

Photography on the Move

How to get the challenging shots
in less than ideal conditions

by Clem Wehner

Automatic what?

- EXPOSURE
- FOCUS
- WHITE BALANCE
- ISO

It depends!



Problems and Solutions

When photographing:

- Indoors
- Museums
- With tour groups
- Impatient companions
- Not enough time to think about settings
- Flash photography prohibitions, etc

Recommendations

- **EXPOSURE**- manual or auto (your choice)
- **FOCUS**- use autofocus (works great *)
- **WHITE BALANCE**- use auto WB (works well *)
- **ISO**- don't use auto ISO (you lose control of noise *)

* most of the time

WHICH TO USE?

Automatic or Manual?

EXPOSURE

AUTOMATIC EXPOSURE- use when:

- Perfect exposure is desired, but not mandatory
- You don't have much time to adjust settings
- You can take several shots of the subject
- The scene, light, subject is changing from shot to shot
- You don't understand manual shooting

MANUAL EXPOSURE- use when:

- When perfect exposure is important
- You want total control of exposure
- You only get one shot
- You have time to adjust settings
- You understand what you are doing

Special Lighting Tools

FLASH:

Pop-up flash

External Flash (modes, articulating head,etc)

DIFFUSERS:

Commercially available (garyfong.com)

Homemade (packing foam, paper, etc)

“Clem’s Special” Light Beamer

Special Lighting Tools

FLASH:

Pop-up flash

External Flash (modes, articulating head,etc)

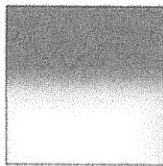
DIFFUSERS:

Commercially available (garyfong.com)

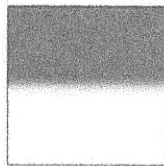
Homemade (packing foam, paper, etc)

“Clem’s Special” Light Beamer

DIFFUSION- SOFTENING THE SHADOW EDGES

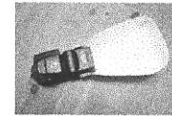
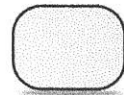


Soft Edge



Hard Edge

Diffusers



Flash Diffusion

without diffuser



Glaring light
Hard shadow edge

with diffuser



Gentle light
Soft shadow edge

Special Lighting Tools

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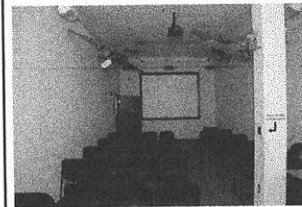
“Clem’s Special” Light Beamer

The packing foam diffuser



Beaming a bright spot of light

- Use a tube of rolled-up packing foam



Special Lighting Tools

FLASH:

Pop-up flash

External Flash (modes, articulating head, etc)

DIFFUSERS:

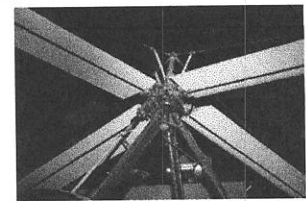
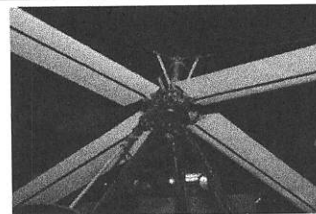
Commercially available (garyfong.com)

Homemade (packing foam, paper, etc)

