



# **FORMS MANAGEMENT**

**Commonwealth of Pennsylvania  
Department of General Services  
Bureau of Publications and Paperwork Management**

Commonwealth of Pennsylvania  
GOVERNOR'S OFFICE

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Manual M210.4 is revised to reflect changes in policy concerning the use of stationery. Replacement pages VI-1 and VI-2 are attached.

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Manual M210.4, Forms Management, is changed to delete the procedures on printing from Section Six and all of Section Eight. On page VI-1, the last two paragraphs under "PRINTING OF FORMS" should be changed by pen and ink to refer to Management Directive 220.9 rather than Procedures 1, 2, and 3.

All types of printing services should be requested in accordance with Management Directive 220.9.

Information on the management of standard (STD) forms and the catalog of STD forms, being deleted from Section Eight, are now contained in manual M210.5.

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Forms Management is a total paperwork information processing system to provide the most effective forms, in the right quantities, at the right time, and at the most efficient cost.

Act 1982-256 requires each agency to establish a forms management program to insure that only those forms needed for the agency's efficient operation are used. This involves more than just controlling the origination and printing of forms; the Act calls for agencies to reduce the frequency of reporting, to use differing compliance standards whenever possible, and to develop sampling techniques to replace uniform reporting requirements. Special emphasis is placed on those forms asking for information from citizens and businesses.

The head of every agency must designate a management officer who is charged by the Act with the responsibility for implementing the forms management program. This manual is designed to assist management officers and forms coordinators in carrying out their responsibilities. It provides guidelines for establishing forms management programs; standards for the creation, design, and control of forms; procedures for requesting printing; a compilation of standard forms; and technical information related to paper, ink, formats, procurement, and storage.

This manual will be updated as necessary by the Bureau of Publications and Paperwork Management through the Directives Management System. It should be kept in a standard three-ring binder for easy reference. Any questions or suggestions should be directed to the Bureau.

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# INTRODUCTION TO FORMS MANAGEMENT

## WHAT IS FORMS MANAGEMENT?

Analysis. Specification. Design. Procurement. Printing. Inventory. Storage. Distribution. Simply put, forms management is a total paperwork information processing system to administer, coordinate, control, and review all printed and reproduced forms that are used in the Commonwealth paperwork system.

While this seems like a rather large undertaking, looking at the components reveals a progression of common sense approaches to getting more for less from our paperwork. Forms management weighs, reviews, and determines the need and work implications of each and every form used within a management system.

## THE BENEFITS OF FORMS MANAGEMENT.

While there are a great number of subtle and indirect benefits that will result from the implementation and strict adherence to a forms management program, there are also a goodly number significant enough to mention here.

To begin with, a forms management program is bound, almost by its very nature, to eliminate unnecessary paperwork. Early estimates are that anywhere from 20 - 35% of any organization's forms can be eliminated with an effective control program. In addition to the elimination of old, obsolete forms, a forms management program will stifle the creation of new, obsolete forms.

Instead, the cause for the creation of good forms will be advanced with such a program. With good tools, both the paperwork and the paperworker will become more efficient and effective. The proper information will be seen by the proper people.

Also, a forms management program is an effective tool in itself; it can help organize and control clerical duties within an office. As you most likely know, the servicing of forms, to a large extent, determines how work activities will be organized and performed. Filing space and time are saved, too.

Perhaps most importantly, a forms management program is likely to improve the work flow crossing agency lines, thereby promoting organizational communication, consistency, and efficiency.

Such a program will produce significant dollar savings; standardize form design, specifications, policies, and procedures; squelch the tendency to change existing forms just for the sake of change; incorporate an element of expertise into the creation and design of forms; promote both the development and maintenance of an effective management system; and allow for a systematic review of forms, which in turn allows for a comprehensive study of the management system.

## FORMS COORDINATION.

Besides the management officers required by Act 1982-256, most agencies will have one or more forms coordinators. These forms coordinators play dual roles in the Commonwealth Forms Management System.

The first responsibility is, quite naturally, to the agency — to insure that the officially approved forms originated by the agency are correct and clerically effective. The second responsibility is to the Commonwealth-wide system — to insure that each agency's program is in harmony with those of other agencies.

## DEFINITIONS.

*Agency.* All administrative departments, boards, and commissions and independent boards and commissions.

*Bureau.* The Bureau of Publications and Paperwork Management, Department of General Services.

*Department.* The Department of General Services.

*Forms.* A document with a standard format which normally contains blank spaces for the insertion of required or requested information.

*Management officer.* Person or persons designated pursuant to Act 1982-256 to manage a forms program.

*Management program.* A written plan for developing, producing, utilizing, and disseminating forms.

*Sampling.* The technique of selecting a representative part of a population for the purpose of determining characteristics, which can then be assumed to be shared by all members of that population.

*Secretary.* The Secretary of General Services.

## SECTION ONE

### FORMS MANAGEMENT PROGRAMS

#### GENERAL.

The forms management programs mandated by Act 1982-256 are to insure that agencies use only those forms necessary for their efficient operations. Particular attention is to be given to the special burdens faced by individuals and small businesses in responding to requests for information. Only those forms meeting the following criteria are to be approved and used:

- (1) they are to ask only for information needed to fulfill an agency's mission;
- (2) they must not impose an undue burden on persons completing them;
- (3) they should not substantially duplicate other forms of the agency or those of other agencies; and
- (4) they are to be brief, plainly written, well designed, and easily completed.

Forms are to be reviewed within two years after their initial issuance and then at least once every five years. Those forms which no longer meet the criteria above and those which no longer serve a lawful purpose of an agency are to be eliminated.

There are three distinct groups of forms; those requiring input from the public, those requiring input from within the same agency, and those that are commonly used by several or all agencies. Forms in the first two groups are to be included in agency forms management programs. The third group, the standard common-use forms, are controlled by the Department of General Services and should not be included in the programs of other agencies.

Forms management programs can be amended at any time while the list of forms must be updated annually. A copy of each program and any revisions, as they occur, are to be filed with the Department of General Services.

There are eight distinct steps involved in establishing a successful forms management program. The first five, when fully operational, will allow for the high degree of control (detailed in the final three steps) necessary for a program to be both effective and manageable. The steps are:

- (1) *Collect.* Until all the forms are in one location, no other steps can be taken.
- (2) *Categorize.* Forms should be divided into at least three areas – public, nonpublic, and standard. Further divisions may be made according to construction (snap-set, continuous, single-sheet), originating level (agency head, bureau director, etc.), or other applicable categories. The number of divisions should be sufficient to effectively categorize the forms but small enough to be manageable.
- (3) *Assemble pertinent data.* The step almost completes itself once the forms have been broken down into the various categories. Additional information which should be recorded regarding forms include: ply (how many sheets are there?), time (how long does it take to fill it out?), purpose (specifically, why does this form exist?), and printer (was it printed in-house or by a commercial vendor?).

(4) *Analyze.* With the forms (and all pertinent data for each), neatly assembled into manageable units, a one-by-one and then unit-by-unit analysis should be made. It is at this stage that those items which are obsolete or duplicative should be purged from the system.

(5) *Prepare an Official Forms Index.* This index will, if step #4 was effectively accomplished, show those forms, and **only** those forms, which are currently operational. It is this step that lays the groundwork for the control steps to follow.

(6) *Prepare an Inventory Status Report.* It is on this report that all aspects of quantity control will be recorded. Information to be noted includes (a) quantity on hand, (b) quantity in storage, (c) quantity on order, and (d) average monthly use. With such data, quantity control is possible.

(7) *Analyze, again.* Besides gang-printing and ordering, other benefits from analyzing your inventory at this stage can include redesigning forms to simplify, reduce size, eliminate unnecessary data, or combining related forms into fewer forms.

(8) *Report.* The final step, simply, is to report the progress made under this Forms Management Program to agency management.

