AIMS/ERP ™

Credit & Receivables Management

Specifications & Guide to Use

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NOTICE

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nature of this information, and to not disclose it to others except during normal use in their
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AIMS/ERP Credit & Receivables Management Overview

The AIMS/ERP Credit and Receivables Management functions are closely integrated with the AIMS/ERP Customer Orders, Shipment and Invoicing functions and include the following capabilities:

Detailed Invoice file - separate from order, order detail, repair, shipping data. Full detail for each invoice is stored, enabling reprinting at any time. Invoice generation rules vary by order type. Invoices are generated only upon recognition of a sale event, and provide full detail for both sales and cost of sales reporting. These events are separate from shipments, completion of services, or other chargeable activities. For example, if a unit is shipped under a consignment sale, a shipment record is created in the Shipments table, but no invoice is generated at shipment.

Customer Balance file - one transaction record for each event that changes the amount of money a customer owes, including invoices, payments, credit memos, and direct adjustments to the overall account balance (separate from adjustments to an order or payment). A/R aging, payments posted and other reports are taken from this table. Payments are applied to Invoice records in this table using a two-way reference method. The Invoice transaction contains all payments and amounts applied to it, and the Payment/Credit transaction contains all invoices it was applied to.

Customer Order Type driven functions - all events are ultimately linked to Customer Orders. AIMS/ERP provides complete flexibility as to order processing logic, which can vary considerably from one order type to another. All events involving shipments to customers, consigned shipments, flooring billing, returns, charges, loan of units, etc., all start with entry of one type or another of Customer Order. These rules are imbedded in the progams that handle the processing of customer orders through out the order cycle and control what happens and in what sequence.

Standardized overall flow - all AIMS/ERP customer order types follow the same general flow and update the same tables with standardized data. This enables standardized reports to be developed that report financial events reliably and completely, even though the rules for the events may vary considerably. Part of this control logic is the status of a particular order. These status codes form a control sequence which is designed to insure that nothing is shipped from the company without being properly documented and authorized by someone empowered to do so. Normally, at a minimum, this involves an authorization step to insure either acceptable pre-payment or that credit is OK. Status codes are explained in detail elsewhere.

Credit Management - fully integrated credit account management will be included in the A/R, Financial Reporting subsystem, including links to customer balance management,

balances and related reports, and tight integration with approval of items for shipment/sale to customers. These functions must be well integrated to work effectively and provide the real-time, up-to-date shipment approval controls needed by the company.

Open Account Management - Uses the Financial Profile data to contain all viewable and detailed data needed to support open balance account management. Aging period subtotals are flexible (each period's number of days is defined in a separate table. Current balance totals and aging period subtotals are computed from detail data during a regular nightly process, or upon request for an individual customer when the need for completely up to the minute data is important. Thee totals are rebuilt during this process from CUSBAL and ORDERS data.

Open Invoice & Unapplied Payment/Credit Data:

- Open Invoice Amount - New invoices for open accounts that are generated add the invoice number, date and amount to CUSBAL data as INV type transactions. Payments applied to invoices are reflected in updates to previously open invoices, corresponding to the effect in the Customer Balance table of the payment and its application to invoices. The remaining unpaid (owed) amounts are reflected in the Open Invoice Amount in the Financial Profile record. The amounts are stored as aging period subtotals, with a total for all. Debit Memos have a TRANTYPE of DM.

- Total Unapplied Credit Amount - These are Payments or Credits in the CUSBAL table for a customer that has unapplied amounts remaining list contains one entry for each payment or credit that is either not applied to any invoices, or that has a portion that remained after the application process, includes the transaction ID and its related amount. Credit type transactions, i.e., those with a negative Transaction Amount offsetting the INV records, have Transaction Codes of:

  PAY - customer payment that is reflected in a bank deposit
  CM - Credit Memo, from returned goods or other adjustment to a sale transaction
  CDE - Credit Discount Earned by customer; payment applied within calculated
       Discount Date
  CDC - Credit Discount Company-granted; payment applied and discount granted to
       the associated invoice, but not within calculated Discount Date.

- Current Balance Owing - this field is a calculated value, being the net total of all Open Invoice Amount Total Unapplied Credit Amount.

Open Customer Order Amounts - a nightly process recalculates these values from open orders data, posting detailed data maintained and stored in the ORDERS record for each order. Upon request, when the Financial Data Update option is taken from the Financial

Inquiry or other screen, the program re-performs this same process, but only for a single customer. Depending on customer data volume, this process may take more than a few seconds to perform. The Order related amount fields include:

- Total Unreleased Orders Amount - calculated total of Unreleased Amounts for all Orders for this customer.

- Total Released Unshipped Orders Amount - calculated total of Released Not Shipped Amounts for all Orders for this customer.

- Total Shipped Uninvoiced Orders Amount - calculated total of Shipped Uninvoiced Amount for all Orders for this customer.

Order record fields are added and maintained for each Order to provide the detailed data and calculation basis for the customer summary data carried in the Financial Profile record. These include:

- Unreleased Amount - added to at order entry or maintenance.
  - subtracted from at Authorization/Release

- Released, Unshipped Amount - added to by Authorization/Release
  - subtracted from by Shipment process.

- Shipped Not Invoiced Amount - added to by Shipment process.
  - subtracted from by Invoicing process.

- Order Invoiced Amount - added to by Invoicing process (sum of all invoice amounts for this Order Number).

Billing Cycle Capability - This allows printing of statements to be mailed to customers to be performed throughout the month, spreading the work load for managing customer collections, cash flow, and mailing of the statements, instead of having it bunched up around the month-end process.

This capability involves a billing cycle calendar table, where the number of billing cycles is defined, and the scheduled calendar dates that are associated with each cycle number. Each customer is assigned to a billing cycle number, the default being "1" (month end). The statement generation program will first determine which billing cycle it is in, then retrieve those customers that are assigned to this billing cycle, generate their statements, and update a list of statement generation dates in the Financial profile record.

Invoicing Options - This capability provides the option to assign one of two methods of matching shipments to invoice generation. Invoicing is driven from data present or not

present in the Shipments records for each open account customer.   The invoicing program will examine the option assigned to each customer (as indicated in his Financial profile record), to determine how to group shipment data into invoices. The options include:

1.   One-for-one: Each shipment results in a matching invoice. No grouping. This is the default method.

2.   One Invoice per Day; All shipments in the same day are grouped together on one invoice. While shipment identification data is shown, the invoice appears as though all line items in all shipments were shipped together. If the invoicee generation program is run more than once a day, this method will group invoices for the same customer generated after the first run onto the next run, resulting in a variation of the basic idea of one invoice per day.

Credit Management Data Definitions

This section defines the actual data field names and defines, where appropriate calcuations in terms of these data field names.

AGEGRP table fields & logic:

Aging Detail - M/Value list of aging periods and associated amounts, includes:

Aging Period - Day value for this aging period, i.e., total number of days from today that constitutes the aging period, for example, if the aging periods are 0-30, 31-60, 61-90, and 90+, the aging period list would include:

> 30 days
> 30 days
> 30 days
> 30 days

Aging Period Start Date - calculated via symbolics from aging period day values

> Today = period start date always is today for first perid
> Today minus first aging group number of calendar days
> = Period Two Start Date
> Period Two Start Date minus next aging group number of calendar days
> = Period Three Start Date
> Continuing for all periods until last line in the list has been encountered and has a
>   Period Start Date.

> For example, using the Aging Period Day values above, the resulting Period Start
>   Dates would be:

> > 30 days - period start date = day no. 0 (today)
> > 30 days - period start date = day no. -31
> > 30 days - period start date = day no. -61
> > 30 days - period start date = day no. -91

FINPROFILE record fields:

Aging Period Date - Date of start date of each period.

Aging Period Amt - value associated with the Aging Period.

Total Open Invoices = sum of all aging period amounts in this customer record.

Total Unapplied Credit Amount = sum of all unapplied payment/credits in CUSBAL for this customer.

Monthly sales totals are maintained in a multi-value list. The Sold To ID is included to provide additional totaling capability if the ID is for a flooring company or other situation where the company is paying the invoices of another customer record (the Sold-To). This list can be sorted and totaled by Sold-To ID, then Month, by Month only, Month then Sold-To ID, plus calculated Year to date totals, either by Sold to or by month.

New invoice amounts are added to these amounts to provide cumulative totals. The list contains one line per sold to ID and month combination. When an invoice is being posted that does not encounter an already present sold to ID and month match (such as with a new month), a new line is added. The data fields in the list are:

SOLDID - Sold To ID (on invoice(s) posted to this list)
SOLDMONTH - Sold Month (Date on Invoice)
SOLDYR - Year of Invoice Date
SOLDTOT - Total Sold to this Sold To ID in this Month; source is Invoice amounts on all invoices with a Bill to ID of this FINPROFILE record ID, and a Sold To ID of this line, for this month.

Symbolic calculation fields are added to provide totals for display and printing:

BILLMTDTOT - Billed Month to Date Total, for all Sold To ID's; list is selected by month and current year, then all lines with this month & year are summed for all Sold-To ID's to obtain the total billed during this month.

SOLDIDMTD - Month to Date billed by Sold To ID; list is selected by current month and current year. Result of this selection is one line for each Sold-To ID in the list, showing the total billed to each sold to ID for this month.

BILLYRTD - Billed Year to Date Total, for all Sold To ID's; list is selected by current year, then all lines with this year and summed for all Sold-To ID"'s to obtain the total billed during this year.

SOLDIDYTD - Year to Date billed by Sold To ID; list is selected by current year. Result of this selection is one line for each Sold-To ID in the list, showing the total billed to each sold to ID for this year.

ORDER record fields:

Order calculations build on two symbolic fields in the ORDERDTL records

RELAMT = (QTYRNP+QTYPICK) x UNITPRICE

SHIPAMT = QTYSHIP X UNITPRICE

Calculations for the order as a whole are performed by summing these order detail amounts into the order (header) record, then combining with other calculations performed for the order as a whole. These are performed as symbolic fields, activated when the record is viewed only, either for inquiry or report purposes.   These other "building-block" symbolics in the ORDER record are:

ORDINAMT = obtained by retrieving all invoices in the INVOICES field of the order
     from the INVOICES table, then adding up their respective BALDUE field amounts
     (Balance Due)

ORDSHIPAMT = sum of ORDERDTL SHIPAMT fields

ORDRELAMT = sum of ORDERDTL RELAMT fields

ORDTOT = sum of all ORDERDTL ORDLINETOT fields

Using these building blocks, additional symbolics calculate the fields used to track and
     update a customer's credit status:

Unreleased Amount - defined as the ORDUNRELAMT

     = ORDTOT minus ORDRELAMT

Released, Unshipped Amount - defined as ORDRNSAMT

     = ORDRELAMT minus ORDSHIPAMT

Shipped Not Invoiced Amount - defined as ORSNIAMT

     = ORDSHIPAMT minus ORDINVAMT

The FINPROFILE Open Orders Data posted from ORDERS record fields:

ORDERS field	FINPROFILE field
ORDUNRELAMT	UNRELTOT
ORDUNRELAMT	RNSTOT

ORDRNSAMT SNITOT

Statement Cycle management fields:

- Statement Cycle Number - must be in the Statement Cycle Calendar table; determines which dates in the month (carried in the calendar table), that a statement is scheduled to be generated for this customer.

- Statement Generation Date - M/Value list of dates which the statement generation program processed statement data for this customer.

Invoice Grouping Option field- this field contains either as 1 or a 2, indicating that the customer's shipments are to be either invoiced on a one for one basis (method 1), or grouped onto a single invoice per day (or per run of the invoice generation program); (method 2).

Age Group Table

This table contains the following fields:

Period Days - PERDAYS
Description - DESCRIPTION

Sales Posting Processes

The sales posting process is performed for each invoice and includes period specific totals by:

- Sold To Customer ID, with subtotals by Order Type.
- Bill to Customer ID, with subtotals by Sold To ID
- Sales Rep ID, sith subtotals by Order Type
- Product Code (Product Class)
- Service Number (as carried in the Services Master record)

Time periods accumulated are by month and year, with Dollar totals via a posting process to each of these categories, using data in each Order and associated Invoice. There is no limit on the number of months of history that can be carried.

Payment Application Logic

The Payment Application process in AIMS/ERP is performed in one of two ways:

Prepaid Orders - For Prepaid Orders, when the Order is shipped, the Prepayment, which is entered directly into the Customer Balance table, is retrieved and matched with the items being shipped by the Ship Staged Orders program. It then applies the payment to the invoice, and posts the invoice data to the Payment record, using the same logic as the Payment Application process in the manual check entry program used by Account Receivable.

Payment on Open Account - This process is performed under user control and is visible on the screen on an Invoice by Invoice basis for each payment entered. Early payment discounts are visible and can be taken automatically, or allowed as an override if the discount date has passed. Credit records to account for each type of discount allowed/earned are generated in the Customer Balance table for that customer's records.

The general process of automatic payment application to open invoices is as follows:

The Invoice Generation program creates detailed Invoices it also creates a corresponding invoice transaction record in the accounts receivable file, called Customer Balance (CUSBAL).

These Invoices appear on the Payment Entry, Credit Memo and Apply Payment windows as open, to which payments can be applied, until the Remaining Amount (original amount minus sum of all applied amounts) is equal to zero.

The application process can be illustrated by the example shown below. The key terms are:

Tran Type = Transaction Type; this indicates whether the transaciton is for an Invoice, Payment, Credit Memo, or (later) Debit Memo.

Tran Amt = Transaction Amount; the total amount before any application process, i.e., the Invoice Total, or Payment Amount.

OurNo -= Our Number; normally refers to either an Invoice Number or Credit Memo Number.

ApplAmt = Applied Amount; this value is associated with one or more payments or credit that paid the invoice, and with one or more invoices that the payment was applied to. It is associated with Their Numbers for Invoices and with Our Numbers for Payments.

Their No = Their Number; refers to the customer's payment identifier, or if a Credit Memo, to our internal credit memo.

Remamt = Remaining Amount; this is the net of Transaction Amount minus all Applied Amounts for that Transaction. When zero, the Invoice is paid in full, or the Payment is fully applied. In either case, the transaction will no longer appear on entry screens.

Example Application:

Before the application process is performed, the records in question would have the following data as an example for a a prepaid order at the point where the Payment was entered, and the Invoice generated, but the application process not performed yet:

TRANTYP	TRANAMT	OURNO	APPLAMT	THEIRNO	REMAMT
PAY	<$100.00> payment amount	blank	blank	888 Customer's check no.	<$100.00>
INV	$60.00 Amt Invoiced	65 Invoice number	blank	blank	$60.00

After the application process is completed, these records would look like this:

TRANTYP	TRANAMT	OURNO	APPLAMT	THEIRNO	REMAMT
PAY	<$100.00> payment amount	65	60.00	888 Customer's check no.	<$40.00>
INV	$60.00 Amt Invoiced	65 Invoice number	60.00	888	$0.00

If a second shipment is made against a prepaid order, the pre-application data would look like this before the second order was shipped.

TRANTYP	TRANAMT	ORDERNO	OURNO	APPLAMT	THEIRNO	REMAMT
PAY	<$100.00> payment amount	1234	65	60.00	888 Customer's check no.	<$40.00>
INV	$60.00 Amt Invoiced	1234	65 Invoice number	60.00	888	$0.00
INV	$40.0	1234	79	blank	blank	$40.00

Amt Invoice	New Invoice Number

When this order's Invoice is "paid for" with the prepayment, the data update would look like this:

TRANTYP	TRANAMT	OURNO	APPLAMT	THEIRNO	REMAMT
PAY	<$100.00> payment amount	65	60.00	888 Customer's check no.	$0.00
		79	40.00		
INV	$60.00 Amt Invoiced	65 Invoice number	60.00	888	$0.00
INV	$40.0 Amt Invoice	79 New Invoice Number	-40.00	888	$0.00

AIMS/ERP Credit Control Summary

The AIMS/ERP Credit management functions provide a highly efficient environment eliminating many routine, redundant and bureaucratic activities, yet provide highly specific detailed controls for the responsible Credit Managet. The overall AIMS/ERP financial and credit control logic is summarized below:

- Financial Profile Record Control - Ties control of customer credit status & payment terms back to the customer's Financial Profile record, if one is present. If not present, all orders are subject to standard prepayment or COD control logic. In all cases, the Payment Terms (multiple options can be added to a customer's record) contained in the Financial Profile record for an open account customer will control what Payment Terms any Order for that customer can be changed to. Financial Status options and related control actions include:

  - Open Account - may have any type of Payment Terms included in its list of Terms, i.e., open account, COD, No Charge, and Prepayment can all be added to the customer's Terms list. No change to Terms in Orders.
  - Prepaid - may only have Prepaid, No Charge and COD Terms types.
    - Requires review, change of Open Account Terms Types in Orders to prepaid/COD Terms types.
  - Hold - does not require Terms changes;
    - New Orders; allowed to be entered, selecting from Terms list, sets   Order Status to HOLD, not NEW.
    - Existing Orders - changes status to HOLD; Staged orders may not be shipped.
  - Terminated - terminates relationship; disallows any new orders, changes Order Status to CANCEL for all existing orders, including staged ones.

