OVRC Excel-Auction

Overview

This document describes the OVRC XL-Auction application. (Revised at version 33) This is a Microsoft Excel spreadsheet that has been configured to track items bought and sold in a public "live" auction. All participants can buy or sell, and the program keeps track of the total proceeds due to every participant, and commissions. It generates lot slips to be attached to the items for sale, and receipts at the end of the sale.

Features

It is based on Microsoft Excel (fully tested on Excel 2000), so is portable and easy to maintain. Note that there are differences between the Mac and PC version of Excel. This was designed to run on a PC, but is functional except for certain quirks related to printing on a MAC. Very limited testing has been done on open office under Linux, and there are some glitches related to the macros.

All participants can buy or sell. (That is, the program is not specifically designed for an "estate sale" where all proceeds go to one person, though it could be used for this application)

Bidders are identified with a bidder name/number. The format is open-ended, but consensus is that a simple number works best. If sales are done on a regular basis, the bidder identification can remain the same from sale to sale. We avoid bidder numbers between 112 and 120, 212 and 220, etc (as 'One Fifteen' sounds a lot like 'One Fifty').

Lots are given a lot number, which is assigned automatically. Lot numbers will generally be selected to not duplicate any bidder numbers. Items can be donated. One cannot deduce from the lot number who the seller is, or if the item is a donation, however this information is printed on the lot tags.

Commission is set-up as a minimum, a maximum, and a percentage. By default, the minimum commission is $1, the maximum is $10, and the rate is 10%, but this policy is just a formula in excel and can be changed.

There are extensive auditing features to allow troubleshooting during or after the auction. An audit file is generated, recording the sales and checkouts in the order that they are entered. In case of discrepancies, this list can be compared with a manually created "Backup" list.

Partial checkouts can be accommodated. That is, if someone checks out early, but later buys another item, he can checkout again. Each time there is a checkout, a record is made.

Additions, deletions and corrections can happen in "real time".

Reserve (minimum) bids can be placed, but they are not enforced.

Tabs

The program runs within a traditional spreadsheet, and uses spreadsheet tabs to organize the various functions within the program. This section describes the tabs, and how they are used.

1) The "Auction" tab. This would be set-up at the beginning of the auction with things like the auction name, date (these appear on the receipts), and auction options. These options include:
   - The ability to print the auction receipt, or just show a preview. (This saves paper while debugging)
   - The ability to select long- or short-form auction receipts, or both. (One could print out a long receipt for the participant and a short receipt (which would be signed-off when the account is reconciled) to be kept as a record of the sale.)
   - Select whether to keep a copy of the receipts.
   - The commission percentage, and minimum and maximum commission that will be charged.

2) The "Bidders" tab lists the auction participants. This list can be in any order, but generally would be sorted in alphabetical order. The only items manually entered on this page are the bidder name, bidder number, and optional membership date, and this would generally be done before the auction. Members are given a unique identifier (numbers or letters or both), usually 3 characters (but can be any length), which could be their initials or simply a number. If the sale is recurring, these could be consistent from sale to sale. This identifier should be short to make entry quick and easy during the sale. Bidder names are recorded (but not address, phone number, etc), but these are for information only. The auction relies on the bidder number, so the numbers are checked for uniqueness (this is the purpose of the "Valid?" column).

   Also on this page is an ongoing summary of the status of the bidders (which is generated automatically), with information like:
   - The number of lots that the participant has purchased.
   - The total value of goods that this participant has purchased.
   - The number of lots that the participant has for sale.
   - The number of lots that the participant has sold.
   - The total value of sales for this bidder (before commissions, including donations).
   - The total value of sales, net of commissions, and not including donations. Essentially his take-home as a result of sales.
   - There is a column that indicates if the participant has items that have been bought or sold, and has not paid. This is essentially an indication that the participant needs to go thru the checkout process.

- The program does allow multiple checkouts (that is, a participant can check-out, then win another lot, and check-out again). This is not encouraged, but the program keeps track of the number of checkouts that have been done, and the money that has been paid.