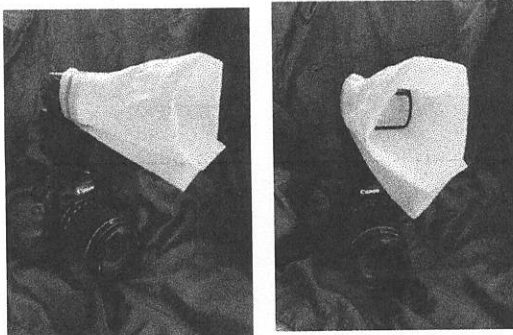
“Clem’s Special” Light Beamer

Highlighting an area of subject

- Use a “Clem’s Special” beaming diffuser

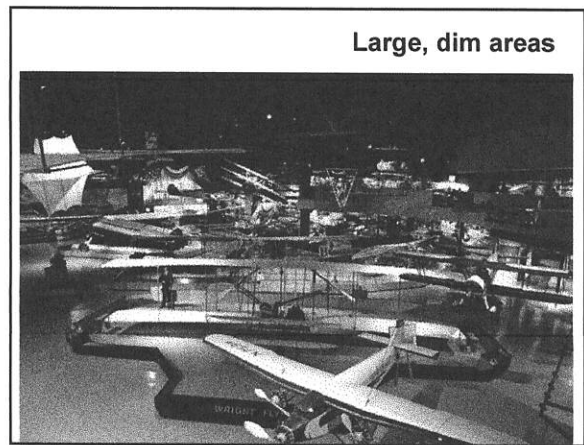
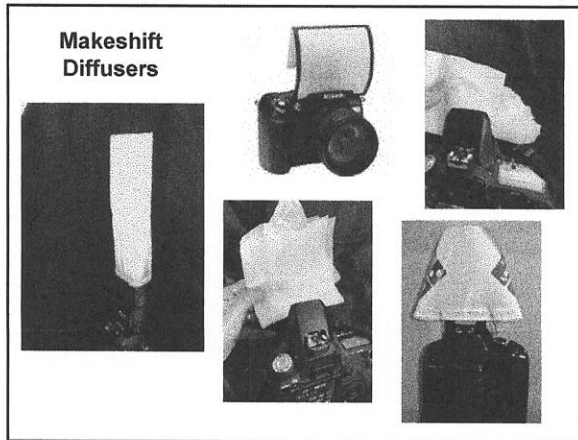


“Clem’s Special” Light Beamer



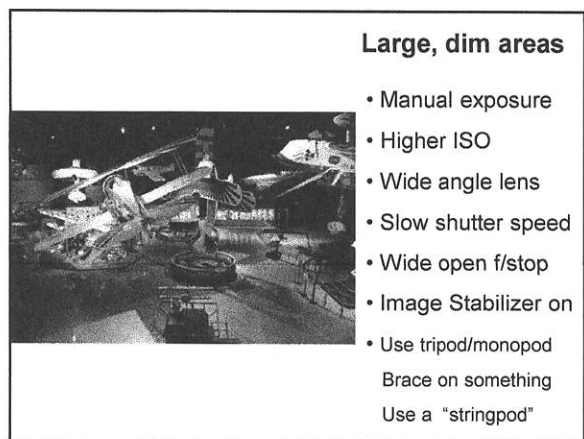
Diffusers in a pinch

- Thin packing foam
- Plastic cup
- Paper towel
- Toilet paper
- Thin white cloth
- Handkerchief

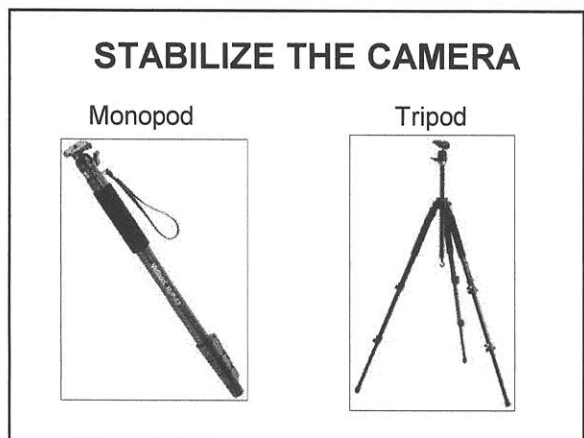


CHIMPING

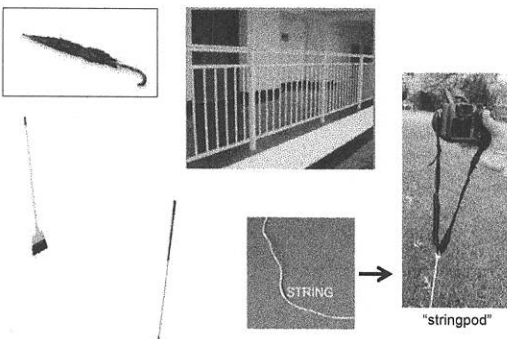
CRUTCH OR TOOL?



Learn to use ALL your tools!



