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VIEWFINDER MENU

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Debbie Edmonds

How Knowing Your Camera Well Will Make You A Better Photographer

by Kevin Landwer-Johan

Know your camera so well you don't have to think about it every moment you are using it. This will make you a better photographer.



The less attention you have to give to your camera, the more focus you can pay your subject.

Photography keeps both your left and right brain hemispheres active. You must engage your left brain to manage the technical aspects of your camera well. Your right brain, which processes creative thoughts, must also be active. Neither side can be allowed to overwork and overshadow the other.

The best way I know how to do this is to have an intimate relationship with your camera. Being close with your camera makes it easier and more enjoyable to use.

Photos © Kevin Landwer-Johan

Practice Using Your Camera Often

Frequent use of your camera will help you develop a more visceral relationship with it. Much like a musician needs to practice for hours on end to master playing specific pieces of music. You must also practice.

A guitarist or trumpeter playing scales over and over on the same instrument will get a feel for it. Not only will they become faster and more skilled, but they will learn to appreciate the tools of their craft with affection. It's the same using a camera.

You might retort, '*but we can't play scales on our cameras.*' No, we cannot, you are correct. However, there are many techniques we can improve upon if we go about it often and with purpose.

What To Practice With Your Camera

Practice managing the most important functions on your camera. How to set the exposure. How to focus, both manually and using autofocus. Using different focal length lenses. And even changing lenses.

1. Practice Changing Exposure Settings

Even if you prefer using auto-exposure, you can practice improving. There will often be times when your camera will give you a less than adequate exposure when you're using auto.

Purposefully take a similar series of photos in challenging lighting conditions many times. This will help you understand when your camera struggles to set the light right. Purposefully take a similar series of photos in challenging lighting conditions many times. This will help you understand when your camera struggles to set the light right.



Set yourself a task to photograph ten different subjects which are front-lit. Then ten with side lighting. And then ten with strong backlighting. Study the results and look at the EXIF data for each photo. See the choices your camera was making. Look at when the camera made better exposures and when it failed to.

Run through this same exercise a few times using manual exposure. You will become familiar with how to manage your settings well. Once you know them, and keep practicing, you'll begin to change these settings without paying too much attention at all.

2. Set Your Shutter Speed

Spend an hour or an afternoon solely focused on what your shutter is set to and how it affects your pictures.



What happens when you use a fast shutter speed compared to a medium or slow one?

Photograph some moving subjects. Maybe a dog playing, people walking, or traffic passing. Notice the relationship between the speed of the motion and the length of time your shutter is open for. With static subjects pay attention to the overall sharpness of your photos. How slow can you set your shutter speed before you begin to see blurring from camera shake? It's good to be aware of this, so you know when you need to use a tripod.

3. Adjust Your Aperture

Take some time to pay attention to what your aperture is doing. This will help you understand it better and the influence it has on the way your photos look.

Try photographing the same subject at every different aperture setting your lens has. You may need to adjust your ISO and/or use a tripod when your shutter speeds become very slow.

Try this same exercise using a wide, medium, and telephoto lens. Look at the differences in how the resulting photographs turn out.

Becoming more familiar with your aperture settings will teach you which is the best f-stop to use in different situations.



4. Experiment With Your ISO

ISO is probably the least well-understood aspect of the exposure triangle. Many photographers tend to set it and forget it. This can be problematic, especially when you set your ISO to auto.

Higher-end late model cameras do not have such problems with digital noise at high ISO settings. Many other cameras do. Digital noise varies from camera to camera and brand to brand, so you need to get a feel for how it is with your camera.

Set your camera on a tripod or steady surface somewhere there's not much light. Set your ISO to the lowest setting and take a photo. Now change your ISO so it's double the setting you started with and photograph the same subject. Repeat this process. Double your ISO before taking your next photo. Continue until you reach the maximum ISO setting your camera has.

Now study and compare the images. How do the first and last ones look when you place them next to each other? How much digital noise can you filter out with the software you use? What level of ISO are you happy to use?

Knowing the answers to these questions will help you learn to set your ISO with confidence in any lighting conditions.



