL Cullen I will get a reading from CPO and get out instructions about flexitime. Now the next item, there is no prohibition against using the phone if you were instructed by CPO to call them, then I think you have every right to call them.
- Ms. Rodgers Since this grievance, I think there has been unfair action directed toward me. If possible, I would rather go ahead and transfer.
- COL Cullen I want to follow this grievance through to its proper conclusion because this discussion indicates that changes need to be made.
- Ms. Rodgers I am at present hesitant about putting in a 123

for promotion because I am not sure what grade I would get.

- COL Cullen    Go ahead and try to do the best you can. I would not tolerate anybody being subjective or vindictive about a 123. I think that's probably carried it through at this point. What I want to do is get a transcript of this and then go back through to the people in management to get the other side of the controversy. If necessary we will hold another meeting with the assembled group and management. As soon as I have a transcription, CW3 Anderson and Sgt James will be informed of what I have told you.
- Ms. Jones    I have been in this job since last April and have asked for a job description. So I asked Ms. Davis and she said she sent up job descriptions and they were sent back.
- COL Cullen    When?
- Ms. Jones    Sometime about the middle of the fall. Well, I want to know what I am supposed to be doing. Ms. Davis said that they were supposed to write up another one and submit it but then they said CPO would have to reevaluate the job. I said well I will wait until after Christmas.
- Ms. Molen    Back to the SOP--about eight months or a year ago Sgt James asked everybody to write down what they did. I wrote mine up and gave it to Sgt James and he was supposed to give it back and he has never given it back.
- COL Cullen    We will adjourn the meeting now. Thank you for coming this afternoon.

## EXHIBIT 5

## FORT SAXON'S SEPARATION TRANSFER SECTION

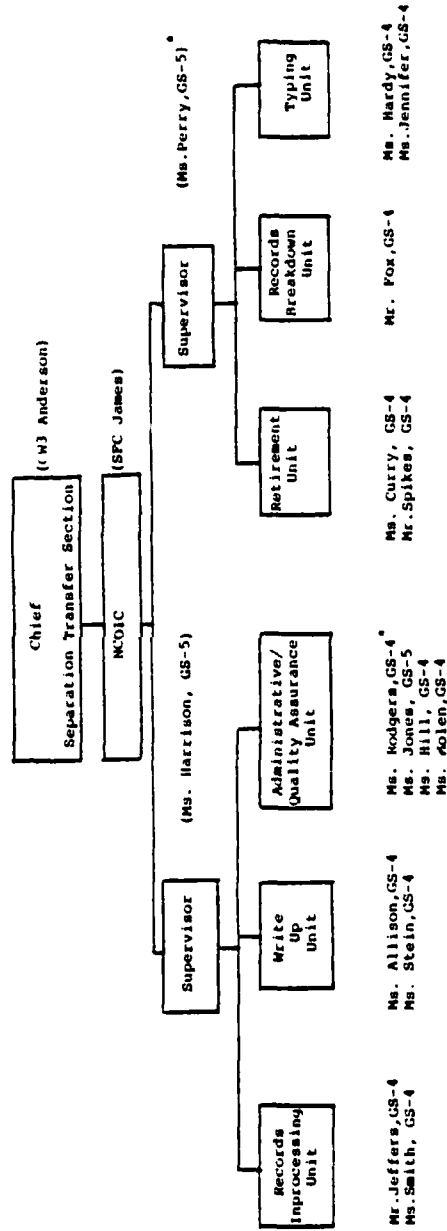
Grievance Remedial Action

| <b>DISPOSITION FORM</b>  |                            |                      |                    |
|--|----------------------------|----------------------|--------------------|
| <small>For use of this form, see AG 340-11, the appropriate agency in TABCD.</small>   |                            |                      |                    |
| <small>REFERENCE OR OFFICE SYMBOL</small>  |                            | <small>CLASS</small> |                    |
| APAA-AG  | Grievance - Thelma Rodgers |                      |                    |
| <small>TO</small>  | <small>FROM</small>        | <small>DATE</small>  | <small>CHK</small> |
| CPO  | AG                         | 19 Jan               |                    |
| ATTN: Labor Mgt & Employee Relations   |                            | COL Cullen/rb/2133   |                    |
| <p>The following is a summary of grievance action:</p> <p>a. An SOP will be reduced to writing insofar as practical. Due to specifics involved, a detailed procedure may not be possible.</p> <p>b. Grievance file will be removed from employee office file and filed elsewhere. Employee was assured this office file would not be transferred if employee should be reassigned.</p> <p>c. It was ascertained that title of Section Head was removed to relieve some pressure on Ms. Rodgers.</p> <p>d. Management has been instructed to seek ways to bridge the communication gap. To this end, assistance will be sought from CPO to aid in improving management-employee relations.</p> <p>e. The Chief of MILPO was instructed to seek a position within his operation to laterally reassign Ms. Rodgers. However, should she be selected for a vacancy outside AG, I would be willing to release her.</p> <p>f. More latitude in application of flextime will be made, consistent with mission accomplishment.</p> <p>g. The minutes of a meeting held on 5 Jan 77 are attached.</p> |                            |                      |                    |
| <p>W. B. Cullen<br/>Colonel, AGC<br/>Adjutant General</p>  |                            |                      |                    |

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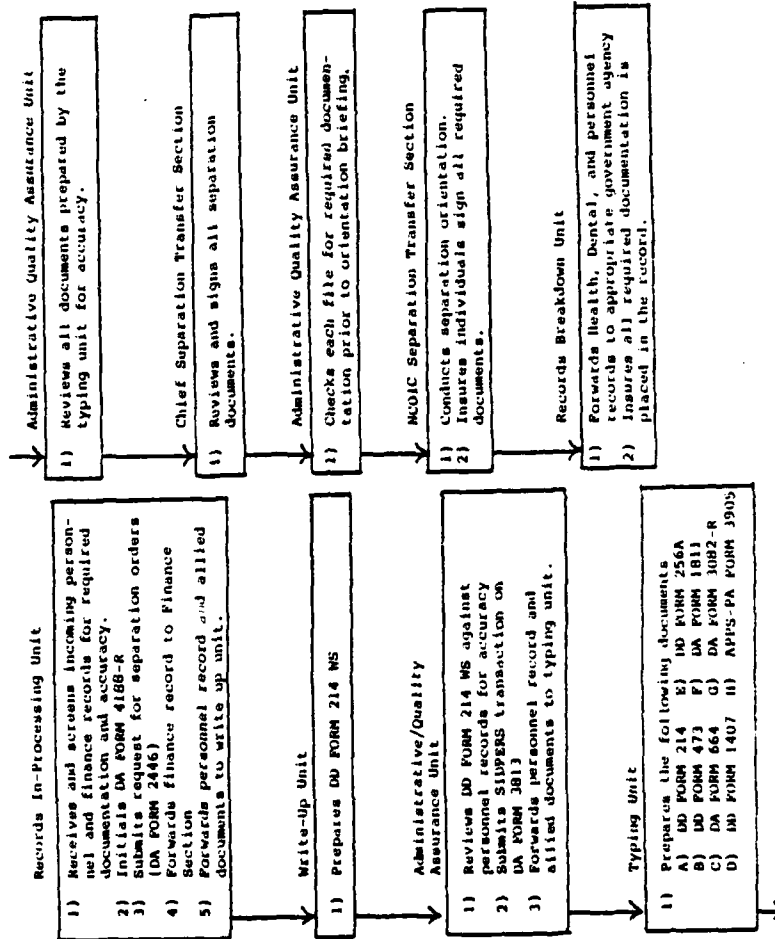
EXHIBIT 6

FORT SAXON'S SEPARATION TRANSFER SECTION  
Separation Transfer Section Organization Chart



\* Ms. Perry assumed the majority of Ms. Davis' duties upon her retirement.  
 \* Ms. Rodgers is still charged against the Separation Transfer Section even though she was reassigned to the Reenlistment Branch.

EXHIBIT 7  
 FORT SAXON'S SEPARATION TRANSFER SECTION  
 Army Separation Work Flow Diagram



## EXHIBIT 8

## FORT SAXON'S SEPARATION TRANSFER SECTION

Anderson's Testimony During the USACARO Hearing

MR ALLEN: I am Robert Allen, an EEO Investigator from the US Army Civilian Appellate Review Office, Atlanta, Georgia. I am here to investigate a complaint of discrimination against you and SFC James, filed by Ms. Perry of 17 November. She alleges that she has been discriminated against by you and SFC James because of her race which is Afro-American. I have already explained to you that statements such as yours are made under oath and without a pledge of confidence. I have shown you a copy of the Privacy Act Notice that applies to this type of investigation. Do you have any questions or reservations about what I have said so far?

MR ANDERSON No sir.

MR ALLEN: Do you have any objections to taking an oath?

MR ANDERSON: No sir.