In a pinch, try something else

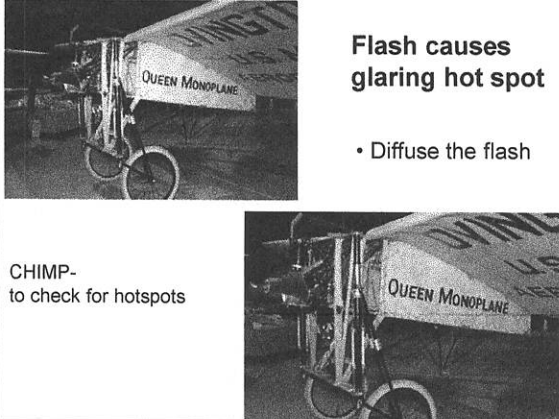


STRING → "stringpod"

Flash causes glaring hot spot

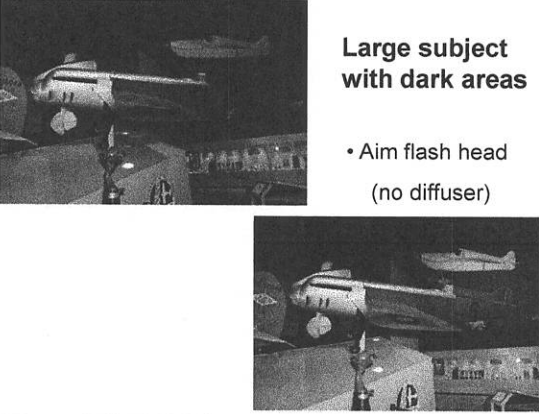
- Diffuse the flash

CHIMP- to check for hotspots



Large subject with dark areas

- Aim flash head (no diffuser)



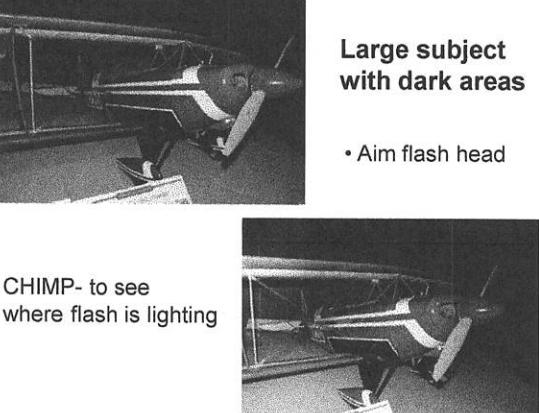
DIFFUSERS CAN BE USED TO
SPREAD LIGHT
OVER A LARGER AREA

IMPORTANT

Large subject with dark areas

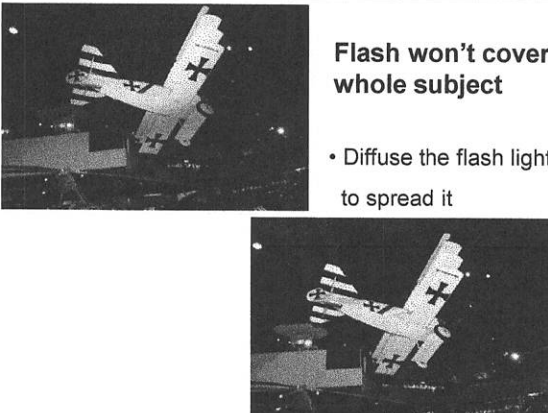
- Aim flash head

CHIMP- to see where flash is lighting



Flash won't cover whole subject

- Diffuse the flash light to spread it



Brighten a natural light scene using flash

Use foam diffuser at low brightness

"NO FLASH ALLOWED" Photography

in a VERY dim room

- Image Stab – on
- Higher ISO
- Long Exposure
- 1/15th sec shutter
- F/4.0 aperture
- Tripod, monopod, stringpod, etc
- Flashlight

Adjusting flash brightness (without adjusting settings)

1. With foam diffuser on external flash:
 - make diffuser smaller
2. With foam diffuser and pop-up flash
 - thicken foam diffuser

Subject too dark- but flash not allowed

Assuming: f/stop & shutter speed as low as possible

- Higher ISO
- Use a flashlight

What if?