5. Fix Your Focus

Concentrate only on getting your photos sharp where you want them to be.

You have various setting options when your camera is set to autofocus. Practice in multiple situations using single and continuous-servo focusing. Photograph both static and moving subject. Which setting are you most comfortable with in any given circumstances?

Switch between single-point and multi-point focus areas. If you are used to letting the camera decide where the lens will focus, switch to single-point. Learn to place the point precisely where you want it. It will take practice, but when you do, you'll become proficient in no time.

Have a go at manual focus. This is a skill I learned because I had to. I started using a camera before autofocus lenses were available. It's an excellent skill to have, even when most lenses are autofocus. But it does require practice so you can get it right. The more time you spend with



it, the faster and more accurate you'll become.



6. Juggle Your Focal Lengths

Photograph the same subject with your widest and your longest lens. And then with your favorite medium lens. Work your subject from different angles and with different focal lengths. Get a feel for how it looks in relation to what's around it and in the background.

Compare your photos. Consider which ones you like the most and why. Which focal length proved to be your favorite? Doing this type of exercise many times will give you a feel for the properties of your lenses. It will help you understand which subjects and situations lend themselves to which lens.

Conclusion

There's no right or wrong way to do photography. There are many technical ways to achieve similar looking images. Having a good command of your camera and an intimate relationship with it requires that you handle it regularly.

Practice often with your camera, and you'll build confidence to use it well in any situation. Be like the guitarist who wants to be a rock star. Go over and over the rudimentary aspects of your craft. The ones you struggle with and the ones you find comfortable.

Soon you won't struggle, and you'll pay less and less attention consciously to what you are doing with your camera. This will free you up to become more engrossed in your subject.

9 Common Travel Photography Mistakes to Avoid

by Marc Andre

Travel and photography are two great things that go together extremely well. There's no better way to capture the memories of your travel than through photography, and a love for both travel and photography can make the entire experience even more fun.

Although millions of people love to take photos of their travels, many are often disappointed with the results.

If you want to improve your travel photography, here are some common mistakes or traps that you can work to avoid.



1. Rushing

The biggest challenge I face with my own travel photography is trying to move too fast. I often find that I fill my schedule too full, which leads to rushing from one place to the next in order to try and see too many different places in a short period of time.

Good travel photography is much more than taking a quick snapshot at each place that you visit. If you want to come away with high-quality photos, you'll need to avoid rushing and take your time. Make an effort to prevent your schedule from getting too full,

and leave plenty of time at each location so you can take your time and get great photos.

2. Lack of Planning

Planning and research is a big part of travel photography. Before your trip, you should be researching all of the places that you'll be going, or even researching to determine where you want to spend your time.

With effective planning, you'll have a better chance of being in the right place at the right time with effective planning, you'll have a better chance of being in the right place at the right time. Without planning, you'll be more likely to miss out on some of the best photo opportunities.

In many cases, the research and planning will require more time and effort than actually taking the photos, but it is an essential part of the process.

There are a lot of different ways that you can go about planning. You can do a simple Google search for something like "*best places to photograph in _____*" and you'll find articles and resources that can help you. You can also search photos at sites like Flickr to find places, as well as the best perspectives and to get ideas for your photographs.

Tools like Google Earth and The Photographer's Ephemeris can be helpful for learning more about a particular spot and tracking the angle and location of the sun or moon at a specific time.

3. Lack of Patience

You'll need to have some patience in order to get the best travel photos. You may need to be willing to wait an hour or more for the sun to get into the right position, for a crowd to dissipate, or for the right opportunity.

4. Photographing Only from Easy View Points



Most travellers take photos when and where it is convenient. Popular overlooks and viewpoints like those that are along the road or easy to reach will be used by most people for their travel photos. In many cases, you can get better (and more unique) photos by putting in a little more effort. For example, the major overlooks at the Grand Canyon are usually crowded with people.

Very few people make the effort to explore areas away from these viewpoints or to hike down into the canyon to get a different perspective. It involves more work and effort, but getting away from the popular viewpoints will allow you to come away with photos that won't be just like everyone else's.