#### **RESPONSIBILITIES OF AGENCIES.**

The forms management system of an agency must be properly located in the organization and adequately staffed. To be cost effective it must have management's support and cooperation. As required by Act 256, each management officer is to:

- (1) compose, administer, and revise, as necessary, the agency's forms management program;
- (2) approve for use only those forms necessary for the efficient operation of the agency;
- (3) insure that the agency foregoes uniform reporting requirements and relies, instead, on sampling; reduces the frequency of reporting; and uses differing compliance standards or exemptions whenever possible; and
- (4) maintain an inventory of all forms in use or distributed by the agency.

#### **RESPONSIBILITIES OF THE DEPARTMENT OF GENERAL SERVICES.**

Certain approval and coordinative functions have been assigned to the Department. The Department is to:

- (1) review, approve, and monitor agency forms management programs;
- (2) prevent duplication, to include assignment to a particular agency of lead responsibility for the collection and dissemination of certain types of information;
- (3) provide coordination of forms management programs among agencies;
- (4) establish an information locator system, to include all types of information collected by agencies; and
- (5) compile and maintain a complete index of forms.

## SECTION TWO

### PAPER AND INK

#### PAPER

The varieties of paper used in printing Commonwealth forms are numerous, and the terminologies used to describe them are even more so. Confusion can, and often does, result from this lack of uniformity. Furthermore, paper manufacturers, in promoting their products, have a tendency to intermingle basic, technical terms with their particular brand name products. This only adds to the confusion.

There are, however, fundamentals which can be helpful guides to the selection and use of paper.

Paper is defined in terms of its use, with each "grade" serving a different purpose. We must be acquainted with how paper is made and graded, and we must come to know the various characteristics of each in order to achieve the greatest benefits.

Each type of paper is graded by the manufacturer under a grading code administered by the U.S. Bureau of Standards.

#### MECHANICAL WOOD PULP.

From a systems paper viewpoint, cellulose fibers used by the manufacturer of paper provide strength and durability. These fibers are minute, hollow plant cells approximately one-eighth of an inch long with a circumference smaller than fine human hair. The process of obtaining cellulose, or pulp, involves merely grinding up wooden logs in such a manner that between 80 and 90 percent of the original ground materials in the logs are utilized. This method of obtaining cellulose is known as mechanical, and the resulting paper is known as wood pulp.

#### SULPHITES.

Chemical pulp, or sulphites, involve a process during which the manufacturer loses about 50 percent of the original wood. Therefore, more wood is needed.

In making sulphites, logs are chopped diagonally into small chips so that as much of the surface is exposed in the cooking liquid as possible. These chips are cooked using steam pressure; sulphuric acids are added to separate the cellulose fibers. These fibers are then run through a machine, fraying the edges so that they knit together. They are then bleached, washed, and added to pure water. This mixture flows onto a huge paper machine through a sluice gate and onto the wire belt of the machine. The paper is formed from the fibers that remain on the surface of the wire. This chemical treatment and bleaching of this grade of paper allows it to resist moisture and penetration of printing inks.

Sulphites are further broken down into four quality grades. Sulphite #1 is clean, uniformly bleached, and the best available. Sulphite #2 is of a slightly lesser quality with the bleaching, the cleaning process, and the manufacturing technique not quite up to the standards of Sulphite #1. However, both of these sulphites usually have a watermark, which is a measure of the paper's uniformity in both quality and thickness. (Watermarks are pressed into the paper while the paper is still wet. The paper is run under a roller just as it is ready to come off the fourdrinier wire; raised type presses a brand mark or rag content percentage into the wet paper.)

Sulphites #3 and #4 are characteristically noted for not having a consistent thickness, color, finish, or bleaching; specks of dirt can sometimes be detected in these two lower grades. Sulphite #4, however, is of sufficient quality and durability that it is considered the workhorse when it comes to Commonwealth forms; it is used for the majority of our paperwork purposes. The only exceptions to this may be if machine specifications, system requirements, or records retention schedules call for a specific paper of definite higher quality.

## CHARACTERISTICS.

Besides grades, there are other characteristics of paper which we must consider.

### *OPACITY.*

The term used to indicate how much light can go through the paper is "opacity." An opaque paper can be printed on both sides. Single-sheet forms sometimes require information or instructions on the back side; therefore, your specifications should call for a paper that has opacity. Otherwise, the printing on the back may show through to the front, and vice versa.

### *GRAIN.*

As the cellulose fibers flow over the fourdrinier at the "wet end" of the papermaking machine, the grain is forced into the paper. Most of the fibers have a tendency to flow more or less parallel to the direction of the flow, which is what gives the paper its grain. The type of form, the machine it is to be used on, and the purpose it serves are all factors to consider in making proper judgement as to the proper direction of the grain.

The long and the short of all this is that paper has the greatest strength in the direction of the grain. It bends, folds, or stands upright more easily with the grain. A form which must be filed in a tray should have the grain running vertically, so it will stand up rigid in that tray. In a typewriter, though, the grain should run parallel to the platen so that it will wrap around the platen more easily. Generally speaking, grain is not an important factor on the lighter weights of paper.

There are two types of grain in papers — whereas short grain describes grain direction parallel with the short dimension of the sheet, long grain, not surprisingly, describes grain direction parallel with the long dimension of the sheet.

### *WEIGHT.*

In the manufacturing of paper, the weight is determined either by varying the speed of the papermaking machine or by varying the opening of the sluice box at the wet end of the same machine. If the opening of the box is narrowed, a smaller quantity of material flows through and onto the fourdrinier wire. The result: a thinner, or lighter weight, paper. Conversely, running the machine faster, without any additional adjustments to the sluice opening, produces heavier paper.

### *BASIC WEIGHT AND SIZE.*

types	sizes
bonds, ledgers, manifold	17 x 22 inches
index bristols	25 1/2 x 30 1/2 inches

The method for determining the weight of paper is to weigh one ream (500 sheets) of the basic sheet size. To get this basic weight, of course, one must know the basic size. And this is as confusing as it probably sounds, especially when you consider that the different types of paper — bonds, ledger, index bristol, etc. — all have a different basic size as the standard for designating weight (the chart above shows a few examples).

Let's say you counted off 500 sheets (one ream) of bond paper (basic size: 17 x 22 inches) and placed it on a scale. If that scale indicates that 16 pounds are weighing it down, the paper you have — each and every one of those 500 sheets — would be 16-pound paper. It follows then, that if 500 sheets of standard-sized bond paper weighs 20 pounds, you would have 20-pound paper in your hands.

When designing forms, using standard sizes cut from a basic size will result in little or no waste. For example, if you took 500 sheets of 17 x 22-inch ledger paper and cut them in quarters, you would get a standard size of paper, 8 1/2 x 11 inches. Agencies should be aware of the various standard sizes of single sheets, as considerable dollar savings could result by using them instead of "bastard," or irregular, sizes.

## PAPERS USED FOR FORMS.

There are several common combinations of these paper specifications used in the printing of Commonwealth forms. These standards have been developed over the course of many decades; they are detailed here.

**BOND.** The most popular and widely used paper is bond (the name originally was used in the printing of bonds and stock certificates). It is now used in reference to paper produced either completely or partially from rags or bleached sulphites and rags.

The primary paper for both in-house and commercial printing of Commonwealth forms, bond's main characteristic is its smooth finish with no glare. It can be used efficiently in practically all applications — handwritten (pen and pencil), typewritten, or on high-speed printers. It is equally applicable to the main methods of production — offset, letterpress or multi-web press operations.

Bond paper is available in sulphites #1 and #4 with weights of 12-, 13-, 14-, 15-, 16-, and 20-pound.

**LEDGER.** This paper is strong and durable because of its heavy construction; it is made especially for accounting and recording purposes. Used for both handwritten and machinewritten entries, it is generally manufactured in two finishes. The regular, or polished, finish is calandered to a smooth, hard finish (best used for handwritten applications) while the uncalandered, or rough posting, finish is used most effectively for machine posting (it absorbs ink and impressions faster and prevents smudging of the machine entries).

