REPORT WRITING WITH PROC PRINT AND PROC QPRINT

James A. Le Goullon, Unisys Corporation
Debra Martinson, Unisys Corporation

ABSTRACT

The PRINT and QPRINT procedures are used to print data from a SAS dataset. The reports produced by these procedures can be as simple or complex as needed, depending on the options used.

INTRODUCTION

PROC PRINT can produce anything from a very simple line-by-line listing of observations to a "customized" report format with subgroups, subtotals, labels and more. QPRINT is an alternative to the PRINT procedure, and although it does not offer all of the features of PROC PRINT, it may provide the programmer with greater control over the report layout.

Both the PRINT and QPRINT procedures can only print data stored in a SAS dataset. For information on creating a SAS data set read Chapter 3 of the SAS User's Guide: Basics, Introduction to the Data Step. This paper features PROC PRINT and concludes with an outline of PROC QPRINT and a simple comparison of the two.

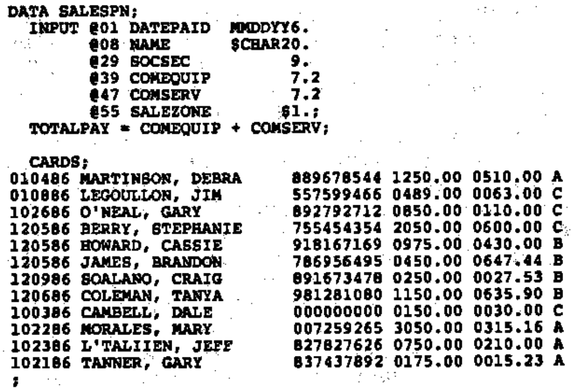
SPECIFICATIONS

PROC PRINT can be used alone, with PROC PRINT options, or with other SAS statements to produce the desired results:

We will see PROC PRINT produce a default report in its simplest form. We will then add options and statements to enhance the report. Remember that a SAS procedure can only be executed on SAS datasets.

Let's begin by writing a data step to create a SAS dataset and then use PROC PRINT to view the results.

A SIMPLE PROGRAM TO CREATE A SAS DATASET:



```
DATA SALESPN;
  INPUT @01 DATEPAID  MMDDYY6.
        @08 NAME      $CHAR20.
        @29 SOCSEC          9.
        @39 COMEQUIP        7.2
        @47 COMSERV         7.2
        @55 SALEZONE      $1.;
  TOTALPAY = COMEQUIP + COMSERV;

  CARDS;
010486 MARTINSON, DEBRA     889678544 1250.00 0510.00 A
010886 LEGOULLON, JIM       557599466 0489.00 0063.00 C
102686 O'NEAL, GARY         892792712 0850.00 0110.00 C
120586 BERRY, STEPHANIE     755454354 2050.00 0600.00 C
120586 HOWARD, CASSIE       918167169 0975.00 0430.00 B
120586 JAMES, BRANDON       786956495 0450.00 0647.44 B
120986 SOALANO, CRAIG       891673478 0250.00 0027.53 B
120686 COLEMAN, TANYA       981281080 1150.00 0635.90 B
100386 CAMBELL, DALE        000000000 0150.00 0030.00 C
102286 MORALES, MARY        007259265 3050.00 0315.16 A
102386 L'TALIIEN, JEFF      827827626 0750.00 0210.00 A
102186 TANNER, GARY         837437892 0175.00 0015.23 A
;
```

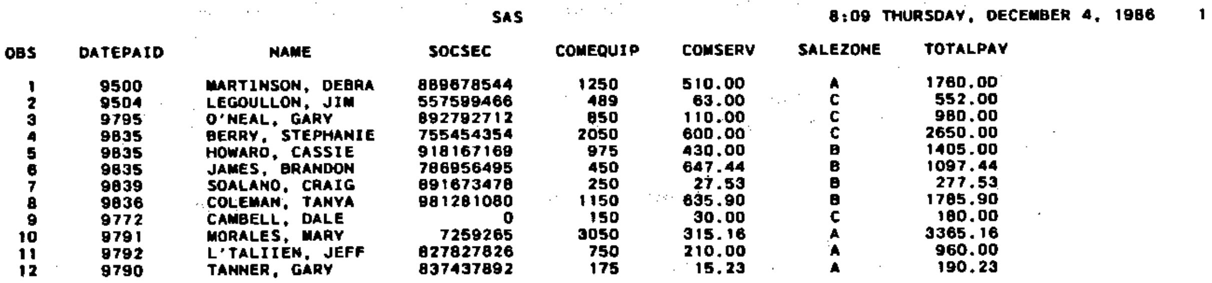
FIGURE #1

The program in Figure #1 creates a SAS dataset containing the date the salespeople were paid, their name, their Social Security number, their commission on equipment sold, their commission on service contracts and their sales zone, then both commissions figures are added to compute total gross pay.

This was followed by the simplest form of PROC PRINT ...