5. Not Prioritizing

How do you go about your travel photography? Most travellers will simply take photos whenever and wherever they are. To get the best photos, you'll need to prioritize. Think about the specific locations or the shots that you want to take and what is most important to you. Research these locations to know the best times to photograph them, and plan your itinerary so you'll be at the right place at the right time.

When you know your priorities, you can plan your schedule with them in mind, and you'll be able to get the best photos possible for the things that are most important to you.

6. Photographing at the Wrong Time of Day

Most travellers take photographs whenever they happen to be out, and a lot of times that winds up being in the middle of the day. Lighting is a huge factor that will impact the results of your photography, and the best lighting is generally around the times of sunrise and sunset.

If you want to get the best photos possible, try to plan your time so that you'll be shooting in the mornings or evenings rather than during the middle of the day when sunlight can be harsh. This also goes back to prioritizing. If you know



the exact spots and shots that are most important to you, you can plan to be at those locations during ideal times.

7. Following the Crowd



Many travellers simply follow the crowd when it comes to photography. A few years ago my wife and I were in Sedona, Arizona enjoying a nice sunset at the Airport Mesa, which is a popular spot in Sedona for viewing the sunset. There were probably more than 100 people there that evening. The moment the sun hit the horizon, almost everyone immediately headed to their car and drove away, despite the fact that the best light and color usually comes shortly after the sun goes down. Don't follow the crowd. **Just because everyone else is packing up or heading to a specific spot doesn't mean that they know what they are doing.** Make your

own decisions and find the best situation that allows you to take great photos, regardless of what anyone else is doing.

8. Over Packing

Although you want to be prepared, you really don't need to bring a ton of gear with you. Packing too much can slow you down if you're doing a lot of walking, and traveling light can be a lot more relaxing and enjoyable.

In most cases, you won't need a bunch of different lenses. You can usually get away with one or two versatile lenses (a nice zoom lens and a prime lens for example) that will cover just about any situation. You can also try to minimize other accessories and be sure that you'll use anything that you take with you.

9. Forgetting the Essentials

Packing light is great, but be sure that you don't forget the essentials. You'll need spare batteries (charged), as well as a charger to avoid a bad situation where you have no battery power left. You may want or need a portable charger that will plug into a cigarette lighter in your car, but that may not be necessary if you're able to charge batteries wherever you are staying overnight.

Spare memory cards are another necessity that you won't want to forget. Be sure that you have enough memory so you won't need to delete photos to make room.

A portable hard drive or some other storage and backup system is also recommended.

If you follow these tips and avoid the common mistakes, you'll be well on your way to memorable travel photos that you can be proud of.

Recommended by our Club.



6 Quick Tips For Shooting Stunning Black and White Photographs

by Sparkle Hill

Black and white photos have a “*timeless*” feel to them. They can evoke emotion and tell a story without all of the distractions of different colors in an image. Shadows, highlights, and lighting are more dominant because other than the different shades of gray, that’s all of the technical details the viewer sees. This allows photographers to put emphasis on the raw emotion of the moment they are capturing.



Here are some tips for creating beautiful timeless black and white photos.

1. Your Gear:

A well-executed black and white photo requires gear that can greatly capture highlights, shadows, and contrast. So you want to be sure to use a camera and lens that has these capabilities. The sharper and more detailed the images, the better.

A good quality graduated neutral density filter can also help quite a lot with landscape photography. A polarizing filter is also a must to deal with reflections and contrast.

You might want to also look into a good set of colored filters or gels. While it may seem counter-intuitive, having a set of colored filter are great for monochrome photography as they can be used to manipulate contrast in black & white images.

2. Lighting:

One of the key elements of a great black and white photo is the lighting. If the lighting is too bright, it can cause you to lose a lot of detail in the highlights due to them getting washed out. If you are working with natural light, avoid shooting during the brightest time of the day.

Of course, a good time to shoot is during the golden hour. The golden hour is always a great time to shoot color photos, and your black & white images will only benefit from it.

3. What To Shoot:

Not all images are suitable for black and white. A beautiful field of red tulips just wouldn’t be the same without color, nor would an image of a warm setting sun.



Try to incorporate things into your image that have texture, patterns, shapes, and details. This will really bring out the contrast and give you a more powerful image.