(OATH ADMINISTERED)

MR ALLEN: Ms. Perry claims that she came into the Separation Transfer Section in June, and at that time was assigned as a Supervisor, Records Breakdown Section, Typing Section, and Officer Separation and Retirement Section. The essence of Ms. Perry's complaint is that she replaced the former incumbent who was Ms. Davis, in that position and has been performing the duties that Ms. Davis had been performing up to that point. But that where Ms. Davis had been a GS-6, Ms. Perry had performed those duties as a GS-5, and has been unable to get any adjustment made in that grade. Her contention is that the reason she has been unable to get any adjustment made is because she is Black. This is really the essence of the complaint of Ms. Perry. I would simply ask you to comment how you see fit.

MR ANDERSON: I cannot respond to what duties Ms. Perry had when she got there. I assumed my duties as Chief of the Separation Transfer Section on or about 12 July. When I arrived, Ms. Perry had the responsibilities of a Supervisory Military Personnel Clerk. She had initial responsibility for the initial preparation of the write up, or initial preparation of all records and associated separation documents for officers who were Released from active duty (REFRAD), discharged or retired, along with the preparation of all records for enlisted personnel who retired at this installation. To be more specific she was supervising the



retirement unit, records breakdown unit, and the typing unit within the Separation Transfer Section. Her duties have remained the same since my arrival on or about 12 July. Does that answer that first question?

MR ALLEN: Yes sir. I think so. One of the main things I am getting at is that you don't know from personal observation what Ms. Davis might have been doing before you got here.

MR ANDERSON: That would be impossible, sir. How can I answer something when I wasn't here? I couldn't respond to what Ms. Davis had done because I came in here and went to work, and when I arrived Ms. Davis was performing the duties of the write-up unit along with many other duties; such as, Ms. Davis was frequently called upon to go in and give orientations to 30, 40, 50, or 60 people that we had. In addition to that she was required to assist me in writing any documents or reports, or any inquiries we had from MILPO or the AG. Because of Ms. Davis' experience and her expertise in the military personnel field she was called upon daily by management to assist them; whereas Ms. Perry was never called upon to go into the orientation room and do an orientation or assist me in the preparation of documents. Ms. Davis was occupying a GS-6 position when I arrived at Separation Transfer Point. To the best of my knowledge, Ms. Davis had been a GS-6, and had held that position several years, when I arrived.

MR ALLEN: Looking now, at the idea of job descriptions. Do you recall whether there was any consideration given to job descriptions, per se, that Ms. Perry's job description said something other than what her actual duties were?

MR ANDERSON: No, I cannot see that, sir. Military Personnel Clerk Supervisor is her job description. To the best of my knowledge Ms. Perry performed duties in her job. We are in the process of separating people from service and when I say separate, we are discharging a man or he has been REFRAD or some type of action is taking place. When we get the record the case is finalized. We are either involved with writing the record up, typing the record up, or checking the record.

MR ALLEN: Well, what I am getting at, for instance you had two people down there, one classified as a Supervisory Military Personnel Clerk GS-5 and one Supervisory Military Personnel Clerk GS-6. Is that true?

MR ANDERSON: That's correct.

MR ALLEN: Obviously then there's got to be some difference in the duties that they perform?

MR ANDERSON: I just explained that to you sir. Ms. Davis had overall responsibility; in other words, she was an assistant

to the NCOIC and the OIC. When we talk about all the things we do we are talking about a lot of time. This took up a lot of Ms. Davis' time. I wasn't under the impression that we were here to discuss Ms. Davis.

MR ALLEN: O.K. What I'm getting at is, were these duties that we are talking about that Ms. Davis was performing recorded in the official job description that was on file for her?

MR ANDERSON: What do you mean recorded, sir? She was performing the duties of a Military Personnel Clerk Supervisor. That's what Civilian Personnel has on file. That's what I had on file in the file that I kept, those were the duties that she was doing.

MR ALLEN: What I'm getting at is, very often you run into a situation where, you'd have a piece of paper that contained a description of the duties but it may not be an accurate description of what is actually being performed.

MR ANDERSON: Sir, we have several jobs down there. There are four jobs that are interrelated. When we have people gone on maternity leave we have to have somebody do their job. I cannot have a job description for 18 employees, a different job description, right?

MR ALLEN: Well, it can be done.

MR ANDERSON: It could not be done there. Because we wouldn't get the job done. We couldn't separate the people. Getting back to Ms. Davis, Ms. Davis and the NCOIC supervised the rest of the people. Ms. Davis worked directly under the NCOIC. I, at times, have given Ms. Davis work to do for me, sometimes it might take a few hours, sometimes longer. That takes her away from her job. The people that Ms. Davis didn't supervise, the NCOIC supervised.

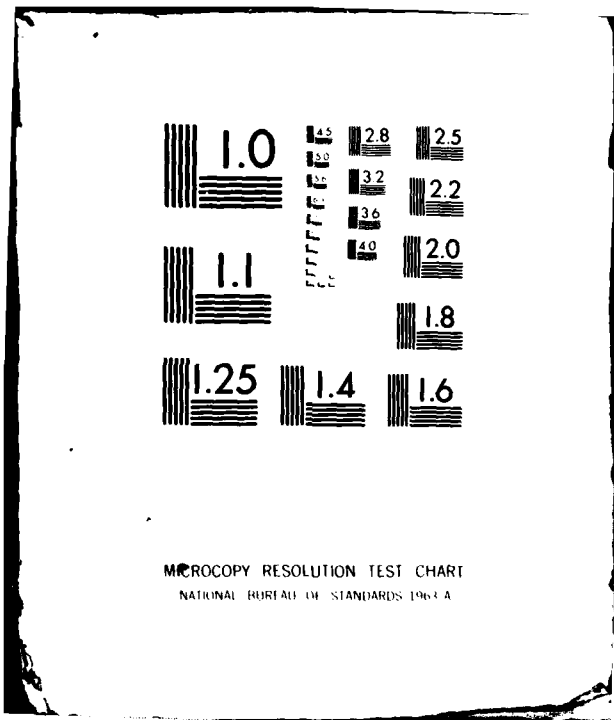
MR ALLEN: O.K. The things that Ms. Davis was doing that would have caused her grade to be higher than Ms. Perry's, right, should have been accurately recorded in her written job description.

MR ANDERSON: They were, sir. They were recorded in her job description.

MR ALLEN: Accurately?

MR ANDERSON: What do you mean accurately? Every word in the job description? When you say accurately I don't know what you mean sir. But, to the best of my knowledge, the files are available at the CPO, the woman performed the duties for which hired. Whether or not she supervised the exact number of people that was in her job description, I couldn't respond to





MICROCOPY RESOLUTION TEST CHART  
NATIONAL BUREAU OF STANDARDS 1963-A

that, because our strength fluctuates at the Transfer Section. Do you understand what I am trying to say?

MR ALLEN: I believe so.

MR ANDERSON: We couldn't say that Ms. Perry supervised five people this month and the next month it may be more.

MR ALLEN: I think I understood you to say that at the time you went in there that Ms. Perry was a supervisor to the Records Breakdown Section, Typist Section, and Officer Separation and Retirement.

MR ANDERSON: That's right. That's what I said.

MR ALLEN: Do you recall anytime since you've been in there, Ms. Perry saying directly to you, or SFC James to you, that she felt her job description or her grade wasn't right?

MR ANDERSON: No, I do not recall that. I do recall that when we were working on the job description she and her supervisor went over the job description in detail. But basically, I found nothing wrong with the job description other than there were some words that were obsolete in the job description.

MR ALLEN: All right. Then at some point, and apparently not too long ago, something was set in motion to have the job description re-written.

MR ANDERSON: SFC James and I talked about that a long time before that thing came up. We were pressed for time, and I talked to the Chief of MILPO, and based on that and the fact that Mr. Bundy had visited our office, we considered that the appropriate course of action. That we would try to further define job responsibilities within the Separation Transfer Section.

MR ALLEN: I understood somewhere along the line that there was some sort of a get together between you, SFC James, Ms. Perry and Ms. Davis.

MR ANDERSON: Let me go back. I knew of no such thing that we ever had a 'get together.' Now we have meetings and certain things are disseminated when changes occur, but as far as having a meeting about job descriptions between Ms. Davis and Ms. Perry and SFC James, I am not aware of such a meeting.

MR ALLEN: Would it still be true, nevertheless, there were draft job descriptions prepared for Ms. Davis and Ms. Perry, individually, and some other job descriptions at this time I don't know how many or for whom.