	A	B	C	E	F	G	H	I	J	K
1	Bidder Number	Bidder Name	Membership date	Valid?	# lots bought	Amount bought	# lots for sale	# lots remaining	Amount sold	Revenue
2	5	5			4	$315	9	3	$315	$58.5
3	1	OVRC			0	$0	0	0	$0	$0.0
4	2	John Lennon	2015Q2		1	$35	5	1	$280	$27.0
5	3	Paul McCartney	2015Q2		2	$270	4	2	$35	$31.5
6	4	George Harrison	2015Q2		0	$0	0	0	$0	$0.0

3) "Consign" tab. This is where the items to be auctioned are listed. Four pieces of information are entered here: the seller's number which may be entered either with the pull-down menu (hold cursor close to the right edge of the cell), or entered manually; an optional "reserve" price may be listed, though the reserve is not enforced; the item may be identified as a donation by placing a "Y" (case insensitive) in the correct column; finally, a description may be entered. This description may be up to 255 characters, and will appear as such on the lot tags. (If the description is long, it may be truncated) The item is automatically assigned a number, starting at a number specified under the 'Auction' tab.

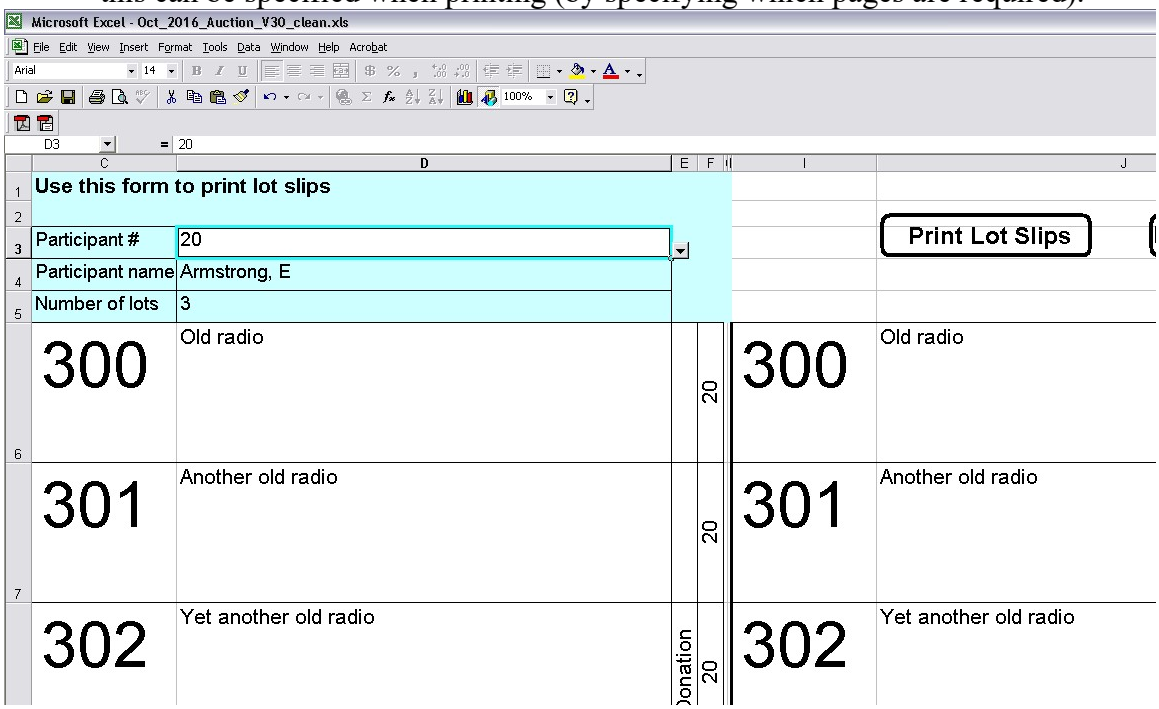
   This page could be prepared in advance or at the auction.