4. Shoot in RAW:

Shooting in RAW format is always a good idea whether shooting in color or black and white. Shooting in RAW allows you to have all of the data saved on the image when you go to edit it. This will allow you to be able to make any minor or major changes needed to correct the image.

In fact, many great black and white images you see today are shot in color and then transformed to black and white via post-processing. Having a RAW file to work with gives you more control of changing the important elements of a black and white photo, such as highlights, shadows, and contrast.

5. Shoot Things With Color:

This may sound backwards because one may think that the less colors in the scene, the better it will look in

black and white.

It's actually the opposite. Shooting a black and white object with no other colors will leave you with a pretty bland image in most cases. Having colors in the scene will give you a larger variety of grey tones in the final result. Which means you will have more details and texture.

6. Practice and Patience:

Learning to create well executed black and white images doesn't happen overnight. While you do still need to put the basic technical principles to use (proper exposure, composition, etc.) as you would with a color image, you have to train yourself to be able to visualize your subjects in black and white you have to train yourself to be able to visualize your subjects in black and white.

Concentrate on highlights, shadows, tones, the lighting, textures, and patterns when preparing your shot. Anything black will be black, anything white will be white, and other colors will give different shades of grey. Try to see them that way in your mind.

Practice every chance you get. The more you shoot, the better you will be able to think in black and white. Study images from the



past shot with film cameras. Follow highly skilled black and white photographers and take note of how they compose their images and take note of the details and different tones.



Be patient as you dive into the world of black and white photography. Take your time mastering the craft and before long you will be creating timeless breathtaking images!

5 Tips for Taking Great Action Shots of Kids

By Drew Bittel

Jumping, running, swinging, hopping, sliding, and skipping can all be used to describe children on the go! Kids are constantly on the move, and I love capturing them in action as they busily explore and discover their world. However, it's frustrating when you try to get the perfect action shot and your images turn out blurry. It's an easy fix, though. Try these tips below to get sharp and focused shots of children in motion!



1. Raise your shutter speed. To get tack-sharp pictures, you need to freeze motion. And in order to freeze motion, you need to have a high enough shutter speed. If you are shooting in manual mode, be sure that your shutter speed is above 1/200. Anything below that is going to be blurry with much motion. If you are shooting sports outdoors where you have a lot of available light, set your shutter speed at or above 1/1000. The higher the shutter speed, the better when shooting action.

2. Adjust your aperture. Your aperture will also play a role in getting sharp images. If you shoot with too shallow of a depth of field (a small f stop number), it will be hard to get your subject in focus. For action shots, try shooting with an aperture of 5.6 or smaller (larger f-stop number). That way you will have a broader depth of field, which will allow more of your image to be in focus. When you get used to shooting action shots then you can try shooting with a larger aperture to really isolate your subject from the background.





3. Turn on continuous shooting mode. When teaching my Mom*togs sessions, I always tell beginners to shoot in single shot mode when getting started in photography. That's so they really pay attention to each shot and don't just "spray and pray," taking multiple shots in a row and hoping one will turn out. However, for action shots I do recommend turning your camera to continuous shooting mode. When shooting in this mode, you can take multiple pictures at a faster rate, allowing you to capture an entire sequence of action. Remember, your camera will have to record all of those images. The more images you shoot, the longer it will take for your camera to record them and allow you to begin shooting again.

4. Use the center focal point. Whenever I'm taking action pictures, I always keep my center focal point on the face of my subject. If you focus past your subject, you will get an out of focus shot. When I can, I also like to focus and recompose to keep interest in my image and not always have my subject in the center of the frame. However, I still use the center focal point because it's typically the most accurate.

5. Switch to shutter priority mode. If you are uncomfortable shooting in manual mode, try shooting in shutter priority mode. In shutter priority mode, you set your shutter speed and your camera automatically adjusts your aperture. Set your camera to TV for Canon users or S for Nikon users. Next, set your shutter speed to 1/1000. If you don't have enough available light, try lowering your shutter speed or raising your ISO. When you are comfortable shooting in shutter priority mode, then move onto shooting in manual where you can really have control of your images.