MR ANDERSON: Well, I know. There was a draft job description for Ms. Perry. We requested that. The current job

description for her position was inadequate and required reaudit. This is on file in the CPO Office. The current description does not encompass the duties assigned and performed by the incumbent. Additional duties should be realized with the duties in Separation Transfer Section that were put into effect. The duties within the Records Breakdown, Retirement Unit, Typing Unit require technical and administrative supervisory responsibility for approximately 800 to 900 separations monthly. I use that word loosely. In the summer it increases, in the winter it decreases. The nature of the supervisory duties are highly sensitive and require explicit knowledge and professional expertise in Separation Transfer. This went out to CPO and we requested that that job be upgraded to the grade of GS-6. We had two jobs back in the Retirement Unit which consisted of Ms. Curry and Mr. Sikes, and the duties performed were identical. When one is gone on leave the other performs the duties while they are absent. Those positions were recommended to be upgraded. The other two positions that I felt warranted consideration to be upgraded were the positions that were occupied by Mr. Jeffers and Ms. Smith. They are down in the In-Processing. Those were submitted and our audit was conducted by Mr. Tom Cook, CPO. Do you need the date, sir?

MR ALLEN: If it's readily available.

MR ANDERSON: It was completed on 2 December. The audit concluded that sufficient justification could not be provided by Management or employees who were interviewed--except Mrs. Hill, who was the only employee that was not interviewed; she requested that she not be interviewed--to warrant upgrading the positions within the Separation Transfer Section.

MR ALLEN: Can you tell me, was the basis for saying there was not sufficient justification that the written description that had been sent in as a proposed Job Description was simply inadequate to justify a higher grade?

MR ANDERSON: No sir. What I am saying is that the work that we do doesn't justify upgrading the position. The job description was brought down by Mr. Cook, each employee was set down and gone over their job description with the employee in detail.

MR ALLEN: That was the job description they had had all time?

MR ANDERSON: That was the job description that I submitted to the Civ. Personnel Office. The new, or proposed job description. We had insufficient justification to warrant upgrading the positions at the Separation Transfer Point. Anything that was omitted or anything that could have been erroneous, the employee was asked in detail, if their job description was correct.

MR ALLEN: Were those job descriptions that you proposed and sent into Civilian Personnel, were they approved in content? Was the description itself?

MR ANDERSON: They were fairly close. I couldn't specifically respond without setting down in detail and going over those. To the best of my knowledge they were fairly close. The positions that we wanted to upgrade we could not get upgraded, so we broke the thing down and we've got separate job descriptions for Ms. Perry, separate job description for the two ladies in Quality Assurance, we have a standardized job description for the people in the In-processing and Write-up Unit and a standardized job description for the people in Breakdown and in our Retirement and Typing Units. Now, what Mr. Cook told me, sir, to have a separate job description for the two people in retirement, I will refer to my notes again: O.K. When Mr. Cook came back down and we finalized the job descriptions and one of them had an error in it, there were two sentences left off, and that's in Ms. Perry's area of responsibility, (we did not discover the administrative error until Mr. Cook had departed) and that was making final disposition of the 201 file and related documents to the appropriate agencies, and the typing of the final separation document with all related forms that accompany. Each supervisor was briefed by Mr. Cook of the CFO in relation to the completion of the position survey. However, Ms. Perry elected not to authenticate the job description for employees in her area of responsibility. She based her action on the fact that the job descriptions should be prepared for the two employees in the Retirement Unit; in other words, the two separate job descriptions. The duties for the employees in her area are similar and quite often require the shifting and cross training of employees to insure that each area of responsibility can be accomplished when employees are absent. To prepare a separate job description for the employees of the Retirement Unit would be cause to down grade four GS-4 positions to GS-3. These positions were identified by CFO, and will be Mr. Fox, Records Breakdown; Ms. Hurdy, and Ms. Jennifer of the typing unit, and the one GS-4 position that we had a vacancy, and my contention was, and I talked to Mr. Cook at length, in the presence of Ms. Perry and SFC James, that I was not so much opposed to having separate job descriptions but I was opposed to the fact that by doing this, it would require these people to be downgraded, and they would have to be shifted to other positions, and it would cause additional workload for the Separation and Transfer Point and would probably slow down the processing of the type of applications that we have. I felt that based on that, and we went ahead and talked to Mr. Cook and we went ahead and consolidated those jobs back there to allow for shifting these people and cross training them, so their jobs would not be downgraded. If these jobs could have been upgraded to a GS-5 we would have been most happy to have had a separate job description. We

would have had a separate job description for our two people out front, Mr. Jeffers and Ms. Smith. All that is on file at the Civ. Personnel Office, and Mr. Cook is in the process now of giving us another job description for those two people back there and adding the two sentences that were omitted.

MR ALLEN: Right up to this moment, do you know if there has been any change made in the official job description in effect for these people, any of them?

MR ANDERSON: Well, what do you mean by official job description? The job descriptions that we received from Mr. Cook, as a result of the audit, are final. The people have been given copies of them, except the people back in the Retirement Unit, the Typing Unit and Mr. Fox, and these were recalled and hopefully within the next few days we will get copies of those. Basically, the only change will be adding the two sentences on there and give us credit for the additional work we do.

MR ALLEN: I can't think of anything further I was to ask you about Ms. Perry's case. Do you have anything to add?

MR ANDERSON: I would love to have promoted Ms. Perry, not on the basis of the fact that she complained, but based on the fact that she does a good job for us. We have failed to provide sufficient data to the Civilian Personnel Office and along with Ms. Perry's personal interview with Mr. Cook.

MR ALLEN: If you have no further comments, this concludes our interview.



## APPENDIX D

Naval Postgraduate School

### FORT SAXON'S WORD PROCESSING SYSTEM REQUEST

In January, Colonel William Cullen, the Adjutant General (AG) at Fort Saxon, met with his deputy, Major Paul Martin, and CW3 Jerry Anderson, to discuss personnel problems in the Separation Transfer Section. Several civilian workers in the Section had complained about the quality of management. Anderson, the head of the Section, said he was convinced that the only problem was that the Section had too many civilians working in it. Sixteen civilian employees and the non-commissioned officer in charge (NCOIC), SFC Thomas James worked within the Section. Civilian personnel regulations kept Anderson from shifting employees from one function to another because of their job descriptions. He told Colonel Cullen that if military personnel replaced half of the civilians, then the organizational continuity and corporate memory of the civilians would be maintained while job flexibility would be gained with the military personnel.

After Anderson departed, Colonel Cullen told Major Martin that Anderson's suggestion only provided a short term solution. He said the problem could be traced to the supply and demand for services. The number of Army personnel being separated from the service at Fort Saxon had declined by one-fourth over the past seven years while the Separation Transfer Section's staff had been reduced by one-half. Nonetheless, the Section had been functioning effectively. All of the Army's separation processing time standards were being met. However, Colonel Cullen told Major Martin that Anderson met the time standards by pressuring the civilian employees which drove them to lodge formal complaints. A pending reduction of two civilian positions in the Section was sure to compound the pressure and increase the complaints.

The Army separation workload at Fort Saxon was forecasted to remain constant for the next few years. If so, and if trends continued, the number of employees authorized for the Section would probably be reduced even further. Colonel Cullen told Major Martin that the only way to relieve the workload pressure and increase efficiency was to automate part of the paperwork processing.

Fort Jackson, S.C. and Fort Dix, N.J. had acquired microprocessor-based word processing (WP) systems that reportedly reduced both the time and costs of processing separation documents.

This case was prepared by Captain John M. Hardesty under the supervision of Professors K. J. Euske and W. J. Naga. The case is intended as a basis for class discussion rather than to illustrate effective or ineffective handling of an administrative situation. Names and certain facts have been changed which, while avoiding the disclosure of confidential information, do not materially lessen the value of the case for educational purposes.

Cullen directed Anderson to study the WP operations at Jackson and Dix. CW3 Mike Sweedon, a computer specialist from the Standard Installation Division Personnel System (SIDPERS) Section, within the Adjutant General Division, was to assist Anderson in his research.

CW3 Anderson and Sweedon identified four areas that would be included in their proposal to Colonel Cullen: processing separation documentation, postal locator services, personnel orders preparation, and centralized typing. Fort Jackson had already purchased a software package from Digital Equipment Corporation (DEC) for \$60,000 which included all of these functions except centralized typing. Since Fort Saxon would not have to absorb any of these developmental costs, Anderson told Sweedon that additional cost savings would be realized if these areas were included in the proposal.

The preliminary work indicated that a WP Center would be established in Wright Hall which housed most of the AG Sections. DEC was selected to provide the equipment (EXHIBIT 1) for the separation documentation preparation, orders preparation, and postal locator functions because of Fort Jackson's success with DEC equipment. In addition, the hardware and software would allow expansion up to 63 simultaneous users. Anderson contended that the large storage capacity requested was justified in light of the fact that other staff agencies on Fort Saxon had expressed interest in tying-in to the Word Processing Center. Dictaphone equipment (EXHIBIT 2) was selected for the centralized typing function because a Tenant Command on Fort Saxon, which utilized Dictaphone equipment, received excellent service from the vendor. Both the DEC and Dictaphone equipment had an expected economic life of five years. The WP Center would be staffed with personnel drawn from the various AG Sections. Additional WP Center start-up costs are shown in EXHIBIT 3.

