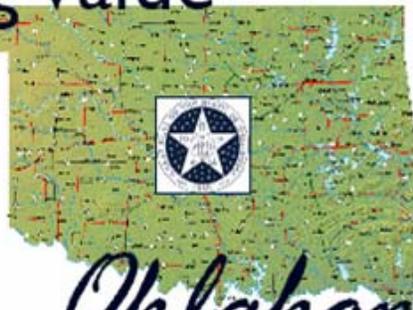


Oklahoma Tax Commission
64th Annual Educational Conference
For Assessing Officers

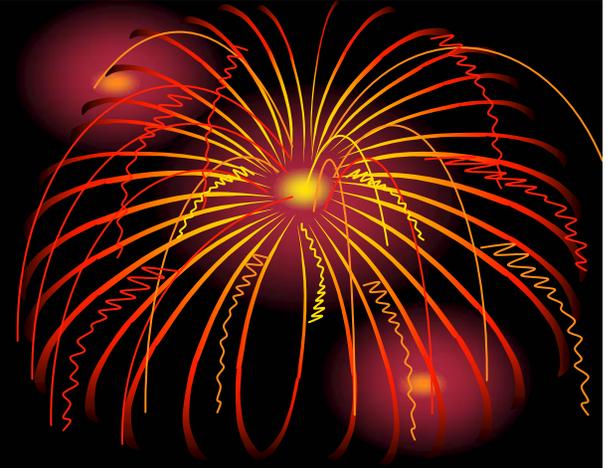
Placing Value

In



Oklahoma

August 5-8, 2008
Tulsa, Oklahoma
Southern Hills Marriott



Oklahoma Tax Commission

*Charles Wilson
Sally Frazier
Gerald Elrod*



Assessment & Equalization Section

*"They Shoot Houses,
Don't They?"*



Digital Photography for the Assessors Office

*Oklahoma Tax Commission
64th Annual Educational Conference*

A close-up photograph of a woman with short brown hair holding a black Canon DSLR camera up to her eye. The camera's lens is prominent on the left side. The background is a solid blue color. Overlaid on the image is the text "Welcome to Digital Photography" in a yellow, italicized, sans-serif font, arranged in four lines.

*Welcome
to
Digital
Photography*



*Everyone has a
photographic memory.*



Some just don't have film.





History of Photography

- *First Photography*

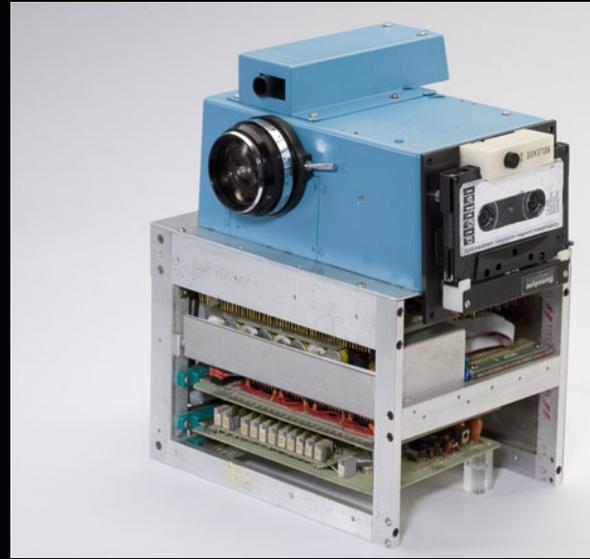
- *Greek translation for “photography” is writing with light*
- *Birth of photography in early 19th century*
- *Arrived in United States in 1839*



Digital History

- *Digital is a recent invention of the 20th century*
- *First appeared as live images on tape or disk*
- *NASA first converted analog-to-digital*
- *First patent for camera without film in 1972*

Kodak's First Digital Camera



In 1975 -- Kodak researcher Steve Sasson built the first digicam, cobbled together from spare parts and digital technology.

Sony Mavica

*The first totally digital camera's
resolution was a modest*

640 x 480





Course Objectives

- *Why buy digital?*
- *What camera fits my needs?*
- *Understanding digital terms and camera features*
 - *Establishing office guidelines*
 - *Field Work – Techniques and Tips*
 - *Downloading of pictures*
 - *CAMA Utilities*
 - *Property Record Card*



Why buy digital?

- *Digital cameras store their photos on either internal memory or removable media storage.*
- *No film and less processing cost.*
- *They are equipped with instant playback to see if you have the shot intended.*
- *Zoom lens allow the field person to obtain pictures from a distance.*

What Camera Fits My Needs

<i>Photographs Types</i>	<i>Best</i>	<i>Good</i>
<i>Hassle-Free, good photos</i>	<i>Compact</i>	<i>Ultra Compact</i>
<i>Great photos, without need to carry large camera</i>	<i>Power Compact</i>	<i>Compact</i>
<i>Great photos in wide range of conditions</i>	<i>SLR</i>	<i>Power Compact</i>



Types of Digital Cameras and Prices

Micro Mini

Ultra compact

Compact

Power compact

Single lens reflex

Medium format

Types of Cameras & Price Ranges

- *Micro Mini - small, fits in a gum pack or smaller. \$100.00 to \$200.00*



Types of Cameras & Price Ranges

- *Ultra compact - small, fits in a pocket.
\$50.00 to \$75.00*



Types of Cameras & Price Ranges

- *Compact - still pocket-sized, but offers good image quality. Standard feature include LCD preview panel on back and memory cards for image storage.*

\$ 100.00 to \$ 200.00



Types of Cameras & Price Ranges

- *Power compacts - have automatic exposure and focusing. Zoom lens is a standard feature.*

\$ 175.00 - \$ 300.00



Types of Cameras & Price Ranges

- *Single Lens Reflex – has detachable lens for wide or telephoto lens. The scene is viewed through the viewfinder or the lens itself.*

\$400.00 - \$1,000.00



Types of Cameras & Price Ranges

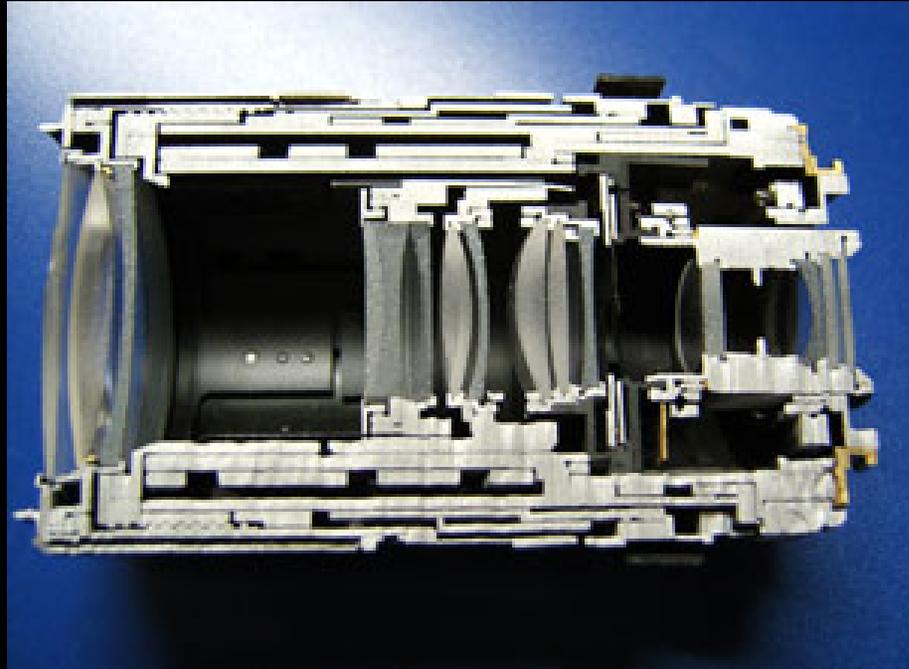
- *Medium format - professional grade.*

\$1,000.00 plus



A look inside your digital camera.

