

DIGITAL EQUIPMENT CORPORATION

**typeset8**  
...dedicated to the  
future of Graphic Arts

## **Business Systems Report Guide**

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For additional copies order from Marketing Manager – Typeset - 8  
Graphic Arts Dept., Digital Equipment Corporation, Maynard, Mass.

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# INTRODUCTION

DEC's *Graphic Arts Business System* is a collection of business data processing programs which run on the same type of Digital computer that many composing rooms use for typesetting – Typeset-8. The Business System consists of six packages:

- Payroll
- Accounts Payable
- Circulation
- Advertising
- Paid In Advance
- General Ledger

One of the most important features of the Graphic Arts Business System is that it handles the accounting needs of your growing business while providing reliable back-up to your Typeset-8 computer.

Since our first installation, in June of 1970, over 35 complete business systems totalling more than 200 packages have been sold. The standard business packages that we offer are a result of our efforts over the past several years. We have taken the best features from our previous installations and incorporated them into, what we feel, is the finest turnkey application packages in the Graphic Arts Industry. This booklet briefly describes the reports in each package.

Included with each package is a number of support days which are used for installation of the programs, on site training, forms design assistance, and minor program modifications. Any additional support that you require can be made available on a time and material basis.

User documentation is provided for all software, including:

- System Flow Charts
- Key Punch Instructions
- Operating Procedures
- General System Documentation
- System Overview

DEC also provides a complete customer education center to train your personnel. Classes for computer operation and programming will be available to you.

Our programs are written for the COS-300 Operating System which uses a simple, easy-to-learn language called DIBOL (*Digital Equipment Corporation Business Oriented Language*). COS-300 is the culmination of one of the most sophisticated, state-of-the-art products in the commercial area for small computers.

The minimum hardware configuration necessary to operate the Business System includes:

PDP-8E Computer with 8K of core memory  
Terminal  
Dual DEctape Transport  
Disk Cartridge Drive  
132 Column Line Printer  
8-Level Paper Tape Reader or Card Reader

Digital Equipment Corporation's commitment to graphic arts dates from the introduction of our first typesetting system in 1965. Since then, we have developed three different systems – Typeset-8, Typeset-11, Typeset-10 – each designed to serve the varying requirements of graphic arts users large and small. Today, hundreds of DIGITAL typesetting computers are working for newspapers, printers, and publishers. We're the only computer manufacturer offering a range of typesetting equipment to support both production and business applications in the graphic arts. We provide total system support, from building the equipment and assembling the applications software to furnishing training and field maintenance on both hardware and software.

# PAYROLL

## HIGHLIGHTS

- Handles weekly, bi-weekly, semi-monthly and monthly employees in one pass
- Handles hourly and salaried employees in one pass
- Handles up to six different “hour” categories and eight “pay” categories
- Stores up to three basic rates of pay for each employee
- Stores up to ten voluntary deductions for each employee
- Calculates up to four different taxes
- Input can be time card or exception basis
- Merges and reports all information from hand written checks
- Override employee deductions without permanently changing the files
- Pays an employee for several pay periods at the same time
- Restart feature in payroll checks
- Produces W-2's, 941A's and Workmen's Compensation Reports
- Simplicity of input
- Flexibility of programs
- Ease of Operation

## **EMPLOYEE MASTER FILE**

The basic file in our payroll package is the Employee Master File. It contains all the pertinent payroll and personnel information needed to produce the reports in the system. This information includes:

- Employee No.
- Employee Name and Address
- Telephone No.
- Birth Date
- Hired Date
- Termination Date
- Last Salary Increase Date
- Amount of Last Increase
- Social Security No.
- Union Affiliation
- Workmen's Compensation Code
- Department
- Pay Plan
- Normal Hours Per Pay Period
- Eligible Yearly Sick Hours
- Eligible Yearly Vacation Hours
- Three Basic Rates of Pay (excluding time and one-half and doubletime)
- Ten Voluntary Deduction Fields
- Federal, State, and FICA Tax Information
- "Other Tax" Information (City, County, School, etc.)

The year to date information includes:

- All Taxes
- Gross Pay
- Overtime Pay
- Sick Pay
- Miscellaneous Pay
- Three Voluntary Deductions
- Regular Hours
- Overtime Hours
- Other Hours
- Sick Hours
- Vacation Hours

## **EMPLOYEE MASTER FILE (Cont)**

Quarterly figures maintained for every employee consists of:

All Taxes  
Gross Pay  
Sick Pay

## **INPUT SPECIFICATIONS**

Input to the payroll system can be programmed in two ways:

- 1) input time card information for all employees who are to be paid, or
- 2) input only those employees who are to be paid other than their normal standard hours.

The system has the facility to input the following data:

Employee No. and Check Digit  
Regular Hours  
Overtime Hours (Time and one-half and doubletime)  
Sick Hours  
Vacation Hours  
Other No. 1 Hours  
Other No. 2 Hours  
Miscellaneous No. 1 Pay  
Miscellaneous No. 2 Pay

The "other hours" fields can be used for your specific requirements, such as holiday hours. The miscellaneous pay fields can be used for such things as bonus, commissions, retroactive pay, etc.

The system can also accept any hand written checks that were produced during the last pay period. The information on these checks is processed through the same input program as the time card data and is shown on the same reports.

## **ERROR CHECKS AND HASH TOTALS**

After the time card input has been prepared, it is passed through the computer and the initial error checking is done. Most typing and transposition errors are detected at this point. While the information is being read in, it is listed on the line printer. Any errors that occur are printed both on the printer and the console device with a message stating exactly what type of error has occurred. At



the end of the job, hash totals are printed for the various input fields (regular hours, sick hours, miscellaneous pay, etc.). These hash totals can then be compared to your input totals to verify all the data was processed and input correctly.

