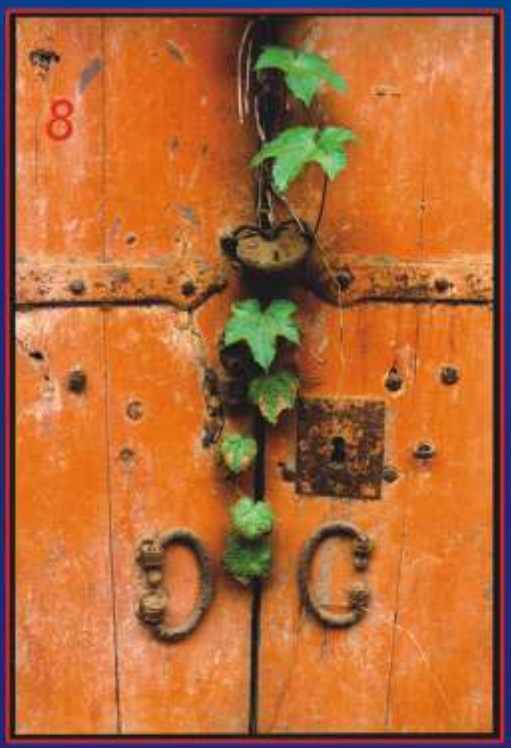
CLICK

THE PHOTOGRAPHIC SOCIETY OF INDIA

RS. 10/-

MARCH 2012



OUTING MONTHLY COMPETITION FEBRUARY 2012

Ganesh Ambokar, APSI 2nd

Ganesh Ambokar, APSI 3rd

OUTING FOR NIGHT PHOTOGRAPHY ON 25TH JANUARY, 2012

Judges: Mr. Shashank Ranjit
Mr. Vilas Parab, APSI

Cover Page:
1 to 6 1st Prize Award winning portfolio of Mr. Nemji Chheda. Prize sponsored by Mr. Vijay Mankarmi - Rs. 1000/-
7. Sayali Madkaikar 1st in Outing
8. Jitendra Naik 1st in Beg in Col

BEGINNERS' MONTHLY COMPETITION FEBRUARY 2012

Jitendra Naik Acpt

Jitendra Naik Acpt

Harshada Sawant 2nd in Col.

Prakash Revadekar 3rd in Col

Judges: Mr. Shashank Ranjit
Mr. Vilas Parab, APSI

Jitendra Naik Acpt

Prakash Revadekar Acpt

Hrishikesh Bind Acpt

Arpit Goyal Acpt

MEMBERS' MONTHLY COMPETITION FEBRUARY 2012

Vaibhav Jaguste, APSI FFIP 3rd in BW

Vaibhav Jaguste, APSI FFIP Acpt

Vaibhav Jaguste, APSI FFIP Acpt

Dr. Suwarna Gawde, APSI Acpt

Judges: Mr. Shashank Ranjit
Mr. Vilas Parab, APSI

Sureshchandra Tarkar Acpt

Umakant Madan APSI Acpt

K. C. Marfatia Hon PSI Acpt

ATTENTION:

Ordinary Members have to renew their membership for the year 2012 - 2013 by 31st March, 2012. The names of the members who fail to renew their membership by 30th April, 2012 shall be deleted from the list of membership.

Renewal Fees: Rs. 500/-


Jiten Hadkar Acpt


Rajendra Waghmare Acpt


Vaibhav Jaguste, APSI, FFIP
3rd in Col


Milind Vedpathak Acpt


Prasad Mantri Acpt


Sandeep Wairkar Acpt


Datta Sawant, Hon. PSI 2nd in Col.


Prakash Dudhalkar Acpt


Aditya Waikul Acpt


Umakant Madan APSI Acpt

Quarterly Thematic Portfolio Competition in celebration of Platinum Jubilee year


2nd Prize award winning portfolio of Mr. Vinayak Joshi.
Prize donated by Mr. Nitin Pawar - Rs. 750/-


3rd Prize award winning portfolio of Mr. Ravindra Deodhar.
Prize donated by Mr. V. N. Dasare - Rs. 500/-

Thematic Portfolio Competition, Month of Feb, 2012 - Judging done by Mr. Datta Sawant, Hon PSI.