PROC PRINT;

... producing a default report as shown in Figure #2:



```
                                      SAS                         8:09 THURSDAY, DECEMBER 4, 1986    1

OBS   DATEPAID        NAME             SOCSEC     COMEQUIP    COMSERV    SALEZONE    TOTALPAY

  1     9500    MARTINSON, DEBRA     889678544      1250       510.00       A         1760.00
  2     9504    LEGOULLON, JIM       557599466       489        63.00       C          552.00
  3     9795    O'NEAL, GARY         892792712       850       110.00       C          980.00
  4     9835    BERRY, STEPHANIE     755454354      2050       600.00       C         2650.00
  5     9835    HOWARD, CASSIE       918167169       975       430.00       B         1405.00
  6     9835    JAMES, BRANDON       786956495       450       647.44       B         1097.44
  7     9839    SOALANO, CRAIG       891673478       250        27.53       B          277.53
  8     9836    COLEMAN, TANYA       981281080      1150       635.90       B         1785.90
  9     9772    CAMBELL, DALE                0       150        30.00       C          180.00
 10     9791    MORALES, MARY          7259265      3050       315.16       A         3365.16
 11     9792    L'TALIIEN, JEFF      827827826       750       210.00       A          960.00
 12     9790    TANNER, GARY         837437892       175        15.23       A          190.23
```

FIGURE #2

THE PROC PRINT STATEMENT USED ALONE

Used alone, without options and other statements, the PRINT procedure defaults are as follows:

1. Centers the title of "SAS" on the second line of the report.

2. Prints an "OBS" column as the first column of the report.

3. Variables are printed in the order in which they appear in the SAS data set.

4. Variable names are used as column headings.

5. Page breaks occur when line space is exhausted on the page.

6. Data from the last SAS data set created in the program is used.

7. Adjusts the column spacing from page to page depending on varying variable data lengths (pages are not uniform).

OPTIONS OF THE PROC PRINT STATEMENT

Now let's add some options ...

```
PROC PRINT options;
```

- DATA = sasdataset

  - The SAS dataset to be printed.

- NOOBS

  - Suppress printing "OBS" column.

- N

  - Print the number of observations at the bottom of the page, or the bottom of each subgroup.

- UNIFORM (or U)

  - Make the output "uniform" throughout the report as opposed to centered, page by page.

- DOUBLE (or D)

  - Create double spaced output.

- ROUND

  - Round numeric values to two decimal places (unless the number of places is specified in a FORMAT statement).

- LABEL

  - Specify that labels are to be used as column headings. The program must contain a LABEL statement.

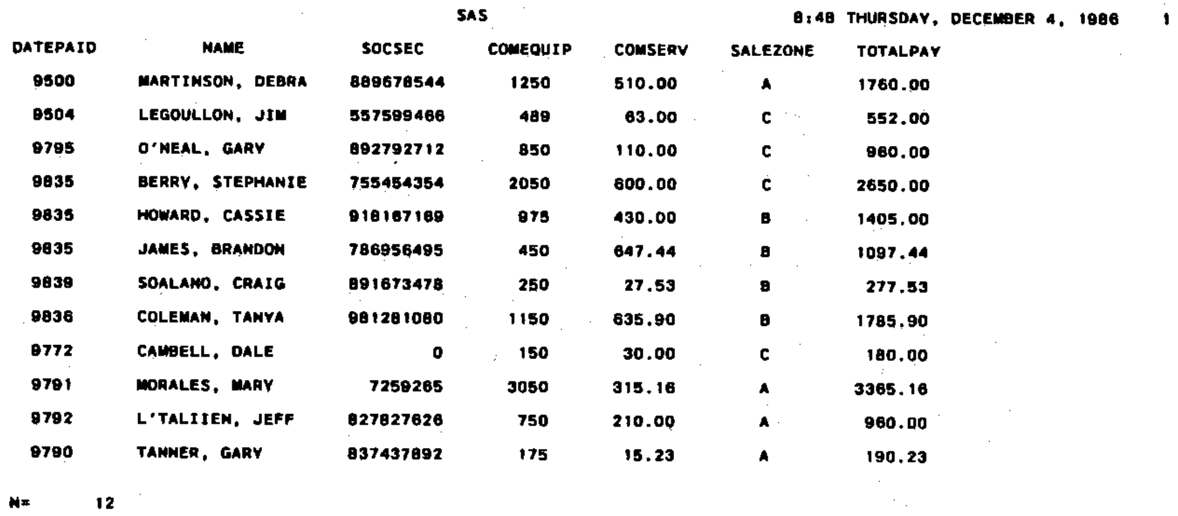
- SPLIT = 'splitcharacter'

  - Specify the split character used in your LABEL statement. NOTE: the SPLIT = option implies that labels will be used. The LABEL option is not required in the PROC PRINT statement.