Other types of error checking include:

- processing a time card for an employee who is not on the Master File
- processing a time card for a non-active employee
- missing a time card for an employee

## **PAYROLL SYSTEM REPORTS**

1. Employee Master File Listing
2. Time Cards
3. Gross Pay Register
4. Payroll Check
5. Payroll Register
6. Deduction Register
7. Vacation and Sick Report
8. Bond Purchase Report
9. Year-To-Date Earnings Register
10. Year-To-Date Hours Register
11. Quarterly Earnings Register
12. Payroll Ledger
13. Unemployment Report
14. Workmen's Compensation Report
15. Termination Report
16. 941A's
17. W-2's

### **1. EMPLOYEE MASTER LISTING**

All information on the Employee Master File is printed on this report, with the exception of year-to-date and quarterly fields. The program can be run to list either the entire file or just selected employees. At the end of the report, totals are printed showing the breakdown of employees by pay plan (weekly, bi-weekly, monthly, terminated, etc.). Totals are also printed for each of the ten voluntary deductions and a final total is printed for the number of employees on the file.

## **2. TIME CARDS**

Time cards are printed for all active employees on file. These time cards can then be filled out by each employee for the next pay period. The information printed is:

Employee No. and check digit  
Name  
Department

## **3. GROSS PAY REGISTER**

The Gross Pay Register is reported in department sequence just prior to printing the checks. The report contains the following information:

Employee No.  
Name  
Gross Pay  
Regular Hours and Pay  
Overtime Hours and Pay  
Sick Hours and Pay  
Vacation Hours and Pay  
Other No. 1 Hours and Pay  
Other No. 2 Hours and Pay  
Miscellaneous No. 1 Pay  
Miscellaneous No. 2 Pay

Departmental and final totals are printed for each category. Any checks issued outside the system (hand-written checks) are noted and totaled on the report. This verifies that a computer entry is made for every hand-written check.

## **4. PAYROLL CHECKS**

A payroll check will be generated for all employees who are to be paid. The stub will contain all relevant information regarding this period's activity. All voluntary deductions, year-to-date tax information, and year-to-date gross pay will be printed. The checks will be printed in department sequence for easy disbursement to all employees. A check restart feature is included in case of a jam in the printer or any other malfunction. This feature will stop any duplication of good checks in case the program must be restarted.

## **5. PAYROLL REGISTER**

The Payroll Register, reported in department sequence, prints the following information:

- Employee No.
- Name
- Gross Pay
- FICA Tax Withheld
- Federal Tax Withheld
- State Tax Withheld
- Other Tax Withheld
- Total of All Voluntary Deductions Withheld
- Net Pay
- Check No.

## **6. DEDUCTION REGISTER**

All voluntary deductions made for each employee are printed in the Deduction Register. The total deductions for an employee will correspond to the amount printed on the Payroll Register. Department totals and a final total will be printed for each deduction.

## **7. VACATION AND SICK REPORT**

For each employee, the reports lists the following information:

- Employee No.
- Name
- Date Hired
- Year-to-Date Hours Worked
- Eligible Sick Hours
- Sick Hours Used
- Sick Hours Remaining
- Vacation Hours Eligible
- Vacation Hours Used
- Vacation Hours Remaining

Totals for all of the above categories will be printed at the conclusion of the report.

## 8. BOND PURCHASE REPORT

The Bond Purchase Report lists those employees who have an amount deducted for savings bonds. The report prints:

Employee No.  
Name  
Social Security No.  
Beginning Bond Balance  
Number of Bonds to Purchase  
Denomination of Bond  
New Bond Balance

A summary, showing the beginning balance, the number and denomination of each bond category to buy, and the ending balance is printed at the conclusion of the report.

## 9. YEAR-TO-DATE EARNINGS REGISTER

The Year-To-Date Earning Register prints the following information for each employee on file:

Employee No.  
Gross Pay  
Overtime Pay  
Sick Pay  
Miscellaneous No. 1 Pay  
Federal Tax  
State Tax  
FICA Tax  
Other Tax  
Totals on Three Deductions

Any three deductions you choose can be stored and accumulated on a year-to-date basis. Totals for all the above categories will be printed at the end of the report.

## 10. YEAR-TO-DATE HOURS REGISTER

For each employee, all the various year-to-date hour fields are printed on the Year-To-Date Hours Register. The report prints:

Employee No.  
Name

(continued on next page)

**10. YEAR-TO-DATE HOURS REGISTER (Cont)**

- Regular Hours
- Overtime Hours
- Sick Hours
- Vacation Hours
- Other No. 1 Hours

All of the above categories will be totaled and printed at the conclusion of the report.

**11. QUARTERLY EARNINGS REGISTER**

The Quarterly Earnings Register prints the following information:

- Employee No.
- Gross Pay
- Sick Pay
- FICA Tax
- Federal Tax
- State Tax
- Other Tax

Totals are printed at the conclusion of the report.

**12. PAYROLL LEDGER**

In order to keep a historical record of each employee's pay information, a Payroll Ledger File is maintained. After every payroll period, all employee pay information is updated on this file. Whenever it is required, a listing of the information can be generated. The data can be listed for all employees or just a selected group. The information maintained is:

- Employee No.
- Name
- Department
- Check No.
- Date
- Gross Pay
- FICA Tax
- Federal Tax
- State Tax
- Other Tax
- Total Voluntary Deductions
- Net Pay

### **13. UNEMPLOYMENT REPORT**

The Unemployment Report is a listing of year-to-date and quarterly earnings to compute wages eligible for unemployment taxes. The report is printed in employee number order and shows the employees name, total year-to-date gross, quarterly gross, and amount eligible for taxes. Totals for each field are printed at conclusion of the report.

### **14. WORKMEN'S COMPENSATION REPORT**

This annual report lists the earnings of all eligible employees in order by Workmen's Compensation Code. The report prints:

Employee No.  
Name  
WC Code  
Year-To-Date Gross Pay  
Year-To-Date Overtime Pay  
Year-To-Date "Net" Pay (gross minus overtime)

Subtotals are printed after each classification and final totals are printed at the end of the report. This report provides your insurance company with a basis for its premium charges without the necessity of an audit by its agents.

### **15. TERMINATION REPORT**

At the end of a year, after W-2's are printed, terminated employees can be deleted from the Master File. When this job is run, all terminated employees will be listed on the line printer with their employee number, name, hired date and termination date. Simultaneously, they will be deleted from the Employee Master File.

### **16. 941A's**

The standard 941A Report can be run every quarter, showing wages eligible for Social Security taxes.

### **17. W-2's**

The standard W-2 forms will be printed yearly for each employee.