The direction of the grain can be important. It should run vertically as the ledger stands up in a tub file. On the other hand, the grain should run horizontally on ledgers fed into a typewriter.

Ledger comes in sulphites #1 and #4; colors available include white, buff, blue, and green tint. Weights include 24-pound for forms printed and rules on one side, 28-pound for forms printed and rules on one or two sides, 32-pound for forms printed and used with accounting machines on one side, 36-pound for forms printed and used with accounting machines on two sides.

**INDEX BRISTOL.** This product is a smooth, hard surface cardboard suitable for writing or printing. It was believed to be first manufactured in Bristol, England; hence, the name. This board stock product is either produced as a "mill" or "index" bristol. Mill bristol is distinguished from index bristol in that it has a better printing surface for halftones and is a higher quality product for finer printing reproduction. Index bristol is usually associated with the production of index cards and forms.

For Commonwealth applications, index bristol is available in either 90- or 100-pound weights.

**TAGBOARD.** A strong grade of cardboard sized for writing, and economical in cost, tagboard is a paperstock suitable for folding. It also has a good tearing strength.

It is made with a good grade of sulphite and sulphate pulp. (Sulphite pulp is made from the chips of spruce and similar woods; sulphate pulp is from the same product, but is prepared under a process that does not bleach the pulp to as white a color.) These manila tagboards come in cream or manila; the white tag comes in only the bleach white color.

Either 100- or 125-pound weights are sufficient for most forms, cards, and covers. However, 150-pound stock should be used for file backs and file covers; 200-pound tagboard should be used only when additional weight or strength is desired.

One very important note: care should be exercised when specifying the grain direction when manila tag forms are to be used on a typewriter. This is particularly true for the heavier weights, as the stock may crack if the grain runs against the platen of the typewriter. For example, if the forms are 8 1/2 x 11 inches, the grain should be short (running along the 8 1/2-inch side).

Tagboard is excellently suited for both letterpress and offset reproduction.

**DUPLICATOR.** Besides the reproduction medium, the deciding factor in the selection of a duplicator master paper is the required number of copies. However, the duplicator papers used for copying on either a direct process or a gelatin process machine are usually interchangeable from one machine to another.

**MIMEOGRAPH.** A special paper with fast ink absorbency as its chief characteristic, mimeograph bond paper is used for running copies from the mimeograph duplicating machine.

**CHIPBOARD.** This is a cheap grade of paper generally used in posters or as a backing for tablets or padded forms.

**MANIFOLD.** Sometimes referred to as "thin" paper, this paper possesses many of the same characteristics as bond paper (indeed, it is produced in the corresponding weights and grades as bond). Used in paper systems where the form consists of multi-parts for legibility in both snap sets and continuous forms, and also as copy paper for typewritten correspondence, manifold should be requested in sulphite #4 bond for forms use.

**CARBONLESS (NCR).** A chemically coated or treated paper, carbonless is used to transfer data from one part of a form to another without, as the name suggests, the use of carbon.

Seven copies can be produced on an electric typewriter; five if handwritten and if the hand is bearing down hard on the paper. However, it is very difficult to produce clean, legible copies using this paper. Furthermore, carbonless paper has a very short shelf life and the more handling it receives the more smudge marks appear.

Also, you must be careful when using this paper not to place another piece of paper on top of it and then write — that is, unless you did want that writing to appear on the NCR form.

And, if you have had some experience with this paper, you already know that on those especially humid days the paper tends to stick to other "innocent bystander" papers in a file.

NCR paper offers little advantage to its user. Besides, the cost of this paper is up to 40 percent more than regular carbon interleaved forms; and then there's the not yet mentioned problems of erasures and fading. A well-constructed snap out form eliminates the need for carbon handling anyway, so the cost for NCR should be justified when requested.

If justified, carbonless is available in the following weights and types of coated paper: first sheet (coated black) 13-pound white and 15-pound color; internal sheets (coated front and back) 14- and 17-pound white and color, each; last sheet (coated front) 13-pound white and 14-pound color. Whenever NCR forms must be microfilmed, black print, instead of blue, should be specified as this provides a better image.

**CARBON.** Legibility of carbon copies is a result of several interrelated factors: carbon weight, carbon dope formula, paper weight, writing method, etc. Carbon test dummies should be requested whenever there is a question as to legibility prior to the vendor's manufacture of the forms.

Upon request of any ordering agency, the vendor may be required to submit samples of paper and carbon in sufficient quantity for the purpose of examination, testing, and approval before actual production of the order. The samples must be the same as the vendor proposes to use to complete the order. Samples are furnished at no additional expense to the Commonwealth. Agencies requesting paper samples must include this request in their specifications and specify the make and model of the machine on which forms are to be processed.

### **PAPER COLOR.**

Colored paper should be specified only when its use will increase visibility, sorting, or distribution efficiency in high production processing areas... not because it'll look pretty! Colored paper is more expensive than white, so its use should be weighed accordingly. Readability and legibility may also be a factor, since white provides the greatest contrast and is the easiest to read. In multi-part sets, light pastel colors are best for carbon legibility.

The standard color sequence for multi-part forms is: (1) white; (2) canary; (3) pink; (4) goldenrod; (5) green; (6) buff; (7) blue; and (8) salmon.

Most vendors are equipped to run colored paper stock at a more economical cost in this standard color sequence. It should also be noted that during paper shortages, all forms vendors are not able to provide all colors. Agencies should be aware of these situations, as white paper is more readily available during these times.

### **INK**

Of course, the paper is only half of the form. While it provides the base, it is the ink that brings life to the paperwork... constructs the form, as it were.

And ink is just as complex an area as paper.

Printing ink used on press equipment is a semi-solid substance applied to the printing plate by means of rollers. These rollers spread the ink evenly over the plate's surface so that a good ink distribution is obtained on the printed form.

### **COLOR.**

The majority of presses are equipped with three printing units; this means that they are capable of printing either three colors of ink on the front of a form, or two colors on the front and one on the back. Although there are a few presses which exceed this limitation, all requests for more than "three unit" printing should be cleared with the Bureau of Publications and Paperwork Management.

Certain colors of ink are carried in stock at all times; these are called "standard inks." In addition, there are certain "secondary," or alternate, colors of ink available. However, agencies should restrict themselves to standard black ink for the face of forms and gray for back printing.

#### **MATCHED INKS.**

Occasionally an agency will request that a form be printed in a color other than one of the standard inks. In such a case, it is necessary that the ink be matched. While on the surface this may sound like a simple operation, it definitely is not; which explains why matching ink is "not guaranteed." Attempts to match a color are difficult and, for this reason, the routine practice of requesting matched colors must be eliminated.

If a form, for example, is to be printed in a matched red ink on 12-pound canary paper, and the sample submitted for matching is on white paper, there will be a decided difference between the shade of ink on the printed form and that on the ink sample. This is due to the fact that the color of paper used has a great effect on the resulting shade of ink. Therefore, to be sure of a closer match, make certain the ink sample you submit is on the same color and type of paper as that used for the form itself. Also, all ink manufacturers have difficulty in maintaining uniform color from one batch of ink to another. This is due to the various finishing processes to which the pigments, waxes, and dyes are subjected and is true even though the manufacturer follows exactly the same formula as before. This is something over which we have no control, but it nevertheless does have a decided effect on how close a match we are able to obtain.

For these reasons, it is extremely important that agencies understand that no one can guarantee a match. All requests for matching ink must be accompanied by two color samples, at least 3 x 3 inches in size and printed on the type and color of paper desired on the finished form; justification must be provided.

#### **SHADES AND TONES.**

The color of ink used to print a form can be affected by several different factors, all of which can cause the color to appear differently on the finished form. This is true not only of matched inks, as discussed previously, but of standard inks as well. All may take on different tones or shades under varying circumstances. Different paper manufacturers produce different shades of the same color of paper; for example, there are "gray-whites" and "blue-whites." Thus, the same color of ink may appear to have a different shade because of the particular "cast" of the paper.