PROC PRINT STATEMENT WITH SOME OPTIONS:

```
PROC PRINT DOUBLE ROUND N NOOBS;
```

This produced the report in figure #3:



```
                                         SAS                          8:48 THURSDAY, DECEMBER 4, 1986    1

DATEPAID        NAME             SOCSEC      COMEQUIP    COMSERV    SALEZONE    TOTALPAY

  9500    MARTINSON, DEBRA     889678544       1250      510.00        A        1760.00

  9504    LEGOULLON, JIM       557599466        489       63.00        C         552.00

  9795    O'NEAL, GARY         892792712        850      110.00        C         960.00

  9835    BERRY, STEPHANIE     755454354       2050      600.00        C        2650.00

  9835    HOWARD, CASSIE       918167169        975      430.00        B        1405.00

  9835    JAMES, BRANDON       786956495        450      647.44        B        1097.44

  9839    SOALANO, CRAIG       891673478        250       27.53        B         277.53

  9836    COLEMAN, TANYA       981281080       1150      635.90        B        1785.90

  9772    CAMBELL, DALE                0        150       30.00        C         180.00

  9791    MORALES, MARY          7259265       3050      315.16        A        3365.16

  9792    L'TALIIEN, JEFF      827827626        750      210.00        A         960.00

  9790    TANNER, GARY         837437892        175       15.23        A         190.23

N=       12
```

FIGURE #3

STATEMENTS USED WITH PROC PRINT

```
PROC PRINT options;
     VAR variables;
     ID variables;
     BY variables;
     PAGEBY byvariable;
     SUM variables;
     SUMBY byvariable;
```

- VAR Statement

  - Specifies which variables will be printed and their order across the page.

- ID Statement

  - Overlays the "OBS" column with a specified variable.

- BY Statement

  - Puts the output into subgroups. The SAS dataset must be sorted (with PROC SORT) by the same BY variable(s).

- PAGEBY Statement

  - Creates a page break each time the value of the BY variable changes. PROC PRINT must include a BY statement.

- SUM Statement

  - Specifies that certain numeric columns be summed, and the sum values printed at the bottom of the column.

- SUMBY Statement

  - Sum the columns by the BY variable (the sum value is printed each time the value of the BY variable changes). Again, SUMBY will only work if accompanied by a BY statement in the PROC PRINT.

USING THE SAS STATEMENTS

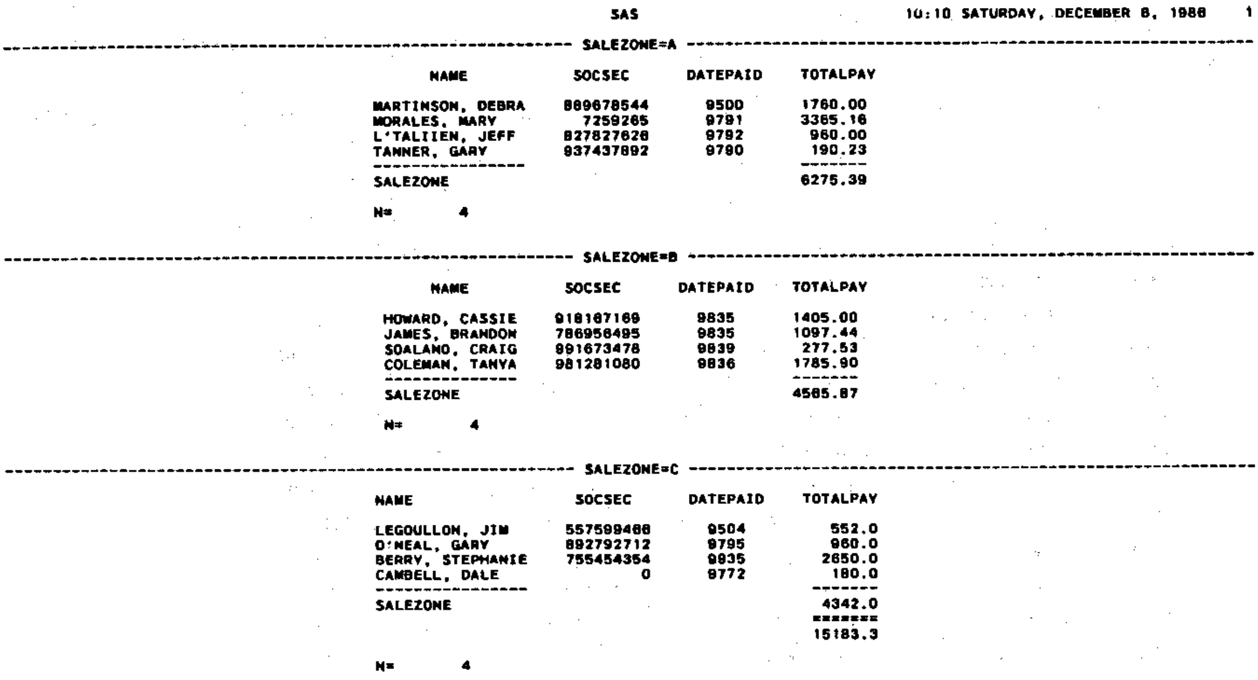
Start with the program example from Figure #1. Followed by a PROC SORT statement sorting the SAS dataset by SALEZONE. (This prepares the PROC PRINT for the BY statement that will create subgroups):

```
PROC SORT;
     BY SALEZONE;
```

Followed by a PROC PRINT statement using the ID, VAR, BY, and SUMBY statements:

```
PROC PRINT DOUBLE ROUND N;
     ID NAME;
     VAR SOCSEC DATEPAID TOTALPAY;
     BY SALEZONE;
     SUMBY SALEZONE;
```