<https://www.nyip.edu/photo-articles/fun-stuff-for-photographers/five-tips-for-great-action-shots-of-kids>

Inexpensive Lenses for your Camera

By NYIP Staff

Most people who buy a Digital Single Lens Reflex (DSLR) camera purchase the lens bundled with the camera — the "kit lens" — and do just fine. After a little shooting, though, they realize there's a world of possibility out there for their photography if they add a few new lenses. That's what an SLR camera allows you to do — take that kit lens off and put other lenses on. At this point, however, sticker shock can set in: the best-rated lenses often come with a very big price tag.

So, are there some great bargains out there? Can you start adding to your camera bag without breaking the bank? Could we assemble a full camera bag of high-quality, useful lenses for under \$1000? It turns out that we can.

The Bargain 50mm

Let's start with the easy bargains. Most camera brands have a "plastic fantastic" 50mm available. For example, Canon sells a 50mm f/1.8 new for \$100, and the Nikon 50mm f/1.8 is \$125. These are classic lens designs, perfected over the years, and they have excellent optical qualities despite the bargain price. (These same brands usually also sell a 50mm f/1.4, generally around the \$400 range. For most people, the less expensive 50mm will be just fine.)

50mm is a great focal length for basic portraits — it's slightly telephoto on most DSLR cameras so it's flattering to the human face, and it provides a working distance that is very comfortable for half-length portraits. In other words, with a 50mm on your DSLR, you end up standing at a distance from your subject that's really

comfortable for most people — not too close, not too far.

Also, because a 50mm f/1.8 provides a very wide aperture, it's excellent for low-light work. And you can experiment with shallow depth of field: it becomes very easy to shoot at f/2.8 and get a person in focus and the background out of focus. A bargain 50mm is light, cheap and optically perfect — and that's tough to beat.

The Off-Brand Macro/Portrait Lens

Judging by the email we receive, many photographers are interested in portrait photography, and many are interested in exploring macro photography. What type of lenses are needed for portraiture or macro work? Well, we usually use focal lengths between 50mm and 135mm for portraits — it turns out that somewhat-telephoto focal lengths are usually flattering to the human face. Macro lenses tend to fall in that same range of focal lengths as well. (A macro lens is a lens designed to let us get a tiny subject at full size in our shot. In other words, even if we are photographing a tiny praying mantis or a button from a coat, we can get close enough and magnified enough that we can fill the frame with that object. This would include photography of everything from bugs to jewellery to architectural details.)



Well, all the major camera brands provide lenses just perfect for either task — for example, you can find a really classic portrait lens, like an 85mm f/1.4, designed and branded for Nikon, Canon, Sony, Pentax or Olympus. These are great lenses, but they're expensive. And you can typically find 50mm and 100mm macro lenses, also, but again the major brand versions tend to be pricey.

So, can find a lens that will work in our price range? Yes. It turns out there are some "off-brand" macro lenses that perform very well as portrait lenses. They do incredibly well on optical tests, matching or beating the branded lenses, and they come in at good prices. There are two I would look at: the Tamron 90mm f/2.8 and the Sigma 70mm f/2.8.

The Tamron 90mm f/2.8 is currently listing at many places at about \$450. All the lens reviews and tests show this lens is a match optically for the best lenses out there — and at about 25% of the price of the "pro" branded lenses. One surprise with this lens: while most lenses don't test their best at the widest aperture — usually lenses perform much better stopped down at least one stop — it turns out that the Tamron does very well at its wide-open setting. So while it doesn't go to f/1.4, you can shoot at f/2.8 with it for very shallow depth of field. I've shot with this lens to try it out, and I really like it.

The Sigma 70mm f/2.8 is another great possibility. A review in *Popular Photography* magazine a while back called it the sharpest lens in the Sigma lineup, and all the lens tests and reviews love it for both portraits and macro work. It's currently selling for \$499. So with either of these, for about \$500 bucks, you can start to experiment with beautiful head-and-shoulders portraiture, and then the next day you can grab your favorite insects and try some macro work. Sigma and Tamron make these for all major camera mounts, last I checked, and you can buy them at most of the big camera stores.

