



U. S. DEPARTMENT OF THE INTERIOR
OFFICE OF SURFACE MINING
RECLAMATION AND ENFORCEMENT
DIRECTIVES SYSTEM

Subject Number:

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135

Date: 10/26/82

Subject:

Word Processing

Approval:

Title: Asst. Director, Budget and Administration

1. Purpose. This directive provides policy guidance to all OSM activities in the acquisition, utilization, and management of word processing systems; it implements the guidelines established in the Federal Property Management Regulations (41 CFR 101-11.9).

2. Definitions.

a. Interface Devices - can be connected directly to a word processor and includes optical character readers, telecommunications units, high speed impact printers and non-impact printers.

b. Key Operator - the individual designated as the contact person for a particular WP system or configuration. This provides a single point of contact for a system and is needed, primarily, on the shared logic systems.

c. Shared Logic System - has several input and output devices linked to one host processor (Central Processing Unit - CPU) that controls the recording of input and output. A shared logic system is in contrast to a stand-alone system which accomplishes text processing in one unit (CPU). The Wang Word Processing System (WPS) 25 is a shared logic system while the Lexitron 1202/1303, VYDEC 1400, Xerox 800/850, and Wang WPS 5 are stand-alone systems.

d. Software - computer programs, menus, code, rules, and procedures used in the operation of word processing.

e. Word Processing (WP) - the manipulation of textual material through the use of a keyboarding device capable of controlled storage, retrieval, and automated typing.

f. Word Processing Equipment (WPE) - includes automatic typewriters through keyboard terminal and associated printers used to access government or commercial computer services for the primary purpose of word processing.

WPE can be classified within six categories as follows:

CATEGORY I - Electronic Typewriter

A one-piece typewriter having internal memory only (i.e. IBM Memory 50/100).

CATEGORY II - Blind Word Processor

Has an integral keyboard, an internal memory, and a magnetic media recording capability (i.e. IBM Magnetic Tape Storage (MTST) or Mag Card II).

CATEGORY III - Thin-window Word Processor

Has an electronic keyboard, an integral memory, a magnetic recording capability, and a visual display of up to two lines.

CATEGORY IV - Visual Display Text Editor

Has an electronic keyboard, usually with a separate printer, an internal memory, magnetic recording capability, and a visual display screen.

CATEGORY V - Shared Logic or Minicomputer Text Editor

Has a central processor or controller that can link multiple workstations to a variety of entry and output devices (i.e. WANG WPS 20/25/30).

CATEGORY VI - Timesharing Word Processor

Uses a main frame computer (or minicomputer) to provide memory and text processing capability (i.e. WYLBUR Text Editor on main frame) to remote input and output devices, including electronic keyboards, visual displays, and printers.

WPE purchased by OSM includes Wang, Lexitron, Vydec, IBM, Olivetti, 3M, Micom, and Xerox.

3. Policy/Procedures.

a. Responsibilities.

(1) Assistant Director, Budget and Administration
(AD for B&A), will:

(a) Approve all requests for WPE, interface devices, and software. Requestor's justification documentation will be reviewed and approval granted to request that show both a need for increased efficiency/accuracy and, also, effective use of the equipment; and

(b) Assign WPE based on justified need. Equipment needs and usage will be reviewed periodically (at a minimum annually) to determine if reassignment is necessary.

(2) For Headquarters, the B&A Management Services Division will:

(a) Order, stock, and distribute supplies for WPE. Supplies will be ordered from vendor periodically to take advantage of quantity discounts. Only COURIER 10, PRESTIGE ELITE 12, and OCR-8 font print elements will be ordered. (This will enable all of DSM to standardize print styles and use proposed Optical Character Recognition (OCR) interface devices). Requests for different print fonts must provide strong justification. Other print fonts will not be kept in stock. Supplies will be distributed to individual offices in approximately 30 day quantities to avoid unnecessarily stockpiling supplies;

(b) Forward all requisitions received for WPE, interface devices, and software (including lease, renewals, and upgrades) to the B&A Information Resources Management Staff (IRMS) for concurrence before a Purchase Order is approved;

(c) Procure blanket purchase contracts for WPE maintenance and supplies; and

(d) Procure blanket purchase contracts for general word processing text entry and revisions when overflow work and special projects are required.