  Financial Status for a customer is always obtained for any program in the system by referring to the actual Financial Profile record; the data is not carried in the Customer Order record.

- Order Change Follow-through - When a customer's financial status is up or downgraded, the system provides efficient control tools to insure that Credit Department actions are followed through to the individual customer Order, so these changes are implemented immediately in an error-free manner, not dependent on people "remembering" to do related corrective actions. This will include appropriate before and after conditions and requiring of related changes.

  An example would be if a customer's status is downgraded from open account to Prepay and the Payment Terms on an Order is changed from an Open Account Terms

Type to a COD one. The system, in this case, automatically adds the required COD charge, which is normally done at Order Entry time.

- Payment Terms Type Controls - Credit control for Customer Orders throughout the system depends on the Payment Terms and its associated Type, and associated rules for each type. The Terms Types are:
  - Open Account - Order Releases subject to Available Credit control logic.
  - Prepaid - Must have payment prior to shipment. If a Credit Card type, card data is required at Order Entry.
  - COD - Adds COD charge to Order/Shipment.
  - No Charge - (New Terms Type to be added) - provides explicit Department & GL Number linking to a specific Payment Terms type, for Warranty, Gift, and other no-charge orders so no erroneous GL charges can result and data entry is streamlined.

- Bill To Customer Controls - All control logic is tied to the Bill To Customer ID's Financial Profile record, or if not present, the Sold To.

Credit Related Order Status Controls

The table below summarizes how the system controls what activities can be performed at various points in the order processing cycle.

Order Status	Order Entry or Change	Release	Pick/Stage	Shipping
HOLD	OK	No	No	No
NEW	OK	OK	NA	NA
REL (one or more releases processed)	OK	OK	OK	OK
CANC (cancelled)	No	No	No	No
Financial Status OK Req'd? (not Hold or Terminated)	Yes	Yes + Avail Credit OK	No	Yes

Financial Profile Status & Terms Action Summary

The Financial Profile window will be changed to add a Order Status & Terms Review subprogram, callable by a hotkey. This call may be mandatory, or optional, depending on what is changed. These determinations are made based on the table below summarizes what the program does when a customer's Financial Status is changed and the related Payment Terms and Orders Actions.

Previous Financial Status	New Financial Status	FINPROFILE Payment Terms action	Order Status & Terms Review Required or Optional; other action performed.
Open Account	Prepay	Delete OA Terms Types	Required
Open Account	Hold		Required
Open Account, Prepay or Hold	Terminated - requires verification of entry	None	Call Order Cancellation Subprogram - Sets Status of all Orders for this customer to Cancelled; closes out all open quantities.
Prepay	Open Account	None	Optional
Hold	Prepay	Delete OA Terms Types	Required
Hold	Open Account	None	Optional
Terminated	Open Acct, Prepay	None	None - should normally not be performed; any orders must be re-entered; effectively requires restart of customer relationship.

Orders Terms Change Summary

The table below summarizes what the order status and terms change program will do when processing orders as a result of Financial Status and/or Payment Terms changes are made in a customer's Financial Profile data.

Previous Payment Terms Value	New Payment Terms Value	Associated Action (performed automatically by program)
Prepay	Open Account	Delete Prepayment record
Open Account	Prepay	Create Prepayment record
Open Account	COD	Add COD Charge to Adjustments
Prepayment	COD	Add COD Charge to Adjustments; delete Prepayment Record
Open Account	No Charge	Delete Prepayment record
No Charge	Prepayment	Create Prepayment record
No Charge	Open Account	None
COD	No Charge	Delete COD Charge
No Charge	COD	Add COD Charge to Adjustments

Financial Master File Maintenance

Customer Financial Profile Data Maintenance

Screen Data:

```
                    Customer Financial Profile Data Maintenance

Customer ID x-------x  Name x-------------------x              Types   xxxx
                                                                       xxxx
Financial  Status     xxxx x-----------------x        Payment Terms        x----------x
Sales Rep ID x--------x                                                    x----------x
Sales Region  x------x          Sales Territory x---------x  Sales Manager  x---------x
Credit Limit  $xxx,xxx.xx     Agreement ? xxx        Credit App?  xxx
Acct Open Date xx/xx/xx                 Flooring Co ID x----x  Name x----------------x*


Financial Status Notes x-----------------------------------------------------x


Other Notes x-----------------------------------------------------------------x
```

Shift + F1 calls the Stores selection popup window, and then the Stores Maintenance window

```
Store ID x---x



Address x------------------------------------x
                    x------------------------------------x
City x--------------------------------x ST xx      ZIP xxxxx-xxxx

```

Shift + F2 calls the Customer FInancial Inquiry display - (FINSTAT window)

```
                        Customer Financial Inquiry


Customer ID x-------x  Name x-------------------x          Types xxxx

Financial  Status xxxx  x------------------x      Floor Co ID x--------x
Current Terms        x------------------x         x-------------------x(1)
                     x------------------x         Sales Rep ID x--------x
                                                  S/R Name x-----------x
Credit Limit              $xxx,xxx.xx             Agreement ?  xxx
   Aging  Days xxx $xxx,xxx.xx               Credit App?  xxx
               xxx        $xxx,xxx.xx             Acct Open Date xx/xx/xx
               xxx        $xxx,xxx.xx
Total Open Invoices $xxx,xxx.xx
Unapplied  Cr. Total $xxx,xxx.xx
Current Balance      $xxx,xxx.xx
  Available Credit   $xxx,xxx.xx


Open Orders:
Unreleased  Total                  $xxx,xxx.xx        Billed MTD $xxx,xxx.xx
Released, Not Shipped Total  $xxx,xxx.xx         Billed YTD  $xxx,xxx.xx
Shipped Not Invoiced Total         $xxx,xxx.xx

Financial Status Notes x--------------------------------------------------x

Other Notes x----------------------------------------------------------x
```

*Display only field

Added 3/23/95:

```
Order Status & Terms Update Window

New Order Status x-----x  New Payment Terms xx   x--------------x

Press F9 to update Ordes
```

Functional Logic

This window is accessed from the PROCUS57 customer data maintenance window, and
can be added only if the customer type is DLR, SVC, REP, or DIST. It allows
establishing the customer as an Open Account Customer. All financial controls
throughout the system use data in the FINPROFILE record, maintained by this window.
In the absence of the FINPROFILE record, a customer is assumed to have only a financial
status of prepayment only for any orders. Generally, finished good products will only be
sold to customers with FINPROFILE records, which also allows tracking of ancillary
documentation such as contractual agreements and credit applications.

Access via softkey is available to access the Dealer's STORES record data.

Financial Status - must be in FINSTATUS Popup window data. Copied into the ORDERS record for each customer order generated for this customer.
Terms - must be in TERMS table; for an Open Account Terms type to be selected, FINSTATUS must be open account. Otherwise only Prepayment terms types can be selected and added to the Terms m/v list. Copied into the ORDERS record for each customer order generated for this customer.

Change 3/23/95:
Added:
When Financial Status value is changed, field exit will evaluate the change as shown in the table below and where appropriate (depending on the change) require the actions defined. The actual functioning in the window is to display a message showing the Order Action required or optional, then allow actual calling of the subprogram(s) via hot key when the user is ready to perform these actions after other data entry is completed in the window. The F9 Presave process checks to insure that these actions were actually performed. When completed, the Subprogram(s) set a flag in memory that the F9 Presave routine checks to insure that required Orders Actions were performed before allowing saving of the FINPROFILE window data.

Previous Value	New Value	FINPROFILE Payment Terms action	Orders Actions
Open Account	Prepay	Delete OA Terms Types	Require call of Order Status & Terms Review subprogram - Prepay Option
Open Account	Hold		Require call of Order Status & Terms Change Subprogram - HOLD Option
Open Account, Prepay or Hold	Terminated - requires verification of entry	None	Call Order Cancellation Subprogram - Sets to CANC
Prepay	Open Account	None	No action
Hold	Prepay	Delete OA Terms Types	Require call of Order Status & Terms Review Subprogram - Prepay option
Hold	Open Account	None	No action
Terminated	Open Acct, Prepay	None	None - should normally not be performed; any orders must be re-entered; effectively requires restart of customer relationship.

Order Status & Terms Update Subprogram

This program is called from the FINPROFILE update window, using one of 3 calling modes or options, Prepay, Hold and Cancel. In this way the FINPROFILE update process can transmit its condition to the Order Status Update subprogram, which uses this to restrict the options selectable by the user.

The options available depend on the Calling Option or Mode, as shown in the table below. When the "TO" Order Status and Payment Terms values have been selected, and the F9 key is pressed, the subprogram then saves the FINPROFILE record from the Window data then retrieves all ORDERS records having this customer ID as a SOLDTO ID, and updates the records.

NOTE: If the previous Order status was HOLD, this program will not provide an update option for Order Status. The user must use use the Order Status Change window to perform this task.

The relationship between Calling Option/Mode and the possible TO conditions are shown in the table below:

Calling Option/Mode	"TO" Order Status Options	"TO" Payment Terms
Prepay	• HOLD • No Change in Status	Select one from F2 popup (revised after Fin Status Change).
Hold	HOLD only	Select one from F2 popup (revised after Fin Status Change).
Canc	CANC only	No update/change

When the Order Status & Terms Change Window has been entered, the program then proceeds to retrieve all ORDERS records with this Customer ID as its SOLDTO ID, and a Order Status of NEW, HOLD, REL, or PC, and update the Order record with the new values. Additional, associated update action for each order may be required, depending on the new Payment Terms. These are summarized in the table below.

Previous Terms Type	New Terms Type	Associated Action (details in reference)
Prepay	Open Account	Delete Prepayment record(1)
Open Account	Prepay	Create Prepayment record(2)
Open Account	COD	Add COD Charge to Adjustments(3)

Prepayment	COD	Add COD Charge to Adjustments; delete Prepayment Record(4)
Open Account	No Charge	Delete Prepayment record(1)
No Charge	Prepayment	Create Prepayment record(2)
No Charge	Open Account	None
COD	No Charge	Delete COD Charge(5)
No Charge	COD	Add COD Charge to Adjustments

(1). Delete Prepayment (PREPMT) Record - reads PREPMT table for a record containing this Order Number, then deletes the record

(2) Create Prepayment (PREPMT) Record - Several steps, including:

1. Retrieves STAGED records for this Order Number, performs invoice calculation logic:
    - Extends Staged Quantities X the Unit Price for the associated Line Number/Part Number in ORDERDTL record.
    - Retrieves ORDERS record, then if no previous Invoice has been generated, adds Shipping Charge and the sum of all adjustments.
    - Adds tax if applicable to each extended amounts for each staged part number.
    - Result is Staged Amount for the Order.

2. Determines required payment amount - Several steps, including:
    - Attempts retrieval of a CUSBAL PAY type record for this Order Number.
    - If not successful, Required Payment Amount = Staged Amount.
    - If successful, subtract Staged Amount from CUSBAL record Remaining Amount to obtain Required Payment Amount.

3. PREPMT record is then written.

(3) Add COD Charge - program adds a COD Adjustment Code line to the ORDERS record ADJCODE, and using the Global Default record value as the COD Amount value, adds this value to the associated ADJAMT field.

(4)   Perform process (1) and (3) above.

(5) Delete COD Charge - program removes the COD Adjustment Charge line form the ORDERS record ADJCODE field and its associated ADJAMT value.

Order Cancellation Actions - taken if the Calling Option/Mode was CANC.

- Set Order Status = CANC

- Order Detail records - Set Quantity Ordered, Released, Picked to = Quantity Shipped
- Delete TOBEPICKED records for the order.

When all selected orders have been processed, the program returns to the FINPROFILE window, which is then cleared, ready for the next entry.

Age Group Maintenance

Screen Data:

```
Period Days   Description
xxxx              x--------------------x
xxxx              x--------------------x
xxxx              x--------------------x
xxxx              x--------------------x
```

Functional Logic

This data is maintained with the Popup & Code Maintenance program. The Age Group is a code table and contains the age grouping period days and a description for each period to be used on screens and reports. This feature gives the system a flexible aging period. The number of periods, in addition to their length, can also be varied.

These period data are called whenever a FINPROFILE record is retrieved for viewing via inquiry or for a report, or updated via the nightly process. The fields in the AGEGRP popup data ("table") are:

PERDAYS - Period Days; number of days in this period
Description - DESCRIPTION - Text description of period, i.e., "0-30 days", or
"Over 90 days."

These fields are used as described below to generate an Aging Detail list for each FINPROFILE record, which is a M/Value list of aging periods and associated amounts, including:

Aging Period (PERDAYS) is the day value for this aging period, i.e., total number of days from the current system date that constitutes the aging period, for example, if the aging periods are 0-30, 31-60, 61-90, and 90+, the aging period list would include:

> 30 days
> 30 days
> 30 days

lso added is an implied "4th period" which is simply everything with a date that is earlier than the last day of the defined 3d period.

The aging calculation process uses the PERDAYS values to calculate the Aging Period Start Date for each Aging Period - calculated (via symbolics) from aging period day values, for example:

Today = period start date always is today for first perid
Today minus first aging group number of calendar days
= Period Two Start Date
Period Two Start Date minus next aging group number of calendar days
= Period Three Start Date
Continuing for all periods until last line in the list has been encountered and has a Period Start Date.
Then the implied "4th period" start date is calculated, by adding the last line's period days, plus one day, to get the day which starts the "over xx days" value for sorting and totaling purposes.

For example, using the Aging Period Day values above, the resulting Period Start Dates would be:

30 days - period start date = day no. 0 (today)
30 days - period start date = day no. -31
30 days - period start date = day no. -61
30 days - period start date = day no. -91 ("4th period")

Financial Status Maintenance

Functional Logic

The financial status options are maintained in the FINSTATUS popup via the Ppopup Data Maintenance program. These options are built into various program functions. The current options are:

PREPAY - prepayment of orders only. This status is presumed to apply in the absence of a FINPROFILE record.

OPENACCT - Customer is in good credit standing, and is approved, subject to credit limits, for order to be accepted and processed for shipment, with invoices being generated and sent later.

HOLD - account is on hold due to a temporary problems. Orders can be accepted, but none will be shipped. This is assumed to be a temporary status.

TERM - relationship with this customer has been terminated. No orders can be accepted. Any orders in process when this status change is made must be returned to stock or are otherwise cancelled.

NOCHG - No Charge - causes Order to be adjusted to a total of zero.

Terms Maintenance

Screen Data
            Terms Maintenance
Terms Code xx
Terms Description x---------x
Terms Type xxxxx
Payment Days xxx
Discount Days xxxx
Discount Rate/Percent xxxx
Removed:
Terms Process Name xxxxxxxxx
Added:
Paymethod   CC?
x-----------x   X

Department   GL Number
x----x   x----------x
x----x   x----------x

Order Type
x-----x
x-----x

Financial Profile Update Options Window

Terms Code to Add to Customer Financial reocrds x--x x---------x

Update Options
- Credit Status = Open Acct
- Credit Status = Prepay only
- All Financial Profile records

Functional Logic

3/23/95 Change Summary:
- Record modified to include Payment Method, Department & GL Number fields.
- Add a No Charge (NC) Terms Type with associated control logic.
- Terms maintenance window disallows deletion of records, or changes to Terms Type field, once record is saved.
- Terms Process Name is removed from the window.
- Additional window fields are added allow maintenance and changes to Payment Method, Credit Card Flag, Department & GL Number fields.
End Change Summary.

3/28/95 Change Summary:
Added:
Additional field for Order Type (M/V); this indicates to which Order Types that this
Payment Terms is selectable. For example, a COD payment term may be global, but
applicable only for FG Order Types because it provides a discount, or a non-discount open
account payment terms may be limited to non-FG Order Types, such as RO, PRTS, MER
orders only.]
Also Added is the Financial Profile Update Options Window - this window and its
associated update program allow the user to select a Terms Code that is to be added by
the program to all Financial Profile records meeting the selection option, which are
customers with a Credit Status of Open Account only, those with a status of Prepay only,
or all (both statuses). The program will not populate records with a Credit Status of
HOLD or TERM (terminated).