A Budget Wide Prime

While we're on Sigma, another real bargain in their lineup is the 28mm f/1.8, currently selling for \$349. I don't have this particular lens. I have both the Sigma 20mm and 24mm, so I feel I have that range covered. According to those who do own it, though, it's a high quality, wide and fast lens for a good price. It does have one downside: it's a big, heavy beast. There are much smaller and lighter 28mm lenses out there — but the Sigma is about a stop and a half faster, since its maximum aperture is f/1.8, and it has shown great performance in optical tests and reviews. On a DSLR, this 28mm range is very useful — it's fairly close to how your eyes see the world.

So, back to our camera bag — if we grabbed a plastic fantastic 50mm for \$100, an off-brand-but-great Tamron 90mm for \$450, and a Sigma 28mm for \$349, that leaves us with \$100. Can we get anything useful in that range?

The Lensbaby

Well, besides adding lenses for specific tasks such as light low-light work, portraiture, macro or wide-angle photography, sometimes we



want to create images that stand out from the crowd. So consider adding a Lensbaby to your kit. The new Lensbaby Composer is just outside our budget at \$269, but "Muse" — available for most camera mounts — goes for about \$99. This tool is intended to let you explore the possibilities offered by selective focus effects — purposely throwing areas of a scene out of focus. Besides creating distinctive, eye-catching images, this is a very fun item that might offer a chance to make an otherwise boring image into something unique.

Bargain Cautions

So, we've found enough bargains to fill a camera bag. If we decide to keep bargain hunting, are there any dangers to avoid? Well, I do advise people that when they see a lens that provides a superzoom range — for example, 20mm-300mm — for only \$200 they should run the other way. There are a lot of lenses that will work and make photographs, but if you look closely you'll discover that cheap superzooms often have a lot of optical problems such as distortion (changing the shape of what is photographed), chromatic aberration (often seen as purple fringing) or vignetting (darkening in the corners of the frame). If our goal is to get high-quality images, a cheap superzoom won't work.

Also, if we take a look at the used market, there are risks to buying used lenses: a lens that is stored in bad conditions can have any of a number of problems, including degraded lubricants that cause the aperture to stick open longer than it should, or other damage that you

won't see until you shoot with the lens. So I generally don't lean toward Ebay.com or Craigslist.com purchases, though some people will do very well there. I do think, however, that one can find very good bargains from reputable used stores — those that know lenses, and that will stand behind their product if something does turn out to be wrong. Also, before buying any lens, use the Web to find specific reviews of how that lens works on your specific model of camera. You'll find that every lens has its positive and negative features, and that's definitely true on bargain lenses. So read the reviews and make sure the lens will work for you.



<https://www.nyip.edu/photo-articles/fun-stuff-for-photographers/inexpensive-lenses-for-your-camera>

Reminder of the training till the end of the year.

Class // A1002 = Adding Emotion	Monday, 21 October 2019	TBA
Photo editing (2) // B002 = exposure, highlight and shadows	Tuesday, 29 October 2019	7-9pm
Club Night (directing emotion comparison)	Tuesday, 5 November 2019	7-10pm
Photo editing (3) // B003 = Framing, cropping, horizons, ratios	Monday, 18 November 2019	6-8pm
Class // A1003 = Composition	Friday, 22 November 2019	TBA
Club Night (rule of thirds comparison)	Tuesday, 3 December 2019	7-9pm

If you are interested, email Norm at norm@ozonline.com.au
With details of which course you are interested in.

Airshow Photography

By Chris Corradino

Each summer, at air shows across the globe, awestruck spectators enjoy the power and precision of aerial demonstration teams and individual performers. In addition to what is happening in the air, there are often static displays on the ground. For photographers, these events provide outstanding photographic opportunities. After you shoot your first air show, you will likely return each year as I do. The tips below are based on my experiences at air shows around the New York area.

Day of the Show

It is recommended that you get to the show at least one hour in advance in order to find parking, and a shooting location. Air shows can be very crowded, with numbers reaching into the tens of thousands. By arriving early, you may be able to set your gear up in a prime area. Generally, the performers enter from the left and right, with their stunts done at “show center.” A good viewing spot is important, as it allows you to focus and track the incoming jets. When possible, I try to pick a place that’s in the shade with a full view of the show center. However, many airports and military bases do not have trees to block the sun. To protect yourself from the elements, I strongly urge you to bring sunscreen.

