



DEPARTMENT OF THE NAVY  
HEADQUARTERS UNITED STATES MARINE CORPS  
3000 MARINE CORPS PENTAGON  
WASHINGTON, DC 20350-3000

MCO 5600.31A  
ARD  
17 Jul 2012

MARINE CORPS ORDER 5600.31A

From: Commandant of the Marine Corps  
To: Distribution List

Subj: MARINE CORPS PRINTING AND PUBLISHING REGULATIONS

Ref: (a) E.O. 13589  
(b) USD Memo, "Campaign to Cut Waste (CCW) Preliminary Guidance for Reducing Printing Costs Throughout the Department of Defense (DoD)," March 9, 2012  
(c) JCP No. 26, "Government Printing and Binding Regulations"  
(d) 44 U.S.C. §501 and §502  
(e) FAR Subpart 8.8, "Acquisition of Printing and Related Supplies"  
(f) DoD Instruction 5330.3, "Defense Logistics Agency (DLA) Document Services", May 18, 2011  
(g) SECNAVINST 5210.16  
(h) NAVSUPINST 4200.99  
(i) MCO 3104.1B  
(j) MCO 5215.1K  
(k) MCO P4400.150E  
(l) MCO P10150.1  
(m) MARADMIN 623/10  
(n) MARADMIN 514/11  
(o) SECNAV M-5214.1  
(p) MCO 5214.2F  
(q) DoD Directive 5230.24, "Distribution Statements on Technical Documents," March 18, 1987  
(r) MCO P5215.17C  
(s) SECNAV M-5210.1

Encl: (1) Best Printing Practices

1. Situation. The references govern acquisition and management of Printing, Publications, Forms, and Reprographics equipment by the Marine Corps.

2. Cancellation. MCO 5600.31.

3. Mission. To establish policy and procedures to ensure compliance with the references.

4. Execution

a. Commander's Intent and Concept of Operations

(1) Commander's Intent. The following policies and designations are established to ensure Marine Corps compliance with the references.

Distribution Statement A; Approved for public release; distribution is unlimited

(a) Public Releasable Documents. Following the guidance in references (a) and (b), as both a policy matter and cost avoidance measure, wherever practicable, all publications, forms, and other official documents approved for public release (i.e., Distribution Statement A publications and Not-Controlled blank forms) shall be disseminated via the Marine Corps official web pages on the Internet at [www.marines.mil](http://www.marines.mil) and distributed to the Operating Forces (OPFOR) on the Marine Corps Publications Electronic Library (MCPEL) DVD in lieu of distributions as printed matter.

(b) Document Services. Per the provisions of references (c) through (j), the processes and procedures associated with acquisition and management of printing, document reproduction, and distribution of official documents, including their digitization and dissemination in electronic formats; as well as, the acquisition and management of enabling equipment and managing software for publishing, are hereinafter referred to collectively as document services.

(c) Marine Corps Central Printing and Publications Management Organization (MCCPPMO). In accordance with the provisions of reference (c), paragraph 30, the Publishing and Logistics Systems Management Section (ARDE), Publishing and Logistics Management Branch (ARD), Administration and Resource Management Division (AR), Headquarters Marine Corps (HQMC), is designated as the Marine Corps' Central Printing and Publications Management Organization (MCCPPMO) responsible for providing oversight management and control of the Marine Corps printing, publishing, publications, and forms management programs, including issuance of policy and regulations governing acquisition and management of document services.

(d) Table of Organization and Equipment (T/O&E) Assets. Acquisition and management of T/O&E assets such as the Tactical Imagery Production System (TIPS) and components of the Marine Corps Common Hardware Suite (MCHS) which are procured and fielded by Marine Corps Systems Command to the OPFOR for use while deployed are exempt from the provisions of this Order and are governed by the provisions delineated in reference (k).

(e) Non-Appropriated Funds Assets. Acquisition and management of document services using non-appropriated funds are exempt from the provisions of this Order and remain governed by those policies and regulations dedicated to the management of non-appropriated fund activities.