The design or style of type in which the form is printed can also cause the color of ink to vary. A pantograph design, for example, may be light or heavy, close or open; a screened design, which has been broken up into a series of dots, appears lighter than a solid image. Also, thin-face type styles may "look" different than printing in a bold block type.

#### **PANTOGRAPHS, PHANTOMS, AND SHADED AREAS.**

All of these features have one thing in common – they are usually printed in a "light" color of ink so that any machine or handwritten impressions falling over these areas will still be legible. Pantographs, phantoms, and shaded areas may, however, only appear to be printed in a light color of ink; it is possible that they may be printed in a dark ink (perhaps, the same ink as used for the base plate of the form) and "screened" so that they merely "look" lighter.

#### **SCREENING.**

Screening is accomplished by photographic means; it consists basically of breaking the design (panto, phantom, etc.) into a series of dots. Although each individual dot is printed in black ink, the overall design looks gray to the eye because of the unprinted, or "white," spaces between the dots. Different densities of screens may also be used to achieve a "dark gray" (dots closer together).

Screening is both an effective and an economical way of printing pantographs, phantoms, and shaded areas, as long as the design to be printed is not too intricate. In the case of some phantoms, for example, breaking the design into a series of dots may completely destroy the detail of the design. In these cases, the design should be printed in a second color of ink.

**SECTION THREE**  
**SNAP SET FORMS**

Carbon sets, or snap out forms, are multi-part sets interleaved with one-time carbon, with a carbon extraction feature. These sets should be so constructed as to provide ease of separation, thus reducing clerical effort. The carbon is attached to a perforated stub and usually extends either one-half or five-eighths of an inch from the edge of the paper. This provides for easy separation of paper and carbons.

A complete set of forms is any number of required pages and carbon held together as a set, usually with a three-quarter inch pasted stub. The use of such form sets permits flexibility, in that it provides for the consolidation of several forms into one for completion at one writing. They also allow for the processing and distribution of the form at different work areas.

**POSSIBLE CONSTRUCTIONS.**

There are several constructions possible for snap sets. With the stub on either the top, the left side or the right side, for example, easy extraction is permitted. In this case, the carbon should be short one-half inch at the end opposite the stub. Left-hand stubs are recommended for handwritten forms. Forms with fewer sheets (low ply) are ideal for typewriter use; with high ply, forms have a tendency to shingle, thus losing their registration.

Ease in making corrections is the chief feature of snap sets with the stub at the bottom of the form; the papers can be left in the typewriter while fixing mistakes.

Double stub sets may be at the left and right sides, or at the top and bottom of the form. They can be separated into two units after first writing for subsequent completion. This construction, however, is not available under DGS Contract 44 for Snap Sets and is a costly special bid item.

**STANDARD SIZES.**

Snap set carbon forms should be constructed to conform to standard sizes when detached (usable size) from the stub. Forms and procurement personnel should be aware of the standard sizes (see chart below) available under contract, thus avoiding trimming charges.

stub width/overall length	
------(in inches)-----	
4 1/4.....	7 3/4
4 1/4	9 1/4
4 1/4	11 3/4
5 1/4.....	6 1/4
5 1/2.....	7 3/4
5 1/2	9 1/4
5 1/2	11 3/4
8 1/2.....	6 1/4
8 1/2	7 3/4
8 1/2	9 1/4
8 1/2	11 3/4
8 1/2	14 3/4
11.....	7 3/4
11	9 1/4
11	11 3/4
11	14 3/4

Generally, it is more economical to place the stub on the short dimension of the form (that is, the 4 1/4-inch side of a 4 1/4 x 9 1/4-inch snap set). Forms can also be constructed in varying lengths and widths of paper and carbons to allow data to be written on all or just some parts of the set. This construction, though, is expensive and may be restricted to a few vendors with the dimensional press capabilities. When costs are justified, these special constructions are available only through the special bid process. Agencies should be aware of the lead time of the special bid process and the availability of vendors with these capabilities.

Some constructions are:

***DIE CUT CARBONS.*** This usually provides for any shape to be cut out of carbon for filling in data on all parts and deleting data on other parts. This type of construction involves an expensive manufacturing operation, it should be noted.

***CARBON SPOT FORMS.*** Predetermined spots are placed on certain parts of the form or the carbon tissue, thus eliminating data on those parts. The spot carbon may be any shape or size, running at any angle of the stub. This, too, is an expensive technique.

***STRIP COATED CARBONS.*** Whereas carbon spot forms involve just spots, this construction, as the name implies, indicates that a full strip will permit all data to appear on some copies and not on others. Although the lengths may vary, the strips must run the full length of the form.

It is highly recommended that "Chinese screens" be printed directly on the face of the form when block outs are necessary; this method reduces costs considerably.

Snap sets procured under Contract 44 are to be interleaved with one-time black or blue carbon, of weight and quality to insure good copies on all parts. Agencies must specify the make and model of machines used in processing these forms. Also, in requisitioning more than four copies in a set, carbon dummy tests should be requested for agency approval of paper and carbon legibility.

#### QUANTITIES.

The minimum number of snap sets which can be ordered under Contract 44 is 2,500 sets; the maximum number of sets is one million. The number of parts available are from two to eight. When agencies require a large quantity of sets with multiple parts, it is advisable to contact the buyer, both to alert him and to provide adequate lead time for procurement. This allows for lower costs.

#### PAPER SELECTION.

Paper stock should be selected carefully, with the basic grades used. The basic run charge under the snap sets contract is for 12-, 14-, and 15-pound, white sulphite #4 bond, or equal. This is based on a per 1,000-set order; there is an additional upcharge per 1,000 sheets for colored paper or for a heavier stock. Generally speaking, 12-pound bond is suitable for all applications.

Sometimes it is necessary, if the processing is to be done in certain machines and depending on the number of parts, to have 15-pound for either the first or last part and 12-pound for the internal plys. However, the printer's paper roll changes and charges are eliminated by requesting the same weights and grades for all parts. Therefore, carbon dummy testing in the machine the processing is to be performed on should be done before the order is made to see if this situation can be avoided.

Other papers available for snap sets include 16- and 20-pound white sulphite bond; 24-, 28-, and 32- ledger, each in white or buff; 90-pound sulphite #4 white index and 100-pound white tag. Again, agencies should analyze their paper needs with care to insure cost effective practices are being followed.

#### INKS AND PRINTING.

Marginal word printing, whether in black or red ink, should be included in your specifications.

When printing is required on the back of any number of form parts, *justification must be provided*; careful planning, in most cases, can eliminate this "need." Whenever back printing is justified, however, either black or gray ink should be used. It must be noted that there is an additional flat charge involved where inks other than black are used.

#### **PUNCHING AND NUMBERING.**

Agencies would do well, financially speaking, to do their own file hole punching of their snap set forms, as there is an additional charge that must be paid if the vendor is to do this. In either case, the number, location, and dimension of the holes should be well planned and specified.

Consecutive numbering should only be used where strict accounting of each and every copy is necessary. Location, as well as beginning and ending numbers, should be specified for every order placed. When absolute control is a must, agencies should require the vendor to provide them with a list of any missing numbers; the flat upcharge for this provision is worth the trouble.

#### **TRIMMING AND PACKAGING.**

When non-standard size forms are justifiably needed, trimming will need to be done; again, there is an additional charge for this, based on the number of parts. Usually, there are separate charges for trimming up to four parts and for trimming from between four and eight parts.

Packaging requirements, like all other aspects of forms production, should be reviewed carefully to reduce costs and waste. Shrink wrapping 500 forms to a package could produce a stock unit that is just a one-month supply for one location and a two-year supply for another.