# ACCOUNTS PAYABLE

## HIGHLIGHTS

- Complete vendor information file at your fingertips
- Supplies 1099 information needed for vendors
- Pays invoices based on the date that you select
- Manual override to *omit payment* of a bill even though it is due
- Six types of input transactions through the same program
- Restart feature in check printing program
- Historical expense information on all transactions
- Check reconciliation reporting

## **VENDOR MASTER FILE**

The basic file in Digital's accounts payable package is the *Vendor Master File*. It contains all pertinent information about each vendor. The information includes:

Vendor No.  
Vendor Name and Address  
Vendor Classification Code  
Year-to-Date Payments  
Number of Checks Written  
Date of Last Check  
1099 Code  
Taxpayer I.D. Code  
Normal General Ledger Account Affected

The vendor classification code is a means, whereby, you can code each vendor by the type of product he sells, the reliability of his service, etc. All payments made to each vendor will be recorded on file. This figure will give you an indication of how much yearly business is done with each vendor. The date of the last check written to a vendor can indicate, when the last time any business was done for a given vendor. Periodically, you may want to purge old vendors from the master file. 1099 information is maintained on the file for those vendors who are affected. At the end of the year, this information will greatly assist you in reporting this data to the Government. If a vendor deals strictly with one product or area in your company, the general ledger number of the affected account can be stored on the Vendor Master File. Whenever an invoice is received from this vendor, the computer will automatically charge the invoice against that account number without you having to enter it.

## **INPUT SPECIFICATIONS**

Six different types of transactions are processed through the same input program.

- Receiving Invoices from Standard Vendors
- Receiving Invoices from Non-Standard Vendors
- Prepaid Invoices from Standard Vendors
- Prepaid Invoices from Non-Standard Vendors
- Deleting Invoices Previously Recorded
- Changing Invoicing Information Previously Recorded.



When entering an invoice from a standard vendor (meaning the vendor information is stored on file) you need not enter the vendor's name and address. You may not have to enter the affected general ledger account number, provided this vendor deals with only one account. The system allows you to charge an invoice to as many general ledger accounts as needed. You are not forced to put *all* vendors on the vendor file. This feature allows you to pay one-time vendors without a lot of unnecessary input on your part.

If, for any reason, a hand written check was given to a vendor (noted above as prepaid) the information regarding the check is fed into the same input program and shown on the Check Register and Distribution Reports (and noted as a prepaid check).

Ease of input is accomplished by providing forms for you to fill out for all transactions.

### **ERROR CHECKING AND HASH TOTALS**

When accounts payable transactions are being processed, the following types of error checking are done:

- Check digits for the vendor number verification
- On prepaid transactions, a verification is made to see that the check number, vendor name and amount have been entered properly.
- On transactions dealing with standard vendors, a check of the vendor file is made for input verification.
- For non-standard vendors, a check of the vendor file is made to make sure that the vendor is not on file.
- The input is verified to see that an invoice was not previously recorded on an earlier run.
- A check for duplicate input transactions is made.

Hash Totals on all amount fields are printed at the conclusion of the input stream. These totals can then be compared to your totals to verify that all data was entered into the program.

## **ACCOUNTS PAYABLE REPORTS**

1. Vendor Master Listing
2. Outstanding Payables Register
3. Cash Requirements Report
4. Accounts Payable Checks
5. Check Register
6. Accounts Payable Distribution Report
7. Historical Expense Distribution Report
8. Check Reconciliation Report

### **1. VENDOR MASTER LISTING**

The Vendor Master Listing provides an up-to-date status report of all present vendors. The report lists:

Vendor No. and Check Digit  
Vendor Name and Address  
Vendor Classification Code  
Year to Date Payments  
No. of Checks Written to Date  
Date of Last Check  
1099 Code  
Taxpayer I.D. Code  
Normal G/L No. (if applicable)

### **2. OUTSTANDING PAYABLES REGISTER**

The Outstanding Payables Register prints a list of all invoices that are carried on the system, but have not been paid. The report prints the following information:

Vendor No.  
Invoice No.  
Vendor Name  
Due Date  
Gross Amount Due  
Discount Amount

Gross amount, discount and net amount due are totaled and printed at the conclusion of the report.

### 3. CASH REQUIREMENTS REPORT

The program will select all invoices due, based on a date entered at the beginning of the run, and print them in the Cash Requirements Report. The program has a manual override to stop payment on an invoice that has become due. This is done by typing the vendor and invoice number of the invoices that are not to be paid. The report prints, in vendor number sequence, the following information:

Vendor No.  
Vendor Name  
Invoice No.  
G/L No.  
Invoice Date  
Due Date  
Invoice Amounts

The total check amount due to each vendor is printed, as well as a final total due, at the conclusion of the report.

### 4. ACCOUNTS PAYABLE CHECK

The Accounts Payable Check is printed in two parts; a check and an invoice stub. The stub contains all the information necessary for the vendor to match your payment with the proper invoice data. For each invoice to be paid this includes:

Invoice Date  
Description and Invoice No.  
Gross Amount  
Discount Taken  
Net Amount  
Total Amount Due

The check shows the check number, date, vendor name and address and amount. Check protecting asterisks are included in the amount. At the conclusion of this report, the total number of checks written and the total dollar value are listed on the console typewriter. The check program also has a restart feature. In case of operator error or a line printer malfunction, the program can be restarted and the good checks that were previously printed will not be duplicated.

## **5. CHECK REGISTER**

All checks written, including those processed outside the system, will be summarized and printed in the Check Register. The report lists the following information:

- Check No.
- Amount
- Check Date
- Vendor No.
- Vendor Name

Any checks processed outside the system will be noted on the Check Register. The total amount of all checks written will be printed at the conclusion of the report.

## **6. ACCOUNTS PAYABLE DISTRIBUTION REPORT**

The Accounts Payable Distribution Report lists all the expenditures for the current period by general ledger account sequence. The report prints:

- General Ledger Account No.
- Amount
- Invoice No.
- Vendor Name
- Check Date
- Check No.

Subtotals are printed by general ledger account number. At the conclusion of the report, the final total expenditure is printed. This information is automatically entered into the general ledger system.

## **7. HISTORICAL EXPENSE DISTRIBUTION REPORT**

All the information from the Accounts Payable Distribution Report can be kept on file for any length of time that you desire. Whenever required, it can be listed in either of two ways. The report can be printed showing all transactions on file or just the totals can be printed by each general ledger account.

