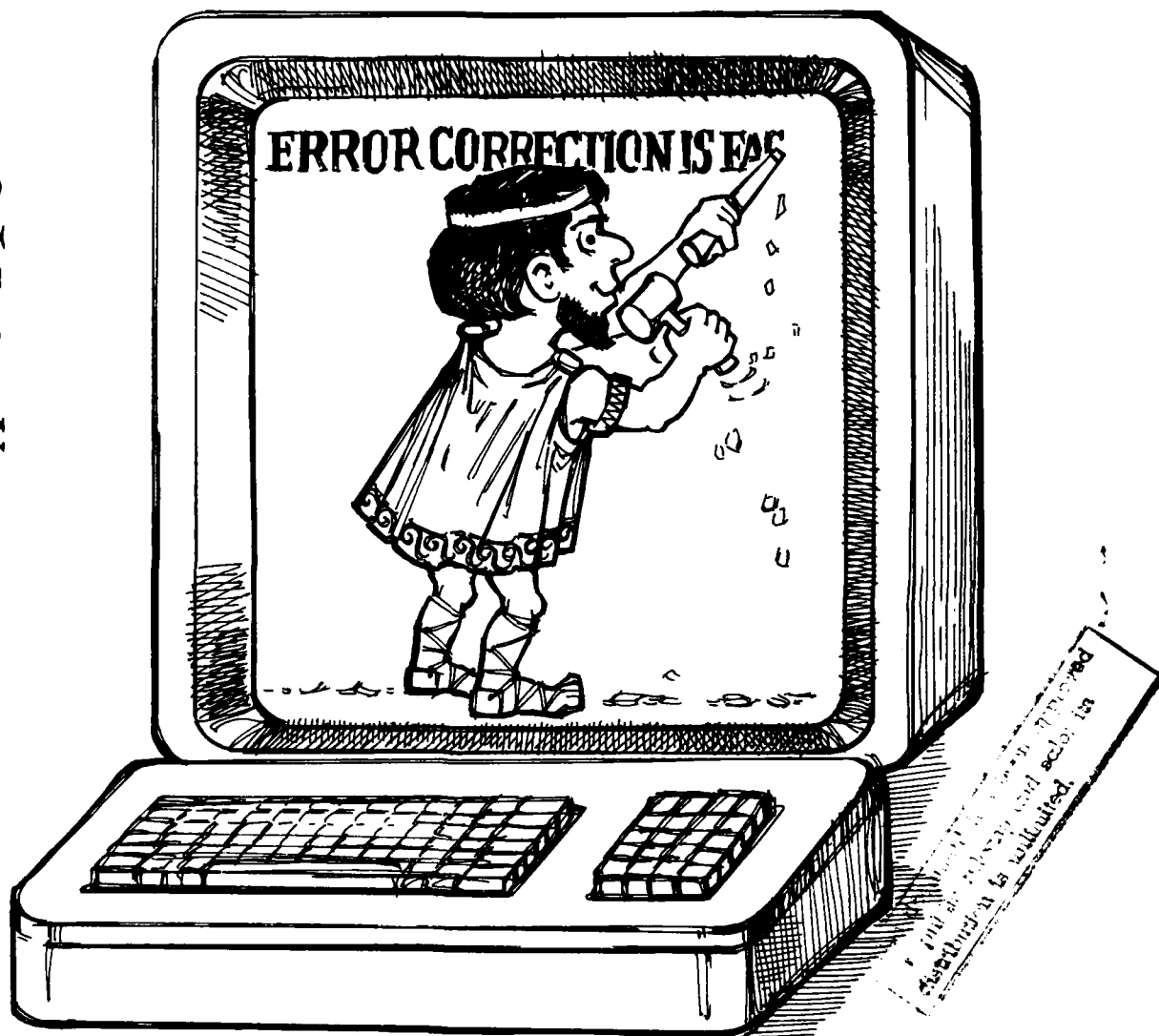


LEVEL ¹⁷ WORD PROCESSING

ADA084154



THE AIR FORCE ADMINISTRATORS' HANDBOOK

5 12 007

RECEIVED
MAY 14 1980
D
C

CLEARED FOR PUBLIC RELEASE.
Authority documents on file with
AGCS/EDCC, Maxwell AFB, AL 36112

The views and opinions expressed in this document represent the personal views of the author only, and should not in any way be construed to reflect any endorsement or confirmation by the Department of Defense, the Department of the Air Force, or any other agency of the United States Government.

This document is the property of the United States Government and is not to be reproduced in whole or in part without permission of the Commandant, Air Command and Staff College, Air University, Maxwell AFB, Alabama. Clearance for public release under the provisions of AFR 190-17 has not been obtained.

A loan copy of this document and limited permission to photocopy may be obtained (subject to proof of eligibility to receive in the case of classification or caveat restrictions) from the Air University Interlibrary Loan Service (AUL/LRX), Maxwell AFB, AL 36112. (AUTOVON 875-7223 - Commerical [205] 293-7223.) Requests must include the author's name and complete title of the study.

Requests for quantity reproduction (more than 10 copies) should be addressed to Air Command and Staff College (EDCC), Maxwell AFB, AL 36112. Requests should include a brief explanation of intended use and distribution.

Copies of technical and logistics related studies are provided to the Defense Documentation Center (DDC) and the Defense Logistics Studies Information Exchange (DLSIE) respectively as a convenience to subscribers.

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

REPORT DOCUMENTATION PAGE		READ INSTRUCTIONS BEFORE COMPLETING FORM
1. REPORT NUMBER 2130-79	2. GOVT ACCESSION NO. AD-A084154	3. RECIPIENT'S CATALOG NUMBER
4. TITLE (and Subtitle) WORD PROCESSING - The Air Force Administrators' Handbook		5. TYPE OF REPORT & PERIOD COVERED
		6. PERFORMING ORG. REPORT NUMBER
7. AUTHOR(s) Morris J. Schur, Major, USAF [REDACTED]		8. CONTRACT OR GRANT NUMBER(s)
9. PERFORMING ORGANIZATION NAME AND ADDRESS Air Command and Staff College Maxwell AFB AL 36112		10. PROGRAM ELEMENT, PROJECT, TASK AREA & WORK UNIT NUMBERS
11. CONTROLLING OFFICE NAME AND ADDRESS ACSC/EDCC Maxwell AFB AL 36112		12. REPORT DATE May 1979
		13. NUMBER OF PAGES 174
14. MONITORING AGENCY NAME & ADDRESS (if different from Controlling Office)		15. SECURITY CLASS. (of this report) UNCLASSIFIED
		15a. DECLASSIFICATION/DOWNGRADING SCHEDULE
16. DISTRIBUTION STATEMENT (of this Report) "Statement A"		
17. DISTRIBUTION STATEMENT (of the abstract entered in Block 20, if different from Report)		
18. SUPPLEMENTARY NOTES Item 16: DTIC also has a version of this document not cleared for public release (i.e. Statement B) under Gov't Accession No. ADB 040 882 L		
19. KEY WORDS (Continue on reverse side if necessary and identify by block number) Administration / / Administrative Systems / / Annotated Bibliography / / Job Enrichment / / Word Processing		
20. ABSTRACT (Continue on reverse side if necessary and identify by block number) See Reverse		

PII Redacted

DD FORM 1 JAN 73 1473

UNCLASSIFIED

SECURITY CLASSIFICATION OF THIS PAGE (When Data Entered)

The Air Force is implementing word processing at all organizational levels. This handbook covers in detail information the word processing project officer needs to successfully implement word processing. Topics covered include: professional readings the officer should review; conducting briefings--including viewgraphs and related text that can be used as briefing aids; planning for implementation and how to budget for word processing; ordering the equipment and modifying the facility; the civilian personnel system; and measuring productivity in the center. An index is included which allows quick access to essential information and encourages use of the handbook during project implementation.

(18)

AIR COMMAND AND STAFF COLLEGE

(14) ACSC-2134-77

(6) WORD PROCESSING:
THE AIR FORCE ADMINISTRATORS' HANDBOOK.

By

(10) Morris J. Schur
Major, USAF

DTIC
ELI
MAY 1 1979

9. Research Study

A RESEARCH STUDY SUBMITTED TO THE FACULTY

11 May 1979

(12) 294

Richard M. Doucet
Major, USAF
Research Advisor

AIR UNIVERSITY
MAXWELL AIR FORCE BASE, ALABAMA

This document has been approved
for public release and sale; its
distribution is unlimited.

4105502

ABSTRACT

The Air Force is implementing word processing at all organizational levels. This handbook covers in detail information the word processing project officer needs to successfully implement word processing. Topics covered include: professional readings the officer should review; conducting briefings--including viewgraphs and related text that can be used as briefing aids; planning for implementation and how to budget for word processing; ordering the equipment and modifying the facility; the civilian personnel system; and measuring productivity in the center. An index is included which allows quick access to essential information and encourages use of the handbook during project implementation.

PREFACE

The author would like to thank Administrative Systems Management personnel at HQ USAF, HQ SAC, HQ ATC, HQ AFLC, Air University, AFMPC, and HQ ARPC for their assistance in providing their "corporate memory" about what a project officer needs to know when implementing a word processing system.

A special note of thanks is due to my advisor, Major Dick Doucet, who kept me on the "yellow brick road" to getting the handbook completed. Ms June Kelly provided outstanding administrative support. Lt Col John O'Neil helped with cartoon support and layout advice.

To my wife, Stephanie, and my children, Jackie and Keith, I now owe many hours of personal time and attention.

Morris J. Schur
MORRIS J. SCHUR
Major, USAF

Accession For	
NTIS ONA&I	☒
DNC TAB	☐
Unannounced	☐
Justification	
By _____	
Distribution/	
Special Mail Codes	
Dist	Available for special
A	

TABLE OF CONTENTS

	Page
ABSTRACT	ii
PREFACE	iii
TABLE OF CONTENTS	iv
LIST OF FIGURES	vii
INTRODUCTION	viii
Chapter	
1. PROFESSIONAL READINGS AND ASSOCIATIONS . .	1
Official Publications	4
Free Magazines	6
References That Cost	6
Professional Associations	9
Summary of Chapter 1	10
2. I'VE GOT TO BRIEF WHOM? WHEN?	11
The Art of Persuasion	12
Viewgraphs	14
A Word of Caution	20
Management's Questions and Answers . . .	47
Action Officers' Briefing	56
Action Officers' Questions and Answers .	57
The Administrators' Briefing	59
Completing the Survey Forms	65
Possible Use of Civilian Personnel	
Officials	65
Administrators' Questions and Answers .	66
Summary of Chapter 2	68
3. PLANNING AND BUDGETING FOR WORD	
PROCESSING SYSTEMS	69
Planning, Programming, and Budgeting	
System (PPBS)	70

CONTINUED

	Page
Financial Management at Wing/Base Level	74
Organization at Base Level	76
Budget Preparation for WP	79
Fast-Payback Capital Investment Program (FASCAP)	82
Summary of Chapter 3	86
4. CREATING THE OPERATIONAL SYSTEM	87
Planning for Implementation	88
Working with Supply, Procurement, Civil Engineering, and Communications-Electronics	91
Problems to Avoid	100
Summary of Chapter 4	102
5. PERSONNEL	103
United States Civil Service Commission	104
Employee Motivation and Word Processing	109
Job Enrichment	116
Summary of Chapter 5	123
6. PRODUCTIVITY	125
What Is Work Measurement?	125
Why Do We Measure Work?	126
Conducting the Work Measurement Study	127
Air Force WPC Productivity Measurement	131
Continuing Technological Change and Productivity	134
Of Special Interest	135
Summary of Chapter 6	137
Concluding Comments	138
Attachments	
1. Administrative Systems 3AZR70270 Class Schedule	141
2. List of Viewgraphs and Films	142
3. DA Letter, 11 Jan 79, Word Processing Implementation	143
4. DA Letter, 26 Mar 79, Word Processing Survey	144
5. ACSC Form 5 "ACSC Speaking Feedback"	145

CONTINUED

	Page
6. HQ SAC/DAY Letter, 20 Dec 1977, Input for Word Processing Equipment, FY 79 and 80 . . .	146
7. Consolidated Program Summary, Exhibit D-18 . .	147
8. Schedule of Essential Actions	148
9. Creating the Operational System	149
10. Word Processing Implementation Actions Network--Critical Path Method (CPM)	150
11. PERT Example--Word Processing Systems Implementation	151
12. HQ USAF/DA/AD Letter, 22 March 1979, "Reclassification of Word Processing Equipment" . . .	152
13. Army "Word Processing Implementation Checklist	153
14. HQ ATC "Word Processing Center General Engineering Specification Summary"	154
15. Civil Service Commission Form PSD-1, "Position Evaluation Statement"	155
16. LMDC Letter, 23 Jan 79, "Typical Job Enrichment Ideas for Administrative Systems (or Word Processing Centers)"	156
17. HQ AFLC HOI 11-1, 1 Nov 76, Administration Center Policy and Procedures	157
18. HQ AFLC HOI 11-1, Appendix 2, 1 Nov 76, Word Processing Center Standard Operating Procedures	158
19. HQ ATC WPC OI 11-2, Oct 77, Line Counting Procedures	159
INDEX	160

LIST OF FIGURES

	Page
1. Planning, Programming, Budgeting	71
2. Scheduling of Budget Requests	72
3. Base Level Financial Structure	77
4. The Relationship Among the Job Characteristics, the Critical Psychological Satisfactions, and Personal Work Outcomes	119

INTRODUCTION

There is nothing more perilous to conduct, or more uncertain in its success, than to take the lead in the introduction of a new order of things, because the innovator has for enemies all those who have done well under the old conditions, and lukewarm defenders in those who may do well under the new.

--Machiavelli, The Prince

Welcome to word processing! Machiavelli's warning must be considered by anyone trying to institute change in an organization--basically, that's what we in the word processing business are trying to do. We are trying to get Management to change the age old system of administrative support. This is a relatively new aspect of the Administrative career field. It attracts a lot of "attention" from commanders, staff agency chiefs, civilian secretaries, military enlisted administrators, and from our other friends in the manpower and budget career fields.

Let's get a few things straight at the start. The purpose of this handbook is to assist you as a newly assigned project officer so you can successfully implement a word processing system. The term project officer refers to anyone, regardless of military grade or civilian status, who has been tasked to implement word processing. I have assumed that you have attended the eight-day "Administrative Systems" course (3AZR70270) at Keesler AFB and are new to word processing. The handbook will not duplicate material presented at Keesler, nor will it cover items concerning dictation skills and techniques or information which should be contained in a word processing center users' guide. The new Air Force executive dictation course, "Say It. . . Don't Write It," was prepared for HQ USAF/DA at Air University in 1978 and should have been released prior to this publication. The course is a combined video tape and instructor presentation; it is available through each command's DA representative.

Attachment 1 to this handbook, "Administrative Systems 3AZR70270," is a recent class schedule for the Keesler course. This schedule will indicate to those readers who have not yet attended the course which items will be covered during the school. The Keesler course prepares you to conduct an administrative systems survey and to validate the need for a word processing center; this handbook supplements what Keesler covered and, more importantly, provides you detailed insight into how to solve the principal problems which can hinder your success.

To save your reading time, I have used a few "short-cuts" in this handbook: WP for word processing; WPC for word processing center; ASC for the Keesler course; Administrator for both military and civilian administrative personnel regardless of exact military title or civil service grade classification; and Management to refer to a commander, supervisor, deputy chief of staff, etc.; and finally, Action Officer for mid-level management.

A recommended reading list is in Chapter 1. The price of each publication is shown along with my evaluation of it. Emphasis throughout this handbook is on assisting you; therefore, suggested briefing materials are in Chapter 2. These aids are being successfully used at numerous Air Force bases at all levels of command. Perhaps one of your most difficult jobs will be to obtain funds for the WP program. You simply can't help the organization being surveyed unless their requirement can be funded. Chapter 3 considers this problem and offers important suggestions about getting rental and purchase funds.

Once you've studied WP, briefed Management, and convinced the "coin biters" to provide funds, how do you actually order the equipment your customer needs? What about facility modification? Chapter 4 answers these concerns and also discusses relationships with other staff agencies who can provide support.

After much frustration, hard work, and a little luck, your facility is ready. What about people, the most important part of the equation: $WP = \text{People} + \text{Equipment} + \text{Procedures}$. Chapter 5 discusses the attitude and policies of the United States Civil Service Commission (the Commission was recently renamed the Office of Personnel Management, but I've used the

former name because it is more widely known) toward WP and related problems of motivation, reduction in force, and job enrichment. Chapter 6 covers productivity measurement techniques.

Now--a few words are required about your author and how and why this handbook was prepared. I have been involved in WP for five years--at base level, MAJCOM (HQ SAC), and in civilian industry. The information in the handbook includes not only my personal experiences, but also interviews I conducted with WP folks from HQ ATC, AFMPC, AFLC, AFCS, AU, Keesler AFB, and HQ USAF.

I sincerely hope this handbook will be of use to you. I would appreciate your comments about what is included in the handbook and if it does help to set up word processing in your organization. Your thoughts and ideas will be included in the first revision to the handbook. The last page in the handbook is a "pre-addressed mailer" you can use to send me your thoughts--no letter bombs, please!

CHAPTER 1

PROFESSIONAL READINGS AND ASSOCIATIONS



— TRY THEM, YOU'LL LIKE 'EM!

WP is a little like pornography. We can't always give you a good definition, but we know it when we see it.

Let's face it--you only have so many hours available and a lot of "fires" to put out. This chapter briefly describes what publications about WP are available and my opinion of their value to you. This value judgment is based specifically on the job you have to accomplish. The items marked with an asterisk are a must. Depending on your level of expertise in WP, I suggest you use the quick reference chart below to determine which materials you want to examine more carefully. All publications are listed on the following page in recommended order of usefulness to you. My

recommendation of the publications which cost should not be construed as promotional in nature.

TITLE OF PUBLICATION

MAJOR POINT OF INTEREST

I. OFFICIAL PUBLICATIONS

*AFR 4-2, Vols I and II

Basic Air Force policy

Army Reg 340-8

Cost justification,
work measurement

Acoustic Analysis and Design
Recommendations for Word
Processing Centers

Project manager/civil
engineer--WPC sound
control

Air Force Audit Agency Summary
Report (SRA85377): Management
of Administrative Systems
Program

Evaluation of current
AF efforts in WP

*ATC MET Study, Final Report ATC
Single-Point Statistical Manpower
Standard, Word Processing Center

Chanute AFB produc-
tivity standards.
Good for explanation
of MET procedures.

*Green's "Designing and Managing
Administrative Systems"

Read prior to conduct-
ing briefings. Explains
different kinds of WPCs.

Church's Work Measurement:
Application to Air Force Clerical
Activities

Background information
on work measurement

Army Pamphlet 340-2

General background
information

II. REFERENCES THAT COST

*Word Processing Report, and
Word Processing World

Hard to do your job without these items. The basic publications in WP.

DATAPRO Report on Automated Office Solutions

You'll need it if you're at MAJCOM level or a WPC manager of a very large center. (25+ keyboards)

*Thursland's Work Measurement

The best book on work measurement techniques.

*"The Seybold Report on Word Processing"

Contains detailed analysis of specific WP equipment which you may be thinking of installing in your WP.

Kleinschrod's book, Management's Guide to Word Processing

Excellent review of all the things you need to do to brief management, conduct surveys, and implement your center.

Rosen and Fielden, Word Processing

Good chapter on work measurement.

Konkel and Peck, The Word Processing Explosion

If you need additional suggestions on specific WP operations.

Anderson and Trotter, Word Processing

If you need case histories of successful civilian applications. Somewhat outdated. Has a fair example of how to prepare a WPC users' guide.

Cecil's, Word Processing in
Modern Office

Look it over if you
need to train new key-
board operators.

Bergerund and Gonzalez, Word
Processing Concepts and Careers

Again, may be of help
to train new operators.

OFFICIAL PUBLICATIONS

AFR 4-2, Volume 1, 15 October 1976, Administrative Systems Program Management, is a four-page pub. which contains basic concepts and policy guidance. It refers you to other pubs. to find out about related problems. *You must follow the basic policies contained in this directive unless you obtain a waiver from HQ USAF/DAY.*

AFR 4-2, Volume 2, 16 September 1977, Developing and Managing Administrative Systems, basically teaches you how to conduct WP studies--the things taught in the Keesler course.

Army Reg 340-8, 20 July 1977, Army Word Processing Program, is like AFR 4-2, Volumes 1 and 2, and contains excellent information on proposal documentation and productivity measurements.

Army Pamphlet 340-2, 1 April 1975, Management's Introduction to Word Processing, is an Army pamphlet apparently designed to substitute for a formal course on WP. It's long and somewhat outdated, but Chapter 7, "Word Processing Environment," contains helpful information on acoustical controls, temperature, and humidity. Chapters 9 and 10 discuss personnel considerations.

Army Environmental Hygiene Agency, 15 August 1974, Acoustic Analysis and Design Recommendations for Word Processing Centers (Special Study No. 99-012-74/75, Aberdeen Proving Ground, MD 21010). This is the "original bible" on noise control in WPCs. *Army noise standards for WPCs are based on this report. Many Air Force units apparently use the same standards and portions of it seem to have "found" their way into AFR 4-2 and into the Keesler ASC.* I recommend you order a free copy--if your civil engineers need technical justification for your requests, they should find the answers in this document.

Air Force Audit Agency, Summary Report of Audit: Management of Administrative Systems Program (SRA 85377), Washington, DC, Department of the Air Force, 26 April 1978. The objective of this study was to evaluate the AF efforts to increase effectiveness of administration through acquisition, implementation, and management of improved administrative systems. The report validates cost savings and states that "Productivity measurements need to be developed for operator/transcriber personnel to determine operator efficiency, training requirements and workload adjustments." *At some point after you install your WPC, you'll probably get a visit from the auditor. I suggest that you read this document to "know where he's coming from."*

Joe L. Church's Word Measurement: Application to Air Force Clerical Activities, unpublished Air Command and Staff College (ACSC) Research Study, Air University, Maxwell AFB, Alabama, 1965. Major Townsend examined the feasibility of using work measurement as a means of establishing manning standards for "clerical activities" in order to control their associated cost. He concluded that a combination of predetermined time standards and operational audit was the most feasible technique to use. The author has an industrial engineering and "manpower" background and his thesis considered administrative positions from those perspectives. *It provides a useful look into the "time and motion" side of WPC.*

ATC Management Engineering Team 1, Final Report, ATC Single-Point Statistical Manpower Standard, Word Processing Center FC370002, unpublished ATC report, Chanute AFB, 1978. This extensive report contains just about all you ever wanted to know about WPC work measurement but were afraid to ask. *It should be read after your center is established and should be studied in conjunction with the auditor report and perhaps the Townsend study mentioned above.* There's little doubt in my mind that sooner or later our WPCs will all be subjected to such studies. You can contact the Chanute MET via AUTOVON 862-4111.

Mrs. Mary O. Ward's "Word Processing Bibliography," Air University Library, Maxwell AFB, Alabama. Mrs. Ward periodically prepares an excellent bibliography of selected references on WP which the AU Library has on hand.

Daniel F. Green's "Designing and Managing Administrative Systems," unpublished paper by the Chief, USAF

Administration Schools, Keesler AFB, Mississippi, 1978. Major Dan Green completed his Education-With-Industry tour with IBM and gained useful insights into WP. His paper is an excellent summary of different kinds of WPCs that you may have need to recommend. Contact Dan via AUTOVON 868-2940 if you want a copy of his 17-page paper. It's a very good one!

So much for officialdom. Let's talk about free magazines.

FREE MAGAZINES

Modern Office Procedures, P. O. Box 95759, Cleveland, Ohio 44101. This monthly magazine contains articles on all aspects of the modern office--WP, reprographics, office planning, facsimile, etc. It's not only free, but it's also good. Order it on your letterhead stationery.

The Office, Office Publications, Inc., 1200 Summer Street, Stamford, Connecticut 06904. Articles in this monthly magazine are about equally divided between records management, microfilm, and WP technology. It also contains brief descriptions of new products.

Computer Decisions, Hayden Publishing Company, Inc., 50 Essex Street, Rochelle Park, New Jersey 07662. Published monthly primarily for data processing types, it frequently contains articles about WP. *It's useful to review because our friends in Data Automation read it and many of their ideas about WP come from pubs like this one.* It will also help to educate those of us who don't know much about computer technology.

REFERENCES THAT COST

Someone once wrote, "The Post Office is a governmental instrumentality which the law charges with bringing you at inconvenient times things you usually don't want and probably don't need."

Since you're going to have to pay for any of the following items, I've listed them in their order of value regarding information which you may need. Before

we start the list, let's talk about how you get the money to purchase these items. You can get it in two ways--by writing a letter to the base librarian in accordance with AFR 212-3, Requisitioning Technical Publications for Libraries (approval is at the MAJCOM level, and the 2750 ABW/PMA, Wright-Patterson AFB, Ohio orders these publications), or you may be able to convince your funds manager to let you have some of "his" supply funds. Try the library route first, but if they're out of funds, talk to your "supply" NCO/funds manager and ask politely. Don't forget you need to create a purchase order via the Procurement System if you order the publications.

Word Processing Report, Geyer McAllister Publications, Inc., 51 Madison Avenue, New York, NY 10010 (\$87/year). Published twice per month. This is the best one available. It will keep you and your WPC supervisor up to date on most aspects of WP. Once each month it contains a four-page technical feature which can frequently be applied to your WP problems. The subscription price includes a copy of the finest magazine on the market, Word Processing World. *If you can't get the bucks for the Report, order Word Processing World by itself for \$14/year. It's been published for five years and there is always at least one useful article in each issue.*

Work Measurement--A Guidebook to Word Processing Management by Arthur L. Thursland was published in 1978 by the International Word Processing Association, Maryland Road, Willow Grove, Pennsylvania 19090. This book contains a detailed examination of work measurement in WPCs.

If you're at the MAJCOM or Separate Operating Agency (SOA) level, you want to order: DATAPRO Report on Automated Office Solutions, DATAPRO Research Corporation, 1805 Underwood Boulevard, Delran, New Jersey 08075, 1978, \$230. This a loose-leaf, two-volume set which is updated monthly. "It is an information service devoted exclusively to the problems of how to adapt a nonautomated office to the evolving concepts and techniques of automated equipment designed specifically for the modern office system." It not only contains articles on just about every subject related to the "office of the future," but it also provides an "Inquiry Service" through which a subscriber may communicate directly with DATAPRO specialists to obtain additional information. The companion book published by

DATAPRO for \$250 is Word Processing; it is also updated monthly and contains a thorough evaluation of all WP equipment. It does not go into as much useful detail as does the following publication.

"The Seybold Report on Word Processing" is published monthly by Seybold Publications, Inc., Box 644, Media, Pennsylvania 19063, \$60 year. Each issue contains a detailed analysis of major pieces of WP equipment and relates its advantages and shortcomings.

If you think you need more "nuts and bolts" information on how to actually conduct the WP survey, the book you want is Walter A. Kleinschrod's Management's Guide to Word Processing (1977), Dartnell Corporation, 4660 Ravenswood Avenue, Chicago, Illinois 60640. This \$49.95 book is a super reference guide and, like DATAPRO, comes in a loose-leaf binder. It is not, however, updated. It's similar to the DA Pamphlet 340-2 except that it's much more up-to-date and presented in a more professional manner. *It is designed to "take you in successive stages from a general view of word processing to the specific designs of a WP system which can serve--and satisfy--the administrative needs of your particular place of work."*

Arnold Rosen and Rosemary Fielden collaborated on Word Processing (1977) published by Prentice-Hall, Inc., Englewood Cliffs, New Jersey, \$14.95. The two college professors wrote this 354-page book primarily as a textbook. Each chapter contains a list of objectives for the reader to accomplish while reading the material, and concludes with questions to stimulate classroom discussion. It's easy to read, extensively illustrated, and worth the money.

The Word Processing Explosion by Gilbert J. Konkell and Phyllis J. Peck was published in 1976 by Office Publications, Inc., P. O. Box 1231, Stamford, Connecticut 06904. This \$7.50 soft cover effort was prepared by two people who earn their living in WP. It traces WP implementation and provides management insight into WP operations. At only 146 pages, you can read it in a few hours. It has practical, down-to-earth suggestions on how to select and train WPC personnel.

We've almost finished our review of things to read. One of the first books published in WP was Thomas Anderson and William Trotter's Word Processing (1974).

You can order it for \$19.95 from AMACOM, the publications branch of American Management Associations, 135 West 50th Street, New York, NY 10020. This book is largely outdated but many of the more recent efforts may have been based upon it. It contains numerous case histories of successful civilian WP installations and also contains a comprehensive appendix to illustrate how to prepare a WP users' manual. Because there are many AF users' manuals available, this book has lost some of its value.

The final two books can be used by new WP employees as part of their training program. Paula B. Cecil's Word Processing in the Modern Office (1976) is printed by Cummings Publishing Company, Inc., 2727 Sand Hill Road, Menlo Park, California 90425. It costs \$6.95 while a companion student workbook with exercises lists for \$3.50. The text is the usual "what it is and does" treatment. Finally, Marly Bergerund and Jean Gonzalez wrote Word Processing Concepts and Careers (1978). This book is available for \$9.95 from John Wiley and Sons, Inc., 603 Third Avenue, New York, NY 10022. It's a lot like the Cecil book--aimed at the community college and vocational-technical school market.

Well, that wraps up the readings.

Someone once said, "Given the sources from which most people get advice, it is remarkable that they do as well as they do."

PROFESSIONAL ASSOCIATIONS

The best place to get good advice is from other people in WP. Many cities have a local chapter of the International Word Processing Association (IWPA) (2360 Maryland Road, Willow Grove, Pennsylvania 19090). I strongly recommend you join (\$35/year) the local chapter of IWPA. IWPA publishes Words bimonthly. This magazine is not nearly as good as Word Processing World, but it's included in the membership. Before sending in your personal check for membership, see your funds manager about getting an "organizational membership." IWPA doesn't really offer an organizational membership, but you can get one with AF funds by using your name and office as the "registered member."

IWPA sponsors a tremendous annual conference called "Syntopican" which features almost every US and some foreign manufacturers WP equipment exhibits. Syntopican also offers conferences on a wide variety of subjects. IWPA also sponsors Spring and Fall symposiums of equipment exhibits at different locations in the United States.

Perhaps even more valuable than the conferences at Syntopican are the contacts you will make with other WP professionals. Through these contacts, you can learn how civilian WPCs are managed and visit many of these installations. You need to keep abreast of the civilian sector so you can adapt worthwhile changes to your WPC.

If you are stationed in the Washington, DC metropolitan area, you should consider joining the Federal Government Word Processing Council (FGWPC). The FGWPC has about 500 members from various federal government agencies. The group not only features outstanding speakers from both the public and private sectors, but also receives advance information on matters of concern to its members. To join, contact Ms. Lucile Townsend at 447-6735. If you are not stationed in the DC area but want additional information or would like to receive the FGWPC Newsletter, contact HQ USAF/DAY, Bolling AFB, DC 20330 (AUTOVON 297-4449). DAY may be able to place you on the distribution list for the Newsletter.

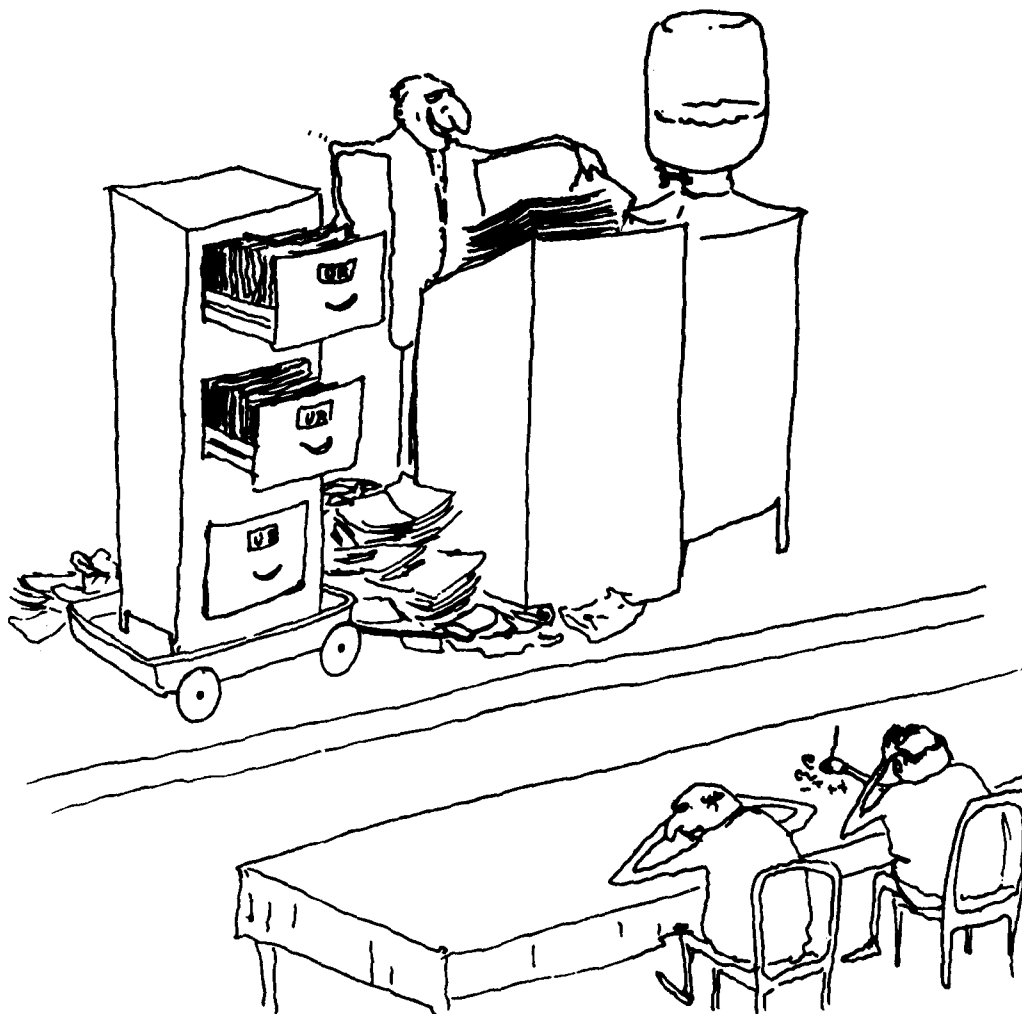
SUMMARY OF CHAPTER 1

The central idea of this chapter is that you must read and keep current in WP. You'll need this knowledge to brief, to purchase, to update, and to be knowledgeable among your peers. This new technological field is moving extremely fast and one way to keep up-to-date is by reading the pertinent literature. It's up to you (based on your background) to pick the selected reference material you will monitor for ongoing information you need and can use.

The next chapter provides information on how to be a good "snake oil salesman" and sell the WP concept to your organization.

CHAPTER 2

I'VE GOT TO BRIEF WHOM? WHEN?



Write reports and give briefings that do not leave the reader or the briefee in a state of complete frustration.

--General Glenn A. Kent
(AU Review, May-June,
1971)

This chapter contains both general tips and specifics on how to present a series of briefings on WP. The first part borrows ideas from Tongue and Quill, "Communicating to Manage in Tomorrow's Air Force," by Lt Colonel Hank A. Staley, Air University. After general info on how to brief, we'll discuss ideas that the three typical groups which you are likely to have to brief--Management, Action Officers, and Administrators--are concerned about. We will also examine the most critical questions these three groups are likely to ask you. I have included a number of paper copies of viewgraphs I developed at HQ SAC which have subsequently been successfully used throughout the Air Force. If you have briefed before and feel comfortable with your talents, you may want to skip the "Art of Persuasion."

THE ART OF PERSUASION

I have tried to indicate with the Machiavelli quote that most folks will regard you as something of a "snake oil" salesman. Any level of Management that agrees to support WP is taking a risk because it will be seen as supporting or directing a basic change to the status quo. You must recognize this resistance and be prepared to respond to it. The following tips can help you survive during the briefing you will give.

As noted in Tongue and Quill (TQ), "the best of persuasive efforts may sometimes fail and the worst may succeed--for any number of factors. . . ." TQ notes "the most important ingredient in advocacy is the 'Aura' surrounding the advocator. . . Are you the kind of person people enjoy agreeing with, or are you the type they might enjoy refusing?" Don't deliberately set out to antagonize anyone--you'll create enough heartburn without extra effort!

How about location? TQ recommends "If you control the location of your briefing or discussion, arrange things to your advantage. . . If you expect strong opposition, a small auditorium inhibits spontaneous discussion. . . The boss's office could lend status to your briefing" because it could show his support for the program. No matter where you brief, try, if possible, to rehearse in the exact location where you'll brief. You'll be much more comfortable if you have rehearsed on the real "playing field."

Is there an opportune time to brief? If you have a choice and "want your audience full of spark, advocate in midmorning. . . If you want them agreeable, advocate immediately after lunch." I recommend you don't brief at 0800, 1130, or 1600.

As I've indicated, you'll create enough problems because you are advocating changes. One significant change is that you will likely recommend at the conclusion of your study that Management give up manpower authorizations in exchange for new equipment and revised procedures. Present both sides of the argument and you will head off some questions and concerns. As General Halftrack says, tell them what you're going to say, say it, and then tell them what you said. Clearly restate your basic position regarding WP in the conclusion. A little later on we'll talk about probable questions you'll be asked.

Normally, you'll need to brief three basic groups of people--Management, Action Officers (E-8 to O-5, GS-7 to GS-11), and Administrators. Analyze your target! Secretaries and other administrators don't relate to the same problems regarding WP that Managers or Action Officers do. If you are briefing a "two-star" who is completely familiar with WP, don't waste his time on the basic "Here's what WP is."

The following section contains a list of questions typically asked by the three target groups. The answers to these questions are presented to your audience in two manners; first, you'll use viewgraphs to give general answers, and secondly, you'll receive direct questions from your audiences. In this handbook, we'll first list the questions of special interest to each of the three groups, then present the viewgraphs; and finally, we'll provide additional answers to the specific questions for each group.

WHAT INTERESTS MANAGEMENT?

Based upon my experience and that of people at MAJCOM DAS who've briefed management on WP, the following general subjects are of special interest:

- Civilian manpower and related costs
- Reprogramming of manpower authorizations
- "Hard" dollar savings
- Where else has WP been implemented?

- Civilian overtime/overhires
- Improved efficiency of total administrative work force
- Surviving the next reduction in force/manpower cut
- Technology--What kind of equipment will we get?
- Doing what the MAJCOM commander has done
- Worker morale
- Status quo
- Probability of success
- What's it going to cost me?
- Will I lose my secretary (status)?

WHAT INTERESTS ACTION OFFICERS?

- Why change the system?
- How will my work get done?
- Why do we need a typing pool?
- Who will make the coffee?
- Will I have to answer my own phone?
- How will my "stuff" get filed?
- What about "hot" priorities?
- Who will manage the system?
- I can't possibly dictate my work because of unique formats, etc!

WHAT INTERESTS ADMINISTRATORS?

- How will it affect me--will I lose my job?
- I won't work for another woman!
- I'll just be a number (loss of identify)
- I (think) I'm too old to learn to operate new equipment
- What about promotions?
- Will the center supervisor be military or civilian?
- What's in it for me?
- It's just a typing pool!
- I want to continue to work for one person!

VIEWGRAPHS

This section contains viewgraphs which you can use to help brief your three target groups. With the exception of the first two recommended viewgraphs, you can actually make viewgraph copies from the viewgraphs contained in this handbook. Starting with Viewgraph 3, a suggested text for each viewgraph is on the following page. Attachment 2 includes a complete list of all viewgraphs and films referenced in this chapter, along with the page numbers where they can be found in the chapter.

VIEWGRAPH 1

your organizational
C R E S T

1st line:
Organization

Your command, organization, etc.; for example,
HQ SAC

2d line
Activity

SYSTEMS MANAGEMENT DIVISION

3d line
Subject

WORD PROCESSING

4th line: How
about a slogan?

A TRANSITION TO TECHNOLOGY

Text to use with this viewgraph:

Good morning/afternoon, I'm _____ (NAME) from _____ (OFFICE).

The purpose of Viewgraph 2 is to present an overview of the contents of your briefing. I suggest, depending on your audience, you consider using the following.

VIEWGRAPH 2

C R E S T

1st line: Title

2d line:

3d line:

4th line:

5th line:

6th line:

WORD PROCESSING

◦ WORD PROCESSING IS

◦ WHY IT IS NEEDED

◦ WHAT IT CAN DO FOR (ORGANIZATION'S NAME
BEING BRIEFED)

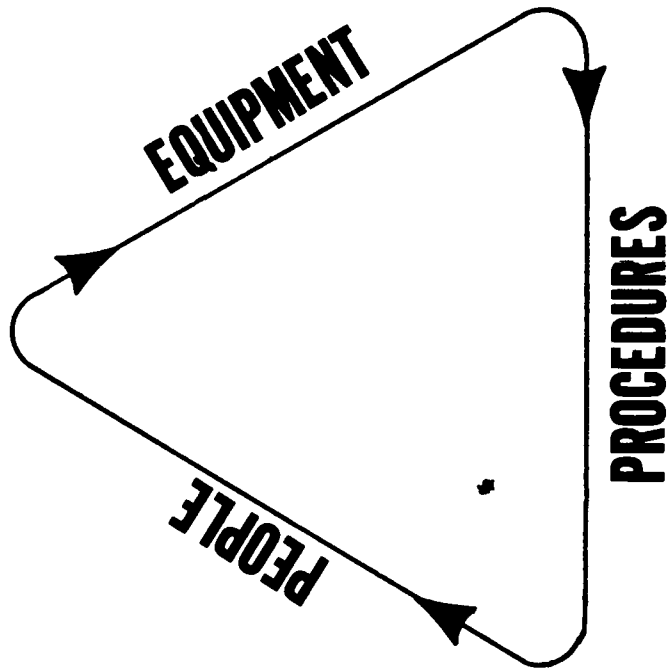
◦ IMPLICATIONS

◦ SUMMARY

You, of course, will have to adjust your overview viewgraph depending on your audience. A suggested text for Viewgraph 2 is:

My purpose today is to explain a concept which we in (organizational identifier) believe will greatly improve (whatever your goal is, such as reduce payroll cost, improve service, etc.). This concept is word processing. These are the main points I will cover during the next (scheduled time of briefing).

WORD PROCESSING IS...



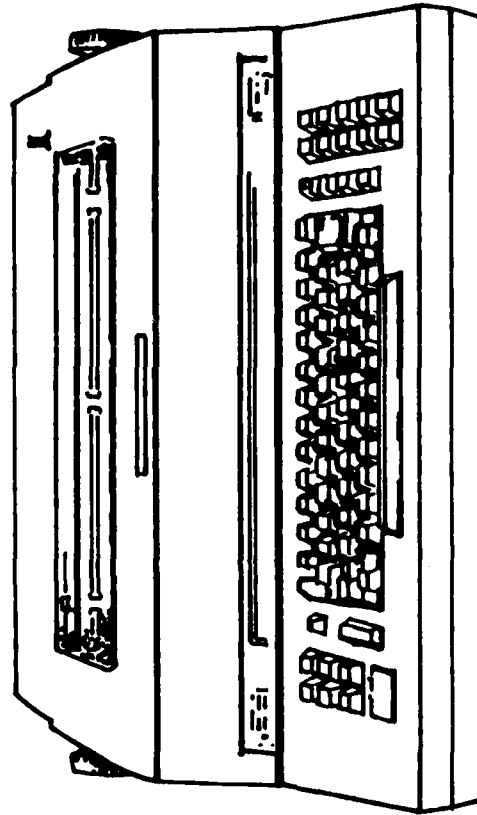
Text for Viewgraph 3:

WORD PROCESSING IS

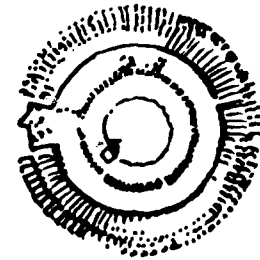
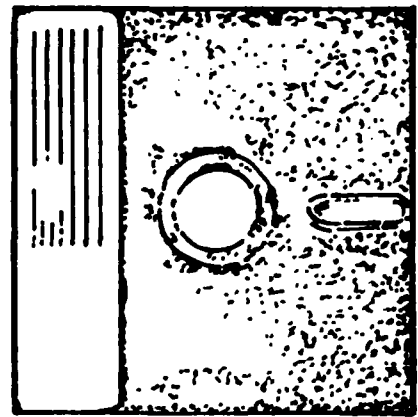
The WP concept was created in the mid-1960s at the IBM World Trade Corporation in Germany. It was developed after productivity studies indicated centralized machine dictation and transcription could reduce the cost of producing typed correspondence. Today, it is installed in a variety of ways in a large number of corporations and government agencies. Word Processing makes efficient use of input dictation equipment, magnetic typewriters and storage media, and highly trained personnel. It cuts throughput time for everyone; the time you have to wait for final typing is reduced because the typing loads are distributed equally in the Word Processing Center.

WORD PROCESSING EQUIPMENT

MAGNETIC KEYBOARD

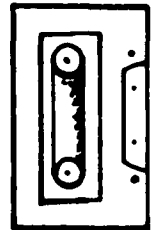


FLOPPY DISK



PRINT WHEEL

TAPE



CARD



Viewgraph 4 illustrates examples of a magnetic keyboard and alternative storage media.

