

# Advanced Accounting Techniques for Commission Auction Companies

By HAROLD I. STEINBERG, CPA

**Here is an interesting display of system ingenuity without the use of a computer. It demonstrates that non EDP accounting machines still have much utility for complex accounting problems.**

The accounting function in a typical medium size organization can usually be improved through mechanization. How does one mechanize, however, if the nature of the business is so unique that standard accounting procedures cannot be utilized? One answer is to create unorthodox machine procedures specifically for the organization. This article describes how a set of procedures was tailored for the complex activities of an art auction gallery in order that it could install a movable-carriage bookkeeping machine, and thereby solve its perplexing and costly problems.

Though the case here described involves an art gallery, the system developed is readily adaptable to any commission auction business that has similar problems.

## HOW THE ART AUCTION GALLERY FUNCTIONS

The merchandise that an art auction gallery sells is obtained on consignment

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from numerous individuals. Each article is called a "Lot," and from twenty-five to eight hundred lots are combined into a single "Sale" hereafter called auction sale or auction. During the auction sale each lot is sold to the highest bidder. The sales price, less a commission based on this price (the gallery's income) is then turned over to the consignor. The merchandise which consists of paintings, antiques, furniture, objects d'art, etc., often includes rare masterpieces worth hundreds of thousands of dollars. The gallery accords every possible consideration to the people who buy and sell this merchandise.

## SALES ACCOUNTING PROBLEMS

Because the merchandise is held on consignment and sold at auction for a commission, certain unique problems arise, the most important of which are:

The gallery does not know the selling price of its merchandise until the moment the winning bid is accepted.

Even when the sales price becomes known, the gallery does not know the amount due the consignor until it determines the commission, expenses and other deductions.

The gallery frequently does not know the identity of customers until they call for the merchandise.

Further problems arise because of the status value of the merchandise and the nature of the clientele. Quite frequently, a customer wants to pay for and pick up his purchase before the Accounting Department has even had a chance to record the sale. The price that a group of consignments brings can be quite high, so it is good policy to notify the consignors of the prices their consignments brought within twenty-four hours of the auction. The conditions of the sales agreements with the consignors vary greatly. Commission rates might depend on the selling price of the consignment, one consignor might be liable for a certain type of expense while another may not, and so on. These varying conditions preclude the application of a uniform settlement formula.

In order to handle the transactions with the necessary speed, the gallery used to write memo entries, and later, when there was available time, reentered, posted and balanced the records. This approach required an excessive number of man-hours, resulted in numerous errors, and of course, was very costly.

*Mechanization of the Accounting Function the Solution.* As the gallery wanted to reduce accounting costs, eliminate errors and provide for a greatly expanded volume which it anticipated, the decision was made to explore the possibility of mechanizing the accounting activities. The installation, however, would have to permit rapid recording of incomplete data, be flexible enough to handle the many different types of transactions and their inherent variations, yet provide suitable controls to insure accurate records.

#### INSTALLATION OF A 17 REGISTER MOVABLE-CARRIAGE MACHINE

It was determined, after much study, that the most appropriate piece of equipment would be a 17 register movable-carriage bookkeeping machine. The problem of the many unique requirements would have to be met, however, by first modifying the gallery's accounting procedures for machine processing, and then designing the machine's program bars to accommodate the unusual procedures. This meant that many bars had to be specifically programmed to do things that had not been contemplated before by the manufacturer of the machine. In all, nine program bars were built. An understanding of the total system can best be obtained through a discussion of those bars which were designed specifically for this installation.

*Purchasers' Sales Bar.* Because selling merchandise is the gallery's "raison d'être," the Purchasers' Sales Bar assumes primary importance. Within moments of the purchase of a lot, the sales price and purchaser's name is forwarded from the auction sales room to the Accounting Department on the Sale record, a journal for the entire auction. An invoice is then immediately prepared in order that it be readily available at the merchandise-pickup counter. The pace in the sales room is hurried, however, and as buyers frequently are only agents, the Sale record does not necessarily indicate the correct name of the customer and sometimes contains no name at all.

As a result, many invoices are either incorrect or incomplete, and have to be redone. This makes it impracticable to post the sales to the accounts receivable ledger cards at the time the invoices are prepared. The invoices, therefore, are typed on a separate 3-total bookkeeping machine and the total of

all the invoices is balanced to the total proceeds of the auction sale as indicated on the Sale record. Shortly after the auction, however, the corrections are completed and the invoices are alphabetized and posted to the accounts receivable cards on the movable carriage bookkeeping machine. In addition, this operation is used to accumulate the amounts and types of taxable sales, exempt sales and taxes due. The total of the postings is then compared to the total in the Sale record in order to insure that every invoice was posted.