Vendors have a set of standards when it comes to packaging a certain number of forms in any one package, so agencies should review their needs before requesting a certain number per package. This is especially true on high volume orders, where an agency might request 900,000 forms, 619 to a package; the extra cost does not justify this worthless specification.

## SECTION FOUR CONTINUOUS FORMS

With the increased use of electronic data processing, continuous forms are rapidly becoming the Commonwealth's largest forms investment. Used mainly for high speed printers, these forms are also used in typewriters, teletype machines, registers, and accounting machines.

Careful consideration should be given to the construction and specifications of these forms, to lower costs. A few hints:

- Vendor stock computer paper is available under contract at low cost and should be used as often as possible as a substitute for "custom" continuous forms.

- Column headings can be printed by the computer in which stock paper can be used, thus reducing costs drastically.

- When the necessity of designing a custom continuous form arises, a standard size form should be specified, again to economize.

- Continuous custom forms are available under DGS Contract 45 in one to eight parts; minimum quantity is 5,000 sets, the maximum is one million sets. It may be to your advantage to secure forms with multi-parts in large quantities under the special bid process by combining orders and gang printing.

- Periodic review should be undertaken to analyze the need for copies of reports printed by computer. This can be helpful in reducing the number actually required. Receivers of various reports which serve no worthwhile purpose should request the originator to remove their name from the distribution list.

### DESIGN CONSIDERATIONS FOR HIGH SPEED PRINTERS.

When designing continuous forms, the following characteristics for high speed printers should be considered.

Marginally punched continuous forms can be accommodated up to a maximum length of 22 inches at 6 lines to the inch, and 16 1/2 inches at 8 lines to the inch. For efficient stacking of forms, the length should not exceed 17 inches.

The operator can set the printers to single space print at 6 lines to the inch. The length of the form must be evenly divisible by 1/6 inch for single spacing, 1/3 inch for double spacing, and 1/2 inch for triple spacing. Similarly, eight lines to the inch requires the length of the form to be evenly divisible by 1/8 inch for single spacing, 1/4 inch for double spacing, and 3/8 inch for triple spacing. Extra-line spacing (double spacing or smaller) is available under the program control without loss of process time. The forms designer may use this feature when selective spacing is required.

Because all print positions can print all characters, form depth and carbon paper can be reduced using side by side printing from 2 and 3 up whenever practical. This not only cuts the computer print time, but also reduces the cost of the form by some 35%. Skip print time should be kept to a minimum.

Forms can be designed for printing 6 or 8 lines to the inch. Single spaced 8 lines per inch printing is not recommended when registration between lines is critical.

It is possible to dispense with vertical lines because the system can be programmed to print commas, decimals, oblique lines, dashes, and other symbols. A vertical line should not be printed between two adjacent printing positions because of the closeness between the adjacent printed characters and the tolerances on both the print positions and the forms.

The number of legible copies that can be produced depends on the weight of the paper used for each form, and on the carbon coating. Please check your operating manual and also ask for carbon dummy test paper samples in your specifications. Because the striking force of the hammers is not adjustable, the paper and carbon should be tested in conjunction with the proper machine settings to determine the suitability of each combination.

## PAPER SPECIFICATIONS AND DIMENSIONS.

The paper used for continuous forms must be of sufficient weight and strength to prevent the marginal holes from tearing out during the feeding, skipping, or ejecting of the form. This is particularly important when single-part forms are being used.

The paper, also, must not be so stiff as to cause improper feeding or excessive bulging, particularly at the outfold. Forms must be free from paper dust and lint. The form, when removed from the carton, must be flat and the edges and the folds must not be damaged. The assembly of multiple copies must be even and the perforations must be intact when the forms are stacked before feeding.

The number of legible copies required is a factor in determining the weight of the paper and the carbon used in a multi-part set. Feeding and legibility performances can best be determined by making test runs of sample sets of forms.

Card forms should be selected from card stock not exceeding .009 inches thick. Card seams or scores should be lapped so that the upper card overlays the lower card to provide a smooth feeding surface on the front of the cards. The folding specifications recommended for continuous card forms is three up for optimum feeding.

It is recommended that form widths be confined to standard sizes and, that wherever applicable on high-speed printers, forms be printed two and three up in order to reduce skip print time and the cost of forms. Standard widths include (in inches): 4 3/4, 5 3/4, 6 1/2, 8, 8 1/2, 9, 9 1/2, 9 7/8, 10 3/8, 10 5/8, 11, 11 3/4, 12, 12 27/32, 13 5/8, 14 7/8, 15 1/2, 16, 16 3/4, 17 25/32, and 18 15/16.

Marginally printed continuous forms up to a maximum length of 22 inches, 6 lines per inch can be accommodated. It is recommended, however, that forms length be confined to regular lengths, such as (in inches): 3, 3 1/4, 3 1/3, 3 1/2, 3 2/3, 4, 4 1/4, 5, 5 1/2, 6, 6 1/2, 7, 8, 8 1/2, 10, 11, 12, 14, and 17. Under Contract 45, the minimum quantity of any one form on a single order is 5,000 sets; however, with depths of 3, 3 1/3, 3 1/2, or 3 2/3 inches, the minimum quantity should be 10,000 sets.

For a form without a perforated vertical tear strip, the first or last character of a printed line must be at least 7/16 inch from the edge of the form.

Vertical lines passing through the two vertical rows of pin holes must be parallel. It is recommended that the edges of the form be 1/4 inch from the vertical center lines through the holes. A horizontal line passing through the center of any two marginal holes on the same line should be at a 90 degree angle to either vertical center line through the marginal holes.

Spacing between holes, center to center, must be such that the pins in the forms tractor, 9/64 inch in diameter and spaced 1/2 inch apart, enter and leave the holes in the paper freely without tearing the paper.

When vertical lines are required, each line should occupy at least one character space. Vertical lines should not be located between adjacent printing positions but should be parallel to a vertical center line passing through marginal holes.

The perforations between forms should be sufficiently deep to permit easy separation, but not so deep as to tear in ordinary handling or feeding through the machine. The perforated lines at the end of the form should always be located 90 degrees to a vertical center line through the marginal holes. The distance from the edge of the form to the marginal perforations is usually 1/2 inch. Cut and uncut portions should be uniformly accurate in length and spacing to insure proper or efficient tearing. Agencies should be sure to include in their forms specifications the make and model number of machines on which forms are to be processed.

## MULTIPLE COPIES.

The number of legible copies is a factor in determining the weight of the paper and carbon required in a paperwork system. The type of paper selected for processing of a particular paperwork system reflects in the cost of the operations; the correct selection will incur benefits to your agency.

The assembly in multi-copy forms should insure that all punching and printing is within .015 inches for proper registration. Single space, 8 lines per inch printing is not recommended with a .093 inch high type when registration is critical between lines. The .079 inch high type is recommended for this spacing.

If multiple copies are not fastened together, the carbon paper must be kept in line with the form by another acceptable manner. One such method is narrow width carbon without pin holes glued to the set, or full width carbon paper punched with substantially larger marginal holes that are centered with the corresponding holes in the form. One-time carbon should produce the required number of legible copies without excessive smudging. This can best be determined by making test runs with dummy samples of paper and carbon.

Whenever required, vertical lines should split the respective print positions, thereby assigning that particular position for the columns field (dollars and cents, for example) separation. Because special characters (such as periods and commas) can be printed in every print position, the use of these symbols as decimal points, etc., avoids the need for vertical lines for such separations. Vertical lines should parallel a vertical center line passing through the marginal holes.

Horizontal printed lines on a form should be at a 90 degree angle to the vertical center line passing through the paper-feed pin holes. The spacing should conform to the setting of the forms feed, six or eight to the inch.

Fastening of forms on the horizontal perforations between margins is not recommended. If a fastening medium is inserted on the perforated line, there should be no printing within 1/4 inch above and below the perforated line. Should forms be required to remain intact after bursting for further processing, crimping should be included in your specifications wherever practical. However, when a glue line is absolutely required, be it on one side or both sides, it usually results in added charges. For multiple part forms where individual parts vary in width, it is recommended that these forms be tested before ordering.