## **8. CHECK RECONCILIATION REPORT**

The Check Reconciliation Report is provided to show the status of each check written and/or processed. When cancelled checks are returned to you from the bank, the information is entered into this program. This report is then generated showing the following information:

**8. CHECK RECONCILIATION REPORT (Cont)**

- Check No.
- Amount
- Check Date
- Vendor No.
- Status (Cleared or Outstanding)

The report also lists incorrect amounts, duplicate check numbers, etc.

# CIRCULATION

## HIGHLIGHTS

- Processes weekly, bi-weekly, four-weekly and monthly billing all in one system
- Prints various types of ABC reports
- Allows rate changes without reprogramming
- Handles multiple editions
- Creates centralized bills for chain stores and large commercial accounts
- Handles PIA Credits
- Prints labels and delivery slips for all routes
- Produces truck loading and delivery reports
- District Manager's break down of sales activity and accounts receivable
- Daily Worksheet for ease of posting draw changes
- Aged Trial Balance
- Invoices printed whenever required

## CIRCULATION DATA FILES

There are two basic files in the circulation system – the *Circulation Master File* and the *Circulation Detail File*. The Circulation Master File contains important billing information about each customer.

The information includes:

- Route No.
- Name
- Address
- Area Code
- Billing Code
- ABC Code
- Insurance Deduction
- PIA Credit for Daily Papers
- PIA Credit for Sunday Papers
- Bond/Savings Deduction
- Bond/Savings Balance
- Route Allowance
- Rate for Daily Papers
- Rate for Sunday Papers
- Billing No.

The area code is a state, county and town code used to produce the ABC Recap Report by county. The billing code is a field that reflects how often a route is billed (weekly, bi-monthly, every four weeks, monthly, or never). The ABC code indicates the ABC zone to which the papers are delivered, as defined by the Audit Bureau of Circulation. The insurance deduction field states the amount of money charged each billing cycle for insurance premiums. The PIA credit fields indicate the normal amount of credit due the carrier for PIA's on the route. If any expense subsidy or allowance is given a carrier, because of the difficulty of his route, distance to travel, etc., the amount for each billing period is placed in the allowance field. Two rates are stored on the file, a daily rate and a Sunday rate. If the bill for the papers does not go to the carrier, a billing number field is provided. The route number of the person to receive the invoice is placed in the billing number field.

The Circulation Detail File contains the production information needed for each route. The information on the file includes:

- Route No.
- Edition
- Monday through Sunday Draw Figures
- Bundle Code
- Daily Drop Location
- Sunday Drop Location

For daily, Sunday, daily overflow, Sunday overflow, and comics, a separate truck number and drop sequence is maintained. The bundle code field is used to tell the computer how the papers for each route should be wrapped. The wrapping methods include:

- Key bundle always
- Key bundle daily – bulk Sunday
- Bulk daily – key bundle Sunday
- Bulk always

The system can generate either one label per route or a label for every bundle. Delivery slips can be generated for bulk routes (routes with odd papers).

## **INPUT SPECIFICATIONS**

The following types of draw changes and other related data can be entered on a daily basis:

- 7 day starts and stops
- 6 day starts and stops (Monday – Saturday)
- 5 day starts and stops (Monday – Friday)
- One day starts and stops
- Today-only change
- Route errors
- Free papers

One day starts and stops allow for changing the draw for a specific day. These changes can be entered in advance of day to be changed. A today-only draw change does not permanently change the Detail File, as all the other types of changes do; it only changes the draw for the particular day being processed. All changes are accumulated daily and a report showing the draw activity is printed prior to billing.

## **ERROR CHECKING AND HASH TOTALS**

As the draw changes are being read into the system, all of the various input fields are hash totalled and printed at the end of the input stream. These totals can be compared to your input totals to verify that all changes were entered and processed correctly. Check digits on route numbers are verified for accuracy on input. The computer will flag any draw changes made to an unknown route. Any changes that result in a draw of less than zero will be flagged and printed.



## **CIRCULATION REPORTS**

1. Circulation Master File Listing
2. Circulation Detail File Listing
3. Daily Draw Worksheet
4. Truck Loading Report
5. Truck Delivery Report
6. Truck Delivery Master List
7. Delivery Slips
8. Labels
9. Daily Draw Sheet
10. ABC Reports
11. ABC Recapitulation Report
12. ABC Returns Report
13. Sales Activity Summary
14. Summary of Adjustments Report
15. Circulation Invoices
16. Aged Trial Balance
17. Billing Summary Report

### **1. CIRCULATION MASTER FILE LISTING**

All of the information in the Circulation Master File will be printed in this report. The total number of records in the file will be printed at the conclusion of the report. The program can be run either listing all the routes on file or producing a selected listing.

### **2. CIRCULATION DETAIL FILE LISTING**

All the information stored on the Circulation Detail File will be printed on the listing. The total draw for each day of the week and the number of records on file will be printed at the conclusion of the report. The job can be run showing all routes on file or a selected listing can be generated.

### **3. DAILY DRAW WORKSHEET**

The Daily Draw Worksheet is used at the circulation desk or by District Managers for noting draw changes for the next day. The program prints the route number, carrier name, draw for the day requested, and boxes for all possible types of draw changes. While changes for the next day are being called in, they can be written on the worksheet. This document then serves as input for entering the draw changes into the computer the following day.

#### **4. TRUCK LOADING REPORT**

The Truck Loading Report shows, by edition, the loading quantities for each truck. It can be used by the mailroom to help monitor the loading of each truck. The program prints the following information:

- Edition
- Truck No.
- No. of Bulk Bundles
- No. of Key Bundles
- No. of Odd Papers
- Total Number of Papers Loaded on Truck.

Final totals will be printed for the various fields at the conclusion of the report.

#### **5. TRUCK DELIVERY REPORT**

The Truck Delivery Report is used by the driver to assist him in making his run. The program prints each drop location, in drop sequence, for all trucks. For each drop, the following information is listed:

- Drop Location
- No. of Bulk Bundles
- No. of Key Size Bundles
- Size of Key Bundles
- No. of Odd Papers
- Total Number of Papers to Drop

After each complete truck run is listed, totals for the various fields will be printed. The computer will then skip to a new page to start the report for the next truck.