A WORD OF CAUTION

Now we're ready to get into the heart of the briefing. Although you are familiar with WP and its vocabulary (jargon), the folks you're briefing may not be. Guard against buzzwords which sound good but don't really convey your message. The trick here is to use words that are precise and relate to the new technology but can be understood by everyone concerned. No one likes to be ignorant of "what's going on," even if it's new. In the Fall 1978 issue of Words, Major William McCarron presented the following chart:

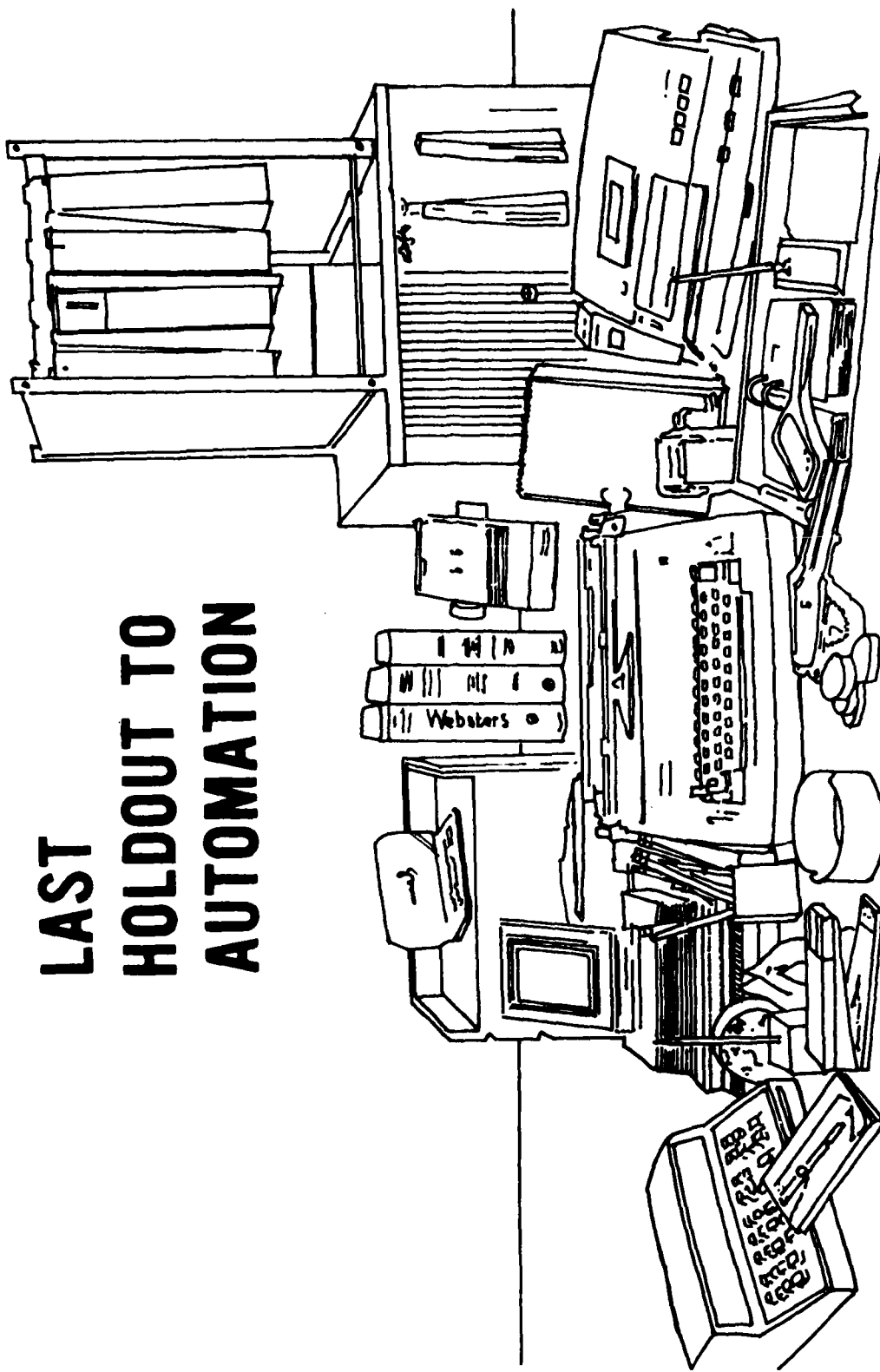
WORD PROCESSING BUZZWORD GENERATOR

1. high speed	1. inkjet	1. printer
2. distributed	2. information	2. network
3. central	3. processing	3. unit
4. shared	4. logic	4. system
5. optical	5. character	5. recognition
6. stand-alone	6. CRT	6. display
7. data processing	7. word processing	7. interface
8. decentralized	8. dictating	8. processor
9. memory	9. input	9. device

His point is that although you could string a "296 combination" together and get "distributed input display," does it really mean anything? You must relate to the folks you are briefing--what do the words mean to them?

With that warning, let's get back to the viewgraphs and their related text.

LAST HOLDOUT TO AUTOMATION



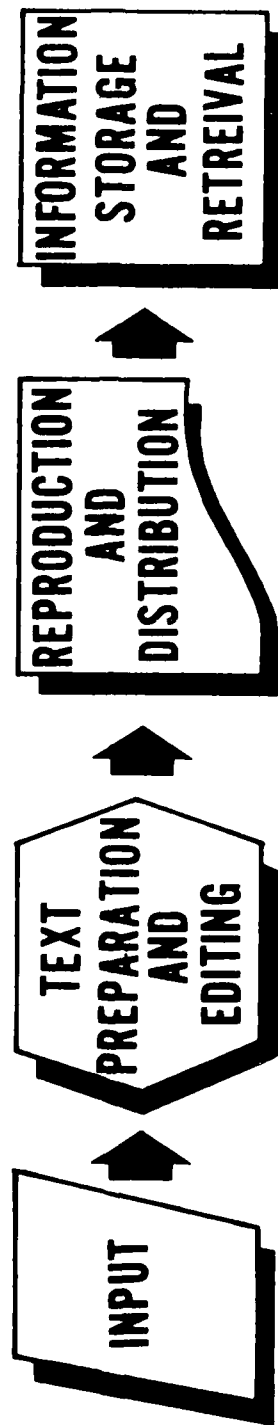
The Traditional Office

Text for Viewgraph 5:

LAST HOLDOUT TO AUTOMATION

The traditional Air Force office represents one of the last areas to take advantage of the benefits of automation. Personnel, Logistics, Finance, and other activities have automated to varying degrees, but in administrative offices we still mainly use equipment and procedures similar to those used three decades ago.

BASIC PAPER FLOW



IN MOST ORGANIZATIONS

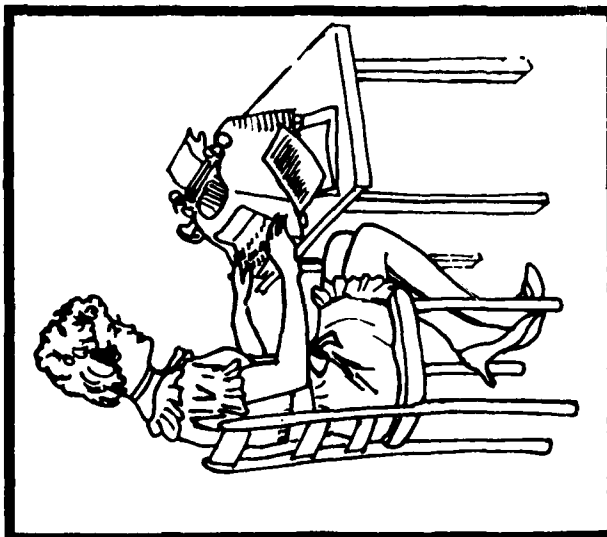
Text for Viewgraph 6:

BASIC PAPER FLOW

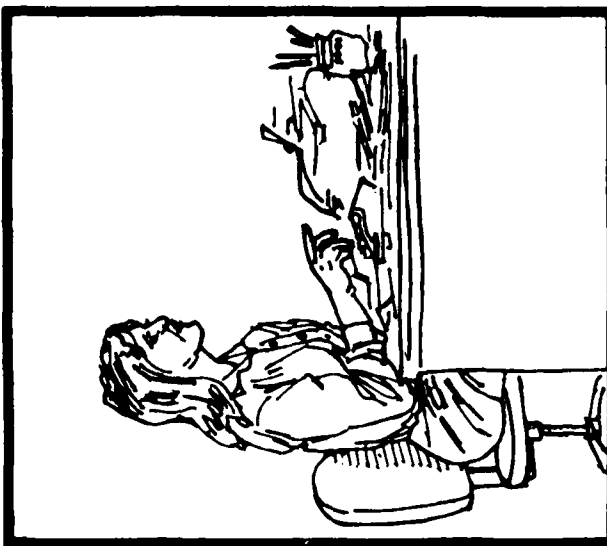
The basic paperflow in any organization is depicted on this viewgraph. The remainder of this briefing discusses problems encountered in this flow and suggested methods to overcome these problems.

THE SECRETARY

1920
with
manual typewriter
50 to 60 WPM



1970
with
electric typewriter
50 to 60 WPM



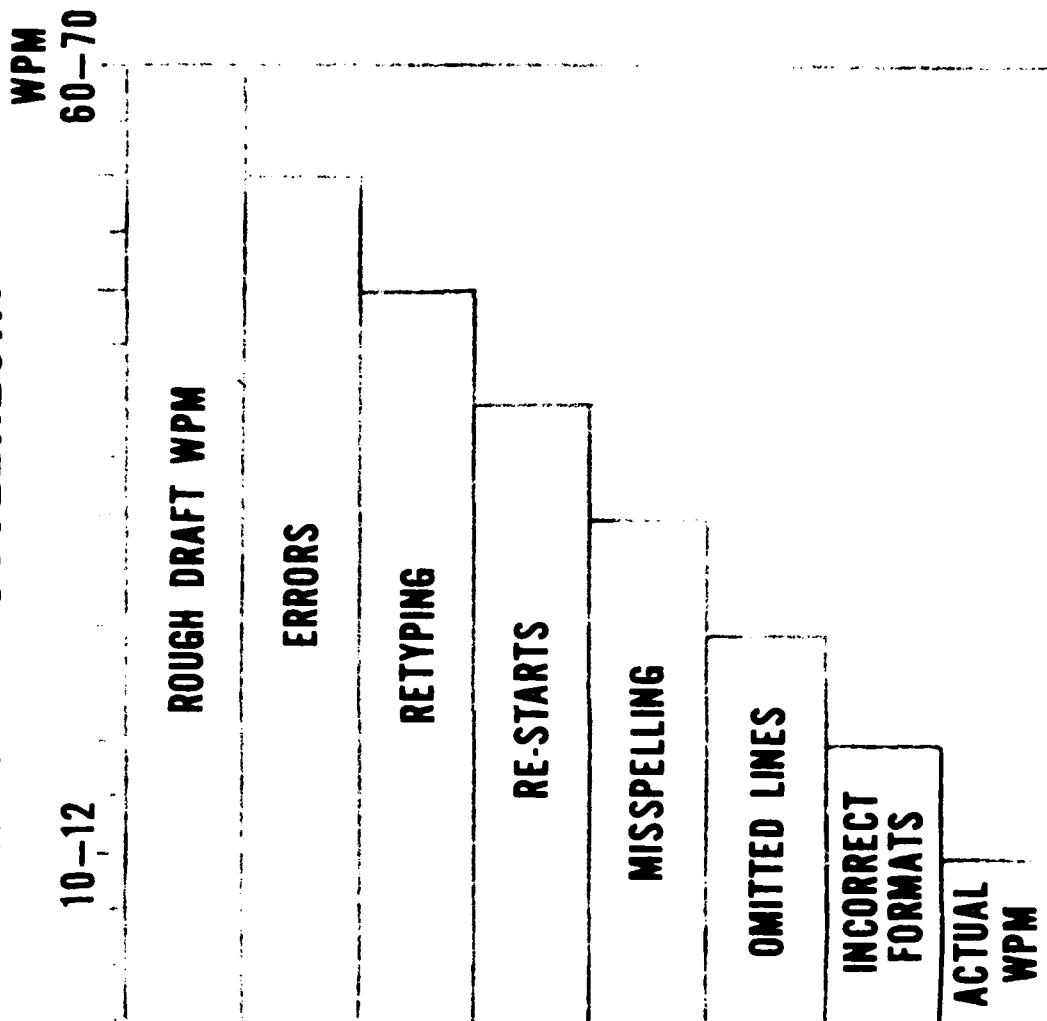
GAIN
= 0

Text for Viewgraph 7:

THE SECRETARY

The average civilian secretary thinks she types at 50 to 60 words per minute (WPM). The average military administrative specialist is rated at about 35 to 40 WPM. In truth, they both produce only about 10 to 12 net WPM. Let's look at why this is true.

WHY A BOTTLENECK?



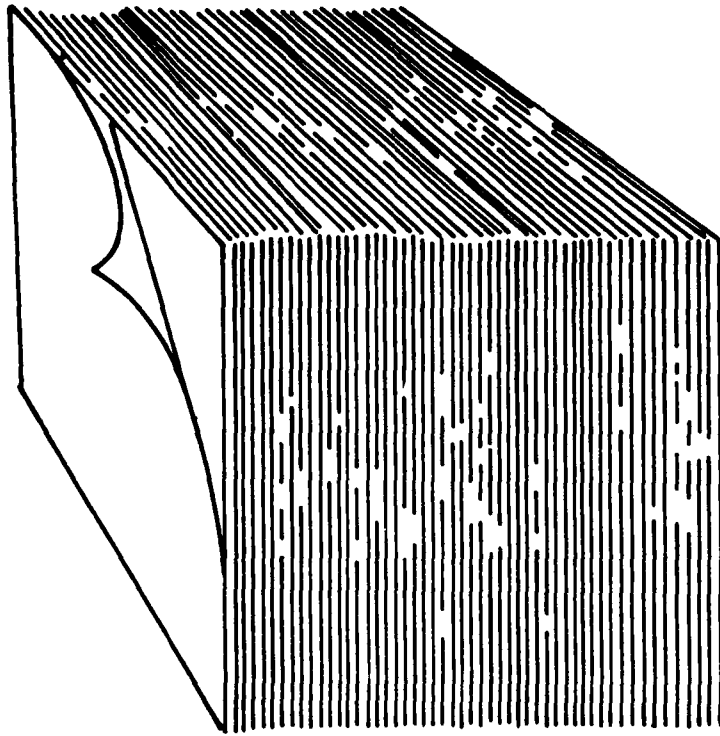
Text for Viewgraph 8:

WHY A BOTTLENECK?

Illustrated here are the reasons typists are able to produce only 10 to 12 WPM in administrative offices. When any one of these things happen, the net production declines.

TODAY'S AIR FORCE OFFICE PROBLEMS

- MANPOWER REDUCTIONS
- SLOW TURNAROUND TIME
- WORK BACKLOGS
- INCONSISTENT TYPING QUALITY
- INADEQUATE PRODUCTION TOOLS
- POOR WORK DISTRIBUTION
- UNCONTROLLED WORK ENVIRONMENT



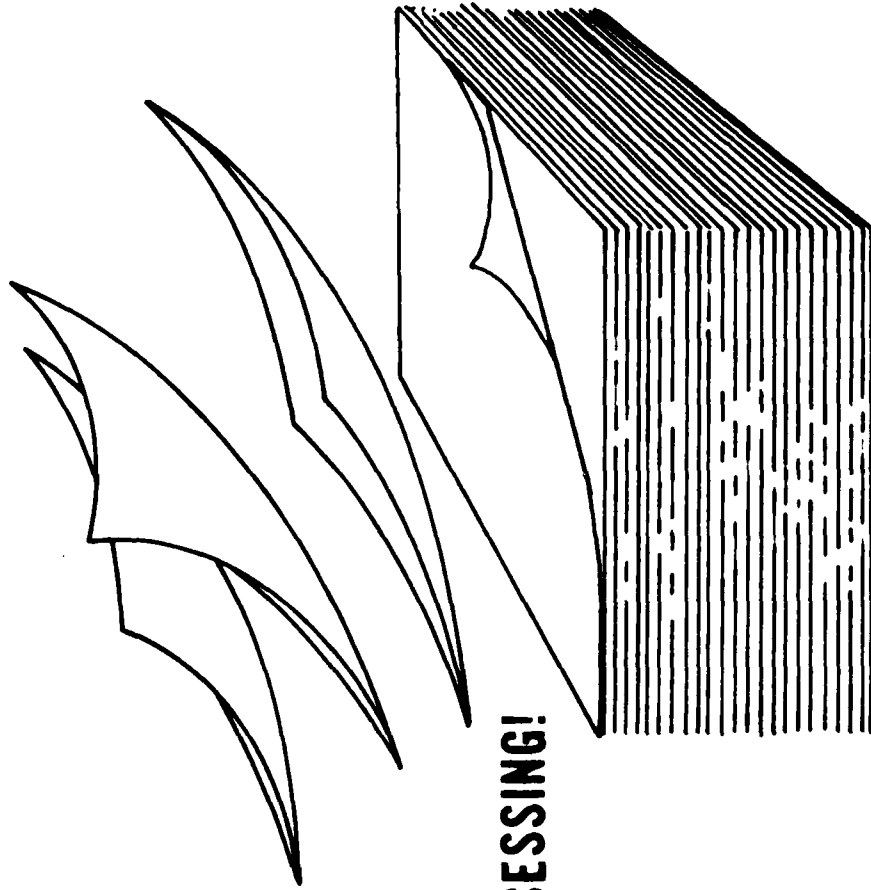
TEXT FOR VIEWGRAPH 9:

TODAY'S AIR FORCE OFFICE PROBLEMS

As a result of the previous conditions, these problems are common in many Air Force offices.

WHAT CAN WE DO?

- PERMIT WORK BACKLOG
- USE OVERHIRES
- WORK OVERTIME
- IMPLEMENT WORD PROCESSING!

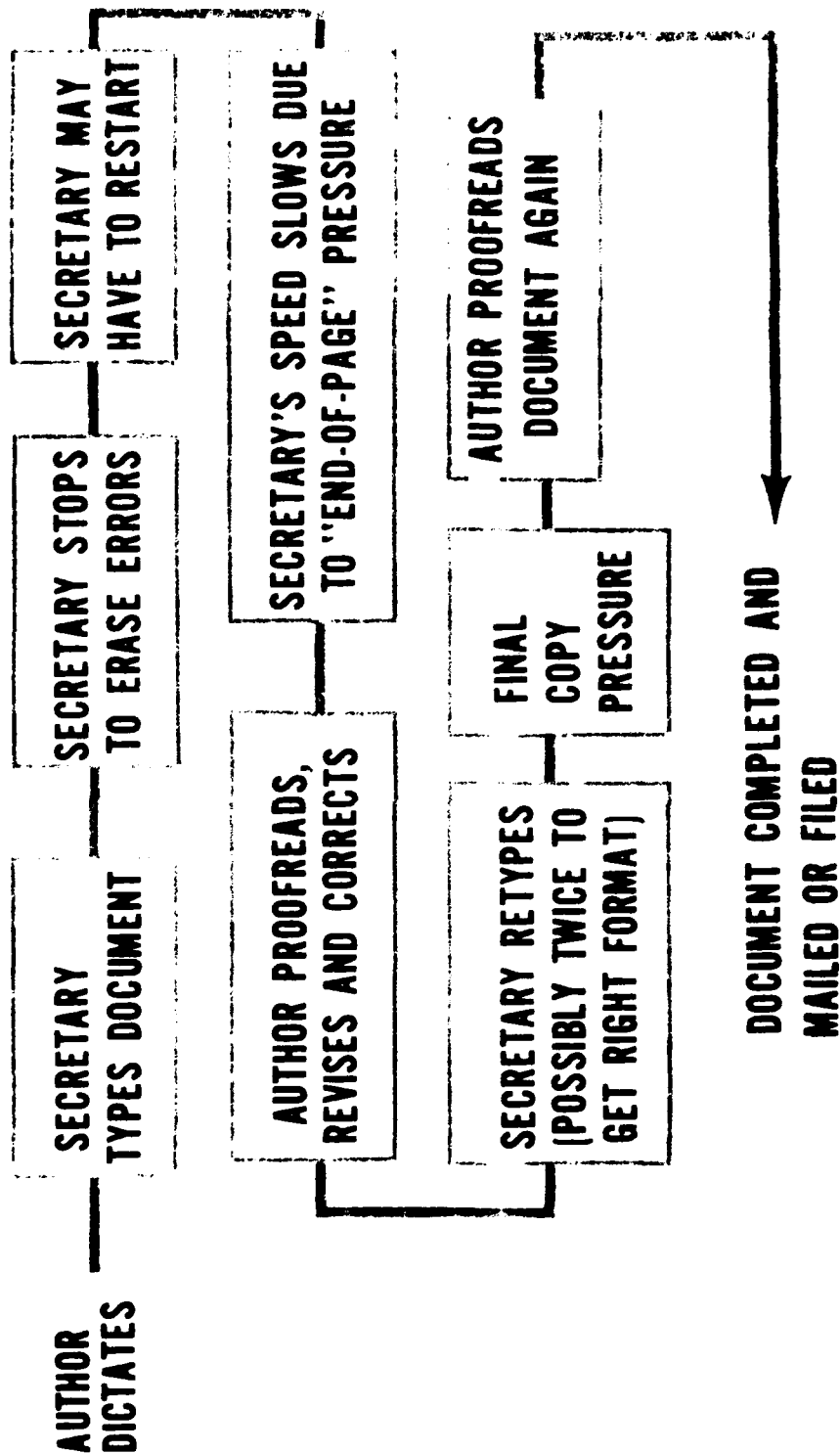


Text for Viewgraph 10:

WHAT CAN WE DO?

As manager, we must find a solution to these problems. Today, there is a choice of office equipment for handling information which will allow the Air Force to do the same amount of work with fewer people. This efficient equipment is based on new technology in magnetic recording and electronics. Since word processing equipment is too expensive to remain idle, it must be placed in the most cost effective and productive environment. As a result, the manager must plan carefully for centralized equipment use and job specialization to change the operational pattern of Air Force offices.

WITHOUT WORD PROCESSING

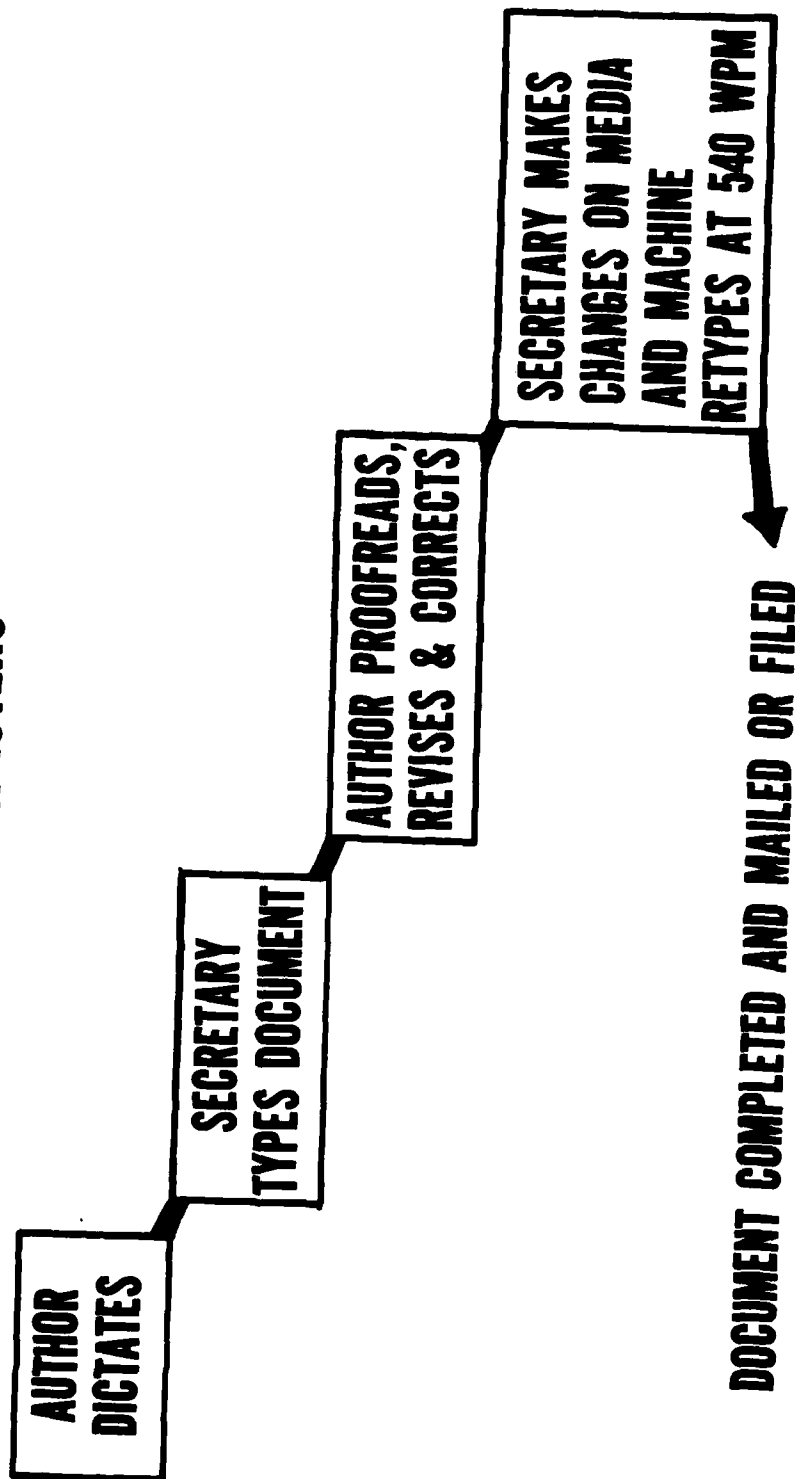


Text for Viewgraph 11:

WITHOUT WORD PROCESSING

The normal document creation cycle without word processing is illustrated here. The secretary and the author both "waste" considerable time because of system mechanics. The result is high production cost and low net productivity. (Depending on "feedback" from your audience, you may want to walk them through this viewgraph and explain unfamiliar terms and phrases such as "end of page" pressure.)

USE WORD PROCESSING TO ELIMINATE TIME WASTERS

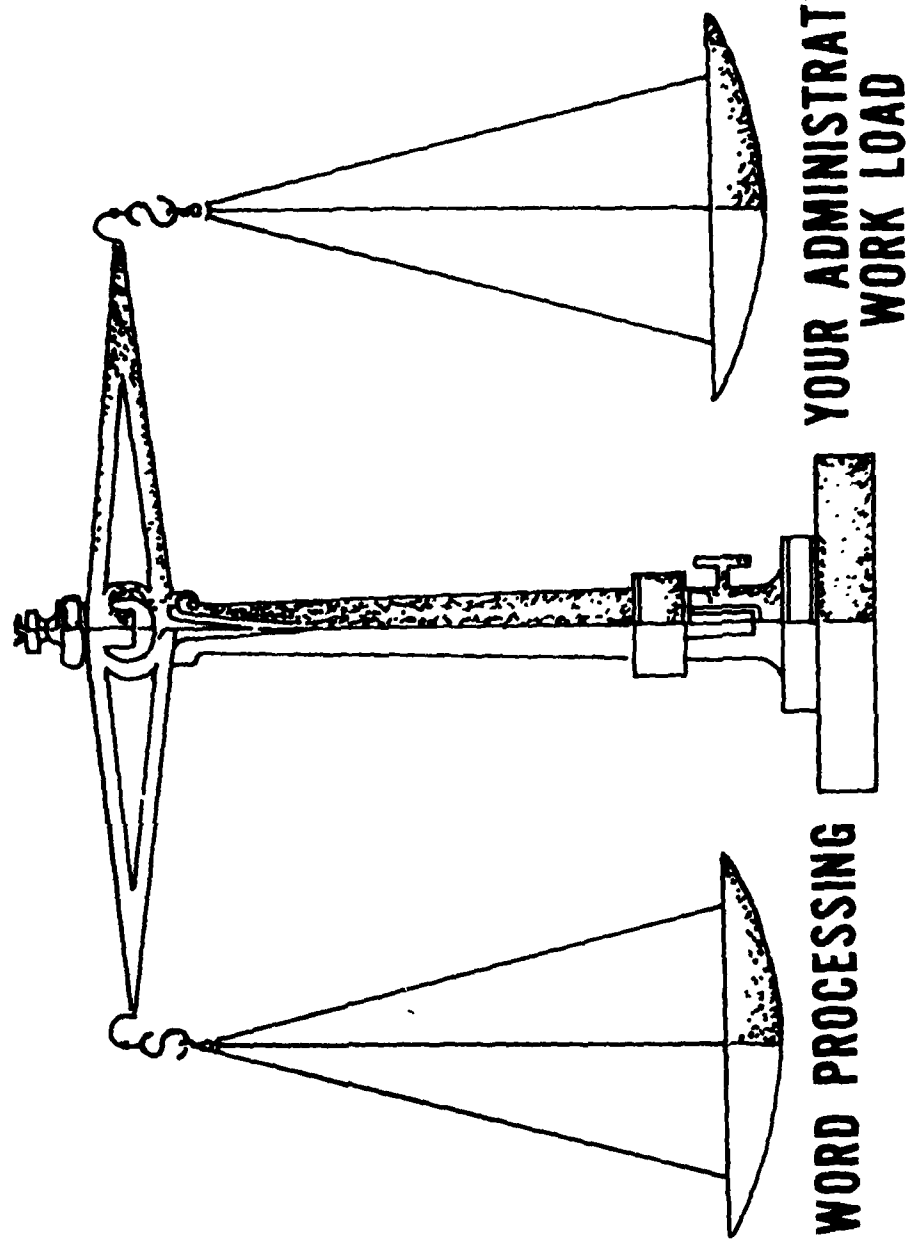


Text for Viewgraph 12:

USE WORD PROCESSING TO ELIMINATE
TIME WASTERS

By using word processing equipment, time wasters are eliminated and the author's and secretary's time is greatly reduced. The author has additional time to create new products plus, if necessary, revise already dictated material. The secretary is able to make changes and "go final" on documents more quickly because the media is available and easily changed.

RESULTING IN A BALANCE



Text for Viewgraph 13:

RESULTING IN A BALANCE

By implementing word processing, the balance between administrative workload and available personnel can be restored.

ADMINISTRATIVE SYSTEM SURVEY DEVELOPMENT

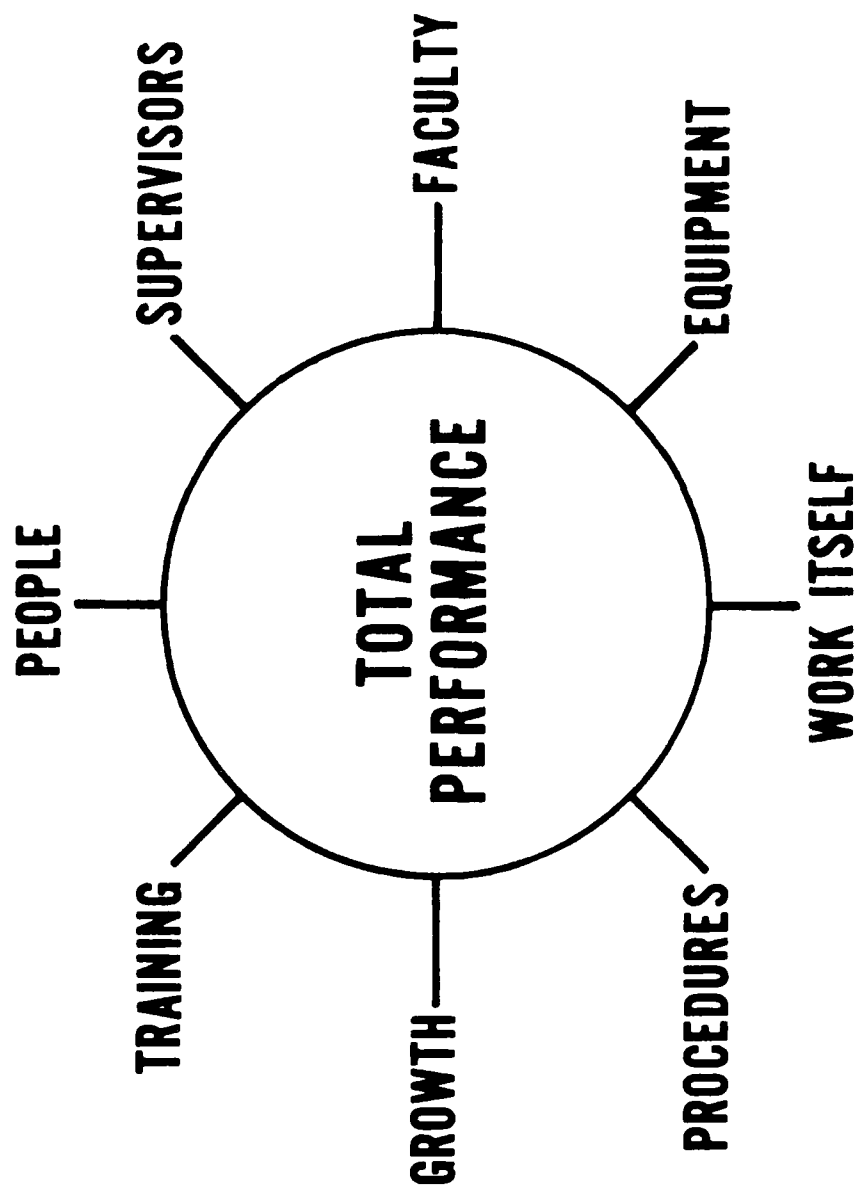
- **APPOINT UNIT PROJECT OFFICER AND SURVEY TEAM MEMBERS**
- **SURVEY TEAM TRAINING**
- **MANAGERIAL AND ADMINISTRATIVE PERSONNEL FAMILIARIZATION
TRAINING**
- **FIFTEEN DAY TYPING LINE COUNT**
- **FIFTEEN DAY TASK TIME ESTIMATES**
- **MANAGERIAL AND ADMINISTRATIVE PERSONNEL INFORMATION
QUESTIONNAIRE**
- **MANAGERIAL AND ADMINISTRATIVE PERSONNEL INTERVIEWS**
- **REPORT PREPARATION/PRESENTATION**
- **CONCEPT APPROVAL**

Text for Viewgraph 14:

ADMINISTRATIVE SYSTEM SURVEY DEVELOPMENT

In order to implement Word Processing, we need your approval to conduct a 15-day survey of the administrative workload in your organization. The survey includes the items shown on this viewgraph. (Emphasize that it will be necessary to appoint survey team members from the organization being studied. This will add validity to the survey because Management's people know the workings of their organization better than you. Stress that you are looking for an honest appraisal of how much WP can improve the organization. This is one of the prime reasons for using one or more of their people.)

ADMINISTRATIVE SYSTEMS SURVEY CONSIDERATIONS



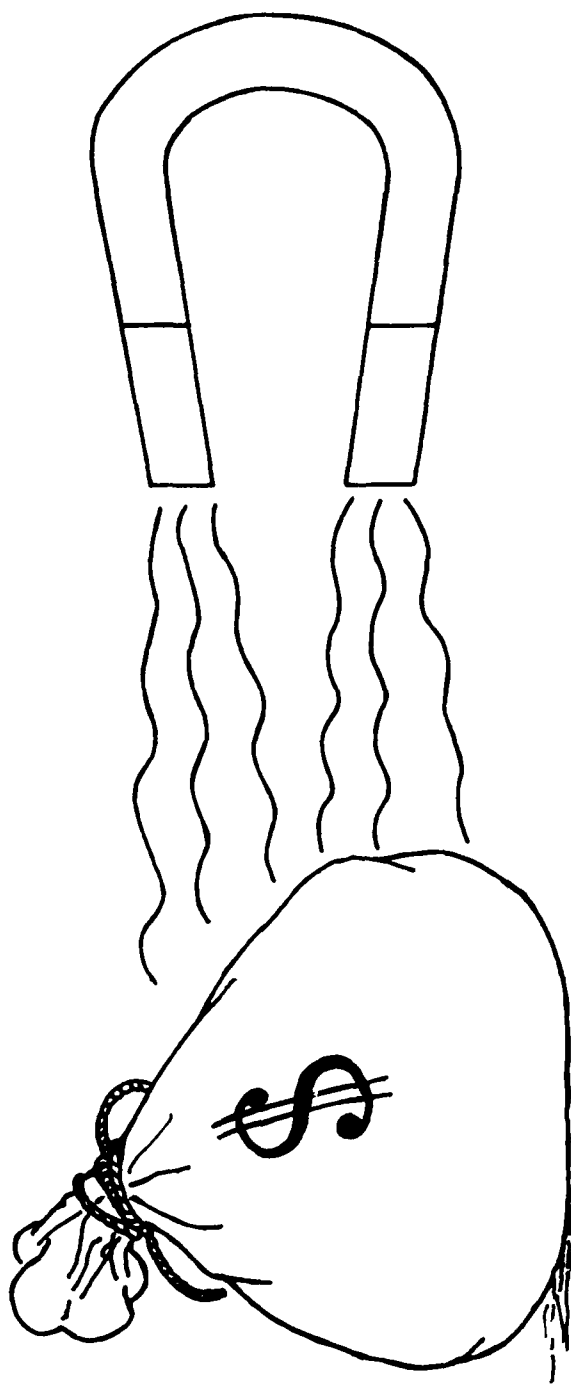
Text for Viewgraph 15:

ADMINISTRATIVE SYSTEMS SURVEY CONSIDERATIONS

As a result of the survey, the report to you will address these items. You will be under no obligation to implement the report's recommendations--our job is to provide you with a workload analysis and recommendations for improvement. (You may want to discuss each item reflected on this viewgraph, but depending upon the amount of time you have been allotted, you may have to do it by exception basis.)

You will recall during your attendance at the Keesler school that you learned to prepare an administrative systems survey report. Review the report you prepared at Keesler and the information you brought back from the course. Look at these materials in conjunction with AFR 4-2, Volumes 1 and 2. This will give you an excellent indication of what items should be contained in your report. I recommend that if you find secretaries are authorized but seldom use their stenographic skills, point that fact out in your report. It's an example of a skill the Air Force is paying for but is not using and represents a potential cost savings when word processing is implemented. An example of this is shown on page 3-16 of Attachment 3, "Word Processing Implementation" which also contains portions of an actual survey report from a MAJCOM. As you may know, HQ USAF/DAY has developed a computer based WP survey which will be distributed in late 1979-early 1980. The MAJCOM WP survey used this computer program and the survey report in Attachment 3 is an example of how WP survey reports will be prepared based on the computer program.

WORD PROCESSING



Text for Viewgraph 16:

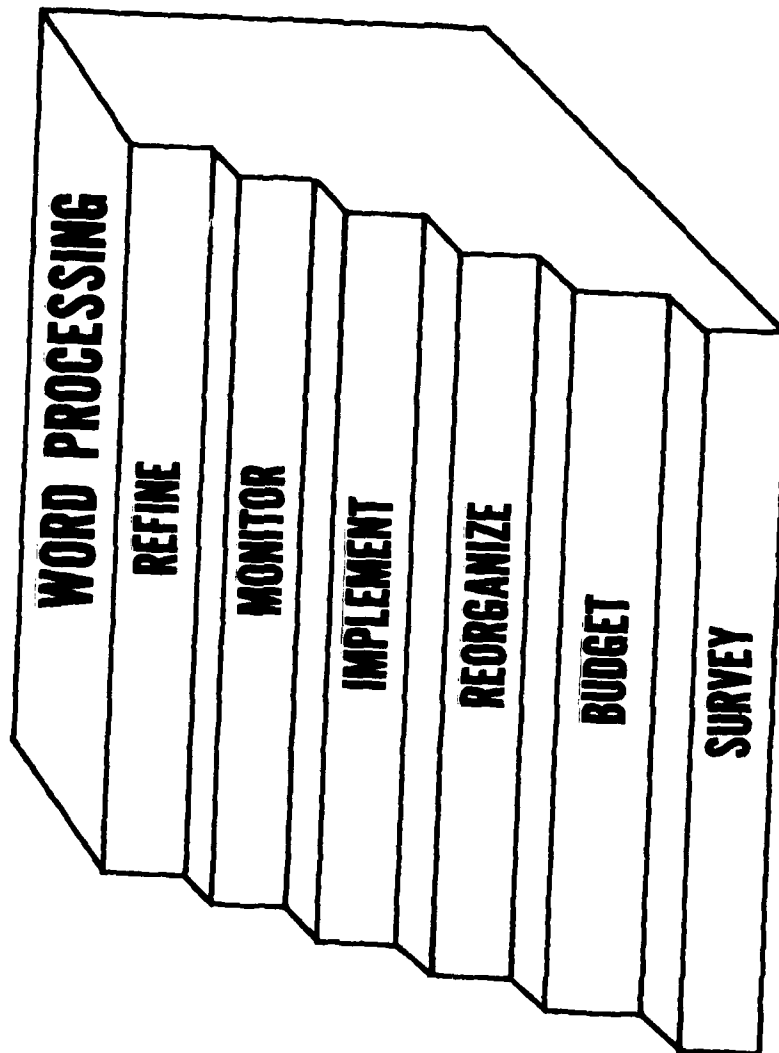
WORD PROCESSING

Management is always concerned about cost effective systems. We will clearly address all costs and potential savings in our report. We cannot, as a matter of policy, implement systems that do not pay for themselves. In most cases, there must be a tradeoff of authorized administrative manpower to pay for the equipment.

(At this point you should discuss the funding policy in your command--does the MAJCOM/DAY fund all WP equipment or does it only fund the magnetic keyboards but not the dictation, or does it fund magnetic keyboards and dictation equipment? Be sure and check this out with your MAJCOM DAY prior to your briefing. This information may be contained in your command's supplement to AFR 4-2.)

You should additionally stress during this portion of the briefing that Word Processing is more than substituting new equipment for old--it represents change and these changes will affect the unit and its personnel.

WORD PROCESSING STAIRCASE



Text for Viewgraph 17:

WORD PROCESSING STAIRCASE

In summary, Word Processing is a systems approach to your administrative office. It's a gradual effort which builds on the steps reflected on this viewgraph.

This concludes my presentation. Before asking your permission to begin the study, I'll be happy to answer any questions you may have.

If Management agrees to let you conduct an administrative systems analysis of the organization, state that you will prepare a letter, for the Manager's signature, announcing the dates of the study and containing other necessary information. A copy of a letter of this type is contained in Attachment 4, "Word Processing Survey."

SHORTER BRIEFINGS

I've provided you with 17 viewgraphs and related important points in the text. You may want to change the tone to fit your specific audience. Typically, you will not have more than 30 minutes to brief. If you have to cut it down to 15 minutes, use any combination of viewgraphs you will feel comfortable with--I suggest Numbers 1, 2, 4, 5, 7, 8, 9, 10, 13, 14, and 17 (if you are asking permission to do a survey). To save time, have Viewgraph 1 on the screen when the Manager enters the briefing room or looks up from his desk.

MANAGEMENT'S QUESTIONS AND ANSWERS

Before we discuss briefings for Action Officers and Secretaries, let's "answer" the concerns/questions you will likely be asked by Management. In the text which follows, I have provided general points of information for you as well as direct suggested responses to questions. Where the questions and suggested responses appear, I have indicated them with Q and A.

HOW DOES OUR ADMINISTRATIVE MANPOWER RELATE TO COST?

One of the first things you need to do is to contact your local manpower office and civilian personnel office to get a computer run or other locally produced document which indicates the number and grades of authorized administrative personnel. Depending upon your duty assignment and who you're briefing, you may need a "run" of the entire Air Force, MAJCOM, Division, Numbered Air Force, base, squadron, or office. For example, as of the first quarter FY 79, there were 724,063 total USAF manpower authorizations and 63,100 Administrative manpower authorizations, which represented 8.7 percent of the force. You can compare the percentages of your unit to the Air Force percentages. You should also have back-up data to support preliminary survey information computed in accordance with AFR 4-2, Volume 2, Attachment 1, paragraphs A1-2 through A1-6. This data is important because it provides a rough estimate as to potential personnel implications and systems cost and savings. The point is, if you walk into a briefing armed only with these viewgraphs and related text, you're likely to be handed your head and never get a chance to recover.

Q

WHAT HAPPENS TO MY MANPOWER LOSSES?

A

Managers guard their manpower authorizations. If they "have" to give up manpower authorizations, they want to make sure someone else doesn't benefit from their loss. Depending upon your command's policies, local wing/base commanders are frequently permitted to "reprogram" administrative manpower reductions into validated manpower shortages in other career fields. In some cases, these decisions are made at the MAJCOM level. A MAJCOM may "grab" these authorizations and put them in a "bank" to use for forthcoming DOD directed reductions. *Never forget that what happens to manpower authorizations is not your area of responsibility; if you try to answer these types of questions, you'll be in the manpower business.*

HARD DOLLAR SAVINGS!

Savings will be discussed in Chapter 3. At this point, let's recognize that you must be prepared to defend your cost figures to both Management and the Budget Office. You must be able to "prove the trade-off" in bucks. You are selling efficiency that the current manpower distribution cannot provide because of its current organization, lack of equipment, and inadequate supervision. There is a tradeoff--less people for improved efficiency--but it's worth it.

Q

WHERE ELSE HAS THIS BEEN DONE?

A

When you go to brief any of the three groups, be sure to take along Viewgraphs numbers 18 through 23. These back-up viewgraphs directly answer the above question. You may wish to update these figures as a particular situation requires. The information on the figures was obtained from personnel at each of the organizations indicated. There simply wasn't space to list all WPCs.

STATUS OF WORD PROCESSING

- **OFFICE OF SECRETARY OF AIR FORCE**
 - **APPROVAL—STUDY OF OWN OFFICE COMPLETE**
 - **IMPLEMENTATION HAS STARTED—5 KEYBOARDS IN, WILL EXPAND TO 16**
 - **16-23 MANPOWER AUTHORIZATIONS (AUTH) WILL BE DELETED**
- **CHIEF OF STAFF... "ACTIVE PROGRAMS ENCOURAGED"**
 - **HQ USAF—NUMEROUS SMALL CENTERS (CEN)**
 - **EACH DCS NOW CONDUCTING SURVEYS—PAX, MPK AND XOX ARE NOW ON LINE. MPM RDS STUDIES HAVE BEEN COMPLETED**
 - **WHEN HQ USAF IS COMPLETE, 100 MANPOWER AUTH WILL HAVE BEEN DELETED**
- **AFMPC**
 - **37 KEYBOARD CEN—23 ADMINISTRATIVE (ADMIN) MANPOWER AUTH DELETED**

STATUS OF WORD PROCESSING (CONT)

• AFLC

- HQ FULLY IMPLEMENTED - 73 ADMIN AUTH DELETED
- 15 FUNCTIONAL WORD PROCESSING CEN

• MAC

- 8 FUNCTIONAL CEN - 32 ADMIN MANPOWER AUTH DELETED
- AD - 12 KEYBOARDS
- DO - 7 KEYBOARDS
- DE (SERVES AC, DA, DE) - 6 KEYBOARDS
- LGS - 6 KEYBOARDS
- SP - 2 KEYBOARDS
- XO - 4 KEYBOARDS
- XPP - 4 KEYBOARDS
- XPQ - 3 KEYBOARDS

• AFCS

- 29 KEYBOARDS CEN - SERVES ALL DCS'
- 17 ADMIN MANPOWER AUTH DELETED

STATUS OF WORD PROCESSING (CONT)

- ARPC

- 3 CENTERS - 20 MANPOWER AUTH DELETED
- 10 KEYBOARDS - CC/AC/DA/DPA/OI/XP
- 9 KEYBOARDS - DPD/DPRR
- 10 KEYBOARDS - DFP/HC/JA/RT/SG

- AFAA

- 5 TERMINALS TIME-SHARE AFISC IBM 360 COMPUTER
- 12 TERMINALS AT OTHER BASES

- AFISC

- 31 TERMINALS AT NORTON AFB
- 11 TERMINALS AT OTHER BASES
- 2 CRT KEYBOARDS IN DA
- 2 CRT KEYBOARDS IN SG

STATUS OF WORD PROCESSING (CONT)

- ATC
- HQ
 - 26 KEYBOARD CEN—20 ADMIN MANPOWER AUTH DELETED
 - 9 DCS' SERVED—CC, DA, DO, DP, OI, LG, SG, TT, XP
 - 5 KEYBOARD FUNCTIONAL CEN FOR DE—2 ADMIN AUTH DELETED
 - 8 KEYBOARD CEN—RECRUITING SERVICES—7 ADMIN AUTH DELETED
 - MANY BASE LEVEL CEN
 - LOWRY AFB—36 KEYBOARDS IN 1 CEN
 - 38 ADMIN MANPOWER AUTH DELETED
 - KEESLER AFB—31 KEYBOARDS IN 4 GEOGRAPHICAL CEN
 - 44 ADMIN MANPOWER AUTH DELETED
 - CHANUTE AFB—19 KEYBOARDS—26 ADMIN MANPOWER AUTH DELETED

STATUS OF WORD PROCESSING (CONT)

• SAC

- HQ SAC/DE—10 KEYBOARDS**
- HQ SAC/DA—2 KEYBOARDS—2 MANPOWER AUTH REPROGRAMMED**
- HQ SAC STAFF—NEW WPC AUTHORIZED DURING CY79, MANPOWER CAN BE DELETED—IMPLEMENTATION WAITING CLARIFICATION OF NEW GRADE CLASSIFICATION STANDARDS**
- HQ 15 AF—8 KEYBOARDS—6 CIVILIAN ADMIN MANPOWER AUTH DELETED**
- JSTPS—2 KEYBOARDS—2 MANPOWER AUTH DEFERRED**
- PEASE AFB—1 KEYBOARD IN DA SERVES 35 STAFF AGENCIES/SQUADRONS**
- TEXT EDITING BEING PLACED INTO INSTRUCTIONAL SYSTEMS DEVELOPMENT UNITS AT CARSWELL, CASTLE, PLATTSBURGH AND VANDENBERG TO SUPPORT COMBAT CREW TRAINING—1 MANPOWER SPACE/BASE DELETED**

STATUS OF WORD PROCESSING (CONT)

- **OFFUTT AFB—4 KEYBOARD CEN**
- **2 MANPOWER AUTH REPROGRAMMED**
- **FE WARREN AFB—3 KEYBOARD CEN**
- **2 CIVILIAN ADMIN MANPOWER AUTH DELETED**
- **WHITEMAN AFB—3 KEYBOARD CEN**
- **SURVEYS UNDERWAY AT OTHER BASES**

Q DO YOU DETERMINE IF I LOSE MY PERSONAL SECRETARY!