(f) Garrison Property Assets. Following the guidance in references (l), (m) and (n), all government owned and leased document services items of enabling equipment, as discussed herein, shall be accounted for as Information Technology Asset Management (ITAM) items on the using-units garrison property records irrespective of whether accounted for by the Defense Logistics Agency, Document Services (DLADS) on the Equipment Management System (EMS).

## (2) Concept of Operations

### (a) Acquisition of Document Services

1. Per the provisions of references (c) through (h), Marine Corps commands and activities are prohibited from acquiring document services directly from commercial vendors.

2. Per the provisions of references (c) through (i), Marine Corps commands and activities shall obtain document services in the following order of precedence: first preference is the local Marine Corps Combat Camera (COMCAM) activity; second preference is the local DLADS activity; third preference is the MCCPPMO.

3. Per the provisions of reference (h) and this Order, Marine Corps Government Commercial Purchase Card (GCPC) holders are prohibited from using the GCPC to procure document services from any source other than DLADS.

4. Per the provisions of reference (i), Marine Corps units deployed shall obtain document services through their supporting COMCAM. The COMCAM may forward requirements beyond their capabilities to the deployed contracting office for procurement from the host Nation. In the absence of a deployed contracting office, deployed COMCAM units may forward requirements beyond their capabilities to the nearest DLADS or the MCCPPMO.

5. Per the provisions of reference (f), Marine Corps field commands, activities, and independent offices not collocated with a COMCAM or DLADS may obtain document services directly from the MCCPPMO. Requirements should be forwarded to the Commandant of the Marine Corps (CMC) at the following address.

Commandant of the Marine Corps (ARDE)  
Attn: MCCPPMO  
3000 Marine Corps Pentagon (Room 2B253)  
Washington, DC 20350-3000

6. All HQMC staff agencies, activities, and independent offices, regardless of location, shall obtain document services in the following order of precedence: first preference is the local or HQMC COMCAM activity; second preference is the local DLADS using the HQMC Preferred Customer Card issued by the MCCPPMO; and third preference is the MCCPPMO. All document services requirements exceeding the capabilities of the HQMC COMCAM and the preset limits of the HQMC Preferred Customer Card, including printing and reproduction for distributions to the OPFOR or external organizations, shall be passed to the MCCPPMO as the first preference provider.

(b) Acquisition of Enabling Equipment

1. Per the provisions of reference (c), paragraph 8-2, requirements for enabling equipment, including all copiers, multifunctional devices (MFD), and reprographics and document imaging equipment, listed with an "X" in columns (1) or (2) of the equipment tables, are controlled by the Government Printing Office (GPO) and must be approved by appropriate authority prior to acquisition, including short-term leases, as follows:

a. Marine Corps field commands and independent activities shall forward requirements for enabling equipment to their Command Printing Officer (CPO) for review and approval prior to purchase or lease.

b. Marine Corps field commands and independent activities not supported by a CPO shall forward their requirements to the CMC at the address at paragraph 4a(2)(a)5 preceding.

c. The CPO shall forward to the CMC (ARDE) at the address above, under forwarding endorsement, all requirements for enabling equipment listed with an "X" in column (1) of the equipment tables in reference (c).

d. The CPO is delegated authority to review and approve requirements for standard office-level enabling equipment listed with an "X" in column (2) of the equipment tables in reference (c), as well as, any other types of standard office-level document services enabling equipment not listed in the tables.

e. The CPO is delegated authority to review and approve requirements for production-level equipment destined to replace existing equipment previously approved by the MCCPPMO. New requirements and those for devices that will significantly increase the COMCAM's capabilities shall be forwarded under CPO endorsement to the MCCPPMO for review and approval prior to acquisition.

2. All requests to acquire enabling equipment must be formally approved in writing prior to acquisition and copies of the approvals must be retained in the contract file as part of the procurement record.

3. Marine Corps Regional Contracting Officers, independent Contracting Officers, their designated Buying Agents, and GCPC holders shall neither purchase nor lease enabling equipment absent written authorization from the local CPO or the MCCPPMO as prescribed above.