IMPORTANT ANNOUNCEMENT:

On the occasion of Platinum Jubilee Year Celebration, PSI announces 'Quarterly Thematic Portfolio Competition'. **The next competition will be held in the month of May, 2012.** The members should submit their portfolio consisting of 6 photographs on or before the **11th May, 2012**. The members can choose any one theme for their portfolio. The print size will be same as the size for our monthly competition All relevant rules of monthly competition will be applicable to this competition. This competition is open to all members including Beginners. One member can submit 4 portfolios.

Success of Members:

44th Howrah Colour Salon 2012

Mr. Ravindra Deodhar	2 Acpt	Mr. Vaibhav Jaguste, APSI, FFIP	1 Acpt
Dr. Suwarna Gawde, APSI	1 Acpt	Mr. Atul Chaubey, AIIPC, IIPC Silver	3 Acpt
Mr. K. B. Jothady, APSI, Hon PSI	1 Acpt	Mr. Ganesh Ambokar APSI	1 Acpt
Mr. Prasad Pawaskar APSI	1 Acpt	Dr. Avanish Rajan APSI	1 Acpt
Mr. Nagesh Sakpal APSI	1 Acpt	Mr. Samir Mohite, APSI, FFIP, AFIAP	1 Acpt
Smt. Kalpana Shah APSI	1 Acpt	Mr. Vishwanath Birje	2 Acpt
Mr. Sunil Marathe APSI	3 Acpt	Mr. Shirish Jhaveri, Hon. PSI, AIIPC,FFIP	1 Acpt
		Mr. Datta Sawant Hon PSI	2 Acpt

Frame 2nd International Salon of Photographic Art 2011

Mr. Subhash Jirange, FFIP, APSI	4 Acpt	Mr. Deepak Bartakke APSI	4 Acpt
Mr. Vilas Parab APSI	2 Acpt	Dr. Suwarna Gawde APSI	1 Acpt
Mr. Sunil Marathe APSI	4 Acpt & 1 FIAP GOLD	Mr. Nagesh Sakpal APSI	3 Acpt
Mr. Atul Chaubey, AIIPC, IIPC Silver	6 Acpt	Mr. Satish Vakharkar	2 Acpt
Mr. Samir Mohite APSI, FFIP, AFIAP	3 Acpt and 1AW	Dr. Avanish Rajan, APSI	4 Acpt & 1 CM
Mr. Umakant Madan APSI	1 Acpt	Smt. Jetal Shah	1 Acpt
Smt. Kalpana Shah, APSI	3 Acpt	Mr. Prashant Sawant	1 Acpt
Mr. P. G. Shivalkar Hon PSI	1 Acpt	Mr. Prasad Pawaskar APSI	1 Acpt

Mr. Shirish Jhaveri, Hon. PSI, AIIPC,FFIP had 7 Acpt in **5th All India Photography Club 2012**, 6 Acpt in **India Circuit (Foto Art Group - Delhi**) and 7 Acpt in **Holland International Image Circuit 2011.**

Our Member Shri Soumitra Banerjee has offered to convert our membership cards into an elegant plastic (thick) cards at a special rate. Those members who are interested may contact the PSI office for details.

PLATINUM JUBILEE SPECIAL - 13th INTERNATIONAL DIGITAL SALON - 2012

Dear Members,
In **celebration of Platinum Jubilee Year**
we have the pleasure to announce the **13th PSI International Digital Salon, 2012** and invite entries for the same.

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13th PSI INTERNATIONAL DIGITAL SALON, 2012

SALON CALENDER

Closing Date : 14th July, 2012
Judging Date : 28th and 29th July, 2012
Notification : 9th August, 2012
Exhibition : 17th to 29th August, 2012
Catalogues/CDs &
Awards dispatch : 12th October, 2012

Salon Chairman:
Mr. Sham Manchekar, AFIAP, Hon. PSI

Salon Secretary:
Mr. Samir Mohite, AFIAP, FFIP, APSI

SECTIONS

A. OPEN
B. NATURE/WILD LIFE
C. PHOTO TRAVEL

Closing Date: Saturday,14th July, 2012.