(3) B&A Information Resources Management Staff (IRMS) will:

(a) Annually review leased equipment, accumulated credits to determine if there is an advantage to convert from lease to ownership;

(b) Maintain an inventory of all WPE, interface devices, and software. Provide semi-annual updates to the Department's master WP inventory;

(c) Disseminate information on WP applications/capabilities and GSA standards/guidelines to both managers and DSM operating officials;

(d) Review service records to determine the adequacy of the vendor's maintenance service and the servicability of the equipment;

(e) Review WP related requisitions, and make recommendations for approval or disapproval to AD for B&A.

(f) Assist offices in justification of WP/WPE(to include ensuring compatibility with existing wpe); and

(g) Provide assistance to shared logic system key operators with system related functions such as security feature, loading software, telecommunications feature, etc. (This is not to replace formal training.)

(4) Headquarters Directorates and Technical Centers (TC) will designate Key Operator(s) based on the location of the Central Processing or Memory Unit (CPU) for all shared logic systems such as the Wang WPS 25. One key operator and a backup should be designated and trained for each system (CPU).

(5) The Key Operators will:

(a) Report all machine service problems to the servicing contractor. Before reporting, the key operator will attempt to verify that a valid machine problem exist and is not due to operator error. Maintain a record of service problems (use format of Appendix A) and make it available to the B&A IRMS at their request;

(b) Maintain integrity of system's software to include the dumping and restoring of software (sometimes referred to as "cleaning the system" for the Wang equipment) on a monthly and as needed basis;

(c) Attempt to answer technical questions and provide assistance to other operators. When necessary, will obtain answers to technical operational problems from vendors; and

(d) Maintain master copy of updated reference manuals on operations and special features.

(6) Each Office Head (i.e. supervisor) will:

(a) Ensure that word processing equipment is used for government business only;

(b) For Headquarters, requisition supplies from B&A Management Services Division's stock in advance of need. For TC's and Field Offices, the administrative officer or secretary/administrative assistant will procure, stock, and distribute WP supplies. This individual will periodically order supplies to take advantage of appropriate quantity discounts;

(c) Ensure that users report service requirements to the key operator promptly;

(d) Ensure that operators are adequately trained. Assistance on training availability can be obtained from the OSM Training Officer;

(e) Prepare requisition and full justification for lease/purchase of WPE, interface equipment, and software, and forward to the AD for B&A ;

(f) Report to B&A IRMS and B&A Management Services Division the intent to relocate WPE. NOTE: Unauthorized movement of WPE may void maintenance agreements and possibly damage equipment;

(g) Maintain documents on system and archive storage devices. (Each office is responsible for maintaining their own backup copies of documents.);

(h) Safeguard sensitive documents on the system by utilizing security options or dumping documents to a storage media (such as a diskette) that can be secured;

(i) Notify the AD of B&A whenever WPE or interface devices are no longer required.

4. Justifying Word Processing and WPE.

a. Because of the expense of WP and WPE (6 to 30 times more than electric typewriters), the General Services Administration requires that the Department and, consequently DSM, closely control their acquisition and use. Office heads will be required to submit detailed documentation for the following areas:

(1) Initial acquisition of WP (i.e. introduction of WP into an office where WP is not currently used at all);

(2) Acquisitions where WP is currently in use. To include the following:

(a) Requests for additional WPE, interface devices, or software to be acquired through lease/rental or purchase.

(b) Renewals of leases of WPE, interface devices, or software.

(c) Conversion from lease to purchase of WPE, interface devices, or software.

(d) Upgrades to existing WPE, interface devices, or software.

(3) In addition, at least annually, B&A IRMS will survey the use of WPE, interface devices, and software currently in use to determine if they are being efficiently and effectively utilized.

b. The following documentation is required to support the initial acquisition of WP:

(1) A Feasibility Study as required by FPMR 101-11.903 to determine whether WP will be cost effective. The objective of this study is to determine if WP will reduce the cost of producing a final document in a timely fashion. The following steps should be followed in this study:

(a) State the problems that exist in the office and, as a direct result of the acquisition of WP, state how the problems will be eliminated.

(b) Analyze the work load by categorizing typing as original, revision, and repetitive. Significant productivity increases can result from the use of WP for repetitive typing with revisions. The cost of WPE for original typing is actually greater than the cost in using ordinary electric typewriters. To aid in collecting this data, the format in Appendix B should be used for a 10 work day sampling period. A high ratio of repetitive or original typing is required to justify WPE. What will be reviewed is not only gross typing volumes, but volumes along with document types. Documents justifying WP are those having extensive revisions, and applications where paragraphs of previously written text are recycled. Short, unique documents, typed only once, offer few if any, costs savings.