A (Recommended answer) You can state that you don't determine or recommend that anyone lose administrative support of any type. The study will determine how many manpower authorizations the organization needs to efficiently and cost effectively support the measured workload. You, the manager of the organization, decide where to make the manpower changes. If your organization wants the benefits that Word Processing can bring, manpower action will be required. Our office stands ready to assist you, if you want, in making this decision based upon the study. Recommend careful consideration to retaining the same ratio of military-civilian personnel after the actions as currently exist. The study will identify numbers of personnel authorizations that would require deletion/reprogramming action if you approve the system implementation.

Q WHAT KIND OF EQUIPMENT DO YOU RECOMMEND? (Frequently followed by, "I like Brand XYZ" or "I saw a TV commercial for Brand PDQ.")

A Your response should be: "The study will indicate what types of equipment the organization needs. Our office will advise your personnel which brands and models of equipment, locally available, your personnel can choose from." (See also Chapter 4 on obtaining the equipment.)

Q MY PEOPLE TELL ME WORD PROCESSING IS NOTHING BUT A GLORIFIED TYPING POOL.

A See Chapters 5 and 6 regarding the attitude of the United States Civil Service Commission and related problems of job enrichment, worker morale, and productivity.

That's about it for briefing Management. I did find that the most "hostile" groups are composed of junior 0-5s and 0-6s who have recently gained their own "personal" secretary. A final reminder would be that when you run into that problem, you have to stress that whatever they may lose in personal support will be made up for by the professional assistance and capability provided by the Word Processing system.

ACTION OFFICERS' BRIEFING

Let's turn our attention to briefing our second group of "customers"--the Action Officers. This briefing will never be given unless you were successful with the Management briefing. There are a lot of ways you can approach briefing Action Officers, but I suggest you concentrate on what the potential change can do to help them. You must also stress that because they create the most correspondence, they will be individually interviewed to find out what kind of administrative support they really need. Depending on the size of your administrative systems survey team and the number of Action Officers, you may interview all or a certain percentage of Action Officers.

Before we examine potential questions and recommended responses, let's talk about the possible use of films which can make your briefings easier. The Information Management Corporation (P. O. Box 2076, Green Bay, WI 54306) produced a series of ten films about WP. You may have seen one of these films during the ASC at Keesler AFB. During my briefings to HQ SAC Action Officers, I used the following briefing sequence:

- Introduction of study team
- Statement of purpose (goals) of study (include dates of study)
- Presentation of film "Kissing the Girls Goodbye"
- Outline of study procedures
 - Data collection (to permit)
 - Time analysis
 - Typing analysis
 - Document review
 - Interviews (of)
 - Administrative support personnel
 - Action Officers
 - Analysis (will consider)
 - Workload data
 - Interview responses
 - Standards and policies
 - Design of proposed system (will include)
 - Type of system needed
 - Equipment required
 - Cost analysis
 - Facility design
 - Time phase actions
- Presentation of film "The Pivot Point"

The film, "Kissing the Girls Goodbye," runs 13 minutes and challenges, in a delicate manner, the traditional boss-secretary-office traditions. The film uses humor and hard facts to get people to examine their fears about new professional roles and the aspect of change in an organization which will happen when WP is implemented. The "Pivot Point" is a 12-minute film which emphasizes the fact that middle-management starts most of an organization's paper work. It stresses that without their positive understanding and cooperation, WP can fail. A strong point of this film is that it explains the psychology and problems of change in any organizational structure. Managers and other professionals make it clear that direct benefits are available for those who use the (new) WP system wisely.

A word of caution about these films. Each film has a Groucho Marx type opening which I advise you to bypass when starting the film. You should also state that although these films show WP in civilian organizations, the main points apply to the Air Force.

HQ USAF/DAY and some MAJCOM/DAY offices have these films available on a "floating library" basis. Contact the DAY shops if you want to preview the films.

By now you should have a "feel" for which viewgraphs you want to use to brief Action Officers. The main point is to be consistent--don't tell a different story with different groups--they'll compare your pitch and answers.

Let's discuss some of the Action Officers' questions.

ACTION OFFICERS' QUESTIONS AND ANSWERS

Q

WHY CHANGE THE SYSTEM?

A

The purpose of the administrative systems analysis (survey) is to find out how much work is being created by people (Action Officers) and the ability of the office Administrators to provide the quality and quantity of support needed. The object will be to make improvements in the system.

Q HOW WILL MY WORK GET DONE?

A The survey will tell us what changes to recommend to your management to provide you support at least equal to what you have now. Our objective is to improve your support.

Q WHY DO WE NEED A TYPING POOL?

A (Suggested response) Ask the person to define typing pool, then say the following: The typical 0-6 has just about all the support he or she needs--if the Administrator is there. The Action Officer who creates most documents, frequently shares support. Cite the ratio of Action Officers to Administrators. State that in WP each Action Officer will receive the degree of support required. See the discussion of typing pool under Administrators' Briefings.

Q WHAT ABOUT THE TELEPHONE AND FILES?

A (Suggested response) Go back to your "the survey and interviews will" approach. Remember what you learned at Keesler--get a Communications individual on the survey team. Also, use a Documentation Technician to look at records, etc.

Q HOW WILL YOU HANDLE THE PRIORITY LETTERS/MESSAGES?

A The WP system will be designed to meet the needs of the office. The matter of priority work is a normal event in all offices and the correct mix of equipment, procedures, and people will insure that priorities are correctly accomplished. The system is designed to handle priority work.

Q WHO WILL MANAGE THE SYSTEM?

A The members of the survey team, which includes someone from your organization, will prepare a study report. The report will recommend the best solution(s) to your management. If the WPC serves only your organization, it is normally supervised by one of your

Administrators who will be trained in these new responsibilities. If the WPC serves more than one organization, the DA normally is assigned management responsibility. If the center serves only your organization, your management will decide whether the supervisor is a civilian or military individual.

Q I CAN'T POSSIBLY DICTATE!

A Everyone is taught to use a pencil when they enter kindergarten. It's hard to break old habits. Air Force DA has a new Executive Dictation Course which is available to everyone. An excellent videotape was developed to train all personnel regardless of previous experience and will be offered by the WPC folks. You'll not only use this course, but you will also normally receive training by the company selected to supply the specific dictation equipment your center uses. Dictation takes practice--not all work can be dictated, but you can learn to feel comfortable using it. The WPC people want to help you; they will take handwritten copy for transcription if the information is formatted uniquely and would be difficult to dictate. If your organization has people that frequently go TDY, make inspections, or do work at home, they will be provided a dictation capability that will permit them to literally dictate their work any place in the world and have a "draft" of their work ready when they return; this capability precludes a heavy workload upon return as under present conditions.

Now that we've completed the easy briefings, it's time to put on the old "flak jacket" and helmet. It's time to brief Administrators--especially civilian secretaries at the GS-5 to GS-7 level.

THE ADMINISTRATORS' BRIEFING

Prior to this briefing, you should have distributed a copy of AF Form 1592, "Administrative System Survey Daily Typing Log," AF Form 1593, "Administrative System Survey Typing Worksheet," and AF Form 1594, "Administrative System Survey Task Time Record," and related instruction sheets to each Administrator. The letter forwarding these forms should be signed by the head of the organization and should contain information about the location and duration of the mandatory briefing personnel will be required to attend. Also tell them to bring the forms with them to the briefing.

I've referred to these briefings as the nonrated officer's "Iron Triangle" because of all the "flak" we normally take. My comments are not to disparage secretaries--they have a lot of honest concern, as we all do, about things that potentially affect their jobs, salary, status, and identity. This briefing should take longer than the other two briefings--about an hour. You'll probably have to give it more than once, since someone has to stay behind to answer the telephones, etc. Here is my suggested format (script follows the outline):

Introduction of study team

-Have on screen Viewgraph 24, "Quote from Oliver W. Holmes," which is illustrated following this discussion.

Statement of purpose (goals) of study

-Include dates

Presentation of film, "Kissing the Girls Goodbye"

Outline of study procedures--same as for Action Officers

Presentation of film, "Worries and Wonders"

Now to the meat of the briefing. I recommend you use the following approach and state it like this: The Purpose is "to inform you about what will happen during the next few months and your role in these future events. You will first see the film, "Kissing the Girls Goodbye," which lasts 13 minutes. This film identifies the traditional management-secretary relationship and asks you to examine any fears of change you may have. It suggests you open your mind to new concepts. The film was produced by a civilian company and although the thrust of the film isn't aimed at the military situation, the main points are well made. Certain individual points will not, of course, apply to our situation.

After the film, we will look at several viewgraphs which will discuss Word Processing in the Air Force environment. We will then briefly review the survey forms you will complete during the 15-day survey period. The final portion of our formal presentation is the film, "Worries and Wonders." At the conclusion of the last film, we'll briefly discuss how to complete the survey forms. We will then answer questions for as long as we can stay here. Let's look at the first film."

After the first film, show a viewgraph which contains the dates of the survey. Your text naturally follows: "During the period _____ to _____, an Administrative System Study will be made in _____ (organization) _____. The purpose of this study is to measure the workload, evaluate the efficiency of administrative procedures, review the effectiveness of the administrative organizational structure, and to determine system cost. The objective is to recommend system improvements."

Follow with Viewgraph 25, "Administrative Systems Analysis." Recommended text is: "The survey will, in effect, determine the health of our patient (name of organization) and recommend changes. We are not trying to determine the "health" of any Administrator.

Show Viewgraph 5, "Last Holdout to Automation," which is designed to indicate to them that the office needs modernizing. Use the text previously provided. Viewgraph 9, "Today's Air Force Office Problems," is next. It points out typical problems in Air Force offices. Use previous text except change it to read "We as administrators. . .," and then continue with the suggested text for this viewgraph.

The next viewgraph is 14, "Administrative System Survey Development." I suggest you state "This viewgraph outlines the comprehensive approach that will be taken during the survey. Each Administrator will complete the survey forms for 15 days. We will interview each of you to find out how your office operates and any suggestions you have for improvement."

Now is the time to use Viewgraph 15, "Administrative System Survey Considerations." The suggested text is: "This viewgraph illustrates that WP is a systems approach to office information needs. WP allows for maximum productivity and performance by configuring equipment, personnel, and the organization to specific needs. WP also provides flexibility needed to meet new requirements and it can provide new career growth opportunities for administrative personnel.

At this point, I suggest that you tell the audience that you are going to "float" very quickly through the next five viewgraphs (18 through 23) which will indicate that if they transfer to another Air Force base, they are likely to find jobs in WP. Also state that "The Air Force implementation rate is less than that of many civilian

companies. Those of you who later leave the Air Force should be able to market your newly acquired skills in the civilian community."

The final viewgraph is Number 3, "Word Processing Is." I suggest you strongly emphasize that "WP is much more than merely replacing a \$750 electric typewriter with an expensive Word Processing keyboard. People, like you in this audience, are the key to success." Pause for effect and then state, "Before we try and answer your questions, we do want to discuss the three Air Force survey forms you will be required to complete during the 15-day period."

**MAN'S MIND STRETCHED TO A
NEW IDEA, NEVER GOES BACK TO ITS
ORIGINAL DIMENSION.**

OLIVER WENDELL HOLMES

ADMINISTRATIVE SYSTEMS ANALYSIS



COMPLETING THE SURVEY FORMS

Explain who will be required to complete the three Air Force survey forms and explain briefly each required entry on the forms. Ask the audience for any questions they have regarding completion of the forms. Do not answer questions not related to the forms until all form-related questions have been asked. *In other words, do not accept questions regarding the content of your briefing or about the objectives of the survey at this time, concentrate on the forms!* Inform them that there will be a project officer in their office who will be available to answer any questions they may think of later regarding completion of the forms. I suggest you also state that you and members of your survey team will be around during the survey period to help answer any questions they have. Most organizations have found it helpful to practice using the forms on the Thursday prior to the next Monday's start of the survey. This will give you and your team the Friday to review the practice entries and to provide feedback to the Administrators completing them.

POSSIBLE USE OF CIVILIAN PERSONNEL OFFICIALS

Now you are ready for the spotlight in the center ring--and "you're in the 'lime' light." Enter this question and answer session confident that you obtained approval to run the survey, survived the Action Officers, and are ready for anything! I always felt I learned something during these sessions because the really good Administrators know more about their organizations than almost anyone else. *Approach these sessions with the idea that you really do want to improve the system.* Part of your function is to allow these valuable people to get their frustrations off their chests and into the open.

If you are not "up to speed" on Civilian Personnel (DPC) actions and requirements, you should have a representative of DPC in a front row seat. If DPC is represented, introduce the representative and state that questions for which you don't have a solid answer or are beyond the scope of your survey team will be answered by the DPC representative. Hopefully, you'll have spent time with DPC personnel prior to their briefings and are up-to-date on policy/regulatory matters. You should also have gone over possible questions and answers and have a consolidated position

on personnel-related questions. A word of caution--some secretaries resent and distrust Civilian Personnel officials, particularly those officials who handle "classifications" and "eligible for promotion rosters." I recommend you try to answer the questions yourself and use the DPC people to help you if you get into an area you are not sure of.

What about labor unions? When you contact DPC, ask their organized labor specialist if the civilian administrators belong to a union. At some bases, unions exist, while at others they do not. If the administrators are unionized, you'll need DPC help on what, how, and when to advise union officials about the survey. You may want to talk to HQ ATC/DAY (AUTOVON 487-4412) or HQ AFLC/DA (AUTOVON 787-2422) if you have to work with a labor union. Both of these commands have had experience in these matters.

ADMINISTRATOR'S QUESTIONS AND ANSWERS

Q HOW WILL IT AFFECT ME?

A (Suggested response) "The survey will provide your Management with information about the amount of administrative work created in the entire organization. The data gathered will provide the survey team with information through which we can recommend system improvement. Your (commander, agency chief, etc.) is not required to accept our recommendations. No one will be individually identified in our report as 'unproductive.' The report will state, how much work was measured and how many manhours will be required to do the work if Word Processing is implemented."

Q WILL A PERSON BE FORCED TO WORK IN WORD PROCESSING?

A (Suggested response) "The DPC Office is responsible for rules about civilian personnel movement. At many bases, WPCs are manned by volunteers. At others, personnel were given either no choice or some other choice of employment. Military personnel are controlled by Personnel and Manpower requirements and regulations. The survey team will recommend to your Management that volunteers be used to the maximum extent. It's just not a question we really can answer

at this time other than philosophically. We are always better off in a WPC when we have people there that want to be there."

Q WILL ONLY CIVILIANS WORK IN WP?

A (Suggested response) "That's a very interesting question. The Air Force has many bases overseas. WP is being implemented throughout the Air Force. This means that we should have some mixture of civilian-military WP trained personnel. The basic 702X0 school at Keesler AFB provides training, to some students, on WP equipment." (I strongly support the assignment of 702X0B personnel to WPCs.) "The exact mixture of manpower authorizations cannot be determined until after the survey. Generally, we recommend that roughly the same ratio of civilian-military authorizations be retained after implementation of Word Processing as existed prior to Word Processing. We will advise all personnel when these decisions are made."

Q ISN'T WP JUST A FANCY TYPING POOL?

A (Suggested response) "How would you define a typing pool? If you mean a group of largely untrained typists using old equipment, with little supervision, typing only projects that no one else wants to type--no! The people in WP will work in modern surroundings with the latest equipment and will be supervised by a full-time professional Administrator who will be specifically trained in his or her new responsibilities."

Q WHAT ABOUT PAY GRADES AND PROMOTIONS?

A (Suggested response) Again, promotions and pay grades are controlled by the United States Civil Service Commission rules and regulations as implemented through Civilian Personnel regulations. (However, in my opinion, the present promotion system for civilian Administrators leaves a lot to be desired.) *Your grades and promotions are perceived, by many of your contemporaries, to be based not on how much you do or how well you do it, but rather on the position of the person you work for. It appears that a vacancy in one staff agency is frequently filled by someone in that*

agency. Under WP, people will be selected for promotion based upon demonstrated ability as judged by professional Administrators. It certainly will not be based, as some secretaries have stated, on who has the "best legs" or makes "good coffee." The Civil Service Commission has just completed a review of existing job classification standards for the Secretary series, GS-318; Clerk-Stenographer and Reporter series, GS-312; and Clerk-Typist series, GS-322. The new standards will use the new Factor Evaluation System. Two general statements can be made about the new classification standards. First, GS-324, Cold Type Composing Machine Series, will be incorporated into the GS-322 series. Secondly, personnel who work in WP will not have a separate occupational series; Word Processing will be included in the GS-322 series.

Q WHAT GRADES DO OTHER WPCs HAVE?

A (Suggested response) "The grades vary depending on a number of factors, including the size of the Center and the variety of work. Our review of Air Force WPCs indicates that for Centers of at least eight employees, the supervisor is generally a GS-6/7 with a GS-5/6 assistant and the machine operators are at the GS-3/5 level. Most operators are GS-4s. (More will be discussed about civilian personnel grades in Chapter 5.)

SUMMARY OF CHAPTER 2

Let's sum up what we have covered in this chapter. I provided a set of viewgraphs and suggested scripts for briefings to three groups of people--Management, Action Officers, and Administrators. Refer to Attachment 5 for a copy of ACSC Form 5 "ACSC Speaking Feedback." You may find it helpful to have someone evaluate your briefing rehearsals by using this form. *Please remember that any Manager who agrees to let you conduct a survey must be prepared for a lot of "friction" from assigned personnel. You've got to make sure of Management's strong, consistent support or the project is doomed.*

Okay, it's time to talk about money for Word Processing!

CHAPTER 3

PLANNING AND BUDGETING FOR WORD PROCESSING SYSTEMS



Equipment costs are often "justified" by personnel savings.

This chapter contains background information on how the Department of Defense (DOD) and the Department of the Air Force budget requirements are prepared and your role in this process. At base level, the Chief, Central Base Administration (DA), has primary responsibility for budget preparation for Word Processing.

This chapter assumes that you either work in DA or will provide your budgetary requirements to DA. We'll discuss what kinds of funds are needed for WP, who has them, and how to "get your share." *Planning and budgeting for funds are areas where many 70XX personnel have very little professional Air Force experience.* Some of the material in this chapter may sound like "Pentagonese," but remember that you are now in the world of the "coin-biters" and you've got to participate effectively in their world. *The "bottom line" in this chapter is that without the proper knowledge you will be unable to participate successfully in the budget process and therefore will be unable to build into the budget your requirements for WP.*

Before we enter the sometimes confusing world of the financial wizards, you need to know the source of the material in this chapter. The material in the first two figures was taken from course materials used in the Air Command and Staff College (ACSC) and some of the related ideas were originally written by an ACSC faculty member, Major Warren E. Cockerham. Specific information on the role of the HQ USAF/DAY budget officer was provided by Lt Col Hal Davis of that office. It's time now to meet the enemy on his battlefield.

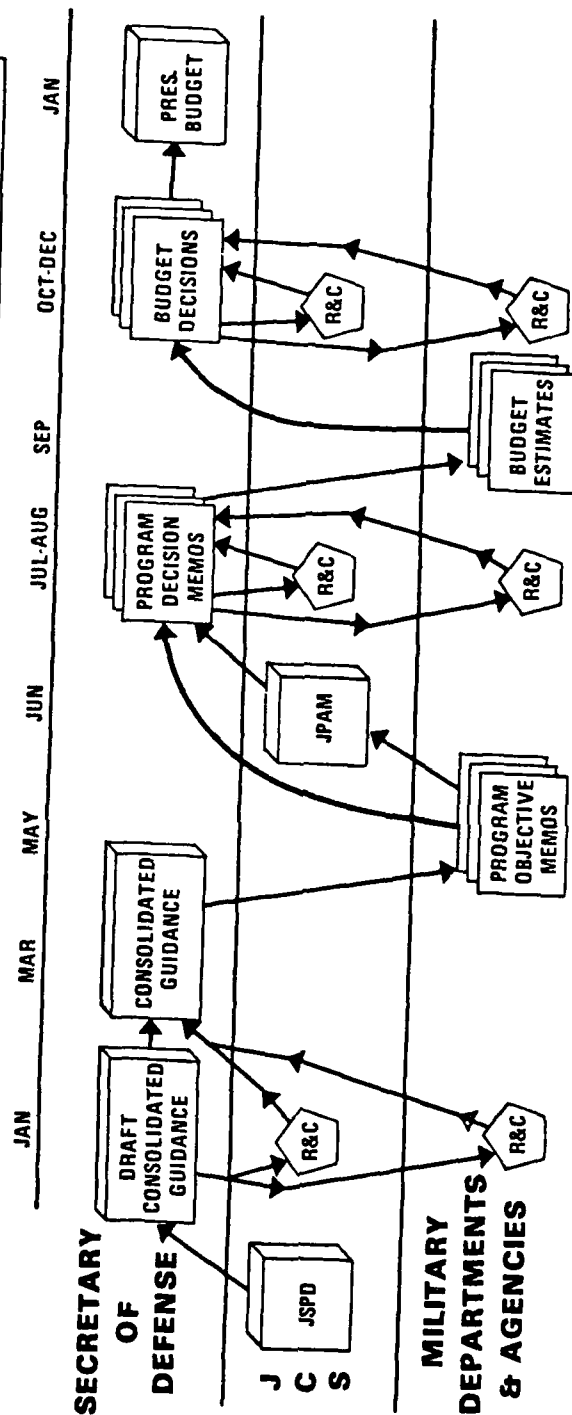
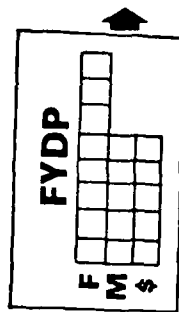
PLANNING, PROGRAMMING, AND BUDGETING SYSTEM (PPBS)

THE PLANNING PHASE

The planning phase begins in November for the fiscal year (FY) that starts three years in the future. In November 1978, the planning phase of PPBS started for the FY 81 budget. The following two figures depict the entire PPBS process. *As Administrators, we are primarily concerned (on Figure 1) with the block "Program Objective Memos" (POM).* You'll also need to refer to Figure 2 and follow actions, from left to right, that start at Base/Wing level. Take a moment now and look at the two figures, then we'll discuss the cycle and what you need to know.

In a sense, the "game" starts when the Secretary of Defense (SECDEF) forwards the "Consolidated Guidance" (CG) to the Air Force. The CG contains the total funding limits, expressed in total obligation authority, into which all Air Force programs must fit. The

PLANNING PROGRAMMING BUDGETING



JSPD = JOINT STRATEGIC PLANNING DOCUMENT
JPAM = JOINT PROGRAM ASSESSMENT MEMORANDUM

R&C = REVIEW AND COMMENT

FYDP SYMBOLS
F = FORCES
M = MANPOWER
\$ = DOLLARS
□ = YEARS

3417-8

Figure 1

SCHEDULING OF BUDGET REQUESTS

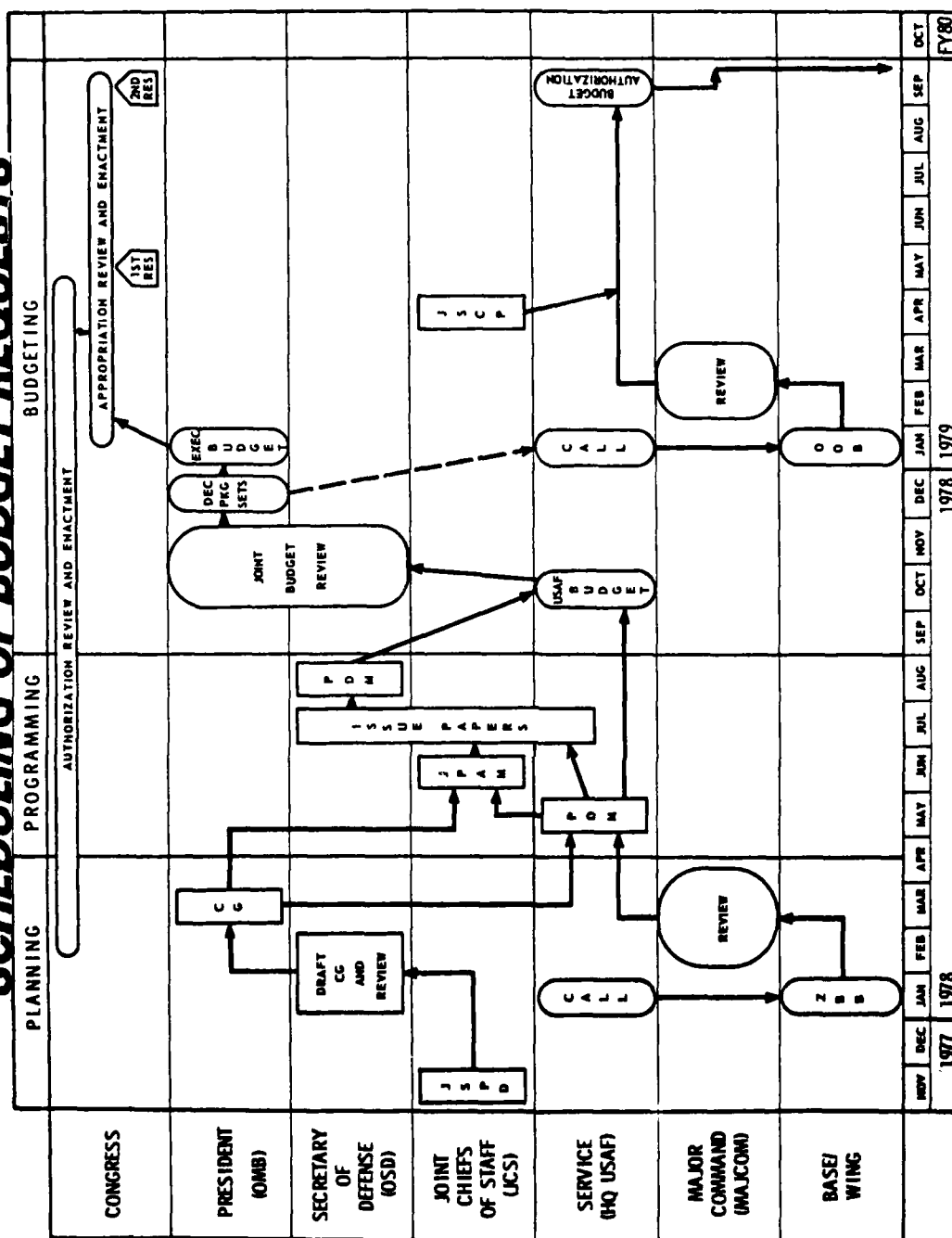


Figure 2

CG does not limit funding for any specific program. Issuance of the CG ends the Planning phase; the POM starts the Programming phase.

PROGRAMMING PHASE

The Air Force POMs contain a detailed presentation of the forces and manpower needed to reach the CG objectives. As shown on Figure 2, the base-level units and MAJCOMs help develop the POMs. The POMs contain specific fiscal limits needed to meet each objective. A POM contains, for example, information on how many B-52 squadrons the Air Force decides it must have to carry out its assigned missions. It also contains requirements for Base Operating Support needed to support the other elements in the Air Force.

As indicated in Figures 1 and 2, the POMs are sent to the Joint Chiefs of Staff (JCS) and SECDEF in June. The POMs are used by SECDEF to ultimately develop Program Decision Memorandum (PDM) in July-August. When the PDMs are issued, the Programming Phase ends.

BUDGETING

Budgeting is the final phase of PPBS. As shown in Figure 1, the Air Force incorporates the guidance and decisions contained in the PDMs to prepare the Budget Estimates. The Budget Estimates, as noted previously, contain information prepared at Base/Wing level as shown in Figure 2. *This means that any input you make at base level in January (78) ultimately is consolidated into the POMs in May, and into the USAF Budget in September (78).* Refer again to Figure 2 and note that the USAF Budget is jointly reviewed by the SECDEF and the President's Office of Management and Budget (OMB). The "financial survivors" from this Joint Budget Review are incorporated into the Decision Package Sets (DPS), which are the SECDEF's final input to the President's (Executive) Budget.

The President transmits the Executive Budget to the Congress in January. Congress, by law, has required itself to complete hearings and debate and prepare authorizing and appropriating legislation by 25 September. The budget execution and control phase is centered in OMB. Through OMB funds are transferred to the Department of the Air Force to be spent at Air Force bases.

In summary, you should view the PPBS as primarily designed to acquire financial resources from Congress. The Air Force and other DOD agencies, of course, acquire these resources in competition with other governmental agencies and their programs. We are now going to discuss the phase of financial management called execution. *Since the majority of resources are used or consumed at wing and base level, we'll examine budget execution from that perspective.* This is the level where many of you will directly participate in the financial process. Let's now look at financial management at Wing/Base level. The following section draws heavily on material developed by Major James G. Collins, ACSC Class of 1977.

FINANCIAL MANAGEMENT AT WING/BASE LEVEL

As in the previous section, we need to "lay some budget building blocks" before getting into more details. The first building block is "major force programs."

MAJOR FORCE PROGRAMS

All defense activities are categorized into one of ten major force programs and, as evidenced by the title, identify broad areas of both forces and support. The ten programs are:

1. Strategic Forces -- SAC, AAC, ADCOM
2. General Purpose Forces -- TAC, USAFE, PACAF
3. Intelligence and Communications -- USAFSS, AFCS
4. Airlift/Sealift -- MAC
5. Guard and Reserve Forces -- Air Force Reserve
and Air National
Guard
6. Research and Development -- AFSC
7. Central Supply and Maintenance - AFLC
8. a. Training -- ATC, USAFA
b. Medical
9. Administration and associated activities --
HQ USAF, MAJCOMs
10. Support of other nations -- SHAPE, NATO,
foreign military
sales

You will note that programs one through five are considered to be force-related and refer to specific mission activities of the Air Force, while the remainder of the programs cross various command lines and mission lines. The last five programs are not the exclusive responsibility of the activities noted above because many of these programs and elements overlap areas of management responsibility. Now refer again to the above program and find the command or mission element to which you are assigned, and determine the major force program (MFP) which is the most predominant for the units for which you will be doing WP studies. *When you begin to budget for WP, you'll need to know how and when to use this information. Basically, you will refer to it as you develop your WP programs and your budget requests will have to be traced back to one of the MFPs.*

PROGRAM ELEMENT CODES (PEC)

The second set of building blocks show PECs. PECs further delineate MFPs and describe a mission in terms of organizational entities and the resources required to perform the tasks of that organization. There are about 600 PECs in the Air Force. Examples of PECs are:

<u>PEC</u>	<u>Description</u>
11113F	B-52 Squadrons
11898F	Management HQ, Strategic Offensive Forces
11896F	Base Operations Support
11894F	Real Property Maintenance, Civil Engineering

ELEMENTS OF EXPENSE/INVESTMENT CODES (EEIC)

Perhaps of most concern at base level are EEICs. This third set of building blocks further identifies the MFPs and PECs and is used to identify the exact type of resource being consumed. *Examples of EEICs of interest to WP you should know about are listed on the next page:*

<u>EEIC Class</u>	<u>Description</u>
39X	Civilian Pay
473	Equipment Rental
569	Purchased Equipment Maintenance
619	Supplies
639	Equipment (Unit cost up to \$1,000)
592	Facility Modifications by Contract

These are the EEICs from which you will normally require funds to implement Word Processing.

RESPONSIBILITY CENTERS AND COST CENTERS (RC/CCs)

Our fourth building block is the RC/CC. You will recall that MFPs, PECs, and EEICs identify the mission and types of resources consumed. *RC/CCs specify where in the Wing this action takes place.* The RCs are organizational entities headed by someone who has financial responsibility and controls resource consumption. Deputy commanders and squadron commanders are examples of RCs. CCs are the lowest level at which costs are monitored. The CC manager is frequently at branch or division level, and each RC has several CCs who report to him. The incumbent of a position automatically becomes a Responsibility or Cost Center Manager. Thus, as Administrators, you may be designated as either. The job of Resource Advisor is assigned as an additional duty. *In the past, some Administrators have "avoided" being designated as an RA. I recommend you actively seek to become at least an RA, for reasons we'll discuss in a few moments.*

ORGANIZATION AT BASE LEVEL

Figure 3, "Base-Level Financial Structure," depicts the basic RC/CC system we have discussed. An "audit trail" can be traced from base level RC/CC through MFPs and PECs. Note the Comptroller shop in Figure 3. The Comptroller's Budget Office acts as the base-level technical advisor to the commander and staff in financial management. The primary financial management point is still at the RC level. If you are not an RC, you may be appointed as a Resource Advisor (RA). The RA is the person responsible for the day-to-day financial management and is the main point of contact with

BASE LEVEL FINANCIAL STRUCTURE

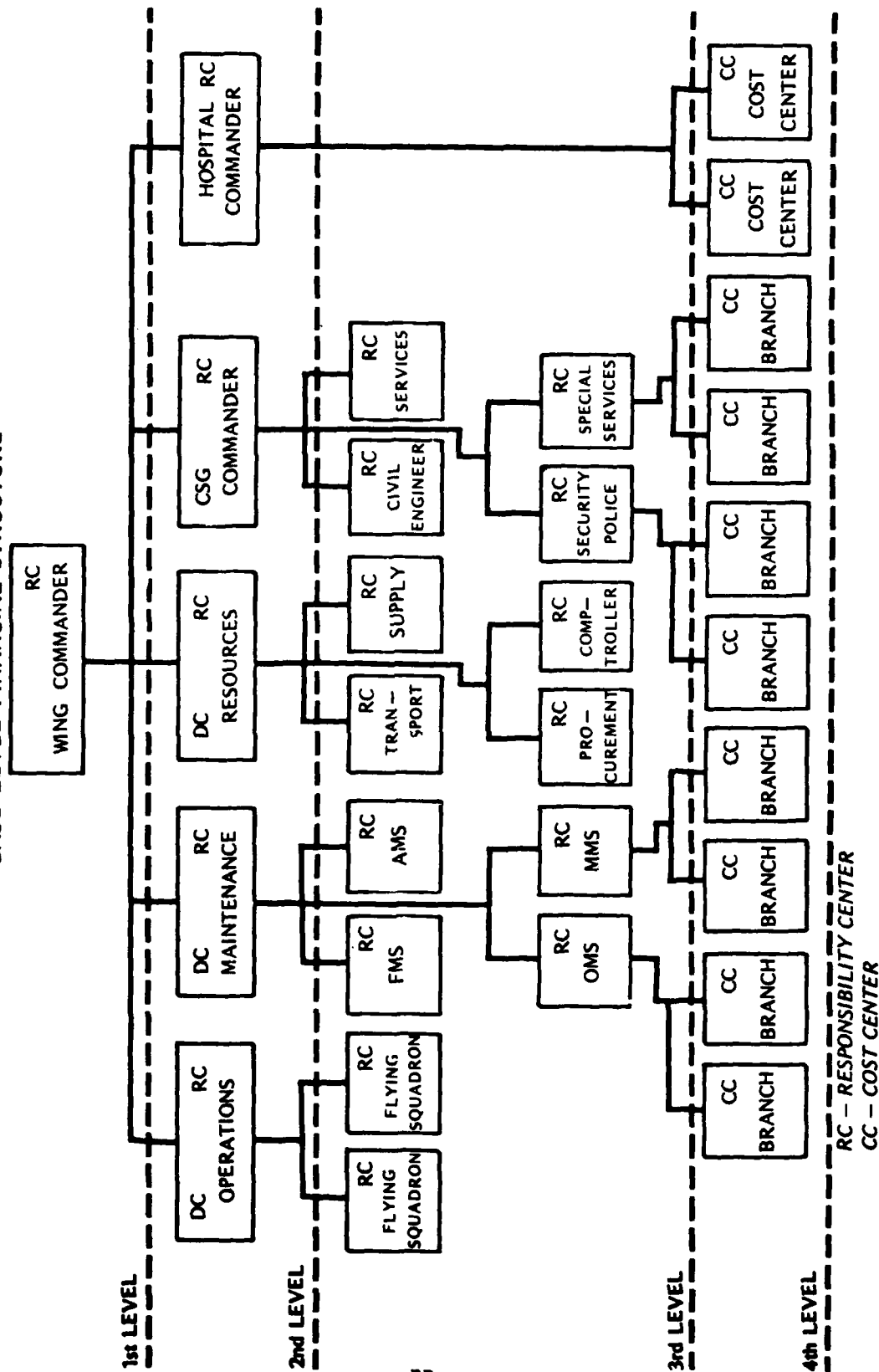


Figure 3

the Budget Office. If you are fortunate enough to become an RA, you will be in an excellent position to determine local availability of funds which might become "available" for use in WP. More importantly, you'll make personal contact with other RAs, Budget Office personnel, and perhaps be appointed to the real "base financial power structure"--the Financial Working Group (FWG). Let's now talk about the FWG because it is the key to success for getting your funds.

FINANCIAL WORKING GROUP (FWG)

The FWG is composed of RAs and is chaired by the Budget Officer. Its job is to make financial recommendations to the senior financial committee on base, the Financial Management Board (FMB). The FWG, for example, develops, reviews, and validates budget requirements; monitors budget execution, recommends re-programming actions; and recommends distribution of funds. If you can get your WP financial needs for supplies and civil engineering facility modifications through the FWG, you stand a very good chance of getting WP on line. After getting your WP needs approved by the FWG, you have one last base-level hurdle--the FMB.

FINANCIAL MANAGEMENT BOARD (FMB)

The FMB is chaired by the Wing Commander and is the senior financial management committee on base. Normally, FMB members include the Commander, Comptroller, and major RCs such as the Deputy Commanders for Maintenance, Operations, and others shown in Figure 3. The FMB approves the budget and programs recommended by the FWG. The FMB establishes funding priorities for the entire base. This group can, for example, direct that your WP facility be rehabilitated rather than some other project being funded at the local level. For example, the base DA at Williams AFB was appointed to the FWG and successfully obtained construction funds for Word Processing at that base.

Let me repeat the major lesson from the previous information. A power structure for financial matters exists on each base. I've outlined what this structure is and how it fits together. *Don't avoid this structure and regard it as just another unnecessary additional*

duty or obstacle. Learn how to work within the structure and get yourself appointed just as high up into the structure as possible. The financial structure represents the "yellow brick road" to funds for some of your WP needs.

Now you've been introduced to and hopefully understand the basic base level, Air Force, DOD, and presidential budgetary process. We have not discussed how you obtain funds for WP equipment. It's now time to consider the preparation of your portion of the budget exhibits for WP.

BUDGET PREPARATION FOR WP

Refer again to Figure 2. Look at the Base/Wing column and up to the Budget Call. Also look across to the Budgeting heading and down to the Call and OOB. OOB stands for Operations Operating Budget. *We're now going to discuss exactly how your local requirements for WP equipment get into the budget cycle and your specific responsibilities in this process. After that, we'll "tie" the entire chapter together so that the "big picture" we have presented comes sharply into focus.*

THE CALL

The Base/Wing budget formulation stage starts when the MAJCOM Budget Office forwards the "Budget Call." The call contains a financial target referred to as a "dollar bogey." The bogey cannot be exceeded if the MAJCOM is to remain within the bogey it received from HQ USAF. The bogey is ultimately based upon approved Air Force programs in the DOD budget.

THE SUBMISSION

Because of bogey limits, the budget call is divided into two parts. "Part One" contains those programs which can fit within the bogey limits. "Part Two" contains programs which base-level FWG/FMBs decide do not have the priority of those in Part One. The budget contains separate schedules for each PEC with dollar figures allocated by EEIC. *You, as a WP manager, are required to submit detailed narrative justification for your requirements. You submit your requirements*

through the FWG where they are consolidated. The programs are then presented to the local FMB for approval prior to submission to MAJCOM.

MAJCOM ACTIONS

By now you should appreciate the importance of working within the FWG/FMB system. Attachment 6, "Input for Word Processing Equipment," is an example of how SAC requirements for WP for FY 79 and 80 were prepared. Included is an example of the narrative justification required for this submission. Please note that paragraph 5 of that attachment contains specific requirements for base-level WP managers to develop. You should note that base requirements are developed in accordance with AFR 4-2, Volume II, paragraphs A1-1 through A1-6. Remember we have noted these requirements previously in Chapter 2 of this handbook. Attachment 7, "Consolidated Program Summary," illustrates how these base-level submissions were consolidated by PEC and EEIC.

SUCCESS VS FAILURE

What determines whether you are able to get your WP programs into Part One or Part Two? In the broadest sense, the support of Commanders! Just as the Wing Commander is head of the base FMB, the MAJCOM Command Section (Commander, Vice Commander, and Chief of Staff) can be powerful allies to WP. *It all reflects back to what you and WP can do for Commanders.* Successful implementation of a WP system can provide badly needed manpower savings, related hard dollar savings, and improved administrative service.

Administrators who work in WP must strive to present a positive image for WP. I have found that one successful technique to brief FWG/FMB is the "Report to Congress" format. Rather than merely ask for X amount of dollars as do most program managers, try recapping what you accomplished with the money you were given the previous year. For example, last year you provided X dollars and we were able to implement X WP systems which saved X manpower authorizations and X dollars. If you provide Y dollars this year, we can implement Y WP systems, save Y manpower spaces and Y dollars. To do this successfully, you need to do a comprehensive

job of estimating savings and then document them with completed surveys.

HQ USAF/DAY ACTIONS

HQ USAF/DAY has a member on the Air Force Operating Budget Review Committee (OBRC). The OBRC reviews all base/MAJCOM budget submissions for the ten Major Force Programs previously discussed. Part of the DAY member's responsibility is to defend WP submissions. The DAY representative works to have the WP fund requirements placed in Part One of the entire Air Force budget. (You can obtain additional information about the OBRC in AFP 172-4, The Air Force Budget.)

IMPACT ON YOUR PROGRAMS

It is important to realize that new program starts or substantial new initiatives in any program, including WP, cannot be included in the OOB. *Because of this, it is extremely important for Administrators to plan ahead and begin to get your inputs into the POMs a year before they are needed.* You can view the POM and the President's budget as "sizing" steps and that whenever you are able to get WP requirements funded out of Part Two, it is always at "the expense" of another program. You therefore must strive to get your needs in Part One. The "next" opportunity to get new program starts is in the next year's POM.

BASE WORD PROCESSING PLAN

It is therefore "mandatory" that you develop a "base plan" for WP implementation. You must look for the greatest opportunities for WP. Among potential areas of opportunity are places which have relatively high numbers of office workers; for example, wing/group headquarters, Finance, Supply, Operations, and Maintenance. Your plans should include anticipated dates of survey and priority listing of WP implementations.

RENTAL, SUPPLY, FACILITY MODIFICATION, AND PURCHASE FUNDS

Let's recap the source of WP funds. We have stated that rental funds are largely controlled by MAJCOM/DAY

based upon your inputs submitted through FWG/FMBs. For example, HQ SAC and HQ ATC/DAY allocated WP rental funds (EEIC 473) to each base for approved rental WP equipment. You are responsible for obtaining your own WP supply funds (EEIC 619) and (592) Facility Modification funds.

When it becomes most cost effective to purchase WP equipment (such as when you have obtained maximum rental dollar accruals), you must first obtain MAJCOM/DAY and HQ USAF/DAY approval (AFR 4-2, Volume I, paragraph 10). After approval, you must submit your requirements for purchase funds (Appropriation 3800, Equipment Investment) to the MAJCOM through the "Supply Community" (LG). LG manages 3800 funds. Annually, the MAJCOM/LG asks for each base's 3800 requirements. The base FWG/FMB arranges all requirements in priority order and forwards the list to the MAJCOM/LG. The MAJCOM/LG normally can fund only about the top six or seven items for each base. As in rental funds, you've got to get the highest priority you can for your WP purchase needs. You should "anticipate" your needs and request MAJCOM/HQ USAF/DAY approval for a certain date in the future when you will have obtained maximum rental accruals on your equipment. You will then be able to participate in the LG 3800 requirements process. The MAJCOM/DAY must maintain cordial and close relations with the LG Funds Manager. There are frequently "small amounts" of 3800 funds which, when consolidated, would fund a WP requirement. Don't be surprised if you get a telephone call from the MAJCOM/DAY that goes something like this: "LG just informed us that they can buy that WP item you want if you can get the priority increased from 22 to 7." If you have good contacts on the local FMB (including the base commander), you may be able to get your priority changed, and, therefore, purchase the equipment.

FAST-PAYBACK CAPITAL INVESTMENT PROGRAM (FASCAP)

FASCAP deserves your special mention. The program is managed by HQ Air Force Management Engineering Agency (HQ AFMEA/MEMP, AUTOVON 487-2492). FASCAP is supported by the Other Procurement Appropriation (3080) and provides funds for investment in "productivity enhancing capital equipment whose costs can be amortized within two years." As of this date, there is no Air

Force regulation governing FASCAP; guidance is contained in HQ USAF/MPM letter, 21 Dec 1978, "Fast-Payback Capital Investment Program (FASCAP)." At base level, the program manager is the local Management Engineering Team (MET).