PANEL OF JUDGES

OPEN SECTION
Mr. K. G. Maheshwari, Hon. FIIPC, ARPS, APSA, Hon. FPS, Hon. FICA, Hon. PSI
Dr. B. K. Sinha, MFIAP, Hon. FIP, ARPS, EFIAP
Mr. Asim Kumar Bhattacharjee, EFIAP, PSA2*

NATURE - WILDLIFE SECTION
Dr. B. K. Sinha, MFIAP, Hon. FIP, ARPS, EFIAP
Mr. Asim Kumar Bhattacharjee, EFIAP, PSA2*
Mr. Aspi Patel, AFIAP, AIIPC, Hon.PSI, APSI

PHOTO TRAVEL SECTION
Dr. B. K. Sinha, MFIAP, Hon. FIP, ARPS, EFIAP
Mr. Asim Kumar Bhattacharjee, EFIAP, PSA2*
Mr. Sham Manchekar, AFIAP, Hon. PSI

PROGRAMMES - MARCH 2012

2nd Friday - *Monthly Competition - Color Prints, Monochrome Prints & Outing for Member & Beginner*

9th Friday - *A Slide show on **"Landscape Photography"** by **Mr. Sanjay Shukla.***

16th Friday - ***"Working towards the Great Photo Story"** by **Mr. Raj Lalwani of Better Photography***

23rd Friday - Holiday (Gudhipadava)

30th Friday - *A Slide show and talk on **"Photojournalism and Calender Photography"** by **Mr. Nandu Dhurandhar.***

Outing - *On 23rd March, 2012 "**Gudhipadva Special Photography**" at Girgaon. Assemble at Phadke wadi Ganesh Mandir, V. P. Road, Charni Road (East), on 7.30 am.(Map is available on PSI notice board).*

Platinum Jubilee Special: PSI arranged an evening with Mr. Ranjitji Madhavji, Past President of PSI and living legend of photography in his own Hamilton Studio Pvt Ltd on Friday 17th Feb. 2012.

Showing old photograph of Mr. and Mrs. K. G. Maheshwari.

Demonstrating studio lights

PSI members are enjoying observing all the antique studio lights demonstration and studio photography tricks by Mr. Ranjitji Madhavji

Showing very old field cameras and antique photographic equipments

Donation: Mr. K. G. Maheshwari, ARPS, Hon. FIIPC, APSA, Hon. FPS, Hon. FICA, Hon. PSI donated his book "Silver Memories" published by Academy of Fine Arts, South Gallery, Kolkata.
Mr. Vasant Manohar, former CEO of Tata Consulting Engineers donated a Canon film camera to PSI.
Mr. Nitin Pawar donated Rs. 750/- and Mr. V. N. Dasare donated Rs. 500/- for Quarterly Thematic Portfolio Competition for the month of February, 2012.

Mr. Adil Gazdar workshop at PSI

Members enjoying workshop by Mr. Adil Gazdar on, "Flash, ISO and White Balance" at PSI on Saturday 18th Feb. 2012.

Definition of "Focal Length"

So to measure the focal length you either have to determine where the rear nodal point is, or you have to use a method of measurement which doesn't require you to know where it is.

There are a number of methods of finding the nodal points of a lens, but none are simple. I won't discuss them here. Instead I'll describe a couple of methods of measuring focal length.

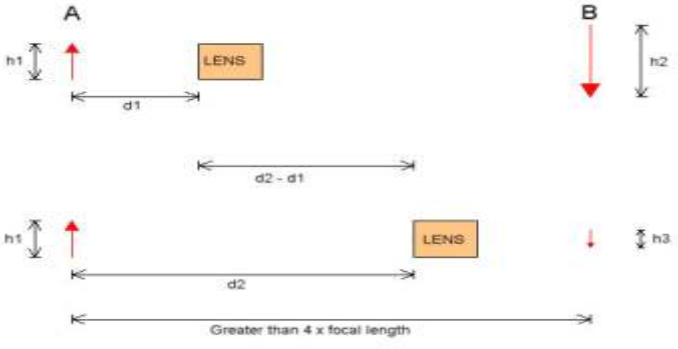
The first method I'll call "the hard way" since it means setting up a small optical bench and making a number of linear measurements. It's the method I'd use to see what the true focal length of a close focusing zoom is. Close focusing telephoto zooms with internal focus often get that close focus by reducing the focal length. So when you have your 300mm zoom focused down to 12", it's probably only really acting as a 100mm lens. Does it matter? Well, if it does to you, this is how to measure it.