(c) Identify total annual costs.

1 Compute annual equipment and personnel costs required to type on electric typewriters the total number of original and repetitious lines to be typed annually. Certain types of repetitive typing, such as identical letters to multiple address should not be counted when copies or form letters are acceptable. Use the figures obtained in (b) above and multiply by 26 to obtain an annual cost.

2 Determine annual equipment cost by amortizing the original cost of the electric typewriter(s) over a 5 year period.

3 Add annual personnel and equipment costs to determine total annual costs.

4 Compute total annual costs required to produce the same or similar material on the WPE under consideration in the same manner as described above. Use actual leased costs or purchased price plus maintenance costs. Include any additional costs that would result from the proposed use of WPE such as wiring costs or special electrical circuits;

5 If the total annual cost saving of using WP is not greater than electric typewriters, WPE should not be used! Offices should also consider use of overtime, staggered workday, or contractor support over the lease or purchase of equipment if the need is for a single rush job or periodic heavy workloads; and

6 Another area to be considered in the Feasibility Study is the time savings aspect of WP. Saving time by using WPE may not result in a cost saving by itself. Time saved will only result in a cost saving if overtime, contractor support, or personnel positions are reduced or eliminated, and the time saved can be used to accomplish other productive work;

(2) If after completing the above computations, it is determined that the use of WP is justifiable, then the following documentation must be completed:

(a) Requisition Form OSM 1511-1, see Appendix C.

1 Requisition must include Vendor's GSA contract number and sales person's contact name and phone number in addition to the following cost information: installation charge, transportation charge, required interfaces, connection wires, monthly maintenance charges, etc.

2 In addition, funds to cover the proposed system must have been budgeted and be available for use.

(b) Provide on a separate sheet of paper the following purchase versus lease information:

1 Lease

a Lease cost per month _____;

b Maintenance cost per month _____ or
N/A (maintenance often covered in lease cost);

c Vendors' lease credit "buyout" plan
is as follows: _____

2 Purchase

a Purchase cost (total) _____;

b Maintenance cost per month _____;

c Equipment/software has _____ day
warranty; and

d Equipment/software has a _____ day trial
acceptance period.

(c) Use the above figure to determine if equipment/software should be purchased or leased. Remember that the maximum life expectancy of most WPE is only five years and some equipment, such as printers, is as little as 3 years. In addition, purchase ties one into obsolete equipment and tends to lessen the vendor's response to problems.

c. Documentation is required to support the acquisition of additional WPE, interface devices, or software. As a guideline, the government standard for workstation use is 5 1/2 hours usage per day and, generally, 3 workstations justify a single printer.

(1) Before planning the requisition of additional WPE consider the following:

(a) Eliminate the use of WPE for repetitive typing of correspondence for which form letters or copies could be used;

(b) Eliminate the use of WPE for short one time letters and memos;

(c) Consider use of electric typewriters or a less sophisticated WPE such as a memory typewriter;

(d) Increase the amount of time WPE is operated by making units more accessible to potential users. Units should be located centrally within the office to give greater access. Government studies have shown that WPE use should be interruption free for greatest productivity; therefore, placement at an individual's work desk is asking for low productivity; and

(e) Stagger workers' day or lunch breaks to increase availability of WPE.

(2) If the above steps do not alleviate the need for additional WP support, the following documentation is required to support acquisition:

(a) State the problems that exist in the office and, as a direct result of the acquisition of the proposed added capabilities, state how the problems will be eliminated.

(b) Analyze the workload currently on the equipment used. A sheet similar to that used in the Feasibility Study phase can be employed (see Appendix B);

(c) Complete Requisition and lease versus purchase computation as described under paragraph 4 b (2) (b).