- *Your camera's inner workings may seem impossibly complicated, but there's nothing inside that should scare you.*



A camera works much like your eye.

- The lens and iris collect and control the light entering the camera. The image sensor converts the light that enters the lens into an electrical signal. The electrical signal is stored as an image internally or on a memory stick. This image can be retrieved by a computer and displayed immediately.*



Digital Camera Features

- *Rechargeable Batteries*

- *Disposable AA vs.
Rechargeable AA*



- *In-Camera
Rechargeable*



Media Storage

- *Compact Flash (CF)*
 - *Mostly bulky of cards, but offer a degree of ruggedness and space for high memory*



Memory Stick

- *Sony's memory format has large capacity but compatibility issues exist between the Duo and Pro versions*



Smart Media

- *Topped out in capacity at 128 MB, found only in digital cameras with modest performance*



Secure Digital (SD) and Multi Media Cards (MMC)

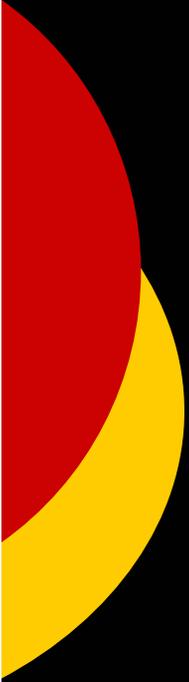
- *Used to store copyrighted material and prevents unauthorized copying. Found mostly in MPS players, phones and PDAs.*



CD or DVD

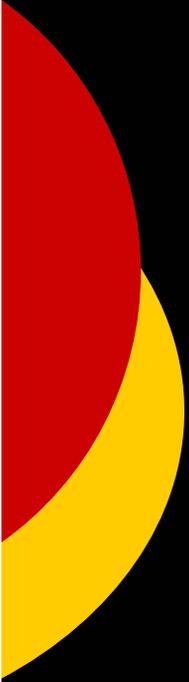
*Particularly effective
for storage of images.
Easy to download and
can be read on most all
computers*





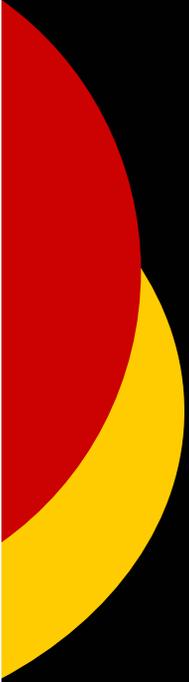
Digital Zoom vs. Optical Zoom

- *The zoom ratio consist of two different types of components*
- *Optical zoom – adjust the lens to enlarge the image*
- *Digital zoom – takes the data from the central pixels and enlarges them to full size of image*
- *For best results, keep your camera on optical zoom*



Digital Dictionary

- *CCD Devise or Charged Couple Devise*
 - *Pixels are tiny dots that are converted into an electrical charge that corresponds to a color in the color spectrum when light hits the CCD of the camera*



Digital Dictionary

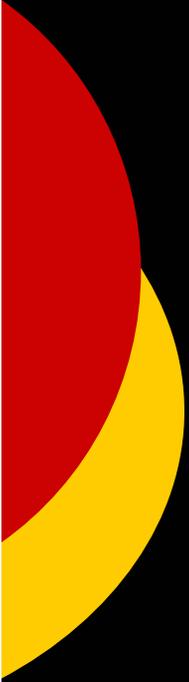
- *Mega pixel*
 - *An image or image sensor with over 1 million pixels.*
 - *A 4.0 Mega pixel camera has a CCD with 4,000,000 pixels.*



Digital Dictionary

- *Compression*

- *The process of reducing the size of a file.*
- *This can be done by a scheme (jpeg) that both reduces the size of the file and degrades the picture.*
- *The other scheme (raw, tiff) will reduce the file size without degrading the image*



Guideline for Photos

- *What to photograph and what not to photograph*
 - *Establish policy regarding people in shot*
 - *Internet accessibility*
 - *Photos use to be only on in-house cards and now on line*



Guideline for Photos

- *Photograph all buildings and any special features*
- *What to avoid in your photo*
- *Discuss importance of where you stand*
- *No shooting through the windshield, etc.*