#### **6. TRUCK DELIVERY MASTER REPORT**

When it becomes necessary to change the delivery sequence of the papers, the Truck Delivery Master Report can assist you. The program prints the following information in truck and drop sequence:

- Route No.
- Name
- Edition
- Truck No.
- Drop Sequence
- Bundle Code
- Drop Location

## 7. DELIVERY SLIPS

For those routes who require it, a delivery slip will be generated. The information on the delivery slip is:

Date  
Truck No.  
Route No.  
Name  
Drop Location  
No. of Odd Papers  
Bulk Bundle Size  
No. of Bulk Bundles  
Total Draw

At the beginning of the program run, the computer will ask what the bulk bundle size is for the day. Based on the bulk bundle size, the system will calculate the number of bulk bundles for each route.

## 8. LABELS

Two formats for labels can be generated – one-up labels or three-across labels. The information printed on the three-across labels is:

Route No.  
Label No. and Total No. of Labels (e.g., Label 2 of 4)  
No. of Papers in Bundle  
Total Draw  
Drop Location

The information printed on the one-up labels is:

Truck No.  
Drop No.  
Route No.  
Name  
Drop Location  
Size of Key Bundle  
Size of Bulk Bundle  
No. of Bulk Bundles  
Total Draw

At run time, the computer asks for the bulk bundle size and minimum bundle size for the day. Based on these inputs, the system calculates the number of bulk bundles each route is to receive, as well as the size of the key bundle.

## **9. DAILY DRAW SHEET**

The Daily Draw Sheet is a summary of the draw information for the day. It is printed in route number sequence. The data on the report includes:

- Route No.
- Edition
- Name
- No. of Papers Billed
- No. of Free Papers
- Total Draw

Totals for each of the fields are printed at the conclusion of the report. The date and day are printed at the top of the report. These reports are kept during the billing cycle to verify the current billing on the circulation invoice.

## **10. ABC REPORTS**

The ABC Reports break-down draw by each ABC zone classification. The reports compare the current period's circulation against the same period last year and show the percentage difference. ABC reports are produced on the following basis:

- Daily
- Weekly
- Monthly
- Quarterly
- Semi-Annually
- Annually

## **11. ABC RECAPITULATION REPORT**

The ABC Recapitulation Report prints the following information, by town, county and state:

- No. of Papers Delivered by Carrier
- No. of Papers Delivered by Motor Routes
- No. of Papers Delivered by Mail
- No. of Papers Delivered by All Other Means

At run time, the computer will ask for which zone (city, retail or other) the report is to be printed. The report reflects one day's newspaper distribution.

## **12. ABC RETURNS REPORTS**

The ABC Returns Report break down the newspaper returns by each ABC zone classification. The reports compare last year to this year and shows the percentage difference. The reports are run for the following periods:

- Weekly
- Monthly
- Quarterly
- Semi-Annually
- Annually

## **13. SALES ACTIVITY SUMMARY**

Prior to billing, the Sales Activity Summary is printed. The following information is listed for each route:

- No. of 7 Day Starts
- No. of 6 Day Starts
- No. of 5 Day Starts
- No. of 1 Day Starts
- No. of 7 Day Stops
- No. of 6 Day Stops
- No. of 5 Day Stops
- No. or 1 Day Stops
- No. of Free Papers
- No. of Route Errors
- Total Period Draw

Totals are printed for each district and final totals are generated at the conclusion of the report.

## **14. SUMMARY OF ADJUSTMENTS REPORT**

As cash and other types of accounts receivable adjustments are received, they are punched and entered into the system. The Summary of Adjustments Report contains totals for each type of adjustment processed (e.g., cash, supplies, etc.).

## 15. CIRCULATION INVOICES

Invoices will be generated for all accounts when their billing cycle occurs. The invoice contains the following information:

- Route No.
- Name and Address
- Balance Forward
- Cash Paid
- Total Daily Draw
- Rate – Daily
- Paper Charge for Daily Papers
- Total Sunday Draw
- Rate – Sunday
- Paper Charge for Sunday Papers
- Daily Returns
- Sunday Returns
- Six Other Credits (i.e., allowance, new starts, etc.)
- Nine Other Debits (i.e., supplies, insurance, etc.)
- Bond/Savings Balance
- Bond/Savings Withdrawal
- Total Amount Due

## 16. AGED TRIAL BALANCE

The Aged Trial Balance lists all outstanding circulation accounts receivables by customer (route) and summarizes all information on the bill. A customer account is broken down as follows:

- Customer No.
- Name
- Total Amount Due
- Current Period Due
- One Period Due
- Two Periods Due
- Three Periods and Over Due

District and final totals for each category are printed. The report can be run in two ways – either listing all detail transactions for each customer or just listing a total for each customer.

## **17. BILLING SUMMARY REPORT**

The Billing Summary Report summarizes all the information on the invoice by district. Totals for each field in the invoice will be printed. Final totals will be printed at the conclusion of the report.

# ADVERTISING

## HIGHLIGHTS

- Handles bulk and frequency contracts
- Supplies daily lineage statistics
- Inserts contract rates automatically
- Accumulates statistics by salesman, comparing current year to previous year
- Compares lineage and dollar sales, by customer, for previous year and current year
- Handles input for general, retail, classified and other types of advertising in a single pass
- Invoices various types of advertising on one bill or separate bills
- Invoices monthly, using balance forward method
- Ages customer accounts, from current month through 120 days
- Flexibility of adding new advertising classifications without changing programs
- Flags contracts that are about to expire



## ADVERTISING FILES

There are two basic files in the advertising system, the *Advertising Master* and the *Contract Master*. Data for every advertising customer is stored in the Advertising Master File. The information stored on the file is:

- Customer No.
- Customer Name
- Address
- Telephone No.
- Advertiser
- Salesman
- Current Month Balance
- 30 Day Balance
- 60 Day Balance
- 90 Day Balance
- 120 Day (and over) Balance

Data for customers with either bulk or frequency contracts are stored on the Contract Master File. The information maintained for each contract is:

- Customer No.
- Ad Category Code
- Contract Salesman
- Start Date of Contract
- Frequency Amount (number of lines/inches per period)
- Frequency Duration (weekly or monthly)
- Month-to-Date Lines/Inches
- Year-to-Date Lines/Inches
- Size of Total Contract in Lines/Inches
- Rate
- Expiration Date
- Contract Duration

The ad category code is a three-digit number that identifies the ad (general, retail, classified, legal, etc.). These categories can be further divided to fit your requirements. This code is very important because it is the basis of many reports in the system. DEC's Advertising Package is flexible enough to let you tell the computer what your various advertising codes are and it stores them with the appropriate titles for each one. These titles then appear on the various reports. When it becomes necessary for you to add a new classification, or change an existing one, it is a simple matter that does not need a programming change — you can do it yourself!

