

NEWSLETTER

MICHAEL CLARK

PHOTOGRAPHY



SUMMER 2019



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Cover Image: Savannah Cummins climbing the route Go Sparky Go (5.11) on the Sparks Wall in Indian Creek, Utah. Opposite Page: Savannah Cummins on Anunnaki (5.11+) at the Optimator Wall in Indian Creek, Utah. Both images were shot as part of an assignment for the launch of the FUJIFILM GFX 100 earlier this year.





On the Run

Six months of constant travel and back-to-back assignments

The last six months have been the busiest period of my career by far, which is why there was no Spring 2019 edition of the Newsletter. It has been quite some time since the Winter 2019 edition came out in January and I know many of my readers have been wondering what happened. It seems this “busiest period of my career” phrase has been popping up quite often each year for the last few years, which is a good thing as it means the career is going well. Along with back-to-back assignments comes a lot of stress. I put a significant amount of stress on myself with each and every assignment. The bigger the stakes, the larger the budget, the larger the amount of stress I seem to take on. If I wasn’t stressed out a little while on an assignment then I would not work as hard. Self-imposed stress is just part of the job for me. Maybe some day I will learn to relax more but it hasn’t happened yet.

As you will see in this Newsletter, there have been some very exciting assignments this year. The Red Bull Super-Moon project (see page 6), which happened way back in March, is still one of the most exciting projects I have worked on this year. The main image from that project, shown in the double-truck Portfolio section of this Newsletter on pages 52-53, is likely one of the best images of the year so far. Shortly after that assignment I took on an assignment with the largest budget I have ever worked

with in my career for the pharmaceutical giant Bayer. And literally a few days after that I drove out to Utah to shoot rock climbing and mountain biking with a FUJIFILM GFX 100 prototype for the launch of that incredible camera. A few weeks after wrapping that assignment I was in Japan attending and speaking at the launch for Fujifilm—and then shortly afterwards I flew back across the Pacific Ocean to speak at a conference for the New Zealand Institute of Professional Photographers. There were a whole bunch of other smaller assignments that filled in the gaps between those gigs mentioned here. Adding it all up, By the end of July I had only been home for a total of six weeks. Needless to say, it is great to be home.

The FUJIFILM GFX 100 launch, and the assignment and run up to that launch, has been a massive career highlight. In this Newsletter is a review of the GFX 100, a detailed article about the assignment and an editorial about the big switch. It has been a wild ride! Enjoy!

Opposite Page: The Wanaka Tree under a starry night on Lake Wanaka in the town of Wanaka, New Zealand.

Recent Clients: Fujifilm, Bayer, Eylea, Red Bull Media House, Patagonia, NEXtera Energy, Santa Fe Institute, Sekonic, *National Geographic*, *New Mexico Magazine*, *Digital Photo Pro* and *Outdoor Photographer*.



Red Bull SuperMoon Project

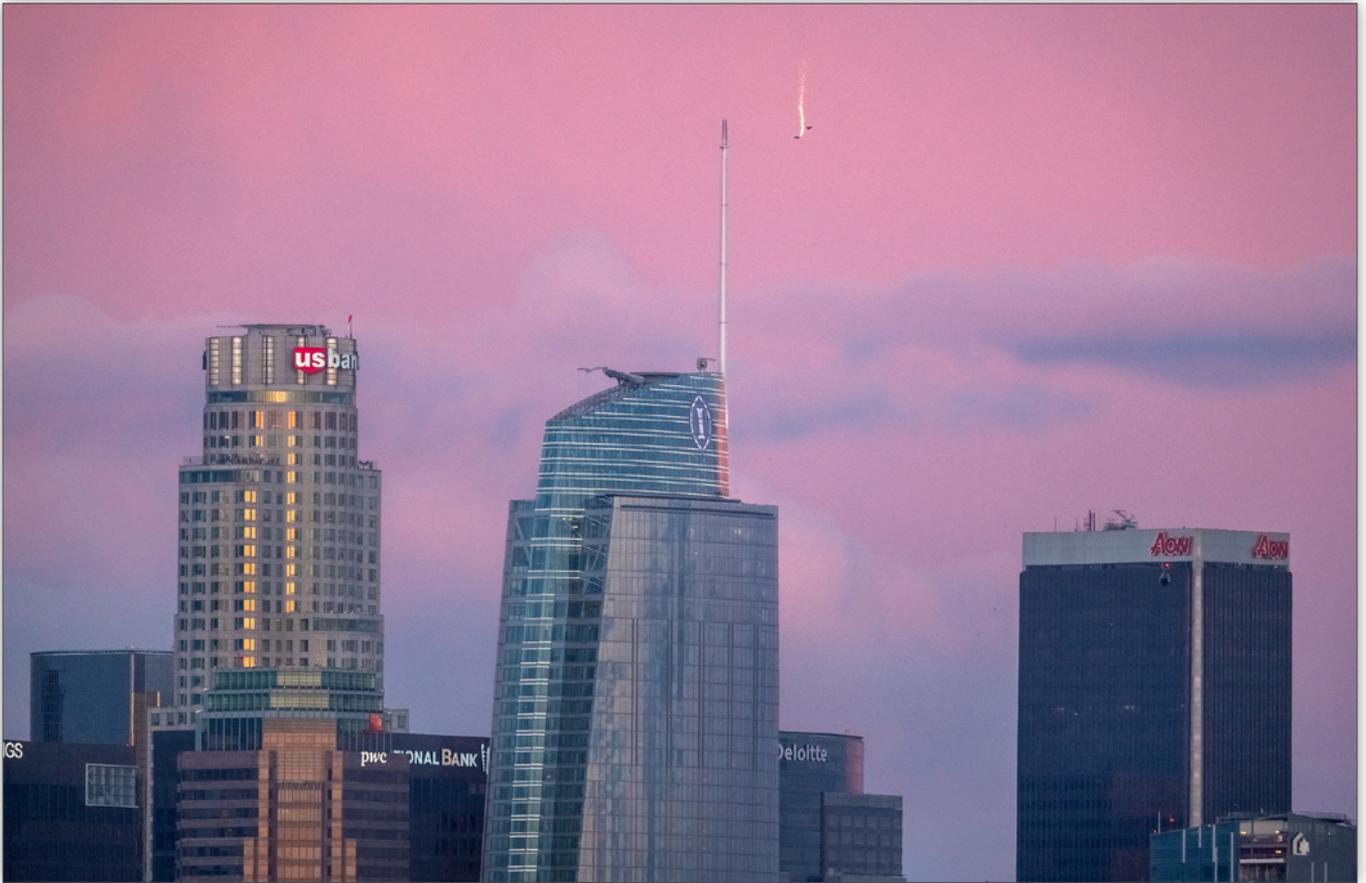
Working with the Red Bull Air Force on a tough Skydiving assignment



The idea was that Red Bull Air Force team members Jon DeVore, Andy Farrington and Mike Swanson would fly through downtown Los Angeles in wingsuits and a few other team members would jump off the Intercontinental Hotel, which is the largest skyscraper in Los Angeles, all with the giant supermoon rising right behind downtown LA. Red Bull had been working on this project

for months and months before I was called in. The lead producer had been studying the geometry of the rising sun for several weeks and knew exactly where the cinematographers and still photographers would need to be to get the shots they were looking for.

For this project, Red Bull hired two still photographers,



Keith Ladzinski and myself, and they also had a giant crew of cinematographers, who would be filming the event from all over the city. Keith and I have a bunch of good friends in common but amazingly we had never met before this shoot. It was great to finally meet him as his work has been incredibly inspiring for so many years. For this project, Keith would be in a helicopter and I would be on the ground. We had a few days before the shoot to scout locations and figure out which would work best considering where the Moon would rise.

The best location on the ground was 3.8 miles away from the Intercontinental Hotel on top of an eight-story storage facility. To capture the action, I rented a Nikon 800mm f/5.6 lens. This lens is a rare beast as it costs

\$16,000 and even in LA where you can rent just about anything no one had an 800mm Nikon lens available for rental. Hence we had to have one shipped in specifically for this shoot. On top of the storage facility we had an unencumbered view of downtown LA.

My thanks to Red Bull and the Red Bull Air Force for bringing me in on this assignment. It was amazing to be a small part of this incredible project. As always, it is a blast hanging out with these guys and to see them in action. To see more images and more behind the scenes images from this project head over to the Red Bull Photography website and read Marv Watson's excellent [article](#). To see the best image I captured on this assignment check out the Portfolio section of this Newsletter on pages 52-53.