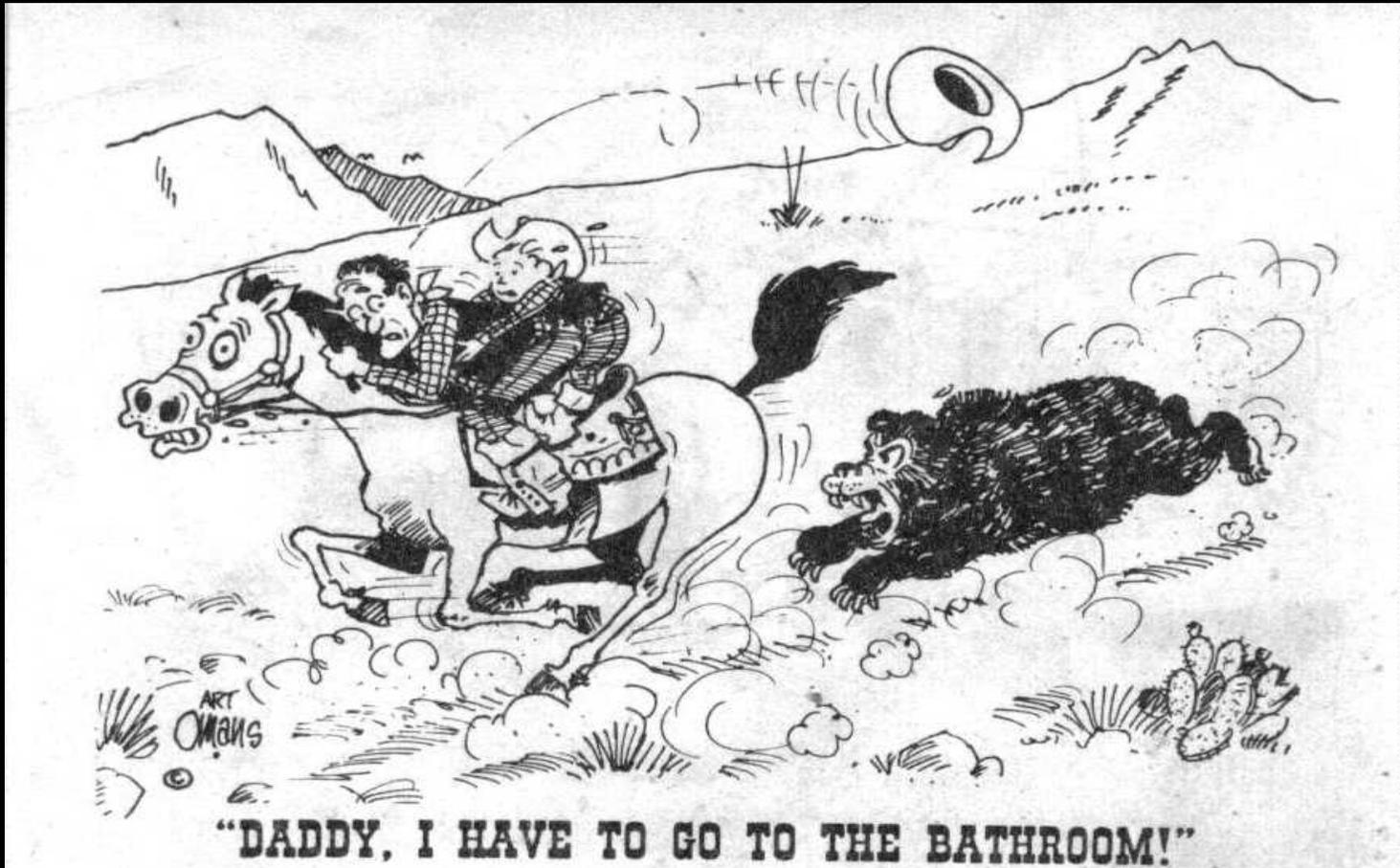


Advantage of Photos in Assessors Office

- *Leads to credibility of actual inspection*
- *Shows condition of property on certain date*
- *Helpful in classing of property*
- *Useful for comparisons in appraisals*
- *Great tool for informal and formal protests*
- *Aid in locating property especially in rural areas*

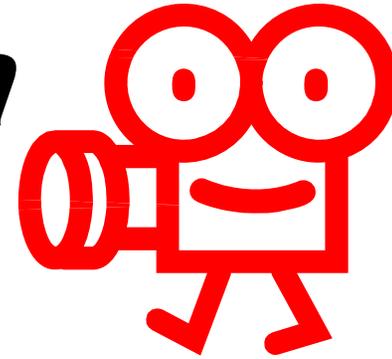
Break Time

10:00 am to 10:30 am





Care and Feeding of Your Camera



Cameras are a lot like people



They don't like heat. Operating temperatures 32 to 104 degrees



They don't like cold. Operating temperatures 32 to 104 degrees



*Dust is an enemy. Try to avoid using
in extreme sandy or dusty areas*



*As with all electronic devices...
they don't like water.*





Patches

*Feed
Me*

Use of Cases for Transport

- *There is a variety of shapes, colors, and sizes; choose one that best fits your needs.*



Use of Neck Strap or Lanyard

Cameras don't like to be dropped!



Lens Protector or Filter

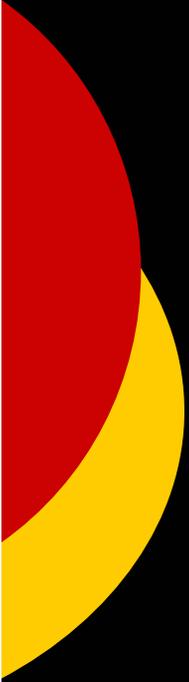
They are available for most lenses and offer inexpensive protection. A UV filter is the most common.



LCD Panel Cover

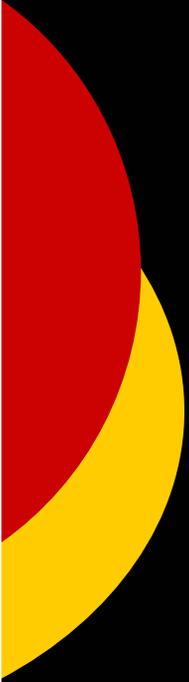
An inexpensive screen that fits over your LCD panel to prevent scratches. The cost is less than \$20.00