## OPERATING CONSIDERATIONS.

During the feeding operation, friction on marginally-punched continuous forms should be eliminated by placing the pack of forms directly beneath the front of the printer on the forms stand, in a position that eliminates any abnormalities on the form. Forms used on a high-speed printer should always conform with forms information included in the Printers Manufacturers Manual.

It is essential that agencies indicate the machines on which continuous pin-feed forms will be processed. The names and models of the printers (the machine which actually impresses information on the form - these range from automatic typewriters to the more sophisticated high-speed printers used with computers), decollators (equipment which removes carbon from forms mechanically), bursters (equipment which separates continuous forms at the horizontal perforation, either singly or as a set), or any other machines on which the forms are to be used should be included.

The type and speed of the machines will determine the paper substance, type of fastening, perforations, carbon, etc. It is equally important to indicate which sets are burst and on which carbons they are to be removed manually. If the form is to be used on a copying machine at a later time this fact must also be included in the original specifications as this use may impair the legibility of those copies if other specifications are not adjusted accordingly.

It is of the utmost importance that all machinery involved in the processing of these forms be maintained in good operating condition. In many instances involving poor copies, a minor adjustment on the machines can produce trouble-free operation of the forms. Operators should be fully informed of both the machine limitations regarding size, spacing, thickness of form, and the adjustments possible for these factors. Machine operator's manuals should be kept readily available for reference.

#### **STORAGE.**

To facilitate processing, forms should be properly stored during the interval between manufacturing and processing. Precaution should be taken to maintain proper temperature and humidity controls, and to store forms in a protected area away from heat and cold.

Continuous forms should be moved to the machine area in which they are to be run for a minimum period of 48 hours immediately before running; this allows for their adjustment to prevailing atmospheric conditions (room temperature, humidity, etc.).

Because some papers, carbons, glues, etc., deteriorate if stored for extended periods of time, older stocks should be used first. Caution should also be exercised in determining order quantities not only for the reasons cited above but also for obsolescence.

#### **PAPER AND INK.**

The basic running charge for continuous forms paper is computed per 1,000 sets. Either 12-, 13-, or 15-pound white sulphite #4 bond paper is the standard. Other papers available, all at an upcharge, include: 16- or 20-pound white sulphite #4 bond and colored bonds in 12-, 13-, 14-, 15-, 16-, and 20-pound weights; 24-, 28-, and 32-pound white sulphite ledger; 90-pound index; and 15- and 17-pound coated front or back NCR. Additional upcharges are involved for colored paper.

All parts are to be of the same width; they are also to be interleaved with sized, one-time carbon, either black or blue as specified by the ordering agency. Black ink is used to print all continuous forms.

There are charges for perforations between sets. All perforations are cut clean and deep enough to permit easy separation, but not so deep as to tear in ordinary handling or to allow fading through the machine.

Depending on the number of parts and the paper specifications of the high-speed printer, usually the same grades and weights of paper should be specified, thus reducing costs by eliminating the need for paper roll changes.

The printing of marginal words for distribution results in a flat charge which is usually cheaper than using colored paper to designate distribution of copies. Marginal words may be printed in red or black ink; desired words and location by parts affected should be specified.

#### **HOLE PUNCHING.**

File hole punching is used to simplify binding or filing. Specify the number of holes, location, and dimensions. In addition to a flat cost for punching, a running per-1,000 charge is also assessed.

Black ink should be specified for all parts. When justified, orders calling for other than black ink result in flat upcharges. Gray ink should be specified for back printing (some vendors are restricted in using other colors) as it is suitable for printing on 12-pound white paper with no show through. When other than gray ink is specified, an additional flat charge is assessed.

#### **FASTENING AND PACKAGING.**

Crimping or similar means of fastening should be used to hold forms intact after bursting. This is usually a no-charge item and may be identified by a vendor's trade name, such as Hook-block, Speedlock, or Stanlock. Sometimes, there is a charge based on a per-1,000-set basis depending on the number of parts in a set. It may be necessary to use the form for additional processing after it is burst, therefore, the set may require the gluing of the opaques. You may also require gluing of one or both sides; there is usually a flat charge plus a running charge of per-1,000, depending on whether one or two sides are glued.

The packaging of continuous forms is left to the discretion of the vendor. All vendors usually have a standard size quantity for packing cartons based on the size and parts of the form. They usually package the forms so that the total weight of a full carton is not too heavy for the person handling the form. Agencies should not specify the quantity of continuous forms to be packaged in a carton, as this will result in delay and additional costs.

## SECTION FIVE

### ENVELOPES

All envelopes may be classified into two general categories — open side and open end. The location of the flap or opening determines the class. Envelopes are sub-categorized according to function and style. These sub-categories consist of commercial, official, window, messenger, etc.

The Department contracts with envelope manufacturers for all using agencies of the Commonwealth. The more commonly used envelopes, in minimum quantities of 25,000, may be obtained through DGS Contract 8 (008-0801). Smaller quantities are available through the DGS Warehouse Catalog, M610.1. Agencies should attempt to standardize their envelope inventory using only basic standard sizes available under contract.

#### SEAM STYLES.

Seams are always on one side of the envelope, called the back; the other side is called the face. There are also center and bottom seam styles, and side seam styles including inside (concealed) and outside (booklet).

#### WINDOW ENVELOPES.

Window envelopes are used for mailing invoices, statements, and forms. They are usually made with a glassine or cellophane patch. The glassine patch is preferred because of its lower cost. Envelopes made without a glassine or cellophane patch are called open face windows. They are used only when price is more important than any other consideration.

Another type of window envelope is the one-piece style. It does not have a glassine or cellophane patch. It is made by chemically treating the proposed window area to make that particular area transparent. The ragged edges around the window, which are the by-product of chemical treatment, are camouflaged by printing a colored border around the window. The only advantage gained by using the one-piece style, known as Mono-outlook, is its adaptability to high-speed inserting.

On many inserting machines a two-piece window envelope may be used, provided the window patch is sealed close to the edge. Open face envelopes are not recommended for inserting machine use; the enclosures could catch and tear the window cut-out and jam the machine.

The square end window has become more popular in recent years. It is considered to be the standard design for all stock window envelopes. There is negligible difference in area exposed between square end and round end windows.

The position of a window in a commercial or official size envelope is always measured from the left side and the bottom of the envelope. The only exception to this rule is: if, by holding the envelope with the flap at the bottom, the position from the left and bottom is standard, you may write your order for standard window — postage meter position. (Note: if the window appears to be in postage meter position, but subsequent measuring reveals it is not, or if the window is other than standard, you must state the position from the left and bottom when the envelope is seen with the flap at the top.)

Forms which require mailing should be designed to fit standard window envelopes wherever applicable to eliminate the task of addressing.

Any window which is not standard size or not in standard position is referred to as a special window. An additional charge is usually made for a special window depending on the quantity.

### **SPLIT GUMMING.**

Split gumming on the flap is recommended for envelopes to be used on an inserting machine because the elimination of gum from certain areas of the flap will prevent tacking, or blocking, as it is sometimes called. When the envelopes are packed in a box, the greatest amount of pressure is exerted where the flap touches the seam. This is because at those two points there are four layers of paper, plus seam gumming, instead of the three- or two-layer thickness throughout the remainder of the envelope. Therefore, it is possible that a deviation from ideal humidity (50% at 72° Fahrenheit) will cause the flaps to stick at the seams.

### **STANDARDS FOR MAILING.**

First class mail weighing one ounce or less, and single-piece third class mail weighing two ounces or less, are subject to a postal surcharge when: (1) such pieces measure more than 6 1/8" in height, 11 1/2" in length, or 1/4" in thickness; or when (2) the length of such pieces is more than 2.5 times the height, or less than 1.3 times the height. Mail measuring 1/4" or less in thickness must be at least 3 1/2" high, 5" long, and rectangular in shape. All documents must be at least .007" thick.