## **INPUT SPECIFICATIONS**

The following information is punched as input to the advertising system for each ad placed.

Customer No. and Check Digit  
Salesman No.  
Ad Category Code  
Final Run Date  
Description of Ad  
Number of Inserts  
Number of Lines or Inches  
Rate  
Discount Percent  
Fixed Charges

The computer will create an ad number for every ad (that is used for maintenance only). If the ad is on contract, the rate does not have to be entered. If the number of inserts is left blank, the program will assume one day.

## **ERROR CHECKING AND HASH TOTALS**

After the input has been prepared, it is passed through the computer and the initial error checking is done. Most transposition and typing errors are detected at this stage. While the information is being read in, it is listed on the line printer. Any errors that occur are printed both on the printer and the console device with a message stating exactly what type of error has occurred. The computer will then ask you whether you want to correct the entry now, on line, or ignore it and re-enter it correctly later. When all the data has been entered, hash totals for the various input fields are printed. These totals can then be compared to your totals to verify that all input was entered into the system. Other error checks are made on the customer number, salesman, ad category code and final run date. If the ad is not on contract, either a rate or a fixed charge must be entered, or the system will flag the ad as an error.

## **ADVERTISING REPORTS**

1. Advertising Master Listing
2. Contract Master Listing
3. Daily Audit Report
4. Daily Lineage Report
5. Month-to-Date Lineage Report
6. Contract Frequency Report
7. Contract Status Report
8. Sales Analysis Report

## **ADVERTISING REPORTS (Cont)**

9. Cash Receipts Register
10. Invoices
11. Billing Recapitulation Report
12. Aged Trial Balance
13. Customer Billing Summary Report

### **1. ADVERTISING MASTER LISTING**

This report lists the following information from the master file:

Customer No. and Check Digit  
Name  
Address  
Telephone No.  
Salesman  
Advertiser

This report can include all customers on file or only a selected list of customers.

### **2. CONTRACT MASTER LISTING**

The following information about your contract customers will be printed:

Customer and Check Digit  
Ad Category Code  
Name  
Contract Salesman  
Frequency Amount (number of lines/inches per period)  
Frequency Duration (weekly or monthly)  
Total Lines/Inches Contracted for Bulk  
Rate  
Expiration Date of Contract  
Contract Duration (3, 6, 9, or 12 months)

This report can include the complete contract file or only a selected list of contracts.

### **3. DAILY AUDIT REPORT**

After loading all your input data, the Daily Audit Report is run. It lists the information from the input tape. A grand total of sales for the day is printed at the conclusion of the report.

#### 4. DAILY LINEAGE REPORT

The Daily Lineage Report prints in ad category sequence. For each category the following data is printed:

Daily Lines/Inches  
Dollar Amount  
Month-to-Date Lines/Inches  
Month-to-Date Dollars

#### 5. MONTH-TO-DATE LINEAGE REPORT

The report is printed in customer sequence. It can be run three ways:

1. Lists every ad and print totals by category within customer.
2. Lists only totals by category within customer.
3. Lists only selected customers.

The format for the Month-to-Date Lineage report is:

Customer No.  
Customer Name  
Description of Ad  
Ad Category  
Date  
Ad No.  
Salesman No.  
No. of Inserts  
No. of Lines/Inches  
Rate  
Discount Percent  
Fixed Charges  
Total Amount of Ad

Total month-to-date sales will be printed at the conclusion of the report.

## 6. CONTRACT FREQUENCY REPORT

The Contract Frequency Report can be run two ways:

1. Lists every customer who has a frequency contract and lists all the advertising he did. If the actual amount of advertising is less than the frequency contract, asterisks will be printed in the margin of the report.
2. Lists only those customers with a frequency contract who have not complied with their contracts.

## 7. CONTRACT UPDATE AND STATUS REPORTS

The following information is printed for each contract advertiser.

Customer No.  
Customer Name  
Ad Category  
Salesman  
Start Date of Contract  
Month-to-Date Lines/Inches  
Year-to-Date Lines/Inches  
Size of Total Contract in Lines/Inches  
Rate  
Contract Duration  
Expiration Date

Any contracts with three months remaining are flagged by three asterisks; two months remaining by two asterisks, and one month remaining by one asterisk. If a contract has expired, the word "*expired*" is printed. Upon expiration, the computer automatically renews the contract for the previous contract duration. If the year-to-date lines/inches are greater than the total contract size, the word "*over*" is printed on the report.

## 8. SALES ANALYSIS REPORT

The Sales Analysis Report is printed for each salesman, in customer sequence. The information listed includes:

Salesman No.  
Customer No.  
Customer Name  
Ad Category

**8. SALES ANALYSIS REPORT (Cont)**

- Current Month – Lines/Inches
- Year-to-Date – Lines/Inches
- Current Month, Last Year – Lines/Inches
- Year-to-Date, Last Year – Lines/Inches
- Current Month Dollars
- Year-to-Date Dollars
- Current Month, Last Year Dollars
- Year-to-Date, Last Year Dollars

Totals are printed for each salesman and a grand total of all dollar fields is printed at the conclusion of the report.

**9. CASH RECEIPTS REGISTER**

As cash and other types of accounts receivable adjustments are received, they are punched and processed into the Cash Receipts Register and saved until the next billing date. The report lists the following information about each adjustment:

- Customer No.
- Customer Name
- Type of Transaction (cash, miscellaneous credit, etc.)
- Amount
- Date
- Description

The Cash Receipts Register can be run in one of three ways:

1. Lists every customer balance plus all adjustments.
2. Lists only customer balances that are affected by adjustment transactions plus all adjustments.
3. Lists only selected customers

Final totals of all types of adjustments will be printed at the conclusion of the report.