The second method I'll call "the easy way". It involves taking one photograph, followed by some fairly simple image measurements and calculations. It's the method I'd use to measure the focal length of telephoto lenses focused at infinity.

The Hard Way

At "A" is the target being imaged and at "B" is a screen on which the image will be focused. "A" and "B" must be greater than 4 focal lengths apart. .

There are two positions for the lens which will focus an image on the screen. In the first position (upper image), a magnified image of the target will be formed. In the second position (lower image), a reduced image of the target will be formed.



The procedure for focal length determination is as follows. Move the lens to a position where a magnified image of the target is focused on the screen. Measure "h1" (the target size) and "h2" (the image size). Also measure "d1", the distance from the target "A" to some point on the lens. It could be the front of the lens or the back of the lens. It doesn't matter.

Now move the lens towards the screen "B" until a second (reduced) image is formed. Measure the distance "d2" from the target "A" to the same point on the lens you used in the first step.

Now calculate the magnification in the first step, which is simply (h2/h1) = "m". Then calculate the distance the lens was moved, which is simply (d2-d1) = "d"

The focal length of the lens is then given by:

focal length = (d)/((m-(1/m))

Example: Lets say the magnification was 6x and the distance the lens had to be moved was 345mm. The focal length of the lens is thus 345/((6-(1/6)) = 345/5.833 = 59.14mm.

While this seems (and is) pretty simple in principle, in practice it's not trivial to setup and to make measurements with high accuracy. If you want 1% accuracy on focal length, you need at least 1% accuracy when measuring magnification and the distance moved. Measuring magnification to a 1% accuracy is pretty difficult.

Does it work in practice?

To test this method I made a very rough calculation of the focal length of a Canon EF28-105/3.5-4.5 USM lens set to 105mm and focused at (1) infinity and (2) 1m. This is an internally focusing lens and so would be expected to change focal length when close focused.

(1) With the lens set to infinity focus I found a magnification of 3x and a distance of 27cm between two focus conditions with the target ("A") and screen ("B") about 55cm apart. This gives a focal length of 101mm, pretty close to the specified 105mm and not bad considering the precision with which I measured magnification and distance.

(2) With the lens set to 1m focus I found a magnification of 5x and a distance of 36cm between two focus conditions. This gives a focal length of 75cm, a reasonable number for a 100mm internal focus lens close focused.

So yes, the method seems to work. However measuring magnification with high precision is tricky, so getting accurate numbers for focal length isn't particularly easy.

The Easy Way

The easy way doesn't require you to make any manual measurements at all, which is why it's easy - and accurate. However it's only good for the lens set to infinity focus. The focal length of a lens is given by:

Focal Length = (length)/(angle)* (180)/pi

where angle = the angle between two distant points
and length = distance between those two points in the focal plane

Fortunately nature has given us the perfect target. The stars. They are pinpoints of light at an infinite distance and astronomers have measured their positions to an amazingly high degree of accuracy. So if we focus on a pair of stars of known angular separation and measure how far apart their images are on the film (or digital sensor), we know the focal length of the lens!

Right now (winter in the northern hemisphere) Orion is a very prominent constellation and it makes a great calibration target. The three stars of Orion's belt (delta, epsilon and zeta Orionis) are nicely spaced for calibration of lenses with focal lengths from 100mm to 600mm and are bright enough to be easily seen and recognized.

The angular separation of the stars is easy to calculate, but a little tedious, so I've done it for you! The basic procedure is to get the coordinates of the stars from a star catalog. The Yale Bright Start Catalog (BS) is available for download from http://vizier.u-strasbg.fr/viz-bin/ftp-index?/ftp/cats/v/50 and lists all naked eye visible stars. It's not easy reading so be warned that finding a star's coordinates takes some effort.

The angular separation between two stars is given by the expression:

Cos (A) = sin(d1)*sin(d2) + cos (d1)*cos(d2)*cos (ra1-ra2)

where A is the angular separation between star 1 and star 2 (degrees)
ra2 is the right ascension of star 2 (degrees)

There are a few complications due to the fact that the stars move. The BS catalog lists positions for 1900 and 2000. Use the ones for 2000 of course. There are also corrections for annual proper motion, but in the case of the belt stars of Orion they're all moving in very nearly the same direction at very nearly the same speed, so they maintain their relative positions over long periods of time and corrections in relative position for proper motion are very small.