   Note that the bidder number and the lot number are the two pieces of information that the program relies on being consistent. Things like bidder name, item description, reserve amount, successful bids, donation, etc., can be changed at any time during the auction with the expected results. Changing a bidder number or a lot number during the auction will inevitably cause unpredictable issues.

   If print is selected at the top of the page, or of the "go" key (the large "+" key) is pressed, the "lot slips" page is invoked (as described below), allowing lot slips to be printed.

	B	C	D	E	F	G
1	Lot #	Seller #	Seller Name	Reserve	Donation	Description
2	1	3	Paul McCartney	$50		radiola 1
3	2	2	John Lennon			radiola 2
4	3	2	John Lennon			radiola 3
5	4	2	John Lennon		y	radiola 4
6	5	2	John Lennon		n	radiola5
7	6	3	Paul McCartney			radiola 6, with quite a lon rambles on and on and o

4) "Lot_slips" tab. This tab allows the easy generation of lot tags to be attached to items being auctioned. There is only 1 entry required: the participant's number. The usual excel print function may be used to print the lot slips (recommended for a mac), or the print function may be clicked. If only a subset of the tags is needed, this can be specified when printing (by specifying which pages are required).



5) The most important page is the "Cockpit" tab. This is the page where the lot number, buyer, and sale price is entered in real time during the auction. Much effort has been made to make this foolproof, quick, and allow for recovery from errors. Also, extra information about the sale and the item being auctioned is available, making errors easier to spot.

   The "Cockpit" tab fills in the "Sales" and "Audit" tab. Although these tabs can also be edited manually, this should be unnecessary if no errors are made during the auction.

   The cockpit requires 3 pieces of information: the lot number, the dollar amount of the sale, and the buyer.

   - The lot number may be entered either with the pull-down menu, or manually. If there is an error in the lot number (for example, if that lot does not exist, or if that lot has been sold or entered as a no-sale) a warning appears in a yellow box below. The operator may proceed anyway, but will be asked to confirm.
   - The sale amount is entered (without a "$"). Note that if "0" (zero) is entered as the sale amount, the item is recorded as a "No Sale" (NS) item. Note that leaving this field blank is not the same as entering a zero; a zero indicates "No Sale", a blank indicates that the price was not entered (it should not usually be

blank!). In case of a "No Sale", the buyer name should not be entered. If the item has a reserve, and the reserve is not met, a warning is presented (under the lot number), but the reserve is not enforced.
- The bidder number may be entered with a pull-down menu, or manually. One can enter any text into this slot, and it will be recorded. This could be handy if there is uncertainty, for example, if the buyer number was not heard clearly.
- There is an optional place for a comment, which could be useful if something seems wrong, but the computer operator does not want to slow down the auction at that time, or to serve as a reminder. The comment is recorded only on the "Audit" tab.