Outdoor Photographer Article

Tips and techniques for getting started in adventure photography



Outdoor Photographer published an article I wrote for them entitled “Challenge Accepted: Tips and Techniques for getting started in Adventure Sports Photography,” way back in the December 2018 issue, and until now I haven’t mentioned it here in the Newsletter. This eight-page article included tips on getting to know the sports you photograph, being comfortable on location, the hard work involved in adventure sports photography, using high frames rates as well as timing the image, autofocus, hyperfocal settings, and finally strobe techniques. The article includes quite a few of my best images from the last

few years and also features my strobe work (as shown above) with Elinchrom’s Hi-Sync strobes.

Over the last few years both Outdoor Photographer and Digital Photo Pro have asked me to write a variety of articles on adventure sports, artificial lighting as well as working with medium format digital cameras. Outdoor Photographer is still one of the largest and most respected photography magazines anywhere so it is always an honor to work with them. Check out the full article online at www.outdoorphotographer.com.

Michael signs on with f-stop camera bags

Having used f-stop camera bags for years the relationship becomes official



I am excited to announce that I have joined the f-stop Gear team. I have used a lot of different camera bags and cases over the course of my career but in the last four or five years I have been using f-stop bags more than anything else for my camera equipment. Their camera bags and ICUs are incredibly versatile and adaptable for all of my assignments. Whether I need a lot of camera gear, or a little with a lot of outdoor gear, the f-stop bags are the best solution I have found. I have a dozen or more of the f-stop ICUs that accommodate my camera gear and often my strobe gear as well. As for backpacks, the Tilopa is

my main go to pack and the slightly smaller Anja is another standout that I use often—especially when traveling on the smaller regional jets, which is pretty often. Having worked with other camera bag companies in the past, I look forward to working with f-stop and also helping them design even better bags for working pros and advanced amateurs.

My thanks to Tim Kemple for recommending me to the folks at f-stop and to the f-stop team for bringing me in. Check out my [f-stop profile](#).

Photography Workshops

An overview of workshops and online classes with Michael Clark

Each year I teach a few workshops on a variety of topics including adventure sports photography and artificial lighting. Below is a listing of the workshops I will be teaching in 2019. For more information on these workshops, and to find out how to register, go to the [Workshops](#) page on my blog or click on the links in the descriptions below.

ADVENTURE SPORTS PHOTOGRAPHY

Summit Workshops - Jackson, Wyoming

September 14 -19, 2019

Instructors: Corey Rich, Lucas Gilman, Sadie Quarrier, Dave Black, Jen Edney, Ryan Taylor, Savannah Cummins, Ted Hesser and Michael Clark

Action and Adventure Junkies Rejoice! Set out on a photography journey in the Grand Tetons with our faculty of adventure photographers and editors from National Geographic, Red Bull, The North Face, and more. Work with expert photographers and learn the shooting and scouting techniques that they use to land their images in top publications, meet the editors behind some of the world's most daring photography expeditions and learn how they hire photographers, and even spend a night camping with the faculty as you network with them throughout the workshop.

In this workshop, you'll be exposed to every aspect of adventure photography, from adventure and outdoor sports photography to product and outdoor commercial photography. The Adventure Workshop is for any and all photographers.

This will be my second year as an instructor for this workshop and I must say it is an excellent experience and a golden opportunity for those looking to jump into the adventure genre. There is no other workshop out there (on the topic of adventure photography) that gives you access to so many top pro photographers in a single workshop. Additionally, where else can you hang out with a top-end photo editor like Sadie Quarrier from National Geographic and sit down with several working pro adventure photographers? This workshop has literally started careers.

Cost: \$1,995.00

Go to the [Summit Workshops website](#) for the specifics on what is covered and what isn't. Please note that this workshop is taught by nine outstanding photographers and photo editors and offers an incredible opportunity to learn from not just one but many experts. This is by far one of the best adventure sports photography workshops out there, especially if you are looking to go pro.



The Grand Tetons loom over Jackson, Wyoming and are the background for the Summit Adventure Photography Workshop. The Summit Adventure Photography workshop is a stellar workshop for anyone looking to get into the adventure sports genre, either as an amateur or a professional.

REACH NEW HEIGHTS WITH THE GFX 100

Foto Care - New York City, New York

October 3-5, 2019

Pictureline - Salt Lake City, Utah

October 31 - November 1, 2019

Instructors: Michael Clark and Justin Stailey

Push Limits. Break Boundaries. Achieve More. Learn the secrets behind Michael's creative process, his advanced lighting techniques and how he uses the GFX 100 to reach new heights creating one of a kind images.

This is a unique 3-day, hands-on workshop with very limited capacity. Each attendee will be issued a personal GFX 100 to use for the duration of the workshop and they

will also have access to an assortment of lenses and on-site Fujifilm experts to ensure that every moment is spent learning and capturing incredible imagery.

WHO SHOULD ATTEND:

Advanced Amateurs, Professionals

WHAT YOU SHOULD KNOW:

Working knowledge of artificial lighting, digital workflow and manual mode on digital SLR or mirrorless camera.

WHY THIS WORKSHOP IS SPECIAL:

Each workshop will feature multiple shooting situations with many opportunities for attendees to create their own images. Each attendee will also be provided a FUJIFILM GFX 100 Large Format Mirrorless Digital Camera to use for the duration of the workshop so that they may get first-hand experience in using the latest in imaging technology. Lighting equipment, additional lenses, and on-site technicians will also be available to students for the duration of the event.

WHAT YOU SHOULD BRING:

Each attendee should bring high-speed SD memory cards, a laptop computer, and a notebook.

Cost: \$1,500.00

Go to the [Fujifilm website](#) for the specifics and to register for the workshop at either location.

ONLINE WORKSHOP CLASSES

Over the last few years I have taught a number of online classes for CreativeLIVE, which are available for

download on their website. These classes are in-depth, online two-to-three day courses. Hence, there is a lot of information and they are a very cost effective way to learn about various photography skills. Below are a listing of my most recent classes.

The Professional Photographer's Digital Workflow

CreativeLIVE (www.creativelive.com)

This digital workflow class covers everything from image capture to the final print. This is not just a class on how to process your images, it is a detailed class for any and all photographers looking to take their photography to a whole new level, stay organized and make sure that they are getting the best possible image quality. This CreativeLIVE class won't cover everything contained in my digital workflow e-book, but it will cover a good portion of the key basics. The course takes a deep dive into color management, sensor cleaning, image organization, file and folder naming, processing images in Lightroom and Photoshop, printing, backing up your images and much more. To watch or purchase this class visit www.creativelive.com.

Cost: \$99 USD

Note that CreativeLIVE often runs sales so the class might be discounted below this price.

Advanced Lighting for Adventure Photography

CreativeLIVE (www.creativelive.com)

Last Summer I taught a two-day live class on advanced lighting techniques for CreativeLIVE and Red Bull Photography, which was broadcast live on July 17th and 18th, 2017. This advanced lighting class covers Hi-Sync (HS)



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Push Limits. Break Boundaries. Achieve More.

Learn the secrets behind Michael's creative process, his advanced lighting techniques and how he uses the FUJIFILM GFX 100 to reach new heights creating one of a kind images.

[REGISTER AT WWW.FUJIFILM-X.COM](http://WWW.FUJIFILM-X.COM)

*Each attendee will also be provided a FUJIFILM GFX 100 Large Format Mirrorless Digital Camera to use along with a selection of lenses for the duration of the workshop.

NEW YORK CITY (10/3 - 10/5) — SALT LAKE CITY (10/31 - 11/2)



lighting techniques for outdoor and adventure photography and also includes a section on capturing portraits of outdoor athletes. As part of this course, we photographed rock climbing, cyclocross, and trail running.

This class is available for download on www.creativelive.com. While this isn't an in-person workshop, like the others listed here, it is a resource that is available online and can be downloaded and watched anytime.

Cost: \$79 USD

Note that CreativeLIVE often runs sales so the class might be discounted below this price.