(c) Mandatory Sources

1. For production-level equipment, such as that used in an installation reprographics center or the COMCAM in support of garrison operations, reference (f) identifies the DLADS as the DoD single-manager for high speed/high volume equipment and, therefore, is the mandatory source for acquisitions of production-level equipment. Production-level equipment is defined as any/all devices listed in the equipment tables of reference (c) with an X in column 1; as well as any high speed/high volume reprographics equipment not listed in the tables capable of full-color printing and/or reproduction at speeds exceeding 55 pages per-minute (PPM) or black & white capabilities exceeding 75 PPM or any device rated by the manufacture for a duty-cycle exceeding 150,000 images per month, regardless of production speed; or any large format device capable of printing, copying, scanning, or faxing a document with a surface area volume greater than 188 square inches or exceeding Tabloid size paper stock at 11 inches by 17 inches.

2. For standard office-level equipment supporting garrison operations, such as networked MFDs, the DLADS is not a mandatory source; however, they are the DoD preferred provider for large acquisitions such as multi-year leases for multiple devices destined for use throughout the command or installation. Standard office-level equipment is defined as any

device listed in the equipment tables of reference (c) with an X in column 2; as well as any reprographics equipment that is not listed in the equipment tables which is capable of copying, printing, scanning, or faxing in full-color mode at speeds not to exceed 55 PPM or in black & white mode at speeds not to exceed 65 PPM and is rated by the manufacturer for a duty-cycle less than 150,000 images per month. Standard office-level equipment may be approved by the CPO for acquisition using local contractual authority provided the purchase does not violate procurement regulations.

b. Subordinate Element Missions

(1) Commanding officers of Marine Barracks and officers in charge (OIC) of Security Detachments, District Headquarters, Inspector Instructors, and other independent activities shall appoint in writing a commissioned/warrant officer, senior staff noncommissioned officer, or civilian employee equivalent to perform the following collateral duties:

(a) As the unit's Forms Management Officer (FMO) responsible for establishing and managing the unit's Forms Management Program per reference (g). Provide a copy of the appointing letter/orders along with point of contact (POC) information to the following address:

Commandant of the Marine Corps (ARDE)  
Headquarters, U.S. Marine Corps  
3000 Marine Corps Pentagon (Room 2B253)  
Washington, DC 20350-3000

(b) As the Command Printing Officer (CPO) responsible for providing command level oversight for implementation of this Order and acquisitions of document services by or on behalf of the command/activity. The CPO shall provide a copy of their appointing letter/orders along with POC information to CMC (ARDE) at the address in paragraph 4b(1)(a) preceding.

(c) Appoint in writing a staff noncommissioned officer, noncommissioned officer, or civilian employee equivalent as the command Directives Control Point (DCP) clerk, responsible for establishing and managing the command's publications and forms library per this Order and reference (j).

(d) Individuals may not be appointed to serve as both the FMO and the CPO simultaneously.

(e) Administration of the DCP may be assigned as either a primary or collateral duty.

(2) Commanders of major subordinate commands (MSC) and Marine Corps installations with COMCAM activities or reprographics centers attached shall:

(a) Designate in writing the OIC or civilian director of the COMCAM or reprographics center, or a senior officer, as the CPO. The CPO shall provide a copy of their appointing letter/orders along with POC information to CMC (ARDE) at the address in paragraph 4b(1)(a) preceding.

(b) Appoint in writing a commissioned/warrant officer, senior staff noncommissioned officer, or civilian employee equivalent as the FMO responsible for establishing and managing the installation's Forms Management Program. The FMO shall provide a copy of their appointing letter/orders along with POC information to CMC (ARDE) at the address in paragraph 4b(1) (a) preceding.

(3) In all instances, the command FMO is responsible for:

(a) Providing command level oversight for the unit's Forms Management Program, including design and maintenance of local-use forms, registering local-use forms with the CMC (ARDE) prior to use, and canceling obsolete forms, as appropriate.