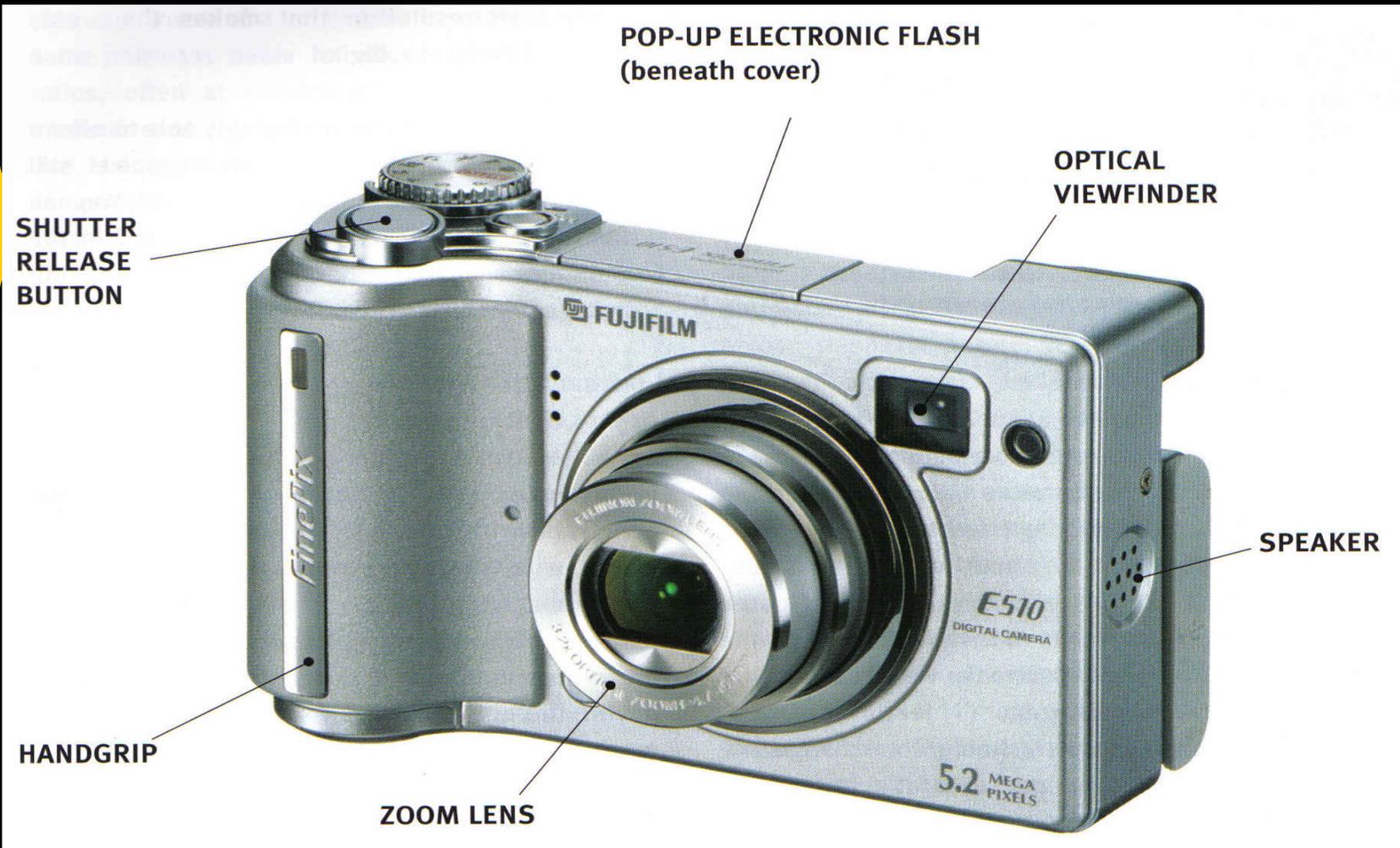
*Use of Your Camera
for Field Work*

*Mastering
Your
Digital
Camera*



Digital Camera Standard Features

- *Lens*
- *Shutter button*
- *Power switch*
- *Zoom Control*
- *Optical View Finder*
- *Menu Button*
- *Function Rocker*
- *LCD Panel*
- *Memory Card Slot*
- *Mode Dial*
- *Battery Compartment*
- *Tripod Mount*
- *Flash Activation*
- *Replay Selector*



**OPTICAL
VIEWFINDER**

**ZOOM
CONTROL**

**RECORD/
REPLAY
SELECTOR**

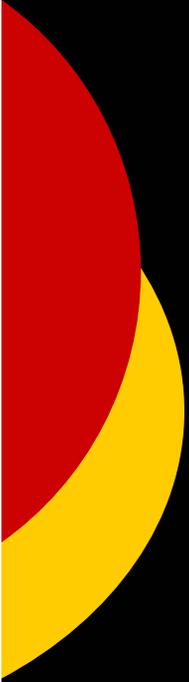
**EXPOSURE
COMPENSATION
BUTTON**

**FUNCTION
ROCKER**

LCD PANEL

**MENU
BUTTON**





- *LCD Panel*

- *Allows you to preview shots but constant use will quickly drain your battery*

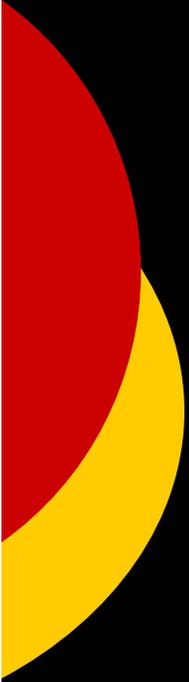
- *Auto White Balance*

- *Attempts to correct color due to different light sources*



○ *Resolution or Detail (Expressed as Mega Pixels)*

- *Higher pixels = better enlargements but large size takes up hard drive space*
- *Lower pixels = good small photos without filling up the hard drive*



*Techniques and
Tips for Taking
the Best Shot*



Importance of Good Vs Bad Photos

- *Photos are important tools and will be viewed by owners and appraisers.*

Bright Light

- *Use lens or shade hood*



Shooting Towards the Sun

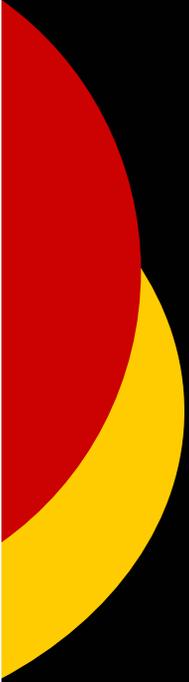
- *Try a different camera angle*



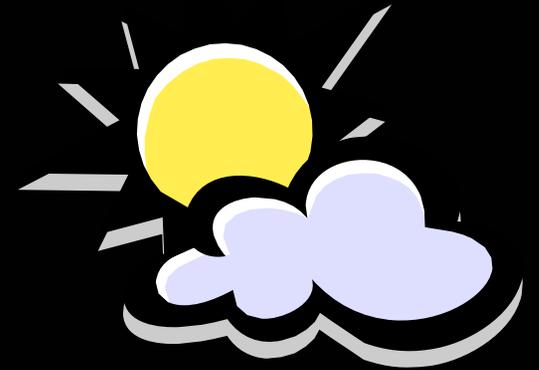
Low Light

- *Turn on camera flash*





*A day without sunshine
is like,*



well, night.



Subject Too Large

- *Try to shoot building at an angle rather than head on*



Subject Too Far Away

- *Use your optical zoom*
- *Crop in the office*



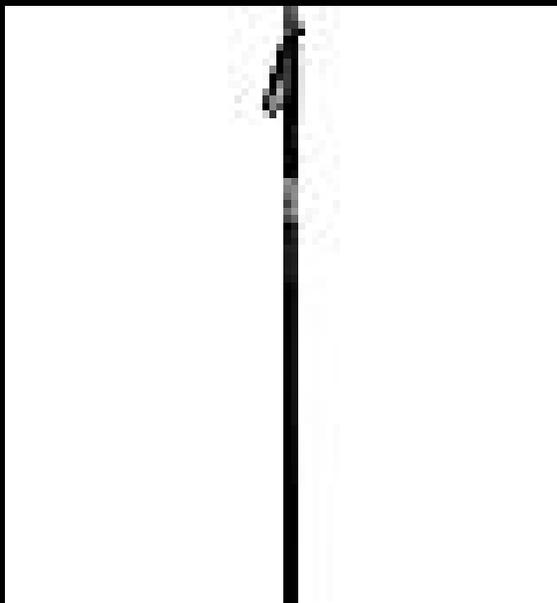
Centering

- *Try to get only your building in the photo*



Preventing Movement or Blurring

- *Use of a tripod or monopod*



Preventing Movement

- *Brace your camera square to your body*



Building Features

- *Photograph any unusual features*



*Good Photos Help Determine
the Quality, Grade or Class*



A Couple of "Don't Do" Shots





*You want your photos to
reflect your
professionalism.*

Good Photos =
Good Public Relations



Despite Your Best Efforts

Sometimes this is the best you can do!!





After a long day in the field you are now ready to *retrieve* your images.



*Downloading of
Pictures to
Your Computer*

Use of Card Readers

- *Inexpensive device that allows you to transfer photos from any type of card media into your computer using your USB port*
- **Caution:** don't leave plugged into computer system

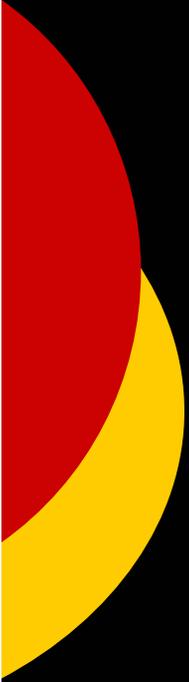


Use of USB Port Cables

- *Easy way to upload photos to server*



- **Caution:** do not leave USB cables plugged into computer



Use of Docking Station

- *Many cameras are equipped with docking stations for photo transfer and charging.*
 - *We strongly encourage you to use your docking station for battery charging only. Don't plug into the computer system.*



*CAMA Utilities for
Picture Maintenance*



Automatic Resize

- *Photos are automatically resized whenever each photo is pulled into the program*
- *Feature is available to resize existing photos*



Picture Maintenance

- *Text Settings allow for the following:*
 - *Parcel ID*
 - *Date*
 - *Comments*