WORKSHOP TESTIMONIALS

"Within the short time I've been studying and practicing photography, I have had teachers who are good educators, but not great photographers, and vice versa, but few who are both. Count yourself in these narrow ranks...I went through 4 years of college and several careers getting less candid advice and encouragement than I got in 4 days with you. For what it is worth, thank you for that." - Brandon McMahon, Adventure Photography Workshop

"Michael set an incredibly high bar for his workshop. He gave 110%, covered a broad range of topics and did an outstanding job." - Chris Council, Adventure Photography Workshop

"I just finished Michael Clark's Adventure Photography Workshop at the Santa Fe Workshops. I had a terrific time with the group of people. We came because of the Santa Fe Workshop's reputation of presenting an intense learning experience guided by fantastic instructors. We got both. Michael Clark really knows his stuff and has a

lot of excess energy, which he focused on us, and he can also teach. He read our skills and weaknesses quickly and went to work to improve each of us technically. He sorted out our individual goals, even when we couldn't really articulate them. Then he gave us plenty of time to address those goals and ask question after question after question. The rough environments in which we photographed were great fun to explore. Couldn't be better." - Tania Evans

"Michael is the best instructor I have taken a workshop from." - Participant, Cutting-Edge Lighting Workshop

"Priceless chance to learn from the absolute best. Every photographer should take this class!" - Jill Sanders, The Professional Photographer's Digital Workflow available on CreativeLIVE

"Michael is a true professional and readily explains all of the nitty gritty issues of a photographer's digital workflow, including important things like Color Management, Lightroom workflows, Printing, and more. He is eager to answer your questions and has a thorough knowledge and passion that he loves to share. He can get way deep into the subject, which I found fascinating. You can tell Michael has great experience in teaching and also likes to learn from his students. He is very authentic, honest, and direct. I highly recommend this class, and look forward to another one of Michael's courses in the future!" - Kristen, The Professional Photographer's Digital Workflow on CreativeLIVE

For more information on my upcoming workshops, or to read more testimonials, please visit the [Workshops](#) page on my blog. Hope to see you at a workshop here soon!

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equipment review

The FUJIFILM GFX 100

A review of Fujifilm's brand-new, 102 MP revolutionary medium format mirrorless camera



Disclaimer: While I am not one of Fujifilm's X-Photographers, I was paid to work with the FUJIFILM GFX 100 on a recent assignment as part of the launch for this camera. I want my readers to be aware of this up front. With that in mind, also know that this system is going to be my main kit going forward. As such, I am certainly biased. I am always looking for the best image quality and the best camera for my needs. For

those that need or want this caliber of camera, I highly suggest trying it out to see if it will work for you and your needs.

As many of my readers have no doubt seen by now, I was one of a handful of photographers selected to create images with the FUJIFILM GFX 100 for the official launch of the camera in Japan a few months ago.



Late in the day on our scout day for the downhill mountain biking portion of the GFX 100 assignment we spotted this hip jump and both Carson Storch and Dusty Wygle launched off it a dozen times or so. Here, Dusty Wygle is catching some serious air off the jump just outside of Virgin, Utah. Tech Specs: FUJIFILM GFX 100, GF 250mm f/4 lens with a 1.4 GF teleconverter, 1/2,500th second at f/5.6, ISO 800.

Many of my readers have also known me to be a die-hard Nikon user and for a time one of Nikon's photographers whose images appeared regularly in their marketing materials. Hence, I realize this move is a big one and took quite a few people by surprise. The long and short of it is that alongside my Nikons I have often had a medium format camera kit along with the 35mm cameras. In the film days I used a variety of Mamiya and Hasselblad medium format cameras. Throughout the entire first half of my career my main go to film was the venerable Fuji Velvia and Provia slide films. More recently I worked with the Hasselblad H5D 50c WiFi for four years, which I sold just prior to the launch of the GFX 100.

In my mind, the GFX 100 was originally meant to be a replacement and upgrade for my Hasselblad kit. I never imagined it would become my main camera before working with it on this recent assignment. I slowly realized with every passing day on the assignment that the GFX 100 is not only a massive upgrade for my medium format camera, but also a camera that could work for about ninety percent (or more) of what I photograph, which is mainly adventure sports. It offers something I have never had before—a medium format camera, with large format image quality, that performs like a top-end DSLR.

Having worked with the GFX 100 since early April, I have

had a considerable amount of time with the early prototypes as well as with the full production level camera over the last few months. In that time, I have explored many of the various options and have learned how to squeeze the most out of this camera for my work.

ERGONOMICS

Let's get right to it. This is an all new, built-from-scratch mirrorless medium format camera. Basically the engineers thought through the needs of professional photographers and how best to implement everything into a system that meets those needs and went about creating that camera. There has never been a medium format camera like the GFX 100 ever. In terms of ergonomics and usability, it is more akin to a pro-caliber DSLR than any other medium format camera on the market, which is probably why so many are comparing it to smaller format cameras.

In the hand, the camera feels solid. It is about the same size and weight as a Nikon D5 or a Canon 1DX MII, which is fairly familiar to most professional photographers. The main grip is substantial and the thumb catch on the back

of the camera further helps to ensure a solid grip. The vertical grip is not quite as dialed in as the main grip—nor is it nearly as refined as the main grip—but it works just fine. Aesthetically, the camera is quite beautiful with the two-toned black rubber cladding and dark gray top and bottom plates. I did not ask the engineers about the lack of rubber on the bottom grip but I have a feeling it has to do with heat dissipation since there are two large batteries in that bottom grip.

I know that many of the reviews of the GFX 100 complain about how heavy the camera is, but I imagine they have been using smaller mirrorless cameras for the last few years. Those working pros who have been shooting with the top-end Nikons or Canons for decades will find the weight of the GFX 100 to be very similar to any other 35mm DSLR. Compared to other medium format cameras (save for the less capable Hasselblad X1D), the GFX 100 is quite light and a dream machine ergonomically. In comparison, my Hasselblad H5D felt like carrying a cinder block around.

Coming to the GFX 100 after having shot with Nikons for more than thirty years, it is certainly taking some time to



Above are (left to right) the back, left side, right side and top of the GFX 100. The rear LCD is tiltable and also has a pull-out feature for looking down at the camera in the vertical orientation. The GFX 100 also has two SD memory card slots, and works with the latest and fastest SD memory cards available. The top of the camera is very sleek and Fujifilm users will note the lack of manual dials, which is a nod towards those professionals that have not used dials on top of a camera in decades.



While capturing images of rock climbing and downhill mountain biking with the GFX 100, I was blown away by the stellar EVF and the wicked fast autofocus. The GFX 100 sets a new standard for electronic viewfinders. Even with a larger lens on the camera like the GF 100-200mm f/5.6 lens (as pictured above), it still is easy to handle and weighs about the same as a Nikon D5 and a 70-200mm f/2.8 lens.

get used to the new camera and the new camera controls. It would be the same scenario no matter what the camera brand. Going from one system to another just takes time to get to know the controls and get used to them. Interestingly, I am already so used to the GFX 100 that when I do pick up my Nikons again I have to remind myself how they work and find my fingers reaching for controls that are not there. I guess that means I have adapted to the GFX 100 fairly quickly.

Essentially, Fujifilm has created a medium format camera that has no competition within its category. Anything else in the medium format sphere is ancient technology. When compared to the advanced capabilities of the GFX 100, it is a very hard sell to purchase a much slower, less capable camera at three to four times the cost of the GFX

100. That is in large part the reason I sold off my Hasselblad gear. It isn't that those "old style" medium format cameras can't work to create incredible photos, they are just seriously lacking in features compared to the brand new GFX 100.

ELECTRONIC VIEWFINDER (EVF)

The 5.69 MP EVF attached to the GFX 100 is also an incredible engineering feat. I have not heard many reviewers even mention the EVF but that is a critical part of the camera. And wow, those 5.69 megapixels offer an incredible view. It takes your breathe away when you look through this viewfinder. Up until now, the Nikon Z mirrorless cameras have what I feel is the best electronic viewfinder I have ever seen, that is until I looked through the



Mount Aspiring (also named Tititea by the Māori) at sunset rising above Lake Wanaka on the South Island of New Zealand. This landscape image, captured on a tripod, is a good example of the incredibly wide dynamic range the camera is capable of capturing. Also of note, as with most medium format cameras, the depth of field is so shallow that I had to shoot two images—one of the foreground and one of the background— and composite those two images together to get a fully sharp image from front to back. Tech Specs: FUJIFILM GFX 100, GF 32-64mm f/4 zoom lens, 1.3 seconds at f/11, ISO100.

GFX 100. A key part of a medium format camera is that they typically offer massive optical viewfinders that are a joy to work with and allow for very critical analysis while composing the image. The end result of those amazing viewfinders is that you capture better images because you can see what is going on in the viewfinder. The new ultra-high resolution EVF built into the GFX 100 is nothing short of astonishing and like the aforementioned

optical viewfinders makes it very easy to compose and craft the image. If you shoot with mirrorless cameras be forewarned—don't look through the EVF in the GFX 100 unless you want to incur some serious gear lust. It is just that good.