(d) In addition, WPE should be compatible with existing WPE through direct interconnection, the use of compatible storage media, or telecommunications. Current Wang equipment supports Wang WPS and industry standard 2780/3780 bisynchronous communications protocol (language) at a 2400 baud data transfer rate. (Details on modem stepping, etc. are available from B&A IRMS and the vendor).

d. To support the renewal of leased WPE, interface devices, or software the following documentation is required:

(1) A completed Requisition Form DSM 1511-1, see Appendix C;

(2) A paragraph stating that there is still a need for the item for the entire renewal period; and

(3) In addition, if it appears that there is to be a continuing need for the item, and the item is still serviceable, then consideration should be given to using accrued lease credits to purchase the item (see paragraph e immediately following).

e. Documentation required to support the conversion from lease to purchase should include;

(1) A completed Requisition Form DSM 1511-1, see Appendix C;

(2) A paragraph stating that there is a continuing need for the items and that they are still serviceable; and

(3) A lease versus "buy out" analysis which shows that over a reasonable life expectancy (usually 3 years), it is cost beneficial to purchase the item (be sure to include the cost to maintain the item in the analysis).

f. Since upgrades to existing WPE, interface devices, or software can often cost more than the initial system (i.e. an upgrade from a Wang WPS 25 to a Wang OIS 130 involves replacing the CPU at \$22,000 and upgrading each workstation at \$1,000 each), the documentation required is similar to that needed to initially acquire the system. Documentation is as follows:

(1) Conduct Feasibility Study to determine whether the upgrade will be cost effective. The following steps should be followed in this study:

(a) State the problems that exist with the current system and, as a direct result of the upgrade, state how the problems will be eliminated.

(b) If the upgrade is required because of an increased workload, analyze the existing workload to see if an alternative to the proposed upgrade will solve the problem.

(c) Identify costs of the upgrade.

1 If applicable, compute the costs required to produce the current workload on the existing equipment.

2 If applicable, compute total annual costs required to produce the same or similar material on the system under consideration. Use actual leased costs or purchased price plus maintenance costs. Include any additional costs that would result from the proposed upgrade such as training, wiring costs or special electrical circuits;

3 If the total annual cost saving of the upgrade is not greater than the current system, the upgrade should probably not be considered; and

4 Another area to be considered in the Feasibility Study is the time savings aspect of WP. Saving time by using WPE may not result in a cost saving by itself. Time saved will only result in a cost saving if overtime, contractor support, or personnel positions are reduced or eliminated, and the time saved can be used to accomplish other productive work;

(2) If after completing the above computations, it is determined that the upgrade is justifiable, then the following documentation must be completed:

(a) A completed Requisition Form DSM 1511-1, see Appendix C.

1 Requisition must include Vendor's GSA contract number and sales person's contact name and phone number in addition to the following cost information: installation charge, transportation charge, required interfaces, connection wires, monthly maintenance charges, etc.

2 In addition, funds to cover the proposed system must have been budgeted and be available for use.

(b) Provide on a separate sheet of paper the purchase versus lease information as outline in paragraph 4 b (2) (b).

(c) Use the above figure to determine if equipment/software should be purchased or leased. Also, if applicable, consider the salvage or market value of the system being replaced.

g. Installed WPE usage will be surveyed and reviewed at least annually by B&A IRMS. The results of this survey will be a recommendation to the AD for B&A to either leave the configuration as it is or make changes. This may entail removing equipment and terminating leases. It is important to note that although WPE often appears to result in an increase in productivity, it should not be used to compensate for an unskilled typist. A poor typist producing 40 acceptable pages a day versus 20 does not realistically represent an increased productivity of 100 percent as a skilled typist can easily match that with an electric typewriter, and skilled WP operators working on repetitive material can produce even many times more pages. This survey will consist of work-load analysis, random work sampling, and interviews with involved individuals.

5. Reporting requirements. None

6. References. Additional guidelines on justifying WP can be obtained from the following:

a. GSA Records and Information Management Handbook (NSN 7610-01-125-1020) entitled: Word Processing Determining the Cost Effectiveness of WPE for Text Editing 1981 (FPMR 101-11-9).

b. Federal Property Management Regulations, 41 CFR 101-11.9.

c. Departmental WP Directive (438 DM 1)

7. Effect on Other Documents. None.

8. Effective Date. Upon Issuance.

9. Contact. B&A Information Resources Management Staff at FTS 8-343-5491.

ORGANIZATIONAL ELEMENT															
DAILY TYPING ACTIVITIES LOG		EMPLOYEE NAME		DATE		PAGE		EQUIPMENT USED			TYPE OF DOCUMENT				
TASK NO.	CLASS	TYPING CATEGORY (Number of TYPED LINES)			ORIGINATOR	TIME (in minutes)	POWER / POINTS	LITERARY	OFFICIAL	CORRESPONDENCE	SYSTEMS	STATISTICS	FORMS	MISCELLANEOUS	TOTAL
		Longhand	Shorthand	Stenographic											
(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)	(L)	(M)	(N)	(O)	(P)
1															
2															
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8															
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10															
11															
12															
13															
14															
15															
TOTALS															