CAMA Utility Menu 3.1 Tulsa School '08

View Backup CAMA Transfer CAMA CAMA Ouths Picture Maintenance

*Access Picture
Maintenance
through CAMA
Utility*

TroyLF

CAPS

7:40 AM

7/25/2008



Raw Pictures

- *Set up where photos are being downloaded from, such as photo stick or floppy*
- *Pulls in photos with default names from each camera*
- *Shows preview of raw photo*

CamaPropImageList

Change Settings Process Pictures Exit

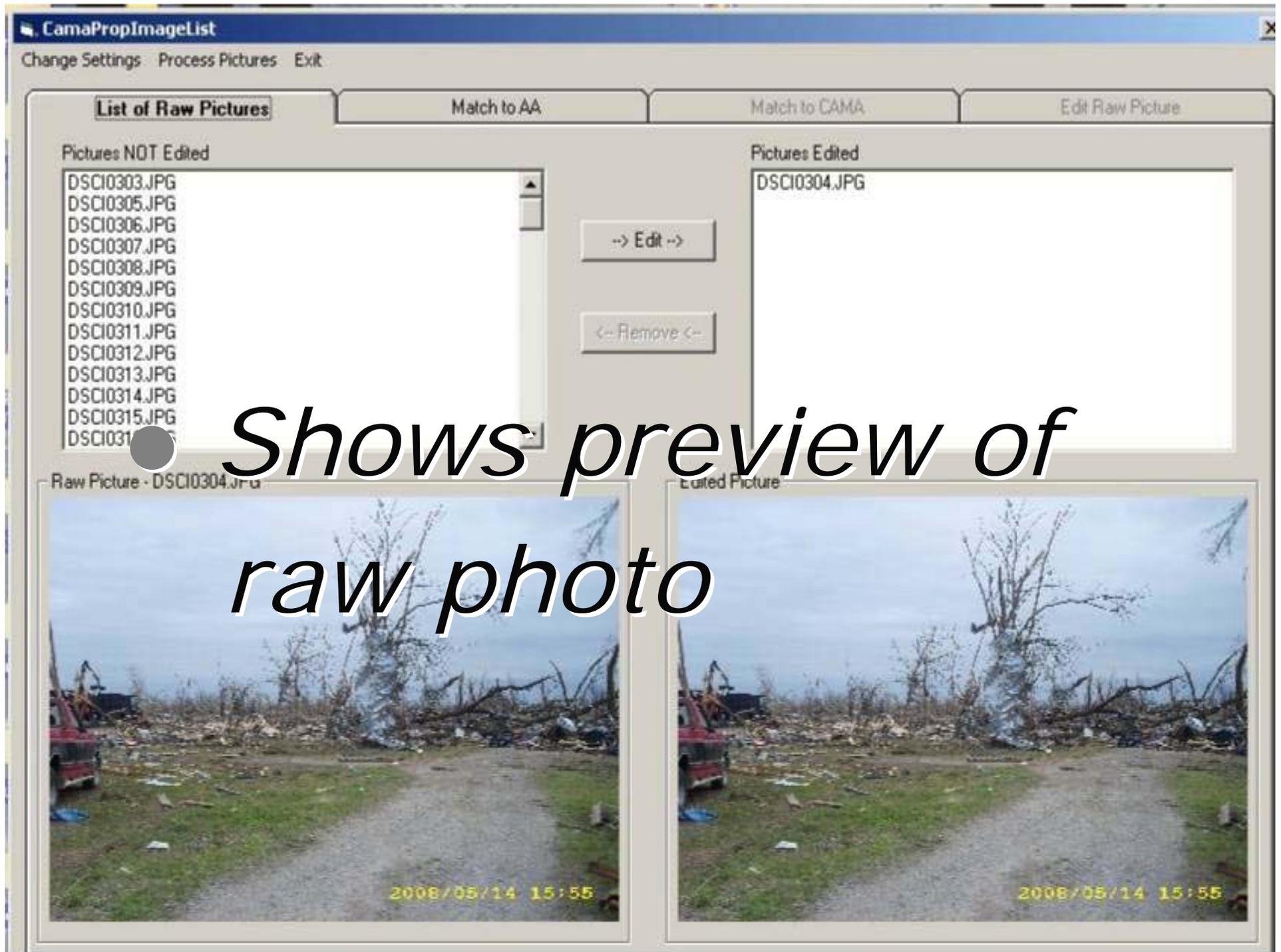
List of Raw Pictures

Match to AA

Pictures NOT Edited

~~DSCI0305.JPG~~
~~DSCI0305.JPG~~
DSCI0306.JPG
DSCI0307.JPG
DSCI0308.JPG
DSCI0309.JPG
DSCI0310.JPG
DSCI0311.JPG
DSCI0312.JPG
DSCI0313.JPG
DSCI0314.JPG
DSCI0315.JPG
DSCI0316.JPG

- *Camera Photos*





Edit of Raw Photo

- *Allows contrast to lighten or darken*
- *Allows standard cropping*

CamaPropImageList

Change Settings Process Pictures Exit

List of Raw Pictures

Match to AA

Match to CAMA

Edit Raw Picture

Current AA Pictures

- A130-00-027-015-0-001-00.jpg
- A130-00-028-001-0-001-00.jpg
- A170-00-000-101-0-001-00.jpg
- A170-00-000-110-0-001-00.jpg
- A240-00-001-001-0-001-00.jpg
- A240-00-001-002-0-001-00.jpg
- A240-00-001-005-0-001-00.jpg
- A240-00-001-013-0-001-00.jpg
- A280-00-005-001-0-001-00.jpg
- A999-03-009-017-0-010-00.jpg
- A999-03-009-017-0-010-00-01.jpg
- A999-35-010-017-2-010-00.jpg
- A999-35-010-017-2-017-00.jpg