The refresh rate is ample, even for action photography. Notably, you can select the Boost Mode to prioritize the

EVF resolution, autofocus or frame rate. I have my camera set up so that the top front button allows me to cycle through these options making for a quick transition from action photography to slower, more thoughtful situations where I want to prioritize the EVF resolution.

In the menu you can add or remove a huge number of different display options for the EVF and the rear LCD screen. At a glance you can have just about any and every camera setting visible in the EVF. Even when selecting a large variety of display options to be visible I don't personally find them too distracting. The beauty of this EVF—even more so than other EVFs I have used—is that it can be customized to your liking.

In the end, the EVF built-into the GFX 100 is so good that I don't even miss the gorgeous optical viewfinder that my Hasselblad had. Add in the fact that it allows me to see the live Histogram (and a whole lot more info) and I feel like I am truly using a modern digital camera.

IN-BODY IMAGE STABILIZATION (IBIS)

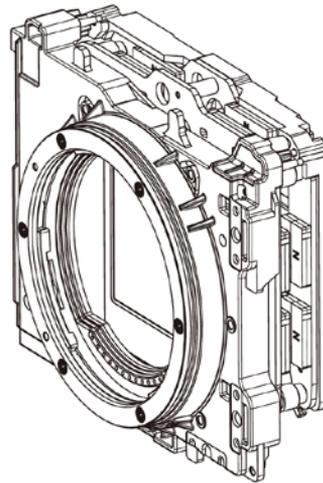
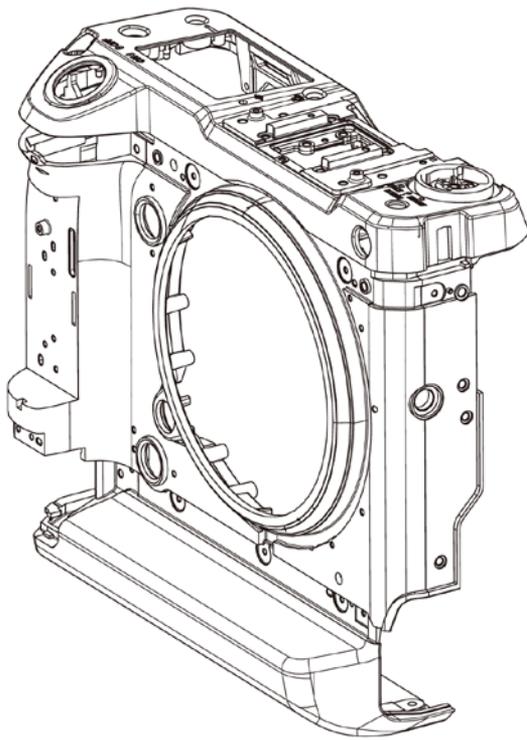
Before we dive into the image quality offered by the GFX 100, I first want to discuss the incredible IBIS technology built into this camera. The IBIS system created for the GFX 100 is an engineering milestone that was very difficult to pull off. The way that the engineers isolated the stabilized sensor from the shutter and the rest of the camera body works incredibly well—especially considering the larger format sensor weighs twice as much as a smaller 35-mm (full-frame) sized sensor. Congratulations to Fujifilm, they have created an incredible camera that was extremely difficult to design and build—and mass produce.

As shown on the next page, the image sensor along with the lens mount and the IBIS stabilizer is part of an inner frame inside the camera body. This inner frame is completely isolated from the shutter mechanism and the outer shell of the camera body to reduce any possible vibrations. I know of no other camera manufacturer that has used such a complex designed like this but I have a feeling some of them will be copying this design in the near future. The upshot of this incredible design is an IBIS system that works shockingly well.

On the assignment for the launch back in April, I worked handheld with the camera and shot at shutter speeds down to 1/20th second with excellent results. I was able to get several sharp images at 1/8th of a second using the GF 23mm f/4 lens but for consistently sharp images I had to bump up the shutter speed to 1/20th second. Note that I am not the steadiest photographer out there so your mileage may vary. Comparing this to my older 50 MP Hasselblad H5D, on the H5D I had to use 1/500th second shutter speed just to have a prayer of getting a tack sharp image and it wasn't always tack sharp even at 1/500th second. The mirror shock was so violent on that camera that handholding it at all was less than ideal in terms of sharpness. The GFX 100 by contrast is incredibly versatile and the IBIS allows for capturing true 100 MP image detail without having to put the camera on a tripod every time you shoot with it. With my H5D, to get the best image quality, I used a tripod 80% of the time. With the GFX 100, and its amazing IBIS technology, I won't be pulling out the tripod nearly as much, which gives me a lot more freedom in how I use the camera.

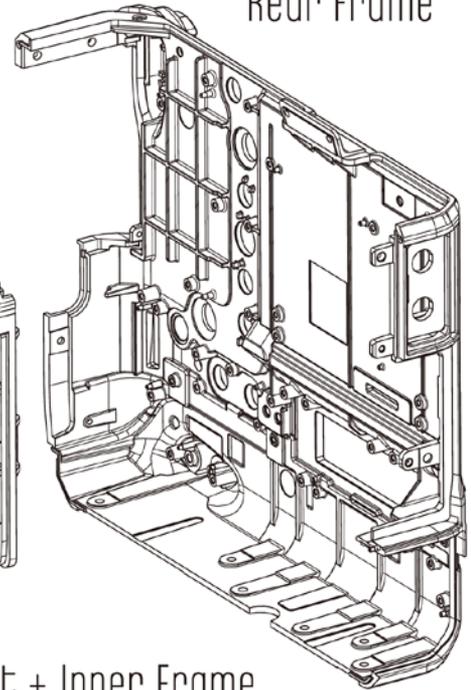
The IBIS is truly a game-changing feature in this camera. Without it, the GFX 100 would be a very challenging

Front Frame



Sensor/IBIS/Mount + Inner Frame

Rear Frame



The IBIS system created for the GFX 100 is an engineering milestone. As shown above, the image sensor along with the lens mount and the IBIS stabilizer is part of an inner frame inside the camera body. This inner frame is completely isolated from the shutter mechanism and the outer shell of the camera body to reduce any possible vibrations. No other camera manufacturer has used such a complex design like this but the upshot is an IBIS system that works shockingly well.

camera to use. As the only medium format camera with IBIS, this gives the GFX 100 a massive advantage over the competition in the medium format space and also makes it a perfect cross-over camera for those coming from 35mm DSLRs or mirrorless cameras.

IMAGE QUALITY

I haven't yet spoken about the image quality, but rest assured those 102 megapixels (101.7 MP to be exact) are simply spectacular. Since I started working with the GFX 100, all of my other cameras seem sub-par. Even my

venerable Nikon D850, which still has stellar image quality, just seems passable in comparison. The GFX 100, with the incredible IBIS technology, redefines what is considered excellent image quality for a wide array of shooting scenarios.

Having worked with the Hasselblad H5D 50C WiFi, a 50 MP medium format camera, for the last four years (which still has exceptional image quality) it even seems "low res" compared to the GFX 100. It is telling that even DPRReview proclaimed that the GFX 100 set a new benchmark when it was tested by them—though to be fair



To give some sense of the incredible image quality the GFX 100 produces above is an approximate 100% crop (on a Retina Screen) of the portrait that appears on page 43. Also of note, Face Detection autofocus was engaged for this image and it locked onto the eyes creating a tack sharp image even though Carson Storch was wearing goggles. Tech Specs: FUJIFILM GFX 100, GF 110mm f/2 lens 1/3,200th second at f/2.8, ISO160.

DPRReview has not tested the Hasselblad H6D-100c nor the 100 MP and 150 MP Phase One offerings.

The GFX 100 has the option to work in 14-bit or 16-bit. Both modes produce excellent image quality but 16-bit is a huge part of why anyone would work with medium format cameras. The color rendition and tonality produced by 16-bit large format sensors is absolutely incredible. With the GFX 100, when you need speed, simply drop into 14-bit. When you need the ultimate bit depth and don't need 5 fps, then up the ante and set it to 16-bit mode. Above is a 100% crop of a portrait to give you some sense of the image quality but even here in this Newsletter, which is compressed for delivery it is difficult

to show the real image quality created by the GFX 100.