To produce the report in Figure #4.



```
                                          SAS                            10:10 SATURDAY, DECEMBER 8, 1988    1
------------------------------------------------------------ SALEZONE=A ------------------------------------------------------------

                                      NAME          SOCSEC      DATEPAID   TOTALPAY

                               MARTINSON, DEBRA   889678544      9500      1760.00
                               MORALES, MARY        7259265      9791      3365.16
                               L'TALIIEN, JEFF    827827628      9792       960.00
                               TANNER, GARY       937437892      9780       190.23
                               ----------------                            -------
                               SALEZONE                                    6275.39

                               N=        4

------------------------------------------------------------ SALEZONE=B ------------------------------------------------------------

                                      NAME         SOCSEC      DATEPAID   TOTALPAY

                                HOWARD, CASSIE   918187169      9835      1405.00
                                JAMES, BRANDON   786956495      9835      1097.44
                                SOALANO, CRAIG   991673478      9839       277.53
                                COLEMAN, TANYA   981281080      9836      1785.90
                                --------------                            -------
                                SALEZONE                                  4585.87

                                N=        4

------------------------------------------------------------ SALEZONE=C ------------------------------------------------------------

                               NAME                 SOCSEC      DATEPAID   TOTALPAY

                               LEGOULLON, JIM     557599488      9504         552.0
                               O'NEAL, GARY       892792712      9795         960.0
                               BERRY, STEPHANIE   755454354      9835        2650.0
                               CAMBELL, DALE              0      9772         180.0
                               ----------------                             -------
                               SALEZONE                                      4342.0
                                                                            =======
                                                                            15183.3

                               N=        4
```

FIGURE #4

ENHANCING THE "LOOK" OF YOUR OUTPUT

THE TITLE STATEMENT

The TITLE statement is used to specify up to 10 lines of titles for most SAS output, including PROC PRINT and QPRINT.

The TITLE statement, to be used with your PROC PRINT, must appear somewhere after a previous RUN statement, if one exists, and before the next RUN, DATA, or PROC statement. Text following the TITLE statement must be enclosed in either single or double quotes, double quotes if macro references are used.

PROGRAM EXAMPLE OF THE TITLE STATEMENT:

```
TITLE1 "A B C  COMPANY";
TITLE3 "COMMISSIONS PAID"
       "BY SALES ZONE";
```

An example of the new report with titles is shown in Figure #5.

THE LABEL STATEMENT

The LABEL statement is used to create column labels. Without the LABEL statement, the PRINT procedure uses the variable names. Text used as labels can be anything, but must be enclosed in quotes.

You may use split characters to cause the label to split to the next line with a limit of two splits (or three line labels). You must then use the SPLIT= option of the PROC PRINT statement and specify what is to be used as the split character.

EXAMPLE OF A LABEL STATEMENT:

```
LABEL

     PRICE = "SALES*PRICE*_____";
```

TO PRODUCE:

```
SALES
PRICE
_____
```

Notice that the words SALES and PRICE are lined up over the "_____".

Also take note, every character before and after the SPLIT character is printed, including blanks. If you need to line labels up then you would use blanks.

PROGRAM EXAMPLE OF THE LABEL STATEMENT:

```
LABEL
 DATEPAID = "  PAY*  DAY*________"
 NAME     = "SALESPERSON'S*   NAME*_________________________"
 SOCSEC   = "SOCIAL*SECURITY #*____________"
 COMEQUIP = "COMMISION*EQUIP SOLD*____________"
 COMSERV  = "COMMISION*SERV CONTRACTS*____________"
 TOTALPAY = "*TOTAL PAY*___________"
 SALEZONE = "SALES ZONE"___________
 ;
```

Notice the two spaces after the " and before PAY and after the * and before DAY. These are used to center PAY and DAY over the eight dashes (-).

An example of the new report with these labels is shown in Figure #6.

3. THE FORMAT STATEMENT

With a FORMAT statement, you format your data for output using SAS formats already available in the SAS library or by creating your own. For example, formats statements are used to print numeric figures with commas or dollar signs. It is also necessary to use a format to print SAS dates in a readable form.

In our example, we will be using the FORMAT statement to enhance the output of the DATEPAID, SOCSEC, and TOTALPAY variables.

AN EXAMPLE OF FORMAT STATEMENTS:

```
FORMAT TOTALPAY DOLLAR10.2;

FORMAT SOCSEC          SSN.;

FORMAT DATEPAID  MMDDYY8.;
```