#### CONSIGNORS' SALES BAR

The other half of each auction relates to the consignors, who provide the merchandise. The reputation of the gallery depends partly on how soon it can notify consignors of the prices paid for their merchandise. On the day following the auction, a set of pre-addressed "gross statements" and the Sale record are given to the machine operator who posts to each consignor's gross statement the *gross* sales price due him for each of his lots.

The machine also accumulates the prices, indicates the total on the gross statement and automatically transfers this liability to the consignor's ledger card. The total of all the postings is then compared to the total on the Sale record to insure that every lot was posted.

*Cash Receipts Bar.* Although the gallery receives cash payments from buyers even before the auction is over, the purchases, as previously indicated, cannot be posted to the accounts receivable ledger cards until several days later. The machine operator does not know, however, if as a result of a previous purchase, there already is a ledger card for the purchaser in the tray. Therefore, if she attempts to post

the receipts before posting the charges, she would waste considerable time looking for cards which might not exist. It was realized that it would not be feasible to post the receipts prior to posting the charges. Hence, a way had to be found whereby the cash could be banked promptly, yet still be controlled, without requiring use of the ledger cards.

A system was developed which utilizes the remittance advice attached to each invoice. Each day the cashier accumulates the remittance advices. At the end of the day she tapes the advice, compares the total to the bank deposit slip which she has also prepared, and forwards the tape and remittance advices to the machine operator. She also deposits the cash and notifies the Treasurer of the amount deposited, so that he can update his cash balance record.

As the cash is in the bank and controlled through the Treasurer's record of the deposit, there is no longer a pressing need to post the receipts. The machine operator can therefore wait until she has accumulated the invoices for several auctions before debiting the invoice amounts to the accounts receivable cards.

Once the invoices are posted, she uses the advices to credit the cards with the cash received through the date of the last auction sale debited. With this procedure she can be certain that there will be a ledger card for every remittance that must be posted. Advices representing many other sources of cash, such as catalog sales, subscription income and payments for appraisals have also accumulated. This presents no problem, however, as the operator can use the machine to record the source of the cash, as well as to credit the purchasers' ledger cards.

*Expense-Accounts Payable Bar.* The expenses for which invoices are submitted to the gallery can be classified

into three types: normal operating expenses; those that are the consignors' responsibility and should be charged against their accounts; and the expenses of the entire auction sale.

As previously indicated, lots are grouped in individual auction sales, and each sale is assigned a number. The gallery finds it desirable to segregate and accumulate for each auction the expenses which can be specifically assigned to it. With this information, it can estimate the costs of future auctions, project its cash requirements and have an additional tool for controlling costs. Furthermore, the cost control function can be even further enhanced if the sale expenses are accumulated according to certain broad categories such as advertising, catalogs, labor, etc. Thus the invoice posting procedure involves first a grouping of the bills by type, then, if necessary, a further breakdown by auction sale number and nature of the expense.

The operator determines the ledger to be charged with the expense, keys the machine button representing that ledger, and updates the ledger card for the appropriate general ledger account, consignor, or auction sale. In addition, she credits and updates the consignor's ledger card. This is similar to any expense-account payable application.

The problem arises when the machine is required to further distribute the charges for one ledger, but not the other two. A movable-carriage book-keeping machine is designed to provide visible proof that the debit entries are equal to the credit entries. If, however, there are two debits (the original entry plus the distribution) for one credit, the machine will "lock-up." The problem was solved by "instructing" the machine to recognize, by means of the button keying, that whenever the sale expense ledger was used, there would be two debits instead of the normal one.

*Consignors' Settlement Bar.* Paying the consignors for their merchandise is another important aspect of the gallery's activities; thus the Consignors' Settlement Bar also has major significance. The settlements, which are normally made thirty days after the auction, can be rather complex; the calculations alone may require the services of a full-time Settlement Clerk.

The Clerk begins with a carbon copy of the consignor's gross statement. A simple gross statement for the sale of three lots is illustrated in Exhibit A. He first marks on it the amounts representing any lots which have not yet been paid for by the purchaser—in the illustration, lot 14—\$200.00. These lots are not settled until payment is received from the purchaser.

He then computes the commission and insurance for the paid lots, and in addition examines the accounts receivable refunds to determine if the consignor owes the gallery any money for a lot previously purchased. This amount is called a "purchase balance." These amounts are noted on the gross statement (\$90, \$3, \$150 respectively in the illustration).