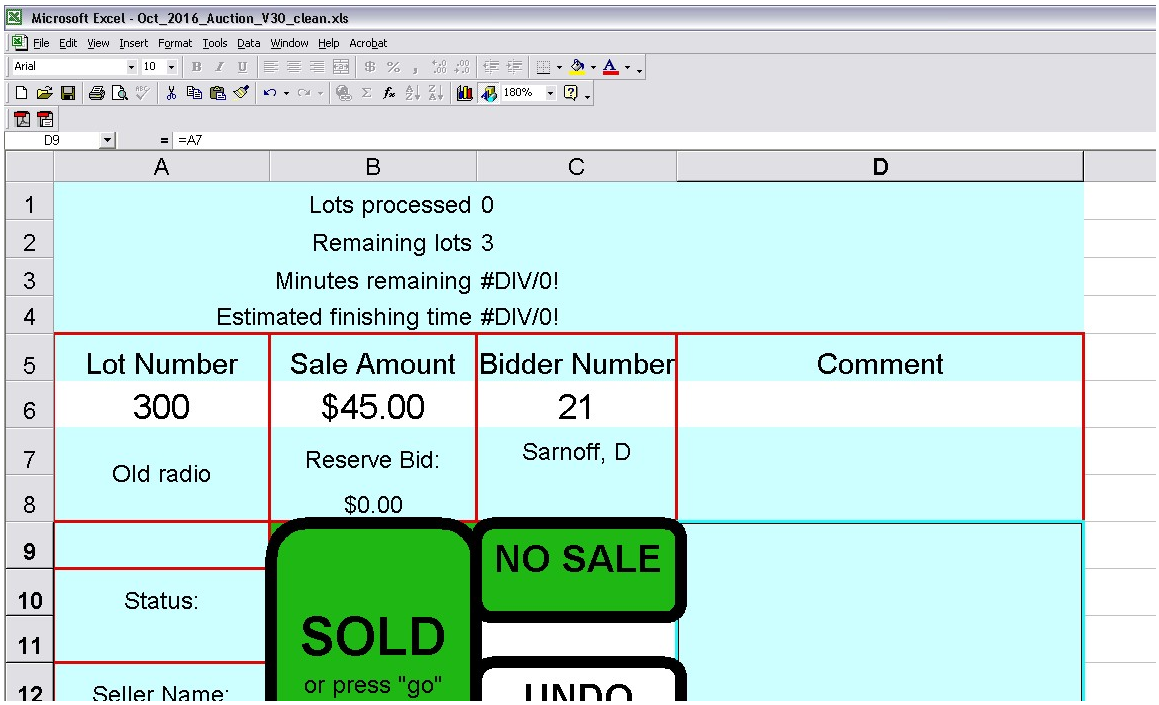
If all information is entered correctly, the area behind the "Sold" button turns green. The computer operator will then click on the sold button, or press "go" (the large "+" key) and the information is entered, and the auction proceeds. I refer to this as "registration". If the program senses something is wrong with the information entered, you can still proceed. Clicking on the arrow still works, but the program asks for confirmation that you want to proceed in spite of the errors.

Note that it is possible (and efficient) to use the Cockpit without the mouse: just use the tab or Enter key to move from field to field, the numeric keypad for data entry, and "go" to register the data.

There is also a no-sale key, which may be used if an item is not sold. This has the same effect as entering "$0" in the sale price.

There is also an undo key, which can undo the last sale. This will be available only if the last sale was entered into the database (for example, if the last entry was not a valid lot number, the data would not have been entered into the database, (since the database is based on lot numbers), and undo would not be available). The undo key is green if it is available.

Potential errors include:
- Item has been sold already. In this case, the previous sale is replaced with the new information. Both items remain on the "Audit" page, for reconciliation later.
- Lot number is not recognized. (Perhaps the computer operator did not hear the lot number, and he wrote in some sort of description instead) In this case, the sale is not recorded (how could it? We don't know what has been sold!), but the note is recorded on the "Audit" page.
- Reserve bid is not met. Not a problem, just a warning.
- Bidder number is not recognized. In this case, the sale is recorded with the bidder number, and a note appear on the audit page, in the hope that it can be reconciled later.



6) The "Sales" tab. This is where the sales are tabulated. Items appear in the same order as the "Consign" tab. One can enter data into this page manually rather than using the cockpit, however the cockpit is recommended. If there have been errors while using the cockpit, these can be corrected thru manual entry in the Sales tab. If $0 is entered as a sale price, it is recorded as a no-sale. The commission charged back to the auctioneer is calculated here.

Lot #	Seller #	Description	Reserve	Donation	Status	Sale Amount	Buyer #	Time	Buyer Name	Comment
1	3	radiola 1	$50	0	SOLD	$35	2	1:15 PM	John Lennon	
2	2	radiola 2	$0	0	SOLD	$20	3	1:14 PM	Paul McCartney	
3	2	radiola 3	$0	0	NS	$0		1:15 PM	#N/A	
4	2	radiola 4	$0	y	SOLD	$250	3	1:17 PM	Paul McCartney	
5	2	radiola5	$0	n					#N/A	
6	3	radiola 6, with quite a long description	$0	0					#N/A	

7) The "Audit" tab. This is a line-by-line recording of every entry made thru the cockpit and checkout tab. Note that manual changes entered on the Sales tab are not recorded in the Audit. Items that the program "thought" were suspicious are highlighted in **bold**, to help make them stand out. Times are also recorded on this page. When an item that was previously "Sold" or "No Sale" is overwritten, the time of the earlier sale is also recorded to help with debugging.