## 10. INVOICES

On a monthly basis, invoices will be generated containing the following information:

Customer No.  
Date of Invoice  
Date of Each Ad  
Rate  
Number of Lines/Inches  
No. of Inserts  
Type of Transaction (retail billing, cash applied, etc.)  
Description  
Amount  
Terms for Discount  
Total Amount Due

At the bottom of the invoice, the program will print the aging of the customer account from current, 30, 60, 90, and 120 days and over.

## 11. RECAPITULATION REPORT

At the conclusion of the billing, a summary report of all invoices will be printed. The recapitulation Report prints:

Total Balance Brought Forward  
Total of All Aged Credits  
Total of Each Type of Aged Credit  
Total Unpaid Balance  
Total Finance Charges  
Total of Each Category of Advertising Revenue  
Total of All Advertising Revenue  
Total of All Other Charges  
Total of Each Type of Charge  
Total of Current Period Credits  
Total of Each Current Period Credit  
New Total Balance Due

## **12. AGED TRIAL BALANCE**

At the conclusion of billing, a new Aged Trial Balance will be run. It contains the following information:

- Customer No.
- Customer Name
- Total Amount Due
- Current Month Balance
- 30 Day Balance
- 60 Day Balance
- 90 Day Balance
- 120 Day and Over Balance

## **13. BILLING SUMMARY REPORT**

A summary report for each customer will be produced to reflect the most recent billing run. The report lists:

- Customer No.
- Customer Name
- Gross Amount Due
- Discount Allowed
- Net Amount Due

Totals for gross, discount and net amounts will be printed at the end of the report.



# PAID IN ADVANCE

## HIGHLIGHTS

- Automatic PIA credits for each carrier
- Renewal notices on demand
- Unearned revenue reports
- New subscribers, renewals, deletions, stops and restarts processed in one input program
- Up-to-date status report for each carrier showing the stops and starts on each route

## **PIA MASTER FILE**

All paid-in-advance, carrier-delivered subscribers are stored on the PIA Master File. The following information is maintained for each customer:

PIA No.  
Route No. of Carrier  
Name and Address  
Date Paid  
Amount Paid  
Start Date  
Expiration Date  
Stop Date  
Restart Date  
Contract Duration  
Subscriber Classification  
ABC Code  
Rate

The contract duration is length of time, in months (1 to 12) that a subscriber will be receiving a paper. The subscription classification is a code that indicates one of the following:

Regular Subscriber  
Gift Subscription  
Special Rate (Schools, Clergy, etc.)  
Employee  
Free Copy  
Military  
Other

The ABC code indicates the Audit Bureau of Circulation zone classification.

A separate file of names and addresses is kept for all customers who are paying for a gift subscription.

## **INPUT SPECIFICATIONS**

The following types of input transactions can be processed through the Paid In Advance program:

- New PIA Customers
- Subscription renewals
- Stop or restart of a current subscriber
- Deletion of an existing customer from the file

When processing a new customer, the following information will be entered:

Route No./PIA No.  
Name and Address  
Date Paid  
Amount Paid  
Start Date  
Expiration Date  
Contract Duration  
Subscriber Classification  
Rate  
ABC Code

For renewals, the data to be entered is:

Route No./PIA No. and Check Digit  
Date Paid  
Amount Paid  
Expiration Date

When a subscriber temporarily stops or restarts a subscription, the following information is required:

Route No./PIA No. and Check Digit  
Stop Date and/or Restart Date  
Expiration Date

When deleting a customer from the file, the only input information necessary is the route number and the PIA number.

### **ERROR CHECKING AND HASH TOTALS**

When the PIA transactions are being processed, some of the types of error checks made are:

- Check digit verification
- Route number and PIA number verification of renewals, stops and starts, and deletions
- For new customers, a check of the master file is made to insure that the PIA number has not been previously assigned

(continued on next page)

- Since dates are an integral part of the system, they are checked for accuracy within a certain range
- Contract duration, subscriber classification, and ABC code verification within a given range

Other types of error checks are also made. For example, common typing errors, such as entering a five digit number in a four digit field, typing alphabetic information in a numeric field, etc.

As the input is being entered into the system, it is listed on the line printer. A hash total of the amount paid field is printed with the number of transactions processed. These totals can then be compared to your totals to verify that all input was entered into the system.

## **PIA REPORTS**

1. PIA Master File Listing
2. PIA Audit List
3. PIA Customer List by Carrier
4. Carrier Credit Summary
5. Renewal Notices
6. Renewal Notice Summary Register
7. Unearned Revenue Register
8. Gift Subscription Listing

### **1. PIA MASTER FILE LISTING**

The PIA Master File Listing program prints all the information about each paid-in-advance customer from the master file. If a customer is getting a gift subscription, the name and address of the person giving the subscription is printed also. The program can be run three ways:

- 1) Lists every subscriber on the file
- 2) Lists only subscribers on particular routes
- 3) Lists only specified subscribers

At the conclusion of the report, a breakdown of the number of customers, by contract, duration, and subscriber classification, will be printed. The total number of records on the file will also be printed.

## **2. PIA AUDIT LIST**

As new customers, renewals, deletions, stops and restarts are entered into the system, an audit list is generated. It contains the information on the input tape plus any errors that occurred. A total of the amount paid for the current batch of transactions is printed at the conclusion of the report.

## **3. PIA CUSTOMER LIST BY CARRIER**

Periodically, a list of customers, in route number sequence, may be required for the carriers. The report can be run two ways:

- 1) Lists all subscribers for each route
- 2) Lists only those subscribers, on each route, who have temporarily stopped, or are about to restart the paper

The following information is printed on the report:

Route No.  
PIA No.  
Subscriber's Name and Street Address  
Stop Date  
Restart Date  
Expiration Date

## **4. CARRIER CREDIT SUMMARY**

On a weekly basis, all carrier credits, for paid-in-advance customers, will be extracted from the master file. The Carrier Credit Summary prints the credit amount due each carrier, for each route. This information will then be automatically entered into the Circulation System for billing.