Fujifilm also made a big deal at the launch about calling this camera "Large Format" instead of medium format. I know many might call that marketing hype, but the reality is that this camera and all other medium format cameras are producing images with resolutions that are the equivalent of 4×5, 8×10 and 11×14 film cameras of yore depending on the sensor used. Hence, since those were the Large format cameras of their time it follows that these medium format cameras qualify as Large format image quality. No one is actually making a 4×5-inch digital sensor for consumers. In general, I think it is time we update the format names according to resolution. APS-C



This panoramic image of Carson Storch hitting a hip-jump in Virgin, Utah was created from twenty different 102 MP images and was then built in Photoshop. The final image file was 174 MP and had a file size of 3.97 GB before it was flattened. The detail in this image is completely insane. It could easily be printed the size of a bus and even from close up the image would appear ridiculously sharp. Tech Specs: FUJIFILM GFX 100, GF 250mm f/4 lens, 1/2,500th second at f/5.6, ISO 1600.

is the new 35mm film format equivalent (or even better by a large margin), full-frame is the new medium format (and it is better than medium format image quality ever was), and finally medium format cameras are the equivalent of large format film cameras.

During the launch, Fujifilm chose one of my expansive panoramic rock climbing images (the image that opens the On Assignment article on pages 34-35) and initially showed only a small two megapixel portion of the image, which looked impressively sharp on their 2K monitor. The next slide was the full resolution image showing just how small that crop was and you could hear an audible gasp from the audience. My point here is that this camera offers the ultimate in cropping options. For example, a vertical 4×3 crop taken out of a horizontal image still has 57 MP! The upshot is that there is resolution to spare.

Above is a panoramic image created from twenty

different 102 MP images. The final pano is a whopping 174 MP and could be printed the size of a bus with insane detail. It also took three attempts to build this pano as my computer shut down the first two times trying to chomp through the insane amount of data. The file size for that PSD layered image is just under 4 GB!

The only downside, if there is one, is that capturing 102 MP images on a regular basis, and occasionally at 5 fps, is going to fill up hard drives like never before in the still photography world. On my assignment for Fujifilm, I created 1 TB of images from a six-day assignment—and that is only a little over 3,000 images. Each worked up image file is around 1.5 GB in size. I have just expanded my already giant RAID arrays to account for the expected increase in data acquisition. For those looking at this camera, this will be an issue. Luckily, hard drives are relatively cheap. This is just part of the digital game: the bigger the resolution, the more space it takes up on hard drives. Of

course, when you see the image quality this camera produces any worries about extra hard drive space flies out the window.

One last note on image quality, the dynamic range of the GFX 100 seems right in line with other high-end medium format cameras, which is around 14- to 15-stops. I am guessing that this camera is right at 15-stops or just a hair under. At some point when that is measured we will know for sure. Nevertheless, there is ample dynamic range and for the best possible image quality I would suggest capturing images in 16-bit mode as this brings up less noise when pulling up the shadows.

AUTOFOCUS

For a medium format camera, the autofocus built into the GFX 100 is nothing short of amazing. No other medium format camera on the market is even in the same universe as the GFX 100. It's autofocus capabilities are much closer to the top-end DSLRs and 35mm mirrorless cameras than any medium format competitor. I have been very impressed with the AF accuracy as well as the AF tracking modes.

The camera was able to track mountain bikers in pretty much any situation I faced. The mountain biking images included in this review (and in the following article) show the camera's autofocus capabilities. The mountain biker in the image on the previous page was tracked using the new autofocus algorithms and the fast frame rate allowed me to capture the height of the action at five (5) frames per second. This is an unusual type of image to be created by a medium format camera. Note this composite only used half the images the camera created! There are

additional shots of the rider in positions in-between those shown here, but they didn't work for the overall image I was going for.

How does the AF tracking compare to a Nikon D850 or a D5? It certainly isn't as fast as the venerable Nikon D5. But it feels like it is only a small step below the AF capabilities of the Nikon D850—with the caveat that the Face Detection and AF accuracy of the GFX 100 is far better than the D850. I definitely would not say the GFX 100 has slow autofocus but it can't quite compete with the fastest autofocus 35mm cameras on the market like the Sony A9, Nikon D5 and Canon 1DX III. But realize what I just said, this is a medium format digital camera that is only a notch below the best autofocus cameras in the world—all of which are using a smaller format sensor and smaller lenses!

Recently, I had the chance to photograph motocross with the GFX to really see how it handles ultra-fast action. During that test shoot what I realized is that the AF settings have to be dialed in to get the best AF tracking results—as they do with any camera. First off, set the camera to continuous AF and set the Boost Mode for the best possible AF performance. I typically have the camera in 14-bit mode and set to shoot 5 fps when tracking action. The last step is to set up the correct AF tracking mode in the menu and there are six options. For the most part the default AF tracking mode works great but for the motocross shoot I found AF tracking mode 4 to be the best options since the rider suddenly appears in the frame when he boosts off the jump. Before I had all of these settings dialed in, the AF struggled. But once I figured out the best settings, I got a fairly high hit rate—especially when considering the rider was flying through the frame



Above you can see a few of the motocross images I captured with the GFX 100. The top images are the full-frame versions and the images just below are the same images zoomed to approximately 100%. Of course with compression in this InDesign document these are not completely representative of what they images look like at 100%. Zoom to 100% in your Adobe Acrobat browser to get the best possible rendering on this graphic. Also, having photographed a fair bit of motocross at the same MX track, I know that images captured with shutter speeds below 1/6,400th second can exhibit some motion blur, making those images look slightly soft or completely out of focus depending on the shutter speed used. Since the GFX 100 mechanical shutter speed tops out at 1/4,000th second, we are very close to the cusp of motion blur wrecking the tack sharp focus we were trying to achieve. Regardless, with the right settings, it is impressive to see the GFX 100 keep up with such a fast paced sport. For extremely fast moving sports like this, the GFX 100 would not be my first choice though it is still a capable camera if your aim is the ultimate image quality. Tech Specs (All Images): FUJIFILM GFX 100, GF 100-200mm f/5.6 lens, 1/4,000th second at f/5.6, ISO 800.

at 40- to 50-mph. This above was a fairly severe autofocus test but shows that when the settings are dialed in, the GFX 100 can track even ridiculously fast moving action.

[Side note: I have seen a lot of camera reviews where they say that the GFX 100 does not have fast AF and is lacking when it comes to AF tracking. In my experience, as explained above, I would have to say those testers did not know how to set up the AF tracking and this is what gave them the impression that the GFX 100 had poor AF tracking. As already discussed, when set up correctly the GFX 100 AF is incredibly capable even for sports.]

In addition to the incredible AF tracking, the Face Detection and Eye AF is a revolution for medium format cameras. As someone who hasn't had much experience with Face Detection and Eye AF I was blown away but how well it works in the GFX 100. The image of Carson Storch on page 23 was captured with Face Detection and Eye AF engaged and it focused on his eye even though he was wearing a helmet and goggles. For this image I used the incredible GF 110mm f/2 lens at f/2.8. The depth of field was incredibly shallow so this was a great test of the advanced autofocus modes. In nearly every image his eye was pin sharp, which blew my mind since my DSLRs typically need ten to twenty shots at f/1.4 to get one where

the eye is sharp. Even when shooting rock climbing with the climber far below me the camera was able to pick up the face and detect the eye allowing me to concentrate on the composition and forget about AF.

On a recent studio portrait assignment, I had the camera on a tripod, the rear LCD angled up, and I then engaged the Face Detection and Eye AF. In this scenario, I had the image framed up and the lighting dialed in, which allowed me to look directly at the subject (without putting my eye to the viewfinder) and concentrate on them. This allowed me to really connect with the subject and capture those moments when his expression changed or fell into place. I have never had such a seamless portrait shoot before, which speaks volumes about how all the various features of this camera work together to help raise the level of the images.

HIGH ISO NOISE

The GFX 100 certainly has some noise at the higher ISOs, as does every high-megapixel camera, but it is very well controlled and looks quite organic. In my testing, I don't

hesitate to crank up the ISO to 6400. ISO 6400 on the GFX 100 seems on par with the Nikon D850 at ISO 6400. But, and this is a realization I have only made in the last month or so, because of the super high resolution of the camera, unless you are printing massive images (larger than 30x40) you won't be seeing any of that noise in a smaller print or resized image. The reality with this camera is that for most uses the images are massively down-sized, which essentially erases a lot of that noise present at the higher ISOs. In that regard, there is phenomenally little noise at high ISOs—much less than pretty much any camera I have ever shot with. Of course, if your intention is to blow up these images huge, and by huge I mean bigger than five feet on the long end, then I would keep the ISO settings as low as possible.

VIDEO

Another exciting aspect of this camera is that it is an extremely capable video camera. I tested the camera with a videographer that shoots quite a few weddings. We used an Atomos Ninja V external recorder so we could access the highest quality footage in 10-bit 4:2:2 at 400 Mbps.