D24 =

	A	B	C	D	E	
1	**16**					
2	**Current Time**	**Lot #**	**Sale Price**	**Bidder #**	**Description**	**Comn**
3	1:14 PM	6	23	3	radiola 6	
4	1:14 PM	2	20	3	radiola 2	
5	1:15 PM	1	35	2	radiola 1	
6	1:15 PM	9	10	5	radiola 9	
7	**1:15 PM**	**3**	**0**		**radiola 3**	
8	1:16 PM	8	0	5	radiola 8	
9	**1:16 PM**	**7**		**5**	**radiola 7**	
10	1:16 PM	7	20	5	radiola 7	
11	1:17 PM	4	250	3	radiola 4	

8) The “Checkout” tab is used after the auction to tally up the items bought and sold, and amount owing for each participant. This results in a printed receipt and a soft copy of the receipt (in a new tab) for record-keeping purposes. (the receipt type depends on the settings on the “Auction” tab) The only manual entry on this sheet is the bidder number. When the “dollar bill” is clicked (or the “go” key is pushed) the program notes the amount owed on the “Bidders tab”, and prints the receipt. It is possible to checkout a participant more than once. This would be done if a participant checks out, but then wins another item in the auction. The second time the checkout is done, the payment from the first checkout is subtracted.

Microsoft Excel - Oct_2016_Auction_V30_clean.xls

File Edit View Insert Format Tools Data Window Help Acrobat

G5 = 20

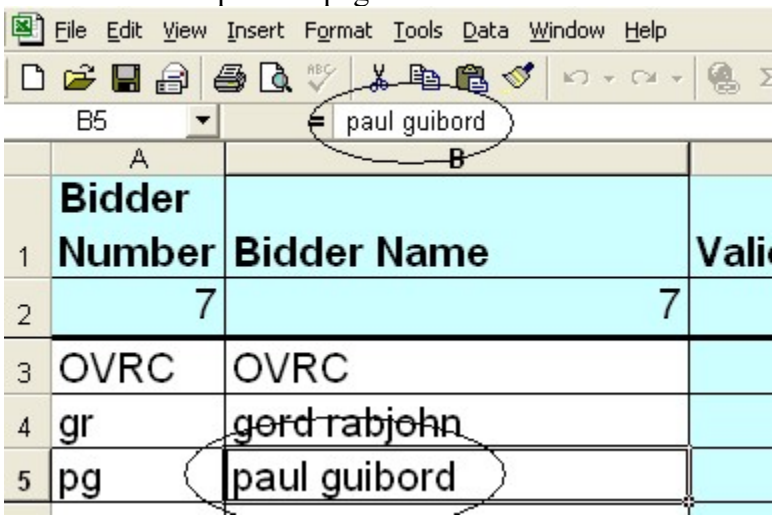
	B	C	D	E	G	H	I	J	L	M
1				**Ottawa Vintage Radio Club**						
2				OVRC Fall 2016 Auction						
3				October 30, 2016	3:15 PM					
4										
5				Participant Code	20				or use "go" key	
6				Participant Name	Armstrong, E					
7				Number of items won	1					
8				Cost of items won	**$4.00**					
9				Number of items for sale	3					
10				Number of items remaining	1					
11				Proceeds from items sold	**$43.50**					
12										
13				Total we owe you	$39.50					
14				Previous Payments	$0.00					
15				Invoice number	0					
16				We owe you	**$39.50**					
17										
18			Club commission is 10%, $1 minimum, $10 maximum.							
21										
22	Lot #	Status		Description		Sold for	Com'n	Net		

9) The “Summary” tab displays statistics as the auction proceeds.