End Change Summary

This program allows maintenance of the Terms table, which contains Payment Terms
options and associated data to be used in Order and Invoice processing. The data fields
are:

Code - unique identifier for each Terms record, stored in FINPROFILE, ORDERS and
        INVOICES records. Required entry.
Description - text description of this terms code to appear in windows and on reports.
        Required entry.

3/23/95 Change:
Modified to add No Charge Terms Type:
Terms Type - OPENACCT, PREPAY, COD, or NOCHG are the only options. Selecting
        a Terms Type of PREPAY, COD or NOCHG will allow that Terms option to be
        selected by the Order Header/Entry program even if a customer does not have a
        FINPROFILE record. Selecting a Terms Type of OPENACCT will allow the
        associated Term record to be selected as an option in the Customer Financial Data
        window only. Required entry. May not be changed once saved.
End Change.
Payment Days - the number of days, that when added to the Invoice Date, give the date by
        which the customer has agreed to pay each Invoice.   Required if Terms Type is
        OPENACCT.
Discount Days - applicable only to Open Account Terms Types; indicates the number of
        days to be added to the Invoice Date to calculate the Discount Date, i.e., the date by
        which payment must be received and applied if the customer is to earn a prompt
        payment discount. Optional Entry.

Discount Rate/Percent - the 2 decimal value, e.g., 2% or 0.02, that is to be multiplied
   times the Invoice Amount to obtain the Discount Amount, i.e., the amount to be
   credited to the invoice during payment entry and application for prompt payment.
   Optional Entry.

3/25/95 Change:
Removed from window, left in the data dictionary.
   Terms Process Name - the name of the process/program to be executed to carry out
   the specific logic of this Payment Terms.

Added:
PayMethod - if more than one entry is present, Order Header/Entry program will require a
   selection, otherwise saving a single entry in the PAYMETH field in the ORDERS
   record, or skipping if blank. Primary use is to provide a readable name for different
   types of credit cards, or, if desired, different types of cash payments. Multivalue list.
Credit Card Flag - If Y, indicates to the Order Header/Entry program that a a number
   entry and expiration date entry and validation is required. If No, no (card) number
   entry and expiration date is required. Associated with PayMethod.
Department - for No Charge Payment Terms Types only; allows entry of one or more
   Department numbers, from Department Table. F2 key brings the table up for
   selection. Multivalue list. Requires at least one entry for No Charge Payment Terms
   Types.
GL Number - for No Charge Payment Terms Types only; allows entry of one or more GL
   numbers, from the GL Number table. F2 key brings the table up for selection.
   Requires at least one entry for No Charge Payment Terms Types; associated with
   Department.

3/28/95 Change:
Added:
Order Type field - multi-value list; pressing the F2 key and making one or more selections
   will add to the list for the Terms records; program will eliminate/prevent duplicate
   entries.

NOTE: Order Header/Entry program will screen Terms options and either eliminate or
   prevent selection of a Terms code that does not include the selected Order Type in
   its Terms record.

End Change.

NOTE: Order Header/Entry program will automatically store a single line entry in the
   Department and GL Number fields in the ORDERS record if a No Charge Payment
   Terms Type is selected, and prompt for selection if multiple lines exist.

3/28/95 Change:
Softkey option is added to call the Financial Profile Update Window, format shown above. When called, the default Terms Code value is the one showing in the Terms maintenance window. Entry of another code is allowed, which must be in the Terms table. Selection of one of the three options shown is required. There is no default, to require a conscious entry choice to this powerful update program. When a valid Terms Code is entered and accepted, and a update selection option has been made, the F9 key can be pressed. When it is, the program presents an "are you sure?" message, which if answered Yes (Default response is No), causes the program to perform the following:

Read all FINPROFILE records in the table, skipping those that do not have the selected Credit Status values as indicated by the selected option, i.e., PREPAY or OPENACCT or both. The program displays the Record ID's of the FINPROFILE records it is reading and updating.   When it is completed, it returns the user to the Terms Maintenance window.,

Transaction Entry Functions

Pre-Payment Entry

Screen Data:

                        Pre-Payment Entry

Order Number x-----x   Order Type xxxx* Order Status xxxxI
Oreer Total $xxx,xxxx.xx*   Staged Amt $xxx,xxx.xx*
Sold To ID x-----------x*   Name x----------------------x* Cust Type xxxx   *
Financial Status x--------------x* Terms   x----------------x   xxxx
                                                                                    xxxx
Pay Method xxxxCheck/Card No. x--------------x Exp Date xx/xx
Authorization No. x-----------------------------x

Pmt Amt $xxx,xxx.xx

Transaction Comments x---x
User-ID x---------x*   Tran Date xx/xx/xx* Tran Time xx:xx*

*Display only

Functional Logic

2/5/95 Change Summary:
Add: search for matching record in PREPMTS table for the Order number. This record is deleted during the update process. Match is only on Order Number. No other matching is performed.

End Change Summary

This program allows direct entry of prepayments for orders to be released for shipment without open account status or that the customer wishes to pay in advance to avoid increasing his open account balance owed. These are in the form of cash, checks, or credit card payments. They are entered prior to the generation of the invoice, and so are identified by an Order Number. The Invoice generation program will, if the Terms are a prepayment type for that order, and attempt to locate a payment Transaction record in CUSBAL containing that Order number and apply it to the invoice being generated at that point.

Prepayments will normally be entered after an order has been released for picking, but prior to its being released for shipment. At this point, the exact amount due for the items

shipped is known and a correct credit card payment can be processed, using the data in the Orders record. This process will correct the current system deficiency where the full order amount is charged for a credit card payment, even if there are backorders.

For the program to accept a prepayment entry, the Terms for the order must be a Prepayment type. This is required to process a prepaid order for an open account customer.

NOTE: Prior to being released for live use, the existing Authorization & Release program must be modified to eliminate its ability to add a PAY record to the CUSBAL table. Failure to do this can result in duplicate PAY records. The existing pick/ship/invoice order program will correctly create and update invoices unless it is changed also. The preferred method is to modify pick orders to issue to the STAGED table, and to place the shipment/invoice generation process after this, so the STAGEDAMT is known and entered in the ORDERS record. The shipment and invoices records are then generated from the STAGED table, and would clear these records.

Upon selection from the menu, the program is at the Order Number field. Pressing the F2 key brings the Order Search engine. The program then displays the data for that Order number on the screen. The following fields are displayed from the Orders record, but may be changed by moving the cursor to them on this screen:

Terms - pressing the F2 key with the cursor in this field brings the Terms list from that customer FINPROFILE record, if available. If there is no FINPROFILE record, the program displays the standard default values, obtained by reating the Terms table and selecting those with a Terms Type of PREPAY. This is the only way the Terms for an order can be changed, i.e., either the prepay standard terms options, or those that have been entered and approved by the Credit Department and are therefore shown in the customer's FINPROFILE record.

Pay Method - pressing the F2 key brings the PayMethod popup, which allows one of these to be selected, if it is to be changed from is previous value.

Check/Card Number - If a Card type Pay method is selected, this entry and the Expiration Date field entries are required. If the Pay Method is a check type, then only this field is required.   A previous entry may be altered using these rules.

Expiration Date - Must be blank if a Check type pay method was selected, otherwise must be a valid month and year, not in the past.

The cursor moves to the Authorization Number field if the Pay Method is a Card type, in which case the Authorization Number field is required. If the Pay Method is not a Card type, then the program will not require entry in the Authorization Number field, but will allow it to be entered.

Next, the cursor moves to the Payment Amount field, which is required, may not be negative or zero.

Next the Cursor moves to the Transaction Comments field, which is optional.

When the entry is complete, the screen is saved with the F9 key. The program then revalidates all entries required on this screen, as defined above, and creates a new CUSBAL record with a transation type of PAY. The CUSBAL record fields updated are:

ID - next incremental transaction ID number
TRANTYPE = PAY
PROCUSID = Sold To ID in ORDERs record
AUDNAME = User -ID
AUDDATE = System Date
AUDTIME = System Time
COMMENTS = Transaction Comments from screen
FORM = form associated with PAYMETHOD as displayed or changed on screen.
THEIRNO = Check/Card No. from screen
AUTHNO = Authorization Number from screen
ORDERNO = Order Number from screen
ORDERTYPE = Order Type from retrieved ORDERS record.
Other fields are null/blank.

The ORDERS record is updated if any fields that could be changed were in fact changed during the entry process. If none were changed, no update is performed. These include:

CREDIT = Financial Status from screen
TERMS = Terms from screen
PAYMETHOD = Pay Method from screen
CARDNUM = Check/Card Number from screen
EXPDATE = Exp. Date from screen
AUDNAME = System User-ID
AUDDATE = System Date
AUDTIME = System Time

2/5/95 Change:

Using Order Number, attempt retrieval from PREPMTS table. If a match is not found, continue processing with no action. If a match is found, delete the PREPMTS record from the table for this Order Number.

End 2/5/95 Change

Direct Payment/Credit Entry & Application

SCR# 806

CHANGED 1/3/95

Screen Data

Window Label - varies with mode selected

```
Customer ID  x-----------x   Name x----------------------x*  Cust Type xxxx       *
Financial Status x--------------x*  Terms xx   x----------------x           *           xxxx
                                           x----------------x                  xxxx
Payment Form x------x                      Tran ID x----x**    Rem Amt.  $xxx.xx**
Check/Credit No.    x----------x           Appl Amt**     Our No**
Pmt Amt $xxx,xxx.xx                        $xxx.xx        x----x
 Apply Method x (1)                        $xxx.xx        x----x
```

Open Invoices For Application:

	Ord	Inv		Disc	Disc	Rem	Appl
Inv Date*	Type*	No.*	Inv. Amt*	Date*	Amt*	Amt*	Amt
xx/xx/xx	xxxx	xxxx	$xxx.xx	xx/xx	$xxx.xx	$xxx.xx	$xxx.xx
xx/xx/xx	xxxx	xxxx	$xxx.xx	xx/xx	$xxx.xx	$xxx.xx	$xxx.xx
xx/xx/xx	xxxx	xxxx	$xxx.xx	xx/xx	$xx.xx	$xxx.xx	$xxx.xx
xx/xx/xx	xxxx	xxxx	$xxx.xx	xx/xx	$xx.xx	$xxx.xx	$xxx.xx

Unapplied Amount $xxx,xxx.xx

```
Transaction Comments x------------------------------------------------x
User-ID  x---------x*  Tran Date xx/xx/xx*  Tran Time xx:xx*
```

*Display only
(1) Selects Application Method

** These fields used only in Application Only Mode. Not displayed in other modes.

Softkey Inquiry windows:

Shift + F1 key, with the cursor on an Invoice line, brings up the Invoices Inquiry window containing that Invoice number's record.

Shift + F2 key brings up the Customer Financial Inquiry screen for this Customer ID.

Shift + F3 brings up the CUSBAL Inquiry screen for this Customer ID, prompting for date ranges before displaying the data.

Shift + F4 brings the Orders Inquiry window.

Unapplied Payments/Credits window:

Trans ID	Tran Type	Form	Trans Amt	Their No.	Rem Amt.	Trans Date
x---x	xxx	x-----x	$xxx.xx	x-----x	$xxx.xx	xx/xx/xx
x---x	xxx	x-----x	$xxx.xx	x-----x	$xxx.xx	xx/xx/xx
x---x	xxx	x-----x	$xxx.xx	x-----x	$xxx.xx	xx/xx/xx
x---x	xxx	x-----x	$xxx.xx	x-----x	$xxx.xx	xx/xx/xx

Functional Logic

1/3/95 CHANGE SUMMARY

Added: Update of Date Closed field in CUSBAL record when invoice is fully paid or when payment/credit record is fully applied; when Amt Remaining becomes zero. Index built on Date Closed speeds retrieval/selection of open records.

Added: Update of BALSTAT table; one record for each Customer ID; one M/V line for each payment application; records dollars applied and the number of days that the application reduced an open debit/invoice.   This data will provide a time and amount weighted history of payment performance that can be used to provide a more effective way of quickly identifying those customers that owe the most for the longest; of changes in payment patterns, and of projecting future payment patterns.

End of 1/3/95 Change Summary

Overview

This is a multi-purpose program that allows entry of payments and credit type transactions into a customer's account balance (CUSBAL) table records, and performs payment/credit application processes against open invoices and debit memos for which payment is owed by the customer.

Modes - This program functions in one of three modes:

1.   Open Account Payment Entry (cash, checks, credit cards) received from Open Account Customer to be applied to unpaid invoices or debits.
2.   Credit Memo Entry - direct entry of credits to adjust previous billing errors, or allow credit for returned goods, other problem resolution with the customer
3.   Application Only - application of payments/credits previously entered, but not applied to Invoices.

The program automatically selects one of these three modes by being called from three separate menu points. This will allow different security access lists for these different functions. Once called into one of these modes, the program will perform only that

function. The window is the same, except for a popup to display and allow selection from a list of Incompletely Applied credit/pay type transactions. This allows the program to function the same once the payment or credit has been selected.

This specification describes each mode separately, the way the user will see them after selection from the menu, but otherwise common functions apply to all modes.

Application Options - the application of credits (payments, credit memos) to debits (Invoices, debit memos) process has three options:

- Payment against invoices - program automatically applies it to the oldest invoice(s) first until the payment is fully applied.
- Payment against specific invoices - program allows user to select specific invoices and the amounts to be applied to each, until the payment is fully applied.
- Payment on open account - not applied to any invoice specifically but saved to the CUSBAL table and is credited to his account balance.

Discounts Earned - If the payment Terms in the associated Order contains early payment discount days and rates, Invoices generated against this Order will contain calculated Discount Amounts and Discount Dates. These data are reflected in CUSBAL INV transactions. If present, these data will display on the window and be used in the payment application process.

The application process takes Discount Dates and Amounts into consideration as follows. If the current date is less than or equal to the Discount Date, the default applied amount will be the Net Amount, after the discount is allowed. If the current date is after the Discount Date, the default applied amount will be the Remaining Amount. Depending on how these are generated, the program will create either a CDE (payment applied within Discount Date) or CDC (payment applied later than Discount Date) credit transaction record.

Functional Details

All Modes - Upon selection from the menu the program displays the window, with the PROCUS search engine window displayed in front of it. If the Escape key is pressed, the Customer ID can be entered directly. Otherwise, the PROCUS search process is used, one or more customer ID's returned, or a single one returned. One is either returned or selected from the popup that is returned, and when the Enter key is pressed from the Customer ID field, the Customer Name is displayed and associated Customer Type values. The FinancialStatus and Terms are retrieved from the FINPROFILE record for that PROCUS ID.

1/3/95 Change:

Retrieval logic is changed to use the CLSDATE (Closed Date) field and index, retrieving, for a given customer, those with CLSDATE = null/blank, i.e., still open. This replaces the use of REMAMT (Remaining Amount).

End Change.

The program then uses that PROCUS ID to retrieve and display all Invoices and Debit Memos (TRANTYPE = INV or DM) for that customer that have a remaining balance (TRANAMT minus sum of all APPLAMT's for that invoice no.) greater than zero, in AUDDATE sequence. These invoices/debits are the customer's open acount items. It is to these records that the payment or credit will be applied if Apply Methods 1 or 2 are selected. The program retains the record ID's for the invoice records displayed in memory for correct updating later.

The screen field values are obtained from:

- Invoice Date = AUDDATE
- Ord Type = ORDTYPE\
- Invoice No. = OURNO
- Invoice Amt = TRANAMT
- Discount Date = DISCDATE
- Discount Amt = DISCAMT
- Remaining = (Symbolic) Invoice amount minus the sum of previous Applied Amounts may already be present in the invoice record (from previous partial applications).

After this point, the function of the screen depends on the Mode selected by the calling point.

Open Account Payment Entry mode -

The cursor moves to Check/Credit No. where it is entered.

Credit Memo Mode - If the the program is in Credit Memo Entry mode, the program will automatically assign the next Credit Memo number, as follows:

- Reads the Credit Memo Number Global Default record, incrementing by one to obtain the next C/M number.
- Writes the Credit Memo Number Global Default record.
- Uses the prefix of CM, then the next incremental number, displays the resulting number on the screen, where is will be used as THEIRNO in the CUSBAL record to be generated.

Open Account & Credit Memo Entry modes -

The cursor then moves to the Payment Amount, where the check or credit amount is entered.