Next he lists the expenses that are chargeable to the consignor—in the illustration, \$30. They are of two types. Most are a result of outside vendors' invoices and have already been posted to the consignors' ledger cards during the Expense-Accounts Payable operation. (This is the type shown in the illustration.) The others are a result of gallery services and would not have been posted to the consignors' cards. The settlement clerk must accumulate the latter charges in order to prepare a journal entry charging the consignors and crediting the appropriate income accounts.

A few days before the settlement is due, the settlement clerk gives the gross statements for all the consignors in an auction sale to the machine operator.

It is the operator's job to prepare the checks for the consignors and record on their cards the payments and new balances due, if any.

With a similar operation for most businesses, the machine would subtract from each creditor's previous balance the total of the actual payment and various subtractions from the gross. In the settlement illustrated, the total subtractions would amount to \$800.00 as follows:

Payment	\$327.00
Unpaid for	200.00
Commission	90.00
Insurance	3.00
Purchase balance	150.00
Expense	<u>30.00</u>
	\$800.00

As previously noted, however, the expenses have already been posted, or will be posted to the card. Furthermore, since the unpaid-for lot is not settled at this time, it must be left on the card as a liability of the gallery. Therefore, if the machine subtracts \$800.00 from the previous balance of \$770.00 (\$800.00 gross price less \$30.00 expense), the result would be a \$30.00 debit balance which is obviously incorrect. It becomes clear that although many different types of items must be subtracted from the gross in order for the check to be written for the proper amount, only certain items can be subtracted from the previous balance to determine the new credit balance on the consignor's ledger card, if any.

A system was designed which divided the deductible items into three groups: subtractions, deductions and expenses. "Unpaid fors" are considered *subtractions*; commissions, insurance charges, and purchase balances are considered *deductions*; expenses, both invoiced and internal, are classified as *expenses*. The program bar was then constructed so that the amount of the check would be the gross less the total of items keyed in from all three groups. The amount entered on the ledger card and subtracted from the previous balance, however, includes only the payment and amounts from the deductions group. In the illustration, this would amount to \$570.00, as follows:

Payment	\$327.00
Commission	90.00
Insurance	3.00
Purchase balance	<u>150.00</u>
	\$570.00

Expenses are not included, and when the \$570.00 is subtracted from the previous balance of \$770.00, the \$200 credit balance remaining represents the liability for the "unpaid for" lot #14.

After the machine operator draws and posts the settlements for the auction sale, she totals the machine. She then verifies that she has in fact settled each consignor by comparing the totals to the total of the auction in the sale record.

The ledger card for the illustrated sale and settlement would appear as follows:

### CONSIGNOR'S LEDGER CARD

#### JOHN SMITH

Date	Transaction	Debit	Credit	Balance
9/1	Expense	\$ 30.00		\$ 30.00 dr.
9/15	Sale		\$800.00	\$770.00 cr.
10/13	Settlement lots 6 & 8	\$570.00		\$200.00 cr.

**OTHER BARS**

In order to process all the accounting activities on the machine, four other bars were also built: a general journal bar, a vendors' disbursement bar, a payroll bar, and a quarterly payroll tax return bar. These bars are fairly standard, but even so, the general journal bar required some additional design in order to handle the five different ledgers and the distribution of the sale expenses to the several different categories.

**CONCLUSION**

Various accounting employees of the gallery had frequently stated that their procedures were too unusual to be

mechanized. Nevertheless, in spite of these doubts a machine was installed which enables the Accounting Department to handle a much greater volume of business with fewer employees, and with a virtual elimination of both errors and overtime. Furthermore, the gallery now has a solid base from which it can pursue additional volume without the likelihood of an undue rise in administrative costs.

The secret of utilizing modern accounting equipment most effectively is to adapt the capabilities of the machine to the requirements of the activities. Any business can benefit, no matter how unusual or complex, provided this adaptation is undertaken creatively and with studious application.

**EXHIBIT A**

GROSS STATEMENT

Miss Dawn Mustaki 1132 Park Avenue New York, New York			GROSS SALE		800.00
			Fording		(200.00)
					600.00
			COMM. ( 15 % )	90 -	
Sole No. 2000 Prints, etchings, etc.			SALES EXP. -		
LOT	DESCRIPTION	AMOUNT	LOTS #	ILLUSTRATIONS #	
6	Picasso	350.00			
8	Braek	110.00	INS. {	3 -	
14	Wierinck	100.00	Purchase Balance	150 -	
		600.00		243 -	
			Expenses	30 -	273.00
			Cash Payment		327.00

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