The AG Division at Fort Saxon already leased a variety of WP equipment (EXHIBIT 4). Most of this WP hardware would be redundant with the proposed system. Additionally, a lack of standardization among the present WP devices prevented operational and storage compatibility with the proposed system justifying termination of these leases.

#### The Separation Transfer Function

Under the current system, the Separation Transfer Section prepared separation documents for 10,500 people each year who were discharged from the Army via Ft. Saxon. The procedure for processing a routine separation packet is illustrated in EXHIBIT 5. Under the present system, the average time to process a separation manually was five days. Five days were needed because of backlogs and corrections. Under the WP System proposal, two GS-4, Step one,<sup>1</sup> positions would be eliminated and the processing time would be reduced to one day. The proposed system would use WP equipment (EXHIBIT 1) for the labor-intensive task of filling out forms. Instead of constantly

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<sup>1</sup>Civilian Personnel Pay Rate table is presented in EXHIBIT 6.

reorganizing, reformatting, and retyping information; variable data would be entered only once on a keyboard then displayed on a cathode ray tube (CRT) terminal. For each separation being processed, the CRT would display forty questions requiring operator responses. The responses would create a data file for each person being separated. Once this information was entered, finished forms would be printed on high speed printers.

#### The Postal Locator Function

The Adjutant General Division, Postal Locator Section, maintained a file on 52,000 assigned or recently departed personnel. The file was utilized by Postal Locator personnel to accomplish mail redirects and handle address inquiries. Locator information was maintained on DA Form 3955 in 21 visible index stands of 35 panels each. Daily additions of locator cards required constant shifting of the cards between the panels. All the cards had to be edited on a monthly basis to remove officially inactive cards. In order to redirect the mail it had to be sorted into alphabetical sequence and then broken down into groups that corresponded to one of the 21 file stands. The mail was then re-addressed by retrieving the correct locator card and writing the forwarding address on the piece of mail. If the new system proposal were approved, then Ft. Saxon would not have to purchase 21 visible index stands because a forthcoming edition of DA Form 3955 would be of a different size. The new stands would cost a total of \$8,000.

Under the manual system, locator inquiries could only be handled during normal duty hours (7:30 through 4:30, Monday through Friday). At all other times the One-Stop In and Out Processing Section provided locator information from the SIDPERS data base for the 20,000 currently assigned people at Ft. Saxon.

Under the proposed system, the 52,000 records would be stored in the WP system on disk drives providing instant access on the CRT terminals.<sup>2</sup> The CRT terminal would provide keyboard access to all locator records. File updates would occur by extracting arrival and departure listings from the SIDPERS magnetic tapes. The system would automatically purge obsolete locator records after Army retention requirements had been met. Address labels for re-directing mail would be provided from the locator data base on a high speed printer. An additional CRT terminal would be placed in the One-Stop In and Out Processing Section to handle after duty hour locator inquiries. Under this proposal, CM3 Anderson and Sweedon estimated that two enlisted E-4<sup>3</sup> positions from the Postal Locator Section could be eliminated. Mail re-addressing and locator inquiry times would be reduced by one-half.

<sup>2</sup>For postal locator equipment requirements, see EXHIBIT 1.

<sup>3</sup>For Military Pay Chart, see EXHIBIT 7.

### Preparation of Military Personnel Orders

Under the current system, 1200 orders per week were processed on IBM magnetic card equipment (EXHIBIT 4) at two locations: Trainee Personnel Section and Administrative Services Section. Information required in the preparation of orders was contained on DA Form 2446, Request for Orders; APPA-AG Form 2017, Assignment Control Card; and other documents. Order Clerks often would have to produce orders quickly, increasing the chance of error. Most errors were made in the standard name line.<sup>4</sup> Amendment orders would then have to be issued to correct erroneous orders.

Under Anderson's and Sweedon's proposal, the SIDPERS assignment instruction file received from Washington would be loaded into the WP system so that those items required for orders preparation would not have to be included on the orders request form. A handwritten orders request form, requiring only essential data, would be forwarded from the Redeployment and Trainee Personnel Sections to the WP Center. The system would be programmed so that the CRT Terminals at the WP Center would lead the operators through a series of interactive questions which would require the operator to enter the items contained on the handwritten order request. The system would pull the order format from disk file, format the keyed information, and print out a military order.

Anderson and Sweedon estimated that the proposal would reduce paper costs \$10,000 on an annual basis, eliminate two enlisted E-4 order clerks at Trainee Personnel Section, and two enlisted E-3 positions at the Redeployment Section.

### The Centralized Typing Function

Under the current system, each of the ten AG Sections had their own secretaries in addition to other clerks who did routine typing. All Section typing requirements were performed on site.

Under the proposed system, users would each have a detailed manual for document origination. A document originator would choose a specific correspondence format and then telephonically call-in variable input following the users manual. This information would be processed through the computer's Master Mind Basic Unit and recorded on a Thought Tank Machine (EXHIBIT 2). The typist would then retrieve this information and using a ear phone Transcription Terminal, type the data on a Word Processing Station<sup>5</sup> (EXHIBIT 1). Output would be provided on the Report Printer (EXHIBIT 2) or Letter Quantity Printer (EXHIBIT 1).

<sup>4</sup>The Army standard name line consists of name, grade, SSN, unit identification code, and unit of assignment.

<sup>5</sup>The Word Processing Station consists of a CRT, keyboard and limited storage device which connects to the Shared Logic Word Processor and Master Mind Basic Unit.

WP Survey

In order to meet Army requirements for a WP system request, CW3 Anderson and Sweedon conducted a typing survey.<sup>6</sup> The intent of this survey (EXHIBIT 8) was to determine the number of personnel who would be required to run the WP System (EXHIBIT 9). In addition to the personnel reductions previously discussed, they identified one enlisted E-3 position from the Personnel Actions Section for elimination, and one enlisted E-4 position from the Personnel Management Section. In addition, overtime costs would be reduced by \$4,000 on an annual basis.

Summary

Anderson told Sweedon that the system that they were about to propose to Colonel Cullen would: (1) improve overall operations because of faster access to files, (2) provide improved output control, (3) add the capability to compile recurring statistical reports, and (4) reduce costs. Anderson and Sweedon agreed that the orders preparation, postal locator, and personnel transfer functions would be easy to sell to Colonel Cullen because these functions were already automated at Ft. Jackson. They did not know how the centralized typing function and associated Dictaphone equipment would be received.

**Assignment:** Evaluate the potential savings of the WP System. Most DOD capital investment decisions require the use of a 10% discount rate.

Comment on the efficiency and effectiveness of the proposed system and hardware and software requirements.

Comment on the WP workload and personnel projection surveys.

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<sup>6</sup>Army Regulation 340-8 requires a word processing typing survey to be performed prior to submission to the Adjutant General Center (TAGCEN) for consideration.

## EXHIBIT 1

## FORT SAXON'S WORD PROCESSING SYSTEM REQUEST

Digital Equipment Corporation Equipment

| Description                                  | Quantity and Location | Annual Maintenance | Annual Lease Payment | Total Purchase Price |
|--|-----------------------|--------------------|----------------------|----------------------|
| Shared Logic <sup>*1</sup><br>Word Processor | 1 MP Center           | 7,548.00           | 46,207.32            | 108,517.05           |
| 67MP Disk Drives                             | 1 MP Center           | 1,680.00           | 7,524.00             | 17,670.00            |
| Multiplexer                                  | 1 MP Center           | 552.00             | 1,524.60             | 3,580.50             |
| CRT Terminal<br>w/keyboard                   | 3 MP Center           |                    |                      |                      |
|  | 4 Sep. Transfer       |                    |                      |                      |
|  | 2 Postal Locator      |                    |                      |                      |
|  | 2 Trainee Personnel   |                    |                      |                      |
|  | 1 One-Stop Processing | 2,448.00           | 10,454.40            | 24,552.00            |
| Remote Communication<br>Cable                | 10                    | -0-                | 522.72               | 1,227.60             |
| 100' Communication<br>Cable                  | 5                     | -0-                | 237.60               | 558.00               |
| High Speed Printer                           | 2 Sep. Transfer       |                    | 4,478.76             | 9,402.30             |
|  | 1 Postal Locator      |                    | 2,985.84             | 7,012.20             |
| Medium Speed Printer                         | 2 MP Center           | 1,980.00           | 2,985.84             | 14,861.40            |
| Letter Quality Printer                       | 4 MP Center           | 2,640.00           | 6,328.32             | 39,041.40            |
| Word Processing Station                      | 4 MP Center           | 2,256.00           | 16,624.32            | 344.10               |
| Sorter RSTS                                  | 1 MP Center           | 5,040.00           | 146.52               | 4,185.00             |
| Datatrieve 9 Track Tape                      | 1 MP Center           | -0-                | 1,782.00             |                      |
| Document Transmission<br>Option              | 1 MP Center           | -0-                | 990.00               | 2,325.00             |
| TOTALS                                       |                       | \$24,114.00        | \$99,806.40          | \$233,276.55         |

\*1 Includes processor, 256 KB Memory, Cabinet, expansion box, bookplane, 67 MB disk and controller, magtape drive and controller, 16 line multiplexer, Operating System Software.