Next, the cursor moves to Transaction Comments. Its handling depends on which mode the program is in:

- Open Account Payment Entry - comments are optional
- Credit Memo Entry - comments are required.
- Application Only - no comments may be entered, as no payment transaction is entered.

Application Only Mode -

Program calls the Unapplied Payments/Credits popup window and retrieves all PAY or CM transactions for the entered Customer ID from the CUSBAL table and displays them in the popup window. These are selected one at a time and applied to the open invoices retrieved later. As each unapplied payment or credit is selected, then processed by the application portion of the program so that its Amount Remaining becomes zero, it is removed from the Unapplied Payments/Credits list. The result is that the user selects an unapplied payment, goes through the application process, saves the screen with the F9 key to update the CUSBAL records, then restarts the process with the next payment, using updated INV records as well.

The payment/credit record selected is brought forward to the payment data fields on the main screen, but in protected mode, so alterations of a payment or credit previously entered cannot be made.

All Modes -

The cursor then moves to Apply Method. This screen field (not stored in the CUSBAL record) is only used to indicate which application method to use:

1 = Automatic application to invoices, using oldest invoice first.
2 = Allow manual selection of individual invoices to apply payment to and manual entry of the amounts to apply to each.
3 = Payment on account, invoices are not applied. Resulting customer balance is affected, similar to a credit memo, but invoices continue to show as open.

Program's actions depend on which of these choices is taken. The applied amounts will be program default values that would be generated on a one line at a time basis. If a Discount Amount is to be earned and automatically credited to an invoice, the program

will automatically generate the credit transaction to "pay" the invoice partially with the earned discount. The program actions for each option are:

Method 1 - Program automatically applies the payment to the oldest invoices first. If Method 1 is selected, which is the Default, taken by pressing the Enter key, the program performs the following:

Starting with the oldest invoice first, applies the check payment to it:

Check amount
minus Invoice Amount Due*
= Check Remainder Amount

*Invoice Amount Due calculation, performed as Default value if Discount Date is less than or equal to current system date:
Invoice Amount
minus Discount Amount
= Invoice Amt Due

Then performs this test to select the next action:

1. If Check Remainder Amount is negative, the check is fully applied, but invoice still has a balance remaining that is unpaid. Application process is complete and the program is ready to update the CUSBAL table.

2. If Check Remainder Amount is zero, check is fully applied, and invoice is fully paid. Application procedss is complete and the program is ready to update the CUSBAL table.

3. If Check Remainder Amount is positive, calculate the Next Applied Amount and repeat the process using the next invoice in the date sequence by calculating the Remaining Applied Amount, which is used in subsequent application steps:

   Check Remainder Amount
   Minus Invoice Amt Due
   = Remaining Applied Amount

4. The process is continued until condition's 1 or 2 above are met and the application process for this check is complete.

5. The program updates the display as it processes. Any remaining Unapplied Amount is reflected in that field.

Method 2 - This option allows the user the option of moving the cursor down the Applied Amount column and manually entering the amount to apply to each invoice line. Zero amounts may be entered for an invoice, to indicate that nothing is to be applied to that particular invoice. The program also does the following for each line exit:

1. Disallows an Applied Amount that would drive the Remaining Amount negative.
2. Updates the Unapplied Amount as a cumulative total of amounts applied to all invoice lines in the display, i.e., it is the reminder of the Check Amount minus all Applied Amounts entered on the screen, as each is entered.
3. As the Default of each Applied Amount entry uses the lesser of Remaining amount or the Unapplied Amount. (This enables the user to manually simulate the automatic process as part of the application process, making an exception only on one or two invoice lines, but taking the default on all others.
4. If a Discount Amount is present for that Invoice, the program will perform the following:

-   If the Discount Date is less than or equal to the current system date, the default (calculated) Invoice Amount Due for that line will have the Discount Amount subtracted from it, and will, when the screen is saved, generate a CDE CUSBAL transaction to "pay" for this part of the invoice.
-   If the Discount Date is later than the current system date, the program will calculate the default Invoice Amount without the Discount Amount, then prompt "Allow Prompt Payment Discount? Y/N" with the default response being No. This will allow the user to accept the non-discounted amount as the Applied Amount simply by pressing the Enter key to acknowledge the message. If Y is taken, the program will calculate the Invoice Amount Due including the Discount Amount, and when the screen is saved, generate a CDC CUSBAL transaction to "pay" for this part of the invoice.
-   Allow a manually entered Applied Amount, regardless of discount status, subject to the validation rules above.

Method 3 - This option allows the user the option of simply entering the payment directly to the customer's account without applying it to any invoice. This will be reflected as an Unapplied Credit, affecting the total that the customer owes, but without altering the invoice applied data.

When the application process is completed, the screen is saved with the F9 key, which initates the following steps:

-   Revalidates all entries already described above.
-   Updates the invoice records by adding (previous Applied Amounts and Their Number lines are not overwritten) an applied multi-value entry line:

APPLAMT = Applied Amount for that invoice line on the screen, including sign
THEIR NO. = Check Number entered on the screen.

A second Applied Amount line is written if the discount was allowed, showing the Invoice as partly paid from the actual payment (PAY record), and partly from the CDE or CDC record generated equaling the Discount Amount.

1/3/95 Change - If Amt Remaining is zero, CLSDATE is updated with the current date.

- If the Balance Remaining on the Invoice record is zero, writes the current system date to the Date Paid field. (This field provides the basis for calculating average days to pay.)

- Adds a payment or credit transaction to the CUSBAL:

    ID = new record ID
    TRANTYPE = PAY or CM
    PROCUSID = from screen entry
    THEIRNO = Check or Credit Memo Number entered on the screen
    TRANAMT = Payment Amount entered on the screen, with a minus sign
    FORM = CHECK or CREDIT
    AUDNAME = User-ID from system
    AUDDATE = Date from system
    AUDTIME = Time from system
    COMMENTS = as entered on the screen
Added: CLSDATE = blank if REMAMT is greater than zero, System Date if = zero.

    For each invoice line applied on the screen with the check number/amount add a multi-value line in the payment transaction record including:

    OURNO = Invoice Number that the payment was applied to, either partially or fully
    APPLAMT = Associated amount applied to that invoice number.
Added: CLSDATE = blank if REMAMT is greater than zero, System Date if = zero.

- For each Invoice or Debit line where the application process included allowing of the prompt payment discount amount, the program generates a CUSBAL record as follows:

    ID = new record ID
    TRANTYPE = either CDE or CDC, depending on the Discount Date
    PROCUSID = from screen entry

THEIRNO = Check Number entered on the screen (credit allowed for prompt
    payment supplements the payment, in effect)

TRANAMT = Discount Amount calculated for this Invoice and shown on the screen
    (minus sign)

FORM = CREDIT

AUDNAME = User-ID from system

AUDDATE = Date from system

AUDTIME = Time from system

COMMENTS = null/blank

Added: CLSDATE = System Date

For each Payment Credit record generated in this way, add a multi-value line in the CDE
   or CEC transaction record including:

OURNO = Invoice Number that the credit was applied to,

APPLAMT = Associated amount applied to that invoice number, i.e., the
    Transaction Amount for the CDE or CDC record, including sign.

1/3/95 Change:

Update of BALSTAT table:

For each "Application Line" added to an Invoice or Debit Memo record, consisting of the amount that the payment processed reduced that invoice by, an update to the BALSTAT table is made, using the following steps:

Attempts retrieve an existing BALSTAT record, using the Customer ID that the payment was entered & applied with.

If the retrieval fails, a new BALSTAT record is created for that Customer ID.

Using the Applied Line data in the payment record for the Invoice or Debit Memo paid, creates a new M/V line in the BALSTAT record:

BALSTAT record	Source
CUSTID	As entered/validated on screen
OURNO	Invoice/Debit memo payment was applied to
APPLDATE	Current System Date
DOLLARAMT	= APPLAMT from payment application process + APPLAMT from associated discount credit entries.
DAYS	Current System Date minus 1st AUDDATE entry (creation date of the

invoice/debit record); i.e., the difference between the date the invoice was created and the date that this amount was paid on it.

End 1/3/95 Change

- When the updating process is complete, the program performs one of the following, depending on the mode it is running in:

Open Account Payment Entry - displays a message informing the user that the payment was processed successfully, and asks if the next payment is for the same customer (retain screen data, clearing only the payment data and restarting at the payment entry point), or not (clear whole screen, restart at the Procus search window.

Credit Memo Entry - clears the screen completely, restarting at the PROCUS search window, without option. This is to reduce the changes of inadvertent Credits from being applied to the wrong customer's records.

Application Only - checks retrieved Unapplied Payment/Credits data. If any records remain, retains the screen's data and restarts at the Unapplied Payment/Credits popup, ready for the next selection. If there are no records remaining to be applied (i.e., all payments/credits have been applied for this customer), the program clears the screen completely, restarting at the Procus Search window. No option is allowed.

Payment Reversal Entry & Application

Screen Data:

                          Payment Reversal & Application Entry

Customer ID x----------x   Name x----------------------x* Cust Type xxxx   *
Credit Status x--------------x* Terms xx   x----------------x   *   xxxx
                                                    xx x----------------x   xxxx

Tran ID x----x   Tran Date xx/xx/xx*   Their No x------x * Order No. x------x
Payment Amt $xxx.xx* Remaining Amount $xxx.xx*

Application Data:
Our No. *   Appl Amt*
x-----x $xxx.xx
x-----x $xxx.xx
x-----x $xxx.xx

 Related Early Payment Credit:
Tran ID x-----x   * Type xxx*   Amount $xxx.xx* Reverse Credit? (Y/N) x

Transaction Comments x--x
User-ID x---------x*   Tran Date xx/xx/xx* Tran Time xx:xx*

Customer Payments /TRANID Popup:

Tran ID	Tran Date	Pmt Amt	Rem. Amt	Their No
x-----x	xx/xx/xx	$xxx.xx	$xxx.xx	x-------x
x-----x	xx/xx/xx	$xxx.xx	$xxx.xx	x-------x
x-----x	xx/xx/xx	$xxx.xx	$xxx.xx	x-------x

Softkeys:

Shift + F? - Customer Balance Inquiry
Shift + F? = CUSBAL Detail Inquiry - shows full detail for selected Payment Transaction on screen.

Functional Logic

This program allows reversal of a previously entered and applied payment. It starts by
requiring identification of the customer, then of the payment that is to be reversed, then
performs the following:

• Creates a new debit memo type CUSBAL record reversing the effect of the previously
  entered and applied PAY type record reflecting the payment.
• Enters reversing application lines in all INV or Debit Memo CUSBAL records to
  which the payment being reversed was applied.

- Allows an option to reverse or not reverse associated discount credits allowed that were created during the original payment entry process.
- Creates a new debit memo type CUSBAL record reversing the effect of previously allowed early payment discount amounts, if present, and the option is taken.
- Updates the BALSTAT table with an adjusted day/dollars value for the Invoice(s) that are having applied amounts reversed.

The program functions upon selection from the menu by displaying the Entry window, with the cursor at the Customer ID field. Pressing the F2 key brings the PROCUS Search Engine window, with which the PROCUS table can be searched. Or, a known customer ID can be entered, which must be in the PROCUS table. If there is no FINPROFILE record corresponding to the otherwise valid PROCUS record, the program displays a warning message that there is no Financial Profile record, then continues, in either case to the Tran ID field.

A known PROCUS Transaction ID may be entered. Pressing the F2 key brings a popup containing all PAY type CUSBAL records for the entered customer ID. The format of the Customer Payments/TRANID popup is shown above. Once a Tran ID is known and selected, the program retrieves its data and displays it on the screen. It also attempts to retrieve an associated CDE or CDC transaction for the same THEIRNO and first AUDDATE. If present, the CDE or CDC record data is displayed in the Related Early Payment Credit fields.

When selected, the Transaction is retrieved and displayed, ready for reversing.

Next the cursor moves to the Reverse Credit? field, which is active only if there is an associated CDE or CDC record.

When the F9 key is pressed, the program prompts for confirmation, allowing an Escape back to the window if desired. Pressing the Escape key closes the window and returns to the menu. Pressing the F8 key clears the data entered and restarts the window at Customer ID.

The Update process includes the following functions:

- Displays messages informing the user that the posting process is being performed.
- Revalidation of entered data; Customer ID is valid, and the Customer ID on the selected PAY record is the same as the initial customer ID entered.
- Generates a new CUSBAL record, with a type of RVP to reverse the PAY record. Data fields are:

TRANID = Assigned by program
TRANTYPE = RVP

PROCUSID = same as entered/selected PAY record
TRANAMT = PAY record's TRANAMT with reversed sign (should be a positive value).
OURNO = PAY record's OURNO data
APPLAMT = PAY record's APPLAMT values, with reversed sign (should be a negative value)
THEIRNO = PAY record's THEIRNO data
FORM = PAY record's data
ORDERNO = PAY record's data
ORDERTYPE = PAY record's data
APPLDATE = current system date
AUDNAME = current system logon name
AUDDATE = current system date
AUDTIME = current system time

- If an associated CDC or CDE record was retrieved and the Reverse Credit? option taken was Yes, then an associated RVC record to reverse the CDC or CDE record is also generated.

  TRANID = Assigned by program
  TRANTYPE = RVC
  PROCUSID = same as entered/selected PAY record
  TRANAMT = PAY record's TRANAMT with reversed sign (should be a positive value).
  OURNO = PAY record's OURNO data
  APPLAMT = PAY record's APPLAMT values, with reversed sign (should be a negative value)
  THEIRNO = PAY record's THEIRNO data
  FORM = PAY record's data
  ORDERNO = PAY record's data
  ORDERTYPE = PAY record's data
  APPLDATE = current system date
  AUDNAME = current system logon name
  AUDDATE = current system date
  AUDTIME = current system time

- Each RVP and RVC record's applied line references are posted to the referenced OURNO INV and DRM records, where the reversed signs will create offsetting posting data that will "reopen" the INV and DRM records remaining amounts. Refer to the Direct Payment Entry program for application logic. The program clears the APPLDATE field if the result of the posting process is that the REMAMT (remaining amount) for any record is not zero after the posting process is complete and the record

is otherwise ready to be written. For each INV and DRM record having an applied line updating the record, these fields also have an additional line added at the end:

AUDNAME = current system logon name
AUDDATE = current system date
AUDTIME = current system time

A line is written to the customer's record in the BALSTAT table for each Invoice record affected by the application of the Debit Memo, including number of days and a reversed sign. This is to reverse the effect of the previously entered payment on the balance statistics for the customer.

When all RVP and RVC records have been written, and all referenced OURNO applied lines records have been retrieved, the new applied lines added and records rewritten, the program clears the window and associated memory, ready for the next entry.

Debit Memo Entry Window

Screen Data:

```
                Debit Memo Entry & Application
Customer ID  x-----------x   Name x----------------------x*  Cust Type xxxx        *
Financial Status x--------------x*  Terms xx   x----------------x            *              xxxx
                                              x----------------x              xxxx
Debit Memo No. x------x   Amount $xxx,xxx.xx

Enter or Select Apply To Transactions
```

Tran ID No.	Inv Date*	Order No.	Ord Type*	Inv No.*	Inv. Amt*	Rem Amt*	Amt to Apply
x---x	xx/xx/xx	x--x	xxxx	xxxx	$xxx.xx	$xxx.xx	$xxx.xx
x---x	xx/xx/xx	x--x	xxxx	xxxx	$xxx.xx	$xxx.xx	$xxx.xx
x---x	xx/xx/xx	x--x	xxxx	xxxx	$xxx.xx	$xxx.xx	$xxx.xx
x---x	xx/xx/xx	x--x	xxxx	xxxx	$xxx.xx	$xxx.xx	$xxx.xx

```
                                                   Unapplied Amount  $xxx,xxx.xx
Transaction Comments x------------------------------------------------x
User-ID  x---------x*  Tran Date xx/xx/xx*  Tran Time xx:xx*
```

F2 from first Trans ID field beings:

```
Transaction Search Window - INV records only.

        Invoices From xx/xx/xx To xx/xx/xx

        Press F9 to search for Invoice Transactions for this
        Customer.
```

```
        Select Invoices for Applying (Popup Delivered):
```

Tran ID	Order No.	Our No	Amt	Date
x---x	x-----x	x----x	$xxx.xx	xx/xx/xx
x---x	x-----x	x----x	$xxx.xx	xx/xx/xx
x---x	x-----x	x----x	$xxx.xx	xx/xx/xx

```
Select with Enter Key then press F9 to transfer to window
```

Functional Logic

This program allows entry of Debit Memos to provide the ability to directly enter and, if desired, application of an amount that will increase the amount a customer owes without

going through the Order-Ship-Invoice cycle. Examples would be correcting invoicing, payment and credit entry errors, or adding finance or interest charges to a customer's account. Adjusting of discrepancies between an amount owed and payment received would be another use.