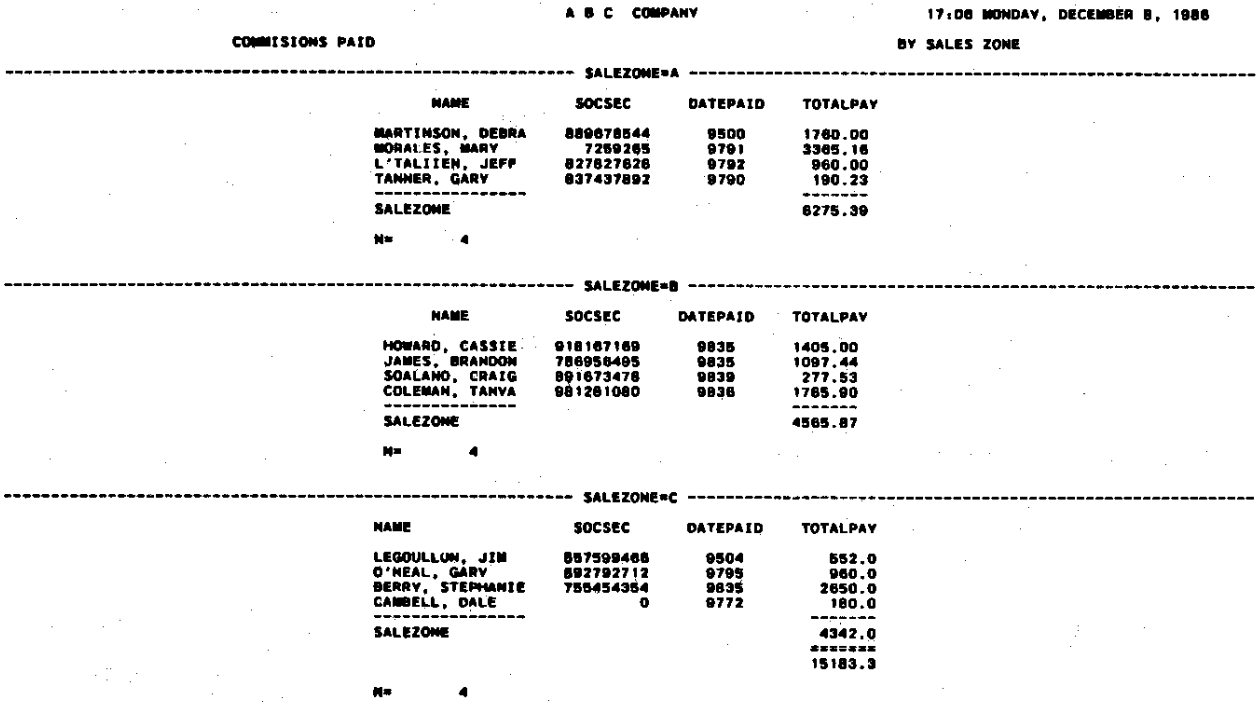
AND OF COMBINING THE THREE INTO ONE FORMAT STATEMENT:

```
FORMAT TOTALPAY DOLLAR10.2
       SOCSEC          SSN.
       DATEPAID  MMDDYY8.;
```

Either way is fine.

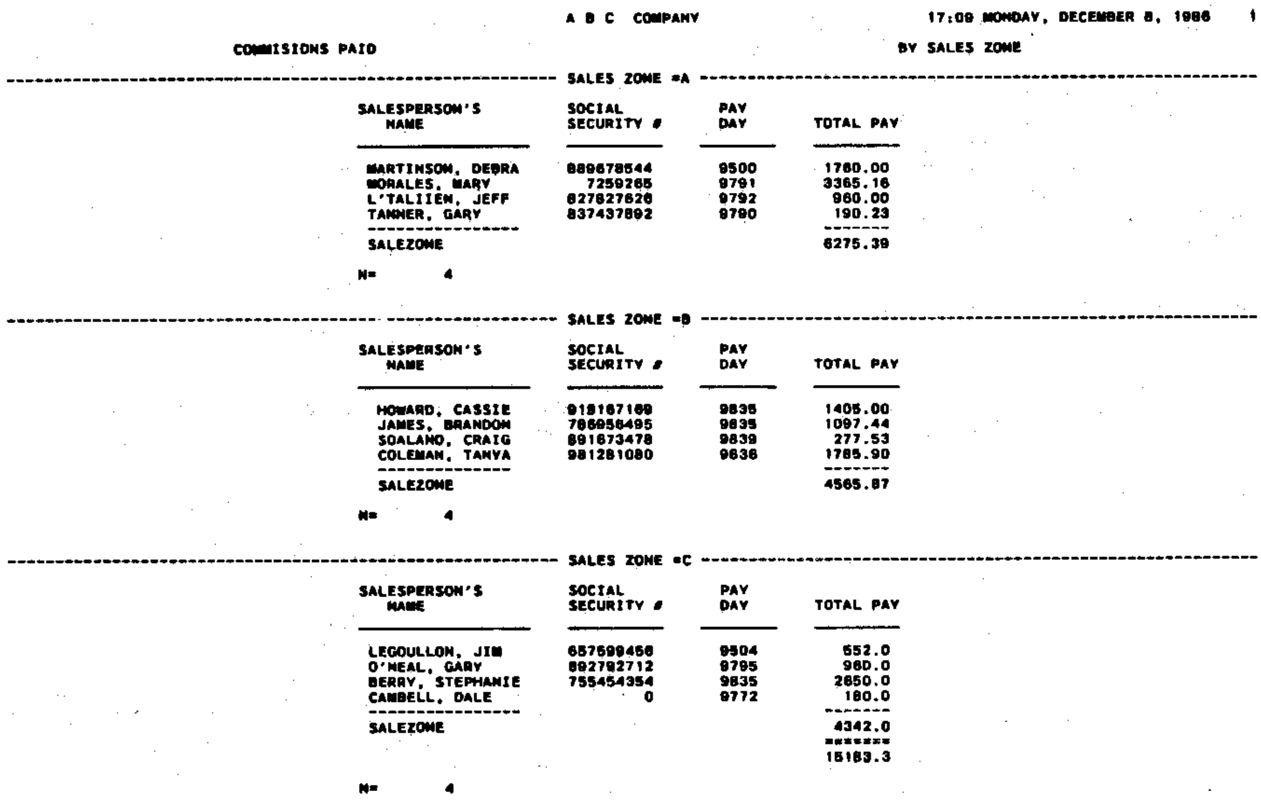
The above FORMAT statement was used to format the TOTALPAY, SOCSEC and DATEPAID variables shown on the final report in Figure #7.