Keesler AFB used the FASCAP system to equip their four WPCs. Before using FASCAP, be careful to consider if you really intend to purchase the equipment. Some MAJCOM/DAY personnel argue that FASCAP can distort an otherwise rational program because you'll use "someone else's" money; you would not normally purchase the equipment but because funds are available you decide to purchase. I strongly support purchase of WP equipment if your anticipated rental costs for two years would exceed the purchase cost. I specifically favor the purchase of software programmable WP equipment which can be updated as later enhancements are developed. Avoid purchase of "firm-wired" or "hard-wired" machines which cannot be updated.

The following guidance is quoted from the HQ USAF/MPM letter:

Program Objectives: The objective of FASCAP is to establish a method of financing fast-payback capital investments for procuring commercially available off-the-shelf equipment that results in reduced operating and support costs. Projects should be justified on the basis of potential productivity improvement through changes in operating methods, processes and/or procedures. The emphasis of this program is on capital-labor substitution. Funding for approved projects will be made available Air Force-wide through established procurement and budget channels.

Qualifying Criteria: Nonexpendable investment equipment having a unit cost of \$1,000 or more which meets the AFM 67-1 criteria for classification as equipment can be approved for FASCAP purchase. The FASCAP project must perform valid operations, functions or services which cannot be accomplished as economically and effectively through the use of existing facilities and/or equipment or by contract.

Savings and Amortization: Valid savings are trackable reductions in manpower and/or operating and maintenance costs generated from approved investments to amortize the cost. Manpower savings may be in whole manpower authorizations and/or in man-hour or partial manpower savings. Partial manpower or man-hour savings are recognized if they can be used to satisfy other valid work center workload requirements. Man-hours saved which are excess to work center requirements will not be recognized as valid savings. All savings must be auditable and records maintained under AFM 12-50. The amortization period will begin with the month a capital investment item is put into service and end with the month total savings equal total costs, not to exceed 24 months.

Manpower: Manpower authorizations deleted to amortize a FASCAP project may be used by the MAJCOM/SOA to satisfy validated deferred manpower requirements. MAJCOMs/SOAs are encouraged to reapply manpower savings at the base with the FASCAP project. Authorizations available as a result of a FASCAP action will be realigned at a grade no higher than the grade saved in the FASCAP action. Authorizations not required to satisfy deferred requirements will be returned to HQ USAF/MPM. MAJCOMs/SOAs will not establish new authorizations solely to use savings made available by an approved FASCAP project.

Unauthorized Activities: FASCAP funds cannot be used to support:

- (1) Major Force Program VI (Research and Development).
- (2) Major Force Program X (Support to Other Nations).
- (3) Government-owned Contractor-operated (GOCO) industrial facilities, or Contractor-owned Contractor-operated (COCO) plants.
- (4) Nonappropriated fund agencies.
- (5) Industrial funded activities (AFR 170-10).

Consolidated Purchase: The \$99,999 limit applies to each individual FASCAP project and does not preclude the consolidated purchase of equipment in several FASCAP projects in order to take advantage of a quantity discount. The total purchase price of a consolidated purchase may exceed \$99,999; however, each individual FASCAP project must satisfy the program criteria including a basic cost of less than \$100,000 and a payback period not to exceed two years.

Air Force Management Engineering Agency (AFMEA): Is responsible for managing and administering FASCAP.

FASCAP Requests: Requests for funds will be developed with the assistance of the Base Supply, Base Procurement Office, Comptroller and the servicing Management Engineering Team (MET). They will be submitted through the Deputy Commander for Resource Management (DCR), or equivalent, to the servicing MET in the format supplied by the local MET.

Supply Procedures: All requests will be accompanied by an AF Form 601b, Custodian Request/Receipt. Requests will be forwarded by the originator to the Chief of Supply (Authorizations/Validation Section). Within five workdays of receipt the Chief of Supply will process the request in accordance with Volume II, Part Two, Chapter 15, AFB 67-1 to determine if the item is allowed in a Table of Allowances (TAs) for the requesting function. If allowed in a TA, approve the AF Form 601b. If the item is not reflected in a TA or requires higher headquarters approval, initiate an AF Form 601a. Supply will then attach a copy of the AF Form 601a or b to the FASCAP request and forward through the Comptroller to the base Deputy Commander for Resource Management or equivalent. The function requesting magnetic/memory word processing equipment will coordinate request with the Central Base Administration Office in accordance with AFR 4-2, Vol I before forwarding to the servicing MET.

Additional information on FASCAP can be obtained from the local MET.

SUMMARY OF CHAPTER 3

Review AFR 4-2 and estimate your WP requirements. Work through the base FWG/FMB structure and program your budget needs for:

Magnetic typewriters -- EEIC 473
Dictation Equipment -- EEIC 473/639
Start Up Supplies -- EEIC 619
Other Equipment (unit cost up to \$1,000) -- EEIC 639
Facility Modification -- EEIC 592

Don't forget to program for the purchase of rental equipment (3800) through the LG community. Also consider the use of the FASCAP program if you think it best fits your needs.

It all comes back to one main point--sell WP to Commanders by saving manpower spaces "up front" and by helping him to establish some degree of management control over administrative manpower resources!

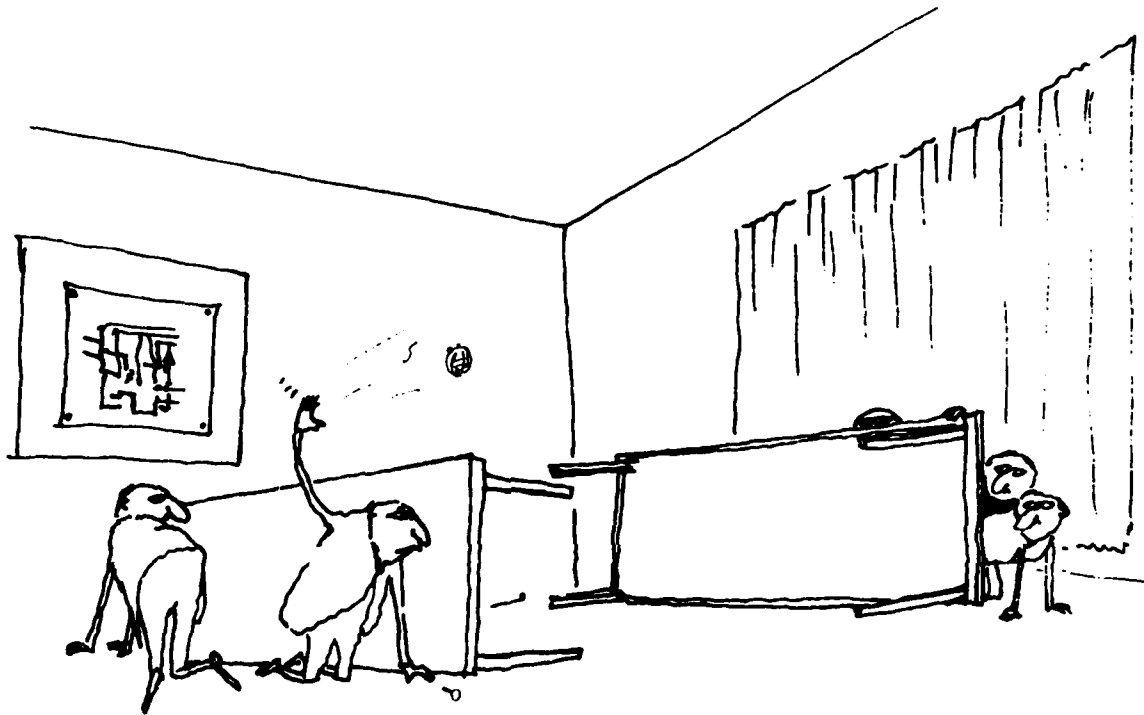
That's it for MONEY. It's time to look forward to actually getting your equipment ordered by Procurement and Supply.

People can be divided into three groups: those who make things happen, those who watch things happen, and those who wonder what happened.

John W. Newbern "Bits and Pieces," 1977

CHAPTER 4

CREATING THE OPERATIONAL SYSTEM



"... this phase will require the close collaboration among all agencies."

MURPHY'S LAWS

#3. Everything takes longer than you expect.

#4. If there is a possibility of several things going wrong, the one that will go wrong first will be the one that does the most damage.

Now that you've briefed Management, conducted the survey, received system approval, and have the funds, how do you get the facility modified and the equipment ordered and installed? This chapter discusses these Planning concerns and provides helpful suggestions in working with Supply, Logistics, Procurement, and Communication-Electronics.

PLANNING FOR IMPLEMENTATION

Woody Allen, in Without Feathers (1977) wrote, "The lion and the calf shall lie down together, but the calf won't get much sleep." You won't get much peace of mind either if you don't carefully plan for installing systems. A number of publications all make the same point--less than 15 percent of the success or failure of any WPC is attributable to equipment alone. Over 85 percent of the success or failure of WP depends on two nonequipment items--people and procedures. A large part of this 85 percent is involved with planning--setting up a coordinated plan. Remember Murphy's Laws--it takes a lot of time to set up a successful working system and if something can go wrong, it will!

DEVELOPING A COORDINATED PLAN

Frantic lunging from one step to another, without a clear plan, is almost a certain guarantee for failure. AFR 4-2, Volume II, Chapter 4, directs ". . .the DA systems staff, together with the functional system manager and the system supervisor" to establish the operational date for the WPC and to ". . .develop a schedule of events to meet that date. Leadtimes for construction, people, equipment, and communications support must be coordinated carefully to avoid unnecessary delays and wasted effort." At this point, you should carefully review AFR 4-2, Volume II, Chapter 4 to assist in preparing your plan of action. A WPC implementation plan that is calmly thought out will not only be easier on the nerves, but will be more productive in terms of manhours and funds spent on the project. I know you're going to be deeply involved in many day-to-day problems, but you *must take one absolutely essential step--develop a coordinated plan.*

HQ AFLC/DAX developed a "Schedule of Essential Actions" which is reproduced at Attachment 8. Review this attachment now to get a "feel" for the items and lead times you'll need to include in your coordinated plan. Some of the items and their time phasing may not fit your plan, but this schedule gives you a good starting point. HQ AFLC/DAX also developed Attachment 9, "Creating the Operational System," which amplifies the items contained in their "Schedule of Essential Actions." You should compare these approaches and draw from them what you can use. The main point is that your local time-phased plan must reflect a carefully conceived pathway from the present administrative organization into a functioning WPC.

ADDITIONAL PLANNING TECHNIQUES (CPM AND PERT)

No one project management technique can be used for all projects, nor will everyone be comfortable with the same technique. Two frequently used techniques are the Critical Path Method (CPM) and the Program Evaluation and Review Technique (PERT). My object in this portion of the handbook is not to make you an expert in any particular control system--it is to give you an idea about whether CPM, PERT, or some other form of "network analysis" may be useful for your planning project. The HQ AFLC "Schedule of Essential Actions" is one control technique.

After you list the various items which must be accomplished in your project, you must estimate the time required to accomplish each action. CPM permits you to find the relationships among the various required actions. You "plot" all actions in an "arrow network," so called because it shows the relationships between each action. For any given relationship, ask three questions: What actions must happen before (X)? What actions can be accomplished at the same time as (X)? What actions cannot start until (X) is completed?

Next, assign an estimated time for each action. This process will identify the critical path--the path whose actions have no time to spare where any delay would jeopardize the timely completion of the entire project. As stated in Management, Organizations, and Human Resources (Weisselberg and Crowley, 1976), "CPM enables project management to plan and schedule work,

by knowing the 'best' course of action, and to determine the effect of delays. Other advantages are that it gives all personnel involved in the project a clear picture of what is going on, and it makes quick re-scheduling of a project possible if changing conditions require it." An example of a CPM network analysis chart is contained at Attachment 10, "Word Processing--Implementation Actions Network--Critical Path Method (CPM)."

Another frequently used technique for aiding coordination and planning is the Program Evaluation and Review Technique (PERT).

The NAVY developed PERT with the help of the management consultant firm of Booz, Allen, and Hamilton. PERT emphasizes rapid detection of delay by use of weighted time estimates. Instead of a single time estimate as in CPM, PERT uses three estimates for the interval between events: the most likely time, the optimistic time, and the pessimistic time. You would weigh the three estimates and calculate the mean time. In 1976, HQ USAF/DAY personnel developed (but did not publish) a PERT chart for WP. This chart is contained in Attachment 11, "PERT Example--Word Processing Systems Implementation." This chart contains many of the items suggested by HQ AFLC and presents them in a different format. Please refer to the PERT chart now. The circle indicates a key event, usually the initiation or completion of an action. The lines in the PERT chart indicate the activities in moving from one event to another. The network moves from left to right and the circles are numbered sequentially to reflect progression from previous events. As reflected on the attachment, the PERT formula is

$$t_e = \frac{t_o + 4(t_m) + t_p}{6}$$

where: t = time in weeks
t_o = optimistic time
t_m = most likely time
t_p = pessimistic time
t_e = time expected.

To determine the total time required to complete implementation, find the critical path. the critical

path is the most time consuming path which represents those activities that will probably require the longest time to complete. The heavy line in Attachment 11 represents the critical path. Because this is the most time consuming path, this is where you will want to apply extra resources, particularly if the project falls behind schedule. You can now determine the earliest expected completion date (tE) for the project by adding the expected times (t_e) for each action in the critical path.

Planning and control systems like CPM and PERT can help you to understand the critical actions required in planning for your WPC. The suggestions of AFR 4-2, Volume II, and the attachments from HQ AFLC can be graphically depicted through use of either CPM or PERT. If you want additional information on either CPM or PERT, a visit to the base library should provide the answers.

WORKING WITH SUPPLY (LGS), PROCUREMENT (LGP), CIVIL ENGINEERING (DE), AND COMMUNICATIONS ELECTRONICS (DC)

Dwight Waldo, in "Government by Procedure," wrote: "One man's red tape is another man's system." Please keep Waldo's comment in mind when you work with the above staff agencies. This section discusses suggested methods of working within "the system" to obtain your ultimate goal of getting your system running. At most bases, the Supply and Procurement activities have been organizationally placed under the Deputy Commander for Resources (DCR). We'll use the symbols LGS for Supply and LGP for Procurement. Your relationships with Civilian Personnel, Manpower, and Military Personnel (CBPO) are covered in the next chapter.

THE SUPPLY SYSTEM

You cannot obtain any WP equipment or supplies without the assistance of Base Supply (LGS). Your point of contact is the Customer Support Branch--they can answer your questions and help solve many problems.

WPC equipment and supplies are authorized in TA 006, Sub-Division AB, "Administrative Equipment." TA

006 is published only on microfiche--either your organization supply NCO or LGS has a copy. The 006 authorizations are used to process paperwork as stated in AFM 67-1, Volume II, part two, Chapter 15. HQ USAF/DAY has requested some WPC equipment changes to 006, but the current keyboard authorizations (quoted from 006) are:*

<u>Stock Number</u>	<u>Nomenclature</u>	<u>Basis of Issue</u>
7430-00-555-4324	Typing machine magnetic tape automatic	As required IAW AFM 67-1, Vol IV, Part One, Chapter 18, para 79 WAB CEMO
7430-00-010-7947	Typewriter magnetic card, automatic	As required IAW AFM 67-1, Vol IV, Part One, Chapter 18, para 79 WAB CEMO

These two authorizations obviously don't cover Cathode Ray Tube (CRT) keyboards, communicating devices, separate printers, etc. The above authorizations will be discussed shortly.

Other WPC equipment and furnishings frequently required include:

<u>Stock Number</u>	<u>Nomenclature</u>	<u>Basis of Issue</u>
7450-00-550-8746	Recorder Input Word Processing	As required for Administration Centers WAB CEMO and MAJCOM Director of Administration and MAJCOM Director of Communications-Electronics
7450-00-849-1136	Reproducer, Sound, Magnetic Reproducing Medium Belt Type	As required for Administration Centers WAB CEMO and MAJCOM Director of Administration and MAJCOM Director of Communications-Electronics

*After submission of this handbook to the ACSC faculty, but prior to its publication, a new edition of TA 006 was published which contains new authorizations--consult LGS.

<u>Stock Number</u>	<u>Nomenclature</u>	<u>Basis of Issue</u>
7450-00-553-6618	Reproducer Sound Luggage Case Type	1 per Steno or Typist Required to transcribe dicta- tion except medical organizations
7230-00-251-7434	Draperies Fabric Fire Resistant	As required for Administration (Word Processing) Center WAB CEMO and MAJCOM Director of Administration
7110-00-710-3869	Enclosure, Acoustical, Open Front for Accommodating Office Machines W/Removal Top Lighting Fixture W/or W/O Fan	1 per office machine when re- quired to suppress noise level
7910-00-470-7632	Shampooer - Rug and Carpet Elec	Note-The allowances apply only when Civil Engineers Janitorial Services are not provided. 1 per office auth carpet/rug.
7910-00-720-5536	Cleaner Vacuum Upright	Note-The allowances apply only when Civil Engineers Janitorial Services are not provided. 1 per office auth carpet/rug.
7520-00-579-7013	Easel Display and Training Alum	As required for Display and Training

If you intend to obtain any of the above items, they should be specifically researched by LGS to determine if TA 006 has been changed. After your WP study has been approved by the MAJCOM/DAY and coordinated

with MAJCOM/DC (if Base Wire Service will be needed for your dictation equipment), most MAJCOMs require you to submit AF Forms 601B, "Custodian Request/Receipt" to get authorization for the 006 items. The MAJCOM may or may not require you to attach a copy of your approved WPC survey as justification for the items. Base Supply prepares an AF Form 601A, "Allowance/Authorization Change Request," and forwards the 601A and 601B to the MAJCOM/Command Equipment Management Office (CEMO) for approval. CEMO (located in LGS) forwards the forms to MAJCOM DA/DC for coordination as required. The forms are then returned to the Base Supply activity to forward to Base Procurement. Not all commands will work this process the same. For example, SAC saves processing time by requesting CEMO to prepare a "Command Directed" 601A when approving the study. This precludes preparing a 601B and saves processing time.

You'll recall I stated that more advanced "state of the art" WPC equipment is not covered by 006. MAJCOMs either have to authorize these items as "suitable substitutes" or request special authorizations from the AFLC Logistic Center at Robins AFB, Georgia. This additional "time waster" should not be necessary after the forthcoming change to 006 due by late 1979.

CHANGES ON THE HORIZON

On 22 March 1979, the HQ USAF Directorate of Administration and Directorate of Computer Resources issued a joint letter "Reclassification of Word Processing Equipment" (see Attachment 12). The letter was issued because the General Services Administration (GSA) announced changes to the "Federal Commodity Classification" of what is automatic data processing equipment (ADPE) and what is word processing equipment (WPE). A review of the letter reveals that effective 1 October 1979 any WP equipment which has more than a single line of display and does not have its own printer will be classified as ADPE. The GSA announcement should result in changes to TA 006 and there will, of course, be changes to AFR 4-2 and the AFM 300 series of directives.

That takes care of equipment, but what about the supply items--magnetic cards, ribbons, etc.? Most WP equipment suppliers also sell supply items. You must establish your stock level requirements with Base

Supply. You need to estimate your quarterly needs, their costs and source. You should "shop around" for your supplies; the WP equipment manufacturer is frequently not the cheapest supplier. At least two MAJCOMs/SOAs are using "recycled" ribbons. New ribbons may cost about \$43.50/dozen. You can probably get recycled ribbons for as little as \$14.50. You may want to contact such companies as the following and determine if they can fill your needs:

Hughes Industries, 1170 Old Henderson Road,
Columbus, Ohio 43320; The Office Store, Inc.,
14 Iverness Drive, East, Englewood, Colorado
80110.

Work with Base Supply and Procurement to obtain your supplies. You will need to obtain a Supply Account number for the WPC; the WPC will probably be assigned an "organization/custodian code." If the WPC is large enough, you will need a full-time supply custodian (account representative). This requirement must be worked out with Personnel and Manpower folks as discussed in Chapter 5. Each time you order an item, the Air Force Stock Fund (AFSF) is involved in the transaction. The AFSF is a revolving fund which finances inventories and "generates" income by "selling" items to you, the customer. When an item is purchased (issued) from Supply, the Operations Operating Budget (OOB) fund reimburses the AFSF.

By now you should have TA 006 authorizations for your needs. Your next step is Procurement.

PROCUREMENT (LGP)

Portions of this section are based on "The Base Contracting Division" by Major Edwin J. Hudson, Jr., a member of the 1979 ACSC faculty.

The mission of the base contracting division (BCD), commonly called Procurement, is to contract for supplies and services. Because Procurement buys everything from soup to medical equipment, its "buyers" cannot be expert in all areas. Work closely with the buyer assigned to your WPC project. Title 10, of the U.S. Code, as codified into the Defense Acquisition Regulatory System (formerly called the Armed Services Procurement Regulations), provides the legal authority

to purchase items for the Air Force. The only person who can legally commit the government for procurement of supplies and services is the base contracting officer designated by the MAJCOM. The Supplies Contracting Branch is responsible for buying office machines while the Contract Repair Service obtains office equipment repairs. Establish contact with the two offices because you'll be "doing business" with them in the future.

Some MAJCOMs may require you to include the recommended equipment vendor on the AF Form 601B; other MAJCOMs do not permit this specification. When the forms go from LGS to LGP, the selection of the vendor(s) will be officially made by the buyer at LGP. My experience has been that the "Procurement Phase" takes up to six weeks--build that into your time phase planning. *Remember that you cannot legally commit the government to rent or purchase equipment from a vendor--that's LGP's legal responsibility.* Normally, you have evaluated all local equipment vendors that are on a General Services Administration (GSA) Schedule. You should, if you have a preferred vendor, specify to the LGP Buyer the recommended source, the number of the GSA schedule, and as much information as the buyer needs to make that job easier. I have discussed the "sole source procurement" problem with a number of MAJCOM/DAY personnel; there is absolutely no consistency between LGP buyers. HQ AFLC and Air University have the only WPCs which I know that required the use of an Invitation for Bid (IFB).

An IFB is prepared by LGP with the assistance of the WP project manager. This process begins when LGP receives the AF Form 9, "Request for Purchase." LGP prepares a solicitation package which includes the statement of work or services (equipment) required, exact specifications, contract clauses, and other related information. This information is combined into an IFB for advertised purchases at established prices or a Request for Proposal (RFP) for negotiated purchases. LGP then distributes the IFB/RFP to potential contractors.

In my opinion, you normally do not want to go the IFB/RFP route. You should clearly indicate your requirements to the buyer and include the necessity of local service and training support--both key ingredients in any successful WPC. The IFB/RFP builds in

additional time delays into the implementation cycle; it also creates the possibility that the contract will be awarded to an "out of town" vendor with only second-party maintenance and without local training for your WPC machine operators. Specify to LGP that the vendor provides, at no cost to the government, specialized training for WPC supervisors. For example, IBM, Xerox, and A. B. Dick provide five-day courses for WPC supervisors. Training for supervisors is also absolutely essential. Remember, selection of the proper equipment represents only 15 percent of the success of a WPC-- 85 percent depends on properly trained personnel (both operators and supervisors) and procedures; insist that the vendor selected provide these services.

Another potential "choke point" in LGP is the Customer Integrated Automated Procurement System (CIAPS) which prepares automated purchase orders. When your purchase order enters this system, you may have difficulty tracking it--just where it is in the process. Don't submit your request to LGP and wait for the system to work--stay on top of the process and track it until the contract is mailed to the potential vendor(s).



Cartoon reprinted
from Airman
magazine.

"There's a guy out here applying for that
contract job."

CIVIL ENGINEERING (DE)

We need to discuss selection of carpet and drapes which will be used in your WPC. Although these items are also ordered by LGP, the role of Engineering and Services is critical. AFR 4-2, Volume II, and the Army Acoustic Analysis Study have clearly established the need for facility modification for proper sound control in WPCs. The information distributed at the Keesler ASC also contains sound control information extracted from the Army study. The first step is to obtain a facility for the WPC. Normally, each base has a Facility Modification Board, chaired by either DE or the Base Commander. You'll probably need to present your facility needs to this board to get your space. You'll next need to design the facility to suit your needs. DE may have an "interior decorator" who will prepare the layout for you; if not, contact your MAJCOM/DAY if the local DE cannot provide assistance. DE frequently has a "Carpet Czar"--an individual who has been responsible for selecting and managing the installation of carpet for many years. Carpet, like many other items needed in a WPC, can be purchased via GSA contract. The Carpet Czar has samples of carpet and knows the attributes of good carpet, proper installation, and other "tricks of the trade." This person also frequently works with "drapery vendors." You'll recall that drapes are specified in TA 006 and require the approval of MAJCOM DA and CEMO. If you have selected your WPC supervisor, this individual should assist in color coordination of furniture, acoustical panels, carpets, and drapes.

You must also provide DE a diagram of the proposed WPC facility and clearly indicate where you need electrical outlets. *Obtain accurate, written specifications from the equipment vendor(s) regarding electrical power requirements and amounts of heat output in British Thermal Units (BTUs) generated by each piece of equipment.* I recommend you obtain or prepare the following chart and give it to DE for their use:

<u>Equipment/ Model</u>	<u>BTUs Per Hour</u>	<u>X</u>	<u>Number of Pieces of Equipment</u>	<u>=</u>	<u>Total BTUs</u>
List each equipment item by brand/model #	Indicate # BTUs provided by vendor		Times # of units =		Total BTUs

Don't forget to include all equipment, including dictation equipment, any copying equipment, and add 450 BTUs for each person working in the WPC. Be certain to ask vendors if any equipment requires a "clean, dedicated power line"--this normally is required by mini-computers and some CRTs. If a vendor specifies either dedicated power or a voltage regulator, immediately place the vendor in direct contact with DE.

DE will also use the BTU and electrical power requirements you provide to determine the heating, air conditioning, and relative humidity requirements for the WPC. The American Society of Heating, Refrigerating and Air Conditioning Engineers has determined that in summer, 95 percent of all people feel "comfortable" when the temperature is between 72° and 80°F, with relative humidity of 15 to 50 percent. During winter, 97 percent of people are comfortable at 75° to 76°.

Dr. Lawrence Wheeler, head of the Behavioral Research Department of Ewing and Miller Associates, conducted a study of the effect of environmental controls on office personnel. Respondents were asked to rate the relative importance of factors that either positively or negatively impacted on their work in an office. The majority of the workers stated that temperature control--air conditioning, heating and ventilation--were more important than any other factor.

At Attachment 13 is a "Word Processing System Implementation Checklist," prepared by the Army. It contains an exhaustive list of things to consider/do before and after equipment is ordered. The Attachment 14, "Word Processing Center General Engineering Specification Summary," was prepared by HQ ATC/DAY. This specification contains detailed guidance on how to prepare the facility and which types of acoustical treatment to use.

Both Attachments 13 and 14 are based, to some extent, on the Army Environmental Hygiene Agency Study referenced in Chapter I. Prior to use of any of the attached facility checklists, or the Army study, make certain the information is current. *Your proper contact is DE.*

Although I've "written around it" previously, let's hit it again--it takes time for DE to modify the WPC facility. Contact the Facilities Modification

Board early, get facility cost data and electrical, power, and temperature control requirements specified, and get DE approval. You don't want to get all your equipment in, personnel selected, and not have a facility to put 'em in!

COMMUNICATIONS ELECTRONICS (DC)

Your next "partner" at the base is DC. These folks are the experts on such things as telephone conduit, interface (if any, with the base telephone system, "selector levels," "trunk links," recorder couplers, etc. As soon as you narrow down your desired choice of vendors for dictation equipment, contact the DC staff for technical assistance and information on the Base Wire System. Depending on local conditions and your requirements, you may have to submit your needs through the local Command and Control Communications Requirements Board (C³RB) (AFM 100-22, "Management of Base Communications Facilities and Services"). This board may only meet quarterly--again, early coordination is required to help meet your implementation schedule. You may want to have your DC representative contact the local vendors for technical data--coordinate with LGP to insure that a violation of the procurement regulations is avoided. Based upon the "tech data" furnished by the potential vendors, DC may be able to advise you on which equipment would permit the smoothest interface.

PROBLEMS TO AVOID

BUY AMERICAN ACT

The Buy America Act (41USC10a-d) has been codified into procurement regulations. Prior to recommending a vendor for WPC equipment to LGP, determine where the products are made. Basically, the Act states that a preference will be given to items made in the United States. The Act contains cost additives which must be made to adjust the price of foreign-manufactured equipment and to determine if the foreign item is really the most economical purchase. The Act is complicated and all questions should be referred to LGP.

MODULAR FURNITURE

Most civilian WPCs used modular office furniture; some military WPCs also use this furniture. On 25 August 1977, the GSA Federal Supply Service issued a "Notice to Ordering Offices" regarding the purchase of modular office furniture manufactured by the Herman Miller Company. The basic situation is that modular furniture is composed of acoustically treated panels from which work surfaces (desks), shelves, files, telephones, etc., can be hung--they save a lot of physical space. No GSA contract exists which specifically contains such furniture. Herman Miller had two GSA contracts, one (GS-00S-00887) for Library Furniture and one (GS-00S-41541) for Office Acoustical Partitions. If you combined items from the two contracts, you would build a "modular action office." The GSA Notice stated that "the above-referenced Schedule Contracts are not to be combined for use in office environments. The partitions under GS-00S-41541 are not intended to be used in conjunction with the hang-on 'Action Office' components available from" GS-00S-00887.

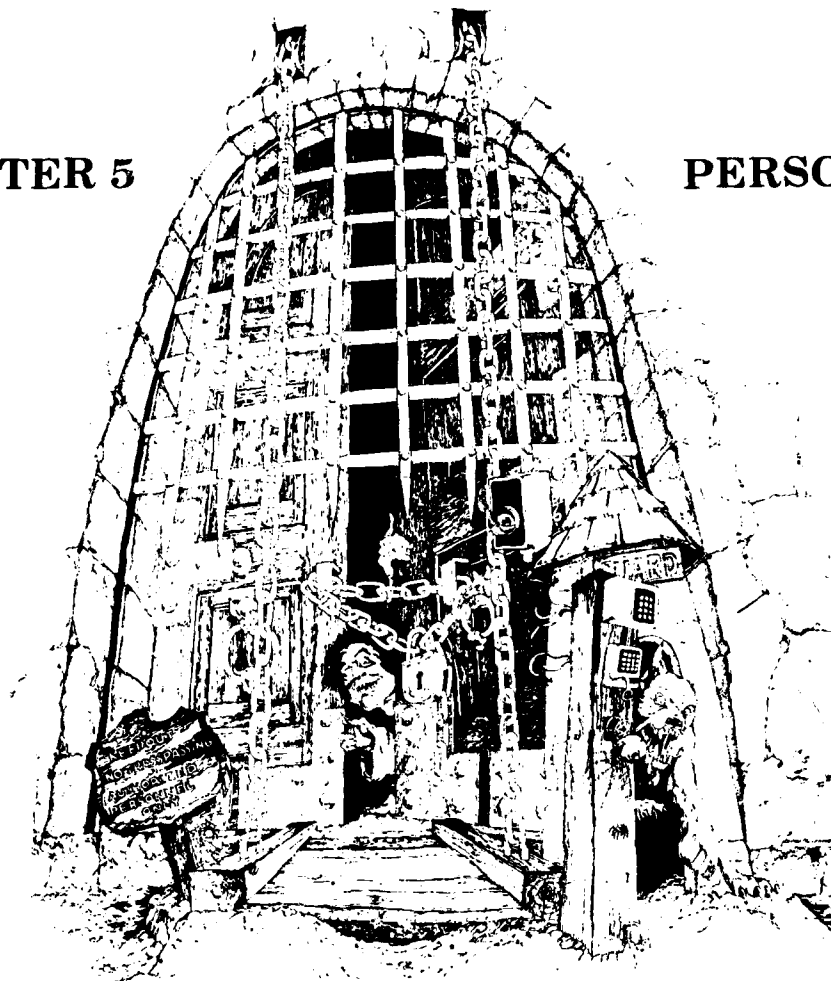
Regardless of GSA's reasons, this Notice would appear to eliminate the creation of a modular action office. NOT SO! A MAJCOM successfully obtained a waiver from the Director of the National Furniture Center (the GSA OPR for the Notice). The National Furniture Center is located at 1755 Jeff Davis Highway, Crystal Square, Building 5, Arlington, VA. The MAJCOM stated that the ability of acoustical panels to support hang-on components was essential to their project. They requested approval of a waiver to permit "the purchase of acoustical panels "off schedule" capable of supporting hang-on components from Herman Miller or another suitable manufacturer. Procurement of all the above "off schedule" if it is determined that a single purchase with volume discount is less expensive than two smaller orders--one on schedule and one off schedule." The National Furniture Center approved the request. The end result was that the local Herman Miller dealer was awarded a contract off schedule for all modular furniture--the firm was cheaper than the "legal" on-schedule separate items.

SUMMARY OF CHAPTER 4

This chapter stressed the absolute necessity for the WPC project manager to prepare a detailed time phased implementation plan to increase the probability of a successful WPC. I provided guidance on the roles played by Supply, Procurement, Civil Engineering, and Communications-Electronics. Detailed checklists and "charting procedures" are contained in attachments. The Buy America Act and problems in obtaining modular office furniture were also discussed. Finally, I've indicated how to work within the GSA system to obtain your necessary equipment and supplies. We'll now turn our attention to the Civil Service Commission, the Civilian Personnel Office, job enrichment, and other people factors.

CHAPTER 5

PERSONNEL



Reprinted with permission of Schlange Electronics.

It's with a great feeling of trepidation that I enter the bastion of the Personnel system in general--and the fiefdom of the Civilian Personnel system in particular. The cartoon reflects my thoughts on the role of the United States Civil Service Commission (CSC); it also reflects to some degree the attitudes about the CSC held by many civilian administrators.

In this chapter, we'll discuss the attitude and official position of the CSC regarding WP. Word Processing grades will be examined in relation to the

new factor evaluation system (FES). The personnel problems you may encounter in establishing your center will be presented. We'll also look at job enrichment as a possible method of avoiding or alleviating potential personnel problems. Let's "beard the lion in his den" and discuss the CSC.

UNITED STATES CIVIL SERVICE COMMISSION

The CSC develops classification standards for civilian personnel employees. The CSC's Bureau of Policies and Standards is the office of primary responsibility for these standards. When government agencies began to implement WPCs in the early 1970s, many managers encountered difficulties in determining correct series classification and grade levels for the position descriptions of their employees. In December 1973, the HQ USAF/DA and the Directorate of Civilian Personnel (DPCMC) jointly published a document entitled "Position Classification Guidance--Administration Center Positions." This joint effort was an early attempt to establish consistency in classification treatment for the civilian positions in Air Force WPCs. The document contained copies of "typical" position descriptions (PD) which were to be used to prepare actual PDs as needed by individual managers and as evaluated by local DPC classifiers. HQ USAF/DA requested that each MAJCOM/base DA establish a closer rapport with the local DPC so that a more responsive system could be implemented.

From early 1974 to early 1979, the CSC was "studying" the classification problem presented by positions in WPCs. During this period, the 1973 guidance was considered by some MAJCOM/DPCs to be "set in concrete"--the result was that all positions were either "made to fit" the suggested PDs, or local commanders had to "persuade" DPC officials to "properly" classify their WPC personnel. Because of this situation, inequities in classification series and grade authorizations existed between MAJCOMs and between MAJCOMs and HQ USAF PDs. What was the result of the CSC study? What was the CSC's attitude on WPC?

ATTITUDE OF THE COMMISSION

In my opinion, the attitude of the CSC toward WP is reflected in the article "Contemplating Word Processing" by Mr. John S. Warman of the CSC Bureau of Policies and Standards. This 1977 article (which appeared in

the Civil Service Journal) described WP as ". . . establishing a high-volume typing pool to transcribe and produce typewritten work." It chided the manager who might decide to implement WP to heed the admonition: "There is no such thing as a free lunch." Mr. Warman developed his opinions during the CSC ". . . study for the purpose of developing both qualification and position classification standards for the . . . secretary, clerk-typist, and clerk-stenographer occupations." Partially because of the above article, it came as no great shock when, on February 8, 1978, the CSC's Bureau of Policies and Standards issued its PDs for the Administrative career field. Forty-three government agencies and representative labor unions had been contacted by the CSC regarding WP. The CSC admitted that it had been urged to establish a new occupational series for positions involving WP. Despite the recommendations of many of the government agencies, the CSC stated: "We have found no basis for this approach . . . we conclude that word processing requires the same basic qualifications as other typing work. . . . Therefore, word processing has been included in the GS-322 series" (clerk-typist series).

The CSC decision does not reflect what has happened in the civilian WP sector. Most civilian companies which have WPCs have a separate career field (classification) for WPC personnel. These companies also recognize that it takes a skilled, highly trained employee to perform in a satisfactory manner in a WPC. The CSC has apparently decided to continue its previous contention that grade levels of administrative civilian personnel are determined by who the Administrator works for rather than the increased quantity and quality of work produced by the employee.

The primary positive aspect of the CSC study was the incorporation of personnel presently classified in the Cold-Type Composing Machine Series, GS-324, into the revised GS-322 series. There were only about 357 personnel in GS-324 series--a series with almost no upward movement. Most personnel in this series are GS-3/4. The importance to your WPC is that the 324 series personnel use equipment similar to, or exactly the same as, WP equipment, to prepare AF publications. Incorporation of the 324s into 322s may permit you to absorb/combine these two similar functions, cross train all personnel, and possibly improve the promotion opportunities for both groups. At the least, integration of

these jobs should provide greater variety of work for your WPC personnel.

SUMMARY OF CSC ACTIONS

The CSC failed to establish a separate series for WPC personnel. This action had the potential effect of not improving either the image, morale, or grade level of WPC personnel. Personnel who are presently classified in the Clerk-Typist Series (GS-322); Clerk-Dictating Machine Transcribing Series (GS-316); and Cold-Type Composing Machine Series (GS-324) will be combined into the revised GS-322 series. The job titles for workers in the 322 series will be Clerk-Typist, Lead Clerk-Typist, or Supervisory Clerk-Typist--not Word Processing Specialist, etc., as used by their contemporaries in the civilian sector. There is also speculation that grade levels for WPC personnel may be held at the 2-4 level rather than 4-6 level. If this occurs, you could experience turbulence within your employees--they'll leave for higher graded jobs.

FACTOR EVALUATION SYSTEM

The new CSC standards incorporate use of the FES which was partially introduced in 1975. The FES is the new classification system for grading non-supervisory general schedule positions. The FES uses nine factors to which points are assigned. The total number of points "credited" to the position is converted into one of the GS grade levels. Each GS grade level is assigned a specific point range. For example, it takes at least 855 points to equate to a GS-5 position. As a WPC project manager or supervisor, you will "use" the FES when preparing PDs for your WP positions. The nine FES factors and how they are used by DPC classifiers are illustrated in Attachment 15, "Position Evaluation Statement." You'll need to become much more familiar with these factors as you implement the center.

Because of the recent Civil Service Commission announcement and the conversion of position descriptions to the Factor Evaluation System. I have not included "typical Word Processing Center Position Descriptions." You'll also recall that the ASC Study Guide, "Administrative Systems Implementation," contains job descriptions prepared under the "old" procedures. When you get ready to prepare your PDs, contact your MAJCOM/DAY for assistance; by that time the MAJCOM/DAY should have

copies of approved PDs written under the new classification standard. At this time, let's assume that you are ready to complete the PDs. How do you actually "get" civilian employees assigned to the WPC?

ASSIGNMENT OF CIVILIAN PERSONNEL

One of the reasons I was somewhat "apprehensive" about this chapter is because there are so many civilian personnel rules and exceptions. For that reason, you'll need to balance what's in this portion against your MAJCOM and local DPC policies. In talking about "hiring" techniques/policies with MAJCOM/DAY personnel, I again confirmed that "everyone" does things their own way. Let's look at contrasting examples.

Within one command, the commander directed that civilian personnel whose jobs were to be deleted from the manpower authorizations would not be subjected to "adverse action notices" which are formal letters of notification prepared by the Civilian Personnel Office. As that command worked it out, DAY determined, by virtue of the survey, how many civilian positions were needed in the center. The DPC staff and the Manpower Staff (XPM) worked together to "bank" jobs left vacant by resignations, transfers, promotions, etc. These banked jobs were filled by Temporary Overhires--not by "permanent employees." The banked authorizations were held for transfer to the WPC. The XPM and DPC created the "manning documents" for WPC. At the same time, each staff agency was told how many residual administrative manpower authorizations they were allowed to retain. In conjunction with XPM/DPC, the staff agency chief decided where they wanted to "place" their retained authorizations. Personnel who occupied positions that were being transferred to the WPC were informed of that fact and were given, by DPC, a choice of jobs--either in WP or in another vacant position somewhere else on the base. Every one of the 26 positions was "filled" by a volunteer.

The net result was a smooth transfer of personnel with minimum personnel turbulence. Let's contrast that MAJCOM's experience with that at another base with a different command.

At another location, the DPC staff has adopted a "rigid" interpretation of the Personnel Regulations. Employees whose positions were being deleted/transferred were given letters of adverse action. They were

then informed of what job they were qualified for and if they failed to accept the new position, their service was "terminated." In most cases, this created ill feelings toward the entire WP concept--both on the part of the employee and on the part of the WPC management which was unable to select the people they wanted for WP. This situation can cause particularly hard problems when the WPC manager has little, if any, choice of the supervisors.

ADDITIONAL SPECIFIC PERSONNEL PROBLEMS

First, on 26 October 1978, the President imposed a Presidential Hiring Limitation. This limitation applies to full-time permanent position vacancies existing on or after 24 October 1978 which are filled from sources outside of the DOD. It limits the number of vacancies which can be filled to 50 percent of those occurring on or after 25 October 1978. If the loss of a person from your WPC results in the employee being transferred/promoted to another AF/DOD job, the hiring freeze does not apply. You could find your WPC unable to fill 50 percent of your vacancies if the departing personnel leave the DOD system.

A second potential problem is the effect of Reduction In Force (RIF) and Stopper Lists. In this adverse situation, the "Personnel System" gives the WPC manager/supervisor no choice of who to hire--anyone on the list who meets minimum requirements is offered the job.

These are some of the more important things you need to know about the Civilian Personnel system. Now, what about the use of military personnel in WPCs?

MILITARY PERSONNEL AND WORD PROCESSING

We've touched on this subject in Chapter 2. Again, my opinion is that 702X0B military personnel should be used in WPCs. If you decide to use military personnel in your center, XPM and DP will jointly work the changes/transfers to the losing/gaining organizations. I have found that many 702X0s were strongly interested in working in WP--these folks recognize the challenge of new equipment and procedures and also correctly evaluated that their post-service employment possibilities would be greatly increased by WP experience.

If large numbers of 702X0s are transferred Air Force-wide into WP, possible adjustments will have to be made to the enlisted weighted airman promotion system, etc. There are also likely to be rank limitations imposed on 702s working in WPCs in other than supervisory positions.

EMPLOYEE MOTIVATION AND WORD PROCESSING

BACKGROUND

A lot has been written about real or potential employee dissatisfaction with WP. Articles such as "The Mechanization of Emily;" "Your Secretary, Robot or Management Aide?;" "Has Word Processing Been Oversold?;" and "Contemplating Word Processing" have been published which stress the dangers of WP. As a WP project manager or supervisor of a WPC, you must recognize that personnel involved in any major change may experience some degree of anxiety and dissatisfaction. What can you do about this potential problem? What can you do to prevent the alleged dehumanization of our employees?

If you're familiar with the works of Abraham Maslow, Frederick Herzberg, David McClelland, Chris Argyris, Douglas McGregor, and Rensis Likert, you may want to skip this section and move on to "The Minnesota Study" in the following section where we'll discuss specific findings on job satisfaction of WP operators. On the other hand, if you've got a minute, read on and I'll try to give you a management perspective for making Word Processing work. We'll quickly look at five theories you should understand before you manage WPC people. In order to successfully direct the actions of others, you, as a project officer/supervisor, need some basic knowledge of current motivational theories. This section provides a snapshot review of the works of the above people. You'll recall that in Chapter 1 I recommended Datapro's Automated Office Solutions for professional reading. This section is based on an article in that book entitled "Guidelines to Current Motivational Theories." I will relate these concepts to the management of WPC personnel as we discuss them.

FIVE IMPORTANT STUDIES AND THEORIES

In 1924-1933, the Western Electric Company conducted a research project at its Hawthorne Works on the factors in the work situation which affect the morale and productive efficiency of workers. Since these studies, a lot of additional research has offered different and at times conflicting ideas on worker motivation. At the least, we know that the most expensive machines are only as effective as the people who operate them and to a great extent the operators are only as effective as the supervision they receive. The motivation challenge is important to you because all the impressive time and cost savings your WP study predicts may vanish if the staff becomes discontented with WP. If your WPC personnel are discontented, the effects will be felt by their clients--the Action Officers in the staff, and you'll soon be up to your eyeballs in alligators. Don't forget that the WPC's success depends the project manager/supervisor's ability to build good working relationships among the Action Officers, WPC personnel, and top management. It's important, therefore, for you to be aware of and deal with the human aspects of change prior to systems implementation; careful planning will save you "tons" of trouble fixing a problem after the system is operational.

Let's take a brief look now at the motivational theories. We'll then discuss two surveys made to measure job satisfaction of magnetic keyboard operators, and conclude this chapter with job enrichment and how it can apply to Word Processing.

A CAPSULE REVIEW OF MOTIVATION

One. Maslow's Hierarchy of Needs theory rests on two basic observations concerning human behavior. Some needs are more powerful than others; and there is a linkage of needs--a hierarchy. The three most basic needs have been largely satisfied in the home or by work: (1) Physiological Needs (food, water, etc.); (2) Safety Needs; and (3) Belongingness and Love Needs (social needs, identity of group membership). The two highest of Maslow's needs--(4) Esteem Needs (self-respect, personal competence, recognition) and (5) Self-Actualization (the desire to reach your maximum potential) are still strong motivating factors for many people. As WP project officer/supervisor, you can't

"play needs" like a pinball machine because a person's needs change from day to day. The upper two needs are primarily met within the individual because, to a degree, these needs are ideas within a person's own mind.

The value of Maslow's theory is that it permits management to recognize that when a powerful need is not met or satisfied, it tends to direct personal behavior. After a need is "satisfied," additional "servings" of the same need cannot increase the motivation of the worker. When we get to the top two needs, the authoritarian (Theory X) management style isn't successful. The bottom line is that we have to be aware that the saying "different strokes for different folks" is situational and depends on the person.

Two. Herzberg's studies in the 1950s complement Maslow's. Herzberg found five Dissatisfiers--"environmental" factors that cannot be used to motivate an employee--they sustain or maintain him. These elements are called "Hygiene or Maintenance Factors" and include: company policy; working conditions; interpersonal relations; and money, status, and security. Experiences with the dissatisfiers cause people to be unhappy or dissatisfied on the job. Herzberg calls the satisfiers motivators. The satisfiers relate to what people do--the tasks they accomplish and include achievement, recognition, interesting work, responsibility, and growth and advancement. The importance to you as a manager/supervisor is that you must take care of the Maintenance issues such as pleasant working conditions, etc., and then concentrate on what really motivates people--achievement, recognition, etc. Your task then is to do what you can to make your WPC as "motivating" as possible. If WPC personnel are not treated well, they can cause many problems. If they are treated well, adding "additional servings" of Maintenance items won't increase their motivation. You've got to get to the motivating issues which relate to self-esteem and self-actualization. When we discuss recent Air Force efforts to use job enrichment in WPCs, we'll examine this relationship more closely.