## EXHIBIT 2

## FORT SAXON'S WORD PROCESSING SYSTEM REQUEST

Dictaphone Equipment

| <u>Description</u>              | <u>Quantity</u> <sup>1</sup> | <u>Annual Lease Payment</u> <sup>2</sup> | <u>Total Purchase Price</u> |
|---------------------------------|------------------------------|--|-----------------------------|
| Thought Tank Machines           | 3                            | 2,489.76                                 | 5,850.00                    |
| Transcription Terminals         | 5                            | 703.20                                   | 1,625.00                    |
| Phone In Adapter                | 1                            | 164.40                                   | 395.00                      |
| ADM with DCK Interface          | 3                            | 1,085.40                                 | 2,550.00                    |
| Cabinet                         | 1                            | 193.80                                   | 450.00                      |
| Dictameter Panels               | 3                            | 360.00                                   | 825.00                      |
| Blank Meter Panels              | 1                            | 3.84                                     | 10.00                       |
| Secretarial Panels              | 5                            | 227.40                                   | 500.00                      |
| Blank Secretarial Panels        | 3                            | 11.40                                    | 30.00                       |
| ECH Panel                       | 1                            | 140.64                                   | 320.00                      |
| Auto. Transfer Panel            | 1                            | 81.00                                    | 175.00                      |
| Auto. Throughput Director Panel | 1                            | 76.08                                    | 175.00                      |
| Transcription Priority          | 3                            | 107.64                                   | 225.00                      |
| Phone In Adapter Director Panel | 1                            | 28.92                                    | 75.00                       |
| Standard Cassette Trans. Unit   | 1                            | 249.48                                   | 589.00                      |
| Master Mind Basic Unit          | 1                            | 4,191.24                                 | 9,995.00                    |
| Report Printer                  | 1                            | 420.24                                   | 995.00                      |
| 193 Modification                | 3                            | 57.96                                    | 150.00                      |
| TDM/DDM Modification            | 3                            | 115.92                                   | 300.00                      |
| Printer Paper                   | 1                            | 19.32                                    | 50.00                       |
| Mini Diskettes                  | 1                            | 25.08                                    | 65.00                       |
| Mini Diskettes Archive          | 1                            | 25.08                                    | 65.00                       |
|                                 |                              | <u>\$10,777.92</u>                       | <u>\$25,414.00</u>          |

<sup>1</sup>All dictaphone equipment would be utilized in the HP Center.

<sup>2</sup>Dictaphone equipment lease includes maintenance. If purchased, annual maintenance fee would be \$1,206 annually.

## EXHIBIT 3

## FORT SAXON'S WORD PROCESSING SYSTEM REQUEST

Additional WP Center Start-Up Costs<sup>1</sup>

|                        |          |
|------------------------|----------|
| Facility Modification  | \$26,000 |
| Telephone Installation | 9,600    |
| Office Furniture       | 21,538   |

<sup>1</sup>These expenses would be paid for in a single payment out of the Adjutant General Division's operating budget.



## EXHIBIT 4

## FORT SAXON'S WORD PROCESSING SYSTEM REQUEST

Present System MP Equipment

| <u>Manufacturers<br/>Model Number</u> | <u>Serial Number</u> | <u>Owed or<sup>1,2</sup><br/>Leased</u> | <u>Monthly<br/>Rental Cost</u> | <u>Proposed<br/>Distribution</u> |
|---------------------------------------|----------------------|---|--------------------------------|----------------------------------|
| AB Dick Magna I -<br>Model 2700       | 629505               | Leased                                  | 299.90                         | Return to Vendor                 |
| AB Dick Magna I -<br>Model 2700       | 835056               | Leased                                  | 478.90                         | Return to Vendor                 |
| IBM Mag Card I -<br>Model 6610        | 9669402              | Leased                                  | 164.90                         | Return to Vendor                 |
| IBM Mag Card I -<br>Model 6610        | 9669396              | Leased                                  | 164.90                         | Return to Vendor                 |
| IBM Mag Card II -<br>Model 6616       | 0019347              | Leased                                  | 266.75                         | Return to Vendor                 |
| IBM Mag Card I -<br>Model 6610        | 9646326              | Leased                                  | 164.90                         | Return to Vendor                 |
| IBM Mag Tape IV -<br>Model 1021       | 085008               | Leased                                  | 205.00                         | Return to Vendor                 |
| IBM Mag Tape II -<br>Model 1011       | 106215               | Leased                                  | 205.00                         | Return to Vendor                 |
| IBM Mag Tape II -<br>Model 1011       | 096739               | Leased                                  | 205.00                         | Return to Vendor                 |

| <u>Manufacturers Model Number</u> | <u>Serial Number</u> | <u>Owned or Leased</u> | <u>Monthly Rental Cost</u>  | <u>Proposed Distribution</u>      |
|-----------------------------------|----------------------|------------------------|-----------------------------|-----------------------------------|
| IBM Mag Tape II - Model 1011      | 0104532              | Leased                 | 205.00                      | Return to Vendor                  |
| IBM Mag Tape II - Model 1011      | 4694653              | Leased                 | 205.00                      | Return to Vendor                  |
| IBM Mag Tape IV - Model 1021      | 0110576              | Owned                  | 56.26 (monthly maintenance) | Transfer to another post activity |
| IBM Mag Tape IV - Model 1021      | 0083128              | Owned                  | 56.26 (monthly maintenance) | Transfer to another post activity |
| IBM Card Reader - Model 1056      | 10379                | Leased                 | 96.00                       | Return to Vendor                  |
| IBM Card Reader - Model 1056      | 10940                | Leased                 | 96.00                       | Return to Vendor                  |
| IBM Card Reader - Model 1056      | 15936                | Leased                 | 96.00                       | Return to Vendor                  |
| IBM Card Reader - Model 1056      | 12613                | Leased                 | 96.00                       | Return to Vendor                  |
| 4 each Junction Box               |                      | Leased*                | 667.00 each                 | Return to Vendor                  |
|                                   | Monthly Lease        | 3289.77 x 12           | = 39,477.24                 |                                   |

<sup>1</sup> Maintenance Cost is included in the rental charge.

<sup>2</sup> Equipment had renewable option at current rental price.

EXHIBIT 5  
FORT SAJON'S MOMB PROCESSING SYSTEM REQUEST  
Separation Procedure

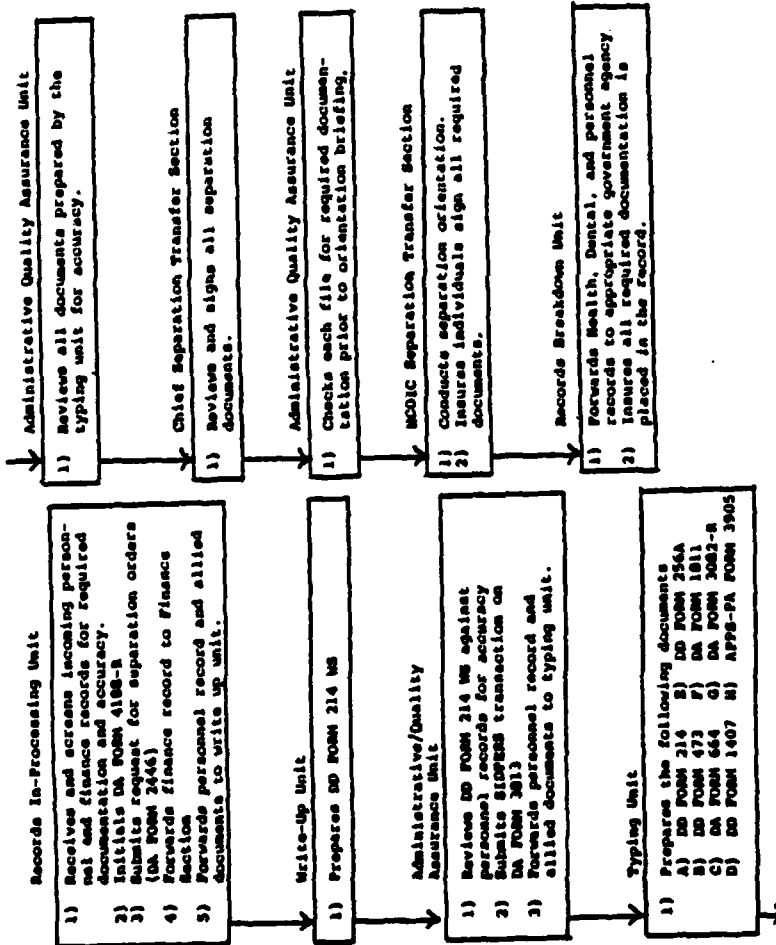


EXHIBIT 6

FORT SAXON'S WORD PROCESSING SYSTEM REQUEST

Standard Civilian Rate Table<sup>1</sup>

|      | [STEP] | 1     | 2     | 3     | 4     | 5     | 6     | 7     | 8     | 9     | 10    |
|------|--------|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| GS-1 | Annual | 7210  | 7450  | 7690  | 7930  | 8170  | 8410  | 8630  | 8890  | 8902  | 9126  |
| GS-2 |        | 8128  | 8399  | 8670  | 8902  | 9002  | 9267  | 9532  | 9797  | 10062 | 10327 |
| GS-3 |        | 8952  | 9250  | 9548  | 9846  | 10144 | 10442 | 10740 | 11038 | 11336 | 11634 |
| GS-4 |        | 10049 | 10384 | 10719 | 11054 | 11389 | 11724 | 12059 | 12394 | 12729 | 13064 |
| GS-5 |        | 11243 | 11618 | 11993 | 12368 | 12743 | 13118 | 13493 | 13868 | 14243 | 14618 |
| GS-6 |        | 12531 | 12949 | 13367 | 13785 | 14203 | 14621 | 15039 | 15457 | 15875 | 16293 |