Proper packaging is one of the most important aspects of the mailing process. Packaging containers must be strong enough to protect the contents; large enough to hold the contents, as well as adequate cushioning materials; yet small enough to tightly enclose the article being mailed.

Acceptable containers include: corrugated and solid cardboard; metal cans, tubes, and boxes; wooden boxes and crates; and fiber mailing tubes with metal ends. Manila envelopes are also acceptable for certain materials, provided that enclosures are not able to shift and slice through the wrapper.

### **SPECIAL ENVELOPES AND FEATURES.**

#### *Rag content bond envelopes.*

Although most correspondence envelopes are made of white wove paper, rag content bond is also used for envelopes. The paper is made by adding rags or cotton to the pulp in a 25%, 50%, 75%, or 100% mixture and is referred to by the percentage of rags contained in the pulp (25% rag bond, 50% rag bond, etc.).

#### *Nylon Mailing Envelopes.*

These envelopes are made of nylon with zippers and the Commonwealth Seal imprinted. They come in two sizes, 9 x 14 inches and 14 x 18 inches, and are used to batch mail to a common destination via U.S. Mail. There may also exist certain applications in the Commonwealth mail service, including mailing plastic seals and address tags. These applications can produce significant savings, as the postage is based on total weight rather than on each individual piece. Other benefits include strong identification, efficiency, security control, and fast turn around. These may be ordered through the Warehouse Catalog, M610.1. The following items are available:

*Form STD-504 Interdepartmental Envelope.*

This is the official envelope used in the Commonwealth mail service for interdepartmental mail. Its use is encouraged, while the use of regular kraft mailing envelopes is discouraged for interdepartmental mail.

*Form STD-505, Personal – Confidential Envelope.*

These are used to reduce Commonwealth postage costs, and are used only to advise employees of certain personnel actions. Its official use is governed by Management Directive 505.8.

*Round Tripper.*

The feature that distinguishes the round trip envelopes is the perforated extension, or stub, which is attached to the face and spot gummed to the back. The recipient tears off the stub and encloses it in the envelope. The flap is then moistened and folded over onto the face for mailing.

The round tripper has two very important capabilities: (1) individuals can fill out the order form and enclose their check with the order, and (2) it has the addressee's name on the back so that there will be no question as to who sent the order.

*Green Diamond Border.*

To increase the speed at which mail is sorted, the postal department approved the use of a green diamond border on envelopes being sent via first class mail. The benefits gained from using green diamond envelopes are the same as those of air mail border envelopes. The border will command the attention of the sorting clerks in the post office. It can be seen even when it is in stacked mail.

*Contac-Seal.*

Labor costs are being given increasing attention today. Management is constantly seeking ways of keeping labor costs in proper proportion to other costs. Contac-Seal gumming (also known as auto-seal and latex seal) enables the user to close the envelope by quickly running the hand over the flap area. The flap will then be secured.

## STANDARD SIZES.

The standard sizes for White Wove Commercial and White Wove Glassine Window envelopes (each open side, high cut, diagonal seams) are shown in the chart below. (Note: where there is no number next to the dimensions, envelopes are simply referred to by those dimensions.)

COMMERCIAL	
size	dimension (inches)
#6 1/4	3 1/2 by 6
#6 3/4	3 5/8 by 6 1/2
	4 by 8 1/2
	3 5/8 by 8
#9	3 7/8 by 8 7/8
	4 3/8 by 8 3/8
#10	4 1/8 by 9 1/2
#11	4 1/2 by 10 3/8
#12	4 3/4 by 11
#14	5 by 11 1/2
	4 3/8 by 8 7/8
	3 7/8 by 9 3/4
	3 1/2 by 7 3/4

WINDOW	
size	dimension (inches)
#6 3/4	3 5/8 by 6 1/2
	3 1/2 by 7 5/8
	3 7/8 by 7 3/4
	3 1/2 by 7 3/4
	3 5/8 by 8
	3 5/8 by 8 3/8
#9	3 7/8 by 8 7/8
	4 3/8 by 8 7/8
	4 1/8 by 9
#10	4 1/8 by 9 1/2
	4 3/4 by 9
#11	4 1/2 by 10 3/8
#14	5 by 11 1/2
	3 3/4 by 8 3/8
	3 7/8 by 7 1/4
	3 5/8 by 7 3/8
	3 5/8 by 8 5/8
	3 3/4 by 7 7/8
	3 7/8 by 8 1/2
	4 by 8 1/2
	4 5/8 by 8 5/8
	4 1/4 by 9
	3 1/2 by 7 7/8

## SECTION SIX

### PROCUREMENT

It is the intention of the Department of General Services that all forms purchased be of first class workmanship and materials suitable for their intended use. All materials and operations, such as printing, collating, punching, perforating, registering, joining, splicing, paper, and carbon leaves, should be of such quality as to insure satisfactory continuous operation on all makes of equipment and for all uses specified. This includes, but is not limited to, electromechanical line printers, teletypewriters, teleprinters, tabulating machines, addressing machines, typewriters, mechanical bursters, and decollators.

After the design of a form has been checked and approved, an order must be placed with the manufacturer. As printing is a precise manufacturing process, the printer needs accurate and complete specifications for the efficient production of the form.

The Bureau also requires certain data for the proper purchase of forms; we cannot improvise information for specifications. Poorly planned and inadequate specifications produce errors, create delays, and cause needless proofs and revisions to proofs. The use of Form STD-3, Form Specifications, will prevent missing any necessary details and make the specification writing job easier and quicker. Too much information is just as bad as too little; it is important that all superfluous information be omitted to avoid any confusion.

#### **RUSH ORDERS.**

One of the most prevalent deficiencies in forms procurement, and one which has a major bearing on excessive costs, is the "rush" order. Inefficient planning and inadequate inventory controls are all too often the cause for forms being ordered on a rush delivery basis. Inadequate specification and poor copy frequently accompany such orders, thus making it impossible for the forms manufacturer to render the kind of service that agencies should get for their forms dollar. Having to upset manufacturing schedules to give rush orders special handling increases the manufacturer's costs and, in turn, these increases are passed along to the Commonwealth.

From every viewpoint, it is to an agency's advantage to allow 90 days before a required delivery date. The Bureau stands ready to take care of emergency requirements, but it should be an objective of ordering agencies to see that emergencies are the exception, rather than the rule.

#### **PRINTING OF FORMS.**

The Planning Division of the Bureau will provide planning assistance on forms, will develop or help develop specifications, will review for approval all requests for printing, and will determine the best means of design and production. Agencies are encouraged to contact the Planning Division before requesting any new forms, before submitting large or complicated orders, or to discuss any aspect of forms or printing.

Requests for commercial printing should be submitted to the Planning Division as shown in Management Directive 220.9, Printing Services.

The Printing Division of the Bureau provides art, composition, and reproduction services. It also provides quick copy service in three different locations. All requests for the composition or in-house reproduction of forms or for the quick copy reproduction of forms are to be submitted as shown in Management Directive 220.9.

## **PROOF POLICY.**

- Three proof copies are normally sent to the ordering agency. They should be carefully edited for spelling and typographic arrangement. The vendor should be responsible for correctly spelling any word that is in an unabridged dictionary, but the ordering agency should not rely on it. Scales should be used on the proof to check spacing and registration.

Minor corrections or changes may be made on the proof in red pencil, but remember — each change not shown on the original copy will be at an additional cost. A second proof should be requested for any form that has critical specifications (exact registration, spacing, etc.) and has been changed. Also, if you make major changes, request a new proof. All layouts and instructions should be returned with the proof.

The proof which is signed by the agency and returned to the vendor is the printed document you will receive.