No Flash Photography Allowed

No Camera Tripods Allowed

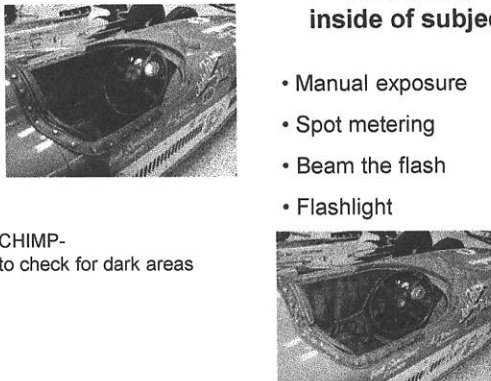
Subject too dark- but flash not allowed

- Higher ISO
- Use a flashlight

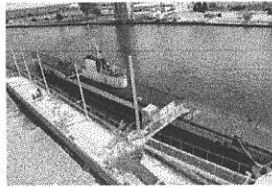
Dark areas inside of subject

- Manual exposure
- Spot metering
- Beam the flash
- Flashlight

CHIMP-
to check for dark areas

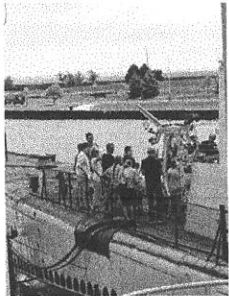


Tour groups



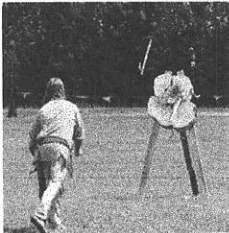
USS Cobia in Wisconsin

- be last in line




Freezing motion

- High shutter speed
- Shutter Priority




CHIMP- to verify you got the axe in flight



Tour groups

Someone is always in the shot!



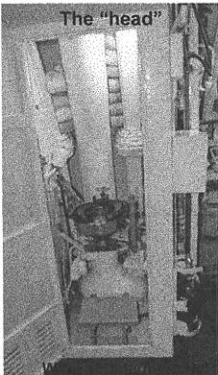
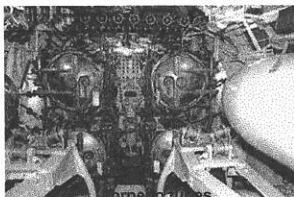
WWII submarine sleeping quarters for 24 men

INSIDE AND CLOSE
(boats, airplanes, vehicles, small buildings, etc.)

Everything is close


Small flash (pop-up) is fine
Use diffuser to reduce glare

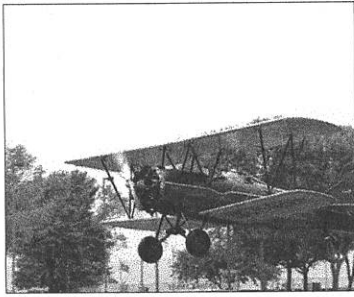
The "head"

Fast motion

OPTIONS: 1. MANUAL
2. SHUTTER PRIORITY
3. SPORTS MODE

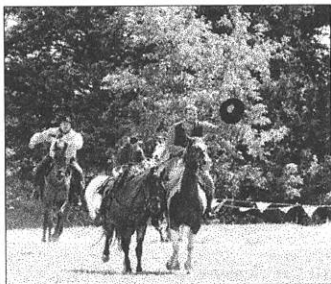




- Fast motion
 - Overcast day
- OPTIONS:
1. MANUAL
 2. SHUTTER PRIORITY
 3. SPORTS (if enough light)



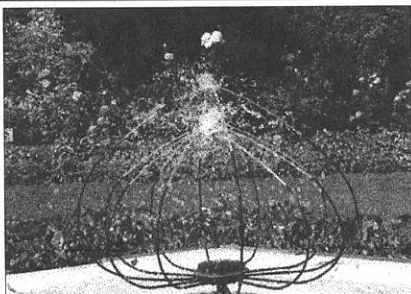
- Goal: smooth the moving water
- OPTIONS:
1. MANUAL (1/4th – 1/15th sec)
 2. SHUTTER PRIORITY



- Fast motion
 - Sunny day
- OPTIONS:
1. MANUAL
 2. SHUTTER PRIORITY
 3. SPORTS MODE



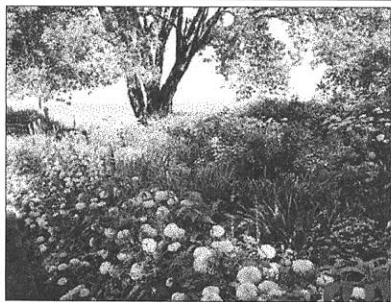
- Goal: everything in focus
- OPTIONS:
1. MANUAL
 2. APERTURE PRIORITY
 3. LANDSCAPE MODE



- Goal: Stop the moving water
- OPTIONS:
1. MANUAL (1/200th sec or more)
 2. SHUTTER PRIORITY
 3. SPORTS MODE

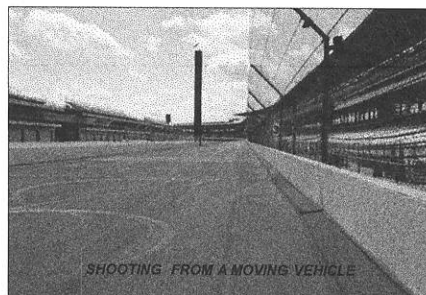


- Goal: everything in focus
- OPTIONS:
1. MANUAL
 2. APERTURE PRIORITY
 3. LANDSCAPE MODE