<sup>1</sup> Does not include fringe benefits which constitute an average additional cost of 9%.

## EXHIBIT 7

## FORT SAXON'S WORD PROCESSING SYSTEM REQUEST

Composite Standard Military Rate Table<sup>1</sup>

|     |        |      |        |
|-----|--------|------|--------|
| E-9 | 23,612 | O-6  | 43,494 |
| E-8 | 20,260 | O-5  | 35,543 |
| E-7 | 17,304 | O-4  | 29,489 |
| E-6 | 14,562 | O-3  | 24,161 |
| E-5 | 12,279 | O-2  | 18,591 |
| E-4 | 10,443 | O-1  | 13,777 |
| E-3 | 9,300  | CW-4 | 27,959 |
| E-2 | 8,435  | CW-3 | 22,495 |
| E-1 | 7,499  | CW-2 | 19,447 |
|     |        | CW-1 | 16,510 |

<sup>1</sup>Includes cost of fringe benefits.

## EXHIBIT 8

## FORT SAXON'S WORD PROCESSING SYSTEM REQUEST

Workload Summary

| A. DOCUMENT LENGTH ANALYSIS      | 1-3 PAGES     | 4-15 PAGES | 15 PAGES | TOTAL         | EXTENSION |
|----------------------------------|---------------|------------|----------|---------------|-----------|
| <b>MILITARY PERSONNEL BRANCH</b> |               |            |          |               |           |
| Personnel Pay Section            | 1923.5        | -          | -        | 1923.5        |           |
| Separations                      | 536.5         | -          | -        | 536.5         |           |
| DFR/DCS                          | 613.5         | -          | -        | 613.5         |           |
| Check Control                    | 1179          | -          | -        | 1179          |           |
| Casualty                         | 1348          | -          | -        | 1348          |           |
| Officer Actions                  | 3774          | -          | -        | 3774          |           |
| Retirements                      | 350           | -          | -        | 350           |           |
| GCH                              | <u>1685.5</u> | -          | -        | <u>1685.5</u> |           |
| Awards                           | 11410         | -          | -        | 11410         | 11,410    |
| <b>Redeployment Section</b>      |               |            |          |               |           |
| Student Officer Management       | 464.5         | -          | -        | 464.5         |           |
| Port Call                        | 5609.5        | -          | -        | 5609.5        |           |
| Overseas Assignments             | <u>1160.5</u> | -          | -        | <u>1160.5</u> |           |
|                                  | 7234.5        | -          | -        | 7234.5        | 7,234.5   |
| <b>Personnel Management</b>      |               |            |          |               |           |
| Assignments                      | 325           | -          | -        | 325           |           |
| GER/EER                          | 8272.5        | -          | -        | 8272.5        |           |
| Reclassification                 | <u>1330.5</u> | -          | -        | <u>1330.5</u> |           |
|                                  | 9938          | -          | -        | 9938          | 9,938     |

## A. DOCUMENT LENGTH ANALYSIS (Cont'd)

| SECTION   | 1-3 PAGES | 4-15 PAGES | 15 PAGES | TOTAL   | EXTENSION |
|---|-----------|------------|----------|---------|-----------|
| Records   | 320       | -          | -        | 320     |           |
| Records Administration                          | 106       | -          | -        | 106     |           |
| Officer Records                                 | 408       | -          | -        | 408     |           |
| Student Officer Records                         | 1636      | -          | -        | 1636    |           |
| Records Bay, Room #200                          |           |            |          |         | 2,469.5   |
|   | 2469.5    | -          | -        | 2469.5  |           |
| MILPO Miscellaneous Sections                    |           |            |          |         |           |
| Congressionals                                  | 1566.5    | -          | -        | 1566.5  |           |
| MILPO Chief                                     | 1536.5    | -          | -        | 1536.5  |           |
| ID Cards  | 10508     | -          | -        | 10508   |           |
| SIDPERS   | 366.5     | -          | -        | 366.5   |           |
| MILPO Operations                                | 658       | -          | -        | 658     |           |
| Office of Adj Gen                               | 227.5     | -          | -        | 227.5   |           |
| A6 Orders Section                               | 23157.5   | -          | -        | 23157.5 |           |
| A6 Typing & Editing                             | 7150.5    | -          | -        | 7150.5  |           |
| Recruitment Office                              | 1577.5    | -          | -        | 1577.5  |           |
|   | 46748.5   | -          | -        | 46748.5 | 46,748.5  |
| Separation Transfer Point & One Stop Processing |           |            |          |         |           |
| STP Typing                                      | 10719     | -          | -        | 10719   |           |
| STP Breakdown                                   | 7348      | -          | -        | 7348    |           |
| Assignments                                     | 1596      | -          | -        | 1596    |           |
| Quality Assurance                               | 2075.5    | -          | -        | 2075.5  |           |
|   | 21738.5   | -          | -        | 21738.5 | 21,738.5  |

**A. DOCUMENT LENGTH ANALYSIS (Cont'd)**

| SECTION                                     | 1-3 PAGES | 4-15 PAGES | 15 PAGES | TOTAL   | EXTENSION |
|---|-----------|------------|----------|---------|-----------|
| <b>TRAINING ACTIVITIES PERSONNEL BRANCH</b> |           |            |          |         |           |
| Personnel Management                        | 360.5     | -          | -        | 360.5   |           |
| Personnel Actions                           | 1812.5    | -          | -        | 1812.5  |           |
| Administration                              | 2564      | -          | -        | 2564    |           |
| Orders                                      | 10410.5   | -          | -        | 10410.5 |           |
|   | 15147.5   | -          | -        | 15147.5 | 15,147.5  |

**B. WORK INPUT ANALYSIS**

| SECTION                          | LONGHAND | COMPOSED BY TYPIST | COPY TYPE | PRE-RECORDED | TOTAL | EXTENSION |
|----------------------------------|----------|--------------------|-----------|--------------|-------|-----------|
| <b>MILITARY PERSONNEL BRANCH</b> |          |                    |           |              |       |           |
| Personnel Action Section         | 369      | 30.5               | 1524      | -            | -     | 1923.5    |
| Separations                      | 15       | 102.5              | 419       | -            | -     | 536.5     |
| DFR/OCS                          | 198.5    | -                  | 415       | -            | -     | 613.5     |
| Check Control                    | 329.5    | 168                | 681.5     | -            | -     | 1179      |
| Casualty                         | 24       | 219                | 1105      | -            | -     | 1348      |
| Officer Actions                  | 205.5    | 739.5              | 2829      | -            | -     | 3774      |
| Retirements                      | -        | 184                | 246       | -            | -     | 350       |
| GCM                              | 527      | 90                 | 1068.5    | -            | -     | 1685.5    |
| Awards                           | 1668.5   | 1453.5             | 8288      | -            | -     | 11410     |