Figure #8 shows the finished program starting after the DATA step (Figure #1).



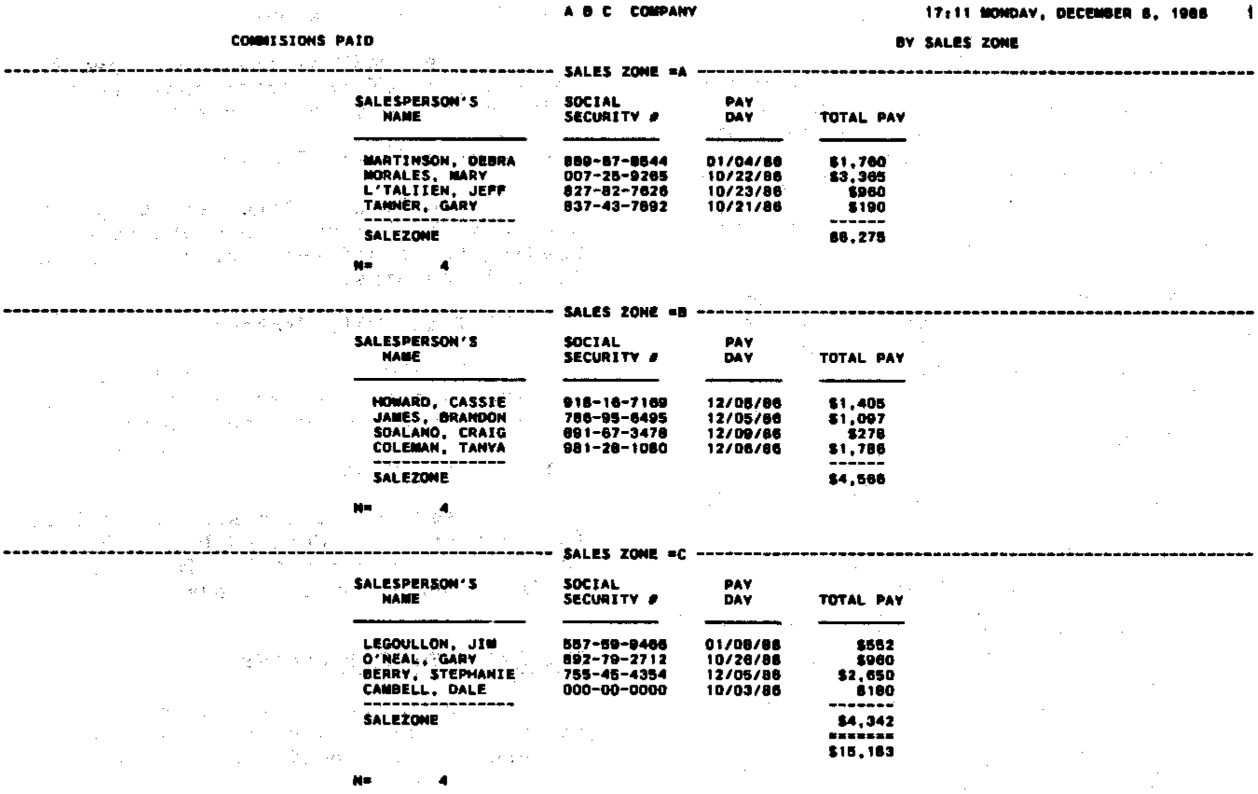
```
                                              A B C  COMPANY                        17:08 MONDAY, DECEMBER 8, 1986

                   COMMISIONS PAID                                               BY SALES ZONE

----------------------------------------------------- SALEZONE=A -----------------------------------------------------

                               NAME             SOCSEC      DATEPAID     TOTALPAY

                        MARTINSON, DEBRA     889678544       9500        1760.00
                        MORALES, MARY          7259265       9791        3365.16
                        L'TALIIEN, JEFF      827827626       9792         960.00
                        TANNER, GARY         837437892       9790         190.23
                        ----------------                                 -------
                        SALEZONE                                         6275.39

                        N=        4

----------------------------------------------------- SALEZONE=B -----------------------------------------------------

                               NAME            SOCSEC      DATEPAID     TOTALPAY

                         HOWARD, CASSIE     918187169       9835        1405.00
                         JAMES, BRANDON     786958495       9835        1097.44
                         SOALANO, CRAIG     891673478       9839         277.53
                         COLEMAN, TANYA     981281080       9836        1785.90
                         --------------                                 -------
                         SALEZONE                                       4565.87

                         N=        4

----------------------------------------------------- SALEZONE=C -----------------------------------------------------

                        NAME                    SOCSEC      DATEPAID     TOTALPAY

                        LEGOULLON, JIM       657599456       9504           552.0
                        O'NEAL, GARY         692792712       9795           960.0
                        BERRY, STEPHANIE     755454354       9835          2650.0
                        CAMBELL, DALE                0       9772           180.0
                        ----------------                                  -------
                        SALEZONE                                           4342.0
                                                                          =======
                                                                          15183.3

                        N=        4
```