The various pages in the program are always “live”. It is possible to add lots, add participants, and modify sales entries or make corrections at any time, even after some participants have cashed out.

Excel Notes

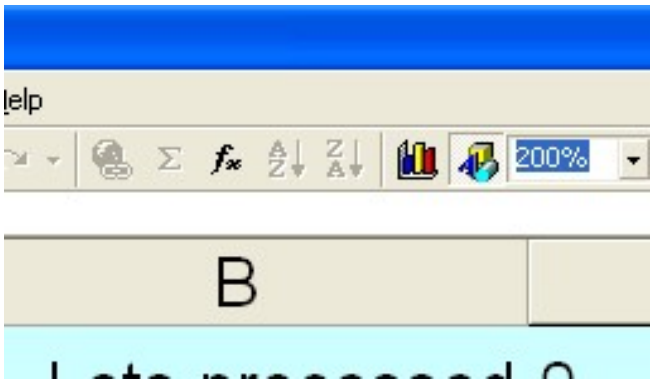
It is assumed that the user has a basic familiarity with the Excel Spreadsheet program. An overview of basic Excel functionality as it pertains to this program follows. When entering items into any cell, the item can be typed in the actual cell, or in the entry window at the top of the page.



Most cells are read-only. Generally, the only cells that can be written in are white. Rather like a Canadian Income Tax (T-1) form! Moving between cells is best performed by using the tab key.

Note that cut, copy and paste can be used, but “drag and drop” ***must never be used*** (as it messes up cell references).

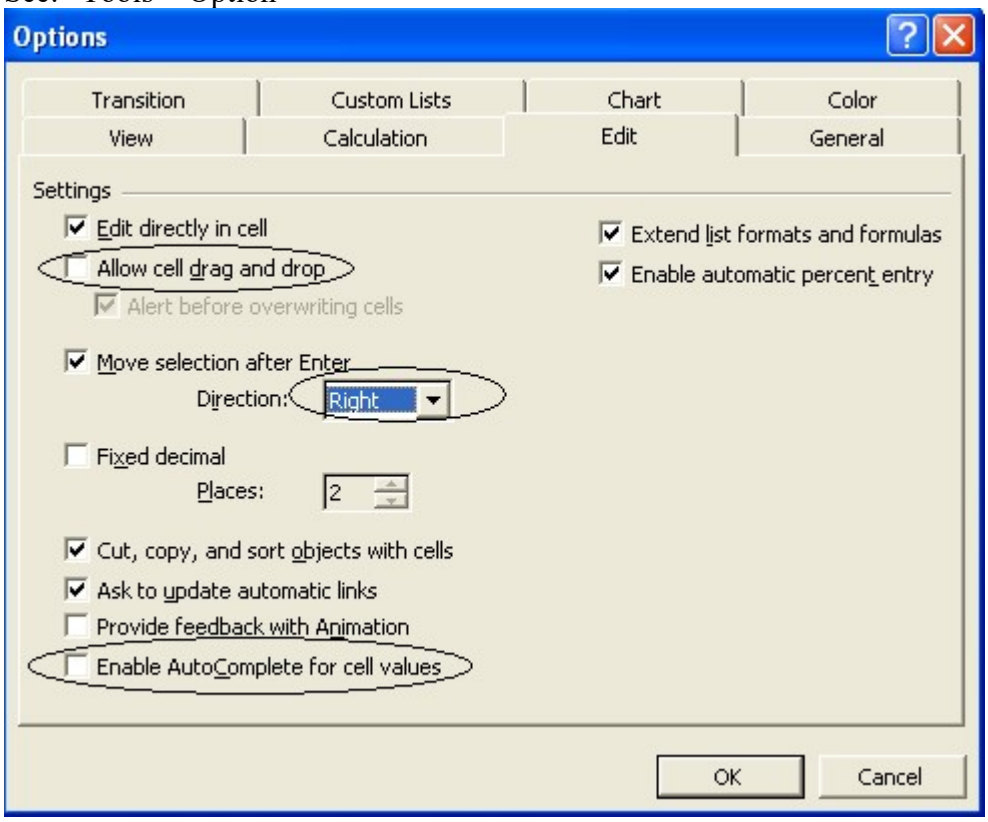
The magnification should be adjusted so the screen is full and it is generally unnecessary to use the scroll bars. Note that it may be necessary to zoom to “selection” (in the zoom pull-down); after this is done once, a magnification value can be entered directly by typing.