Three. McClelland's studies of "high achievers" are important because we always want employees who are "self-starters." McClelland found six key elements you can use to help create an atmosphere in which people can become achievers. These elements which allow

individuals to have some degree of input into their jobs are:

- a. Setting Own Goals
- b. Personal Responsibility for Goal Achievement
- c. Moderately Risky Goals (not too easy a job)
- d. Prompt and Meaningful Feedback (on how they are doing)
- e. Rewards/Recognition Tie-in (translates into good job = reward)
- f. Support and Encouragement when Desired (supervisor of WPC provides help when asked).

Let's hit the main point again--if the above six elements cause people to become achievers, then try to build these factors into jobs in the WPC and your personnel will begin to achieve their potential.

Four. Argyris' and McGregor's studies focused on the impact of the work environment on individuals. Argyris found that in those organizations where employees have some control over their work environment and in planning (in our case for change to WP), they tend to behave in an adult manner. When you block this adult tendency and treat them like machines, they react in a childlike manner and suddenly you've got "personnel problems" and high turnover rates in your WPC.

Five. McGregor developed Theory X and Theory Y to describe management styles. You can use these theories to see where you fit. Briefly, Theory X holds that people are basically lazy, have to be constantly motivated, resist change, and therefore you as project manager/supervisor must direct people's efforts by tight control and the "carrot and stick approach." If you fit Theory Y, you react opposite to Theory X and are probably more flexible--you'll try and modify the situation rather than (fitting) modifying people to the situation. Let's not forget McGregor's "self-fulfilling prophecy phenomenon." The attitude and behavior you as the manager/supervisor see in your people may be a direct result of the way you manage. If you "telegraph" your assumptions about an employee's ability, etc., you're likely to see that behavior because we tend to become what people expect us to be--smart, dumb, lazy, etc.

By now you're probably asking, "How do we change people's behavior?" Likert would answer this question by telling you to adjust your management style which may in turn change your employees' perception of the environment which then leads them to modify their behavior and conduct a more successful operation.

So much for the theory. What studies of actual WPCs have been made and what has been discovered that you can use?

THE MINNESOTA STUDY

Ms Mona J. Casady wrote her PhD thesis in 1973 on Job Satisfaction of Magnetic Typewriter Operators in Word Processing. She surveyed 111 companies in Minnesota which used WP equipment. A sample of 74 WP operators participated in her study. Among the educational instruments she used were the: Minnesota Satisfaction Questionnaire (MSQ) to measure job satisfaction; and the Minnesota Importance Questionnaire (MIQ) and Employee Questionnaire to predict job satisfaction. The participants reflected in the MIQ that in an "ideal" job, the most descriptive characteristic was the operators' need for achievement--a job that would give them a feeling of accomplishment. They also liked jobs where they were able to use their abilities and had a good chance for advancement. The MSQ scores suggested that operators were most satisfied in their actual WP jobs with the "pay and amount of work they do" and with the "way they get along with their co-workers." When asked about which work factors contributed most toward their job satisfaction, the operators listed the highest four as:

- a. Quality of the finished product (and ease of correcting errors)
- b. The large volume of documents they produced with speed.
- c. The variety of tasks.
- d. The degree of independence and responsibility involved with their jobs.

The operators were then asked to identify factors which cause job dissatisfaction. They listed the main dissatisfiers as:

- a. Pressure to produce more work in less time.
- b. Repetitious work which causes boredom.

- c. Being treated as a machine rather than a person--the lack of recognition and appreciation.

In terms of vocational needs, Ms Casady's study identified the strongest need of magnetic typewriter operators as the need for a job that could give them a feeling of accomplishment. She identified 14 employee or job characteristics which do not significantly relate to job satisfaction including: their amount of education, age, level of previous experience, type of machine operated, etc. Also of interest to Air Force supervisors was her finding that neither English nor spelling skills relate strongly to job satisfaction.

As a result of this study, you should stress to the potential WPC employees the need for their being able to work in close cooperation with others. You should clearly indicate the potential source of job dissatisfaction. Let's try and tie this information in with the more recent findings that apply to WPCs.

THE AIR FORCE INSTITUTE OF TECHNOLOGY (AFIT) STUDY

In 1977, two AFIT students, Majors Donald R. Joyner and Jon N. King conducted A Behavioral Assessment of Word Processing Centers. The focus of their study was on the 16 WPCs at Headquarters Air Force Logistics Command (AFLC), Wright-Patterson Air Force Base, Ohio. These centers were established as a result of a "crash project" in about four months in 1976. It is my understanding that this project was completed because of a severe shortage of civilian personnel funds at HQ AFLC. The study revealed that the WPCs have experienced personnel turnover rates twice that of base-wide clerical personnel and the expected productivity levels have not been achieved. *The stated objective of this study was to determine the relationship of job satisfaction to other behavioral outcomes of personnel assigned to WPCs.*

During the study, there were 104 women assigned to HQ AFLC WPCs; 62 provided usable responses. The researchers tried to measure potential turnover rates, operator productivity (measured in lines of production per day), and job satisfaction of the 62 personnel. *The officers compared the 62 women with previous job satisfaction studies of personnel in all occupations,*

men and women, in a wide variety of jobs. In my opinion, this places their findings in question--they should have measured AFLC WPC operators against all other clerical personnel on Wright-Patterson AFB and against other MAJCOM WPCs. In any case, their study disclosed that WPC personnel were significantly less satisfied with their jobs in terms of the type of work itself and their chances for promotion. The operators, as was reflected in the Casady study, were most satisfied with the quality of their supervisors. The response for pay and co-workers (hygiene factors) was normal. They also found that operators who were low producers of work had more concern with their pay.

What is important for you as a project officer and supervisor is their finding that because of the "haste" with which the WPCs were established, Herzberg's motivating factors of achievement, recognition, work itself, responsibility and advancement, were either

. . . lightly considered or ignored. As a result, loss of autonomy, lack of task significance and skill variety, reduced task identity, and less feedback have caused general dissatisfaction among WPC employees. . . . Threatened loss of identity and the appearance of production type work created uneasiness among employees due to potential layoffs. . . .

The authors recommended that management needs to reestablish meaningful relationships between the operators and action officers. They also suggested that the supervisors rotate the unique and repetitious jobs in the centers.

You may recall from my review of Herzberg's theories that satisfaction with their supervisors is a hygiene factor and will contribute little to job satisfaction.

PUTTING IT ALL TOGETHER

Let's put all of this information together and look at the factors involved in what I consider to be a successful WPC. HQ ATC implemented their WPC in a gradual, carefully planned manner with full support of the ATC commander. They rotate their unique jobs between operators and make extra efforts to insure

employee satisfaction and motivation. The operators consider that their careers have been broadened by the fact that their supervisors encourage direct contact with the action officers (dictators). There is an obvious and open line of communication between operators and top management. Because of the manner in which the operators were not forced to work in the WPC, and because the WPC does work for all levels of the headquarters, including the ATC command section, the operators have strong job identity and satisfaction. The personnel who have left this center have done so because of promotion, transfer of the husband, or retirement. Let's now turn our attention to job enrichment and what it offers to WPCs.

JOB ENRICHMENT

BACKGROUND

One of the newest, most popular behavior-oriented management theories is job enrichment (JE). Some authors call JE work redesign or job enlargement. It began in the United States with the research of such people as Frederick Herzberg and Louis Davis. The Journal of Applied Psychology; Personnel; and the Harvard Business Review frequently feature JE articles. In particular, I recommend you read the following four articles: "Is Job Enrichment Just a Fad?" by J. Richard Hachman (Harvard Business Review, September-October 1975); "A New Strategy for Job Enrichment" by Hachman, Oldham, et al. (California Management Review, Volume XVII, No. 4, Summer 1975); "Job Enrichment Factors for the Secretary" by Paul G. Traux (Word Processing Report, Volume 6, No. 11, June 1, 1974); and "Does Job Enrichment Really Pay Off?" by William E. Reif and Fred Luthans (California Management Review, Volume XV, No. 1, 1972). These four articles present composite suggestions on how to implement JE and what problems you can anticipate.

What we're going to do in this section is to look at the Air Force Job Enrichment Program, how this program is managed, and review JE efforts in Air Force WPCs.

AIR FORCE JOB ENRICHMENT

The Air Force Leadership and Management Development Center (LMDC) was established in 1975 because the Air Force Management Improvement Group determined that 72 percent of Air Force personnel wanted better leadership and management and 86 percent wanted more responsible and challenging jobs. One of LMDC's projects is JE. LMDC's approach to JE relies heavily on the works of Hachman and Oldham. LMDC defines JE as "A management process which focuses on the job itself with the goals of: Making the job more interesting and meaningful; and increasing job challenge and responsibility."

The LMDC briefing on JE stresses that the focus of JE is on the job itself at the lowest level--it's not a program that's forced down on people from the top such as happens in the Management by Objectives Program. JE has top management support but goals and effects don't come from the top--they start at the worker's level.

LMDC has trained full-time JE advisors for six MAJCOMs who are augmented in their efforts by additional advisors from LMDC as needed. If you are interested in attempting to make your WPC workers' jobs more interesting and satisfying, you can contact one of the following MAJCOM JE advisors, or LMDC if your MAJCOM does not currently have a JE advisor:

MAJCOM JOB ENRICHMENT ADVISORS

<u>MAJCOM</u>	<u>NAME</u>	<u>PHONE</u>	<u>ADDRESS</u>
ATC/LMDC	Lt Col Joel Gill	875-7058/ 7050	ATC LMDC/EDCS Maxwell AFB AL 36112
MAC	Maj Anne Bonen	638-3276	HQ MAC/DP Scott AFB IL 62225
PACAF	Maj Richard Ensor	449-1761	HQ PACAF/DPZ Hickam AFB HI 96853
TAC	Capt Alan Gavron	432-5353/ 55	HQ TAC/DPACQ Langley AFB VA 23665
AFSC	Capt Robert Ginnett	858-4271	HQ AFSC/DPAM Andrews AFB DC 20334

<u>MAJCOM</u>	<u>NAME</u>	<u>PHONE</u>	<u>ADDRESS</u>
SAC	Capt John Ottino	271-3280/ 4573	HQ SAC/DPXPM Offutt AFB NE 68113
AFCS	Capt David Reusser	638-4775	HQ AFCS/CSM Scott AFB IL 62225
AFLC	Col Leon Mark	458-3955	AFLC/OJE/DPCJ Hill AFB UT 84403

LMDC's program recognizes extrinsic job factors, such as security, working conditions, pay, and factors intrinsic to the job itself--meaningfulness, sense of responsibility, challenge, and feedback. These are things we examined in the previous section on motivation. LMDC focuses on the intrinsic factors. They have found that jobs which Air Force personnel find most rewarding have five core ingredients:

- a. skill variety
- b. task identity
- c. task significance
- d. autonomy
- e. feedback.

Let's now look at Figure 4, the LMDC Job Enrichment Model (based on Hachman and Oldham), and discuss its implications. This figure is shown on the next page and is entitled "Job Enrichment."

Skill Variety--The degree to which a job requires the WPC operator to accomplish activities that challenge her skills and abilities. The more skills required, the more appealing and rewarding the job will be. In some centers, WPC operators should be allowed to proof-read their own work--the lead operator/supervisor would spot check a sample of the work, if any, unless she receives numerous complaints.

Task Identity--The job from start to finish--a complete task such as typing a complete report, rather than just a portion of the report. Another example is that corrections on a previously typed product should be completed by the original operator.

Job Enrichment

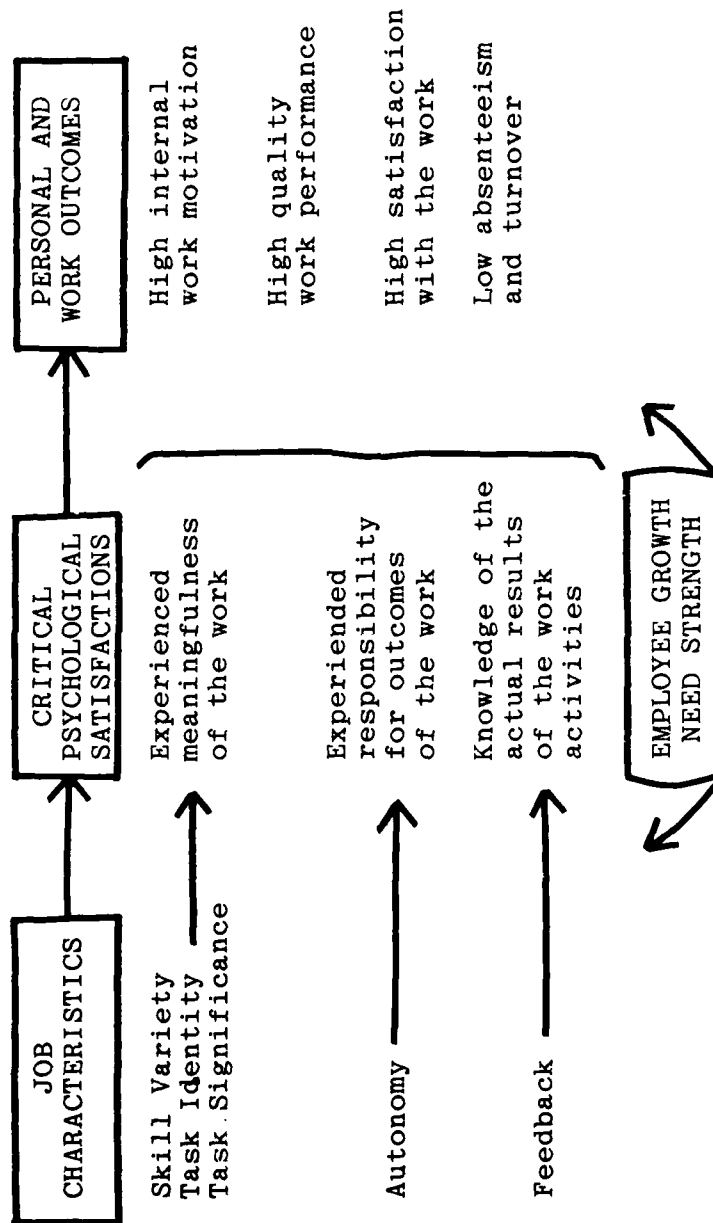


Figure 4. The Relationships Among the Job Characteristics, the Critical Psychological Satisfaction, and Personal Work Outcomes

(Source: "A New Strategy for Job Enrichment" by Hachman, Oldham, Janson, and Purdy, California Management Review, Summer 1975, Vol. XVII, No. 4, p. 58)

Task Significance--How important is the product to someone else--a document typed for the wing commander is an example. HQ ATC operators, for example, work for specified portions of the staff and identify with that group of action officers.

Autonomy--The degree of control the employee has over the job itself. Have too many external controls been placed over the job? WPC operators need a degree of freedom, independence, and discretion in scheduling their work and in determining how they will carry it out. Within the Air Force Reserve Personnel Center (ARPC), the WPC operators schedule their own work break and also can "challenge" the action officer on incorrect format. Another suggestion is to permit the operators to use the concept of flexible work hours.

Feedback--The degree to which WPC operator receives information about how well the job was accomplished. Hachman has stated that feedback is most powerful when it comes directly from the work itself--for example, when the WPC operator completes an Officer Efficiency Report error free and is aware of the importance of that document to an officer's career.

Figure 4 depicts how the five job characteristics combine to affect the psychological feelings that help to determine if a WPC operator will be internally (self) motivated to work effectively. What you want to work toward are WPC jobs that are high in at least one of the three items that result in meaningful work and are also high in feedback and autonomy.

Everything isn't a "bed of roses." As Hachman's studies indicate, not all employees will react in a positive manner to JE. Employees who have been "down-trodden" for 15 or 20 years in dull jobs may find it impossible to become self (internally) motivated. Like many management challenges, JE takes a consistent amount of effort to make it successful. Attachment 16, "Typical Job Enrichment Ideas for Advance Administrative Systems," contains LMDC's list of JE proposals for WPCs. I suggest you refer to this list now. Many of the items may be things you have already thought of--good! You may not agree with all items and some items may simply not be possible in your situation. You may have to coordinate some of these items with DPC based upon the possible impact on position descriptions (GS grade levels) and possible labor union involvement.

Don't look to JE to solve "people problems"--JE seeks to attack "job problems." Your JE advisor is trained to assist in JE implementation. If you are unable to have a JE advisor help implement your JE program, I strongly recommend you read the article "A New Strategy for Job Enrichment" which contains specific implementing instructions. The MAJCOM JE advisor will administer a 93-question "Job Attitude Survey" to your personnel to determine their degree of satisfaction with their jobs, their work relationships, etc., and to measure the jobs in terms of skill variety, task identity, task significance, autonomy, and feedback from the job. These surveys are forwarded to LMDC where they are run against a computer program which interprets the responses to establish an overall indication of the motivating potential of the job. This motivating potential score (MPS) permits your JE advisor to better assist you to implement a successful program. LMDC stresses use of the following seven implementing concepts:

- a. Design natural unit to work
- b. Combine tasks
- c. Establish operator-user relationships
- d. Remove unnecessary controls
- e. Grant additional authority
- f. Plan and schedule their own work
- g. Provide direct feedback from the work itself

By now you should be asking, "Where has this been done?" LMDC has assisted in WPC JE efforts in HQ Military Airlift Command (MAC) and has visited a number of other WPCs. It's useful at this point to examine a JE effort conducted by another agency at the HQ ARPC in Denver, Colorado.

The ARPC JE project was managed by the Department of Behavioral Sciences and Leadership, United States Air Force Academy. In order to get an idea of how JE was implemented at ARPC, I not only talked with the Academy staff, but also with the Chief, Word Processing Branch, ARPC. Let's first look at the ARPC effort from the Academy's viewpoint. Based upon the information gained in the Job Attitude Survey compared to a post-survey six months after implementation of JE, the Academy staff considered the following improvements statistically significant:

- a. Task identity
- b. Job satisfaction
- c. Satisfaction with their supervisors
- d. Communication climate
- e. Psychological climate

The Academy personnel stated that WP will never be an outstanding job from the standpoint of enrichment; but that the organizational climate can be improved, and that the nonproduction oriented (customer support) type WPCs appear to be "healthier" places to work. The Academy personnel stated that the high turnover rate (70 percent in 1978) in ARPC's centers is probably healthy in that personnel polish their skills in WP and then get promoted to different jobs.

When I contacted ARPC, I got a different outlook on the JE program. ARPC personnel do not feel that JE was successful. ARPC Administration personnel listed their main mistakes in JE implementation as:

(1) The implementing committee, which included employees from each of the WPCs, did not receive proper training and orientation on what job enrichment was all about. It was about midway in the project before we even learned the difference in hygiene and motivator items. We spent most of our time spinning our wheels on hygiene items.

(2) A lot of items that were implemented were implemented on paper only, in that they didn't work out when we tried to apply them in the work environment.

(3) A lot of items we spent hours researching and discussing in our implementing committee meetings, could have just been done, nothing more said about it, and possibly some benefits gained.

As an outsider, I think that JE was helpful to ARPC. They were able to come up with 197 items for suggested change; they implemented 39 of these items. Implementation of that many items would appear to indicate changes needed to be made and that JE was the reason they were made--it improved the "communications climate" in ARPC. Perhaps one of their most successful changes was the suggestion that operators be allowed

to fill temporarily vacant jobs (GS-316-5). Such vacancies were due to reassignment, promotion, resignation, or extended leave of the incumbent. Operators who were GS-316-4 were voluntarily detailed into the vacancy for a two-week period. Appropriate entries were made on AF Form 971, "Supervisor's Record of Employee." After a second two-week period, a Standard Form 52, "Request for Personnel Action," was initiated to enter the information in the worker's Official Personnel Folder. This action can help qualify the GS-4s for later eligibility for promotion to GS-5.

Each suggestion for JE at ARPC was subjected to a ten-step written process as follows:

- Step 1: Define the item.
- Step 2: List advantage: to employees, the organization, to customer.
- Step 3: List Disadvantage: What are the risks involved; negative consequences; impracticability.
- Step 4: Advantages against Disadvantages
- Step 5: List Roadblocks: What publications and regulations need to be changed.
- Step 6: Develop Strategies to minimize remaining disadvantages
- Step 7: Develop strategies to clear any roadblocks
- Step 8: Program the item for action
- Step 9: Anticipate individual worker responses
- Step 10: Design the item feedback: How is the item to be monitored after implementation.

SUMMARY OF CHAPTER 5

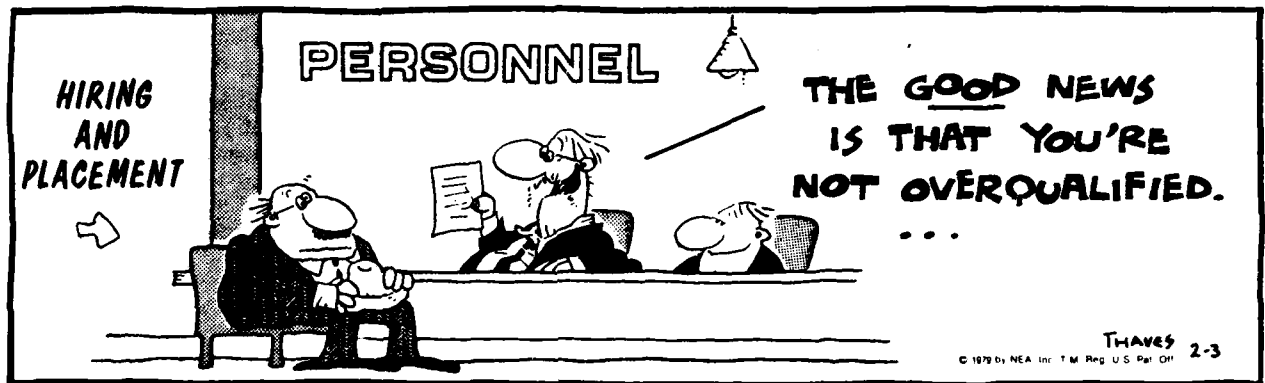
The US Civil Service Commission has decided not to create a separate classification series for WPC personnel. This decision will apparently aggravate our morale problems and accompanying turnover rate. Combining this problem with the Factor Evaluation System means that we in WP will face increased "management opportunities" in the future.

WP has experienced a technological explosion. Motivational theories of management have surfaced which appear to offer a solution to the "people problems" which the technological solutions have fostered. You as a WPC project officer or supervisor will have an increased chance for system success if you take advantage

of such motivation aids as job enrichment. The payoff for you will become visible through employee job satisfaction, improved job performance, and a healthier organization.

FRANK AND ERNEST

by Bob Thaves



Reprinted by permission of Newspaper Enterprise Association, (or NEA).

CHAPTER 6

PRODUCTIVITY



*"Looks like management's decided
it's time for another productivity gain."*

Reprinted with permission from Word Processing World,
Copyright 1978 by Geyer-McAllister Publications, Inc.,
New York.

The purpose of this final chapter is to consider what actions you should take to insure that your WPC provides both quantity and quality support, as you promised, to your customers--the staff. To help accomplish your goals, we're going to focus our discussion on various aspects of productivity: what is work measurement; should we measure work; techniques for measurement; and, recommendations for work measurement records and reports. Productivity is important because you can't make rational adjustments to the WPC (in terms of equipment, personnel, procedures) without an accurate idea of what your personnel should be achieving.

WHAT IS WORK MEASUREMENT?

AFR 25-5, Air Force Management Engineering Program (MEP), is published in three volumes and contains

detailed information about the Air Force management engineering program. As such, it's a logical place to seek our definition of work measurement. AFR 25-5, Volume I, "Policy, Responsibilities, and General Program Management," defines work measurement as

A technique for the collection of data on man-hours and production of work units, so that the relationship between work performed and man-hours expended can be figured and used as the basis for personnel planning, scheduling, production, budget justification, performance valuation, and cost control.

Arthur Thursland's Work Measurement states that

Work Measurement is a technique management employs to increase productivity and reduce cost. . . . Work Measurement is measuring, controlling and monitoring performance. Management spends 25% of the time expended in the management process measuring work.

It's fairly easy to define work measurement--it's harder to determine if we should measure work.

WHY DO WE MEASURE WORK ?

Thursland also states

The fundamental questions in all work measurement situations are: How long does it take to complete each unit of production? How many units of production can an operator produce in one day? . . . Will I be able to control costs?

Remember when you learned to conduct a WP survey at the Keesler Administrative Systems Course? You were instructed to use the expected machine performance (EMP) factors contained in AFR 4-2, Volume II, to determine the number of magnetic typewriters required in your WPC. The EMP for a mix of typing categories is 700 lines a day. The various EMPs provide one answer to the work measurement question of the number of units of production a good operator can produce daily.

OPINIONS OF THE MAJCOMS

In Chapter 1, I recommended that you read the Air Force Audit Agency Summary Report, Management of Administrative Systems Program. The Auditor recommended that HQ USAF/DAY provide to all WPCs criteria for measuring operator/transcriber productivity. On 13 February 1978, HQ USAF/DAY asked 26 MAJCOM/SOAs for their position on this matter. The responses, to my knowledge, have not been published prior to the printing of this handbook. At least 11 respondents replied in support of Air Force operator productivity standards, while another four indicated they preferred a locally developed standard.

My analysis of the 26 responses indicates that there are "stumbling blocks" over standards because significant differences exist between WPCs in terms of equipment, kinds of documents prepared, tasks assigned to the centers, organizational structure, and average document turnaround times required. Concern was also expressed that operators would feel that they were in a production-line environment rather than in a service activity. Finally, there is a degree of doubt that WPC supervisors would be able to justify the time expended on data collection when compared to the potential value and use of the information obtained.

The remainder of this chapter will answer the concerns expressed above and will suggest a method to measure productivity.

CONDUCTING THE WORK MEASUREMENT STUDY

Thursland's book amplifies MAJCOM concerns about productivity. He notes the possibility that the information may not be obtained in a usable format and may actually raise more questions than are answered. His concern is that the cost of gaining the information and applying it to the WPC may cost more than the information is worth. As he puts it: "A work measurement system that is cumbersome to use and apply will fall into disuse within a year or two. All the time, money and effort expended in its development and installation will have been wasted."

The same concern was addressed in Major Church's 1965 ACSC study Work Measurement Application to Air

Force Clerical Activities. Although Church's study was prepared prior to implementing WP, it provides insight into the approach of a professional Air Force management engineer. Church analyzed the following work measurement techniques in terms of their potential application to clerical activities:

1. Time Study
2. Predetermined Time Standards
3. Work Sampling
4. Operational Audit
5. Corelation and Regression Analysis

He noted that all five work measurement techniques have two common characteristics: mathematically, none are absolutely accurate; and, all involve varying degrees of human judgment.

The next portion of Chapter 6 is designed to familiarize you with the techniques, terminology, and methods used in Air Force work measurement studies. It's not designed to make you a management engineer; however, you should become more knowledgeable about selecting and using work measurement techniques if you intend to implement such a system in your WPC.

To insure that we're on the same wave length, I've extracted the following definitions from AFR 25-5, Volume I, and any future reference in this chapter to these terms uses the definitions contained below unless otherwise specified. Here are definitions you should know because you're likely to get help from the local Management Engineering Team (MET) when you implement your work measurement system.

Time Study: A work measurement method consisting of a careful time measurement of the tasks with a time measuring instrument, adjusted for any observed variance from normal effort to pace and to allow adequate time for unavoidable or machine delays, rest to overcome fatigue, and personal needs. Learning or progress effects may also be considered.

Work Sampling: The application of statistical sampling theory and techniques to the study of work systems. The characteristics of the sampled (observed) work performed are used to describe

the total work measurement and methods engineering to produce statistically sound estimates of the amounts of work and types of activity performed. Work sampling data can be used in conjunction with associated work counts to compute standards.

Work Unit: The basic identification of work accomplished or services performed. Work units should be easy to identify, convenient for obtaining productive count, and usable for scheduling, planning, and costing.

Standard Time: The time that is considered necessary for a qualified worker, working at a normal pace which is ordinarily used under capable supervision and experiencing normal fatigue and delays, to do a defined amount of work of specified quality when following the prescribed method.

Job Standard: Time required to accomplish or produce a particular end product or service, or a group of products or service.

Operational Audit (OA): A MEP work measurement method consisting of one or a combination of these techniques; good operator, historical performance, technical estimate, and directed requirement.

Productivity: The efficiency in using resources to carry out a given mission. Measured in terms of the ratio of output to input. Also, the ratio of actual performance to standard performance, or level of performance, in a previous period--applicable to either an individual worker or a group of workers.

Standard: Any established or accepted rule, model, or criterion against which comparisons are made.

The current issue of AFR 25-5 uses the term "standard time" to refer to predetermined times. In his study, Church defined Predetermined Time Standards from the then AFM 25-5 as follows: "All systems of predetermined time standards are based upon standard data gathered by time study or other standard setting techniques where times are established for each element of a job."

Church concluded that predetermined time standards, work sampling, and operational audit could be used to determine manning requirements in Air Force clerical activities. He noted that Predetermined Time Standards were a relatively precise technique adaptable to clerical activities but they were relatively complex and time consuming to prepare. Work Sampling was depicted as having considerable accuracy and, in this respect, he considered it comparable to Predetermined Time Standards. He judged that the Operational Audit was a technique largely dependent on individual judgment and, consequently, less accurate than either of the other two techniques. Church's summary was ". . . a combination of Predetermined Time Standards and Operational Audit would best serve the overall Air Force objective of expediency with acceptable accuracy." He based this conclusion upon the fact that any system selected for work measurement should be economical to apply, expedient, and flexible so that it could be changed when changes in the work unit occur. Therefore in 1965 Major Church made these recommendations

The Air Force should develop acceptably accurate Predetermined Time Standards for repetitive clerical activities which can be applied consistently throughout the Air Force. . . the Operational Audit technique should be used by technicians as a secondary means of establishing time standards for clerical tasks which are not adaptable to Predetermined Time Standards.

At this point you should understand that there are numerous analytical techniques for measuring work in WPCs. The question you have to answer in your case is, "How much information do I need to accomplish my objective?" Thursland sums it up this way:

The components of a work measurement study are the flow of work, the process for performing work, the definition of the various types of work performed and the volume count of work produced. This information will be collected during the study from three principal sources:

- Written material, records and reports
- Interviewing people performing the work
- Observation of the people at work.

With the previous information as background, we're now going to examine work measurement standards and practices currently in use in the Air Force and then review a recent MET study of a WPC.

AIR FORCE WPC PRODUCTIVITY MEASUREMENT

AFR 4-2, Volume II, requires WPCs to prepare AF Form 1509, "Administration Center Work Request," for each job typed in WPC. The 1509 is the "single most important form used to manage the workload. It tells what to do, how to do it, and when to do it. It is used to control the flow of work through the center" The 1509 indicates the following information:

1. Time the job is received in the WPC.
2. Name of the operator who will do the work.
3. Date/time the operator started the job.
4. Date/time the job was finished.
5. Total time.
6. Page count--the number of finished pages.
7. How the job was received--dictation, hand-written, etc.
8. When the job is returned to the customer.

Monthly, each WPC supervisor reviews the 1509s and counts each form as a job. The total number of jobs (not pages) is calculated and sent to the DA.

My analysis of the 26 inputs from the MAJCOM/SOAs and my interviews with MAJCOM/DAY personnel indicate dissatisfaction with the current system. The primary concern is that the number of jobs does not reflect the productivity of either the individual operators or the center. Let's assume your WPC monthly report reflects accomplishment of 358 jobs in July and 400 in August. Does that mean that the WPC was more productive in August? Not necessarily because the report fails to answer two questions that should be very important to you as the supervisor--did the operators produce more actual work in August, and did they get the jobs back to the customers when required? The monthly reports also do not permit the DA to compare productivity of operators or centers because there is no indication of what kind of work was performed (statistical, short letters, long reports, etc.) or the quality of the work. The form and the report also do not provide the supervisor a method of performing another vital task--

analysis of job turnaround time. When a customer sends in work, the supervisor should be able to tell when the job can be completed and returned. If the supervisor had this capability, he/she could assign work to a particular operator based on job load and turnaround times required of previously submitted work. The result would, of course, be balanced workload between operators, improved management, and better customer service.

Now that we've examined the deficiencies of the current system, let's take a look at what local productivity standards are being used at two MAJCOMs and then at a MET study of a WPC.

HQ AFLC

When HQ AFLC/DAX implemented WPC at that headquarters, it published Headquarters Operating Instruction (HOI) 11-1, "Administration Center Policy and Procedures," and Appendix 2 to HOI 11-1, "Word Processing Center Standard Operating Procedures." These HOIs are Attachments 17 and 18, respectively. HOI 11-1 requires DAX, in coordination with DPQ, to determine manpower requirements, develop production standards, and standard position descriptions for WPC personnel. *DAX clearly defined the services provided by the WPCs.* Appendix 2 of HOI 11-1 ". . . establishes and describes the methods and procedures which will be employed in WPCs to achieve optimum productivity and job enrichment." The established standards classify work in five categories for two different brands of equipment. The standards reflect output in lines per hour and day for each brand of equipment. AFLC Form 613, "AFLC WPC Monthly Report," clearly depicts the turnaround times for each type of work accomplished and also indicates the work backlog. Please refer to Attachment 18 and review a sample of AFLC Form 613--you'll see many of the various productivity measurement techniques we've discussed in this chapter. Section 8 of the form also reflects daily personnel productivity and the lines per day per WP specialist.

When HQ AFLC implemented WPC, they also set a target goal of 45 percent of all work to be dictated to each center. The Form 613 indicates the percent of dictation for each center. AFLC/DA has stated that they use this percent figure to compile "a headquarters

average dictation use rate" and compare it with their target goal. If necessary, dictation recording equipment can be increased or decreased. *The important point to remember is that without a goal and without a data collection method and work measurement standard, management could not make intelligent decisions regarding either increasing or decreasing the number of keyboards, personnel, dictation recorders, or changes to the center's configuration.*

HQ ATC

The position held by HQ ATC/DAY is that the most meaningful measure of operator/transcriber productivity is achieved through use of a factored line-counting system. HQ ATC WPC policies are specified in their HOI 11-2, "Line Counting Procedures," which is reproduced as Attachment 19. A factor is "a term used to identify the weight/credit given for the level of difficulty of a typing project." The ATC factor system is similar to AFLC's in that categories of work are specified. The operator completes each job and then uses the "Factored Line Guide" to compute the "credit" given for the job. If you refer to Attachment 19 and the "Factored Line Guide," you'll find, for example, that if an operator keyboards ten original lines, 100 percent credit is given; if 50 percent of the lines are revised lines, only five lines are credited.

ATC primarily uses this factored line count for operators who are still in a training status. After a fully qualified operator consistently attains "productive levels," they are not normally required to count lines. The WP supervisor watches for consistent rates of low production to determine when an operator should return to a measured line count. ATC considers that WPC personnel don't like being timed--line counting adds to operator stress. There is also a feeling that the time spent gathering such statistics, while not specifically quantified, is at best a distractor.

Now that we've examined two DA developed standards let's examine perhaps the most comprehensive study of a WPC made by a MET.

CHANUTE AFB MET STUDY

During the period May-December 1977, the Chanute AFB MET conducted a study of the WPC operated by the

3350th Technical Training Wing at Chanute AFB. The primary purpose of the study was ". . . to develop a work center description and statistical manpower standard for. . ." the Chanute WPC and ". . .to develop methodology useful in other WPC studies."

As recommended in Thursland's book and applied at HQ ATC and HQ AFLC, the MET study recognizes variations: categories of work submitted (handwritten copy, dictation, prerecorded, and revision), type of originating activity (combat support group, tech training center), and type of machine used to keyboard the materials. *The MET used the techniques of work sampling and operational audit as the measurement method. MET made extensive use of "job request logs and line count reports" maintained by the WPC. The study also considered turnaround time for routine and priority work.*

The MET study found that operator productivity was influenced by the amount of work to be done. "The more work logged in, the harder the work center personnel worked." MET decided not to use a factored line count system. They stated, "It would be more effective over the long term to retain separate line count reporting. This would permit more accurate adjustments of the manpower equation coefficients at a later date, if significant changes in equipment or in the relative amounts of the different typing requirements so dictated."

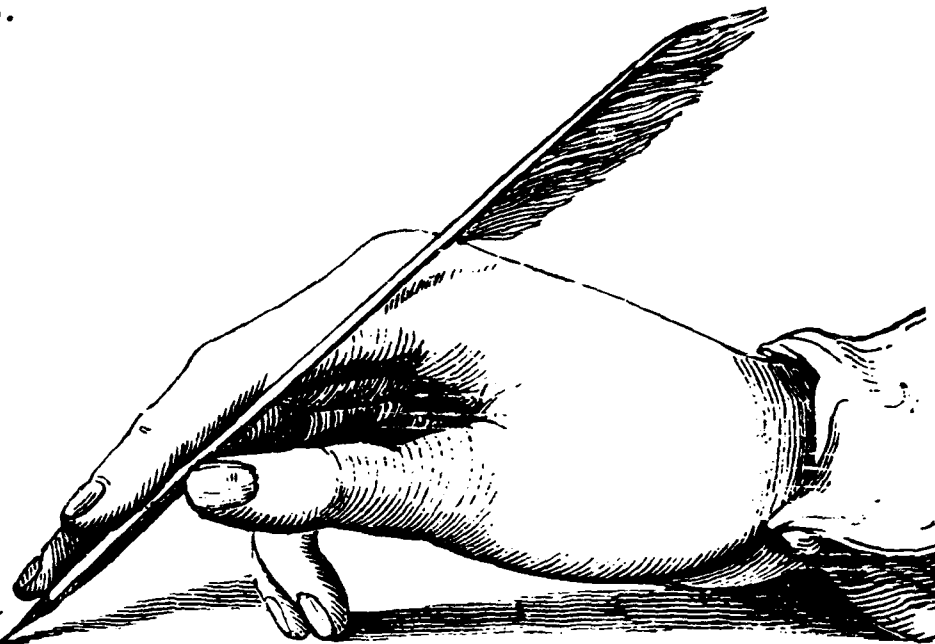
An interesting aspect of the MET study is that the manning authorized in the Chanute WPC was not adversely affected by the MET study. It is also significant that MET made use of the historical records maintained by the WPC--the line count records. Their use of such records indicates the need of some positive method of productivity measurement.

CONTINUING TECHNOLOGICAL CHANGE AND PRODUCTIVITY

Some of the newer WP systems automatically record the number of key strokes in each job typed. At the end of each job, the machine prints out a record for the WPC supervisor indicating the date the job was typed and the number of key strokes, and in some cases, the time lapsed from start to finish of the job. While such systems certainly would delete the requirement for the operators to measure the number of lines they've produced, they do not answer the question of how responsive is the WPC--the turnaround time. The use of

MET type work measurement studies using the Operational Audit method reflects three primary techniques: the good operator, historical performance (line count records), and technical estimates of the time it takes to do a job.

of
special
interest



I think that the Chanute study and the more modern WP systems which automatically collect certain workload data validate the need for you as a WPC project manager or supervisor to have the following information available:

1. Standard specified techniques for doing each type of job (frequently called applications).
2. Predetermined time standards for each application, method of submission, and the machine the work is to be accomplished on in your WPC.
3. Accurate historical records of work accomplished in your center.
4. Clearly identified services that the WPC provides.

5. Written turnaround time goals for each service provided.

The volume counts of units of work produced by the operators should be developed without requiring the operators to use a major portion of their available productive time accumulating the data. The standards you establish in your center should not only tell how long it actually takes to complete a job, but more importantly, they should reflect the work that is to be accomplished and how long it should take a good operator to complete that amount of work. If you desire, you then can apply this Predetermined Time Standard to the production performance of an operator and determine his or her productive effectiveness. The productive effectiveness will be a measurement of the individual's production compared to your standard. I'm not advocating that this be done every day--I am stating that proper use of Predetermined Time Standards and work measurement will provide you this capability.

WORK MEASUREMENT RECORDS AND REPORTS

Until or unless HQ USAF/DAY establishes a different method of productivity measurement my recommendation is that you contact your local MET team and, in accordance with AFR 25-5, Volume 3, request that the MET perform a Management Advisory Service. The Management Advisory Service provided by the MET can enable you as the project officer and supervisor, in conjunction with the MET, to determine realistic and fair Predetermined Time Standards for the different applications of work and the equipment they are to be performed on. This will enable you to gather the kinds of work measurement information you need. Thursland states that the major goals of a work measurement program are to gain the following management information:

- To gain control of labor costs.
- To bring the efforts of people and machines to expected capacity.
- By developing better work methods.
- By determining employee training needs and designing programs to satisfy training needs.
- By establishing quality standards for services.

- By developing practical production quotas.
- To determine the individual and collective production of people and organized groups.
- By developing standards of performance.
- By establishing realistic staffing requirements.
- By developing production planning controls.
- By setting up accurate production schedules.

Obviously not every WPC will have the same standards. Base your standards on your needs. Keep in mind that when any system requires an excessive amount of time for the operators to prepare records, the system will likely fail. I recommend that you submit a monthly performance report to your management. This report should reflect the overall effectiveness of the WPC. It should include such information as the period of time covered by the report, the number of personnel in the WPC, the stated goals in terms of turnaround time established by the center, and how well the center met that goal. It should indicate your work backlog and the significance of the amount indicated. You should also include training that you have given to any operator and any recommendations you have for equipment or system improvements. If possible, indicate the amount of work produced for each staff agency served and the percent of dictation input by each staff agency. What you are trying to show, among other things, is the relationship between the work you have to do and the available personnel.

SUMMARY OF CHAPTER 6

What I have tried to do in this chapter is to make you aware of what work measurement is, why it is needed in word processing centers, the various techniques that are used in work measurement, and, to put performance standards in the proper perspective. *There is no one universal standard valid for all WPCs. You should work to establish, at the outset of implementing your system, reasonable standards for job performance. When properly developed and conscientiously applied, work measurement standards in WPCs can become an effective management tool. You must periodically determine whether or not the production goals of your WPC are realistic under your present conditions.*

CONCLUDING COMMENTS

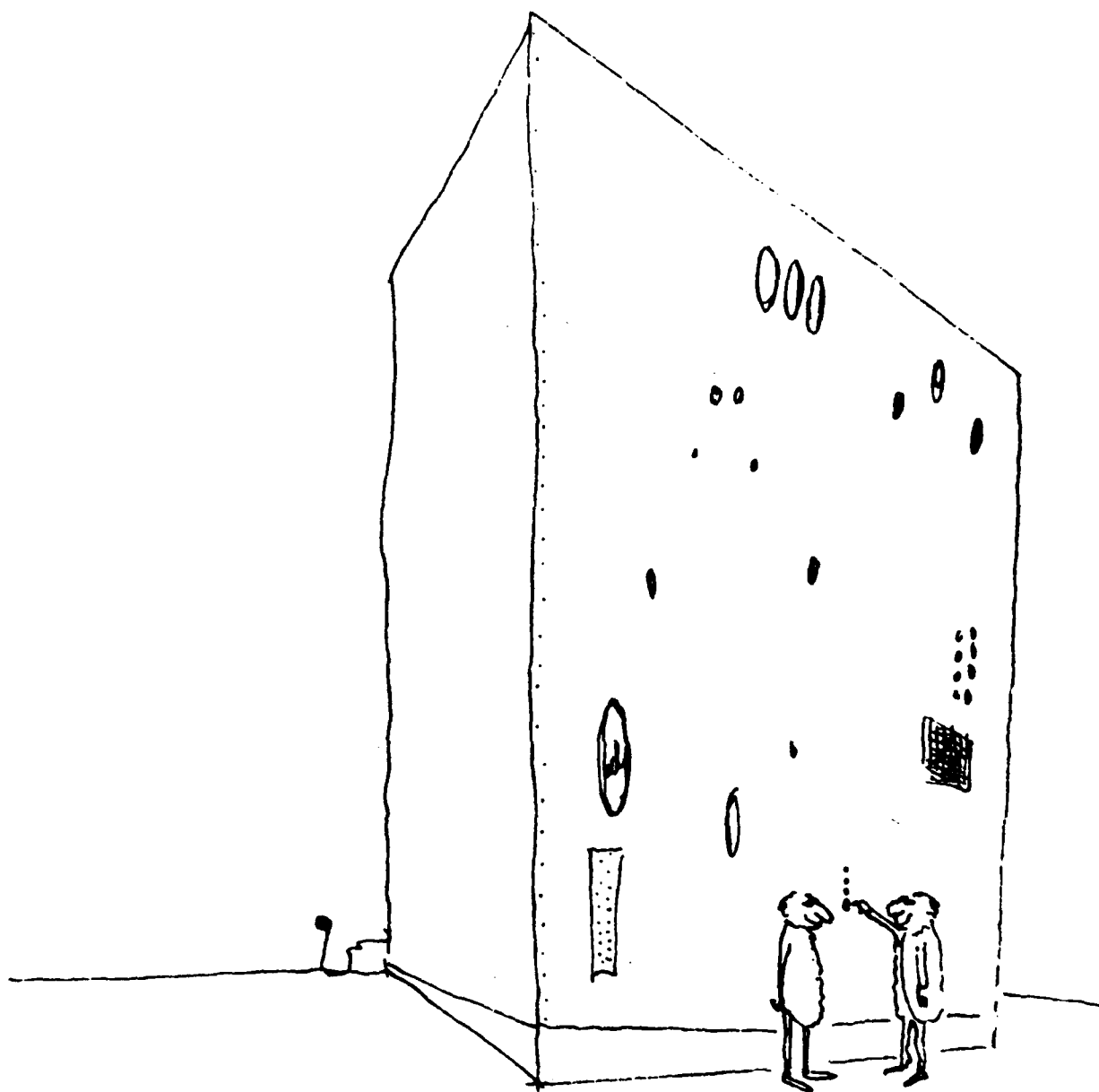
I've tried to include in this handbook things you really need to know. Your job isn't easy and there are a lot of alligators in the swamp. The following page contains some of the frustration I felt the first time I implemented a center without a handbook to guide me.

Seven Phases of Project Development

- I Exultation
- II Disenchantment
- III Confusion
- IV Search For The Guilty
- V Punishment Of The Innocent
- VI Neglect Of The Deserving
- VII Distinction For The Uninvolved

139

I've been accused by Management of failing to measure the workload of their office at the "correct time." The next cartoon reflects that charge.



"Of course, bull in pure form is rare. There is usually some contamination by data."

I hope this handbook has been helpful and would appreciate your comments.