From left to right: Apla has created a new high spec cage for the GFX 100. It comes in both silver (left) and black (center). Of note, the cage also supports a lens converter that allows PL mount cine lenses to be mounted on the GFX 100. Quite a few Hollywood cinematographers are excited about this setup, which speaks well of the GFX 100 and its video capabilities. At right is the FUJINON PREMISTA 28-100mm cine lens, which has an image circle that just covers the GFX 100 sensor.

We tried out both the F-log and Eterna settings, and while both were excellent the camera has such a wide dynamic range that the Eterna film setting was the one that really seemed to be the best option. The roll off in the highlights was smooth and not harsh like that I have seen from a lot of still cameras with a video mode. There is some rolling shutter, as usual with most mirrorless still cameras that shoot video, but it is not as egregious as you might think. From what I have seen it is on par or slightly better than the rolling shutter produced by the Canon 5D IV.

At the launch, Fujifilm had their new large format Premista 28-100mm video lens (shown on the previous page) attached to the GFX 100 and the footage from that combo looked incredible. Alpa has also launched a new cage to build up the GFX 100 (also shown on the previous page) which looks quite interesting. The Alpa case also has a mount adapter so that PL cine lenses can be adapted to the GFX 100. Of course, one of the main issues using this camera for video is that there are very few video specific cine lenses that cover the image circle of this massive image sensor. Of course the Fujifilm GF lenses cover it but they are not video specific lenses. The new Premista lenses just barely cover it but those are giant \$40,000 lenses that will most likely have to be rented. And lastly, the Arri 65 PL mount lenses (which are rehoused Fuji-Hasselblad medium format lenses) can also be rented but doing so outside of Los Angeles or New York might prove difficult.

Because the GFX 100 can output 4K DCI video from the full sensor in 10-bit 4:2:2 and with Fujifilm's amazing Eterna film simulation, this gives the video output a very unique look. For most of my video productions we take

one or two Red Digital Cinema Cameras with us and while the GFX 100 is not set up to capture motion in the same manner as a Red, it is not far off in terms of image quality. I can definitely see our crew using the GFX 100 on future assignments where we need to capture both stills and video.

Lastly, I am not a true video geek so I am sure that others will dive deeper into the video capabilities of the GFX 100. Jordan, from DPReview, just posted a [video review](#) of the GFX 100 specifically looking at it's motion capture capabilities and had very good things to say about it.

PROFESSIONAL LEVEL DURABILITY

The GFX 100 camera body is also incredibly well weather sealed as are the majority of the GF lenses. In hand, and in use, it seems tough and able to take any abuse that my pro-caliber Nikons could take. It is also a marvel of engineering. I can't reveal my conversations with the engineers but it was quite evident that this camera was technically very difficult to create and they took great pains to make sure it was up to the punishment that pros regularly dish out to their gear.

DUST-BUSTING SENSOR CLEANING

As a side note here, I worked with the camera in southern Utah in some of the dustiest locations anywhere. With such a huge sensor I was worried about dust spots showing up all over the place—as they would have with my Hasselblad H5D. In that ten day assignment, I only ever saw one dust spot on the images and I changed lenses fairly often. I don't know how that is possible or what is going on there—the only thing we could come up with

was that the sensor vibration cleaning option does an incredible job at shaking dust particles off the sensor surface.

Having shot with the camera more extensively since that assignment, I have seen very few dust spots on my images over the last three months that I have been working with the camera. The GFX 100 has a sensor cleaning mode built-in that uses vibration to shake off dust particles when the camera is turned on and turned off. I am not sure what Fujifilm has done here but it seems vastly more effective than any other built in sensor cleaning solution I have ever seen!

The engineers and tech reps have told me specifically not to try and clean the sensor myself. They told me to send it in for cleaning—so the fact that the camera can actually shake the dust off the sensor is a critical feature for those like me that live in dusty areas.

BATTERY LIFE

The GFX 100 comes with two batteries and holds those

two batteries in the vertical grip. In use, and with the image review turned off, I average around 1,000 to 1,200 images before needing to change the batteries. Because the camera houses two batteries, I tend to replace a battery when the first one gets low. The camera can technically run on one battery but for the best performance I always keep two batteries in the camera.

GF LENSES

The GFX camera system at this point is also well flushed out, especially considering it is a medium format system. Fujifilm has an extensive lineup of lenses, all of which are ridiculously sharp. The lens line up is pretty extensive as shown below. From 23mm to 250mm, and with a 1.4x teleconverter that extends that to 350mm, there are enough options for a wide variety of scenarios. The only thing missing for me is an ultra wide angle fisheye lens and a long 600mm f/4 super telephoto equivalent. On the long end, it is easy enough to use the GF 250mm lens with the teleconverter and crop in to gain more focal length. Cropping into the image it is possible to replicate a 500mm lens and still have a 50 MP image.





As shown above, Fujifilm has a very complete ecosystem built up for the GFX cameras including speedlights, lenses, lens adapters, straps, EVF accessories, WiFi apps and large format options. In addition to that shown here there are already a wide variety of third-party lens adapters on the market as well, which allow for Nikon, Canon and other manufacturers lenses to be adapted to the GFX cameras using the 35mm crop mode.

All of the GF lenses have the WR designation as well which means they are gasketed and sealed to prevent water from getting into the lens. The lenses fit to the lens mount tightly as well, making for a very nicely weather sealed system.

When I tested the GF lenses against my Hasselblad H lenses last year I found that in every case the Fujifilm glass was as sharp or sharper than my Hasselblad glass. That isn't too surprising since Fujifilm actually manufactured Hasselblad's H-series lenses for the last few decades. In fact, the Hasselblad H lenses can be used on the GFX cameras and they can even utilize the leaf shutter built into those lenses, which is great for working with strobes. I still have a few of my Hasselblad H lenses and have used them with the "Fujifilm H Mount Adapter G"

on the GFX 100 in the studio for capturing portraits. When adapting the H-series lenses to any of the GFX cameras they only work in manual focus mode but all of the lens data does come through to the camera. On that note, the GFX 100 can also be mounted on a view camera for the ultimate in tilt/shift studio photography and Fujifilm also makes several view camera lenses as well.

Some have complained that Fujifilm does not have that many fast aperture lenses. In the medium format world, f/2.8 and f/4 is still decently fast and offers pretty shallow depth of field. The GF 110mm f/2 is one of my favorite lenses and it is wicked fast at f/2. Shooting wide open on that lens creates a super shallow depth of field not unlike an 85mm f/1.4 lens. Of course there are some faster GF mount lenses made by third party manufacturers like the



Savannah Cummins on Anunnaki (5.11+) at the Optimator Wall in Indian Creek, Utah. Even at ISO 5000, the GFX 100 shows very little noise—especially when considering that at normal viewing sizes a lot of the high ISO noise is down-sampled away. I have made a 17x22-inch print of this image and at that size it is very hard to see any significant noise. Tech Specs: FUJIFILM GFX 100, GF 23mm f/4 lens, 1/800th second at f/5, ISO 5000.

Mitakon Zhongyi Speedmaster 85mm f/1.2 but I have not tried those. There is also the manual focus Laowa 17mm f/4 GFX Zero-D made specifically for the GF mount, which broadens the available lenses to a 35-mm equivalent of 14mm. Needless to say, there are lots of options and Fujifilm is releasing more next year including the GF 45-100mm f/4 zoom lens that appears on their lens roadmap and is sure to be popular.

CONCLUSION

The GFX 100 obviously has an incredible array of new features including a 102 MP sensor, In-Body Image-Stabilization (IBIS), crazy fast (for medium format) and accurate autofocus, a high frame rate (for a camera of this type), full-sensor read out 4K video, stellar ergonomics, Face Detection with Eye AF, and a host of other stand out features. These all add up to a camera that can be used for a wide variety of photographic scenarios. The GFX 100 isn't replacing all of my cameras but it will be the camera I work with for the majority of my work.

Most of the reviewers compare it to DSLRs or 35mm (i.e. full-frame) mirrorless cameras because that is what they know, which is totally fine. But, I think that perspective, while totally valid, misses the point. I can certainly see a lot of DSLR or full-frame mirrorless folks who want the ultimate image quality stepping up to this camera because it is so capable and doesn't feel like an old-school, archaic medium format camera. Alternatively, I can see pretty much every photographer worldwide working with medium format cameras ditching their current gear and pickup this system no matter what genre they work in. Fujifilm just upended the entire medium format industry. It isn't any one of the features in the GFX 100 that really

makes it stand out but rather all of them combined together in a medium format camera that sets this camera apart from just about any other camera out there. I have barely even mentioned that the camera can fire at 5 frames per second in 14-bit mode.