(b) Monitoring command data collections to ensure all comply with references (o) and (p) and are reported to the HQMC Reports Control Manager at the following address:

Commandant of the Marine Corps (ARDE)  
Attn: Reports Management  
3000 Marine Corps Pentagon (Room 2B253)  
Washington, DC 20350-3000

(c) Ensuring local-use forms are assigned a local stock number and form number, and, are not adopted for use in place of official forms prescribed by higher authority.

(4) In all instances, CPOs are responsible for:

(a) Providing command level oversight for all COMCAM and reprographics center operations including document duplicating and printing functions and the acquisition of document services from external sources.

(b) Providing command level oversight for all printing performed by or on behalf of the command ensuring the best printing practices delineated at enclosure (1) are adopted and adhered to wherever practicable.

(c) Performing command level oversight for acquisition of enabling equipment whether Marine Corps owned or leased, ensuring enabling equipment in-use throughout the command is properly accounted for on the using-unit's property accounting records.

c. Coordinating Instructions

(1) The MCCPPMO shall:

(a) Manage the Marine Corps Printing, Publishing, Publications, and Forms Management Programs providing effective oversight for production, procurement, and distribution of publications, forms, and other official documents destined for distribution to the OPFOR. This includes issuing policy, governing directives and regulations, and establishing and implementing procedures to ensure compliance with the references and other higher authority policies and regulations governing the acquisition and management of document services and enabling equipment.

(b) Serve as the Marine Corps representative for acquisition and management of document services.

(c) Establish and maintain the official Marine Corps Reprographics Equipment Management Program; perform departmental level oversight and control over Marine Corps owned and leased enabling equipment procured for use supporting in-garrison operations.

(d) Establish and maintain the official Marine Corps Publications web page on www.marines.mil as the single official-source for dissemination of public releasable Marine Corps Orders and other publications through the Internet.

(e) Establish and maintain effective means to disseminate publications, forms, and other official documents to the OPFOR in digitized formats in lieu of and as an alternative to distributions of printed matter.

(f) Establish, maintain, and administer Marine Corps Automated Information Systems (AIS) dedicated to providing efficient document services to the Marine Corps by managing acquisition and distribution of all official publications, forms, and other documents destined for distribution to the OPFOR, including providing systems administration, technical assistance, and information access management support services for those AIS.

(g) Provide departmental level oversight for all printing performed by or on behalf of the Marine Corps ensuring the best printing practices delineated at enclosure (1) are adhered to wherever practicable.

(2) Commanders of MSCs, Installations, field activities and Marine Barracks and OICs of all Security Detachments, Directors of District Headquarters, Inspector-Instructors, and other independent activities shall establish and maintain unit level Publications and Forms Management programs per this Order and references (g) through (j).

(3) Regional Contracting Offices shall ensure equipment purchases, service & maintenance (S&M) contracts, and lease contracts for enabling equipment include required clauses such as DFARS 252.232-7003 and one locally drafted clause authorizing the government to remove and retain internal hard drives and memory components of any equipment used for reproduction, scanning, faxing, or imaging of official documents both at lease-end and during any interim interval whenever the equipment is removed from service. Additionally, all lease and S&M contracts must include clauses requiring the vendor's service technicians to have a DoD issued security clearance equal to or higher than that of the materials imaged on the device to be serviced. Documentation of the technicians' security clearances must be presented before a vendor's bid can be accepted for consideration during the contract competition process.

(4) All Marine Corps activities including active and reserve battalions, squadrons, and larger OPFOR units; Marine Barracks and Security Guard Detachments, District Headquarters, Recruiting Stations, Inspector-Instructor Staffs, and HQMC Staff Agencies shall establish and maintain an Individual Activity Account Code (IAAC or IAC) in the Marine Corps

Publications Distribution System complete with unit POC information and a complete street address suitable for receipt of U.S. Mail and bulk deliveries.

(5) Publication sponsors shall ensure all publications acquired by them or produced at their direction are:

(a) Distributed as digitized material whenever possible; practicing effective cost avoidance measures by reducing reliance upon distributions of printed matter.