The program functions upon selection from the menu by displaying the cleared window, with the cursor at the Customer ID field. Pressing the F2 key brings the PROCUS Search Engine, or a PROCUS ID may be entered if it is known. When the Enter key is pressed, the program then attempts retrieval of the customer's PROCUS record, and if present, the FINPROFILE record. If the PROCUS record is not present, the customer number is not known to the system and the entry is rejected. If the PROCUS record is present, but the FINPROFILE is not, a warning message is display "No Financial Profile Record, not an open account customer".

When the message is acknowledged, the program continues by retrieving the PROCUS data, and if available, the FINPROFILE data and displaying it on the screen, with the cursor at the Debit Memo Number field. The program retrieves the Global Default Debit Memo Number record, increments the value by one, displaying the result in the field. Or, the user can enter a unique number for this field. Next the amount of the Debit Memo is entered, which must be greater than zero.

Next the cursor moves to the Tran ID No. field. At this point, the user has several options:

1. Save without applying the Debit Memo to any Invoice records. The F9 key simply saves the data, creating a new DBM type CUSBAL record, with no applied to data.

2. Direct entry of Transaction ID Numbers - Enter one or more CUSBAL Tran ID numbers to retrieve INV type records for application. These must be INV type records and have the same PROCUSID as that entered on the screen initially. If not, the retrieval is rejected. Each successive entry completes a Apply to Transaction line on the screen. An Applied Amount entry is allowed after each retrieved record.

3. Search and select Invoice records - Pressing the F2 key causes the program to bring up the Transaction Search Window. A date range is entered, and when the F9 key is again pressed, the program searches for and retrieves CUSBAL INV type records for this PROCUSID for the Transaction Date range entered, displaying the results in a popup for selection. One or more of the retrieved records is selected with the Enter key. When the F9 key is pressed, the program returns the selected lines to the Entry screen for entry of applied amounts.

As each Applied amount value is entered (a line may be skipped by simply pressing the Enter key), the Unapplied Amount is updated to show the remaining value.

Transaction Comments is optional. User ID, Tran Date and Time are system values.

When entry is completed, the window is saved with the F9 key. Presave revalidation of all entries is performed before updating. The entered Debit Memo record is then saved with a type of DBM. The applied to references entered (OURNO & APPLAMT for each Invoice line) is included in the Debit Memo record, and is also added to the applied data list for the referenced Invoice CUSBAL records.

A line is written to the customer's record in the BALSTAT table for each Invoice record affected by the application of the Debit Memo, including number of days and a reversed sign.

When the update process is complete, the program clears the window, ready for the next entry.

Customer Open Financial Data Retrieval Subprogram

Screen Data:

None - Called from within other programs

Functional Logic

This program retrieves all <u>open</u> (i.e., with an Amount Remaining) invoice, payment, credit memo records, and customer order records that are not billed complete and recalculates totals that are displayed as though they are carried in the Financial profile record for a customer. This approach allows these data to be calculated on a real-time basis, retrieving all appropriate data records and recalculating data at the time the data is needed, rather than retrieve and recalculate all data during an overnight process when only some of it is actually needed at any one point in time. These data produced by the program include totals for:

- Unpaid Invoices, with subtotals by Aging Period
- Unpaid invoice subtotals by Order Type
- Unapplied Credits/Payments
- Unreleased on order amounts from Orders
- Released, not shipped amounts from Orders
- Shipped, not invoiced amounts from Orders
- Available Credit Amount

The program is called from within a window or processing program where a customer (PROCUS) ID is available, either by entry/selection by the User, or by selecting records from ORDERS, or FINPROFILE (Sold-To ID in the ORDERS record is used), is already present, updating that customer's financial data only, and where accurate invoice and order data is needed to calculate Available Credit. These programs include:

- Customer Financial Data Inquiry window
- Automatic Customer Order Release Generation
- Credit Override Approval of Order Releases
- Accounts Receivable Aging Report
- Any other report or window showing Open Customer Financial Data

A separate program and process is used to post cumulative sales history data to a variety of records. The retrieval logic for this program is the same in all cases, although each

calling program will not necessarily use all data retrieved by this program. The retrieval and calculation process includes the following steps:

- Retrieves the Aging Period Start Dates from the Age Group table data to define the aging periods to be used for subtotaling invoice amounts due.   These fields are calculated using the entered Aging Period values, which set the size of each aging period, and the number of periods that open invoice amounts are to be subtotaled into.

- Retrieves the customer's FINPROFILE record to obtain Credit Limit amount.

CUSBAL table records - for each customer performs the following:

- Retrieves all transactions with an Amount Remaining (REMAMT). These will be INV, DRM, PAY and CRM transaction types. The INV type records are invoices that have not been paid in full, while the PAY and CRM types are Payment or Credit Memo records that have unapplied amounts available

- Sorts the INV transaction types into AUDDATE (first line in the field only to get date created) sequence, calculating period subtotals using the Aging Period Start Dates, where the AUDDATE is greater than or equal to the Period Start Ddate, but less than the succeeding period's start date.   The last period contains all INV REMAMTs totaled for invoices with an AUDDATE greater than the last period's start date, regardless of how far in the past the AUDDATE is.

- Sorts INV transaction types into ORDTYPE sequence, calculating subtotals by ORDTYPE.

- Calculates the Open Invoice Total Amount by adding all the ORDTYPE subtotals.

- Either displays the resulting data on the window, or retains in memory for use by the calling program, creating a "pseudo updated" FINPROFILE record, in that the data appears to be in the record, but is in fact re-retrieved and calculated each time the outputs are needed.

- For each PAY or CRM transaction with an REMAMT greater than zero, adds the total REMAMT values and posts the result to the Total Unapplied Credit Amount (UNAPLCRD) field in the FINPROFILE data for that customer.

ORDERS table records - performs the following:

Retrieves all ORDERS records with a status of NEW, OK, REL, PC, or SC, using the Sold To Customer ID:

If the ORDSTATUS is NEW, or SC use the Order Total amount and do not perform the Order Detail record analysis that follows.

Order calculations build on two symbolic fields in the ORDERDTL records

RELAMT = {(QTYRNP+QTYPICK) x UNITPRICE} + TAX

SHIPAMT = (QTYSHIP X UNITPRICE) + TAX

Calculations for the order as a whole are performed by summing these order detail amounts into the order (header) record, then combining with other calculations performed for the order as a whole. These are performed as symbolic fields, activated when the record is viewed only, either for inquiry or report purposes. These other "building-block" symbolics in the ORDER record are:

ORDSHIPAMT = sum of ORDERDTL SHIPAMT fields + SHIPCHARGE + the sum of
    ADJAMT fields

ORDRELAMT = sum of ORDERDTL RELAMT fields + SHIPCHARGE + the sum of
    ADJAMT fields

ORDTOT = sum of all ORDERDTL ORDLINETOT fields + SHIPCHARGE + the sum
    of ADJAMT fields

Using these building blocks, additional symbolics calculate the fields used to track and
    update a customer's credit status:

Unreleased Amount - defined as the ORDUNRELAMT

    = ORDTOT minus ORDRELAMT

Released, Unshipped Amount - defined as ORDRNSAMT

    = ORDRELAMT minus ORDSHIPAMT

Shipped Not Invoiced Amount - defined as ORSNIAMT

    = ORDSHIPAMT minus ORDINVAMT

For all orders for the same customer, sum these fields and post the total to the indicates FINPROFILE record field:

    ORDERS field   FINPROFILE data

ORDUNRELAMT   UNRELTOT = Unreleased Order Amount
ORDRNSAMT   RNSTOT = Released Not Shipped Amount
ORDSNIAMT   SNITOT = Shipped Not Invoiced Amount

Calculates Net Balance Owed from:

Open Invoice Total Amount
minus Total Unapplied Credit Amount
= Net Balance Owed

Calculates Available Credit from:

Credit Limit (CRDLIM)
minus Net Balance Owed
minus RNSTOT
minus SNITOT
= Available Credit Amount (CRDAVAIL)

Open Account Invoice Generation

Screen Data:

None - program runs from Job Server.

Report Format - Product Order Invoices: for MER, PRTS, FG Order Types:

Co Name record   Page xx
                                    Invoice
Invoice No. xxxx   Invoice Date xx/xx/xx

Billed To: Shipped To:

x---------------------   -------x   x--------------------------------x
x---------------------   -------x   x--------------------------------x
x---------------------   -------x   x--------------------------------x
x---------------------   -------x   x--------------------------------x

Order No. x---------x   Ship Date xx/xx/xx   Orderded by: x----------------x
Date Ordered xx/xx/xx   Shipped Via x---------x Sales Person x-------------x
Special Shipping Instructions x--x

L/I	Part No.	Desc.	Unit Price	Tx	Qty Ord	Qty Prev Ship	Quantity Shipped &Billed	Quantity Back-ordered	Ext. Amt
x	x-----x	x-----x	$xxx.xx	x	x---x	x--x	x-----x	x-----x	$xxx.xx
x									
x	x-----x	x-----x	$xxx.xx	x	x---x	x--x	x-----x	x-----x	$xxx.xx
x	x-----x	x-----x	$xxx.xx	x	x---x	x--x	x-----x	x-----x	$xxx.xx
x	x-----x	x-----x	$xxx.xx	x	x---x	x--x	x-----x	x-----x	$xxx.xx

Notes: (customer notes) x--x
Linked Notes:
x---x
x---x

Adjustments*	
Reason	Adj Amt
x----x	$xxx.xx
x----x	$xxx.xx

Invoiced Subtotal	$xxx.xx
SalesTax	$xxx.xx
Shipping Charge	$xxx.xx
Adjustment Amt	<$xxx.xx>
Net TOTAL	$xxx.xx

_____

Report Format - RTN Order Type

Co Name record   Page xx
                        Repaired Unit Packing List /Invoice

Invoice No. xxxx   Invoice Date xx/xx/xx

Billed To: Shipped To:

x---------------------------x   x---------------------------------x
x---------------------------x   x---------------------------------x
x---------------------------x   x---------------------------------x
x---------------------------x   x---------------------------------x

Order No. x----------   Ship Date xx/xx/xx   Returned by: x----------------x
Rtn Auth Datexx/xx/x   Shipped Via x----------x Cust Service Rep x-------------x
Special Shipping Instructions x--x
UPS Tracker No's x--------------x, x--------------x, x----------------------x

RA No. L/I	Repaired Product & Service/ Part No.	Desc.	SN Unit Price	Tx	Quantity Billed	Ext. Amt	Unit Total
xxx-x	xx	x----------x	x---------x				$xxx.xx
x	x-----x	x-------x	$xxx.xx	x	x-----x	$xxx.xx	
x	x-----x	x-------x	$xxx.xx	x	x-----x	$xxx.xx	
x	x-----x	x-------x	$xxx.xx	x	x-----x	$xxx.xx	
xxx-x	xx	x----------x	x---------x				$xxx.xx
x	x-----x	x-------x	$xxx.xx	x	x-----x	$xxx.xx	
x	x-----x	x-------x	$xxx.xx	x	x-----x	$xxx.xx	

Notes: (customer notes) x---x
Linked Notes:
x--x
x--x

Adjustments*			Invoiced Subtotal	$xxx.xx
Reason	Adj Amt		SalesTax	$xxx.xx
x----x	$xxx.xx		Shipping Charge	$xxx.xx
x----x	$xxx.xx		Adjustment Amt	<$xxx.xx>
COD Chg	$xxx.xx		Net TOTAL	$xxx.xx

Functional Logic

Overview

This program is run on a periodic, scheduled basis from the Job Server (daily, twice daily, etc.) and will generate invoices for orders that were shipped to Open Account type customers that had Orders with TERMS that were Open Account type. Invoices for Prepaid or COD TERMS type orders are generated at shipment time.

An invoice is to be generated whenever a Shipment record exists but the INVNUM field is null, indicating that no corresponding Invoice record has been generated. Only two invoicing methods are supported, these are:

- Invoice Method 1 = one invoice for each SHIPMENTS record ID.
- Invoice Method 2 = generate one invoice for all SHIPMENTS records for this BILL-TO Customer that have not been invoiced

Depending on the option in the FINPROFILE record, shipment data is either placed on one invoice per shipment record, or grouped togther on one invoice at each run.

Invoice data is generated and written to the INVOICES table, with updates to the ORDERS and CUSBAL tables as well, then the Invoice Printing subprogram is called for each, generating the printed output. Invoice table update processes and printed invoice formats vary by Order Type. Currently two methods are supported:

- Product type orders, including MER, PRTS, and (future) FG products,
- Repaired Units, including RTN order type.

Current Standard Cost data is captured and stored in the Invoices record to provide repeatable Cost of Sales calculations and reporting.

Detailed Functions

The program is setup to execute on the Job Server on a pre-scheduled basis. The steps in its process are:

1. Selects SHIPMENTS records to be invoiced, indicated by a null in the INVNUM field.

2. The selected SHIPMENTS records are sorted by BILLTO Customer ID, or if blank, SOLDTO customer ID, to support the customer specific billing options, as shown in the FINPROFILE record for the customer.

3. The FINPROFILE record for each customer to be billed is retrieved to obtain the Invoicine Method. Currently, two methods are supported:

   - Invoice Method 1 = one invoice for each SHIPMENTS record ID.
   - Invoice Method 2 = generate one invoice for all SHIPMENTS records for this BILL-TO Customer that have not been invoiced

4. Retrieves the ORDERS record to obtain the TERMS for this Invoice, Bill to ID and associated Bill to Address, and tax rate.

5. The INVTOT value is checked, and if it is zero, (no prior invoices against this Order Number), then the following charges are added to the first invoice, as shown in the ORDERS record. These are not added to subsequent invoices for this Order Number.

    - Shipping Charges.
    - Adjustment Codes and associated Amounts

6. For each PART, the program retrieves the corresponding ORDERDTL record to obtain the Unit Price to be used in generating the Invoice's line item and extended amounts.

7. If the Order Type is MER, PRTS, or (future) FG, the SHIPMENTS record data is generated by reading each PART line in the SHIPMENTS and generating an INVOICES record PART line, pricing it as shown below. Refer to the MER. PRTS, FG Order Type Invoice table data reference table below.

    PARTQTY X Unit Price from ORDERDTL for the same PART value
    = Extended Amount

    Extended Amount X TAXRATE from ORDERS record for the Order Number
    = TAX

    Extended Amount + TAX = Total Extended Amount for line item

    Sum of all Total Extended Amounts = Invoice Total, plus if applicable, Shipping Charges & Adjustment Amounts.

8. If the Order Type is RTN, the driving Shipment record will only reflect the Units that were shipped,and requires a different invoicing method from product invoices. The Shipments record tells which R/O Numbers/Unit IDs were shipped, but does not include the Order Detail line items that constituted the cost for the repair. The method includes the steps shown below. Refer to the RTN Order Type Invoice Data reference table below.

    For each PART line in the SHIPMENTS record, retrieve the ORDERDTL records carrying the same Unit ID, These are then priced:

    An additional invoice line (not numbered) is generated for each repaired Unit ID that was shipped and is now being invoiced, and under which the related charges are shown (refer to the Invoice Format above for clarification of the arrangement).

    Unit Prices are obtained from the related ORDERDTL records, including those for both S (SERVICES) item types and I (inventory/product) item types.

The Extended prices are calculated, along with tax as the multiple of the Order Qty and Unit Price, plux tax.

Subtotals for each Unit are calculated and included in the line in the INVOICES record, and printed on the report format.

Invoice Total is the sum of all Repaired Units being invoiced together, including Shipping and Adjustment amounts for the first invoice against the Order.

8. When all invoice data for the SHIPMENTS record has been retrieved, priced, it is posted as follows:

    - An INVOICES record is created; the next Invoice Number is retrieved and used to identify the Invoice record.
    - A CUSBAL transaction record is created, using the INVOICES record ID just generated, and associated Invoice data.
    - The SHIPMENTS record's INVNUM field is updated by adding the new Invoice number to it. This prevents the SHIPMENTS record from being invoiced again.

7. For each INVOICES record generated, the appropriate Invoice Print subprogram is then called to print it from the data in the table (Product or RTN format).

8. The program continues processing the uninvoiced SHIPMENTS records until all have been invoiced.

MER, PRTS, FG (future) Order Types - Invoice Table (INVOICES) - Data Reference table. Use with Product Invoice format, shown above.