ATTACHMENT 1

Administrative Systems 3AZR70270 Class Schedule

ADMINISTRATIVE SYSTEMS

3AZR70270

C L A S S S C H E D U L E

DAY 1

Orientation
Admin Systems Briefing
Background of Admin Systems
Center Tour
Office Systems Technology

DAY 2

Pre-survey Procedures
-Sizing Up the Situation
-Change Process
-Custom/Production
-Planning and Implementing
Admin Systems
-Designing Admin Systems for
Different Work Environments
Center Tour
Introduction of Case Study
-Debriefing

DAY 3

Survey/Data Collection
-Pre-survey Budgeting
-Action Officer Supporting Work
-Non-typing Support
Survey Techniques
-Data Collection
-Forms Completion
-System Analysis

DAY 4

Survey Techniques
Equipment Selection/Requisition
Guest Speaker
System Design

DAY 5

Case Study

DAY 6

Case Study

DAY 7

Implementation
-Implementation Actions
-Job Design
-Position Descriptions
-User's Guide/Internal Operating Procedures

DAY 8

System Management
-Admin System Management
-Management Tools
-Data Acquisition
-Work Project
Written Evaluation
Critiques
Graduation

ATTACHMENT 2

List of Viewgraphs and Films

List of Viewgraphs and Films

Page

Viewgraphs

<u>Number</u>	<u>Title</u>	
1	Cover Viewgraph	15
2	Overview	16
3	Word Processing Is	17
4	Word Processing Equipment	19
5	Last Holdout to Automation	21
6	Basic Paper Flow	23
7	The Secretary	25
8	Why a Bottleneck?	27
9	Today's Air Force Office Problems	29
10	What Can We Do?	31
11	Without Word Processing	33
12	Use Word Processing to Eliminate Time Wasters	35
13	Resulting in a Balance	37
14	Administrative System Survey Development.	39
15	Administrative Systems Survey Considerations	41
16	Word Processing	43
17	Word Processing Staircase	45
18	Status of Word Processing	49
19	Status of Word Processing (Contd)	50
20	Status of Word Processing (Contd)	51
21	Status of Word Processing (Contd)	52
22	Status of Word Processing (Contd)	53
23	Status of Word Processing (Contd)	54
24	Quote from Oliver W. Holmes	63
25	Administrative Systems Analysis	64

Films

Kissing the Girls Goodbye	56,60
The Pivot Point	57
Worries and Wonders	60

ATTACHMENT 3

DA Letter, 11 Jan 79, Word Processing
Implementation

DEPARTMENT OF THE AIR FORCE



REPLY TO
ATTN OF: DA

11 JAN 1979

SUBJECT: Word Processing Implementation at

TO:

1. Reference
Processing Implementation at

Programming Plan 78-9, Word
dated 27 June 1978.

2. The decision to implement word processing evolved from a need to reduce the high cost of current administration and increase the efficiency of [at a time when available Air Force resources are declining. Administration has always been labor intensive -- it takes a lot of people to type, file, and otherwise handle paper. Word processing is a more cost effective and efficient alternative that can produce annual savings of over \$1 million; however, this requires 102 administrative authorizations to be deleted or reprogrammed to other functional areas.

3. Attachment 1 is the word processing report compiled from survey data. Option Two and all recommendations have been approved for This option centralizes word processing at the Deputy Chief of Staff level, is user oriented, manned and operated, offers the greatest savings, and will facilitate conversion to new information management technology.

4. Option Two will be implemented according to a phased schedule (Atch 2) beginning 2 April 1979. The phased schedule is an estimate only and may have to be modified as necessary. DA is overall project monitor for this effort and will make central selection of all equipment and furnishings. Full staff cooperation and specific functional expertise will be required from Procurement, Supply, Logistics, Civil Engineering, Personnel, Manpower, Communications, and others to ensure a smooth transition to word processing. Office space needed for WP and administrative support will be generated by using organizations through internal realignment of their currently assigned office space.

5. The filling of administrative positions will be suspended immediately in order to permit a committee of DA, DP, and XPM representatives to determine the most desirable policies necessary to achieve 102 personnel reductions by the time the last center is installed. Some interstaff and intrabase reassignment of personnel may be required to attain authorized administrative levels. Every effort will be made through attrition and transfers to provide continued employment for all administrative personnel. In order to achieve the desired financial economies, each agency will ensure that the savings for each position identified for deletion will average at least \$13,000.00.

6. Agencies implementing word processing should begin to seek highly qualified volunteers, both civilian and military, for word processing operators. The requirement to provide career progression for each category must be recognized and honored.

7. By 18 January 1979 each agency will identify by letter to DAY a project officer and alternate, responsible for implementing their word processing. Subsequently, a meeting with project personnel will be held to discuss word processing center and administrative support areas, facility modifications, positions for deletion/reprogramming, training, and general program requirements.

Chief of Staff

USAF

2 Atch

1. Word Processing Report
2. Implementation Schedule

Cy to:

DIRECTORATE OF ADMINISTRATION

SYSTEMS MANAGEMENT DIVISION

WORD PROCESSING SURVEY REPORT

...A TRANSITION TO TECHNOLOGY

WORD PROCESSING SURVEY

- --15 WORK DAY SURVEY CONDUCTED
 - --19 DCS/DIRECTORATES, 573 ADMINISTRATIVE PERSONNEL SURVEYED
 - --SURVEY DATA COLLECTED, AND ENTERED, INTO AF/DAY COMPUTER PROGRAM
 - --REPORTS VERIFIED AND SUBMITTED BY EACH AGENCY
 - --SURVEY METHODS AND COST DATA PRESCRIBED
- AFR 4-2, VOL 11
- AFR 173-10, VOL 1, TABLES 20, 24, MILITARY AND CIVILIAN PAY DATA

MAJOR FINDINGS

- --- TIME ACCOUNTING
- --- TYPING
- --- CURRENT ADMINISTRATIVE COSTS
- --- OBSERVATIONS IN GENERAL AND ON AGENCY REPORTS

TIME ACCOUNTING
ADMINISTRATIVE DAILY TASKS

<u>TASK</u>	<u>*%</u>	<u>MIN</u>	<u>TASK</u>	<u>*%</u>	<u>MIN</u>
MAIL	8	27	FILING	6	19
TELEPHONE	8	27	STENO	0	1
TIME/ATTENDANCE	0	1	WRITING	3	9
RECEPTION	3	12	PROOFING	6	18
SUPPLY	1	4	MAKE-UP	3	11
CORR CONTROL	6	19	COPYING	3	11
OPEN/CLOSE	1	5	SURVEY	7	23
TRAINING	4	13	ERRANDS	8	25
RESEARCH	8	27	OTHER	7	20
			TYPING	<u>17</u>	<u>55</u>
			T O T A L	100	5 HRS 22 MIN

* PERCENTAGES ARE ROUNDED

TIME ACCOUNTING DAILY

● --PRODUCTIVE TIME

--NON-TYPING

--TYPING

HOURS MINUTES

4 27

 55 =

5 HRS 22 MIN

● --UNPRODUCTIVE TIME

--UNKNOWN

--LEAVE

1 49

 49 =

2 HRS 38 MIN

● --OVERTIME

--NON-TYPING

--TYPING

5 1/2

 1/2 =

6 MIN

TOTAL

8 HRS 6 MIN

TIME ACCOUNTING DAILY CONT'D
PERCENTAGES OF PRODUCTIVE/UNPRODUCTIVE/OVERTIME

<u>AGENCY</u>	<u>PERCENT OF PRODUCTIVE TIME</u>	<u>PERCENT OF UNPRODUCTIVE TIME</u>	<u>PERCENT OF OVERTIME</u>	<u>AVERAGE PRODUCTIVE HOURS/DAY</u>
AC	66	34	0	5 HRS 18 MIN
AD	70	30	1	5 HRS 36 MIN
CS	64	36	14	5 HRS 6 MIN
DO	66	34	2	5 HRS 18 MIN
DP	73	27	1	5 HRS 54 MIN
DT	75	25	0	6 HRS 0 MIN
HC	74	26	0	5 HRS 54 MIN
HO	82	18	0	6 HRS 30 MIN
IG	79	21	0	6 HRS 18 MIN
IN	67	34	3	5 HRS 18 MIN

TIME ACCOUNTING DAILY CONT'D
PERCENTAGES OF PRODUCTIVE/UNPRODUCTIVE/OVERTIME

AGENCY	PERCENT OF PRODUCTIVE TIME	PERCENT OF UNPRODUCTIVE TIME	PERCENT OF OVERTIME	AVERAGE PRODUCTIVE HOURS/DAY
JA	79	21	2	6 HRS 18 MIN
LG	69	31	4	5 HRS 30 MIN
NR	76	25	0	6 HRS 6 MIN
OI	74	26	6	5 HRS 54 MIN
SG	73	26	1	5 HRS 54 MIN
SP	73	27	0	5 HRS 48 MIN
XO	58	42	7	4 HRS 42 MIN
XP	64	36	5	5 HRS 6 MIN
	58	42	1	4 HRS 36 MIN
HQ AVERAGE	67%	33%	2%	5 HRS 22 MIN

TYPING

●--EVERY DOCUMENT TYPED WAS LOGGED AND ASSIGNED A PROJECT NUMBER

●--TYPING LOGS AND DOCUMENTS WERE COLLECTED AND ANALYZED

●--57% OF ALL TYPING REQUIRED A TURNAROUND OF LESS THAN EIGHT DUTY HOURS

●--43% HAD A TURNAROUND OF EIGHT DUTY HOURS OR MORE

TYPING CONT'D

SECURITY CLASSIFICATION

● --- 64% UNCLASSIFIED

-- (7% WAS SENSITIVE -- OERS, APRs, PERSONNEL ACTIONS)

● --- 1% CONFIDENTIAL

● --- 30% SECRET

● --- 5% TOP SECRET

100%

COST OF PRESENT ADMINISTRATIVE SYSTEM

<u>COST CATEGORY</u>	<u>AMOUNT (ANNUAL \$)</u>	<u>TOTAL</u>
P E R S O N N E L (ADMIN)		
MILITARY SALARIES (416)	5,126,057	
CIVILIAN SALARIES (206)	2,763,368	
CIVILIAN OVERTIME	7,653	\$7,897,078
E Q U I P M E N T		
RENTAL	110,937	
MAINTENANCE	108,955	\$ 219,892
S U P P L I E S	352,667	\$ 352,667
TOTAL COST PRESENT ADMINISTRATIVE SYSTEM		\$8,469,637

ADMINISTRATIVE PERSONNEL AUTHORIZATIONS/ANNUAL COSIS

	CIV	\$	MIL	\$	TOTAL	\$
AC	13	171,799	9	125,922	22	297,721
AD	22	299,002	73	828,782	95	1,127,784
CS	7	110,532	7	104,596	14	215,128
DO	19	254,349	54	674,882	73	929,231
DP	32	418,194	13	179,040	45	597,234
DT			6	68,664	6	68,664
HC	1	16,246	5	84,980	6	101,226
HO	1	14,924	2	24,622	3	39,546
IG	6	89,155	8	101,540	14	190,695
IN	11	155,220	37	453,765	48	608,985

ADMINISTRATIVE PERSONNEL AUTHORIZATIONS/ANNUAL COSTS CONT'D

	CIV	\$	MIL	\$	TOTAL	\$
JA	3	39,444	4	63,543	7	102,987
LG	39	505,821	45	581,334	84	1,087,155
NR	3	42,672	2	29,130	5	71,802
OI	4	61,018	5	63,021	9	124,039
SG	6	82,311	5	85,834	11	168,145
SP	4	55,885	1	13,420	5	69,305
XO	2	26,426	10	136,197	12	162,623
XP	21	277,967	36	524,146	57	802,113
	<u>12</u>	<u>142,403</u>	<u>94</u>	<u>982,639</u>	<u>106</u>	<u>1,125,042</u>
TOTALS	206	\$2,763,368	416	\$5,126,057	622	\$7,889,425

OBSERVATION

PRODUCTIVITY

● - 5 HRS 22 MIN AVERAGE DAILY PRODUCTIVE TIME

VS

6 HRS 17 MIN AIR FORCE STANDARD

● ---INDICATES SOME MODERNIZATION OF EQUIPMENT AND CENTRALIZING OF
ADMINISTRATIVE EFFORT AND DELETION/REPROGRAMMING OF SPACES ARE
IN ORDER TO BETTER UTILIZE ASSIGNED RESOURCES.

3-15

OBSERVATION
STENOGRAPHIC SKILLS

- ---ARE NOT GENERALLY USED THROUGHOUT THE HEADQUARTERS
- ---204 SECRETARIES ASSIGNED (206 AUTHORIZED), 199 OR 98% ARE STENO QUALIFIED.
- ---DURING THE SURVEY ONLY 212 HOURS OF STENOGRAPHIC DICTATION WAS RECORDED OUT
OF 23,880 HOURS MEASURED FOR STENO QUALIFIED PERSONNEL. THIS MEANS THAT
ONLY 2% OF ALL LINES TYPED WERE DICTATED.
- ---THE AIR FORCE IS PAYING FOR A SERVICE WHICH IS ESSENTIALLY NOT BEING USED.

OBSERVATION

AGENCY REPORTS

--- OF THE 19 AGENCIES SURVEYED, 10 REPORTED SOME OF THEIR TYPING COULD BE SENT TO A WPC (THE AMOUNT RANGED FROM 31% TO 75%).

AC, AD, DO, DP, IG, LG, OI, SP, XP,

---THE REMAINING NINE AGENCIES RECOMMEND THAT NONE OF THEIR TYPING BE DONE IN A WPC.

CS, DT, HC, HO, IN, JA, HR, SG, XO

--- DID NOT PARTICIPATE IN THE SURVEY.

PARTICIPATED IN DATA COLLECTION ONLY AND WILL DETERMINE THEIR OWN WP REQUIREMENTS.

OPTIONS

THE FOLLOWING OPTIONS ARE BASED ON

●--A REVIEW OF SURVEY FINDINGS

●--INFORMATION FROM THE AIR STAFF, OTHER COMMANDS, AND COMMERCIAL VENDORS

●--COST EFFECTIVENESS

--IT WOULD BE NECESSARY FOR EACH AGENCY INCLUDED IN WP TO REORGANIZE/
REALIGN THEIR ADMINISTRATIVE EFFORT AND DELETE/REPROGRAM MANPOWER
SPACES TO JUSTIFY THE MAGNETIC KEYBOARDS.

OPTIONS CONT'D

●--IT DOES NOT APPEAR AT THIS TIME TO BE ECONOMICAL NOR PRODUCTIVE TO
INCLUDE SEVERAL AGENCIES IN WP BECAUSE OF THE

--NATURE AND SMALL AMOUNT OF TYPING

--FEW PEOPLE INVOLVED

--LARGE AMOUNT OF ADMINISTRATIVE SUPPORT TASKS PERFORMED

●--THESE NINE AGENCIES ARE

CS	HO	NR
DT	IG	SG
HC	JA	SP

OPTION TWO

● ---AUTHORIZE 95 MAGNETIC KEYBOARDS INTO DCS/
DIRECTORATE CENTERS UNDER USER CONTROL TO
ACCOMPLISH ALL THEIR TYPING. (23 KEYBOARDS ON HAND.)

● ---10 CENTERS ARE PREFERRED

--HOWEVER, UP TO 18 CENTERS MAY BE REQUIRED TO
ACCOMMODATE WIDELY DISPERSED STAFF ELEMENTS.

● ---102 MANPOWER SPACES MAY BE DELETED/REPROGRAMMED

OPTION TWO
KEYBOARD/OPERATOR REQUIREMENTS

<u>ORGN</u>	<u>LINES</u>	<u>KEYBOARDS/ OPERATORS</u>	<u>MAXIMUM # OF CENTERS</u>	<u># KEYBOARDS ON HAND</u>	<u># NEW KEYBOARDS REQ</u>
AC	58,667	5	1	1	4
AD	191,656	17	3	6	11
D0	136,526	12	2	0	12
DP	135,485	12	2	2	10
IN	88,995	8	2	4	4
LG	176,105	16	2	2	14
OI	20,633	2	1	4	-2
X0	23,143	2	1	0	2
XP	108,973	10	2	4	6
	125,012	11	2	0	11
	<u>TOTAL</u>	<u>95</u>	<u>18</u>	<u>23</u>	<u>72</u>

OPTION TWO

MANNING REQUIREMENTS

NON TYPING AND TYPING

<u>ORGH</u>	<u>ADMIN SUPPORT</u>	<u>KEYBOARD OPERATORS</u>	<u>TOTAL REQUIRED PERSONNEL</u>	<u>PRESENT AUTHORIZED</u>	<u>DELETE/ REPROGRAM</u>
AC	13	5	18	22	- 4
AD	69	17	86	95	- 9
DA	*1	0	1	0	+ 1
DO	46	12	58	73	-15
DP	27	12	39	45	- 6
IN	35	8	43	48	- 5
LG	56	16	72	84	-12
OI	7	2	9	9	0
XO	5	2	7	12	- 5
XP	36	10	46	57	-11
	<u>59</u>	<u>11</u>	<u>70</u>	<u>106</u>	<u>-36</u>
TOTAL	354	95	449	551	102

3-22

* HEADQUARTERS WORD PROCESSING MANAGER

OPTION TWO
SPACE REQUIREMENTS

---OFFICE SPACE FOR OPTION TWO WOULD COME FROM THE
RESPECTIVE DCS/DIRECTORATE THROUGH INTERNAL
REALIGNMENT AND NO ADDITIONAL SPACE IN BLDG
WOULD BE REQUIRED

OPTION TWO

COSTS

●--THE COST OF OPTION II WOULD BE APPROXIMATELY

--7,518,380 THE FIRST YEAR

--7,442,380 FOR EACH SUCCEEDING YEAR

--WITH AN ANNUAL SAVINGS OF \$1,012,057 FOR THE FIRST
FIVE YEARS

OPTION TWO

COST OF PROPOSED SYSTEM FOR FIVE YEARS

COST CATEGORY	YEAR 1	YEAR 2	YEAR 3	YEAR 4	YEAR 5
PERSONNEL	\$6,541,699	\$6,541,699	\$6,541,699	\$6,541,699	\$6,541,699
EQUIPMENT RENTAL	434,059	434,059	434,059	434,059	434,059
MAINTENANCE	108,955	108,955	108,955	108,955	108,955
INVESTMENT	76,000				
SUPPLIES	<u>357,667</u>	<u>357,667</u>	<u>357,667</u>	<u>357,667</u>	<u>357,667</u>
ANNUAL COST	\$7,518,380	\$7,442,380	\$7,442,380	\$7,442,380	7,442,380

3
25

PRESENT SYSTEM COST 5 YEARS

\$42,348,185

PROPOSED SYSTEM COST 5 YEARS (AVERAGE ANNUAL COST \$7,457,580)

\$37,287,900

PROJECTED 5 YEAR SAVINGS

\$ 5,060,285

AVERAGE ANNUAL SAVINGS

\$ 1,012,057

(BASED ON A MANPOWER SAVINGS OF 102 AUTHORIZATIONS, USING GS-5 AS AVERAGE GRADE FOR

ADMINISTRATIVE SUPPORT PERSONNEL.)

RECOMMENDATIONS

--RECOMMEND OPTION TWO BE APPROVED FOR FOR THE FOLLOWING REASONS

● --NO ADDITIONAL SPACE REQUIRED

--BECAUSE AGENCIES COULD ADJUST INTERNALLY FOR THEIR WPC SPACE

● --OPTION TWO SAVES MORE MONEY AND MANPOWER

--FEWER SUPERVISORS AND EQUIPMENT REQUIRED

--\$127,397 ANNUAL SAVINGS OVER OPTION ONE

● --WPCs WOULD BE MANNED BY AGENCY PERSONNEL AND MORE RESPONSIVE TO
AGENCY NEEDS

--CENTERS SUCCESS WOULD BE MORE OF A CHALLENGE SINCE THEY
WOULD BE "IN HOUSE"

RECOMMENDATIONS CONT'D

●---CURRENT TREND IS TOWARD WPCs IN SMALLER CLUSTERS UNDER USER CONTROL
(AIR STAFF AND INDUSTRY)

--IN THE PAST HIGH UNIT KEYBOARD COST REQUIRED CENTRALIZATION TO ENSURE
PRODUCTIVITY AND COST EFFECTIVENESS

--TODAY UNIT KEYBOARD COSTS ARE DECLINING

--WHILE EQUIPMENT HAS ENHANCED CAPABILITIES AND FASTER PRODUCTION
SPEED

--THEREFORE, WPCs DO NOT HAVE TO BE LARGE TO BE COST EFFECTIVE

--SMALLER USER CONTROLLED CENTERS HAVE PROVEN TO BE MORE RESPONSIVE

RECOMMENDATIONS CONT'D

● --NEW OFFICE TECHNOLOGY AND COMPATABILITY OF EQUIPMENT COULD OFFER
MANY BENEFITS WHEN WP IS CONFIGURED IN USERS AREA

--WP EQUIPMENT CAN EVENTUALLY BE TIED TO MAIN FRAME COMPUTERS TO
ACCESS, STORE AND RETRIEVE INFORMATION

--WP EQUIPMENT WITH TELECOMMUNICATIVE MODEMS COULD COMMUNICATE
WITH OTHER WP EQUIPMENT (ELECTRONIC MAIL)

--WP EQUIPMENT COULD ALSO BE TELECOMMUNICATIVE USED FOR

--PHOTOCOMPOSITION OR MICROGRAPHIC MEDIA PRODUCTION

RECOMMENDATION CONT'D

- --DA PERSONNEL MAKE THE CENTRAL SELECTION OF MAGNETIC KEYBOARDS FOR _____ TO ENSURE SYSTEMS AND APPLICATIONS ARE COMPATIBLE FOR CURRENT AND FUTURE REQUIREMENTS.
- ---THOSE POSITIONS IDENTIFIED BY THE SURVEY AS EXCESS TO REQUIREMENTS BE DELETED/REPROGRAMMED BY XPM THE FIRST QUARTER AFTER WORD PROCESSING IS IMPLEMENTED OR AS DETERMINED IN THE BEST INTEREST OF THE COMMAND. XPM COMMITTEE WITH DP AND DAY MEMBERS NEEDED TO DETERMINE BEST APPROACH.
- ---CENTERS BE MANNED WITH A MIXTURE OF MILITARY AND CIVILIAN PERSONNEL TO PROVIDE A VISIBLE CAREER PATH FOR BOTH. MIX TO BE DETERMINED BY USER.
- ---EXCESS STANDARD ELECTRIC TYPEWRITERS BE REMOVED WITHIN 90 DAYS AFTER WPCs ARE OPERATIONAL.

RECOMMENDATIONS CONT'D

●--THE CURRENT REPLACEMENT CYCLE FOR CIVILIANS, NOT INCLUDING THE 22-DAY LAPSE RATE, IS RUNNING FROM 2 TO 4 MONTHS. THEREFORE, RECOMMEND THAT THE INITIAL AND REPLACEMENT HIRING OF CIVILIAN PERSONNEL FOR WPCs RECEIVE PRIORITY

--TO ENSURE ADMINISTRATIVE REQUIREMENTS ARE BEING MET

--AND EXPENSIVE EQUIPMENT IS FULLY USED

RECOMMENDATIONS CONT'D

● --RECOMMEND GS RATINGS FOR MAGNETIC KEYBOARD OPERATORS BE AT LEAST GS-4

--RATINGS LESS THAN GS-4 WILL CONTRIBUTE TO CONSTANT PERSONNEL TURNOVER AND ARE DETRIMENTAL TO ATTRACTING AND RETAINING HIGHLY QUALIFIED, FUNCTIONALLY KNOWLEDGEABLE OPERATORS

--THE GRADING OF WP OPERATORS AT GS-4/5, AND SUPERVISORS AT GS-6/7 LEVELS WOULD BE COMMENSURATE WITH THE GRADE LEVELS OF NONWPC SECRETARIES OR CLERKS CURRENTLY ASSIGNED

● --IMPLEMENTATION OF A DICTATION SYSTEM AND TRAINING PROGRAM FOR EACH AGENCY WITH A WPC. THE DICTATION SYSTEMS SHOULD BE INSTALLED APPROXIMATELY 6 MONTHS AFTER ESTABLISHMENT OF THE WPCs.

RECOMMENDATIONS CONT'D

●---AFTER WPCs ARE FULLY OPERATIONAL, A PERMANENT ADVISORY GROUP BE ESTABLISHED AND COMPRISED OF DAY, ADX, AND OTHER FUNCTIONAL SPECIALISTS AS NEEDED. THIS GROUP CHAIRED BY DAY WILL IDENTIFY, AS NEW TECHNOLOGY BECOMES ECONOMICALLY AVAILABLE, THE MAGNETIC KEYBOARDS AND USER APPLICATIONS AND PROGRAMS THAT CAN BE TELECOMMUNICATIVELY LINKED OR CONNECTED TO MAIN FRAME COMPUTERS, PHOTOTYPESETTERS OR MICROGRAPHICS TO ENHANCE WP CAPABILITIES. THIS GROUP WILL ALSO CONTINUALLY EVALUATE THOSE AGENCIES NOT INCLUDED IN WP TO ENSURE THE MOST COST EFFECTIVE METHODS/EQUIPMENT ARE USED, OR DETERMINE AT A LATER DATE THOSE AGENICES THAT SHOULD CONVERT TO WP.

●---AFTER WP AND DICATION EQUIPMENT BECOMES OPERATIONAL, A COMPLETE REVIEW OF STENOGRAPHIC POSITIONS BE ACCOMPLISHED TO INSURE POSITION CLASSIFICATIONS REFLECT ACTUAL JOB REQUIREMENTS.

SUMMARY

●--A VALID REQUIREMENT FOR ADVANCED ADMINISTRATIVE SYSTEMS EXISTS
IN

--AS PROVEN BY THE SURVEY DATA

●--ADMINISTRATION HAS ALWAYS BEEN LABOR INTENSIVE

--IT TAKES A LOT OF PEOPLE TO TYPE, FILE, AND OTHERWISE HANDLE
PAPER

●--A MORE COST EFFECTIVE ALTERNATIVE IS AVAILABLE

--WORD PROCESSING

SUMMARY CONT'D

--ACTUAL IMPLEMENTATION OF WORD PROCESSING DEPENDS ON

● ---GUIDANCE FROM COMMAND SECTION

● ---FUNDS AVAILABILITY

● ---SPACE AVAILABILITY/INTERNAL REALIGNMENT

● ---FACILITY MODIFICATION

● ---PERSONNEL ACTIONS

● ---SUPPLY AND EQUIPMENT DELIVERY

IMPLEMENTATION SCHEDULE

WORD PROCESSING

<u>AGENCY</u>	<u>DESIRED PROGRAM START DATE</u>
/XP	2 Apr 79
/LG	1 May 79
/DP	1 Jun 79
/AC	1 Jun 79
/AD	2 Jul 79
/DO	1 Aug 79
/IN	1 Aug 79
AR	31 Aug 79
/XO	31 Aug 79
/OI	31 Aug 79

EVALUATION FOR WORD PROCESSING
OR EQUIPMENT UPGRADE

Command Section	1 Oct 79
/DT	1 Oct 79
/HC	1 Oct 79
/HO	1 Oct 79
/IG	1 Oct 79
/JA	1 Nov 79
/NR	1 Nov 79
/SG	1 Nov 79
/SP	1 Nov 79
/DE	1 Dec 79
/DA	1 Dec 79

ATTACHMENT 4

DA Letter, 26 Mar 79, Word Processing Survey

DEPARTMENT OF THE AIR FORCE



DA

26 MAR 1979

Word Processing Survey

Staff

1. As a result of the preliminary visit to this headquarters by /DAY representatives in January 1979, an in-depth survey of our present procedures for handling paperwork and other administrative services, i.e., typing, telephone coverage, filing, etc., will begin on 2 April 79. Expected duration of the survey is approximately three weeks.
2. The purpose of this survey is to provide recommendations for improving the efficiency of our current administrative support, and also to ensure that we meet the objective to enrich jobs through challenge and opportunity.
3. I urge you to take an interest in this survey, and give your undivided attention at the meetings scheduled below:

Staff Agency Heads	0800	29 Mar 79	Conf Room
Middle Managers/Supervisors	1000	29 Mar 79	Conf Room
Secretaries/Stenographers and 702X0 Military Personnel	0800 & 1000	2 Apr 79	See *

* Due to LO orientation, our conference room will not be available for these periods. Sessions will be held in room 17 (basement of building) (attendance at only one session is required).
4. Results will be studied to determine feasibility of application in whole or in part within I believe this program will provide an opportunity to identify even more effective ways to accomplish the mission of Therefore, I ask you to give it your full support.

ATTACHMENT 5

ACSC Form 5 "ACSC Speaking Feedback"

A SPEAKING S FEEDBACK	NAME	SEMINAR/MIX	TIME
	STAFF ACTION/SUBJECT		Stop: _____
			Start: _____
		TOTAL: _____	

	REVIEWER'S NOTES	
CONTENT: "What was Said?" Least Effective ←————→ Most Effective INTRODUCTION <i>Salutation Overview</i> - Unclear, omitted/incomplete; too long or short; adequately focused, significance of subject established and/or direction and purpose identified; clear/comprehensive. BODY: ORGANIZATION - None evident; hard to follow, imbalanced; main ideas related; progression smooth; logical. SUPPORT - Inadequate; lacked credibility; adequate, related to ideas; accurate, credible, and adapted to audience; comprehensive and varied, enhanced argument. TRANSITIONS - Omitted; vague/abrupt; established continuity; smooth and varied, enhanced progression of argument. CONCLUSION <i>Summary/Recommendations Close</i> - Unclear, omitted/incomplete; too long or short; adequately reviewed; highlighted ideas and effected closure; provided synthesis, meaningful completion.		
DELIVERY: "How was it Said?" Least Effective ←————→ Most Effective AUDIENCE CONTACT - Missing; partial; included most of audience; direct and comprehensive; received and used feedback to adjust to audience. PHYSICAL MOVEMENT - Lacking/distracting; clumsy/mechanical; adequately supportive; well timed, natural, integrated; enhanced communicative effort. VOCAL VARIATION - Monotonous or artificial; too loud or soft, slow or fast, high or low; natural; varied and fluent-held attention; enhanced communicative effort. EXPRESSION <i>Word Choice Pronunciation Grammar</i> - Inappropriate/incorrect; partially distracting; usually appropriate and correct; ideally adapted to audience; highly articulate and precise. SINCERITY/ENTHUSIASM - Unenthusiastic/disinterested; partially involved; displayed positive attitude; poised, related well to audience; genuine concern for subject and audience. VISUAL AIDS - Needed but not used; sloppy/awkwardly used; clarified ideas; stimulating, well integrated; enhanced communicative effort. QUESTIONS - Easily flustered/limited knowledge; unsupported guessing; supplied most information requested; credible and smooth; completely poised, demonstrated knowledge in depth.		
FEEDBACK SUMMARY		
STRENGTHS:		
RECOMMENDATIONS FOR IMPROVEMENT:		

ATTACHMENT 6

HQ SAC/DAY Letter, 20 Dec 1977, Input for Word
Processing Equipment, FY 79 and 80

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS STRATEGIC AIR COMMAND
OFFUTT AIR FORCE BASE, NEBRASKA, 68113



REPLY TO
ATTN OF: DAY (Major Schur, 271-6400)

20 DEC 1977

SUBJECT: Input for Word Processing Equipment, FY 79 and 80

TO: AIG 688/DA AIG 689/DA

1. This letter constitutes a request for a special exhibit in the Operations Operating budget (RCS: DD Comp (AR) 1092). The special exhibit is needed to evaluate and defend command programs in HQ USAF Reviews and Office of the Secretary of Defense Hearings. Careful planning and commitment to administrative systems programs (Word Processing) is of utmost importance. The call for the FY 80 budget is occurring 15 months earlier than the former budget cycle. Formal HQ USAF/ACB notification of this special exhibit will be released in the next few days to HQ SAC. This letter provides you advance notification so that you may begin your work now. HQ SAC/ACB will issue the base ACR a formal change to the budget call upon receipt of the requirement from HQ USAF. Please furnish a copy of this letter to the base ACB. HQ SAC/ACBM contact is Major Porterfield/4153.
2. This new cycle forces administrators to develop implementation plans for the orderly introduction of cost effective word processing systems during FY 79 and FY 80. This budget submission must include your Word Processing (WP) needs for the next two fiscal years (thru 30 Sep 1980). For the first time you have the opportunity to plan for funding requirements well in advance of the budget year. It is especially important that we plan well for WP programs. Many new WP systems should be in operation at base level by the end of FY 80.
3. Each DA (host and tenant) should plan on implementing at least one centralized WP system at each base in FY 79. By the end of FY 80 a number of small centers (5-9 keyboards) or one or two large centers (10 or more keyboards) should be operational at each base if your subsequent surveys prove they will be cost effective. During the current FY (1 Oct 77-30 Sep 78) each DA should begin to "conduct or monitor" WP surveys as soon as personnel from the base attend the Administrative Systems Management Seminar (Course) at Keesler AFB, MS. SAC tenant units that do not receive a quota should request assistance from their NAF/DAY. IN FY 78, HQ SAC/DA has implemented a WP system; HQ 15 AF will become operational in Jan 78; F. E. Warren (90 CSG/DA) in Mar 78 and Offutt AFB (3902 ABW) in May 78. Begin formal survey activity at your units after submission of the budget. Your formal studies will validate your budget requests.
4. SAC is faced with a sizeable civilian manpower reduction to be implemented in FY 78. Implementation of word processing can do much to soften the impact of civilian manpower reduction actions that have or may be required in the future. It can also greatly improve the quality and quantity of administrative support. Wing and Group Headquarters, Civil Engineering, Hospitals and Judge Advocate activities are examples of areas where WP can have strong applications.
5. DAY, as the manager for EEIC 47330, word processing equipment rental, will base our input for such equipment upon the requirements each base submits. Prepare special exhibits for above equipment as follows:
 - a. EEIC 473 - Equipment rental for Word Processing equipment.
 - b. EEIC 569 - Purchased Equipment Maintenance.
 - c. EEIC 628 - Purchased Equipment costing less than \$1,000.
6. Include in the exhibit all funds in these expense elements that relate to Word Processing and operations. For instance:
 - a. EEIC 473 - show rental of magnetic keyboards and dictation equipment, but not rental of laundry and dry cleaning equipment which is also a 473 expense.
 - b. EEIC 569 - show proposed equipment maintenance for administrative system equipment but not maintenance of other types of equipment.

c. EEOC 628 - show purchased equipment (unit cost of less than \$1,000.00) cost for support of administrative systems, i.e., portable dictation/transcription units, furniture.

d. Please be aware that the formats prescribed herein may be slightly different when issued by ACB but the techniques will be the same when computing the number of machines required.

7. AFR 4-2, Vol II, Attachment 1, Para A1-1 thru A1-6 provides specific guidance to determine equipment needs. It is appended as Attachment 1 to this letter. In order to have a common base line for cost analysis, please use the following cost factors after determination of equipment needs:

a. Rental of magnetic typewriters - use \$300.00 per month per machine.

b. Rental of dictation systems - use \$250.00 per month for each recorder required (this includes input stations, transcribers, etc).

c. Estimate \$800 per person for equipping Word Processing Centers (WPC) with acoustical panels, work stations, portable dictation/transcription units and furniture.

d. For maintenance cost of presently owned keyboards use \$45.00 month for each machine.

e. For maintenance cost of owned Dictation recorders - use \$15.00 per month.

8. The formats to be followed are at Attachments 2 thru 5. A blank format, which is authorized for local reproduction, is at Attachment 6. These formats contain a number of abbreviations which are explained below:

a. PEC - Program Element Code. The Air Force Budget is composed of a series of Program Element Codes - Expenses related to a program are charged to its program element code. Administration does not have its own program element code. Administrative expenses are charged to the appropriate PEC where the expense occurs. In the FY 80, the term "Decision Unit Summary" is also being used. They have the same meaning.

b. PFY - Prior Fiscal Year. In this action, Fiscal Year 78 is considered the prior fiscal year. It is used as a base line to review program changes in budget reviews.

c. CFY - Current Fiscal Year. In this action the current fiscal year is FY 79 (1 Oct 78 thru 30 Sep 79).

d. OBY - Operating Budget Year. In this action, the OBY is FY 80 (1 Oct 79 thru 30 Sep 80).

9. Please consolidate the base requirements and submit them to the base ACB (The suspense to HQ SAC/ACB is 27 Jan 78). Please provide an information copy of your input to your numbered air force/DAY.

Morris J. Schur
MORRIS J. SCHUR, Major, USAF
Chief, Systems Management Division
Directorate of Administration

- 4 Atch
1. ~~AFR 4-2, Vol II, Para A1-1 thru A1-6~~ **WITHDRAWN**
2. Format, Magnetic Keyboards
3. Format, Dictation Equipment
4. Format, Maintenance
5. Format, Purchased Equipment
6. ~~Blank Format~~ **WITHDRAWN**

OPERATIONS OPERATING BUDGET REQUIREMENTS		Activity		WORD PROCESSING SYSTEMS				Page No.
FY 80 Operations Operating Budget Description	EEIC 4-1	PFY - 78	CFY - 79	FUNDED	UNFUNDED	MINIMUM	CURRENT	ENHANCED
Magnetic Typewriters								

1. List all Decision Unit Summary Numbers and amounts where funding support is requested by PFY, CFY and OBY.

2. Narrative:

a. For PFY, describe current program, state number of magnetic typewriters which are used in Admin Centers and the number in non-center environment. Also, state the number purchased for which rental money is not requested. State the number of purchased magnetic typewriters used in admin centers and the number in a non-center environment.

b. For CFY and OBY. Relate the funding support to your total Administrative Systems Implementation Plan.

(1) Describe planned growth in CFY and impact of planned requirements. Growth must be stated in terms of specific bases and/or Organizations to implement Administrative Systems during the CFY period and OBY. Address the Minimum and Enhanced levels of funding during the OBY.

(2) Describe requirements for Administrative Systems beyond OBY. Describe in percentage the degree of completion of your Implementation plan by the end of the OBY.

c. Describe the savings achieved in number of manning spaced reprogrammed to other command priorities or deletions taken in directed reductions.

(1) For PFY, describe the savings achieved in all prior implementations of Administrative Systems.

(2) For CFY and OBY, state the savings potential by implementation of Administrative Systems.

OPERATIONS OPERATING BUDGET REQUIREMENTS		Activity		WORD PROCESSING SYSTEMS				Page No.
FY 80 Operations Operating Budget Description	PFY - 78	CFY - 79	FUNDED	UNFUNDED	MINIMUM	CURRENT	OBV - 80	
Dictation Equipment EEIC 473								

1. List all Decision Unit Summary Numbers and amounts where funding support is requested.
2. Narrative:
 - a. For PFY, describe current program. State the number of central dictation recorders, transcribers, or recorder/transcribers rented. State purchase intent and timing of the purchase based on economic equity accrual.
 - b. For CFY and OBV. Relate the funding support to your total Administrative Systems Implementation Plan.
 - (1) Describe planned growth in CFY and impact of unfunded requirements. Growth should be stated in terms of specific Bases and/or Organizations to implement Administrative Systems during the CFY period and OBV. Address the impact of the Minimum and Enhanced Levels of funding during the OBV.
 - (2) Describe requirements for Administrative Systems beyond OBV. Describe in percentage the degree of completion of your implementation plan by the end of the OBV.

OPERATIONS OPERATING BUDGET REQUIREMENTS		Activity		Page No.			
LY 80 Operations Operating Budget	EEIC 569	WORD PROCESSING SYSTEMS	CFY - 79	OBV - 80			
Purchased Equipment Maintenance			FUNDED	UNFUNDED	MINIMUM	CURRENT	ENHANCED

1. List all Decision Unit Summary Numbers and amounts where funding support is requested by PFY, CFY and OBV.
2. Narrative:
 - a. For PFY, describe the current program. State the number and types of equipment to be maintained for support of administrative systems.
 - b. Anticipate new purchases showing maintenance of equipment to be purchased during the CFY and OBV. Relate the funding support to your total Administrative Systems Implementation Plan. Address the impact of the Minimum and Enhanced funding level during the OBV.

OPERATIONS OPERATING BUDGET REQUIREMENTS		Activity		WORD PROCESSING SYSTEMS				Page No.
FY 80 Operations Operating Budget Description	EEIC 628	PFY - 78	CFY - 79	FUNDED	UNFUNDED	MINIMUM	OBY - 80	
Purchased Equipment							CURRENT	ENHANCED

1. List all Decision Unit Summary Numbers and amounts where funding is requested by PFY, CFY and OBY.
2. Narrative:
 - a. For PFY, provide estimate of expenditures.
 - b. For CFY and OBY. Relate the funding support to your total Administrative Systems Implementation Plan.
 - (1) Describe planned growth in CFY and impact of unfunded requirements. Growth should be stated in terms of specific Bases and/or Organizations to implement Administrative Systems during the CFY period and OBY. Address the impact of the Minimum and Enhanced levels of funding during the OBY.
 - (2) Describe requirements for Administrative Systems beyond OBY. Describe in percentage the degree of completion of your implementation plan by the end of the OBY.

ATTACHMENT 7

Consolidated Program Summary, Exhibit D-18

CONSOLIDATED PROGRAM SUMMARY									
FY _____ OPERATIONS OPERATING BUDGET						ACTIVITY		PAGE NUMBER	
								1	
								EXHIBIT D 18	
SPECIAL PROGRAM									
Title of Special Program	Prior Year			Current Year			Operating Budget Year		
	Direct (2)	Reimb (3)	Total (4)	Direct (5)	Reimb (6)	Total (7)	Direct		Reimb (11)
							Min (8)	Cur (9)	
<u>ADMINISTRATIVE SYSTEMS:</u>									
<u>DE:</u>									
<u>11113 EEIC:</u>									
473 - Magnetic typewriters	3	--	3	54	--	54	97	50	--
- Central dictation systems									--
569 - Magnetic typewriters	--	--	--	--	--	--	7	--	--
- Central dictation systems									--
628 - Magnetic typewriters	--	--	--	--	--	--	--	--	--
- Central dictation systems									--
<u>DE:</u>									
<u>11115 EEIC:</u>									
473 - Magnetic typewriters	--	--	--	39	--	39	57	29	--
- Central dictation systems									--
569 - Magnetic typewriters	--	--	--	--	--	--	5	--	--
- Central dictation systems									--
628 - Magnetic typewriters	--	--	--	--	--	--	--	--	--
- Central dictation systems									--

CONSOLIDATED PROGRAM SUMMARY									
FY _____ OPERATIONS OPERATING BUDGET									
ACTIVITY								PAGE NUMBER 2	
EXHIBIT D 18									
SPECIAL PROGRAM									
Title of Special Program	Prior Year			Current Year			Operating Budget Year		
	Direct	Reimb	Total	Direct	Reimb	Total	Direct		
	(2)	(3)	(4)	(5)	(6)	(7)	Min	Cur	Enh
	(8)	(9)	(10)	(11)					
<u>ADMINISTRATIVE SYSTEMS:</u>									
<u>11118 EEIC:</u>									
473 - Magnetic typewriters	4	--	4	4	--	4	4	--	--
- Central dictation systems									
569 - Magnetic typewriters	--	--	--	4	--	4	4	--	--
- Central dictation systems									
628 - Magnetic typewriters	--	--	--	--	--	--	--	--	--
- Central dictation systems									
<u>11142 EEIC:</u>									
473 - Magnetic typewriters	--	--	--	--	--	--	9	5	--
- Central dictation systems									
569 - Magnetic typewriters	--	--	--	--	--	--	--	--	--
- Central dictation systems									
628 - Magnetic typewriters	--	--	--	--	--	--	--	--	--
- Central dictation systems									

CONSOLIDATED PROGRAM SUMMARY

FY _____ OPERATIONS OPERATING BUDGET

PAGE NUMBER

3

EXHIBIT D 18

ACTIVITY

SPECIAL PROGRAM

Title of Special Program	Prior Year			Current Year			Operating Budget Year			
	Direct	Reimb	Total	Direct	Reimb	Total	Direct		Enh	Reimb
	(2)	(3)	(4)	(5)	(6)	(7)	Min	Cur	(10)	(11)

(1)

ADMINISTRATIVE SYSTEMS:

PE:

11212 EEIC:

473 - Magnetic typewriters
 - Central dictation systems
 569 - Magnetic typewriters
 - Central dictation systems
 628 - Magnetic typewriters
 - Central dictation systems

PE:

11213 EEIC:

473 - Magnetic typewriters
 - Central dictation systems
 569 - Magnetic typewriters
 - Central dictation systems
 628 - Magnetic typewriters
 - Central dictation systems

CONSOLIDATED PROGRAM SUMMARY									
FY _____ OPERATIONS OPERATING BUDGET					ACTIVITY		PAGE NUMBER		
							4		
							EXHIBIT D 18		
SPECIAL PROGRAM									
Title of Special Program	Prior Year			Current Year			Operating Budget Year		
	Direct	Reimb	Total	Direct	Reimb	Total	Direct		
							Min	Cur	Enh
	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
								(11)	

(1)
ADMINISTRATIVE SYSTEMS:

PE:

11310 EEIC:

473 - Magnetic typewriters	5	--	5	3	--	3	--	--	--
- Central dictation systems									
569 - Magnetic typewriters	--	--	--	6	--	6	--	--	--
- Central dictation systems									
628 - Magnetic typewriters	--	--	--	--	--	--	--	--	--
- Central dictation systems									

PE:

11894 EEIC:

473 - Magnetic typewriters	15	--	15	25	--	25	70	36	--
- Central dictation systems									
569 - Magnetic typewriters	--	--	--	2	--	2	3	--	--
- Central dictation systems									
628 - Magnetic typewriters	--	--	--	--	--	--	--	--	--
- Central dictation systems									

CONSOLIDATED PROGRAM SUMMARY									
FY _____ OPERATIONS OPERATING BUDGET					ACTIVITY		PAGE NUMBER		
							5		
							EXHIBIT D 18		
SPECIAL PROGRAM									
Title of Special Program (1)	Prior Year			Current Year			Operating Budget Year		
	Direct	Reimb	Total	Direct	Reimb	Total	Direct		Reimb
	(2)	(3)	(4)	(5)	(6)	(7)	Min (8)	Cur (9)	Enh (10) (11)
ADMINISTRATIVE SYSTEMS									
PE:									
11896 FEIC:									
473 - Magnetic typewriters.	93	--	93	316	--	316	803	412	--
- Central dictation systems									
569 - Magnetic typewriters	24	--	24	24	--	24	54	--	--
- Central dictation systems									
628 - Magnetic typewriters	--	--	--	--	--	--	--	--	--
- Central dictation systems									
PE:									
11897 FEIC:									
473 - Magnetic typewriters	--	--	--	10	--	10	15	--	--
- Central dictation systems									
569 - Magnetic typewriters	--	--	--	--	--	--	2	--	--
- Central dictation systems									
628 - Magnetic typewriters	--	--	--	--	--	--	--	--	--
- Central dictation systems									

CONSOLIDATED PROGRAM SUMMARY

FY 1988 OPERATIONS OPERATING BUDGET

PAGE NUMBER

6

EXHIBIT D 18

Title of Special Program	SPECIAL PROGRAM									
	Prior Year			Current Year			Operating Budget Year			
	Direct	Reimb	Total	Direct	Reimb	Total	Min	Direct	Enh	Reimb
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)	(11)

ADMINISTRATIVE SYSTEMS:

PE:

11898 EEIC:

473 - Magnetic typewriters. 152 -- 152 263 365 182 -- --
 - Central dictation systems
 569 - Magnetic typewriters 12 -- 12 24 40 -- -- --
 - Central dictation systems
 628 - Magnetic typewriters -- -- -- -- -- -- -- -- -- --
 - Central dictation systems

2. Narrative:

a. PFY:

- (1) 34 magnetic typewriters and 6 central dictation systems are used in Administration centers.
 - (a) 2 magnetic typewriters and 1 central dictation system were purchased with 3080 funds.
 - (b) 32 magnetic typewriters and 5 central dictation systems are being rented.
- (2) 125 magnetic typewriters and 0 central dictation systems are used in other than Administrative centers.
 - (a) 39 magnetic typewriters purchased and 0 central dictation systems purchased.
 - (b) 86 magnetic typewriters rented.