## **5. RENEWAL NOTICES**

At any time you desire, the system will generate Renewal Notices. At run time, the computer will ask for a date. A Renewal Notice will be printed for any customer whose subscription expires before that time. The Renewal Notice contains the following information:

PIA No.  
Subscribers Name  
Address  
Rate  
Contract Duration

If the subscription was a gift, the name and address of the person receiving the paper will be printed also.

## **6. RENEWAL NOTICE SUMMARY REGISTER**

Current renewal notices are summarized in the Renewal Notice Summary Register. This register can be used as an internal document for any customer queries regarding billing.

## **7. UNEARNED REVENUE REGISTER**

The system will generate an Unearned Revenue Register on demand. For each subscriber, the following data will be printed:

Route No./PIA No.

Customer Name

Amount Paid

Earned Revenue

Unearned Revenue

Expiration Date

Totals for each category will be printed at the conclusion of the report

## **8. GIFT SUBSCRIPTION LISTING**

A listing of all customers who have given a gift subscription can be run at any time. The listing prints the route number, PIA number and the name and address of the customer who gave the subscription.

# GENERAL LEDGER

## HIGHLIGHTS

- Produces Balance Sheet and Income Statement
- Shows Year-To-Date plus monthly information on all revenue and expenses
- Distributes all expenses by department
- Reports show current year, previous year and budget figures for easy comparison

## GENERAL LEDGER MASTER FILE

The basic file in our General Ledger system is the *General Ledger Master File*. For every account, actual and budget figures are recorded for each month of the year. Also stored for every account is a unique code that identifies the location on the balance sheet or income statement where the account should be totaled and printed. This file is created before the general ledger programs are installed. You enter all the budget figures for the year and the actual figures up to the current month. You then specify the line of the balance sheet or the income statement on which the account is recorded. Installation of the system can begin after this file is created.

## INPUT SPECIFICATIONS

The basic input to the general ledger system is printed in the various reports from the payroll, advertising, circulation and PIA systems. The accounts payable system automatically enters general ledger data from the Accounts Payable Distribution Report Program. The information needed for each transaction in the G/L System is the following:

Transaction Date  
Accounting Period Affected  
General Ledger Account No.  
Amount  
Debit or Credit  
Description  
Source (from advertising, payroll, etc.)  
Reference No.

## ERROR CHECKING AND HASH TOTALS

The following error messages may be generated for all incoming transactions:

- Invalid G/L Account No. — no such account no. is on the General Ledger Master File.
- Source Description Error — the transaction is from an unknown source (not payroll, general journal entry, etc.).
- No date on transaction
- No reference number on transaction
- Debits do not equal Credits — this error is printed when all transactions against a particular source and reference number do not equal.

These error messages will be printed when running the trial balance for a batch of transactions.



## **GENERAL LEDGER REPORTS**

1. General Ledger Master Listing
2. Trial Balance
3. Month End General Ledger
4. Income Statement
5. Balance Sheet
6. Detail of Revenue Report
7. Detail of Expenses Report
8. Report of Expenses by Type
9. Year-to-Date General Ledger

### **1. GENERAL LEDGER MASTER FILE LISTING**

For all general ledger accounts, the report lists the actual and budget figures for each month of the year. It also lists the balances at the beginning of year, as well as year-to-date figures for actual and budget.

### **2. TRIAL BALANCE**

After a batch of transactions has been entered, a trial balance can be run. It lists the following information:

Entry No.  
Source Reference No.  
Account No.  
Date  
Description  
Debit or Credit Amount

Totals are printed by reference number with final totals for all debits and credits. If the accounts do not balance, the missing entries can be entered easily and the program can be rerun.

### **3. MONTH END GENERAL LEDGER**

After the trial balance has been run successfully, a month end general ledger listing will be generated. The report is listed in general ledger account sequence. If an income statement account is listed, the budget figure for the month will be printed. If a balance sheet account is listed, the beginning balance will be printed. The following information about each transaction during the month will be printed:

Account No.  
Account Name

### **3. MONTH END GENERAL LEDGER (Cont)**

Entry No.  
Source Reference No.  
Description  
Debit or Credit Amount

Monthly totals for each account will be printed. If the account is a balance sheet account, the closing balance is listed.

### **4. INCOME STATEMENT**

The income statement can be run on a monthly or year-to-date basis. The following figures will be listed for each account:

Current Year  
Previous Year  
Variance  
Percentage Difference  
Budget  
Variance (current year versus budget)  
Percentage Difference

### **5. BALANCE SHEET**

A balance sheet that shows the figures for the current year and the previous year will be produced.

### **6. DETAIL OF REVENUE REPORT**

The Detail of Revenue Report will list all revenue accounts on the general ledger file by revenue classification. It can be listed in two ways, showing either the current month or year-to-date balances. The information listed includes:

Account No.  
Account Name  
Current Year  
Previous Year  
Variance  
Percentage of Difference  
Budget  
Variance (current year versus budget)  
Percentage Difference

Totals for each classification of revenue will be printed.

## 7. DETAIL OF EXPENSE REPORT

The Detail of Expense Report prints all expense accounts on the general ledger file in department sequence. The report can be produced showing either current month or year-to-date balances. The following data is printed about each account:

- Account No.
- Account Name
- Current Year
- Previous Year
- Variance
- Percentage Difference
- Budget
- Variance (current year versus budget)
- Percentage Difference

Totals for each department will be printed.

## 8. REPORT OF EXPENSES BY TYPE

The general ledger file is sorted by the last four digits of the account number (type of expense) then by department number (the first two digits). For all types of expense (i.e., regular pay, sick pay, etc.) a departmental breakdown is printed. Totals are printed for each type of expense. The information listed includes:

- Account No.
- Account Name
- Current Year
- Previous Year
- Variance
- Percentage Difference
- Budget
- Variance (current year versus budget)
- Percentage Difference

The report can be run showing current month or year-to-date figures.

## **9. YEAR-TO-DATE GENERAL LEDGER**

This report contains the same type of information as the Month End General Ledger. The data is listed by account number and date. If the account is a balance sheet account, the beginning balance is listed. If it is an expense or revenue account, the budget for the month is printed. Then, all transactions for the month are listed. Totals are printed at the conclusion of the month for each account and a closing balance (for a balance sheet account) or budget amount (for an income statement account) is printed for the next month. This process is repeated to the conclusion of the current month.