## B. WORK INPUT ANALYSIS (Cont'd)

| SECTION                      | LONGHAND | COMPOSED<br>BY TYPIST | COPY TYPE | PRE-RECORDED | TOTAL   | EXTENSION |
|------------------------------|----------|-----------------------|-----------|--------------|---------|-----------|
| Redeployment Section         | 9        | 165                   | 290       | -            | 464.5   |           |
| Student Officer Management   | 74       | 1550                  | 3985.5    | -            | 5609.5  |           |
| Port Call                    | 468.5    | 265.5                 | 426.5     | -            | 1160.5  |           |
| Overseas Assignment          | 551.5    | 1980.5                | 4702.5    | -            | 7234.5  | 7,234.5   |
| Personnel Management         | 16       | 68.5                  | 250.5     | -            | 335     |           |
| Assignments                  | -        | 2200.5                | 6072      | -            | 8272.5  |           |
| OER/EER                      | -        | 452.5                 | 878       | -            | 1330.5  |           |
| Reclassification             | 16       | 2721.5                | 7200.5    | -            | 9938    | 9,938     |
| Records                      | 230      | 3.5                   | 86.5      | -            | 320     |           |
| Records Administration       | 43       | -                     | 63        | -            | 106     |           |
| Officer Records              | 64       | 5                     | 338.5     | -            | 407.5   |           |
| Student Officer Records      | 466      | 29.5                  | 1140.5    | -            | 1636    |           |
| Records Bay, Room #200       | 803      | 38                    | 1628.5    | -            | 2469.5  | 2,469.5   |
| MILPO Miscellaneous Sections | 734      | 76                    | -         | 756.5        | 1566.5  |           |
| Congressionals               | 133.5    | -                     | 391       | 1012         | 1536.5  |           |
| MILPO Chief                  | 57.5     | 2143.5                | 8307      | -            | 10508   |           |
| ID Cards                     | 118.5    | 67.5                  | 180.5     | -            | 366.5   |           |
| SIDPERS                      | 139      | 120.5                 | 398.5     | -            | 658     |           |
| MILPO Operations             | 171      | 12.5                  | 44        | -            | 227.5   |           |
| Office of Adj Gen            | 1298     | 5561.5                | 8300      | 7998         | 23157.5 |           |
| AG Orders                    | 368      | 710.5                 | 2055      | 4017         | 7150.5  |           |
| AG Typing & Editing          | 385      | -                     | 1007      | 185.5        | 1577.5  |           |
| Reenlistment                 | 3404.5   | 8692                  | 20683     | 13969        | 46748.5 | 46,748.5  |

**B. WORK INPUT ANALYSIS (Cont'd)**

| SECTION   | COMPOSED BY TYPIST |           | COPY TYPE | PRE-RECORDED | TOTAL   | EXTENSION |
|---|--------------------|-----------|-----------|--------------|---------|-----------|
|   | LONGHAND           | BY TYPIST |           |              |         |           |
| <b>Separation Transfer Point &amp; One Stop Operation</b> |                    |           |           |              |         |           |
| STP Typing  | 5747.5             | 36        | 4935.5    | -            | 10719   |           |
| STP Breakdown   | -                  | 2020      | 5328      | -            | 7348    |           |
| Assignments   | 435                | -         | 1161      | -            | 1596    |           |
| Quality Assurance   | 207.5              | -         | 1868      | -            | 2075.5  |           |
|   | 6390               | 2056      | 13292.5   | -            | 21738.5 | 21,738.5  |
| <b>TRAINING ACTIVITIES PERSONNEL BRANCH</b>               |                    |           |           |              |         |           |
| Personnel Management                                      | 106                | 53.5      | 201       | -            | 360.5   |           |
| Personnel Actions   | 391.5              | 145.5     | 1275.5    | -            | 1812.5  |           |
| Administration  | 1751               | -         | 813       | 5744         | 2564    |           |
| Orders  | 2732.5             | -         | 1559      | -            | 10410.5 |           |
|   | 4981               | 199       | 3848.5    | 5744         | 15147.5 | 15,147.5  |
|   |                    |           |           |              |         | 114,686.5 |

**C. WORK OUTPUT ANALYSIS**

| SECTION                  | ORIGINAL TYPING | REVISION TYPING | REPETITIVE TYPING | TOTAL  | EXTENSION |
|--------------------------|-----------------|-----------------|-------------------|--------|-----------|
|                          |                 |                 |                   |        |           |
| Personnel Action Section | 369             | 30.5            | 1524              | 1923.5 |           |
| Separations              | 117             | -               | 419               | 536.5  |           |
| DRF/DCS                  | 198.5           | -               | 415               | 613.5  |           |
| Check Control            | 329.5           | 168             | 681.5             | 1179   |           |
| Casualty                 | 243             | -               | 1105              | 1348   |           |
| Officer Actions          |                 |                 |                   |        |           |

## C. WORK OUTPUT ANALYSIS (Cont'd)

| SECTION                             | ORIGINAL<br>TYPING | REVISION<br>TYPING | REPETITIVE<br>TYPING | TOTAL         | EXTENSION |
|-------------------------------------|--------------------|--------------------|----------------------|---------------|-----------|
| <b>MILITARY PERSONNEL BRANCH</b>    |                    |                    |                      |               |           |
| Retirements                         | 945                | -                  | 2829                 | 3774          |           |
| GCH                                 | 104                | -                  | 246                  | 350           |           |
| Awards                              | <u>527</u>         | 90                 | <u>1068.5</u>        | <u>1685.5</u> |           |
|                                     | 2833.5             | 288.5              | 8288                 | 11410         | 11,410    |
| <b>Redeployment Section</b>         |                    |                    |                      |               |           |
| Student Management                  | 174                | -                  | 290.5                | 464.5         |           |
| Port Ca7)                           | 1624               | -                  | 3985.5               | 5609.5        |           |
| Overseas Assignment                 | <u>733.5</u>       | -                  | <u>427</u>           | <u>1160.5</u> |           |
|                                     | 2531.5             | -                  | 4703                 | 7234.5        | 7,234.5   |
| <b>Personnel Management Section</b> |                    |                    |                      |               |           |
| Assignments                         | 84.5               | -                  | 250.5                | 335           |           |
| OER/EER                             | 2200.5             | -                  | 6072                 | 8272.5        |           |
| Reclassification                    | -                  | <u>452.5</u>       | <u>878</u>           | <u>1330.5</u> |           |
|                                     | 2285               | 452.5              | 7200.5               | 9938          |           |
| <b>Records Administration</b>       |                    |                    |                      |               |           |
| Officers Records                    | 230                | 3.5                | 86.5                 | 320           |           |
| Student Officer Records             | 43                 | -                  | 63                   | 106           |           |
| Records Bay, Room #200              | 64                 | 5                  | 338.5                | 407.5         |           |
|                                     | <u>466</u>         | <u>29.5</u>        | <u>1140.5</u>        | <u>1636</u>   |           |
|                                     | 803                | 38                 | 1628.5               | 2469.5        | 2,469.5   |

## C. WORK OUTPUT ANALYSIS (Cont'd)

| SECTION   | ORIGINAL<br>TYPING | REVISION<br>TYPING | REPETITIVE<br>TYPING | TOTAL   | EXTENSION |
|---|--------------------|--------------------|----------------------|---------|-----------|
| MILPO Miscellaneous Sections                    | 741.5              | 68.5               | 756.5                | 1566.5  |           |
| Congressionals                                  | 111                | 35                 | 1390.5               | 1536.5  |           |
| MILPO Chief                                     | 2203.5             | -                  | 8304.5               | 10508   |           |
| ID Cards  | 221.5              | 10                 | 130                  | 366.5   |           |
| SIDPERS   | 218.5              | 43.5               | 396                  | 698     |           |
| MILPO Operations                                | 183.5              | -                  | 44                   | 227.5   |           |
| Office of Adj Gen                               | 6855.5             | 5                  | 16297                | 23157.5 |           |
| A6 Orders                                       | 1024               | 113                | 6013.5               | 7150.5  |           |
| A6 Typing & Editing                             | 385                | -                  | 1192.5               | 1577.5  |           |
| Reenlistment                                    | 11948.5            | 275.5              | 34524.5              | 46748.5 | 46,748.5  |
| Separation Transfer Point & One Stop Processing |                    |                    |                      |         |           |
| STP Typing                                      | 5783.5             | -                  | 4935.5               | 10719   |           |
| STP Breakdown                                   | 2020               | -                  | 5328                 | 7348    |           |
| Assignments                                     | 435                | -                  | 1161                 | 1596    |           |
| Quality Assurance                               | 207.5              | -                  | 1868                 | 2075.5  |           |
|   | 8466               |                    | 13292.5              | 21738.5 | 21,738.5  |
| TRAINING ACTIVITIES PERSONNEL BRANCH            |                    |                    |                      |         |           |
| Personnel Management                            | 159.5              | -                  | 201                  | 360.5   |           |
| Personnel Actions                               | 391.5              | 145.5              | 1275.5               | 1812.5  |           |
| Administration                                  | 1751               | -                  | 813                  | 2564    |           |
| Orders  | 2732.5             | -                  | 7678                 | 10410.5 |           |
|   | 5034               | 145.5              | 9967.5               | 15147.5 | 15,147.5  |
|   |                    |                    |                      |         | 114,686.5 |