Field Name	S/M	Source	Comment
INVNUM	S	Program	Next incremental record ID
ORDNUM	S	ORDNO in STAGED	
SOLDTO	S	SOLDTO customer in ORDERS	
BILLTO	S	BILLTO customer in ORDERS	
BILLTOADDR	M	Bill to Address in ORDERS	
SHIPTOADDR	M	Ship to Address in ORDERS	
TERMSLIST	S	Left Blank	
PRICELIST	S	Left Blank	

Field	Type	Source	Notes
TAXPROC	S	ORDERS	
TERMS	S	TERMS in ORDERS	
INVDATE	S	Program	Current System Date
TOTSHIP	S	Ship Charge from ORDERS	
TOTTAX	S	Total Tax From ORDERDTL's TAX for items billed/shipped	
ITYPE	M	ITYPE from ORDTL for PART	One occurrence for each ITYPE billed
OURLINE	M	LINENUM from ORDERDTL for this PART	Key to AMV stack;
POLINE	M	blank	
PART	M	PARTNO from STAGED	
PARTDESC	M	PARTDESC from ORDERDTL for this PART; if blank, use PART_MASTER	
QTY	M	Qty shipped this Shipment & Invoicing process	
UNITPRICE	M	UNITPRICE from ORDERDTL for this PART	for PART & LINENUM
TAX	M	TAX from ORDERDTL for this PART for quantity shipped this process	
SERIALS	M		
BTYBO	M	Remainder of ORDQTY minus QTY	
ORDQTY	M	ORDQTY from ORDERDTL for this PART & LINENUM	
PRDCODE	M	left blank	
SHIPPERS	M	SHIPMENTS record ID for items shipped, Invoiced this process	
CUSTNOTES	S	CUSTNOTES in ORDERS record	
AUDNAME	S	User-ID of person running program	System Logon value
AUDDATE	S	Date invoice record generated	System date
AUDTIME	S	Time Invoice record generated	System Time
ADJCODE	S	ADJCODE in ORDERS record	
ADJAMT	S	ADJAMT in ORDERS record	
PAYIDS	M	Left blank	
PAYAMT	M	Left blank	

Comment [PD1]: Page: 82

OURNOS	M	Left blank	
APPLAMTS	M	Left blank	
REMAMT	M	Left blank	
LINKEDNOTES	M	Linked Standard Notes records	Used to print standard text on Packing List and/or invoice
		Unit Standard Costs for Cost of Sales	Associated with PART lines.
STDMTLCST	M	Standard Material Cost	Std Costs from Part Master
STDLABCST	M	Standard Labor Cost	If I/Type is Services, retrieves Std HRS & Std Rate from SERVICES to calc Std Labor Cost; otherwise from Part Master
STDOMCST	M	Standard O/Mfg Cost	Part Master
STDOVCST	M	Standard Overhead Cost	Part Master
STDBURCST	M	Standard Burden Cost	Part Master
STDFRTCST	M	Standard Freight Cost	Part Master

RTN Order Type - Invoice Table (INVOICES) - Data Reference table (Repaired Units Shipped to Open Account Customers). Use with Repaired Units Invoice Format, shown above.

Summary - The Invoice record for a RTN (Repair Order) contains extra lines to structure and associate the Order Detail charges for each Unit being billed on this Invoice. As such, it is not driven from the Shipments record directly, unlike product/parts shipments. Invoicing is also for Services performed in repairing the unit, which are Order Detail lines.

Field Name	S/M	Source	Comment
INVNUM	S	Program	Next incremental record ID
ORDNUM	S	ORDNUM from ROTS record & ORDNUM from ORDERS	
SOLDTO	S	SOLDTO customer in ORDERS record	
BILLTO	S	BILLTO customer in ORDERS record	
BILLTOADDR	M	Bill to Address in ORDERS	
SHIPTOADDR	M	Ship to Address in SHIPMENTS	
TERMSLIST	S	Left Blank	

PRICELIST	S	Left Blank	
TAXPROC	S	ORDERS	
TERMS	S	TERMS in ORDERS	
INVDATE	S	Program	Current System Date
TOTSHIP	S	Ship Charge from ORDERS	
TOTTAX	S	Total Tax From ORDERDTL's TAX for items billed	
ITYPE	M	ITYPE from ORDTL for PART Extra Line for Product, Description & Unit ID, followed by OrderDtl charge lines	One occurrence for each ITYPE billed Identifies Unit repaired, so following charge lines are associated with the appropriate unit.
OURLINE	M	LINENUM from ORDERDTL for this PART	Key to AMV stack;
POLINE	M	blank	
PART	M	PART from ORDERDTL	Can be a Service; can be duplicated for multiple Units, once for each unit.
PARTDESC	M	PARTDESC from ORDERDTL for this PART; if blank, use PART_MASTER	If ITYPE is Services, and Desc is blank, retrieve from Services Master
QTY	M	Qty sold from ORDERDTL for this Unit	
UNITPRICE	M	UNITPRICE from ORDERDTL for this PART	for PART & LINENUM
TAX	M	TAX from ORDERDTL for this PART	
SERIALS	M	Unit ID for each group of charge lines	
BTYBO	M	Left blank	
ORDQTY	M	Left blank	
PRDCODE	M	Product Code (from Unit ID)	
SHIPPERS	M	SHIPMENTS record ID for repaired units shipped, Invoiced this process	
CUSTNOTES	S	CUSTNOTES in ORDERS record	
AUDNAME	S	User-ID of person running program	System Logon value
AUDDATE	S	Date invoice record generated	System date
AUDTIME	S	Time Invoice record generated	System Time

Comment [PD2]: Page: 85

ADJCODE	S	ADJCODE in ORDERS record	
ADJAMT	S	ADJAMT in ORDERS record	
PAYIDS	M	Left blank	
PAYAMT	M	Left blank	
OURNOS	M	Left blank	
APPLAMTS	M	Left blank	
REMAMT	M	Left blank	
LINKEDNOTES	M	Linked Standard Notes records	Used to print standard text on Packing List and/or invoice
		Unit Standard Costs for Cost of Sales	Associated with PART lines.
STDMTLCST	M	Standard Material Cost	Std Costs from Part Master
STDLABCST	M	Standard Labor Cost	If I/Type is Services, retrieves Std HRS & Std Rate from SERVICES to calc Std Labor Cost; otherwise from Part Master
STDOMCST	M	Standard O/Mfg Cost	Part Master
STDOVCST	M	Standard Overhead Cost	Part Master
STDBURCST	M	Standard Burden Cost	Part Master
STDFRTCST	M	Standard Freight Cost	Part Master

Field Data Source Reference table - CUSBAL table Invoice record:

Field Name	S/M	Data Source	Comments
ID	S	Program	Incremental, non-significant ID;
TRANTYP	S	Program = INV	
PROCUSID	S	Bill TO or, if blank, SOLDTO in INVOICES & (ORDERS) record	
OURNO	M	= INVOICES record ID just generated	Single value field usage for INV types
APPLAMT	M	left blank	

TRANAMT	S	Program: sum of TOTITYPE lines + TOTAX + TOTSHIP in INVOICES record, i.e. Invoice total	
AUDNAME	S	Program	Logon User-ID
AUDDATE	S	Program	current system date
AUDTIME	S	Program	current system time
THEIRNO	M	Left blank	
COMMENTS	S	NOTES from ORDERS record	
ORDERNO	S	Order Number from INVOICES record	
ORDERTYPE	S	ORDERTYPE from ORDERS record with this ORDERNO	
APPLDATE	S	Left blank	

Reports & Inquiries

Aged Receivables Functions - Overview

The Aging of Receivables capability has several aspects:

- A window to define, change aging periods to be used, and associated definitions for each period,
- A program to dispaly the aging information for a customer on-line.
- A program to update and re-post customer financial data, including open invoice totals and open order amounts; this program is run nightly for all open account customers, and upon request for a single customer, runnable from several points in the system where up to the minute data may be needed.
- A program to print a standard aging report, including a totals only summary report version.

The data for aging of customer accounts is maintained in the FINPROFILE record for each open account customer, consisting of a list of invoices with open acounts owed, and a list of unapplied payments. When the data is retrieved, using dictionary symbolics, the totals for each time period and total current balance owed are computed from these detailed lists. The lists are updated real-time, as invoices are added and payments applied.

The result is that aging data is available whenever it is needed, yet there is no computer processing time to generate a complex batch report that is out of date as soon as it is printed.

Aged Accounts Receivables Report

Screen Data:

```
              Aged Accounts Receivable - Options

Select Customer Balance Data for Customers:

Customer ID          Name
x-------x      x-----------------x *(or ALL)
x-------x      x-----------------x*
x-------x      x-----------------x*


Sort Options:    x

1.    Customer Name (alphabetic), Invoice Due Date
2.     Customer ID (ascending  sequence), Invoice Due Date

Detail Options (select one):  x

1.    Full Detail- Invoice Totals, subtotals by Customer
       w/ Customer Totals & Summary Page
2.     Customer Totals - one line per customer, w/ Summary        Page
3.    Summary Page only  (aging  Grand totals only)
```

*Display only fields

Report Format:

Co Name record
x/xx/xx xx:xx (date/time printed)   Page xx

Aged Receivables
(selection/sort options selected)

Invoice No	Type	Their No	Date	Rem. Amt	Days Open	Due Date
Invoice Totals Option						

Customer ID x---------x Name x---------x Financial Status x-----------x

Invoice No	Type	Their No	Date	Rem. Amt	Days Open	Due Date
x--x	xxx		xx/xx/xx	$xxx.xx	xxx	xx/xx/xx
x--x	xxx		xx/xx/xx	$xxx.xx	xxx	xx/xx/xx
x--x	xxx		xx/xx/xx	$xxx.xx	xxx	xx/xx/xx
	xxx	x---x	xx/xx/xx	$xxx.xx	xxx	xx/xx/xx

Cust Total :

Age Period	Period Amt
x-----x	$xxx.xx
x-----x	$xxx.xx
x-----x	$xxx.xx
Unappl Pmt/Credits	($xxx.xx)

Cust ID   x-----xTotal: $xxx.xx

Summary Page - Total All Customers:

Age Period	Period Amt
x-----x	$xxx.xx
x-----x	$xxx.xx
x-----x	$xxx.xx
Unappl Pmt/Credits	($xxx.xx)
Grand Total	$xxx.xx

Functional Logic

**Upon selection from the Report Manager menu, the program offers a selection of
one, a short list of customer IDs, or ALL customers for which aging data is to be
retrieved and printed, and options for the level of detail to be generated on the
report. It then generates the report from CUSBAL table data.**

The Invoices Detail option shows both open INV type records as well as PAY and CRM
type transaction records.

The report produced is a relatively standard accounts receivable aging report, including
listing of specific invoices that are shown as unpaid, unapplied payments/credits, and
subtotals for each customer according to the aging group day periods.   It is run from the
Report Manager, and can be submitted to the Job Server, to be run at a later time. Or, if

desired, it can be run from a local workstation, which would be selected if only one or two customer's data were to be printed.

The program functions upon selection from the Report Manager menu, by displaying an option selection screen to allow entry of selected customers to have aging reports printed, or the selection of ALL. Also available are several sort options, and options to generate full invoice detail, including part numbers, quantities and prices, a semi-detail, which has one line for each invoice (no part number level detail), or only summary total lines for each customer, omitting all individual invoice detail. The program uses the AGEGRP table to categorize open invoices into subtotals by day period.

Initially, the program retrieves the AGEGRP set of day values from the AGEGRP codes table. These values determine the number of periods, and the number of days in each consecutive period.

Next, for each customer selected and whether the summary page only option was selected, the program performs the following to generate the aging data:

Work Table Dictionary:

ID = PROCUSID
Name = Customer Name
Financial

- Opens the work table used to organize and format the data for reporting.
- Retrieves the AGEGRP table to set up the aging categories.
- Retrieves all CUSBAL records for the selected customers with a Remaining Amount greater than zero. Each record is written to the work table including its associated Customer Name, retrieved from the associated PROCUS record, and the Financial status, retrieved from the customer's FINPROFILE record. If there is no FINPROFILE record, the program inserts the text "no Financial Profile record."
- Sorts the Work table into either Customer ID or Customer Name sequence, depending on the option selected.
- Calculates the Aging Period Totals for each period, using the AGEGRP periods setup initially.

- Continues through all customers meeting the selection option criteria until complete.
- Writes the report data as shown in the accompanying format(s).

Customer Financial Inquiry

Screen Data:

```
                    Customer Financial Inquiry

Customer ID x-------x  Name x-------------------x          CustType        xxxx
                                                                           xxxx
Financial  Status xxxx  x------------------x               Floor Co ID x--------x
Current Terms        x-------------------x                 x-------------------x(1)
                     x-------------------x                 Sales Rep ID x--------x
                                                           S/R Name x-----------x
Credit Limit              $xxx,xxx.xx                      Agreement ? xxx
   Aging  Days      xxx*   $xxx,xxx.xx*                    Credit App? xxx
                    xxx*   $xxx,xxx.xx*                    Acct Open Date xx/xx/xx*
                    xxx*   $xxx,xxx.xx*                    High Balance $xxx,xxx.xx
Total Open Invoices $xxx,xxx.xx*               High Bal. Date   xx/xx/xx
Unapplied  Cr. Total $xxx,xxx.xx*
Current Balance     $xxx,xxx.xx*                           Avg Pay Dollar/Days  xxx*
  Available Credit   $xxx,xxx.xx*


Open Orders:
Unreleased  Total           $xxx,xxx.xx*          Billed MTD $xxx,xxx.xx*
Released, Not Shipped Total  $xxx,xxx.xx*      Billed YTD  $xxx,xxx.xx*
Shipped Not Invoiced Total   $xxx,xxx.xx       *

Financial Status Notes x----------------------------------------------x

Other Notes x--------------------------------------------------------x

Linked to ID/Names:
x-----x      x--------------------------------------x
x-----x      x--------------------------------------x
```

(1) Floor Co name

Callable Windows:

Shift + F1 to call PROCUS addresses, including Alt addresses.

Returned display is:

```
          Customer Addresses

Cust ID  x------x  Name x--------------------------x

Ad Type   Street                      City          St      ZIP
xxxx x--------------------------------x x-------------x  xx         xxxxx(1)
```

```
xxxx x-------------------------------x x-------------x xx      xxxxx
xxxx x-------------------------------x x-------------x xx      xxxxx
xxxx x-------------------------------x x-------------x xx      xxxxx
```

(1) First line is always MAIN, which is main PROCUS address. Other lines are alternate addresses.

Shift + F2 to call PROCUS phones. Returned display is:

```
              Customer Phones

Cust ID  x------x  Name x-------------------------x

Type      Phone                 Ext     Description
x----x    x-----------------x   x---x   x-------------------------x
x----x    x-----------------x   x---x   x-------------------------x
x----x    x-----------------x   x---x   x-------------------------x
```

Shift + F3 to access Stores - brings up selection popup showing all Stores, or goes directly to the Store Inquiry window:

```
Store ID xxxx            Dealer ID/Name xxxxxxx  x--------------------x
Nickname  xxxxxxxx
Address & other data in STORES record.
```

Shift + F1 from within the Store Inquiry window displays the alternate addresses for that Store record. When the field is accessed, the Phone engine is called.