This magnification is part of the “Standard” toolbar. If this is not visible, click “View > Toolbars > Standard” to make it visible.

Other useful editing options:

See: “Tools > Option”



Typical Usage

Start with a fresh copy of the program. (A previously used version of the program can be cleaned up using the “Clean_All” macro. Be aware that this erases all auction data, so use it with caution). When the program starts, allow macros. On the “Auction” tab, enter the name of the auction, date, and check the settings for the printouts.

In preparation for the auction, the list of bidders must be entered. This would typically be accomplished by cut and paste from the mailing list onto the “Bidders” tab. Also, the lots to be auctioned off must be consigned by entering them on the “Consignment” tab.

The sellers will need lot tags to attach to their articles. These are created on the “Lot_Slips” tab. These can be created in advance (using the Cute PDF printer option) and sent to the sellers if desired. Or, they can be printed at the sale.

When the sale is ready to begin, the computer operator focuses on the cockpit. As items are auctioned, the item number, sale amount, and bidder are entered for each lot.

Items or bidders can be added before or after the sale has started by using the "Bidders" and "Consignment" tabs.

A summary of actions to be performed in the event of an error is shown below. First, note that nothing is "registered" until the SOLD (or "go") is clicked. Prior to that, entries in the cockpit can be edited at will. Warnings will be seen (reserve not met, illegal values, invalid lot #, invalid bidder #, lot already been sold or listed as no-sale) if the data looks wrong. The "green" background (behind the sold button) will not be seen unless there are no errors or warnings. In the event that an error is made and registered with a click of the arrow, use the following guide:

- You can use the "undo" function if you realize the error immediately.
- If the lot number was correct, but the dollar amount was missing or wrong (or was set to zero, making it a no-sale), or the bidder number was missing or wrong, simply re-enter and re-register the correct information. When SOLD is clicked (it will not be green), it will overwrite the incorrect information (on the sales tab) with the correct information. You will receive a message that the item has already been sold: no problem, just ignore it.
- If the item number was incorrect (for example, perhaps you intended to register that lot number 56 was sold, but mistakenly registered it as lot 65), there are 3 scenarios: a) If you have not overwritten data, that is if lot 65 has not been sold yet, then just enter and register the correct information in the cockpit. When the "real" lot 65 comes up later in the auction, you will receive a warning that it has been sold already; just ignore that warning. b) If you have overwritten data (lot 65 was properly registered earlier), you will need to refer to the "Audit tab", find the earlier (correct) entry for lot 65, and re-enter this information for lot 65. Then, reenter the correct information for lot 56. (Note that this error is unlikely, because the program would have warned you that the lot had already been sold before and after you clicked on the arrow). c) if there is no lot 65, then the database was not updated, just enter and register the correct information in the cockpit.
- If you receive a warning that the item was already sold (prior to clicking SOLD), then either you are about to make a mistake, or you made a mistake earlier. First, verify that you have the current lot number correct. If it is correct, then I recommend that you proceed to register the lot, and add a comment, something like "hey, something went wrong: this lot was incorrectly double-sold, and I am sure this entry is right" At the end of the auction, there will presumably be an item left unsold (and hopefully the error will become obvious, like transposed digits, or a typo). At this point, the best approach is to go to the "Sales" tab and enter the correct information. A concrete example: assume that we enter lot 65, and the program tells us that the lot was already sold. The computer operator would verify that lot 65 is indeed correct. The operator would proceed as usual, and add a comment. At the end of the auction, there should be an unsold item, perhaps lot 56. Looking at the "Audit" tab, you should find 2 entries for lot 65: a later one with the comment (and, by the way, a time marker that tells you the time of the

earlier lot 65), and the earlier lot 65. We can safely assume that the earlier lot 65 should really be lot 56, and we can read, from the earlier lot entry, the buyer and amount for this sale. This can be entered either using the cockpit, or directly on the "Sales" tab on the line for lot 56. Note that changing the entry on the "Audit" tab will have no effect; the change must be made to the "Sales" tab either directly or with the cockpit.