CONSOLIDATED PROGRAM SUMMARY

FY _____ OPERATIONS OPERATING BUDGET

ACTIVITY	PAGE NUMBER
	7
	EXHIBIT D 18

Title of Special Program	SPECIAL PROGRAM						Operating Budget Year		
	Prior Year			Current Year			Direct		
	Direct	Reimb	Total	Direct	Reimb	Total	Min	Cur	Enh
(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)	(9)	(10)
									(11)

ADMINISTRATIVE SYSTEMS:

(c) 47 of the above 125 machines are used in SG activities.

b. CFY & OBY:

(1) CFY Funded Requirements: \$750,000 will provide rental funds for 95 additional magnetic keyboards and 39 additional central dictation systems to be used in Administrative centers and 125 magnetic typewriters used in other than Administrative centers. This level of funding will permit accomplishment of 43% of the goal of 596 systems for all PECs thru OBY.

CFY Unfunded Requirements: \$934,000 requested would permit rental of 184 additional magnetic typewriters and 89 additional dictation systems to be used in Administrative centers. This level of funding would permit a total of 438 typewriters and 134 dictation systems and accomplish 72% of our goal of 596 systems thru CFY.

OBY Funded Requirements: \$1,506,000 will continue rentals for equipment installed thru CFY and will permit rental funds for 21 additional magnetic typewriters and 21 additional dictation systems for use in Administrative centers. This level of funding will permit a total of 459 magnetic typewriters and 155 dictation systems and accomplish 77% of the goal of 596 systems thru CFY.

OBY Unfunded Requirements: \$768,000 requested would permit rental of 137 additional magnetic typewriters and 90 additional dictation systems to be used in Administrative centers.

(2) Funds requested thru OBY, funded and unfunded, would permit installation of 596 magnetic keyboards and 245 dictation systems, resulting in 100% completion of our implementation plan thru OBY. Our total five year implementation plan is estimated at 967 magnetic typewriters and 412 dictation systems.

CONSOLIDATED PROGRAM SUMMARY									
FY _____ OPERATIONS OPERATING BUDGET					ACTIVITY		PAGE NUMBER 8		
					EXHIBIT D 18				
SPECIAL PROGRAM									
Prior Year				Current Year			Operating Budget Year		
Direct		Reimb	Total	Direct	Reimb	Total	Min	Cur	Enh
(2)	(3)	(4)		(5)	(6)	(7)	(8)	(9)	(10)
Title of Special Program							Reimb		
							(11)		

ADMINISTRATIVE SYSTEMS:

- c. Implementation at the funded and unfunded level thru FY 80 will result in 374 manpower authorizations deleted/reprogrammed for an annual savings of \$4,386,652.
- (1) Implementation of administrative systems thru PFV has permitted 24 manpower authorizations to be deleted/reprogrammed for an annual savings of \$233,754.
- (2) Implementation for CFY and OBY could result in 350 additional manpower authorizations being deleted/reprogrammed for an annual savings of \$4,152,898.

ATTACHMENT 8

Schedule of Essential Actions

18 May 1976

APLC-WPAC-DEC 72 10M

REPLACES HQ AF/LC FORM 224, APR 64, WHICH WILL BE USED UNTIL STOCK IS EXHAUSTED.

AFLC FORM
JAN 68

 $1-A-1$

ORGANIZATION		HQ AFCL		FUNCTIONAL AREA		DAX		AFCL PROGRAMING PLAN NO.		75-35		ANNEX/XXXXXXX A		App 1	
ACTION ITEM NO.	ACTION ITEM	ACTION AGENCIES (OPR)	ACTION AGENCIES (OPR)	ACTION AGENCIES (OPR)	ACTION AGENCIES (OPR)	ACTION AGENCIES (OPR)	ACTION AGENCIES (OPR)	ACTION AGENCIES (OPR)	ACTION AGENCIES (OPR)	ACTION AGENCIES (OPR)	ACTION AGENCIES (OPR)	ACTION AGENCIES (OPR)	ACTION AGENCIES (OPR)	ACTION AGENCIES (OPR)	ACTION AGENCIES (OPR)
12	Provide Organization Layout to Dau	Task Orgn. J													
a.	Phase I (Bldg 262, 1st Floor)														
b.	Phase II (Bldg 262, 2nd Floor)														
c.	Phase III (Bldg 266 & Ja, Area B)														
13	Approve final layouts by DAU	DA													
a.	Phase I (Bldg 262, 1st Floor)														
b.	Phase II (Bldg 262, 2nd Floor)														
c.	Phase III (Bldg 266 & Ja, Area B)														
14	Submit Comm rgmt layout to 2046 Comm Gp.	DA													
a.	Phase I (Bldg 262, 1st Floor)														
b.	Phase II (Bldg 262, 2nd Floor)														
c.	Phase III (Bldg 266 & Ja, Area B)														
15	Submit organiz layouts to 2750/DH	DA													
a.	Phase I (Bldg 262, 1st Floor)														
b.	Phase II (Bldg 262, 2nd Floor)														
c.	Phase III (Bldg 266 & Ja, Area B)														
16	Realign Offices	2750/DH													
a.	Phase I														
b.	Phase II														
c.	Phase III														
17	Rework Communication System	2046 Comm Gp													
a.	Phase I														
b.	Phase II														
c.	Phase III														
18	Typing Equipment Delivery and Installation	Vendor													
a.	Phase I														
b.	Phase II														
c.	Phase III														

AFCL FORM 319
JAN 60

REPLACES HQ AFCL FORM 215, APR 64, WHICH WILL BE USED UNTIL STOCK IS EXHAUSTED.

AFCL-WPAB-B-AUG 65 37M

ORGANIZATION		HQ AFCLC		FUNCTIONAL AREA		DAX		AFCLC PROGRAMMING PLAN NO.		75-35		App 1	
ACTION ITEM NO.	ACTION ITEM	ACTION AGENCIES (OPRI)	CY	FY	CY	FY	CY	FY	CY	FY	CY	FY	REMARKS
19	Dictating Equipment Delivery	Vendor											
a.	Phase I												
b.	Phase II												
c.	Phase III												
20	Dictating Equipment Installation	Vendor											
a.	Phase I												
b.	Phase II												
c.	Phase III												
21	Typing Training Program for Secretaries	DA & Vendor											
a.	Phase I												
b.	Phase II												
c.	Phase III												
22	Dictating Training for Authors	DA & Vendor											
a.	Phase I												
b.	Phase II												
c.	Phase III												
23	WP Supervisor's Training												
a.	Phase I												
b.	Phase II												
c.	Phase III												
24	Delivery of DCK Couplers	Vendor & 2750/PP											
a.	Phase I												
b.	Phase II												
c.	Phase III												
25	Install DCK Couplers	2046 Comm GP											
a.	Phase I												
b.	Phase II												
c.	Phase III												
26	Publish and distribute WP Sys User's Manual	DA											

AFCLC FORM 319 JAN 68 REPLACES HQ AFCLC FORM 319, APR 64, WHICH WILL BE USED UNTIL STOCK IS EXHAUSTED. AFCLC-WP-48-NOV 70 10708

SCHEDULE OF ESSENTIAL ACTIONS

[illegible]

NOI 14 310-87000

REPLACES HQ AFPC FORM 128, APR 64, WHICH WILL BE USED UNTIL STOCK IS EXHAUSTED.

APLC FORM 319
JAN 68

ATTACHMENT 9

Creating the Operational System

CREATING THE

OPERATIONAL

SYSTEM

o CREATING THE OPERATIONAL SYSTEM

1. START ACTIVITIES
2. BRIEF PERSONNEL (PROVIDE TOURS AND DEMOS)
3. PREVIOUS SURVEY REVIEWED
4. START PROCUREMENT ACTIONS
5. EQUIPMENT VENDORS SELECTED
6. FLOOR SPACE & SYSTEM LAYOUT DETERMINED
7. TELEPHONE SYSTEM DEVELOPED
8. FACILITY MODIFICATION & TELEPHONE CHANGES REQUESTED (WORK ORDERS)
9. EQUIPMENT ORDERED
10. DELIVERY NOTIFICATION RECEIVED
11. TRAINING SCHEDULE DEVELOPED
12. INSTALLATION COMPLETE
13. POSITION DESCRIPTIONS WRITTEN
14. POSITION DESCRIPTIONS & GRADES APPROVED

(CONT'D)

o CREATING THE OPERATIONAL SYSTEM (CONT'D)

15. SYSTEM PERSONNEL SELECTED
16. TYPEWRITER TRAINING COMPLETE
17. TRANSCRIPTION TRAINING COMPLETE
18. DICTATOR & OTHER TRAINING COMPLETE
19. NEW SYSTEM SERVICES IDENTIFIED
20. INTERNAL OPERATING PROCEDURES MANUAL WRITTEN
21. USERS' MANUAL WRITTEN
22. CONTROL SYSTEM MANUAL WRITTEN
23. ALL MANUALS PUBLISHED
24. ALL MANUALS DISTRIBUTED
25. ALL PERSONNEL BRIEFED
26. SYSTEM OPERATIONAL
27. FINE TUNE

o PERT

CREATING THE OPERATIONAL SYSTEM

START ACTIVITIES

BRIEF PERSONNEL

TOURS

DEMOS

REVIEW/ANALYZE

PRE-SURVEY DATA

IMPLEMENTATION

o INVOLVE

- FUNCTIONAL ORGANIZATION *
- CE'S - ELEC.
- COMMUNICATIONS **
- FACILITIES *
- PERSONNEL **
- MANPOWER
- COMPTROLLER - FINANCE/DATA AUTOMATION *
- PROCUREMENT **
- BASE MOVERS
- OFFICE OF INFORMATION
- TRAINING (201 FILE, FOLLOW-ON) *

o IMPLEMENTATION

- o PLAN - WHO DOES WHAT, WHEN

- ACTIVITY/ MILESTONE CHART

* PART OF CENTRAL STUDY TEAM AT LEAST PART TIME

** TOURS

WP EQUIPMENT

- o START PROCUREMENT ACTIONS
- o SELECT VENDORS

DICTATION

TYPEWRITERS

PANELS

DRAPES

CARPET

PHONES

FURNITURE

SUPPLIES

PHONE - DICTATION INTERFACE COUPLERS

- o ORDER EQUIPMENT - PAY CLOSE ATTENTION TO LEAD TIMES
- o DELIVER EQUIPMENT
- o INSTALL EQUIPMENT
- o PROVIDE CENTRAL VENDOR INTERFACE

SUPPLIES

PAPER - CONTINUOUS FORM

MAG CARDS

INTERCHANGEABLE TYPING ELEMENTS

PAPER COPY HOLDERS

WINDOW ENVELOPES - REP. LTRS

HOLDER FOR CONTINUOUS FORM PAPER

FACILITIES - WPC & ASC & AUTHORS

FLOOR SPACE

SYSTEM LAYOUT

ACOUSTIC NEEDS - CARPET, DRAPES, & PANELS

STATIC-FREE CARPET

AIR CONDITIONING

HEATING

PHONE LAYOUT

C.E. WORK - ELECTRIC INSTALLATION/MOVES

OPEN SPACE VS. WORK STATION CUBICLES

LIGHTING

COMMUNICATIONS

o WPC

- DICTATION - PHONE INTERFACE
- PHONE PER TYPIST

ABILITY TO CALL AUTHOR ABOUT QUESTIONS

o ASC

- PHONE

MULTI-BUTTON

INTERCOMMS

o AUTHORS

- ANSWER OWN PHONES OR ASC
- o GOVERNMENT OWNED VS. BELL OWNED
 - LEADTIMES

o COORDINATE W/FACILITY REALIGNMENT

PERSONNEL

- o RESISTANCE TO CHANGE
- o TRAINING (VENDOR VS. GOVERNMENT PROVIDED)
 - TYPEWRITER (VENDOR VS. GOVERNMENT SITE)
 - TRANSCRIPTION
 - DICTATION
 - SUPERVISION (VENDOR & GOVERNMENT)
- o POSITION DESCRIPTIONS
 - WRITTEN
 - APPROVED
- o JOBS CLASSIFIED
- o GRADE STRUCTURES
 - WPC
 - ASC
 - PROMOTION POSSIBILITIES
- o ROTATION BETWEEN WPC & ASC, IF POSSIBLE
- o CAREER PATHS

- o PERSONNEL SELECTION & STAFFING
 - VOLUNTEERS
 - EQUIPMENT DEXTERITY
 - TYPING SKILLS
 - LANGUAGE & SPELLING SKILLS
 - ADMINISTRATIVE SKILLS
- o CENTER SUPERVISION
 - A FULL-TIME JOB

WORD PROCESSING TRAINING

WPC

SUPV - TYPEWRITER, DICTATION, SUPERVISION, DICTATION SYSTEM,
TRANSCRIPTION.

SECY - TYPEWRITER, DICTATION, TRANSCRIPTION, ASC/WPC PROCEDURES.

ASC

SUPV - TYPEWRITER, DICTATION, TRANSCRIPTION, SUPERVISION,
DICTATION SYSTEM.

SECY - DICTATION, ASC/WPC PROCEDURES

AUTHORS

DICTATION, ASC/WPC PROCEDURES

DICTATION

- o PROBABLY HARDEST TRAINING
- o TERMINOLOGY
 - UNIQUE TERMS
- o LET SKILL EVOLVE
 - START SLOW
 - WRITE OUT AND READ INTO PHONE/MIC
 - OUTLINE
 - NOTES
 - SPONTANEOUS

OPERATING INSTRUCTIONS

- o WPC/ASC INTERNAL OPERATING PROCEDURES
- o USERS' MANUAL
- o CONTROL SYSTEM MANUAL
- * ALL MANUALS WRITTEN
- * ALL MANUALS PUBLISHED
- * ALL MANUALS DISTRIBUTED
- * ALL PERSONNEL BRIEFED ON MANUALS

INTERNAL PROCEDURES

*ASC

- o FILING PLANS
- o LISTS - (CHECK PRIVACY ACT)
 - PERSONNEL
 - FUNCTION (PROJECT)
 - ORGANIZATION

*WPC

- o MAG CARD/TAPE STORAGE
 - TEMPORARY
 - PERMANENT
- o LISTS (CHECK PRIVACY ACT)
 - PERSONNEL

* SECRETARY HANDBOOK

o DETAIL WEEK-BY-WEEK CHART

- DETAILS OF WHO DOES WHAT, WHEN, HOW
- EXACT DAYS & WEEKS

IMPLEMENTATION

- 0 - ONE - WPC & ASC AT A TIME
 - ONE SUB-ORGANIZATION AT A TIME

WK 1 - TRAIN TYPIST

WK 2 - MOVE TO WPC

WK 3 - TRAIN AUTHORS

WK 4 - START DICTATION

SYSTEM OPERATIONAL

FINE TUNE SYSTEM

- CONTINUE MONITORSHIP
- TASK LEVEL
- QUICK FIX TO MINIMIZE PROBLEMS

WP CAUTIONS/SUGGESTIONS

1. PROCEED SLOWLY. STUDY, PLAN TO "N"TH DEGREE.
2. INVOLVE THE FUNCTIONAL ORGANIZATION

- MANAGEMENT AND AUTHORS AND SECRETARIES
- HOLD SALES MEETINGS

* CONTACT THE LOCAL UNION

3. INVOLVE, FROM THE BEGINNING, THE SUPPORT ORGANIZATIONS SUCH AS

- PERSONNEL
- BASE MOVERS
- BASE COMMUNICATIONS
- COMPTROLLER
- PROCUREMENT
- CIVIL ENGINEERS
- PROGRAMMER FOR CREATE
- MANPOWER
- FACILITIES
- OFFICE OF INFORMATION
- TRAINING

4. VISIT AREA INDUSTRY AND GOVERNMENT ORGANIZATIONS WITH WORD PROCESSING

5. READ ARTICLES IN:

- MODERN OFFICE PROCEDURES - FREE
- WORD PROCESSING WORLD - \$7/YR
- WORD PROCESSING BY IBM - FREE
- IWP - \$35/YR
- SYNTOPICAN
- WORDS
- VIEWPOINT
- MANAGEMENT WORLD

CONT'D

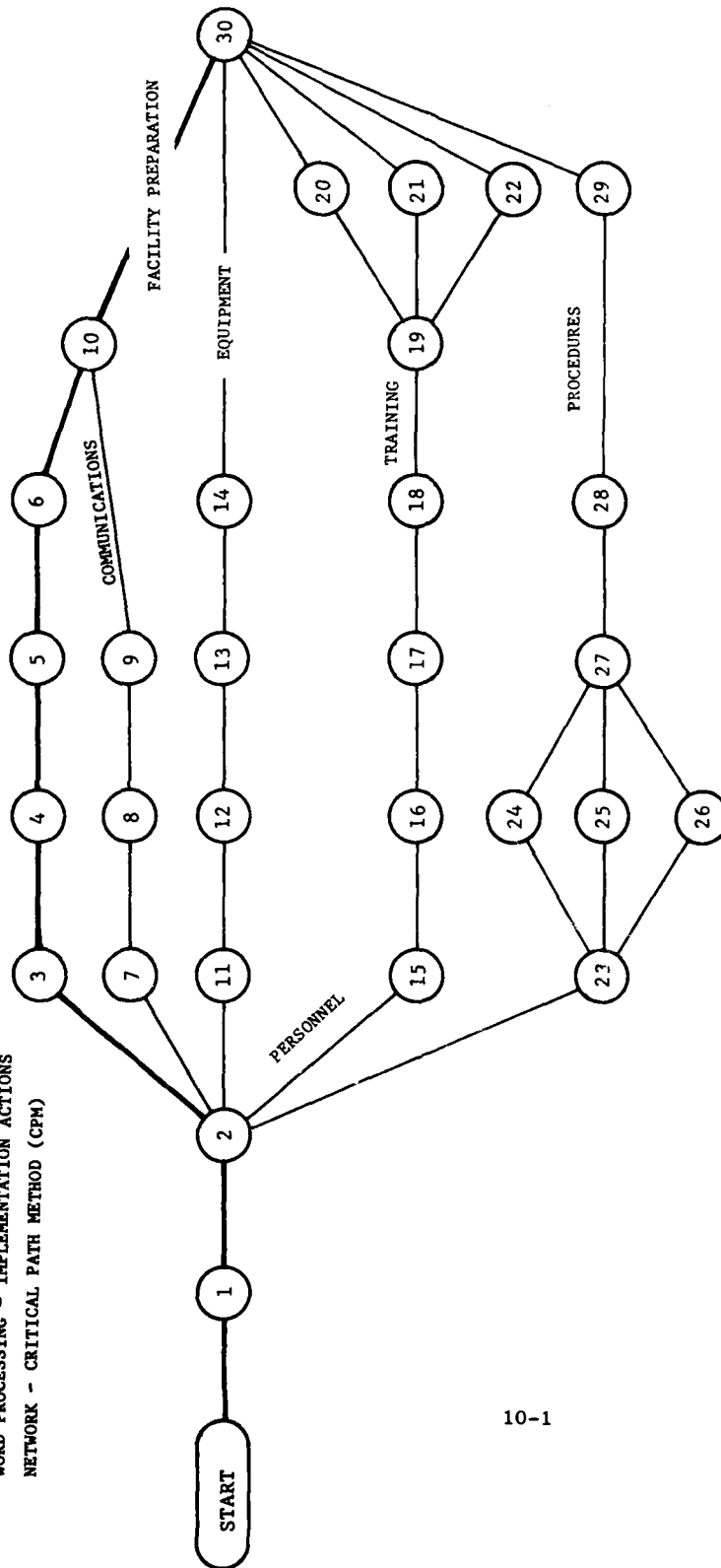
WP CAUTIONS/SUGGESTIONS (CONT'D)

6. SET UP WPC W/CARPET, DRAPES, PANELS BEFORE BEGINNING OPERATION.
7. ARMY PAMPHLET 340-2
8. AF POLICY
AFM 67-1
AFR 4-2
AF DA LTR, 13 AUGUST 1974, EQUIPPING ADMINISTRATIVE CENTERS
9. CLASSIFIED - TYPING - ?
CLASSIFIED DICTATION - NO
10. UPDATE COST W/LOCAL COST DATA

ATTACHMENT 10

Word Processing Implementation Actions Network--
Critical Path Method (CPM)

WORD PROCESSING - IMPLEMENTATION ACTIONS
NETWORK - CRITICAL PATH METHOD (CPM)



START	
1	Develop plan
2	Plan approved
FACILITY PREPARATION	
3	Coordinate plan
4	Design floor plan
5	Request construction
6	Construction complete
7	Design phone system
8	Request phone changes
9	Phone system installed
10	Occupy facility
EQUIPMENT	
11	Equipment review
12	Order equipment
13	Equipment delivered
14	Equipment installed
PERSONNEL	
15	DPC coordination
16	Position descriptions written
17	Grade levels established
18	System personnel selected
TRAINING	
19	Schedule training
PROCEDURES	
20	Typewriter training complete
21	Dictation training complete
22	Transcription training complete
23	Identify system services
24	Operating procedures written
25	User's manual written
26	Control system completed
27	Manuals published
28	Manuals distributed
29	Personnel briefed
30	<u>SYSTEM OPERATIONAL</u>

ATTACHMENT 11

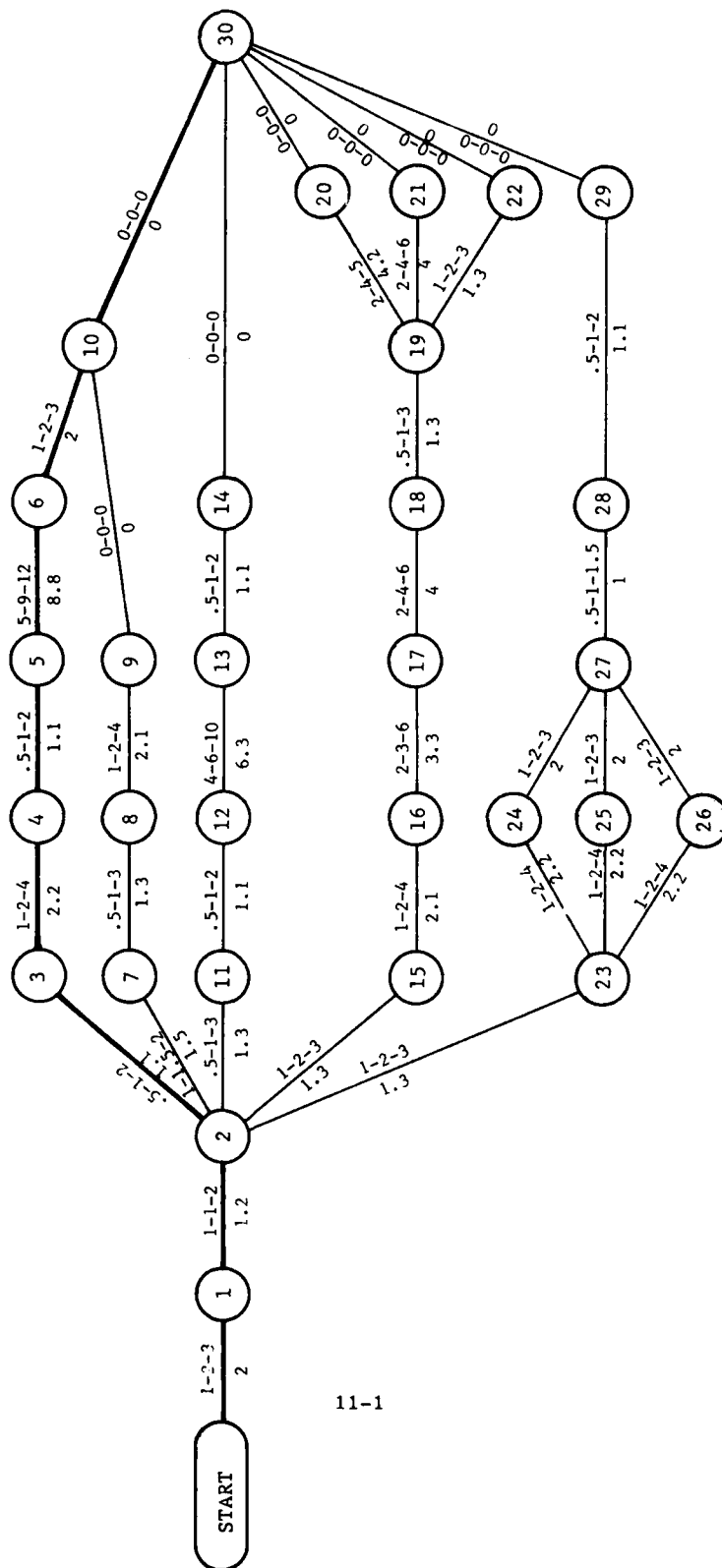
PERT Example--Word Processing Systems Implementation

Program Evaluation and Review Technique (PERT)
PERT EXAMPLE - WORD PROCESSING SYSTEM IMPLEMENTATION

Medium size organization
 75-100 Action Officers
 10-50 Administrative Support Personnel
 Administration Center Established
 10-20 Administrative Support Personnel

PERT Formula

$$t_e = \frac{t_o + 4(t_m) + t_p}{6}$$



The t_e for path 1-2-3-4-5-6-10-30 = 18.4 weeks = Critical Path
 The t_e for path 1-2-7-8-9-10-30 = 8.1 weeks.
 The t_e for path 1-2-11-12-13-14-30 = 13 weeks.
 The t_e for path 1-2-15-16-17-18-19-20-30 = 16.2 weeks.
 The t_e for path 1-2-23-25-27-29-30 = 10.8 weeks.

ATTACHMENT 12

HQ USAF/DA/AD Letter, 22 March 1979,
"Reclassification of Word Processing Equipment"

DEPARTMENT OF THE AIR FORCE
HEADQUARTERS UNITED STATES AIR FORCE
WASHINGTON, D.C.

20330



REPLY TO
ATTN OF DA

22 March 1979

SUBJECT: Reclassification of Word Processing Equipment

TO ALMAJCOM-SOA/DA and ADP Single Managers

1. This is a joint HQ USAF Directorate of Computer Resources and Directorate of Administration letter. Its purpose is to provide you with interim information concerning the General Services Administration (GSA) review of word processing equipment.

2. The advances in computer technology are causing an overlapping in the areas of data processing, word processing, and office automation. The GSA reviewed the identification of what is automatic data processing equipment (ADPE) and what is word processing equipment (WPE). The results of this review may see some word processing equipment, now on Federal Supply Group (FSG) 74, office equipment, deleted from FSG 74 and placed on FSG 70, ADPE. The GSA announcement (Atch 1) indicates the following:

a. If the word processor has a multi-line display, it will be reclassified as ADPE, FSG 70. Examples of this type of equipment are the 3M Linolex, and the Lexitron (any device with a screen displaying more than one line of type).

b. If the word processor shares a common printer, rather than having a devoted printer, it will be reclassified as ADPE, FSG 70. Examples are the NBI and the Lanier No Problem (whenever more than one keyboard shares the same printer with another keyboard).

c. If the word processor is a "shared logic system" it will be reclassified as ADPE, FSG 70. Examples are the Xerox DACONICS and DEC WP-34 (whenever several keyboards share the same central logic unit).

d. Word Processors which have a single line of display and a devoted printer will remain classified as office equipment, FSG 74. Examples are the Xerox 850 with single line display (although the same unit with full display would be reclassified as ADPE), the IBM MC II, the A.B.Dick MAGNA II, and so forth.

The above general classifications are subject to change. We will keep you informed as subsequent formal changes are made.

3. We anticipate the above word processing equipment to be removed from FSG 74 and placed into FSG 70 at the completion of the current contract period, 30 September 1979, when FY 79 FSG Group 74 Part I contracts expire.

12-1

Underwrite Your Country's Might - Buy U.S. Savings Bonds

4. For the present, all provisions of AFR 4-2 and the AF 300 series will continue to apply. To clarify, the procedures under which we have been operating, and will continue to follow during the interim period, are:

a. If an item appears on an FSG 74 schedule contract, and the identical item does not appear on an FSG 70 schedule contract, the item is office equipment and not ADPE. AFR 4-2 applies.

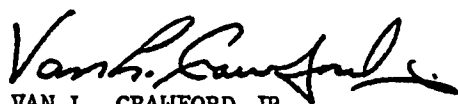
b. If the identical item appears on both FSG 74 and 70 schedules, it is considered ADPE and not office equipment. The AFR 300 series apply.

c. If the equipment appears only on an FSG 70 schedule contract, it is ADPE. The AFR 300 series apply.

d. If the equipment is not on any schedule contract, you may request a determination from HQ USAF/ACDX, or contact HQ USAF/DAY.

5. The Directorates of Computer Resources and Administration are working together to provide a comprehensive integration of the common areas since this reclassification may result in new methods for funding, approval and reporting in the future. To insure a smooth transition and to facilitate adequate preparation for the effective date of the equipment reclassification action, all requests for word processing that fall into the categories outlined in paragraphs 2a, b and c (that equipment to be reclassified as ADPE) will be coordinated with the ADP Single Manager prior to approval. Should any problems arise due to this added coordination requirement, inform HQ USAF and resolution will be furnished after joint review by both Directorates.

FOR THE CHIEF OF STAFF


VAN L. CRAWFORD JR.
Colonel, USAF
Director of Administration


ROBERT E. CHAPMAN
Brigadier General, USAF
Director of Computer Resources

~~1 Atch~~
~~CSA Release~~ **WITHDRAWN**

Cy to:

AFDSEC/CC	3780 TCHTG/CC
AFDSDC/CC/SCDP	HQ AFSC/SRF
AFCAC/CC	AFDSC/CC
AFDAMET/CC	FEDSIM/CC
AFTAC/AD	AFCS/CD
HQ ATC/TTQ	NGB/ACD
PHASE IV PMO/CC	

ATTACHMENT 13

Army "Word Processing Implementation Checklist"

WORD PROCESSING SYSTEM IMPLEMENTATION
CHECKLIST

PURPOSE. To assist managers in planning and implementing a Word Processing System and reduce the number of known pitfalls.

1. PRIOR TO FINALIZING PROCUREMENT ACTION:

a. Insure proposal has been coordinated with and approved by appropriate activity/agency head(s) and funds are available to support total acquisition as indicated in basic proposal.

b. Insure no significant changes in mission, organization, activity, workload requirements, functions, or equipment marketplace have occurred which affect choice of vendor or proposed equipment configuration.

c. Review contract clauses, if possible, and check the following:

[] Service. Acceptable response time on service calls.

[] Maintenance. Specific source designated responsible for maintaining the basic system and all component parts.

[] Warranty. Check pre-purchase repair, replacement, and reconditioning options available to you (the buyer).

[] Purchase Options (if rented/leased). Percent of accrued rental credit allowable toward purchase.

[] Contract period extensions (if leased).

[] Termination clauses with and without due cause and penalties pertaining thereto.

[] Movement and transfer of machines restrictions.

[] Transportation and installation charges/responsibilities.

[] Penalty for late delivery.

[] Credit of previous transportation/installation "set up" charges at time of purchase.

[] Modifications, alterations and attachments to WP system(s).

[] Liability for loss or damage.

☐ Availability of supplies, including those provided upon exercise of purchase option.

☐ Acceptance of machines/systems.

☐ Training. Extent of vendor obligations for conducting initial and follow-up refresher training. Include cost of additional training "per person" whenever a fee is charged.

☐ Special TEMPEST requirements and certifications by manufacturer, if any.

☐ For Immediate Purchase. Contract should contain a clause which specifies that "Equipment can be returned to the vendor after one year with no penalty except one year rental if the system proves unsatisfactory."

2. PRIOR TO DELIVERY OF EQUIPMENT. Insure action has been taken or consideration given the following areas:

a. Facilities. Have adequate WP facilities been established and/or obtained? The establishment of adequate WP facilities usually requires a considerable amount of lead time, especially when alterations are required.

b. Electrical System. All shared logic mini computer and standalone cathode ray tube (CRT) systems require "dedicated" electrical lines. If dedicated lines are required and have been previously installed, have an electrician inspect them to insure adequacy and proper grounding.

☐ Has an electrical survey been made?

☐ Have future electrical requirements been taken into consideration?

☐ Will electric outlets accommodate the WP system(s), central recorder(s), transcription unit(s), desk or floor lamp(s), and other types of peripheral equipment?

☐ Has equipment manufacturer or vendor been consulted regarding special electrical requirements and specifications provided?

☐ Electrical and telephone lines scheduled for installation prior to installation of carpeting?

c. Lighting. Tasks performed in a WPC require proper lighting for the health and welfare of employees working therein. The US Army Environmental Hygiene Agency recommends maximum illumination of 150 foot candle (FC) power; however, experience indicates 90-100 FC directly on the work station will provide minimum acceptable levels of illumination and comply with Federal Energy conservation policies.

- ☐ Has lighting system been checked by a building engineer?
- ☐ Is lighting adequate?
- ☐ If no, has action been taken to secure additional lighting?

d. Temperature and Humidity. These are two of the most important factors affecting personnel and machinery in a WPC environment. When designing a WPC, you should consider both dry bulb temperature (DBT) and relative humidity (RH). Basic comfort conditions are recommended at 74° DBT and 48% RH. Although the RH may go as low as 25% without affecting human comfort conditions, machines often become inoperable due to static build-up in the lower humidity ranges. Areas prone to low humidity may require a "Humidifier".

- ☐ Has the building engineer checked temperature and humidity levels within the WPC?
- ☐ Is a humidifier required to reduce static electricity?
- ☐ If yes, has humidifier been ordered?
- ☐ Has equipment manufacturer or vendor been consulted regarding special heating/cooling requirements and specifications provided?

e. Air Quality and Ventilation. The important factor to remember about heating, cooling, humidity, and dust control in the WPC is that two environments exist. The primary consideration is the human environment but there is also the closely related factor of machine environment requirements. Air conditioning and proper heating are essential and air flow control are necessary year-round considerations. Extreme temperature and humidity levels are detrimental both to machine and personnel efficiency. It should be noted, heat gain from a mini-computer or shared logic system must not be overlooked and proper ventilation provided to insure maximum operational efficiency and prevent system failure.

- ☐ Has the building engineer checked the air conditioning and air distribution system within the WPC?
- ☐ Is the air conditioning and air distribution system adequate?
- ☐ If no, has action been taken to resolve inadequacies?

f. Acoustics. The ideal WP environment is one in which the work stations are people and machine oriented. According to experts at the US Army Environmental Hygiene Agency, there are two basic concerns with respect to noise hazard to the unprotected ear and annoyance to the worker. While most WP systems do not produce hazardous noise levels, we have found that noise does annoy operators and adversely affects their morale and production. Principle methods of controlling noise are: engineering controls (machine enclosures) and architectural acoustic control (treatment of room surfaces with acoustic material).

[] Have you considered noise abatement within your WPC? Noise control enclosures are available for most WP systems; however, experience has shown most operators are reluctant to use them. They should be considered when machine(s) will be physically located in administrative offices where noise would affect or disrupt normal conversation and operations.

[] What is your noise abatement solution? Architectural controls yield less sound reduction at the typing station than engineering treatments, but do result in larger reductions at greater distances from the work station or printer. Thus, architectural acoustic treatments are considered very effective methods in reducing overall noise levels; this is important in a room with a large number of machines. There are numerous methods available to you in reducing noise thru this method. They include: treatment of ceiling, walls, or floor with acoustic absorptive material, and adequate spacing between work stations. The materials available for correct acoustic treatment are:

- Acoustically rated fiberglass drapery (unlined)
- Acoustic wall panels
- Acoustically rated and static retardant carpeting
- Acoustic partitions

Best results are achieved when used in combinations; i.e., carpet, drapery, and partitions. NOTE: WPC personnel should assist in selecting color(s).

List items Ordered: _____

If carpeting or rugs are to be installed make sure all electrical and telephone lines have been laid!

g. Color. Several considerations go into the selection of colors for the WPC: type of work performed, time spent in the area, and space available. In addition, it is good policy to consider the personal preferences of WP personnel. Creative use of color can provide an aesthetic atmosphere as well as light reflectance, and can reduce personnel reactions to fatigue and strain caused by jobs requiring prolonged concentration. Harmonious color coordination in the WPC makes employees feel better and work better. A unified decorative scheme should tie together and coordinate wall paint, chair coverings, screens, partitions, work units, and files.

- ☐ Does the WP facility require painting?
- ☐ If yes, has a work order been prepared and submitted?
- ☐ Did WP personnel participate in color selection?

h. Office Landscaping. The trend in office landscaping today is toward more open areas which facilitate the flow of work and communications. The layout of the WPC will depend upon availability of space, personnel to be served, the type and amount of equipment to be installed, and the design of the system. The layout should result in a smooth flow of paperwork from receipt to delivery. The "Open Office" concept, if it is well designed and executed, has the potential of improving morale and productivity and may be an important factor in the success of your WPC.

- ☐ Have floor plans for the WPC been prepared?
- ☐ If yes, have requisitions for site preparation been developed and submitted through appropriate channels?
- ☐ Are local funds available to defray cost of renovation?

i. Telephone System.

- ☐ Have telephone requirements been established and a plan submitted to your local telephone representative?
- ☐ Are you planning on installing a central telephone "dictation" system?
- ☐ If yes, have you consulted local telephone representatives and the equipment vendor to insure proper interface with trunk lines can be made?
- ☐ Have you considered installing a telephone in the Lounge area?

Telephones should not be installed at individual operator/typing stations. They distract operators, promote inefficiency and reduce productivity.

j. Supplies. Insure that a three to six month supply of essential operating supplies is ordered along with each new WP system and steps taken to prevent the stock from becoming exhausted. Always allow 6-8 weeks lead time on all requisitions for supplies and seek cheaper alternate sources whenever possible. Check off items listed below:

Make sure you have ordered:

- ☐ Typewriter/printer ribbons (carbon or fabric).

- ☐ Typing fonts, elements, or print wheels.
- ☐ Magnetic recording media (i.e., cards, cassettes, floppy discs, and "programmed" disc packs, tapes and cartridges).
- ☐ Special continuous form or pin feed paper.
- ☐ Carbon sets.
- ☐ Batteries for portable recording devices.
- ☐ Battery recharger for portable recording devices.
- ☐ Chart recorder paper for centralized dictation systems.
- ☐ Special peripheral supplies peculiar to and/or required by your WP system. (List below)

k. Administrative Requirements. Insure action has been taken to accomplish the following: (Check-off items)

- ☐ Establish WP positions, grades, and personnel authorizations.
- ☐ Prepare and coordinate Job Descriptions with local CPO.
- ☐ Interview and select WP Center Supervisor. (Careful examination is imperative.)
- ☐ Brief center supervisor and schedule for management training (if needed) and specialization training; i.e., DA Word Processing Seminar, WP Symposiums, and trade shows, etc.
- ☐ Interview and select all other WP personnel. (Selections should be made by the Center Supervisor--if possible). It is imperative that you staff the WPC with top notch personnel.
- ☐ Brief center personnel and sehadule for special training courses sponsored by DA, DOD, the Civil Service Commission, equipment manufacturers, and public institutions, if needed.
- ☐ Brief all key personnel, secretaries, clerks, and typists who will be supported or affected by word processing.

☐ Develop and prepare written "User" and "Center" procedures manuals (include instructions for operating telephone dictation system, if applicable).

☐ Order all essential supplies referred to in para 2b, above.

☐ Order office furnishings; i.e., chairs, work stations, tables, file and storage cabinets for stationary and magnetic media, acoustical partitions, drapery, carpeting, rugs, dictation system cabinet, paper cutter, adding machine or calculator, etc.

☐ Prepare work orders or requests for electrical, telephone, air conditioning (cooling and heating) and lighting system inspections and service.

☐ Develop and prepare work order forms for submitting documents to the WPC, internal production logs, statistical forms, etc.

☐ Arrange training schedule for center personnel once the contract for WPE has been let and confirmed by the Procurement Office. (NOTE: Vendor "Operator" training should commence prior to receipt of equipment and be completed within 2 weeks of actual installation to insure maximum operational efficiency.)

☐ Develop criteria for training on special applications, assemble samples of work to be processed by the WPC and provide this data to the vendor prior to commencement of "Operator" training.

☐ Obtain and maintain copy of WP Equipment contract(s), if possible.

3. SYSTEM DELIVERY AND INSTALLATION.

☐ Was WP equipment delivered on date promised? DATE: _____

☐ If no, was penalty for late delivery enforced-- see Contract?

COMMENT: _____

☐ Was total system delivered (no hardware or software missing)?

COMMENT: _____

☐ Was equipment inspected upon receipt?

☐ If yes, by whom was it inspected? _____.

(NOTE: Under no circumstances will Army personnel attempt to uncrate, assemble, move or install WP equipment. Such action will absolve the shipping agent, manufacturer or vendor of all responsibilities for repairing or replacing defective merchandise. The Army could also be held accountable for cost of repairs).

☐ Was equipment received in damaged condition? Specify

COMMENTS: _____

_____.

☐ Did vendor install and perform a system maintenance check in a timely manner--i.e., within 24 hours of receipt of equipment?

COMMENTS: _____

_____.

☐ Were "Service Request" procedures defined by the vendor; telephone number(s) provided, etc.?

☐ Was a "Set-up Kit" of essential supplies (ribbons, print wheel, typing fonts and magnetic media) provided with each system?

☐ Were operating or training instructions provided with each WP system?

4. POST IMPLEMENTATION REQUIREMENTS. After installation of equipment insure that the following actions are accomplished:

☐ WP Equipment Inventory. Prepare and submit a Word Processing Equipment Inventory form through channels to HQDA (DAAG-AMS-W) WASH DC 20314 within 30 days of receipt and installation of new equipment. (See Chapter 6, AR 340-8, Army Word Processing Program).

☐ Productivity Report. Prepare and submit WP Center Report at 6 and 12 month intervals in accordance with Chapter 5, AR 340-8.

☐ Special Requirements. Prepare and submit all data required by system approval authority, if requested.

☐ Maintenance Record. Establish a "Service Call" log in order to keep track of all requests for service (include date, time, system number, problem, and date and time serviceman responded).

5. FOLLOW-UP ACTIONS AFTER SYSTEM INSTALLATION. Once the WP system has become fully operational you should not let your guard down. Good word processing operations are developed over a lengthy period of time and require careful planning, coordination, and periodic in-process reviews to insure that pre-established goals and objectives are met. To insure maximum long term efficiency of the WP operation you should continuously monitor the following:

a. Equipment.

☐ Maintenance. Is it adequate? Service response time reasonable? Is there excessive downtime?

COMMENTS: _____

☐ Equipment Acceptability. Does equipment perform as advertised? Is software complete? Are there any significant shortcomings? Are operators/secretaries satisfied with the equipment?

COMMENTS: _____

☐ Equipment vs. Application. Is equipment suited for the applications? Equipment too sophisticated? Are there applications which must be contracted outside of the organization--if so why? Are full capabilities of equipment utilized? Required?

COMMENTS: _____

☐ Equipment Upgrade. Based on workload requirements, should system be expanded, reduced or peripheral changes required.

COMMENTS: _____

b. Personnel.

☐ Have all authorized positions been filled with full-time, permanent personnel?

☐ Have grades been established at a level commensurate to the duties performed?

- ☐ Has a career path been established within the center?
- ☐ Is employee turnover rate high?
- ☐ Do center personnel receive formal recognition from users for "jobs well done" or are they isolated from the rest of the organization?
- ☐ Are center personnel allowed to participate in the decision making process re. center operations/equipment selection, etc? If no, why?
- ☐ Are WP Center personnel generally satisfied with their jobs and working environment? If not, why?
- ☐ Are all WP Center personnel debriefed prior to their departure?
- c. Training.
 - ☐ Are operators and supervisory personnel receiving adequate training? If no, why?
 - ☐ Have vendors provided adequate training on their equipment?
 - ☐ Are users provided training on dictation equipment? Is follow-up training provided by the center?
 - ☐ Are newly assigned action officers and key civilian and military personnel briefed on WPC operations?
 - ☐ Are WPC personnel encouraged to enroll in off-duty training programs?

ATTACHMENT 14

HQ ATC "Word Processing Center General Engineering
Specification Summary"

WORD PROCESSING CENTER
GENERAL ENGINEERING SPECIFICATION SUMMARY
HQ ATC/DAY

Ceiling - height should be lowered to approximately nine feet. This permits lower footcandle illumination at the fixture while providing the required 90 (+ 10%) footcandle illumination on the work surface. When existing walls above a ceiling height of nine feet are not smooth (free of pipes, etc), application of acoustical wall material is difficult. An additional cost is incurred to acoustically treat the walls above the nine foot level. A lower ceiling height is sometimes required to permit proper placement of air diffusers and ducting. Ceiling material must have a Noise Reduction Coefficient (NRC) in excess of 0.60.

Walls - will not be painted. All wall surfaces, excluding windows, will be covered with an acoustical wall material with an NRC Specification Range of .50 or greater, to eliminate as much reflected sound as possible. Wall treatment only to a wainscot level is inadequate. Wall material used will not be acoustical tile (ceiling type) or other material which will not permit proper maintenance. Wall covering will be selected from the following list or an approved equal.

Armstrong Soundsoak Wall Panels

NRC .55 - .65

ASTM-E-84: Flame Spread 25, Fuel Contributed 15,
Smoke Developed 100

Donjon Acoustic Wall Panels, 1" fiberglass core
covered with Dynatex

NRC .75

ASTM-E-84: Flame Spread 25, Fuel Contributed 20,
and Smoke Developed 20

Carpet Imports, Myatex 100% Sisal Woven Wall Covering
with latex backing 3/16"

NRC .65

ASTM-E-84: Flame Spread 25, Fuel Contributed 0,
Smoke Developed 10

Doors - When there are multiple doors to a center (i.e., three rooms converted to one) unneeded doors will be closed and faced inside for smooth application of acoustic wall material. Entrance to word processing center should be through a single entrance door to permit work and visitor control. A security lock will be installed on the entrance door to permit unit manager to secure high-cost equipment during unattended periods. Door must open outward.

Lighting - will provide 90 (+ 10%) footcandles at the work surface. An office layout of work stations/desks indicating exact position of work units must be drawn and presented to DE prior to design planning to allow lighting designer flexibility in siting fixtures. Conventional recess mounted fluorescent fixtures (2' x 4') are recommended.