Shift F4 to call the Open Amounts Detail List. Returned display is:

```
         Open Invoices & Unapplied  Payments/Credits Detail*

Cust ID  x------x  Name x-------------------------x
      Open  Invoices                               Unapplied Payments

                   Remaining         Pmt   Their
Our No.   Inv Date  Amt              Form   No      Amount
x----x    xx/xx/xx  $xxx,xxx.xx      xxxx   x----x  $xxx,xxx.xx
x----x    xx/xx/xx  $xxx,xxx.xx      xxxx   x----x  $xxx,xxx.xx
x----x    xx/xx/xx  $xxx,xxx.xx      xxxx   x----x  $xxx,xxx.xx
x----x    xx/xx/xx  $xxx,xxx.xx      xxxx   x----x  $xxx,xxx.xx
          Total     $xxx,xxx.xx             Total   $xxx,xxx.xx
```

Soft keys from Invoice Lines:

Shift + F1 brings up Invoices Inquiry to show full invoice detail
Shift + F2 brings up CUSBAL record to show Customer Balance Data Detail:

Balance Record Detail Popup:

Tran ID	Tran Date	Tran Amt	Our No	Appl Amt	Pmt Form	Their No	Remaining Amt
xxxx	xx/xx/xx	$xxx.xx	xxxx	$xxx.xx	xxxx	xxxxx	$xxx.xx
				$xxx.xx	xxxx	xxxxx	
				$xxx.xx	xxxx	xxxxx	

Shift + F5 to call the Open Orders Detail List. Returned display is:

```
              Open Customer Orders Detail

Cust ID  x------x  Name x--------------------------x

              Order Total    Rel'd Tot      Ship'd Tot     Inv'd Tot
Order No.
x------x      $xxx,xxx.xx    $xxx,xxx.xx    $xxx,xxx.xx    $xxx,xxx.xx
x------x      $xxx,xxx.xx    $xxx,xxx.xx    $xxx,xxx.xx    $xxx,xxx.xx
x------x      $xxx,xxx.xx    $xxx,xxx.xx    $xxx,xxx.xx    $xxx,xxx.xx
x------x      $xxx,xxx.xx    $xxx,xxx.xx    $xxx,xxx.xx    $xxx,xxx.xx
Totals        $xxx,xxx.xx    $xxx,xxx.xx    $xxx,xxx.xx    $xxx,xxx.xx
```

Shift + F6 to call the Updated By List. Returned display is:

```
    Financial  Profile Record Updated By

Updated by   Date           Time
x----------x  xx/xx/xx                xx:xx
x----------x  xx/xx/xx                xx:xx
x----------x  xx/xx/xx                xx:xx
x----------x  xx/xx/xx                xx:xx
```

Shift - F7 to call the Statement Cycle Detail. Returned display is:

```
   Statement Cycle Detail

Statement Cycle Number xxxx       Invoicing Method x
Statement Generation Dates
        xx/xx/xx
        xx/xx/xx
        xx/xx/xx
        xx/xx/xx
```

Functional Logic

This window retrieves and displays all dealer, rep, or distributor financially related data from the PROCUS and Financial Profile records. When called from the menu or from within another window, it displays the window, with the PROCUS search engine's window displayed. The search parameters may be entered, F9 pressed to retrieve them, or the Escape key will allow direct entry of the Customer Number (ID). The F2 key will recall the PROCUS Search Engine. The PROCUS ID that is selected or entered are then used to attempt retrieval of FINPROFILE records, which may or may not be present. If a PROCUS record is present, the search process will return an ID, but the program will display an error message if the FINPROFILE for that customer ID is not present.

In order to generate the open customer amounts and orders data, the Customer Open Financial Data Update Subprogram is called. This program returns its data to an area in Commons (an array in memory), which the window(s) then use to retrieve data for the display.

Once the main screen is displayed, othere screen's data is retrieved, calculated where necessary, and displayed by using the function keys, including:

- Address data, including alternate addresses - Shift + F1
- Phone data, including company phones - Shift + F2
- Stores access - Shift + F3
- Open Invoice & Unapplied Amounts Detail - Shift +F4
- Open Orders Detail - Shift + F5
- Undated By List - Shift + F6
- Billing Cycle Detail - Shift + F7

Customer Credit Controls Report

Screen Data

Sort Options:
    By Name
    By Cust ID

Report Format: (landscape)

co Name record
xx/xx/xx xx:xx (date/time printed   Page xx
                        Customer Credit Controls
                        (Sort Option selected)

Name Cust ID Cust ID/ Name	dba Name	Cust Type	Bill To Address	Floor Co ID	Acct Op Date	Cr Lim it	Fin. Sts	Pmt Terms	Cred App?	Fin Stat Notes	Other Notes
x---x	x---x	xxx	x----x	x--x	xx/xx	$xz	xx	x---x	x	x---x	x---x
x-----x		xxx	x----x					x---x			
		xxx	x----x					x---x			
x---x	x---x	xxx	x----x	x--x	xx/xx	$xz	xx	x---x	x	x---x	x---x
x-----x		xxx	x----x					x---x			
		xxx	x----x					x---x			

Functional Logic

This report lists all credit & related control information for open account customers. These data are used as references and to control the Automatic Order Release process, and to release staged orders for Shipment (including both product orders and repaired units).

Open Prepayments Required Report

Screen Data

None - no selections - Run from Report Manager

Report format:

Co Name record)
xx/xx/xx xx:xx (date/time printed)   Page xx
                         Open Prepayments Required by Order No.

Order No	Ord Typ	Lst Updt	Cust Name	Pmnt Form	Card No	Exp Date	Stgd Amt	Prior Pmts ID	Prior Pmt Rem. Amt	Pmt Req'd
x--x	xx	xx/xx	x---x	xxxx	x---x	xx/xx	$xxx	xxx	$xxx	$xxx
								xxx	$xxx	
x--x	xx	xx/xx	x---x	xxxx	x---x	xx/xx	$xxx	xxx	$xxx	$xxx

Functional Logic

This report lists all records in the PREPMTS table by Order number.   Run from the Report Manager, upon selection it retrieves and sorts sll PREPMTS records, listing relevant fields in the PREPMTS records.

Records in this table are added to by the Pick/Issue an Order to Staging, and are cleared by the PrePayment Entry program.

Data Sources for the report are:

Order No = ORDERNO
Ord Typ = Order Type from ORDERS record for this ORDERNO
Lst Updt = Latest value in the AUDDATE list
Cust Name = Customer Name retrieved from the PROCUS table for SOLDTO
Pmt Form = PAYFORM
Card No = CARDNUM
Exp Date = EXPDATE
Stgd Amt = STAGEDAMT
Prior Pmts ID = PAYIDS
Prior Pmt Rem. Amt = REMAMTS for associated PAYID line
Pmt Req'd = PMTREQD

Rejected Order Release Report

Screen Data

None - no selection options.

Report Format:

Co Name record
xx/xx/xx xx:xx (date/time printed)   Page xx
                              Rejected Order Releases

Cust ID	Cust Name	Order No	Ord Typ	Ord Status	Part	Qty	Rej Amt
x--x	x-------x	x-----x	xxxx	xxxx	x---x	x--x	$xxx.xx
x--x	x-------x	x-----x	xxxx	xxxx	x---x	x--x	$xxx.xx
x--x	x-------x	x-----x	xxxx	xxxx	x---x	x--x	$xxx.xx
					Cust	Total	$xxx.xx
x--x	x-------x	x-----x	xxxx	xxxx	x---x	x--x	$xxx.xx
x--x	x-------x	x-----x	xxxx	xxxx	x---x	x--x	$xxx.xx
x--x	x-------x	x-----x	xxxx	xxxx	x---x	x--x	$xxx.xx
					Cust	Total	$xxx.xx
					Total	Unreleased	$xxx.xx

Functional Logic

This report retrieves and prints, in Sold to Customer sequence, orders that were processed by the Automatic Order Release process, but rejected due to either Financial Credit Status reasons, (HOLD or TERMinated), or releasing the items and quantities released would have driven the Available Credit negative.

These Orders may have either all or only part of their ordered quantities selected for releaseing by the Automatic Order Release process. The Order Numbers and associated items and quantities are those that fell within the Release Through Date window only, and have not previously been released. Other items released but not shipped may still be in the To Be Picked or Staged steps in the process. These quantities are included in the Available Credit calculations.

The report shows the Unreleased data list, carried in the ORDERS record, that is updated by the Automatic Order Release process. The same list is accessed and displayed by the Credit Override program, so Rejected Order Releases can, if desired, be printed out with this report prior to performing the Credit Override process, which will release these and only these quantities.

Upon selection from the Reports Menu causes the program to execute, retrieving all ORDERS records with data in the Unreleased items list, sorts them into Customer ID sequence, then generates the report in the format shown above.

Customer Name is retrieved from the PROCUS record, using the Customer ID, and Description is retrieved from the Part Master table for that part number.   Subtotals are generated for each Customer ID, and for the Total Unreleased.

Repair Statement Printing

Screen Data:

None - Job Server based

Report format: (should match closely the exiting Repair Statement format, an example of which is attached); Uses letter head stationary as the print medium.

```
          (Bill To Address label block)*          (Bill to Cust ID)* x--------x
          x----------------------x
          x----------------------x
          x----------------------x
```

REPAIR STATEMENT   OPEN ITEMS AS OF (print date)   Page xx

RA#	SN	CUST NAME	SHIP DATE	RA TTL	PAY MENTS	BAL DUE	TRMS
x---x	x-----x	x---x	xx/xx/xx	$xxx.xx	$xxx.xx	$xxx.xx	x----x
x---x	x-----x	x---x	xx/xx/xx	$xxx.xx	$xxx.xx	$xxx.xx	x----x

(Aging Data)*
Current $xxx.xx   31-60 Days $xxx.xx   61-90 Days $xxx.xx   Ovr 90 $xxx.xx

Standard printed comments:
Please pay from this statement.
For proper credit, please include RA Number with your payment

*items in parentheses are for explanation and are not printed.

Functional Logic

This program prints a "repair statement" containing all RO and Spare Parts (and if entered, open account merchandise orders) for a customer.

It is designed to be run on a monthly basis, and will print all open invoices for the customer (and unapplied payments) in the CUSBAL table at that time. The FINSTAT program is called for each customer during the cycle to develop the aging data.

When initiated, the program selects all INV type CUSBAL records with a REMAMT. The records are sorted by Customer ID, then each statement page(s) are generated. At

the end of each customer's Invoice data, the FINSTAT program is called to calculate and retrieve the aging data, which is printed on at the end of the statement for each customer, before starting the next customer's statement data.

Data Sources:

Bill to Address data	Orders record, obtained from INVOICES record for OURNO in CUSBAL
Bill to Cust ID data	CUSBAL record
RA#	RO Number, retrieved from ORDERS record from INVOICES record for OURNO in CUSBAL
SN	Unit ID from ROTS record
CUSTNAME	OWNER ID's Name, from ROTS record, if different from Bill to Cust ID on statement
SHIPDATE	first AUDDATE in CUSBAL record
RATTL	TRANAMT in CUSBAL record
PAYMENTS	total of APPLAMTS in CUSBAL record
BALDUE	REMANT in CUSBAL record
TRMS	payment TERMS in INVOICES record for OURNO in CUSBAL.
Aging data block	Aging periods & associated amounts generated by FINSTAT.
Text	New Global Default record to contain Statement Std Text; its contents

Full Statement Printing

Screen Data:

None - Job Server based

Functional Logic

This program is designed to be run on a period basis, i.e., once a month for each open account customer. It uses the Billing Cycle Calendar and billing cycle numbers in each FINPROFILE record to determine which customers are to have their statements generated during this run.

The program functions by selecting those customer that either have no billing cycle value in their FINPROFILE record, in which case the program places a "1" in the field, then uses it. This cycle causes a statement to generated in the first run of the program after calendar month end.

Essentially, for each customer having a statement printed, the program retrieves and prints the Customer Balance data for that customer, in date sequence for all open items in the list.

Posted Payments Received Reports

Screen Data

Selection Options:
- Date From xx/xx/xx To xx/xx/xx
- Order Types (ALL or selected)
- Payment Form (ALL or selected)

Sort Options:
- By Order Type, then Form, then Date
        Subtotals by Form, Order Type, Grand Total
- By Form, then Order Type, then Date
        Subtotals by Order Type, Form, Grand Total
- By Date, then Form
        Subtotals by Form, Date, Grand Total

Report Format:

Co Name record
xx/xx/xx xx:xx   Posted Payments Received   Page xxx
                          Sorted by (sequence selected)

Pmt Form	Order Type	Tran Date	Cust ID	Name	Our No.	Order Status	Their No.	Trans ID	Trans Amt
xxxx	xxxx	xx/xx/xx	x----x	x--------x	x------x	xxxx	x-----x	xxxxx	$x,xxx.xx
xxxx	xxxx	xx/xx/xx	x----x	x--------x	x------x	xxxx	x-----x	xxxxx	$x,xxx.xx
xxxx	xxxx	xx/xx/xx	x----x	x--------x	x------x	xxxx	x-----x	xxxxx	$x,xxx.xx

Selected Subtotals: $xxx,xxx.xx
        -Form Total
        -Date Total
        -Order Type Total
        -Grand Total

Functional Logic

This program selects transaction records from the Customer Balance table (CUSBAL) having a Transaction Type of "PAY" (payment) according to the selection option entered. The use of the report is to create reports to match with specific groups of sales drafts, checks, etc. for cash receipts management purposes.

The program functions upon selection from the Report Manager by presenting the selection option window, which accepts entry of date ranges, order types and payment form options, then one of several sort sequences, each of which has an accompanying set of subtotals.

When the F9 key is pressed, the program selects the CUSBAL transactions according to the selection criteria, sorts them and produces the report, to either the screen or printer in the format shown above.

Sales Invoice Register

Screen Data:

- Invoices with dates from xx/xx/xx to xx/xx/xx

Report Format: see INVGRP.DOC for detailed report layout.

Functional Logic

This program reads the INVOICES table and selects invoice records that meet the date range selection entered. The selected record data is then sorted by order type and printed.

Order related data is obtained via symbolic from the ORDERS record, using the OURNUM field contents. If there is no corresponding reference, this data is simply left blank on the report, with an Order Type of null, which places these records at the first of the report.

Part Description is obtained from the Invoice records PARTDESC field, if any data is present. If it is blank/null, it is obtained via symbolic from the Part Master record for that PART field value. For most order types, this will be a record in the Part Master table.

All other data is obtained from the INVOICES record. Some fields are symbolic calculations from Unit Price

Cost of Sales Reports

See SLSCST.DOC for report format

Functional Logic

This program reads the INVOICES table and selects invoice records that meet the date range selection entered. The selected record data is then sorted by order type and printed. It is used to relieve inventory at standard cost for items that have been sold from inventory, and to create cost of sales entries for Income statement purposes.

For non-inventory line item types, such as Extended Warranty (EXWAR) and Services (S) the report will return zeros at this time.

Order related data is obtained via symbolic from the ORDERS record, using the OURNUM field contents. If there is no corresponding reference, this data is simply left blank on the report, with an Order Type of null, which places these records at the first of the report.

Part Description is obtained from the Invoice records PARTDESC field, if any data is present. If it is blank/null, it is obtained via symbolic from the Part Master record for that PART field value. For most order types, this will be a record in the Part Master table.

Standard Cost for L/I Type "I" (inventory items) is obtained from the Total of all Current Standard Unit cost fields in the Part Master for each line item Part Number.

All other data is obtained from the INVOICES record. Some fields are symbolic calculations from Unit Price

Customer Payments and Credits Report

Screen Data:

Seleciton Options:

Date From xx/xx/xx To xx/xx/xx
Customer ID's   x------x
                  x------x
Print Zero Amts Remaining? (Y/N)

Report Format:

Co Name record
xx/xx/xx xx:xx   Customer Prepayment Reconciliation   Page xxx
                    From xx/xx/xx To xx/xx/xx - (selection option)

Cust ID	Name	Order No	PmtAmt	Pmt Form	Their No	Inv No	ApplAmt	Tran Date	Amt Rem
x---x	x----x	x---x	-$xxx.xx	xxxx	x---x	x---x	$xxx.xx	xsx/xx/xx	-$xxx.xx
						x---x	$xxx.xx		
						x---x	$xxx.xx		
x---x	x----x	x---x	-$xxx.xx	xxxx	x---x	x---x	$xxx.xx	xsx/xx/xx	-$xxx.xx
						x---x	$xxx.xx		

Functional Logic

This program retrieves CUSBAL table records with a TRANTYP of PAY, sorts them by
PROCUSID, then by ORDERNO to obtain and group records by ORDER. Since
prepayments are Order specific, this will group any multiple prepayments for the same
Order Number together.

Dealers & Stores Report

Screen Data
None - no options: Run from Report Manager

Report Format

Co Name record

Cust ID	Cust Name	Main Address	Store Nickname	Store ID	Fox Base ID	Store Address
xx/xx/xx xx:xx		Dealers with Stores				Page xx
x--x	x-------x	x-------x	x-----x	xxxx	x----x	x--------x
			x-----x	xxxx	x----x	x--------x
			x-----x	xxxx	x----x	x--------x
x--x	x-------x	x-------x	x-----x	xxxx	x----x	x--------x
			x-----x	xxxx	x----x	x--------x

Functional Logic

This report is driven from the STORES table, and shows via Procus references in the STORES records which Dealer (PROCUS ID) that the store belongs to. It also shows address information for each store, and for the related "parent" master Customer (PROCUS) record.

Since the report is driven from the STORES record, and the Procus maintenance program governs the relationship betwen Customer Type and the presence of a STORES record related back to the PROCUS ID, this report does not have to show Customer ID, which may be presumed to be DLR.

The report cannot show Procus records that are dealers, without stores, but that should have them. There is no relationship betwen PROCUS records that can be used reliably to "automatically" build these relationships, which must therefore be built by hand.