My calculations show the following spacings:

Delta to Epsilon = 1.38583 degrees
Epsilon to Zeta = 1.35606 degrees
Delta to Zeta = 2.73601 degrees

So, now we have that all we need to do is take a photograph of those stars. Two things to bear in mind here. First, if there is any distortion in the image, they results will be affected. Fortunately telephoto lenses don't usually have a lot of distortion. However if they do, distortion is a function of the cube of the distance from the center of the frame, so if we keep the stars away from the edge, distortion should be negligible. Second, the earth rotates (so the stars appear to move across the sky). If you want to freeze that motion with a 500mm lens, you'll need an exposure of 1/10s or less. Fortunately these stars are bright enough that an exposure of 1/10s at f5.6 at ISO 400 or 800 is enough.

As a brief aside here, the exposure required for a given star at a given ISO setting doesn't depend on the f-stop of the lens. This may seem odd, but it's true. Exposure depends on f-stop only for extended objects. A star is essentially an infinitely small point source and the (diffraction limited) size of the image is essentially the same at the same f-stop no matter what focal length lens you use. So you get the same sized image with a 500mm lens at f4 as you do with a 50mm lens at f4. For extended objects the 500mm lens would give you an image 10x as large. What exposure does depend on is the physical size of the aperture, which is given by (focal length/f-stop), so for a 500mm lens at f4 it's 500/4 = 125mm. For a 50mm lens at f4 it's 50/4 = 12.5mm. Since the amount of light collected is proportional to the area of the aperture, you'll need 100x longer exposure with the 50mm f4 lens than you need with the 500mm f4 lens to record the same star at the same brightness. With the 50mm lens at f2, you'd only need to expose for 25 times as long as the 500mm lens at f4.

Absolute, precise, focus isn't needed since the star image will be a circle and you can just pick the center of the circle as the reference point from which measurements are made. However the better the focus the less exposure will be needed. Just focus

To be cont.

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BOOK - POST

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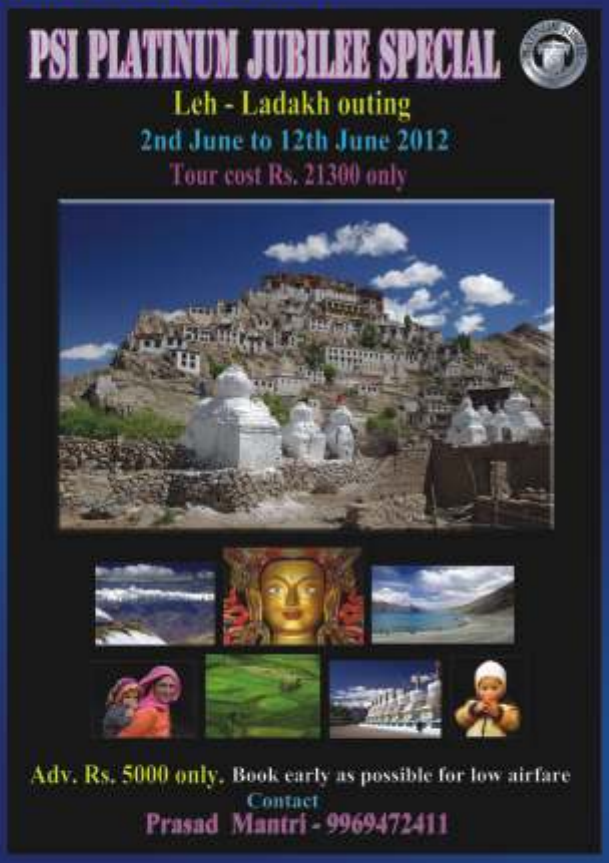

From :

THE PHOTOGRAPHIC SOCIETY OF INDIA
Saheb Building, 5th Floor, 195 D. N. Road, Fort, Mumbai - 400001
Phone : 22664296, Website : <www.photographicsocietyofindia.com>
EMail direct to secretaries : psi1937@yahoo.com

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