Replace AA Picture

New AA Picture

A170-00-000-110-0-001-00

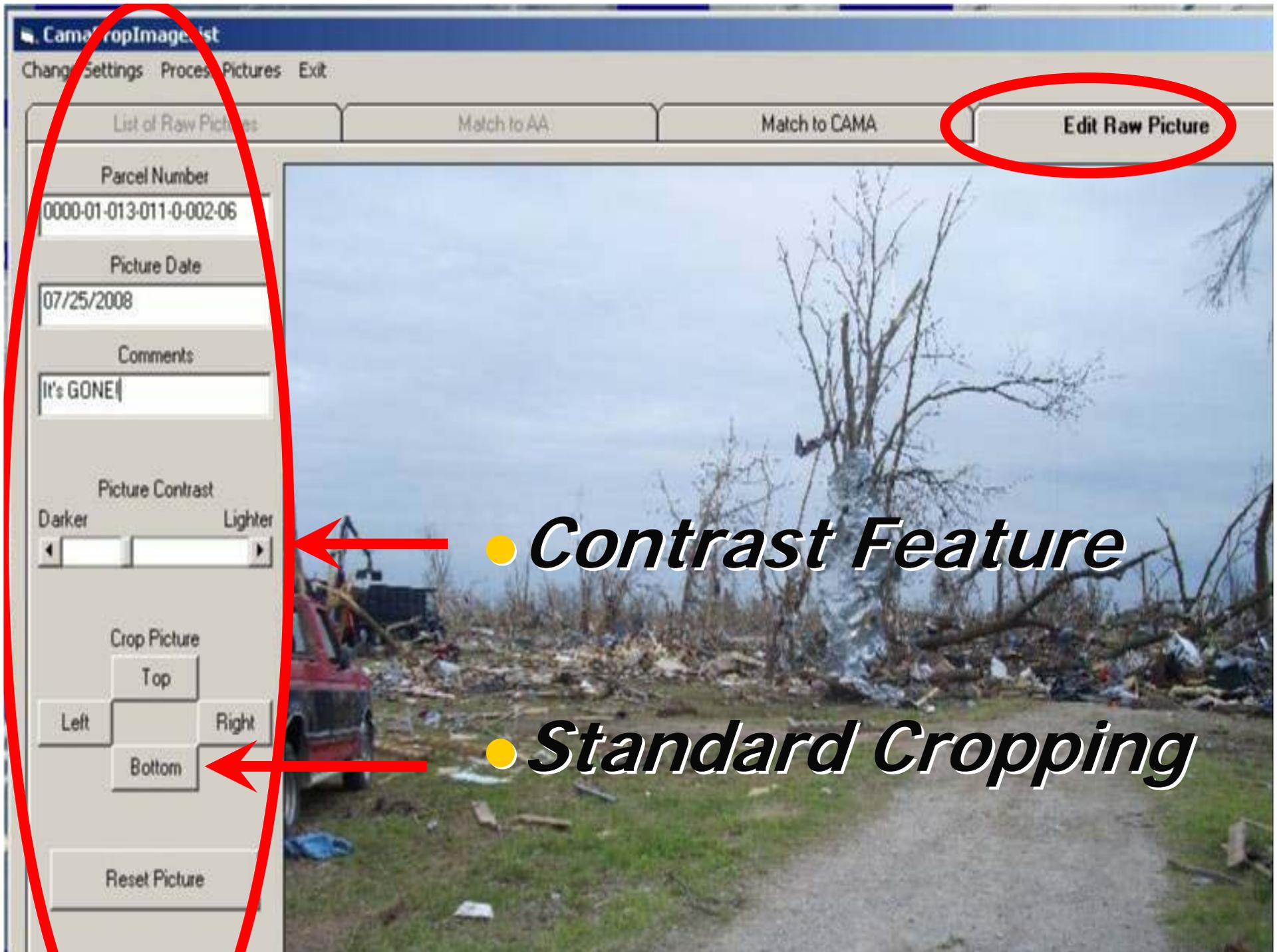
Set Picture Name

Raw Picture



Current AA Picture





Edit Raw Picture

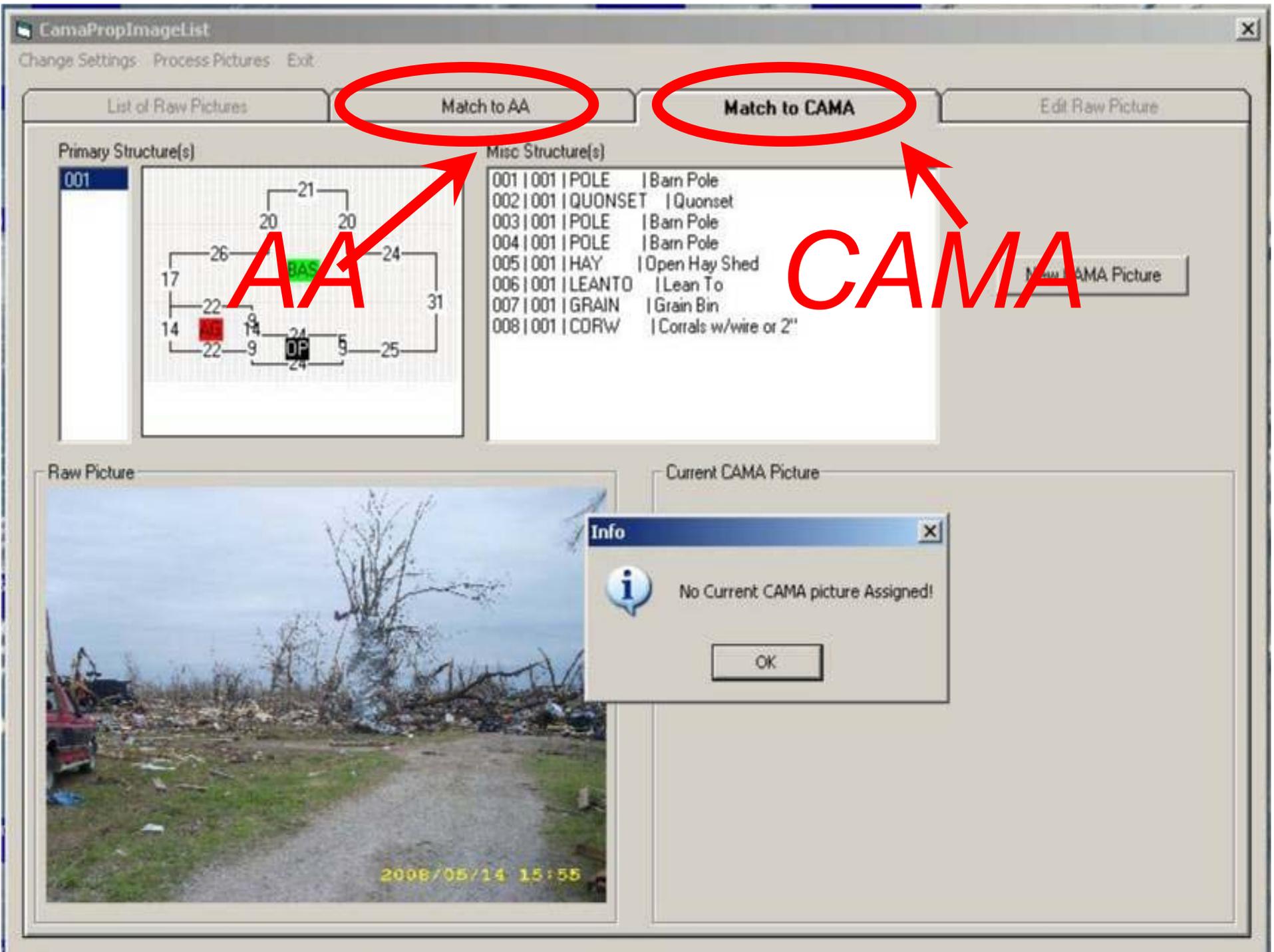
● *Contrast Feature*

● *Standard Cropping*



Process Pictures

- *Saves photos individually to AA, CAMA or Both*



CamaPropImageList

Change Settings Process Pictures Exit

List of Raw Pictures

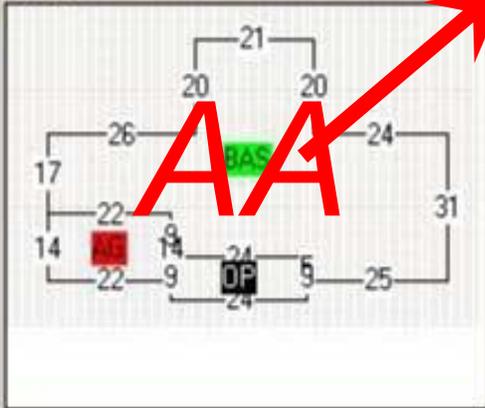
Match to AA

Match to CAMA

Edit Raw Picture

Primary Structure(s)