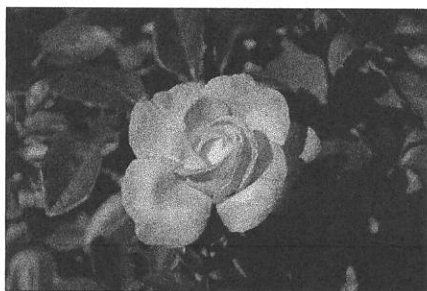
Goal: everything in focus

- OPTIONS:**
1. MANUAL (f/16 or higher)
 2. APERTURE PRIORITY
 3. LANDSCAPE MODE



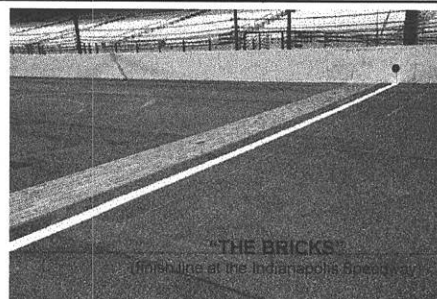
Goal: clear photo from moving vehicle

- OPTIONS:**
1. MANUAL (1/250 OR MORE)
 2. SHUTTER PRIORITY
 3. SPORTS MODE



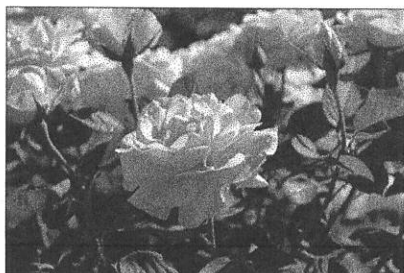
Goal: gently blur the background

- OPTIONS:**
1. MANUAL (f/4 or less)
 2. APERTURE PRIORITY
 3. PORTRAIT MODE



Goal: in focus on a bright day

- OPTIONS:**
1. MANUAL
 2. "P" auto mode



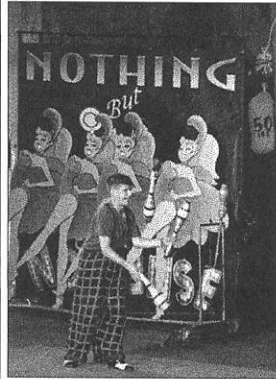
Flowers moving in blowing wind

- OPTIONS:**
1. MANUAL (1/160th or more)
 2. SHUTTER PRIORITY
 3. SPORTS MODE



Fast moving subject

- Bright light**
- OPTIONS:**
1. MANUAL (1/200 OR MORE)
 2. SHUTTER PRIORITY
 3. SPORTS MODE



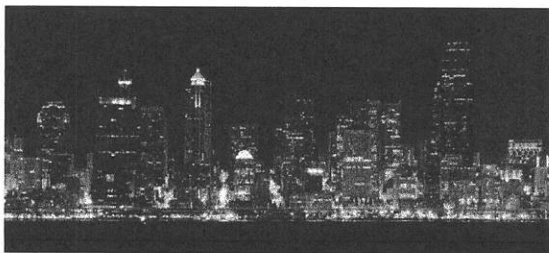
Fast moving subject
Low light

OPTIONS:

1. MANUAL (1/100th or more)
2. SHUTTER PRIORITY
3. FLASH (if allowed)
or, INCREASE ISO

Stuff to keep in your camera bag

- Packing foam
- Rubber bands
- Tape
- String
- Small scissors
- Small bright flashlight (preferably LED)
- Spare batteries



Cityscape at night

1. MANUAL (1/25th sec, f/2.8)

OPTIONS:

2. NIGHT MODE
(Use tripod)

Some last thoughts

- Photography in these situations is trial and error
- Take lots of shots. Try different settings
- “Chimping” is OK. When experimenting, it’s the only way to know if what you did worked
- You may never get another chance for these images, so make sure you got it!

Recommendations

- Learn to shoot in **MANUAL**, then experiment!

If shooting in auto exposure modes:

- Use “P”, not **AUTO** on exposure dial
- Learn to use **SHUTTER & APERTURE PRIORITY**
- Understand limits of **PRE-PROGRAMMED MODES**
- Take multiple shots with different settings