Checkout can occur at any time, but generally should be at the end of the auction. When each participant approaches the computer operator, the operator will enter the bidder number (on the "Checkout" tab), print the receipt (the "go" button can be used), and the participant will settle his account with the cashier. (It may be desirable to print a 2nd receipt for record-keeping purposes; this can be setup on the "Auction" tab). All accounts that need to be settled are listed as status "OPEN" on the Bidders tab. Checking out, and printing the receipt turns that "OPEN" status off. If errors are discovered while checking out, (perhaps a price was incorrectly recorded (change the price on the "Sales" tab), perhaps a participant wants to turn an item into a donation (change the status on the "Consignment" tab), perhaps the incorrect buyer was recorded (change it on the "Sales" tab)), this could impact some people who had already checked out. If this is the case, the affected participants will revert to "OPEN" status. They will need to be checked-out again, by generating a new receipt with a revised account balance. This happens automatically.

Limitations

Currently, the program can handle 500 participants and 500 lots. Expanding this is not difficult. Currently, the program prints out single lot slips; dual lot slips have been suggested as a better option for maintaining accurate records. This is an easy change, but it is not hard-coded yet. Individual sales must be less than $32000.

How it works

All of the auction transaction data is stored in three lists:
-The names of the participants are on a list on the "Bidders" tab.
-The descriptions of the lots are on a list on the "Consign" tab.
-The connection between the lots and the bidders (who bought what and for how much) is on a list (that mirrors the "Consign" list) on the "Sales" tab.

These three tabs hold essentially all the auction data. The rest of the tabs put data into these three lists, or read data from these three lists. A key concept here is that data is not flung all over the excel file; it is all in these three sheets. These three sheets also talk to each other: for example, sales data is summarized (on a per-person basis) in the "Bidders" list.

The other tabs are as follows:
-"Lot_Slips" simply pulls data from the "Consign" list so that lot tags can be easily printed.

-“Cockpit” provides an interface to getting information onto the “Sales” list. This was considered necessary because a live auction is fast and busy, and scrolling around the sales list requires time and attention. “Cockpit” uses Visual Basic Macros.
-“Checkout” pulls information from the Sales tab, essentially finding all buys and sells for a given participant and listing them in the form of a receipt. It also records when a receipt is printed (in the assumption that the receipt is paid) and records a copy of the receipt. “Checkout” uses Visual Basic Macros.
-“Audit” is a list in which all “Cockpit” and “Checkout” transactions are recorded, and is generated by the respective macros. It is an audit trail, so all of the information is taken as snap-shots from the “Bidders”, “Consign”, and “Sales” pages. (The implication here is that information in the “Audit” list is not used elsewhere, and it is a snap-shot representing the data at the time of the transaction. In other words, changing data in “Bidders”, “Consign” or “Sales” does not change what appears in “Audit”) It is intended to be used in case it is necessary to find errors made during an auction.
-“Summary” is a top-level view of how the sale is going.
-The “Aucton” tab contains auction set-up information, which feeds into the user interface. (so, yes, it includes some information about the overall auction, but really just “window dressing” information)

Software Usage

This is entirely open-coded software. It was developed for an Excel 2000 spreadsheet, with macros enabled. It has been tested on more recent versions of Excel. I use “Cute PDF” to generate .pdf files of the lot tags, but any .pdf generator should work with suitable program modifications.

The program was written in English, but can be adopted for different languages. (however, some names and sheet names are hard-coded in the macros) The “Util” tab includes variables that set the words used (words like “Sold”, “Open”, “NS” (for No Sale); these can be edited at will without changing the program.