001



Misc Structure(s)

001	001	POLE	Barn Pole
002	001	QUONSET	Quonset
003	001	POLE	Barn Pole
004	001	POLE	Barn Pole
005	001	HAY	Open Hay Shed
006	001	LEANTO	Lean To
007	001	GRAIN	Grain Bin
008	001	CORW	Corrals w/wire or 2"

Match CAMA Picture

Raw Picture



Current CAMA Picture





New Property Record Card

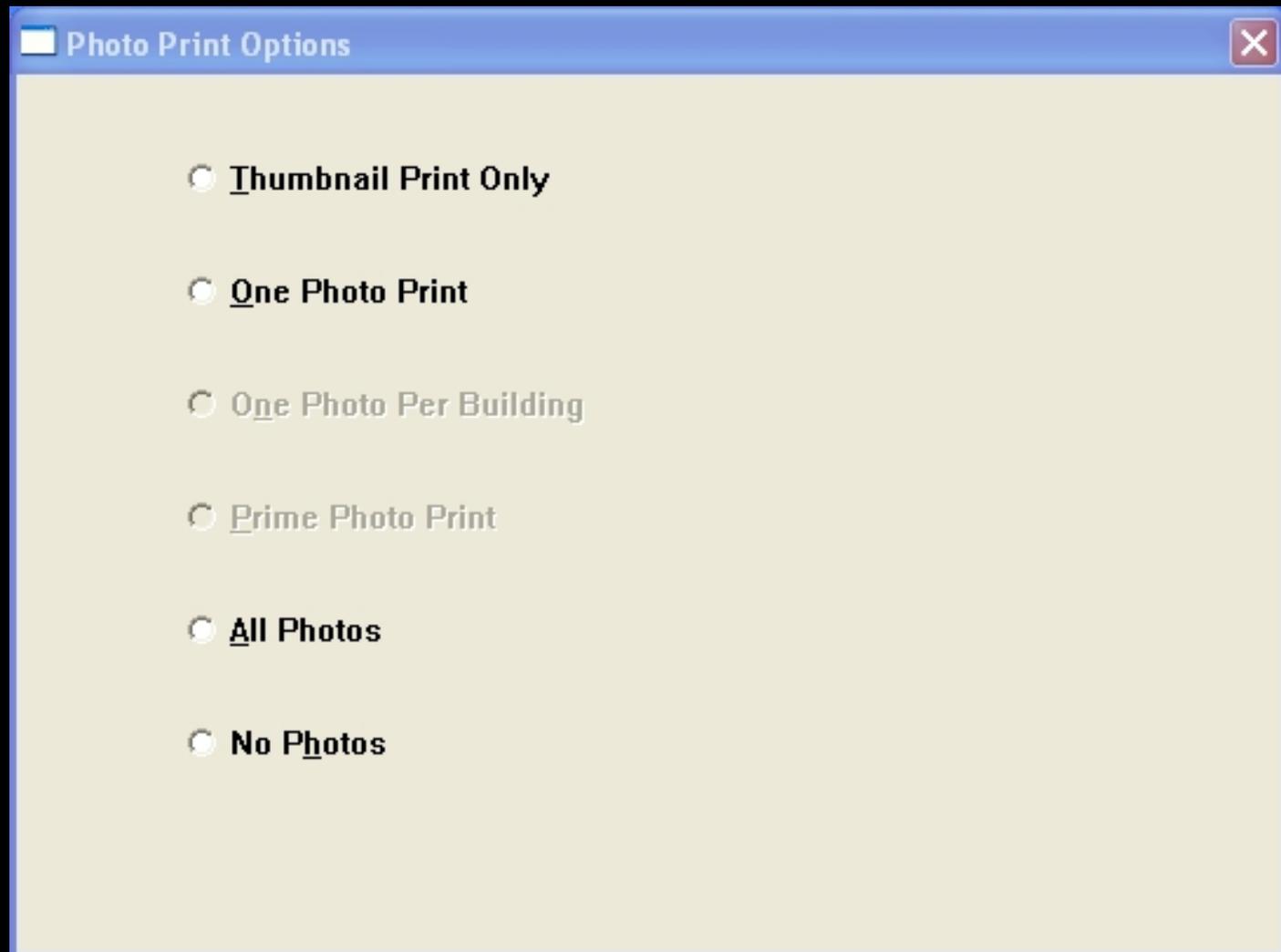
- *Photo Card Numbering System and Use of parcel ID number*
 - *Primary photo will have parcel ID number followed by -000*



New Property Record Card

- *Secondary photos will have parcel ID number followed by -001 for second photo and -002 for third photo, etc. up to 999 photos on each parcel.*
- *This numbering sequence is the most compatible for both CAMA and AA.*

Selecting Thumbnail or All Photos

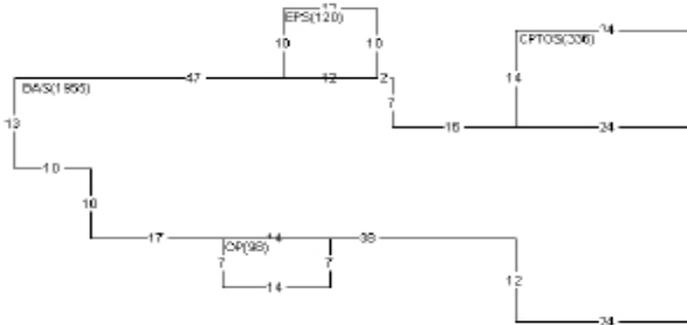


BEG. 1142FT S OF NE COR LOT 1,
 W 627FT. S 330FT., E627FT., N
 330FT., SEC. 1-16-15

BLDG # 1
 Stories/Style 1 One Story
 Occupancy 1 Single Fami
 Design 0001 TRADITIONAL
 Quality 03 Class D+ LO
 Roof Type 01 GABLE
 Roof Material 1 COMP SHG CL
 Exterior Wall-1 3 AL/VNL SDG
 Exterior Wall-2
 Foundation 2 "D" CONVNTN
 Interior Fin 3 D AVERAGE
 Floor Cover 3 "D" AVERAGE
 No. Bedrooms 000
 No. Baths
 Total Rooms 000
 Heating 1 FORCED AIR
 Air Condition 1 FORCED AIR
 Fireplace #1
 Fireplace #2
 Primary Garage
 Primary Porch 3 OpnPorch Cl
 Basement
 Actual Year Blt 1945
 Year Remodeled 0000
 Eff. Year Built 0000
 Condition 3 AVERAGE
 Normal Depr Tbl DA Class D AVG
 Functional Obs. 000000
 Economic Obs. 000000
 Observed Depr. 000000
 Obsvd Depr Code
 RENT 000000
 Cnty Adj. Fact. 000

OAKWOOD OK 736599726
 Site Address: 000000

Land Value 4,750
 Misc Value 11,052
 Bldg Value 32,258
 Total Value 49,060
 Value By CAMA