(b) Properly recorded in the Marine Corps Publications Distribution System (MCPDS), complete with all elements of metadata and the publication's distribution list, where applicable.

(c) Assigned a Distribution Statement code per reference (q). The distribution statement code assigned shall be based upon the sensitivity of the publication's content and serve to denote the extent to which the publication may be made available for distribution, release, and dissemination without further authorization from the sponsor. Any/all publications containing sensitive material such as budgetary information, individual Personal Identifying Information (PII), troop strength or equipment densities, training schedules or objectives, deployment dispositions, unit readiness statistics; or operational tactics, techniques, or procedures shall be designated as "For Official Use Only" and assigned a Distribution Statement other than "A." The distribution statement assigned shall be displayed centered and one inch from the bottom-edge of the first page of the publication and in the same location on the outside of the publication cover page where applicable.

(d) Reported to CMC (ARDE) for assignment of a Publication Control Number (PCN); and for ensuring the PCN assigned is displayed properly on all copies of the publication; as follows:

1. On Marine Corps Orders and Bulletins, and all letter-type publications, the PCN shall be printed on the authentication page, appearing justified to the left margin and two lines below the authentication signature.

2. On perfect-bound, hard-bound, and hard-cover publications where no authentication page is present, the PCN shall be printed on the Title page, centered one inch above the bottom-edge.

3. On periodicals, the PCN shall be printed on the inside of the cover at or near the bottom-edge of the page in the left-most column or as the last line of the production & distribution authority statement.

4. On Technical Publications, the PCN shall be printed and displayed on the authentication page following the format guidance in reference (r).

5. Recruiting materials, posters, pamphlets, brochures, tri-fold and bi-fold hand-outs, maps, and other miscellaneous administrative publications shall have the PCN printed on them for identification purposes only. In these instances, the PCN display location is left to the discretion of the sponsor as long as it is easily identifiable and legible. It may be

displayed in any obscure area, including on the reverse or back-side of posters, where it does not distract from the document's content. Additionally, these types of miscellaneous administrative documents are considered public releasable by nature and do not require a Distribution Statement unless the content is sensitive, classified, or otherwise dictates restricting distribution. In such instances, a Distribution Statement other than "A" shall be assigned and clearly displayed on the front, centered 1 inch from the bottom edge, in a type set larger than 10 point.

#### 5. Administration and Logistics

a. Un-controlled blank forms shall be disseminated via the Internet through the Department of the Navy Forms web site at <http://navalforms.daps.dla.mil/web/public/home> in lieu of distribution as printed matter. All forms, regardless of type, acquired or produced by or on behalf of the Marine Corps for use Marine Corps-wide shall be assigned a National Stock Number (NSN) and a Forms Number (FN) through the Defense Logistics Agency (DLA), Defense Logistics Supply Center (DLSC), and the DLADS; recorded in the Stock List SL-8-09993A, and the Marine Corps Electronic Forms System (MCEFS). Forms adopted for local use by field activities shall be assigned a local stock number and forms number and reported to the CMC (ARDE). All information collections, including forms, must comply with references (o) and (p) and be submitted to the reports control manager CMC (ARDB) for appropriate action.

b. Publicly releasable official documents and publications shall be disseminated electronically via the Internet whenever practicable. Distribution of printed matter to the OPFOR is a costly undertaking. The cost of ink, paper, packaging, postage, and bulk materials handling continue to increase across the board, so much so that their combined costs has made it cost prohibitive to continue distributing information as printed matter when it can be just as effectively disseminated through the Internet for pennies. Accordingly, wherever practicable, Distribution Statement A publications and other public releasable documents shall be designated as Electronic Distribution Only (EDO) and disseminated via the Internet at the Marine Corps official publications web site in lieu of distributions as printed matter. Copies of EDO pubs held in unit libraries and the publications warehouse will no longer be updated by incorporation of printed changes and should be disposed of following local paper-recycling procedures.