FIGURE #5



```
                                              A B C  COMPANY                        17:09 MONDAY, DECEMBER 8, 1986     1

                   COMMISIONS PAID                                               BY SALES ZONE

-------------------------------------------------- SALES ZONE =A -----------------------------------------------------

                       SALESPERSON'S          SOCIAL          PAY
                          NAME                SECURITY #      DAY         TOTAL PAY
                       ---------------        ----------      -------     ---------

                        MARTINSON, DEBRA      889678544       9500          1760.00
                        MORALES, MARY           7259265       9791          3365.16
                        L'TALIIEN, JEFF       827827626       9792           960.00
                        TANNER, GARY          837437892       9790           190.23
                        ----------------                                    -------
                        SALEZONE                                            6275.39

                       N=        4

-------------------------------------------------- SALES ZONE =B -----------------------------------------------------

                       SALESPERSON'S          SOCIAL          PAY
                          NAME                SECURITY #      DAY         TOTAL PAY
                       ---------------        ----------      -------     ---------

                         HOWARD, CASSIE       918187169       9836          1405.00
                         JAMES, BRANDON       786958495       9835          1097.44
                         SOALANO, CRAIG       891673478       9839           277.53
                         COLEMAN, TANYA       981281080       9836          1785.90
                         --------------                                     -------
                         SALEZONE                                           4565.87

                       N=        4

-------------------------------------------------- SALES ZONE =C -----------------------------------------------------

                       SALESPERSON'S          SOCIAL          PAY
                          NAME                SECURITY #      DAY         TOTAL PAY
                       ---------------        ----------      -------     ---------

                        LEGOULLON, JIM        657599456       9504            552.0
                        O'NEAL, GARY          692792712       9795            960.0
                        BERRY, STEPHANIE      755454354       9835           2650.0
                        CAMBELL, DALE                 0       9772            180.0
                        ----------------                                    -------
                        SALEZONE                                             4342.0
                                                                            =======
                                                                            15183.3

                       N=        4
```

FIGURE #6



```
                                          A B C  COMPANY                          17:11 MONDAY, DECEMBER 8, 1986    1
                 COMMISIONS PAID                                                    BY SALES ZONE
---------------------------------------------------------- SALES ZONE =A ----------------------------------------------------------
                            SALESPERSON'S       SOCIAL          PAY
                              NAME              SECURITY #      DAY       TOTAL PAY
                            ---------------     ------------    --------  ---------

                             MARTINSON, DEBRA   889-87-8544     01/04/86    $1,760
                             MORALES, MARY      007-25-9265     10/22/86    $3,365
                             L'TALIIEN, JEFF    827-82-7626     10/23/86      $960
                             TANNER, GARY       837-43-7892     10/21/86      $190
                             ---------------                               ------
                             SALEZONE                                      $6,275

                            N=       4

---------------------------------------------------------- SALES ZONE =B ----------------------------------------------------------
                            SALESPERSON'S       SOCIAL          PAY
                              NAME              SECURITY #      DAY       TOTAL PAY
                            ---------------     ------------    --------  ---------

                              HOWARD, CASSIE    918-16-7169     12/08/86    $1,405
                              JAMES, BRANDON    786-95-6495     12/05/86    $1,097
                              SOALANO, CRAIG    891-67-3478     12/09/86      $278
                              COLEMAN, TANYA    981-28-1080     12/06/86    $1,786
                              --------------                               ------
                              SALEZONE                                     $4,566

                            N=       4

---------------------------------------------------------- SALES ZONE =C ----------------------------------------------------------
                            SALESPERSON'S       SOCIAL          PAY
                              NAME              SECURITY #      DAY       TOTAL PAY
                            ---------------     ------------    --------  ---------

                             LEGOULLON, JIM     557-59-9466     01/08/86      $552
                             O'NEAL, GARY       892-79-2712     10/26/86      $960
                             BERRY, STEPHANIE   755-45-4354     12/05/86    $2,650
                             CAMBELL, DALE      000-00-0000     10/03/86      $180
                             ---------------                               -------
                             SALEZONE                                      $4,342
                                                                           =======
                                                                           $15,183

                            N=       4
```

FIGURE #7

```
PROC SORT;
  BY SALEZONE;

PROC PRINT N SPLIT="*";
  ID NAME;
  VAR SOCSEC DATEPAID TOTALPAY;
  BY SALEZONE;
  SUM TOTALPAY;
  SUMBY SALEZONE;

  TITLE1 "A B C  COMPANY";
  TITLE3 "COMMISIONS PAID"
         "BY SALES ZONE";

  LABEL  DATEPAID = "  PAY*  DAY*_________ "
         NAME     = "SALESPERSON'S*   NAME*____________________"
         SOCSEC   = "SOCIAL*SECURITY #*__________"
         COMEQUIP = "COMMISION*EQUIP SOLD*__________"
         COMSERV  = "COMMISION*SERV CONTRACTS*__________"
         TOTALPAY = "*TOTAL PAY*_________ "
         SALEZONE = "SALES ZONE"
         ;

  FORMAT TOTALPAY DOLLAR10.2
         SOCSEC   SSN.
         DATEPAID MMDDYY8.;
```

FIGURE #8

THE QPRINT PROCEDURE

The QPRINT procedure is an alternative to PROC PRINT that prints values of observations in a table. QPRINT may offer the SAS programmer greater execution efficiency and more control over the report layout. QPRINT does not, however, offer PAGEBY, SUM, or SUMBY statements as available with PROC PRINT.