Quadruplex - outlets will be located at each work station and indicated on an attached office layout.

Conduit - will be required for dictation recorders, from not less than 6" above floor level up to and through the ceiling. Conduit (1/2") should lie in the corner of a room, if possible, with exact position indicated on office layout plan. Wall covering will conceal the conduit.

Telephone Conduit - will be required to support an instrument at each work station. It should be installed prior to installation of acoustic wall material to conceal its presence and provide access in work stations and indicated on an office layout plan.

Floor - will be carpeted with tufted, cut pile, 100% nylon (yarn ply 2 minimum, 4 oz polypropylene and jute backing, 5/16" pile height, 35 oz per square inch pile weight) carpet over approved padding for maximum sound and static absorbing properties. Minimum NRC .45 and a 3500 volt static rating is required. Floor covering will be selected from the following or an approved equal.

Bigelow Sanford, Inc.
Bigelow Bold or Beauvais patterns
w/Omalon C2 padding

Window Coverings - may be decorator, 1/2" venetian blinds selected from the following list or an approved equal.

Levolor Blinds & Shade
Levolor Lorentzen, Inc
5610 Maple Ave
Dallas TX 75235

Drapery - must have an acoustic rating of at least NRC 0.60, installed from floor to ceiling at 150% fullness, and hung 3" from wall. Drapery may be used in lieu of acoustic wall material.

Heat Gain - from electronic typewriters may be sufficient to require coding modifications for A/C and air-distribution systems. Contact specific vendor brochures for BTU heat gain factor. Provide equipment amps and BTU heat gain factor to DE.

Temp/Humidity - basic comfort conditions are: 74 degrees (dry bulb temp) DBT and 48% relative humidity (RH). Static build-up in lower RH ranges cause machine malfunctions.

Flammability Requirements

Wall Covering: ASTM-E-84 Flame Spread Rating not greater than 25 and smoke spread not higher than 100.

Floor Covering: carpet ASTM-E-84 flame spread rating not greater than 75.

ATTACHMENT 15

Civil Service Commission Form PSD-1,
"Position Evaluation Statement"

> APPENDIX C

Factor Evaluation System

POSITION EVALUATION STATEMENT

Title, Series, and Grade _____

Organization _____ Position # _____

Evaluation Factors	Points Assigned	Standard Used (Bm ² #, FL#, etc.)	Comments
1. Knowledge Required By The Position			
2. Supervisory Controls			
3. Guidelines			
4. Complexity			
5. Scope and Effect			
6. Personal Contacts			
7. Purpose of Contacts			
8. Physical Demands			
9. Work Environment			
SUMMARY	Total Points		Remarks: (As appropriate, desk audit findings or other considerations not previously documented which affect final grade.)
	Grade Conversion	GS-	

ATTACHMENT 16

LMDC Letter, 23 Jan 79, "Typical Job Enrichment
Ideas for Administrative Systems (or Word
Processing Centers)"

DEPARTMENT OF THE AIR FORCE
LEADERSHIP AND MANAGEMENT DEVELOPMENT CENTER ~~XXX~~(ATC)
MAXWELL AIR FORCE BASE, ALABAMA 36112

23 Jan 79



TYPICAL JOB ENRICHMENT IDEAS

for

ADVANCE ADMINISTRATIVE SYSTEMS
(or Word Processing Centers)

- I. ESTABLISHING CLIENT OR USER RELATIONSHIPS -- improves feedback from the work itself and reinforces the sense of the importance of the job.
- Let users bring work directly to operators and vice versa.
 - Educate people on what a center can and can not do e.g. capabilities of equipment.
 - Allow operators to give informal briefings at staff meetings of those they serve.
 - Establish visit schedules for users to observe operations of centers.
 - Locate equipment and operators in the working areas they support.
 - Allow each operator to have a phone with a Class A line so they can discuss drafts, dictation, etc. even when user is TDY.
 - Give users more standardized information for such things as draft corrections, dictation procedures, etc.
 - Have seminars with users on how to make notations, corrections, etc.
 - Publize turn-around times, priority systems, etc.
 - Have brainstorming sessions with users to generate ideas for better service/relationships.
 - Let each operator design a self-inking stamp to annotate what they have worked on.
 - Have comment cards/flyers to allow operators to recognize users who give good or bad dictation, legible drafts, etc.
 - Allow operators to feedback both positive and negative feedback to users.

II. GRANTING ADDITIONAL AUTHORITY -- increases the autonomy and responsibility an individual has for doing the job as he or she best sees fit. This often involves adding more meaningful skills to the job along with combining tasks to associate with a whole or complete job.

- Have operators responsible to proof their own work.
- Allow operators to make corrections in grammar, spelling, etc.
- Have same operator make corrections on work typed.
- Allow center supervisor authority to grant comp time, time off and determine over time.
- Have supervisors decide priority of inputs, not users.
- Let operators determine the correct format per AFR 10-1.
- Allow minor pen & ink changes on letters instead of requiring another final.
- Allow operators to reject work which is unacceptable (illegible, ...). Get supervisor's support for this.
- Let operators have input on whether an effort should go final or for another draft i.e. before total coordination has been done.
- Let operators set up their own backup assistance for peak periods.
- Let operators decide retention period of dictation and typed media.
- Allow centers to invite business school classes or high school secretarial classes to tour facilities. Operators give briefings and demos; helps recruiting.
- Allow operators to contact Field Engineer or factory rep for maintenance of equipment.

III. PLANNING AND SCHEDULING OWN WORK -- creates feelings of responsibility and importance in the worker.

- Arrange Flex-time within the center to cover peak periods and more than an eight hour day.
- Publish "peaks" and "valleys" of work week.
- Stagger lunch breaks.
- Have operators set goals for their jobs.

- Involve center personnel in negotiating priority system.
- Negotiate and publizize turn-around time for each type project.
- Annotate each product to indicate it was done by a center in case product needs to be redone.
- Delete work that should be done on non-WPC typewriters.
- Plan for adequate break-in/training periods before a new operator or center goes "operational."

IV. REMOVING UNNECESSARY CONTROLS -- increases job autonomy and responsibility.

- Do away with line counts.
- Allow mark-ups of drafts to make changes clear.
- Reestablish priority system.

(NOTE: For additional info contact Maj Don Krump AV 875-7095.)

ATTACHMENT 17

HQ AFLC HOI 11-1, 1 Nov 76, Administration
Center Policy and Procedures

1 November 1976

Administrative Practices

ADMINISTRATION CENTER POLICY AND PROCEDURES

This operating instruction establishes administration center policy and procedures at HQ AFLC and tells those supported by these centers how to obtain the services they provide.

	Paragraph	Page
Terms Explained	1	1
Establishment and Organization of Administration Centers.....	2	1
Management and Supervision.....	3	2
Services Provided by the Word Processing Center.....	4	2
Services Provided by the Administrative Support Cluster.....	5	2
Administrative Support Cluster Standard Operating Procedures.....	6	3
Authors' Instructions	7	3
WPC Standard Operating Procedures.....	8	3
Security.....	9	3

1. TERMS EXPLAINED:

a. Administration Center. All administrative functions and responsibilities under a single supervisor in a major staff office (deputy chief of staff or special staff office). These functions and tasks are subdivided into two parts: the Administrative Support Cluster (ASC) and the Word Processing Center (WPC).

b. Administrative Secretary. A secretary assigned to an ASC. At least one administrative secretary in each ASC will be a stenographer to take classified dictation, record summaries of telephone calls, and take other dictation which cannot be recorded on the central dictating system.

c. Administrative Support Cluster (ASC). The collocation of administration personnel to perform all administration tasks for all personnel supported by the ASC except those performed in the WPC.

d. Correspondence Secretary. A secretary assigned to a WPC who has received special training in the operation of automated word processing output equipment using magnetic media for the transcription, storage, and revision of information.

e. Prerecorded Document. A report, regulation, manual, operating instruction, etc, which will be revised periodically; a repetitive or variable information document stored on

magnetic media in the WPC for use upon request by its author.

f. Repetitive Document. A document, usually a letter, which will be transmitted to more than one addressee in identical form. It is recorded for playback so that each addressee receives a "personal" (original) copy.

g. Variable Information Document. A document which is prepared for more than one addressee and contains basically the same information with the exception of specific numbers, words, or groups of words in the document which vary for each such addressee.

h. Word Processing Center (WPC). The collocation of correspondence secretaries to transcribe, revise, and, upon request, store documents on magnetic media for future use.

2. ESTABLISHMENT AND ORGANIZATION OF ADMINISTRATION CENTERS:

a. Requirement for Administration Center. The Directorate of Administration (DAX) will evaluate each requirement for an Administration Center (AC) on the basis of an analysis prepared by that office. The analysis will include workload measurement and a determination as to how that workload can be accomplished most cost effectively, that is, by consolidation with an established center or by the establishment of an additional center.

b. Manpower and Organization. DAX will coordinate each analysis with the DCS/Personnel (DPQ). In coordination with DAX, DPQ will determine manpower requirements, develop production standards, and standard position

OPR: DAX
DISTRIBUTION: F

descriptions for ASC and WPC positions and designate the DCS or staff office chief (OPR) who will manage the center.

c. Equipment Requirements. DAX will determine equipment requirements and obtain the funds necessary to support those requirements.

3. MANAGEMENT AND SUPERVISION. Each WPC will be managed and supervised by the OPR designated by DPQ. DA will publish operating instructions designed to provide the best possible customer service at the most economical cost in manpower and money. In achieving that objective, DAX will develop and publish standard WPC procedures. The OPR will insure that those procedures are followed in each of its WPCs. All personnel are encouraged to submit suggested improvements to those procedures to DAX for evaluation and possible implementation.

4. SERVICES PROVIDED BY THE WORD PROCESSING CENTER. The WPC provides the following services. You may dictate UNCLASSIFIED information into WPC recorders around the clock 7 days a week from any telephone in the United States. When dictating from off-base, mechanical limitations permit dictating only - other features such as backup, fast forward, etc, cannot be used. Detailed instructions and authorized formats are in Appendix 1 of this HOI.

a. Types of Documents:

(1) Narrative Documents. WPC equipment is designed for maximum productivity in minimum time of narrative material such as correspondence, regulations, manuals, reports, memoranda, messages, briefing scripts, briefing synopsis, talking papers, background papers, reports on significant items during Commander's absence, staff summary sheets, and interest items.

(2) Nonnarrative Documents. The use of this equipment for the completion of forms such as travel vouchers, request for military airlift, routing and transmittal slips, orders, supply requisitions, visual aids, etc is not economical; moreover, such use delays significantly the completion of narrative documents. Therefore, nonnarrative documents as described above will be prepared only in the ASC. While forms are not normally typed in the WPC, when information on a form or document is repetitive or standard throughout an organization, it may be prerecorded for automatic playback on demand.

Discuss the possibility of such an application with your WPC supervisor.

b. Transcribing. Because a CS can transcribe dictation faster than handwritten drafts, all UNCLASSIFIED documents except those containing complex formulae or tables will be dictated into the WPC recording equipment. CLASSIFIED INFORMATION may be dictated to the ASC stenographer. Dictating also saves the author's time as an author can dictate at least five times faster than he/she can write and it decreases turnaround time because a correspondence secretary can transcribe dictation faster than handwritten drafts.

c. Draft or Final Copy. The WPC will furnish a double spaced draft or final copy as requested by the author.

d. Retention of Dictation. The WPC will retain the magnetic media on which the author's dictation is recorded for a period of 10 work-days from the date of dictation unless other instructions are received during the dictation or within that period.

e. Proofreading. WPC supervisors will insure that incoming work is complete and legible before it is assigned to a CS for typing, and that outgoing final work is proofread and returned to a CS for correction where necessary.

5. SERVICES PROVIDED BY THE ADMINISTRATIVE SUPPORT CLUSTER (ASC). These services are available by calling the ASC:

a. Dictation and Typing. A stenographer will record and transcribe CLASSIFIED information, telephone call summaries, or similar information which cannot be dictated to the WPC. Portable dictating equipment is available to record minutes of meetings which then may be transcribed in the WPC. The ASC will type all NONNARRATIVE type documents described in paragraph 4a(2).

b. Assembly and Quality Control. The ASC will:

(1) Pick up transcribed documents from the WPC.

(2) Proofread and check for compliance with pertinent directives governing format. If correction is required, edit and return to the WPC.

(3) Add coordination on the record

copy, assemble and mark copies of completed documents; prepare and attach routing/transmittal slips; and deliver to the document author.

c. Maintenance of Files. Maintain files in a current status; locate and furnish files upon request. Prepare file plans and dispose of files in accordance with governing directives.

d. Travel and Transportation. The ASC will make travel and transportation arrangements, pick up tickets, etc, for personnel it supports.

e. Mail Control and Distribution. Receive, process, and deliver all incoming and outgoing mail for offices supported in accordance with AFR 10-5. Maintain suspense control and followup system prescribed in AFR 10-1/AFLC Sup 1.

f. Reproduction Service. Reproduce documents on copy machine (up to 10 copies) or obtain additional copies by the duplicating process at the local printing plant.

g. Other Services. Receptionist, answer telephone calls, maintain appointment calendar for division chiefs supported, evaluate the organization's office supply requirements, order supplies, and pick up and deliver them.

6. ADMINISTRATIVE SUPPORT CLUSTER STANDARD OPERATING PROCEDURES. Each OPR will publish, in an appropriate operating instruction (OI), ASC procedures which best meet its requirements. These procedures will include as a minimum a delineation of all tasks performed and the assignment of those tasks to ASC personnel. Each OPR will furnish a copy of this OI to DAX.

7. AUTHORS' INSTRUCTIONS. Instructions for authors, general dictating techniques, and examples of forms, correspondence, and reports authorized for use at HQ AFLC will be published as Appendix 1 to this HOI.

8. WPC STANDARD OPERATING PROCEDURES. These procedures will be issued as Appendix 2 to this HOI with distribution controlled and made by DAX to WPCs only.

9. SECURITY. Classified information must be controlled at all times in accordance with AFR 205-1. WPC dictation equipment cannot be used to dictate classified information. You may dictate classified information to your ASC stenographer, into portable dictating equipment available from your ASC, or it may be typed in the WPC from longhand. Not all typing equipment in the WPCs is cleared for typing classified information; therefore, CSs must insure that the machine on which classified information will be typed has been cleared.



C. W. MORIN, Colonel, USAF
Director of Administration

F. M. ROGERS, General, USAF
Commander

ATTACHMENT 18

HQ AFLC HOI 11-1, Appendix 2, 1 Nov 76,
Word Processing Center Standard
Operating Procedures

WORD PROCESSING CENTER STANDARD OPERATING PROCEDURES

This appendix establishes and describes the methods and procedures which will be employed in Word Processing Centers (WPCs) to achieve optimum productivity and job enrichment.

1. **PRODUCTION GOALS.** Daily production goals are based upon 6.7 productive hours and 1.3 nonproductive hours for personal rest and delay (PR&D). Cost-effective operation and customer support in terms of satisfactory turnaround require the attainment of these goals.

Experience in Government and industry indicates that correspondence secretaries (CSs) achieve or exceed these minimum goals within 8 weeks following completion of training. (A standard line is 60 pica spaces.)

WHEN INPUT IS	OUTPUT IS	
	WORDS/LINES PER MINUTE	LINES PER HOUR/DAY
Mechanical Transcription (MT)	20.0 2.00	120 804
Longhand Transcription (LT)	16.6 1.66	110 737
Revisions (R)	50.0 5.00	300 2010
Final/Repetitive (F) - Redactron	76.2 7.62	457 3062
Final/Repetitive (F) - Xerox	100.0 10.00	600 4020

a. Single Task Assignment Concept. The assignment of the tasks listed above and as described in paragraph 2b herein provides maximum productivity and minimum turnaround time. This concept eliminates delays which occur (and result in nonproductive time) when a CS performs all or several of these tasks, each of which requires changes in equipment setup and supplies, during the duty day. To preclude the monotony associated with the single task assignment concept and afford each CS the opportunity to play an active role in all phases of WPC operations from original input to final output, WPC supervisors are encouraged to rotate the assignment of these tasks among all their personnel.

b. Waiver of Single Task Assignment Concept. The supervisor of a WPC which maintains or exceeds the minimum production goals in paragraph 1 for 4 consecutive weeks may waive the requirements in paragraph 2b if the WPC continues to maintain or exceed those goals.

2. **WORK FLOW AND CONTROL.** The assignment of work and workflow are shown in attachment 1. The Administrative Support Cluster (ASC) will provide pickup and delivery service between the author and the WPC. All work (incoming and outgoing) will be delivered to and picked up from the WPC supervisor. The WPC supervisor will:

a. Assign one correspondence secretary (CS) to:

(1) Insure that incoming work is complete and legible before it is assigned to a CS for typing. Contact the author as necessary for clarification.

(2) Proofread outgoing final work. Return work requiring correction to a revision CS.

(3) Prepare a Daily WPC Log in the format of attachment 2 from file headers on the magnetic cards (MCs) for each document produced.

(4) Prepare a WPC Request (AFLC Form 615) for each document transcribed from

APP: DAX

CAUTION: X (Controlled, issued,
by DAX)

dictation and revised. Extract necessary information from the WPC Log. Deliver completed AFLC Forms 615 to ACOOF daily.

(5) File MCs and the original keyboard draft copy for each document prepared in the WPC. Attach them to incoming revisions before delivering them to a revision CS.

(6) Assist the WPC supervisor.

b. Based upon the average daily input (in standard lines) to the WPC, designate CSs for the exclusive completion of documents in each of the categories listed in paragraph 1. A WPC supervisor whose center meets or exceeds those goals 4 consecutive weeks may waive this requirement if the center continues to maintain or exceed them.

c. Prepare and issue to each CS identical MCs with recorded setup formats for recurring documents such as those attached to Appendix I, this HOI.

d. Assign incoming work to the appropriate CS, that is, machine transcription, revision, longhand, or final copy. The duration of these assignments (minimum of 1 day) will be at the discretion of the WPC supervisor.

e. Maintain a dictionary, a current copy of HOI 10-1, HOI 11-1, AFR 10-1/Sup 1, AFM 10-4, AFR 10-6/Sup 1, AFM 11-2, AFM 100-20/Sup 1, and AFP 13-2 for reference by all CSs.

f. Insure that lines are counted and reported in accordance with this criteria:

(1) Xerox - Record the number of the last line typed as reflected on the "Print Code" copy of the 10-pitch draft or revised draft.

(2) Redactron - Record the number of the last line typed as reflected on the MC card track indicator.

(3) Statistical Line Count - Record the sum of the above number plus the number of lines of statistical data multiplied by 2. For example, a 50 line document which included 5 lines of statistical data would be counted as 60 lines ($50 + 5 \times 2$).

g. Obtain from the ASC a current personnel roster and furnish a copy to each CS. This roster will be alphabetical by name with the organization symbol, post number, and telephone number of each person supported by the WPC.

h. File and dispose of all magnetic media and retained draft copies created in the WPCs as follows:

(1) Retain repetitive documents, regulations, manuals, etc until the author directs their disposition.

(2) All other MCs are temporary unless the author assigns a disposition date. Prepare three sets of divider cards. Each set will contain a card labeled for each day of the week that is, "MONDAY, TUESDAY, WEDNESDAY, THURSDAY, AND FRIDAY." Arrange subdividers behind each of these cards by authors' office symbols. File MCs by date recorded/revised and originator's office symbol. Each Monday, the MCs in the third set (oldest by date) will be returned to the CSs for reuse. After MCs have been removed, put this set of divider cards in front of the file and file the current week's MCs behind the day each MC was recorded.

i. Maintain AFLC Form 529, WPC Maintenance Record, accurately in accordance with instructions in attachment 3. Forward it to DAX not later than the 5th workday after the beginning of each month. DAX will use the data provided in these forms to monitor vendor response, machine reliability, meantime between failure, total downtime, etc and initiate corrective action where indicated.

j. Request and review CREATE output product semimonthly and furnish AFLC Form 613, WPC Monthly Report (attachment 4) to DAX not later than the 10th workday after the beginning of each month.

3. CORRESPONDENCE SECRETARY PROCEDURES. Maximum benefits of automated typing equipment can be realized only through the use of standard formats (margins, tabs, line spacing), standard recording and playback procedures, and batch processing (grouping the tasks to minimize setup requirements). Batch processing and standard formats and procedures enable any CS to revise documents originally keyboarded by any other CS and provide document turnaround in a minimum of time. For those reasons, each WPC CS will employ only the procedures set forth in the equipment manufacturer's training manual and in this HOI/Appendix 1. WPC supervisors and CSs are encouraged to submit suggested changes to these procedures through their supervisor to DAX if they believe they have a more effective method for performing a particular function.

a. Setup. Use prerecorded format MCs issued by the WPC supervisor to set and record (DUP) margins (Xerox) and tabs (all equipment). Record a header for each document on the first four lines of each MC. To avoid problems in pagination, end each MC with a complete paragraph. Type header information from dictation or the WPC Request attached to longhand drafts. Reserve line 03 for the subject by a carriage return if the subject is not immediately available and record it on line 03 later. Time and date the transcription/revision was completed, line count, and MC number may also be recorded in REVISE after the document has been typed.

(1) Line One: Xerox 800 - Margins and Tabs; Redactron, Tabs only. DUP recorded format furnished by WPC supervisor.

(2) Line Two: Author's Organization Symbol, Name, Post Number, and telephone number; CS's Initials, Current Date, MC Number(s) and Stop Code.

"MAXP/Mr. White/103H/72184/BB/28 Jul 76/MC 8117 & 8124 (Stop Code)"

(3) Line Three: Document Subject, Recording Pitch (variable pitch equipment only) and Stop Code.

"Depot Maintenance Productivity Measurement (10P) (Stop Code)"

(4) Line Four, Page One MC: Method of input, that is MT, LH, R or RT: Military Time/Date dictated, requested, and completed typing; total pages, (Stop Code), total lines, (Stop Code) lines revised (if any) and (Stop Code).



C. W. MORIN, Colonel, USAF
Director of Administration

"MT/1600 07 28/1200 08 02/1635 07 28/2 (Stop Code) 55 Stop Code"

(5) Line Four, Page (MC) 2 and Succeeding MCs for a Document: Identify the paragraphs recorded on the MC:

"Paras 4 through 6."

b. Selection of Ribbon and Pitch. Use only fabric ribbon for drafts and revisions. Use only carbon ribbon for final copy. On variable pitch machines, use RIGHT JUST proportional spacing for final copy unless the document is part of a larger document previously finished in 10 or 12 pitch type. Right Justification proportional spacing reduces the consumption of paper, filing space, and the cost of reproduction and postage.

c. Playback. Batch processing and use of prerecorded standard formats will enable documents recorded on variable pitch equipment to be played back in 10- pitch, 12- pitch, or proportional spacing without rekeyboarding the document. Standard recording of the header information will eliminate the need for the author to complete a WPC Request form for each revision; eliminate the need for the CS to complete WPC Request forms; eliminate the need for the CS to handscribe information on each MC envelope; and eliminate the need for the WPC supervisor to handscribe a log. Header information will be played back as follows:

(1) Drafts, Revision Drafts, and Record Copy: Play line 02.

(2) Magnetic Card Envelope: Play lines 02 and 03.

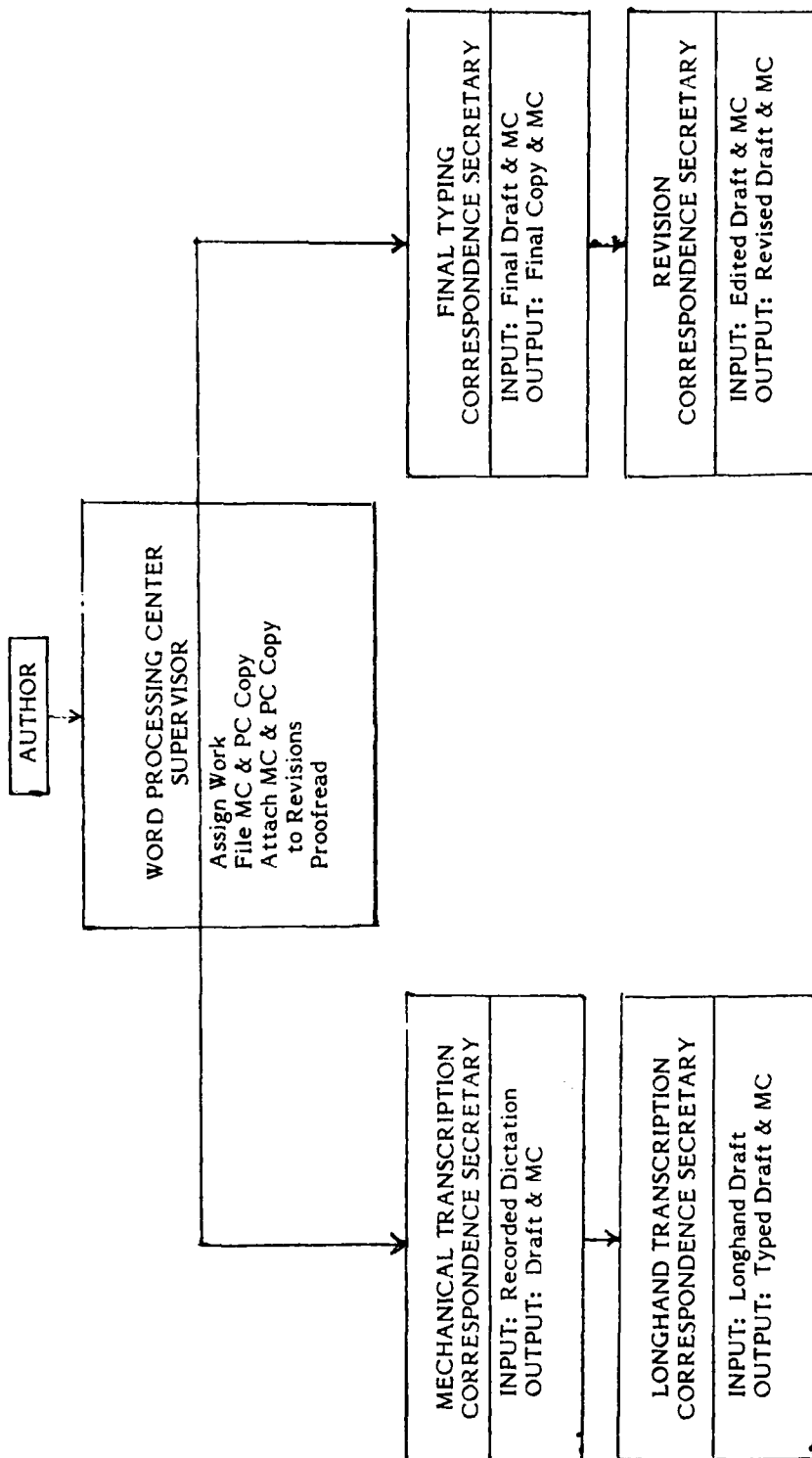
(3) WPC Log: Play lines 02, 03, and 04.

F. M. ROGERS, General, USAF
Commander

4 Attachments

1. Work Flow & Control Chart
2. WPC Daily Log
3. WPC Maintenance Record, AFLC Form 529
4. WPC Monthly Production Report, AFLC Form 613

WORK FLOW AND CONTROL CHART



MA/DA WORD PROCESSING CENTER DAILY LOG		28 Jul 1976			
		<u>PG</u>	<u>MT</u>	<u>LH</u>	<u>LR</u> <u>RT</u>
MAXP/Mr. White/103H/72184 /BB/28 Jul 76/MC 8117 & 8118 Depot Maintenance Productivity Measurement MT/0800 07 28/1200 08 02/0900 07 28		2	55		
MAXP/Mr. White/103H/72184/BB/28 Jul 76/MC 8117 & 8118 Depot Maintenance Productivity Measurement R/1000 07 29/1200 08 02/1200 07 28		2			5 55
MAXP/Mr. White/103H/72184/BB/28 Jul 76/MC 8117 & 8118 Depot Maintenance Productivity Measurement RT/1400 07 28/1200 08 02/1500 07 28		2			55

18 15

PG - Total number of pages in the document.

MT - Lines typed from mechanical recording.

LH - Lines typed from longhand draft.

LR - Lines revised in the document.

RT - Total lines typed in revised or final copy.

[illegible]

Word Processing Maintenance Record

How to Prepare Word Processing Center Maintenance Record
(AFLC Form 529)

Block 1 - WPC No. - Indicate the assigned WPC number.

Block 2 - Organization and Location of WPC. Self-explanatory
(If no room/post number, leave blank).

Block 3 - Equipment. Place an "X" in appropriate block.

Block 4 - Name of operator. Place last name of operator
normally using the equipment.

Block 5 - Machine (Type/Model/Tank). Identify by brand name/
model number where applicable.

Block 6 - Serial No. Identify the serial number of equipment
to be repaired.

All other blanks - self-explanatory.

WORD PROCESSING CENTER MONTHLY REPORT					
1. ORGANIZATION/WPC MA/DA WPC				2. MONTH YEAR NOVEMBER 1976	
3. MANNING DATA					
CORRESPONDENCE SECRETARIES	AUTHORIZED	ASSIGNED	VACANCIES	AUTHORS SUPPORTED	
	9	* 9	1	183	
4. TURNAROUND AND BACKLOG					
		HOURS PER DOCUMENT	DOCUMENTS	PAGES	
A. AVERAGE TURNAROUND	LH	4.07	984		
	REV	2.48	192		
	MT	1.88	97		
B. HARD COPY BACKLOG (EOM)				12	
C. DICTATION BACKLOG (EOM)		.2			
5. AVERAGE WORKLOAD DATA					
		LINES	PAGES	DOCUMENTS	
A. OUTPUT PER DAY		4126	246	114	
B. DICTATION PER DAY		1704	74	37	
C. REVISIONS PER DAY		632	27	16	
D. HARD COPY PER DAY		1790	78	39	
E. DICTATION USE PER DAY		49 %		9	
F. RETYPE FREQUENCY PER DAY		15 %			
G. TOTAL WORKLOAD DISTRIBUTION			1-3	88 %	
			over 8	2 %	
6. EQUIPMENT			7. SERVICE RESPONSE		
		TYPING	DICTATION	TYPEWRITERS	DICTATION
A. AVAILABLE HOURS		1584	1584	A. AVERAGE HOURS	1.5 7.4
B. DOWNTIME HOURS		4.5	37	B. NO. OCCURRENCES	3 5
C. PERCENT DOWNTIME		1	2		
8. PRODUCTIVITY					
A. PERSONNEL HOURS AVAILABLE		B. DAILY PERSONNEL EQUIVALENT		C. LINES/DAY/SECRETARY	
1320		7.5		550	
9. REMARKS					
* BLOCK 3 - 1 ASSIGNED CORRESPONDENCE SECRETARY IS ON A TEMPORARY POSITION.					
18-8					

HOW TO PREPARE WPC MONTHLY REPORT (AFLC FORM 613)

The WPC supervisor will be responsible for completion of all block (1-8) and block 9 where applicable. See example of completed AFLC Form 613.

Block 1 - Organization/WPC. Indicate organizational symbol and appropriate WPC number.

Block 2 - Self-explanatory.

Block 3 - Manning Data. Self-explanatory. The "Authors Supported" block indicates the total number of authors using the system during reporting period. (Count each user one time.)

Block 4 - Turnover and Backlog.

A. Average Turnaround. Obtain from CREATE listing (pages 88-93) for each category indicated, i.e. LH, REV, MT.

B. Hard Copy Backlog (EOM). Indicate total hard copy backlog (pages) at end of month.

C. Dictation Backlog (EOM). Indicate total dictation hours (to nearest tenth) of backlog at end of the month.

Block 5 - Average Workload Data.

A-D. Indicate average lines, pages, and documents of each category (A-D). Obtain from CREATE listing (page 2) by dividing total number of workdays into each total.

E. Dictation Use Per Day. Obtain percentage of dictation by dividing 5B by the sum of 5B and 5D.

F. Retype Frequency Per Day. Obtain percentage of retyped lines per day. Divide 5C by 5A.

G. Total Workload Distribution. Obtain from CREATE listing (page 5), Document Count Frequency.

Block 6 - Equipment.

A. Available Hours. Multiply total number of units by total number of WPC operational hours for each category, i.e., typewriters and dictation (include console).

B. Downtime Hours. Indicate the sum of all downtime hours for each category.

C. Percent Downtime. Obtain by dividing Block 6B by Block 6A for each category.

Block 7 - Service Response. Obtain average response time by dividing the number of occurrences into the sum of all response time items.

Block 8 - Productivity.

A. Personnel Hours Available. Indicate total number of personnel hours available during reporting period (total payroll hours minus all leave, holidays and other hours unavailable for assigned activity).

B. Daily Personnel Equivalent. Obtain by dividing 8A by (8 hours times total working days).

C. Lines/Day/Secretary. Obtain average lines per day, per secretary. Divide 5A (lines) by 8B.

Block 9 - Remarks. If explanation is necessary for any of the blocks or items within the blocks, reflect this by placing an asterisk in appropriate block, or use for other applicable information as necessary.

ATTACHMENT 19

HQ ATC WPC OI 11-2, Oct 77,
Line Counting Procedures

October 1977

Administrative Practices

Line Counting Procedures

This operating instruction outlines the procedures to be followed in counting typed lines in the HQ ATC Word Processing Center (WPC). It applies to all personnel assigned to the WPC.

1. General. Productivity statistics are required to determine the machine/personnel resources required as well as to provide a measurement of individual proficiency. These statistics will also reflect the amount of work we are doing for each staff agency supported (outlined in WPCB OI 11-1).

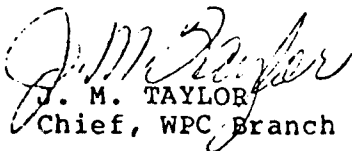
2. Responsibilities:

a. Each correspondence specialist records the number of lines typed for each document processed on ATC HQ Office Form 2. These forms are completed for each agency supported and given to the section supervisor at the close of business each Friday.

b. Section supervisors will compile production statistics and forward them to the center manager on ATC Form 88D by close of business each Monday.

c. Center manager consolidates reports from each section and compiles a report for DAY on a weekly basis.

3. Procedures. Attachment 2 contains detailed procedures for counting lines in the WPC.


J. M. TAYLOR
Chief, WPC Branch

2 Atch

1. Definitions
2. Line Counting Procedures

DEFINITIONS

The definitions herein are defined for the purpose of clarifying categories of typing when aggregate lines typed.

1. Factor. A term used to identify the weight/credit given for the level of difficulty of a typing project.

2. Forms. Any document typed on a numbered form is considered a form application.

3. Statistical. Either numerical data or narrative material typed in columnar or unique format will be considered statistical typing.

4. Revision/Pre-Record. Documents previously typed in the center that are returned with the author's changes, or documents stored in the center to be processed when variable information is submitted by authors are considered revision or pre-record applications.

5. Repetitive (automatic). The same document replayed more than once, or the same document addressed to more than one addressee (i.e., switch code applications, etc) will be referred to as repetitive documents.

LINE COUNTING PROCEDURES

1. Narrative typing.

a. Letters. Begin counting lines with reply to attention of. Count through the signature block or the attachment and copies to elements, whichever is longer, otherwise, count through the last line of text. If there is a memo for record, include those lines, but not the extra spaces between the last line of text and the beginning of the MR. If you use the plastic overlay to compute those lines, place the first line even with reply to attention of through the last line of text or the signature block and add the lines in the MR. If you take machine line count use stop codes following the signature block or last line of text, as appropriate, and type the MR (please don't insert extra carrier returns). Total lines of type and enter under MD or HC and under the factor column.

b. Messages. Use message format card. Begin counting lines with the first typed word, i.e., unclassified in the upper right hand corner. If taking machine count, set stop codes at the end of text, roll down to the signature block and type signature element lines and unclassified. When using the plastic overlay, count through the text and add the lines in the authentication, author, data area and unclassified. Enter the total lines typed under MD or HC column and factor as a form (120%), entering this figure in your factored column.

2. Forms. In counting forms that require only Xs, short words or phrases, each word or "X" is assigned a value of "1" and every ten words or Xs, and any portion thereof is counted as one line. Narrative or text material in forms is counted the same as the body of letters. Enter the total lines typed under MD or HC, as appropriate, and enter the factor count as a form (120%).

3. Statistical. Count the same as narrative letters. If an 8 x 10 1/2 paper is typed lengthwise, take the total lines plus 1/3. If typed lengthwise on legal size paper, take the total lines and double your line count. Enter this figure under the HC or MD column and factor that figure as statistical material (145%) and enter in the factor column.

4. Revision work. Revision work will be classified as revision if less than 40% of the entire job requires revision. If more than 40% of the job is changed, or has changes in it, it will be more advantageous to rekeyboard and count as original copy. When counting revision projects, count the total lines in the job and enter that figure under the HC column. Factor total lines as revision (50%) and enter in factor column.

5. Prerecorded. Count the total lines in the job and enter figure under HC column. Factor total lines as revision (50%) and enter in the factor column.

6. Repetitive (Automatic) Letters. Count total lines of address list, total the lines in the original keyboarding of the letter and enter total under HC or MD and factor columns. Total lines in all the letters and enter under HC column and factor as a repetitive document (30% of total) entering this figure under the factor column.

7. Special categories.

a. Citations. Take full line count for initial keyboarding and play out to execute the right justify, e.g., if the citation is 30 lines from the heading through the last line, enter 30 under HC column, and 30 under your factored column following initial keyboarding. When using the right justify program card to execute, add to the previous factor count the total number of lines in the citation. In other words the factored column will be double your MD or HC column, as appropriate. If returned for revision, which necessitates reexecution of the right justify program, count in the same manner. If when revising you don't have to reexecute the right justify program, enter the revision factor count for the citation in your factor column.

b. There will always be exceptions to any rule and adjustments will need to be made in our procedures. On unusual projects work with the center manager or section supervisor to determine the best method for determining line count on these jobs.

c. One exception will be the narrative of recommendations for decoration. With the restrictions imposed for margins, etc, this application will be "factored" as a form.

8. Identification line. This should be typed on the first page of drafts, or the signature page or last page of final products, as applicable. Always add one line to your total line count for this element.

BER OF- LINES	ORIGINAL (100%)	REVISIONS/ PRERECORDED (50%)	REPETITIVE (20%)	STATISTICAL (145%)	FORMS (120%)	NUMBER OF LINES	ORIGINAL (100%)	REVISIONS/ PRERECORDED (50%)	REPETITIVE (20%)	STATISTICAL (145%)	FORMS (120%)
3	3	2	1	4	4	51	51	26	15	74	61
4	4	2	1	6	5	52	52	26	16	75	62
5	5	3	2	7	6	53	53	27	16	77	63
6	6	3	2	8	7	54	54	27	16	78	65
7	7	4	2	10	8	55	55	28	17	80	66
8	8	4	2	11	10	56	56	28	17	81	67
9	9	5	3	13	11	57	57	29	17	83	68
10	10	5	3	14	12	58	58	29	17	84	70
11	11	6	3	16	13	59	59	30	18	86	71
12	12	6	4	17	14	60	60	30	18	88	72
13	13	7	4	18	16	61	61	31	18	88	73
14	14	7	4	20	17	62	62	31	19	90	74
15	15	8	4	22	18	63	63	32	19	91	76
16	16	8	5	23	19	64	64	32	19	93	77
17	17	9	5	25	20	65	65	33	20	94	78
18	18	9	5	26	22	66	66	33	20	96	79
19	19	10	6	28	23	67	67	34	20	97	80
20	20	10	6	30	24	68	68	34	20	99	82
21	21	11	6	30	25	69	69	35	21	100	83
22	22	11	6	32	26	70	70	35	21	100	84
23	23	12	7	33	28	71	71	36	21	103	85
24	24	12	7	35	29	72	72	36	22	104	86
25	25	13	8	36	30	73	73	37	22	106	88
26	26	13	8	38	31	74	74	37	22	107	89
27	27	14	8	40	32	75	75	38	22	109	90
28	28	14	8	40	34	76	76	38	23	110	91
29	29	15	8	42	35	77	77	39	23	112	92
30	30	15	9	44	36	78	78	39	23	113	94
31	31	16	9	45	37	79	79	40	24	115	95
32	32	16	10	46	38	80	80	40	24	116	96
33	33	17	10	48	40	81	81	41	24	117	98
34	34	17	10	50	40	82	82	41	25	119	99
35	35	18	11	51	42	83	83	42	25	120	100
36	36	18	11	52	43	84	84	42	25	122	101
37	37	19	11	54	44	85	85	43	26	123	102
38	38	19	11	55	45	86	86	43	26	125	103
39	39	20	12	57	47	87	87	44	26	126	104
40	40	20	12	58	48	88	88	44	26	128	106
41	41	21	12	59	49	89	89	45	27	129	107
42	42	21	13	61	50	90	90	45	27	131	108
43	43	22	13	62	51	91	91	46	27	132	109
44	44	22	13	64	52	92	92	46	28	133	110
45	45	23	14	65	54	93	93	47	28	135	112
46	46	23	14	67	55	94	94	47	28	136	113
47	47	24	14	68	56	95	95	48	29	138	114
48	48	24	14	70	58	96	96	48	29	139	115
49	49	25	15	71	59	97	97	49	29	141	116
50	50	25	15	72	60	98	98	49	29	142	118
						99	99	50	30	144	119
						100	100	50	30	145	120

INDEX

- Abstract, ii
- Acoustic Analysis, 4
- Action Officers'
 - Briefing, 56-57
 - Questions & Answers, 57-59
- Administrative Systems Course (ASC), viii, 126
- Administrators'
 - Briefing, 59-65
 - Questions & Answers, 66
- AF Form 1509, 131
- AFIT Study, 114-115
- AFLC, 132, 133
- AFR 4-2, 4, 131
- AFR 25-5, 125, 129
- Argyris, 112
- Army WP, 4
- ARPC, 121-123
- Assigned Strength, 47
- ATC, 133
- Attachment
 1. Administrative System Class Schedule, 141
 2. List of Viewgraphs and Films, 142
 3. Word Processing Implementation, 143
 4. Word Processing Survey, 144
 5. ACSC Form 5, "Speaking Feedback", 145
 6. Input for WP Equipment, 146
 7. Consolidated Program Summary, 147
 8. Schedule of Essential Actions, 148
 9. Creating the Operational System, 149
 10. WP Implementation Actions Network, CPM, 150
 11. PERT Example, 151
 12. Reclassification of WP Equipment, 152
 13. WP Implementation Checklist, 153
 14. WPC General Engineering Specifications, 154
 15. CSC Form Position Evaluation Statement, 155
 16. Typical Job Enrichment Ideas for WP, 156
 17. HQ AFLC OI for WPC, 157
 18. HQ AFLC Productivity Standards, 158
 19. HQ ATC WPC OI 11-2, Line Counting Procedures, 159
- Audit Report, 5
- Autonomy, 120
- Base
 - DA, 69, 70
 - Level Financial Structure, 76
- Bibliography for WP, 5
- Birth of WP Concept, 18
- Briefings, Chap 2
 - Where, When, How, 12-13
- BTU, 99, Atch 13
- Budget
 - Call, 79
 - Preparation, 73, 79
 - Submission, 70, 79
 - Success/Failure, 80
- Budgeting, 73
- Carpet, 98
- Casady Study of WP operators, 113
- Changes on the Horizon, 94-95
- Chanute MET Study, 133
- Civil Engineering, 98-100
- Civil Service
 - Classification, 104, 105
 - Commission, 103-106
- Civilian Personnel
 - Assignment, 107
 - Officials, 65-68
 - System, 103, 107-108
- Communications-Electronics, 100
- Computer Decisions, 6
- Coordinated plan, 88
- Cost, 62
 - Centers, 76
- Critical Path Method, 89-91
- Data Automation, 94
- DATAPRO Reports, 7
- Dictation Equipment, 59, 94, 100
- Draperies, 98

Elements of Expense/Investment
Codes, 75

Employee Motivation, 109, 123
Equipment

Classification, 94
Recommendations, 55

Factor Evaluation System, 106

Factored Line Count, 133

FASCAP, 82-86

Feedback, 120

Figure

1. - 71

2 - 72

3 - 77

4 - 119

Financial Management, 74

Board, 78

Financial Working Group, 78

Free magazines, 6

Funding policy, 44

Furniture, 101-102

Hachman, Oldham, et al., 119

Herzberg's studies, 111

High achievers, 111

Hiring freeze, 108

Information Management

Corporation, 56

IWPA, 9, 10

Introduction, viii

Investment funds, 82

Invitation for Bid, 96

Jargon in WP, 20

Job Enrichment, 116-123

Advisors, 117-118

ARPC, 121-122

LMDC, 117

"Kissing the Girls Goodbye", 56

Labor unions, 66

LMDC, 117, 123

Major Force Programs, 74

Management Questions and

Answers, 13, 14, 47, 55

Manpower Costs, 47

Maslow's Theory, 110

McClelland's studies, 111-112

McGregor, 112

Minnesota Study, 113-114

Modern Office Procedures, 6

Modular Furniture, 101

Murphy's Laws, 87

OBRC, 81

Office, The, 6

Official Publications, 2, 4, 5

Operational Audit, 129, 130

Pay Grades/Promotions, 67

Personal secretary, 55

Persuasion, Art of, 12

"Pivot Point", 56

Planning Coordination, 86

Planning Phase, 70, 73

Preface, iii

Predetermined time standards,
129, 130

Priority work, 58

Procurement, 95, 97

Productivity, 129-135

Professional Associations, 9

Professional Readings, 1-8

Program Element Codes, 75

Program Evaluation and Review
Techniques, 89-91

Programming phase, 73

Project Officer, viii

Reduction in Force, 108

References that Cost, 6-9

Request for Proposal, 96

Requisitioning Technical
Publications, 7

Resource Advisor, 76

Responsibility Centers, 76

Ribbons, 95

"Seybold Report on WP", 8

Skill variety, 118

Standard, 129

Time, 129

Stock numbers, 92-94

Summary of Chapter

- 1 - 10
- 2 - 68
- 3 - 86
- 4 - 102
- 5 - 123
- 6 - 137

Supply System, 91

Survey

- Considerations, 45, 46
- Development, 39, 40, 60
- Forms, 59, 65

Syntopican, 10

System Management, 58, Chap 6

Table of Contents, iv

TA 006, 92, 93

Task

- Identity, 118
- Significance, 120
- Telephone, 58, 100
- Theory Y, X, 112
- Thursland, 126, 127, 130
- Time study, 128
- Typing pool, 55

Vendor training and
service, 96-97

Word

- of Caution, 20
- Processing Council,
Fed Govt, 10
- Processing Funds, 81-82
- Processing Is, 18
- Processing Report, 7
- Processing plan, 81
- Processing World, 7

Work

- Measurement, 7, 125, 135
- Sampling, 128
- Unit, 129
- "Worries and Wonders", 60

FROM: _____

FTD/SU/Maj Schur
Wright-Patterson AFB OH 45433

.....
(Fold on dotted line)