(1) It is acknowledged there are many public releasable publications which absolutely must continue to be distributed in printed form whether due to their unique content, target audience, or intended end-use. Subsequently, waivers to the Internet only policy may be granted based upon the publication sponsor's formal written request. All requests for waiver must be addressed to the CMC (ARDE) at the address in paragraph 4a(2)(a)5 preceding, and shall include justification delineating why the publication must continue to be designated as Distribution Statement A publication, yet distributed as printed matter. Justification should include an explanation as to why dissemination via the official web page on the Internet and on the MCPDL DVD are insufficient means to reach the target audience or constitute a hindrance

to the documents' ability to fulfill its intended purpose. The waiver request must be signed by a principle equal to or higher within the chain of command of the publication's releasing authority as delineated in reference (j).

(2) EDO publications shall not be stocked for requisitioning at the publications stock point nor printed in whole by end-users for purposes of inspections. However, specific pages, paragraphs, appendices, enclosures, tables, charts, or portions thereof which are frequently required as ready-reference materials supporting daily routine business may be printed and retained in a desktop turn-over file for quick-reference. Local procedures must be established to ensure the aforementioned extracts are maintained current with changes to the basic publication and that portable media holding such records are safeguarded from the elements and routinely backed-up to ensure continuous content availability.

(3) Publications accessible only through the Internet should be downloaded and retained on portable media for ready-reference upon demand; reliance upon Internet access while deployed is discouraged.

c. The MCEPL on DVD shall be updated and distributed quarterly as a complete library containing all Marine Corps Orders and other Marine Corps administrative type publications declared EDO; including incorporation of applicable changes, effectively eliminating the need to stockpile dated MCEPL DVDs.

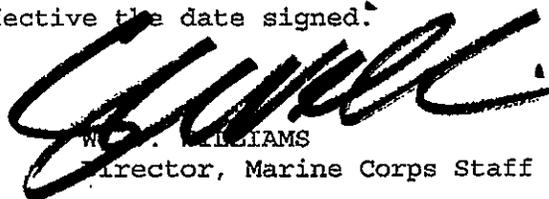
d. Local directives and supplements may be issued to amplify this Order; however, such local directives or supplements shall not contradict or repeat information contained in this Order.

e. Records created as a result of this Order shall be managed according to the National Archives and Records Administration approved dispositions per reference (s) to ensure proper maintenance, use, accessibility and preservation, regardless of format or medium.

#### 6. Command and Signal

a. Command. This order is applicable to the Marine Corps Total Force.

b. Signal. This order is effective the date signed.

  
W. WILLIAMS  
Director, Marine Corps Staff

Distribution: PCN 10208650000

Copy to: 7000260 (2)  
7000144/8145001 (1)

## Best Printing Practices

### 1. Selective printing:

a. The best printing practice anyone can adopt is to print only when absolutely necessary.

b. Print only that which is needed. In all instances, a best printing practice is to select specific pages; such as those which are frequently required as ready-reference material supporting daily routine business and limit printing to this select content, and then retain the printed matter in a desktop turn-over file for reuse.

c. Conduct paperless meetings and briefings whenever feasible, using overhead projectors, video displays, etc., in-place of printed handouts.

2. Personal-use printers, copiers, scanners, and facsimile machines should be replaced with shared or community-use Multifunctional Devices (MFD) (also known as Multifunctional Printers (MFP)) wherever a Cost Benefit Analysis (CBA) supports the move as a practical cost saving measure. An MFD is a device that performs all four functions - copy, print, scan, and fax.

a. Before purchasing or leasing an MFD to replace existing desktop peripherals, the command printing officer must conduct a thorough CBA to determine which is cheaper - a purchase or lease, an MFD or single function device; e.g., a desktop copier, printer, scanner, or facsimile machine. The command should lease an MFD only when a CBA clearly establishes at least three of the four functions will be used at a recurring rate sufficient to ensure cost effectiveness of the lease.

b. Devices should be distributed throughout the command at the absolute minimum density necessary to support all end-users; but not in per-capita densities greater than 50 end-users per device. Nor should they be distributed in densities less than five end-users per device except where required to support independent field offices such as Officer Selection Offices, Recruiting Stations, Inspector-Instructor Staff offices, class room environments, and other independent offices not adjacent to larger more populated office spaces, or those dispersed offices where it is impractical to walk or drive to a far-distant device to retrieve the printed matter.