Just one feature of QPRINT is the ability to print your data in panels or "newspaper" style, print constant text between columns, and more.

PROC QPRINT SPECIFICATIONS:

The following statements can be used with QPRINT:

```
          PROC QPRINT options;
               RESET options;
               OBS options;
               ID variables {/options};
               VAR variables {/options};
               BY variables;
               CONSTANT quoted text
          {/options};
               HEAD options;
               FOOT options;
               TAIL {name};
```

STATEMENTS USED WITH QPRINT

Below are statements of the QPRINT procedure. This is a very brief "highlight" at most! More information can be obtained through the Institute.

- RESET

- The RESET statement allows OBS, ID, VAR, and HEAD options to be reset. This allows two or more different looking reports on one page.

- OBS

- The OBS statement causes the printing of an OBS column in each panel of the report. This is the default in PROC PRINT.

- ID Statement

- Like the ID statement in PROC PRINT but with extra options. For instance, a header can be specified to span all ID variables.

- VAR Statement

- Again, similar to the ID statement in PROC PRINT but with extra options.

- CONSTANT Statement

- The CONSTANT statement specifies the printing of character constant to be printed in every row of a table.

- HEAD and TAIL Statements

- Can be used together to specify and mark the beginning and ending of a heading to be printed over one or more (or all) columns.

- FOOT and TAIL Statements

- Same with the HEAD and TAIL statements only the text is printed as footings to the specified columns.

- BY Statement

- Used to created separate tables for each group as defined by the BY variables. Each new table for each BY variable begins on a new page.

OPTIONS USED WITH QPRINT

Again, this list is not all inclusive, but only highlights some feature options special to QPRINT:

- ALIGN

- With ALIGN, SAS centers the widest panel, and all other panels are indented identically - otherwise each panel is centered individually according to it's data values.

- FOOT=

- Where you may specify the number of lines to be left between the data and any footings.

- HEAD=

- Indicate the number of lines to be left between the data and any column headings.

- PANEL=

- Specify the number of blank lines to leave between panels.

- CHARS=

- Specifies the number of characters of a variable name or heading to be used. The default is to use all of the characters.

- HEAD=NAME, LABEL, or BLANK

- Indicate whether variable names, labels or nothing is to be printed as column headings.

- INDENT=

  - Can indent data values from the column heading.

- JUSTIFY=LEFT, CENTER, RIGHT or DEFAULT

  - Specifies justification of column headings.

- LINE=

  - Specifies which line a column heading or footing is printed.

- MULTIPLE=

  Prints the table in a multi-column format - or "newspaper" style.

- NUMBER{=quoted string}

  - Prints the number of observations but differs from the N option of PROC PRINT where an optional quoted string can be used as a label.

- OVERLINE{='c'}

  - Prints a line of hyphens (or another specified character) between the data and the footings.

- ROWS=n, MAX, PAGE, OBS, or WRAP

  - Specify the number of rows to be printed in each block, print all rows in the group or dataset, all that will fit on a page, print as many panels as can be printed on a few pages as possible, or in wraparound fashion.

- VERTICAL/NOVERTICAL

  - Default is NOVERTICAL - specifying the VERTICAL option causes the variable names to print vertically.

- WIDEN/NOWIDEN

  - Default is NOWIDEN - the WIDEN option widens columns as appropriate for enough space to print all of a heading or footing.

- WIDTH=

  - Specify the range of column widths.

- ZONE=

  - Specifies the maximum width of the table.

COMPARISON OF THE PRINT AND QPRINT PROCEDURES

Briefly comparing the two:

1. Only with the PRINT procedure can the PAGEBY, SUM, or SUMBY statements be used.

2. Only with QPRINT can you span headings and footings over groups or columns.

3. QPRINT offers greater control of the overall report layout and narrow tables can be printed in multicolumn (or panel) layout.

4. For a large number of variables, QPRINT requires less memory than PRINT.

5. PRINT may use less computer time if printing less than 100 variables but QPRINT becomes more and more efficient than PRINT as the number of observations increases.

6. QPRINT requires less pages to print although if the data values vary greatly, PRINT may use substantially less pages without the UNIFORM option.

CONCLUSION

In conclusion, both the PRINT and QPRINT procedures offer the SAS programmer a fast and easy way to produce printed output of a SAS dataset. It is very easy to build on the basic default report, enhancing it until you have exactly what you want.

REFERENCES:

The PROC PRINT information covered in this talk, unless otherwise specified, is documented in SAS User's Guide: Basics, Chapter 43, pages 1007 through 1017.

The QPRINT procedure is documented in the SAS Technical Report P-145 (Changes and Enhancements to the Version 5 SAS System, April 1986) pages 89-122.

The authors may be reached at Unisys Corporation, San Tomas @ Central Expressway, Santa Clara, CA, 95052.