## EXHIBIT 9

## FORT SAXON'S WORD PROCESSING SYSTEM REQUEST

Word Processing Personnel Projection

| SECTION<br>Type of Work<br>Performed | Average Weekly<br>Lines | Production <sup>1</sup><br>Factor | X | Factor for<br>Absences | = | Projected<br>Personnel |
|--------------------------------------|-------------------------|-----------------------------------|---|------------------------|---|------------------------|
| <b>MILITARY PERSONNEL BRANCH</b>     |                         |                                   |   |                        |   |                        |
| <b>Personnel Actions</b>             |                         |                                   |   |                        |   |                        |
| Original Typing                      | 2833.5                  | 3500                              | X | 1.11                   | = | .90                    |
| Revision Typing                      | 288.5                   | 7000                              | X | 1.11                   | = | .05                    |
| Repetitive Typing                    | 8288                    | 10000                             | X | 1.11                   | = | .92                    |
|                                      |                         |                                   |   |                        |   | <u>1.87</u>            |
| <b>Redeployment</b>                  |                         |                                   |   |                        |   |                        |
| Original Typing                      | 2531.5                  | 3500                              | X | 1.11                   | = | .80                    |
| Revision Typing                      | 0                       | 7000                              | X | 1.11                   | = | .00                    |
| Repetitive Typing                    | 4703                    | 10000                             | X | 1.11                   | = | .52                    |
|                                      |                         |                                   |   |                        |   | <u>1.32</u>            |
| <b>Personnel Management</b>          |                         |                                   |   |                        |   |                        |
| Original Typing                      | 2285                    | 3500                              | X | 1.11                   | = | .72                    |
| Revision Typing                      | 452.5                   | 7000                              | X | 1.11                   | = | .07                    |
| Repetitive Typing                    | 7200.5                  | 10000                             | X | 1.11                   | = | .80                    |
|                                      |                         |                                   |   |                        |   | <u>1.59</u>            |
| <b>Records</b>                       |                         |                                   |   |                        |   |                        |
| Original Typing                      | 803                     | 3500                              | X | 1.11                   | = | .25                    |
| Revision Typing                      | 38                      | 7000                              | X | 1.11                   | = | .01                    |
| Repetitive Typing                    | 1628.5                  | 10000                             | X | 1.11                   | = | .18                    |
|                                      |                         |                                   |   |                        |   | <u>.44</u>             |
| <b>MILPO Miscellaneous</b>           |                         |                                   |   |                        |   |                        |
| Original Typing                      | 11948.5                 | 3500                              | X | 1.11                   | = | 3.79                   |
| Revision Typing                      | 275.5                   | 7000                              | X | 1.11                   | = | .44                    |
| Repetitive Typing                    | 34524.5                 | 10000                             | X | 1.11                   | = | 3.83                   |
|                                      |                         |                                   |   |                        |   | <u>8.06</u>            |

| SECTION<br>Type of Work<br>Performed                            | Average Weekly<br>Lines | Production<br>Factor | X | Factor for<br>Absences | = | Projected<br>Personnel |
|---|-------------------------|----------------------|---|------------------------|---|------------------------|
| <b>SEPARATION TRANSFER POINT AND ONE STOP PROCESSING</b>        |                         |                      |   |                        |   |                        |
| Original Typing   | 8446                    | 3500                 | X | 1.11                   | = | 2.68                   |
| Revision Typing   | 0                       | 7000                 | X | 1.11                   | = | 0                      |
| Repetitive Typing   | 13292.5                 | 10000                | X | 1.11                   | = | 1.48                   |
|   |                         |                      |   |                        |   | <u>4.16</u>            |
| <b>TRAINEE ACTIVITY PERSONNEL BRANCH</b>                        |                         |                      |   |                        |   |                        |
| Original Typing   | 5034.5                  | 3500                 | X | 1.11                   | = | 1.60                   |
| Revision Typing   | 145.5                   | 7000                 | X | 1.11                   | = | .02                    |
| Repetitive Typing   | 9967.5                  | 10000                | X | 1.11                   | = | 1.11                   |
|   |                         |                      |   |                        |   | <u>2.73</u>            |
| <b>GRAND TOTAL</b>  |                         |                      |   |                        |   |                        |
| Original Typing   | 33882                   | 3500                 | X | 1.11                   | = | 10.75                  |
| Revision Typing   | 1200                    | 7000                 | X | 1.11                   | = | .19                    |
| Repetitive Typing   | 79604.5                 | 10000                | X | 1.11                   | = | 8.84                   |
|   | <u>114686.5</u>         |                      |   |                        |   | <u>19.78</u>           |
| <b>TOTAL NUMBER WORD PROCESSING PERSONNEL REQUIRED PER WEEK</b> |                         |                      |   |                        |   | 20                     |

Production Factors are contained in AR340-8.

## BIBLIOGRAPHY

- Adams, M.J. & Penitinen, D.V. "A WP Success Story - Coping with Growth." Administrative Management, April 1978, pp. 73-76.
- "Army Targets on WP Cost Effectiveness." Administrative Management, May 1975, pp. 42-44.
- Arnstein, J. "We Miniaturized Our Word Processing Centers." The Office, March 1977, pp. 89-90; 114-116.
- Bierly, K. "Administrative Support is a Word Processing Myth." The Office, January 1977, p. 36.
- Burns, J.C. "The Evolution of Office Information Systems." Datamation, March 1979, pp. 60-64.
- Caplinger, F.E. "Word Processing Implementation." The Office, September 1974, pp. 94; 101.
- Carls, C.B. "Getting Ready For Word Processing's Second Generation." Datamation, September 1978, pp. 139-140.
- Christensen, G.J. "Has Word Processing been Oversold?" The Office, September 1977, pp. 26; 31-39.
- Cornnell, J.J. "Word Processing and the Office of the Future." Administrative Management, April 1978, pp. 100-102.
- Doades, J.R. "How Investments In Administrative Support Can Pay Off." Administrative Management, June 1979, pp. 60-62.
- "From Typing Pool to Word Processing Center." The Office, September 1977, pp. 106-108.
- Gottheimer, D. "Developing a System Suited to Your Needs." Administrative Management, April 1978, pp. 78-87.
- Kreighbaum, R.L. "Could Your Office Use a Word Processing Cneter?" The Office, February 1975, pp. 18-19.
- Larkin, D. "The Government Takes a New Look At Word Processing." The Office, January 1979, pp. 81-83.
- Law, D.E. & Pereira, D.E. "Word Processing: How to Cut Secretarial Administrative Costs." Management Review, March 1976, pp. 28-35.

- Lawson, B. "Destroying the Myths About WP." Administrative Management, November 1978, pp. 57-60.
- Lederer, V. "It's More Than Faster Correspondence." Administrative Management, November 1978, pp. 60-66.
- Lucas, H.C. Information Systems Concepts for Management. New York: McGraw-Hill, 1978.
- Malone, F.W. "The Beautiful Word Processing Plan That Almost Failed." The Office, June 1976, pp. 94-98; 179.
- Oman, R.C. "Comparing the Benefits and the Costs of Electric Typewriters and Word Processors." The Office, June 1977, pp. 77-79.
- Ornelas, M.J. "Humanizing Word Processing Mechanization." The Office, January 1976, pp. 95-97.
- Petrovich, L. "The Million-Dollar Answer is Word Processing." The Office, January 1978, p. 70.
- Phillips, F.S. "An Update On Administrative Support Centers." AMA FORUM, February 1978, pp. 29-31.
- Primrose, B. "Coordinated WP Yields Big Savings and High Morale." Administrative Management, November 1978, pp. 22-23; 58.
- Schanstra, C.Z. "So You've Decided To Integrate DP and WP." Infosystems, April 1979, pp. 34-40.
- Smith, E.R. "WP's Crucial Pre-Launch Phase." Administrative Management, March 1975, pp. 63-72.
- Smith, E.R. "WP Decentralization: Has It Gone Too Far?" Administrative Management, February 1979, pp. 49-53.
- Strahan, B.R. "Computerized WP: The Viable Alternatives." Administrative Management, July 1976, pp. 38-39.
- Swett, D.D. "Productivity of Word Processing." The Office, August 1975, pp. 57-59.
- "The Office of the Future." Business Week, June 30, 1975, pp. 53-57; 64; 71-73; 80-84.
- Thomas, R. "The Federal Government's Word Processing Program." The Office, February 1975, pp. 52-53.
- Traux, P.G. & Strong, J. "Think Before You Leap Into Word Processing." The Office, November 1976, pp. 73-75; 132.



U.S. Department of the Army. Army Word Processing Program (AR 340-8). Washington, D.C.: Author, 1979.

U.S. Department of Defense. Economic Analysis and Program Evaluation for Resource Management. (DoD Instruction 7041.3). Washington, D.C.: Author, 1972.

Webber, R.A. Management: Basic Elements of Managing Organizations (revised ed.). Illinois: Irwin, 1979.

Williams, D.J. "General Dynamics' Program of Administrative Assistance Emphasizes Word Processing." The Office, February 1977, pp. 39-43.

Wohl, A.D. "Exploring the Link Between DP and WP." Administrative Management, October 1977, pp. 43-45; 86-96.

Wohl, A.D. "What's Happening in Word Processing." Datamation, April 1977, pp. 65-71.

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