Invoice Printing Subprograms - Logic & Formats

Screen Data -

None - called from other programs

Functional Logic

Invoice Printing function consists of the following:

1. A called Control Program that receives one or more Invoice Numbers to be printed, then determines the correct Invoice format to be printed for each, by selecting the appropriate printing subpprogram and calling it for that Invoice Number. When the printing subprogram is finished, control is returned to this control program. When the entire list of Invoice Number has been printed, the Control Program then returns control to the Menu or previous calling program. This logic will allow invoices to be printed in any sequence without calling the wrong format printing program, since the control program retrieves the Order record and determines the correct printing format for each successive Invoice number.

    The called Control Program is called from:

- Print Invoices (generated by INVGEN)
- Ship RO's - An option is that this program can call Formats 1 and 2 directly, using the same logic.
- ShipStaged Orders - An option is that this program can call Formats 3 and 4 directly, using the same logic.
- Reprint Invoices

2. Four different invoice printing subprograms each with the appropriate format and logic. If desired, these 4 different logical designs can be accomplished within only two programs, as long as the printed results are consistent.

Essential differences between formats:

- Orders that have a PrePayment Terms Type have a combination Packing List/Invoice format that combines shipping, order status (if applicable) and billing information in one format.
- Orders that have an Open Account Terms type have a straight billing invoice format that shows only the items billed and their charges.
- RO Invoices have their charging data organized to show Services distinct from Inventory items that are charged for. All charges are organized to show the services and item charges for each Unit that was invoiced. This means that the same service

or item charged for two (or more) different units that were invoiced at the same time must be grouped separately, with a subtotal by Unit ID to clearly show how much each unit cost to be repaired.

Control Program functions:

Receive, control and maintain the Invoice Number(s) to be printed.
As each Invoice Number is selected for printing, performs the following:
Retrieve the INVOICES record, retrieving the Order Number for that Invoice Number.
Select the appropriate printing format as follows:

> If the Order Type is RO and the TERMS type is PREPAY or COD, then Format 1 is used.

> If the Order Type is RO and the TERMS type is Open Account, then Format 2 is used.

> If the Order Type is not RO (can be MER, PRTS, or other), and ther TERMS type is Open Account, then Format 3 is used.

> If the Order Type is not RO (can be MER, PRTS, or other), and the TERMS type is PREPAY or COD type, then Format 4 is used.

Format 1 - RO OrderType, PREPAY or COD TERMS Type Orders:

Co Name record   Page xx
                          Repaired Unit Packing List /Invoice

                                                          Invoice No. xxxx
                                                       Invoice Date xx/xx/xx

Billed To: Shipped To:

x----------------------------x   x---------------------------------x
x----------------------------x   x---------------------------------x
x----------------------------x   x---------------------------------x
x----------------------------x   x---------------------------------x

Order No. x----------   Ship Date xx/xx/xx   Returned by: x----------------x
Rtn Auth Datexx/xx/x   Shipped Via x----------x Cust Service Rep x-------------x
Special Shipping Instructions x--x
UPS Tracker No's x--------------x, x--------------x, x----------------------x

RO* No. L/I	Repaired Product & Service/ Part No.	Desc.	SN Unit Price	Tx	Quantity Billed	Ext. Amt	Unit Total
xxx-x	xx	x----------x	x---------x				$xxx.xx
x	x-----x	x-------x	$xxx.xx	x	x-----x	$xxx.xx	
x	x-----x	x-------x	$xxx.xx	x	x-----x	$xxx.xx	
x	x-----x	x-------x	$xxx.xx	x	x-----x	$xxx.xx	
xxx-x	xx	x----------x	x---------x				$xxx.xx
x	x-----x	x-------x	$xxx.xx	x	x-----x	$xxx.xx	
x	x-----x	x-------x	$xxx.xx	x	x-----x	$xxx.xx	

Notes: (customer notes) x--x

Adjustments*	
Reason	Adj Amt
x----x	$xxx.xx
x----x	$xxx.xx
COD Chg	$xxx.xx

Invoiced Subtotal	$xxx.xx
SalesTax	$xxx.xx
Shipping Charge	$xxx.xx
Adjustment Amt	<$xxx.xx>
Net TOTAL	$xxx.xx
Due	$xxx.xx

Payment Data:

No.	Pmt Amt	Invoices	Inv. Amt	Date	Amt Remaining
x--x	$xxx.xx	xxx	$xxx.xx	xx/xx/xx	$xxx.xx
		xxx	$xxx.xx	xx/xx/xx	

_____

Format 2 - RO Order Type, TERMS Type is OPENACCT:

Report Format - RTN Order Type

Co Name record   Page xx
                        Repaired Unit Packing List /Invoice

                                                                Invoice No. xxxx
Payment Terms x--------x   Invoice Date xx/xx/xx

Billed To: Shipped To:

x---------------------------x   x---------------------------------x
x---------------------------x   x---------------------------------x
x---------------------------x   x---------------------------------x
x---------------------------x   x---------------------------------x

Order No. x----------	Ship Date xx/xx/xx	Returned by: x---------------x
Rtn Auth Datexx/xx/x	Shipped Via x---------x	Cust Service Rep x-------------x
Special Shipping Instructions x---x		
UPS Tracker No's x-------------x, x--------------x, x----------------------x		

RO* No.	Repaired Product & Service/		SN				Unit
L/I	Part No.	Desc.	Unit Price	Tx	Quantity Billed	Ext. Amt	Total
xxx-x	xx	x----------x	x---------x				$xxx.xx
x	x-----x	x-------x	$xxx.xx	x	x-----x	$xxx.xx	
x	x-----x	x-------x	$xxx.xx	x	x-----x	$xxx.xx	
x	x-----x	x-------x	$xxx.xx	x	x-----x	$xxx.xx	
xxx-x	xx	x----------x	x---------x				$xxx.xx
x	x-----x	x-------x	$xxx.xx	x	x-----x	$xxx.xx	
x	x-----x	x-------x	$xxx.xx	x	x-----x	$xxx.xx	

Notes: (customer notes) x---x

Adjustments*	
Reason	Adj Amt
x----x	$xxx.xx
x----x	$xxx.xx
COD Chg	$xxx.xx

Invoiced Subtotal	$xxx.xx
SalesTax	$xxx.xx
Shipping Charge	$xxx.xx
Adjustment Amt	<$xxx.xx>
Net TOTAL	$xxx.xx

*This format calls for retrieving the RO Number and generating a summary line by sorting the PART line charges by Unit ID. I think I recall a discussion with Cuong over the difficulites with this issues. The format shown is the PREFERRED format. A compromise could be a line generated just from the UNITID data that is associated with the PART line charges in the INVOICES record. In either case, the resulting RO oriented formats MUST group charges by each unit repaired and billed on the same Invoice Number. The customer MUST know how much each unit cost to fix, especially Service Centers, so they can charge the customer appropriately and keep their own books straight.

One alternative that is acceptable is to generate the Unit ID line as a subtotal line <u>after</u> the charges for that unit, with the unit's associated subtotal amount.

Format 3 - Order Type Not RO, is MER, PRTS or other; TERMS type is OPENACCT:

Co Name record   Page xx
                      Invoice
                                            Invoice No. xxxx

Payment Terms x---------x   Invoice Date xx/xx/xx

Billed To: Shipped To:

```
x---------------------    -------x         x----------------------------------x
x---------------------    -------x         x----------------------------------x
x---------------------    -------x         x----------------------------------x
x---------------------    -------x         x----------------------------------x
```

```
Order No. x----------x        Ship Date  xx/xx/xx    Orderded by: x----------------x
Date Ordered xx/xx/xx         Shipped Via x---------x  Sales Person x--------------x
Special Shipping Instructions x-----------------------------------------------------x
```

L/I	Part No.	Desc.	Unit Price	Tx	Quantity Billed	Ext. Amt
x	x-----x	x-----x	$xxx.xx	x	x-----x	$xxx.xx
x						
x	x-----x	x-----x	$xxx.xx	x	x-----x	$xxx.xx
x	x-----x	x-----x	$xxx.xx	x	x-----x	$xxx.xx
x	x-----x	x-----x	$xxx.xx	x	x-----x	$xxx.xx

Notes: (customer notes) x--x

Adjustments*				Invoiced Subtotal	$xxx.xx
Reason	Adj Amt			SalesTax	$xxx.xx
x----x	$xxx.xx			Shipping Charge	$xxx.xx
x----x	$xxx.xx			Adjustment Amt	<$xxx.xx>
				Net TOTAL	$xxx.xx

_____

Format 4 -   Non-RO, Prepaid/COD Orders:

Co Name record   Page xx

                         Packing List /Invoice

                                                    Invoice No. xxxx
Payment Terms x----------x   Invoice Date xx/xx/xx

Billed To: Shipped To:

x----------------------   -------x   x---------------------------------x
x----------------------   -------x   x---------------------------------x
x----------------------   -------x   x---------------------------------x
x----------------------   -------x   x---------------------------------x

Order No. x----------x   Ship Date xx/xx/xx   Orderded by: x----------------x
Date Ordered xx/xx/xx   Shipped Via x----------x Sales Person x--------------x
Special Shipping Instructions x--x

L/I	Part No.	Desc.	Unit Price	Tx	Qty Ord	Qty Prev Ship	Quantity Shipped &Billed	Quantity Back-ordered	Ext. Amt
x	x-----x	x-----x	$xxx.xx	x	x---x	x--x	x-----x	x-----x	$xxx.xx
x									
x	x-----x	x-----x	$xxx.xx	x	x---x	x--x	x-----x	x-----x	$xxx.xx
x	x-----x	x-----x	$xxx.xx	x	x---x	x--x	x-----x	x-----x	$xxx.xx
x	x-----x	x-----x	$xxx.xx	x	x---x	x--x	x-----x	x-----x	$xxx.xx

Notes: (customer notes) x--x

Adjustments*	
Reason	Adj Amt
x----x	$xxx.xx
x----x	$xxx.xx
COD Chg	$xxx.xx

Invoiced Subtotal	$xxx.xx
SalesTax	$xxx.xx
Shipping Charge	$xxx.xx
Adjustment Amt	<$xxx.xx>
Net TOTAL	$xxx.xx
Due	$xxx.xx

No.	Pmt Amt	Invoices	Inv. Amt	Date	Amt Remaining
x--x	$xxx.xx	xxx	$xxx.xx	xx/xx/xx	$xxx.xx
		xxx	$xxx.xx	xx/xx/xx	

Manual O/A Invoice Generation & Print

Screen Data:

```
Manual O/A Invoice Generation

Generate O/A Invoice & Print

Shipment No.    x----------x
                x----------x

Press F9 to generate Invoices
```

Functional Logic

This program allows generating of an Open Account Invoice for a Shipment when the actual Invoice is needed to go with the shipment, or must be FAXed immediately, i.e., when the situation cannot wait for the regularly scheduled INVGEN process, and when a Pro Forma Invoice will not suffice.

The program performs the same process as INVGEN. In place of the standard search of the SHIPMENTS table, there is an entry window.

The entry window allows entry of specific Shipment Number (SHIPMENTS record ID's) that the user wishes to Invoice immediately. Pressing F9 calls the Invoice Generation program iteratively for each Shipment. When the entered shipments have had Invoice data generated, the print routine is called. It selects the appropriate print format for the order type and sends the correct invoice print image to the spooled printer.

Refer to the Invoice Generation and Invoice Printing Specifications for details of these functions.

ProForma Export Invoice for Staged Products

Screen Data:

```
              Pro Forma Invoices for Staged Products

        Order No.        x---------x
                         x---------x

        Press F9 to Print  Pro Forma Invoices
```

Report Format:

Co Name record   Page xx

                        Pro Forma Export Invoice

Payment Terms x---------x   Date Printed xx/xx/xx
                                                   x------------x(**)

Billed To: Shipped To:

x---------------------   ------x   x---------------------------------x
x---------------------   ------x   x---------------------------------x
x---------------------   ------x   x---------------------------------x
x---------------------   ------x   x---------------------------------x

Order No. x---------x   Date Ordered xx/xx/xx   Ship Via x------------------x
Special Shipping Instructions x---x

L/I	Part No.	Desc.	Std Unit Price	Net Unit Price	Quantity	Ext. Amt	Comm.
x	x-----x	x-----x	$xxx.xx	$xxx.x	x-----x	$xxx.xx	x---x
x	x-----x	x-----x	$xxx.xx	$xxx.x	x-----x	$xxx.xx	x---x
x	x-----x	x-----x	$xxx.xx	$xxx.x	x-----x	$xxx.xx	x---x
x	x-----x	x-----x	$xxx.xx	$xxx.x	x-----x	$xxx.xx	x---x

(*)x--x
x--x
x--x

Notes: (customer notes) x--x

Adjustments*		Value At Std Price	Charged Items Subtotal	$xxx.xx
Reason	Adj Amt	$xxx.xx	Shipping Charge	$xxx.xx
x----x	$xxx.xx	Std - Net Price Diff.	Adjustment Amt	<$xxx.xx>
x----x	$xxx.xx	$xxx.xx	Net TOTAL	$xxx.xx

*Standard Notes section - prints in the body of the invoice, i.e., inside the borders; separate from
Customer Notes at the bottom of the Invoice.

** Sold To Customer ID

Functional Logic

This program retrieves and prints non-RO type Order data using the STAGED part numbers and quantities to determine what is about to be shipped, and is therefore will be invoiced as it is unless the staged items are changed. Unit Prices are taken from the ORDERDTL record data linked to the STAGED items for the Order.

Also included is the printing of Standard Notes, if one or more are linked to the ORDERS record. These print in the body of the Invoice format, instead of at the end, where Customer Notes are printed, and may have specific formats, such as for a signature block or other similar purpose.

The program functions upon selection from the Report Manager by displaying the Order Number entry window, which accepts entry of one or more Order Numbers that the user wishes to have a Pro Forma Invoice printed for. ALL is not an option. The entered orders must have an order type that is not equal to RO. Each Order Number entered must have a STATUS that is REL, PC, SC, or HOLD. Order Numbers with a status of CANC or BC are rejected.

When the F9 key is pressed, the entered Order Numbers are fed to the Pro Format Invoice Generation & Print program, which generates the printed output to the printer until all Order numbers entered have been printed.

The Pro Forma Generation Process includes the following steps for each Order Number entered and accepted in the entry screen:

Retrieves all STAGED records with ORDERNO = to the entered Order Number. The result is the list of Part Numbers and Quantities for this Order that are to be included in the Pro Forma Invoicing Process.

ORDERDTL records for the Order Number are used to retrieve the UNITPRICE value for the Line Item Number/Part Number.

The resulting list of Line Items Numbers, Part Numbes, and Quantities is extended times the Unit Price values retrieved and used to generate the Pro Forma Invoice.

The Data reference table below describes each data field on the report and its source.

Report Data	Source Table	Source Field
Payment Terms	ORDERS	TERMS

Billed To	ORDERS	BILLADDR
Shipped To	ORDERS	SHIPADDR
Order Number	ORDERS/Screen	ORDNUM
Date Ordered	ORDERS	ORDDATE
Ship Via	ORDERS	VIA
Special Ship Inst.	ORDERS	SHIPINFO
L/I	STAGED & ORDERDTL	Driven From STAGED record's ORDLINNO, matches LINENUM
Part No.	ORDERDTL	Driven from STAGED record's PARTNO PART
Desc	ORDERDTL	PARTDESC
Std Unit Price	ORDERDTL	STDUPRICE
Unit Price	ORDERDTL	UNITPRICE
TX	ORDERDTL	TAX
Quantity	STAGED	STAGEQTY
Ext Amt	Calculated	Total Quantity (above) X Unit Price for L/I Number
Comments	ORDERDTL	COMMENTS field (new) for LINO
*	ORDERS	STDNOTES: for each STDNOTE value, the STDNOTE record is retrieved and the text printed in the body of the Invoice, inside the border.
Notes:	ORDERS	CUSTNOTES
Adjustments		
Reason	ORDERS	ADJCODE values
Adj Amt.	ORDERS	ADJAMT values
Value at Std Unit Price	Program	STDUPRICE X Quantity for each line item, summed for all line on report.
Std - Net Price Diff.	Program	Value at Std Price minus Charged Items Subtotal

Charged Items Subtotal	Program	Sum of ORDERDTL Extended Amounts (above)
Shipping Charge	ORDERS	SHIPCHARGE
Adjustment Amt.	ORDERS & Program	Sum of ADJAMT values
Net TOTAL	Program	Sum (algebraic) of : Order Subtotal + Sales Tax + Shipping Charge + Adjustment Amt