3. Default to monochrome or "black on white" (B&W) print whenever practical.

a. Where color printers or MFDs which have an on-board black-ink or toner cartridge are available, default all print to B&W settings. In these instances, construct the document for B&W presentation from the start; print in color only when color is required to add emphasis to the information being presented.

b. Where color printers or MFDs without an on-board black ink or toner cartridges are all that is available, avoid printing in only B&W. The reason for this seemingly counterproductive policy is that many color printers and MFDs which do not have a black-ink or toner cartridge on-board, manage to print in "black" through a saturation-mix of each of the color toners; in many instances, using four times as much toner as a device with an on-board

black-ink/toner cartridge. In-fact, printing B&W on a color MFD such as these will almost certainly cost more than twice as much per page than printing those same pages in color.

4. Default to duplex (double-sided) printing wherever practicable - reduces paper consumption by nearly half.

a. Printing duplex on a simplex (single-side) device can be accomplished by first printing all odd-numbered pages and then re-feed the printed pages through the device a second time while printing the even-numbered pages on the back-side of the previously printed odd-numbered pages.

b. For PowerPoint presentations, limit print to "handout" mode with multiple slides per page.

5. Set default print resolution to "draft" or "econo" printing rather than "high resolution" or "photo quality."

6. Set your word processor-font to toner/ink efficient fonts.

a. Certain type fonts are "less" toner-intense than others, such as: Century Gothic, Garamond, or Times New Roman; whereas, other fonts, such as Arial, are toner-heavy or toner-intense fonts. A recent university study has determined that using less-intense type fonts can reduce toner consumption by as much as 30% over a toner-intense font such as Arial. In other words, the best printing practice is to use fonts that appear lighter on the page than those that appear darker.

b. Avoid using "block" or "fixed" character type fonts such as Courier or Courier New; instead use "proportional" type fonts such as Times New Roman. The block or fixed character type fonts always use the same amount of page space for each character irrespective of the character's actual size; e.g., they use the same amount of space to print an "I" as they do to print an "M" whereas proportional type fonts use less space for the "I" than that used for the "M." Net savings can be as much as a half-page of print for every page printed; e.g., these enclosure pages printed in Courier or Courier New at 10 pitch require three pages, when printed using Times New Roman the same text in 10 pitch requires only two pages.

7. Default font size. Set your word processor's font size to 10 wherever practicable. This simple change can save on paper costs; e.g., these enclosure pages printed using 10 pitch produce three pages of printed matter. Increasing the font size to 12 could result in as many as four pages being printed.

8. Default to narrow margins. Except for official letterhead correspondence and official documents, which require 1" margins, set the default margin size to three quarters of an inch (.75 inches) or narrower whenever possible - results in more characters per-line which further reduces paper consumption.

9. Create electronic records. Use "print to PDF" or word processing applications such as Adobe Acrobat Professional, MS Word, or similar applications to generate Portable Document Format (PDF) files for retention as electronic records in lieu of printed records.

10. Reduce waste.

- a. Use print "preview" to thoroughly proof documents before printing.
- b. Completely exhaust toner and ink before changing cartridges; use recharged cartridges wherever possible, and ensure used-cartridges are recycled.
- c. Use General Services Agency (GSA)-approved 30% recycled paper whenever possible.
- d. Use standby and sleep modes whenever available. Most government print devices are on all day and in many instances all night, but are used only a small portion of the time. Users can lower costs and reduce energy consumption by changing the device settings so that the device converts to "sleep mode" when not used for a specified period of time. Additionally, all workstations, peripherals, and MFDs should be turned-off at the end of each work day.