Lens Choices



© NYIP Student Advisor Chris Corradino

In 2008, The United Kingdom’s Red Arrows performed over Staten Island in their first ever visit to New York. A 400mm lens was used to emphasize the team’s formation, along with the clouds, and smoke.

When I photographed my first air show many years ago, I used a 28-135mm lens. Yet, unless the plane was flying directly above me, I found that much more reach was necessary. Today, I use a 70-200mm for action that’s directly overhead, and a 400mm for tighter shooting. My camera does not have a full frame sensor, so a 400mm with a 1.6 crop factor is actually an effective 640mm lens. Just remember, air shows are usually several hours in duration, and longer lenses can get quite heavy. Image stabilization is a nice feature, but a tripod will give your arms a break and allow you to create sharp images consistently. While the majority of my aviation work is shot with longer lenses, I find that wide angle lenses are also useful for performance teams that are spread out in wide formations. By utilizing a few different options, you can capture more of the action, and will come home with a diverse collection of images.



© NYIP Student Advisor Chris Corradino

A 17-40mm wide angle lens was used to create a unique perspective. Here, three SNJ-2 planes depart Republic Airport on a cloudy day in Farmingdale, New York.

Shutter Speeds

Attempting to freeze the motion of something travelling over five hundred miles per hour is no easy feat. In order to achieve this, a fast shutter speed of around $1/1000$ is recommended. Yet, like most aspects of photography, there are exceptions to this. With older planes, a shutter speed of $1/1000$ will freeze the propellers. The effect actually reduces the appearance of motion, and gives the image an unnatural look. To show the movement of the propeller, a shutter speed of $1/90$ is a good starting point. However, you may have to adjust it slightly to $1/60$ th or slower, depending on the speed of the plane. Of course, with these slow shutter speeds you will want to pay close attention to your camera technique to ensure sharp images.



© NYIP Student Advisor Chris Corradino

To show the motion of this plane's propeller, a slower shutter speed of $1/90$ th was used.

In-Camera Metering

Even today's sophisticated DSLR metering systems can be tricked by certain situations. When exposing a jet against a clear blue summer sky, automatic camera settings will often properly expose the sky, and leave you with an underexposed plane. In order to have full control over the camera, I prefer to use the in-camera spot meter along with the manual exposure mode. Semi automatic modes can be effective as long as you are utilizing your histogram, and making adjustments as needed. Most often, I find myself around 1/1000th, ISO 400, and f5.6. Of course, this can change drastically depending on the weather conditions of that particular day.

Focus

Rather than trying to frame the perfect shot, I like to use a high speed burst mode and fire off many frames for each pass. This technique increases the percentage of keepers. Following high speed objects this way takes some getting used to. Thankfully, most cameras feature continuous focusing, also known as AI Servo. This mode will allow you to continually focus on moving subjects. To use this feature successfully, keep your center focusing point over the aircraft with your cable release or shutter held halfway down. As you follow the plane through your viewfinder, the camera will automatically adjust the focus as the aircraft gets closer. When you are ready to make an image, simply press the shutter all the way down. Luckily, air show organizers often arrange "photo passes," where the pilot flies at a reduced speed. Don't get too comfortable though, they return to full speed after just a few slow turns.



© NYIP Student Advisor Chris Corradino

If your DSLR has a fast burst mode, it can help to capture high speed passes made famous by the Navy's Blue Angels.

Memory

With all of this high flying, fast-paced action, you will likely go through many memory cards rapidly. I bring a portable hard drive with me, and download the contents of the card while continuing to shoot. Once I'm sure the images have been safely written to the drive, I format the card in camera and reuse it. I like to shoot in RAW format whenever possible. However, if you are short on memory cards, and don't have a portable hard drive, you may want to consider shooting in the Large/Fine JPEG format. This will allow you to fit more images on the card than RAW.