Effective Area 1,955
 Points 0.0000
 Bldg Rate 47.14
 RCN 92,166
 Pct Good 0.3500
 OBSOL 0.0000
 Building Value 32,258

BOOK	PAGE	DATE	QS	SALE PRICE
PERMIT NO	TYPE	DATE		AMOUNT

Appraiser JL J. LOUTHAN-OWNER
 Appr Date 08/23/06
 Use Code 0002 RURAL RESIDENT
 NBHD 7000.00 RURAL #10
 L100 M100 B108

AREA	FLAT	HEATED
BAS	1955	1955
OP	98	
CPTOS	336	
EPS	120	



History Values

Tax Year	Total Appraised Value
05	31,711
01	16,916

MISC	BLDG	CODE	DESC	LENGTH	WIDTH	UNITS	ADJ PRICE	EYB	DT	PCT	ADJUSTMENT	VALUE
1	1	EPSD	EncPorch Cls D	12.00	10.00	120.00	14.39	00		37.00	1.00	639
2	1	STL BIN 4	STEEL BIN 4 RING	.00	.00	1.00	400.00	00		50.00	1.00	200
3	1	POLE	Barn Pole	30.00	30.00	900.00	3.37	00		10.00	1.00	303
4	1	LEANTO	Lean To	38.00	24.00	912.00	2.93	00		10.00	1.00	267
5	0	UTIL	Utility Bldg	50.00	30.00	1500.00	5.36	2004		95.00	1.00	7,638
6	0	CPTOSD	CovPatio Cls D	24.00	14.00	336.00	6.28	2007		95.00	1.00	2,005
LAND	LUSE	DESC	ZONING	UNITS	TP	PRICE	----- ADJUSTMENT CODE/FACTOR -----				VALUE	
1	2	Rural Res	R1	4.75	AC	1000.00	.00	.00	.00	.00	.00	4,750

New Property Record Card



Prop - 0000-01-16N-15W-1-002-00-000



Prop - 0000-01-16N-15W-1-002-00-002

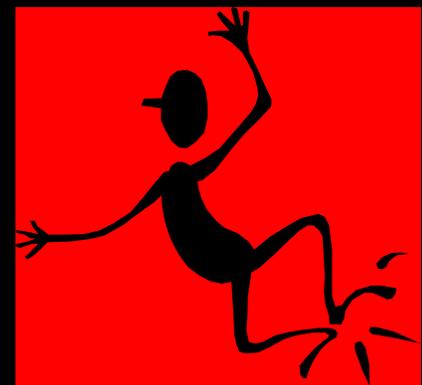


Prop - 0000-01-16N-15W-1-002-00-003

- 
-
- *Take new Photos once every 4 years on visual Inspection cycle*
 - *Archive off previous photos if space is problem on server*

The 50-50-90 rule:

*Anytime you have a 50-50 chance
of getting something right,
there's a 90% probability you'll get it wrong.*

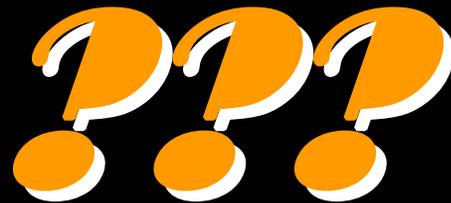




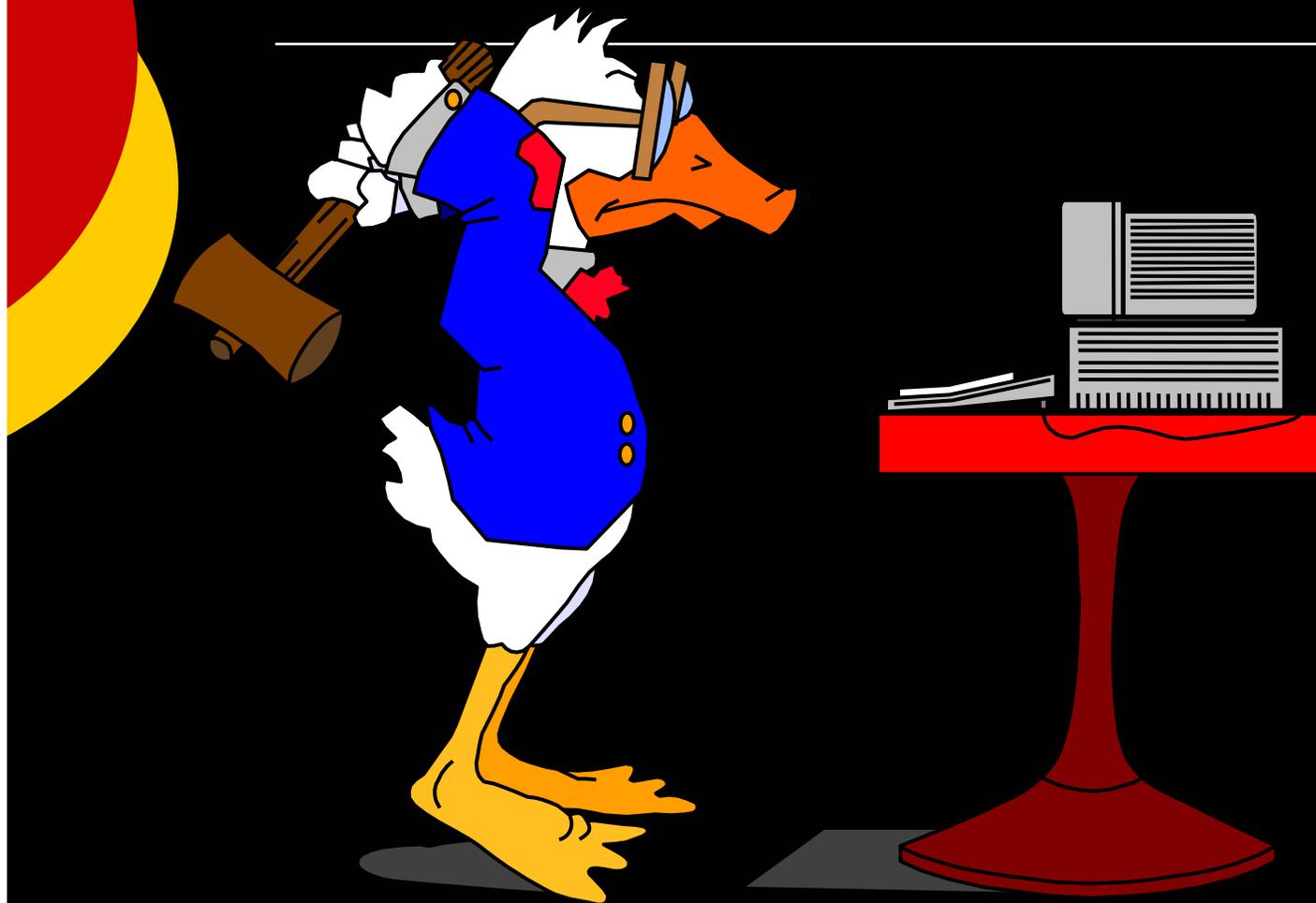
Thank you



Questions



That's all folks!!!!!!!!!!



HIT ANY KEY TO CONTINUE ?