APPENDIX B

SEE REVERSE FOR INSTRUCTIONS

* LINES - DEFINED AS 72 CHARACTERS PER 8 1/2 x 11 inch PAPER

The Daily Typing Activities Log

Instructions for filling in the log are given in the following seven steps:

- . Step 1. Enter identification data in the proper boxes on the top line.
- . Step 2. Task number (column A): Each number represents a separate task done during the day, and copies of everything you type should be available when requested. Use a separate log each day if more than one log per day is used. The first task number on the subsequent log should follow in sequence from the last number used on the previous log.
- . Step 3. Typing category (columns B through G): Enter the number of lines you typed for this task in the appropriate column.
 - a. Original typing (columns B through E) includes any material submitted for typing for the first one of the following four ways the material comes to you:
 - 1. Longhand (column B)-handwritten material.
 - 2. Shorthand (column C)-shorthand notes being transcribed.
 - 3. Dictation machine (column D)-dictation machine recordings.
 - 4. Self-compose (column E)-typing from general verbal or written instructions but actually composed by yourself as you type.
 - b. Repetitive revisions (columns F and G)-includes typing material already typed. For each job, enter the number of lines where a change has occurred in column F and the number of lines where no change occurred in Column G.
- . Step 4. Originator (column H): Write the name of the person and office you typed the task for.
- . Step 5. Time (column I): Record the time in minutes that you took to type the task. (round up to nearest 5 minute interval)

Step 6. Equipment (column J): Enter the manufacturer of the piece of WPE IBM selectric, Wang, etc. in this space. Enter location, room and any special features used such as sorter, column edit, math, glossary, communications.

Step 7. Type of document (columns K through O): Enter the number of lines typed under the appropriate column. The number entered here will be the same as the number entered under TYPING CATEGORY.

- a. Correspondence (column K): Includes letters memorandums, transmittals etc.
- b. Reports (column L): Includes reports, manuscripts, and other lengthy documents.
- c. Statistics (column M): Includes documents primarily structured in column format.
- d. Forms (column N): Includes standard and optional forms as well as locally created forms.
- e. Miscellaneous (column O): Includes all other types of documents. Examples: labels, control slips, etc.

OFFICE OF SURFACE MINING
ALL SPACES WITHIN HEAVY LINES
FOR USE BY PURCHASING OFFICE ONLY

REQUISITION

TRANSACTION NO. _____

Delivery Time _____ Ship Via _____

ATTENTION: George Cooper 243470M
Suggested Vendor Wang Laboratories Inc.
Address 1300 N. 17th St. 2nd Fl. Rosslyn Va
Date of Requisition _____ (Req. No. _____)
Date Required _____ (Delivery To: Greg Seitz Rm 5415-1)

Vendor WANG LABORATORIES, INC.
One Industrial Avenue - Lowell, Massachusetts 01851
MO. DAY YEAR
Date _____
FOB _____
Payment Terms _____
For use of Requisitioner
Wang must coordinate with
Greg Seitz 343-5491 before Sched. Inst.

Item No.	ARTICLES OR SERVICES	Quantity	Unit	Unit Price	Amount	Chg	Sub
The following are under GSA contract #GSA contract #GS-00C-02930							
1	Upgrade following WP System 25-2 to WP System 30:						
a.	UJ-1037 for CPU #FB8521 (Rm 5120L)	1	ea	960.00	960.00		
b.	UJ 1037 for CPU #FB8533 (Rm S-151)	1	ea	960.00	960.00		
c.	UJ 1037 for CPU #FB6070 (Rm S-265)	1	ea	960.00	960.00		
d.	UJ 1037 for CPU #HA1867 (Rm S-210)	1	ea	960.00	960.00		
e.	UJ 1037 for CPU #GZ9537 (Rm5315A)	1	ea	960.00	960.00		
	Installation Charge 3% of total			28.80	144.00		
	TOTAL				\$4,944.00		

SAMPLE