What to Look For

Smoke trails and after burner effects are great additions to an aviation image. Be ready for them, as they happen quickly. The trails of white smoke are actually created by pumping oil into the exhaust pipe. This is particularly interesting when used by an entire formation of planes. The patterns of smoke can be used to make for a more artistic composition. In addition, it adds a bit of contrast to the otherwise plain blue sky. I also look to capture the interaction between two planes. When pilots are flying side by side with their wings nearly touching, a great deal of tension is introduced to the photo. By freezing this moment in time you are also showcasing the precision, and skill of the daring pilots.

<https://www.nyip.edu/photo-articles/fun-stuff-for-photographers/airshow-photography>

Backups and Storage

The Problem

Since I changed over to digital photography I have had many a sleepless night worrying about how to ensure the safety of all my files. I have a fairly lowly DSLR with 'only' 10 megapixels, nevertheless that means that each picture, in RAW format, produces a file of approximately 10 megabytes. So, CD or DVD storage just doesn't have the capacity that I need. Also I'm not convinced by the longevity of CDs or DVDs. External drives are a good solution now they are cheaper, I can store them at a separate location so as not to be wiped out by fire or burglary, they are not constantly working like an internal hard drive so they should last longer. Also I am continually renewing the backup so deterioration of the data image should not be too much of a problem.

External drives are very much part of my solution but the problem is that I have to remember, and then take the time, to do the backup. Much as I try to discipline myself, I am not the world's best at taking the time out to do backups.

The Answer

So what's the answer? Well, as I said, part of the answer is an external hard drive but, let's face it, if thieves broke in to 'Lawrence Towers', they'd probably leave my desktop and steal my USB drive.

A service that has recently reached maturity and is now very useful, instead of just being a bit of a gimmick, is online backup. I decided to do some research on the subject, prices and so forth, and realized that this could be the answer to my problem. A thorough trawl of the internet kept turning up one name that seemed to rise head and shoulders above the competition, in terms of price, service and ease of use, that name was Mozy Online Backup. <https://www.carbonite.com/products/mozy?origin=mozy.com>

The Deal

This great service is completely free if you want to store less than 2Gb of data, and you can store that 2Gb for as long as you want because there is no expiry date to the offer.

If, like me, you have significantly more than 2Gb to store you can have, unlimited (and they do mean unlimited) storage for \$4.95 per month. Now we all hate paying for things on the web, me most of all, but for the price of two or three cups of coffee a month I can rest easy in my bed (and not need so much coffee).

After a brief trial run with the free account, I considered it to be a 'no brainier' and signed up for the 'full monty'.

The Test

After downloading a small program, which manages all the data, and telling it which folders you want to include in your backup. Then you simply let it loose. The initial backup took **forever**, as I only have a wireless internet connection which is one megabit on a good day when the wind is in the right direction, and I have over 50 gigabytes of data. So I had to leave my computer on 24/7 for a few weeks while the backup chugged

away, I thought it was never going to finish. The progress panel is very good though, giving a progress bar (with numbers too), a speed reading and an estimated time to complete the task, so you're never left wondering what's happening.

After the initial backup is complete the automatic backup will just kick in, it's default setting is twice a day, and make any changes to the folders on your list. You can re-configure the backup schedule any way you want but the default settings seem pretty good to me. Backups never seem to interfere with my work, all I have to do is remember to leave the computer on while I go for lunch or whatever and, by the time I get back, the backup is done.

Restoring Files

The backup appears in Windows Explorer as a new drive, you can explore the contents just as you can any other drive and you can restore any individual file or folder that you need to recover by just double clicking on it. Obviously, if you need to restore everything, it's going to take a while, but you can grab the files you need most first to get you back in business and let the rest chug away while you get on with your work.

The Conclusion

All in all, I find it the most hassle free system to have on my computer, less trouble than my anti-virus and a lot less trouble than Windows update, it just beavers away in the background and gets the job done. The job that you never seem to have time for until after you have lost everything, I've been there and got the T-shirt and I don't want that experience ever again, especially with my photos.

Give it a try, what have you got to lose? Apart from all your photos.

https://www.geofflawrence.com/backups_and_storage.html



"Your photos were crap. We threw them away."