## **STATIONERY.**

- Forms and procurement personnel should be aware of the restrictions on the use of stationery, including letterheads, envelopes, memo cards, invitations, and business cards. The use of engraved stationery with the gold state seal and coat of arms is now permitted only for the Governor, Lieutenant Governor, judges, department secretaries, cabinet officers, and designated members of the Governor's senior staff. Thermographic (raised print) stationery in a maximum of two colors (no gold seal) is permitted for executive deputy secretaries, assistants to the Governor, chairpersons of boards and commissions, and heads of institutions.
- Stationery required for all other purposes will be by the standard offset printing process using a good quality bond paper and one color of ink only. The printing of business cards at Commonwealth expense is restricted to officials at the bureau director or higher level and to individuals whose positions require frequent contact with the public. Furthermore, the composition, artwork, and printing of personalized memorandum pads and their reproduction by or for employes of the Commonwealth is prohibited. Standard Forms STD-502, Desk Memorandum, and STD-509, Call Memorandum, are the official pads used for informal correspondence.

## **VENDOR PERFORMANCE.**

One of the services of the Bureau is the resolution of agency problems and complaints relative to the quality, delivery status, and other aspects of paper, printing, forms, and envelopes purchased through the Department. Bureau personnel are in daily contact with the vendors who are competing for the state's forms and envelope business; we are concerned that all problems are equitably resolved in a minimum amount of time.

Knowledge of the types of problems encountered can lead to actions that will minimize the chances of similar situations arising in the future. Such information will also provide valuable input to the Department's record of vendor performance.

It is the intention of the Bureau to purchase the best forms possible. If a vendor is not performing properly the ordering agency should notify the Bureau, citing specific documented instances of unsatisfactory performance on Form STD-9, Vendor Performance Report. When applicable, sample forms or envelopes should accompany the report. Be assured that such information will receive immediate attention, and that appropriate steps will be taken to correct any given situation with a minimum of delay. Problems of an immediate nature (such as late deliveries) may be referred to the Bureau by telephone.

### ***INSPECTION CRITERIA.***

Agency forms personnel should, immediately upon receipt of shipment, inspect forms to verify compliance with specifications as originally processed through the Bureau. The checklist shown below should be used for this purpose.

1. Correct quantity, proper paper grades, quality, and paper weights.
2. Proper form size, heading locations, type of punching, and perforations (if any).
3. Correct numbering on all parts of multi-part forms.
4. Legible carbon copies and registration of all parts.
5. Proper sequence of parts and marginal words.
6. Proper location of carbon strips and blocking (if any).
7. Back printing properly located when specified.
8. Proper attaching of snap out stubs or fastening, crimping, or gluing of continuous pin fed forms.
9. Correct labeling and packaging.
10. Correct paper colors and sequence.
11. Test run forms for proper spacing, legibility, and registration, using the machines the forms are processed on and those used for post-printing operations.

Forms not conforming to actual specifications must immediately be reported by phone; the Bureau will furnish agencies with Form STD-9, Vendors Performance Report, to document deficiencies and advise agencies accordingly in any given situation.



## SECTION SEVEN

### STORAGE

Inventory of forms serves as a buffer against uncertainty in supply and demand. It arises out of the need to control the storage and distribution of forms to be used by various using locations. Without adequate control, there is a tendency to accumulate too few or too many forms, often of the wrong kind and in the wrong places.

There are a number of costs associated with storage which should be considered:

- The cost of storage facilities.
- The cost of insuring facilities and contents.
- The cost of material handling and recordkeeping.
- The cost of interest or investment.
- The cost of depreciation, obsolescence, and shrinkage.

Storage should be used to meet normal consumption requirements. That is, it is carried to provide for the basic need. At the same time, it is important to achieve maximum inventory turnover. Storage is also required for a variety of special reasons, all resulting in the maintenance of inventories in excess of those required for basic inventory replenishment. Oftentimes, for example, an agency can benefit by buying extra quantities of forms in anticipation of contract expiration or paper shortages. The most important of these reasons is the need to provide a buffer between the difference in demand and supply so that replenishment of supply is possible without running out of forms.

The three areas of concern for agencies storing their own forms are: (1) storage costs; (2) control of forms distribution; and (3) "stock outs."

If an agency has its own storage and distribution operation, the control of forms is generally placed under the forms control/forms management operation. If there is no forms control or forms management operation, the responsibility for checking usage, quantities on hand, and re-order times will probably be assigned to material control.

The types of records used, as well as the degree of control, vary considerably. Some agencies prefer to store and distribute their own forms; they feel they will be in a better position to control delivery and assure that they will always have forms when they need them without overstocking. In these cases, it is imperative that good internal paperwork and inventory systems be established.

The ideal situation, from an efficiency and cost standpoint, is to purchase forms for immediate use without storing them. Someone has to pay for storage, either the vendor or the agency. Ultimately, it reflects on the price of the forms.

Questions agencies should ask themselves about storage are:

- (1) Are the storage and distribution costs excessive?
- (2) Do we have frequent stock outs?
- (3) Should the various user locations have faster delivery times?
- (4) Is storage space a problem?

(5) Do we have a difficult time maintaining our forms inventory?

(6) Could we benefit from being able to group forms for economic ordering quantities?

Maximum results may be obtained from inventory control of forms – but, it must be a continuing effort. It cannot be an on and off again sporadic endeavor. It is one control which, when conscientiously and completely applied, will lead to the following benefits:

#### **Eliminating "Out of Stock Situations"**

- Reduces office down time.
- Reduces costly overtime.
- Eliminates errors associated with rush orders.
- Eliminates production down time.
- Eliminates bootleg forms.
- Eliminates high cost of rush orders.
- Systems won't suffer because forms due for revision had to be rush ordered.
- Strain on employes, procurement, and vendor relations will be reduced.

#### **Preventing "Over Stock Situations"**

- Increases cash flow.
- Storage space freed up.
- Reduces time spent on inventories.
- Reduces obsolescence of forms.
- Eliminates spoilage of carbons or special papers.
- Eliminates forgotten forms.
- Eliminates extra handling of excess forms.
- Permits regular and timely review of all forms.

#### **RECOMMENDATIONS.**

Forms should be kept in sealed shipping containers until used. The containers should not be placed directly on or against masonry surfaces. Twelve-inch cartons may be stacked up to four high, each carton set squarely on the one underneath with no additional weight placed on the stack. When stacking containers of other sizes, the strength and stability of the container must be considered, as well as the weight of the paper. Containers should not be stacked on their sides.

Paper size and strength are affected by variations in temperatures and humidity, with the latter having the greater effect. The recommended environment for storing forms is a temperature of 50 – 80° Fahrenheit (10 – 26.7 C.) and a relative humidity of 20 – 80%. For best machine performance, it is recommended that forms be stored in a room environment of 35 – 65% relative humidity. If forms are stored in any other environment, a reduction in performance may be experienced. This can be partially corrected by acclimating the paper to the processing environment before use.

When forms are processed over equipment with feeding devices for fixed forms widths in an uncontrolled humidity environment, feeding or registration problems may result. Wide fluctuations in relative humidity will cause variations in forms width, which can result in improper engagement of feed pins with the marginal holes. When forms are used in a controlled environment, the containers should be opened a minimum of 24 hours before use to allow for proper conditioning of the paper. Forms exposed to extremes of humidity and temperature may be permanently damaged.

Forms stored under the above conditions will provide for a maximum shelf life.

As a general rule, old forms should be used before any new stocks are issued. In other words, **first in – first out**. Low usage forms should be placed in the working areas rather than in central stores or stock rooms. Forms which are slow movers should be checked to see if they are still valid. Revisions of an existing form should not be issued until the old supply is depleted (unless the improvement gained offsets the cost of the old forms in stock). When forms are obsolete or no longer used, they should be made into scrap or scratch pads, whenever practical, or charged to the originating unit.

The Department also has contracts for the sale of waste paper and tab cards. Further information may be obtained by contacting the Bureau of Surplus Property.