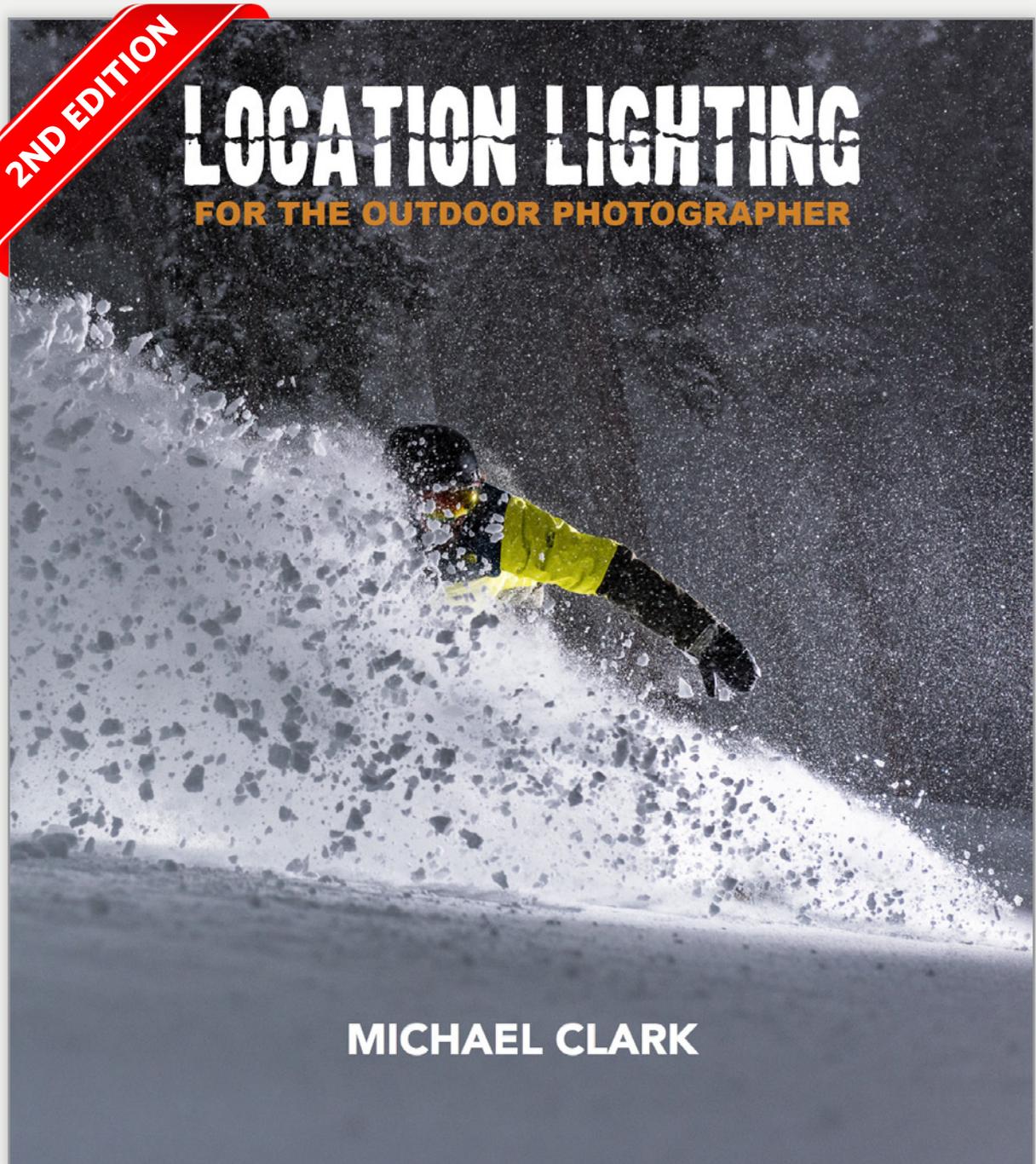
There are so many features built into this camera that it is a bit bewildering. This might be the first camera for which I break out the user manual and read it cover to cover. If there is a feature you wish a camera had the odds are good that somewhere deep in the GFX 100 menu that feature exists—or if it isn't there the Fujifilm engineers are working on it for the next Firmware update. I suppose it wouldn't be much different if I have never worked with a Nikon camera and picked up a D850 or the Z7. I would have to delve into the user manual to figure out some little known features of those cameras as well.

I could go on and on about the GFX 100. It is a supremely capable camera for a wide array of photographic scenarios. Not only is it giving me breathe-taking image quality, but it is also changing how I work. In the end, I think I said it best in the interview entitled "[Blazing Trails with Michael Clark & the GFX 100](#)," that appears on the Fujifilm-X website: "This is going to be the camera to beat in the medium and large format sphere. Nothing else even comes close. For professionals looking for the best image quality and the most usable large format option on the market, this is it. Period."

For more information on the FUJIFILM GFX 100 please visit the [Fujifilm Global website](#) or visit the [GFX 100 Fujifilm-X website](#), which has even more information. For those that would like to try out the camera check out my upcoming [GFX 100 workshops](#) in New York and Utah.

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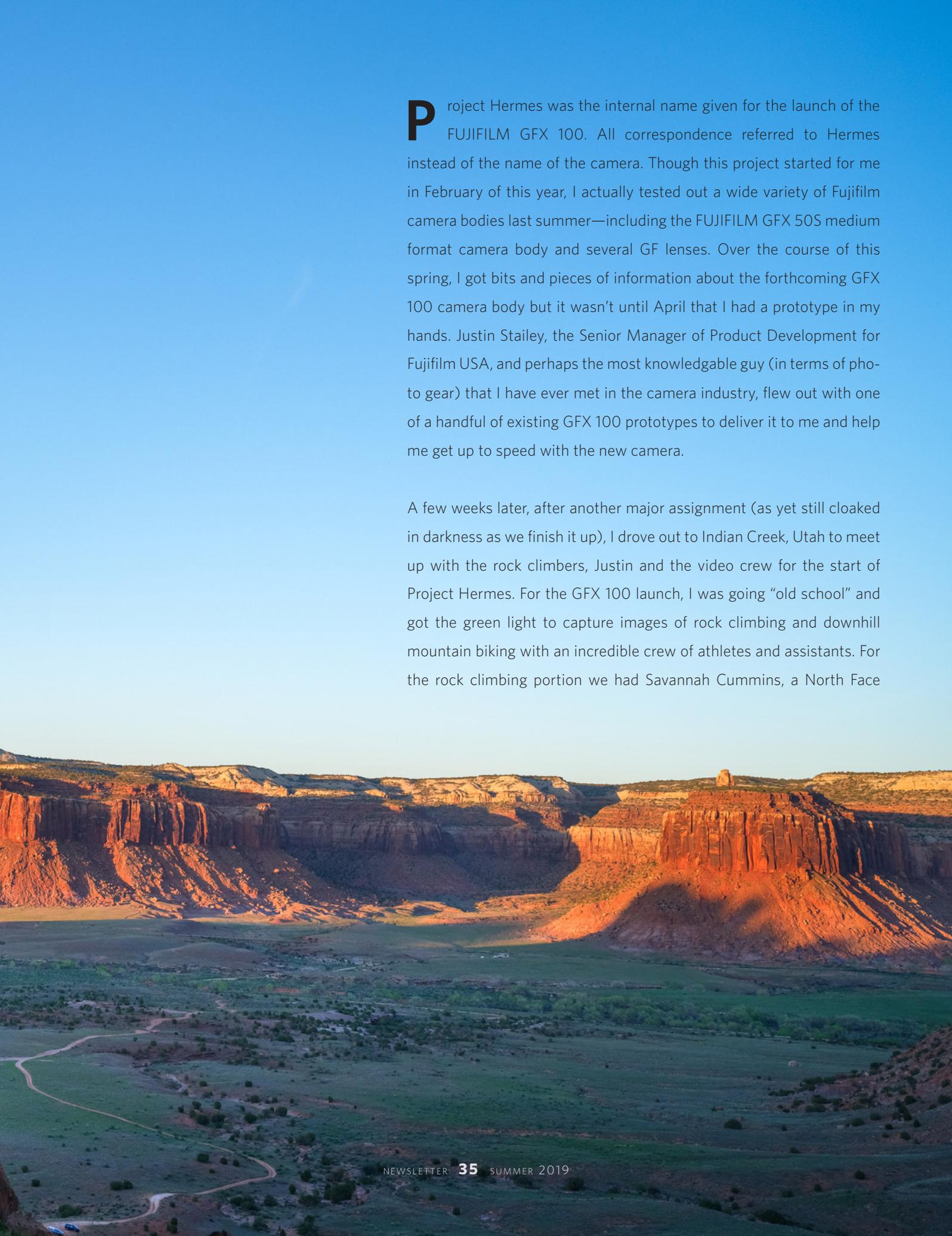
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an assignment:

PROJECT HERMES

ON ASSIGNMENT FOR THE LAUNCH OF THE FUJIFILM GFX 100

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Project Hermes was the internal name given for the launch of the FUJIFILM GFX 100. All correspondence referred to Hermes instead of the name of the camera. Though this project started for me in February of this year, I actually tested out a wide variety of Fujifilm camera bodies last summer—including the FUJIFILM GFX 50S medium format camera body and several GF lenses. Over the course of this spring, I got bits and pieces of information about the forthcoming GFX 100 camera body but it wasn't until April that I had a prototype in my hands. Justin Stailey, the Senior Manager of Product Development for Fujifilm USA, and perhaps the most knowledgeable guy (in terms of photo gear) that I have ever met in the camera industry, flew out with one of a handful of existing GFX 100 prototypes to deliver it to me and help me get up to speed with the new camera.

A few weeks later, after another major assignment (as yet still cloaked in darkness as we finish it up), I drove out to Indian Creek, Utah to meet up with the rock climbers, Justin and the video crew for the start of Project Hermes. For the GFX 100 launch, I was going “old school” and got the green light to capture images of rock climbing and downhill mountain biking with an incredible crew of athletes and assistants. For the rock climbing portion we had Savannah Cummins, a North Face

sponsored climber, and Angela Van Wiemeersch, an incredible all around rock and ice climber, as the main climbers and additionally we had Ted Hesser, another incredible climber and photographer, rounding out the crew and acting as my assistant. For the downhill mountain biking portion we were lucky enough to get Carson Storch, a Red Bull sponsored rider who has ridden at several Red Bull Rampage events, and Dusty Wygle, who rides for Nitro Circus. Helping assist me on that second leg of the assignment was Dave Gardner from Missoula, Montana. This was one of the best crews I have ever had on any assignment and these images would not exist if not for the help of my assistants and the incredible athletes.

Indian Creek, Utah, just an hour or so south of Moab, Utah, is one of my favorite climbing areas on the planet. As can be seen in the images on the previous page and the following page, the scenery is absolutely stunning and the red rock glows at certain times of the day. I have spent nearly three years of my life exploring this area of Utah, and I have spent at least a year of my life climbing, and photographing climbing, in Indian Creek. Hence, shooting a major assignment like this in the Creek felt like a homecoming.

Previous to this assignment, it had been quite a while since I had been to the Creek. Back in the day when I was going there a few times each year, there were very few climbers looking to get thrashed on the difficult crack climbs in the creek. These days, there are a few hundred climbers on any given day in the spring and fall spread out at the various buttresses. Camping is difficult to find. Standing in line to climb one of the classics is the new normal. I probably sound like an old geezer, but I was a

bit shocked at how popular the Creek has become—and rightly so. It is an incredibly unique and challenging climbing area. Each and every route there feels like a full on expedition for those of us that aren't wicked strong.

In all my years of capturing the sport of rock climbing, I have never attempted to use artificial lighting to light up a crack climb. If I was going to do it then Indian Creek seemed like the perfect place to go. For this assignment, Fujifilm partnered with my long-time sponsor Elinchrom so we could create another set of Hi-Sync images in the same vein as the [Lighting the Spirit](#) campaign produced for the Elinchrom ELB 1200 battery-powered strobe kit back in 2017.

I met Savannah while teaching at the Summit Adventure Photography workshop last year in Jackson, Wyoming. I was very impressed by her and have seen her rise to stardom in the climbing world. This spring we talked about meeting up at Indian Creek to go climbing together and that turned into a photo trip for Fujifilm. Once we locked onto the Creek we texted each other for a few months highlighting possible routes to photograph. In the end, we decided on some old-school classic splitters, like Scarface (5.11) shown on the following page, and some new school classic routes, like Go Sparky Go (5.11) shown on pages 40-41, in addition to others. For the rock climbing portion of the assignment, we had one scout day and three shoot days to make some magic happen.

On the scout day we hiked all over the place checking out the climbs and the position of the sun at each crag—using the Sun Seeker app. Critical for this shoot was figuring out when the climbs went into the shade so we didn't have to compete with that while trying to light the climb

Previous Pages: Savannah Cummins on Anunnaki (5.11+) at the Optimator Wall in Indian Creek, Utah. This Page: Savannah Cummins climbing the super classic route Scarface (5.11) on the Scarface Wall in Indian Creek, Utah.



with battery-powered strobes. Once we had seen everything we put together a plan of action for the next three days.

Even in April this year, the mornings were quite cold in Indian Creek. Climbing in the shade at the crack of dawn might have provided us with good light but the near freezing desert conditions would have been tough to deal with and torturing your athletes isn't a great way to start. Hence, for all three days in the Creek we slept in and let it warm up a bit before heading out. The athletes seemed to have endless energy and were up for just about anything but I was also trying to manage energy levels since we had three full days ahead of us, climbing from 10 AM or so until after dark on each day.

On the first shoot day, we headed to the Sparks wall to photograph Go Sparky Go (5.11c) and Jupiter Crack (5.11). Because we were using lighting it takes a lot more time, and we had to make sure we allowed enough time, to set up the lighting before conditions were perfect for the key shot each day. After a quick warm up route, Savannah jumped on Go Sparky Go to dial it in and I captured images from the ground. For this first go we did not use strobes. I just wanted to see the movement on the route and get a sense for where the best images on the route might be for later that afternoon when we did have the strobe set up. After a quick lap, we moved over to Jupiter Crack, which has become a modern classic in Indian Creek. Jupiter Crack, shown on the next page, is a daunting climb with intense exposure and some wide crack climbing. Angela cruised up Jupiter Crack with ease, as shown on the following page. For Jupiter Crack it didn't make sense to light the image with a strobe so we just captured it

using available light. Doing so also allowed me to test out the high ISO settings and the new In Body Image Stabilization (IBIS) on the GFX 100.

By late afternoon, we moved back over to Go Sparky Go and Ted Hesser got the strobe set up on an adjacent route. Then after a bit of testing Savannah got back onto the route and we started capturing images with the strobe using Elinchrom's Hi-Sync technology to overpower the daylight. As luck would have it, some clouds also rolled in behind the climb and with the strobe exposure this allowed us to make those clouds look dark and moody, which further helped the lighting stand out. The strobe lighting spotlighted Savannah in a very understated way that really makes this image (shown on pages 40-41) stand out as one of the best from the entire assignment. In fact, Fujifilm chose this image of Savannah on Go Sparky Go to be one of the main images promoting the camera as shown on page 51 at the end of this article.

On the second day we captured a variety of portraits and lifestyle images in the morning and then made our way over to the ever-popular classic climb Scarface (5.11a/b). Scarface, on the Scarface Buttress, is one of the most classic routes in all of Indian Creek. It sits just off the main road and is visible from quite a few other buttresses in the Creek. We went to the climb early in the afternoon expecting to stand in line for our turn to get on it, but happily no one was on it. Hence, we set up the rope for Ted to get on top of the route with a strobe and then waited for the sun to drop below the horizon so we could get the sweet light of sunset in the background. As can be seen on the previous page it all worked out pretty well. Savannah cruised Scarface

Angela Van Wiemeersch climbing the route Jupiter Crack (5.11) on the Sparks Wall in Indian Creek, Utah.





*Svannah Cummins on Go Sparky Go (5.11)
on the Sparks Wall in Indian Creek, Utah.*



pretty easily and also climbed up and down for me at the top of the route so I could get just the right body position and movement I wanted.

On our last day of the climbing portion of this assignment, we headed to the Optimator Wall. Our plan for the final day was to shoot a route called Soul Fire (5.11) from above and then set up the strobe to photograph Savannah on another classic route named Anunnaki (5.11+). Loaded down with huge packs, which is the norm when photographing climbing and especially true when bringing out multiple 15-pound (6.8 Kg) battery-powered strobes to a somewhat remote location, we made our way up the 600-foot tall (180-meter) talus. While hiking up in the sun it was blazing hot. In the shade, at the base of the cliff, it felt chilly—especially with a wet shirt from all the sweat. That is just part of the desert experience.

Up until this project, I haven't really shot a lot of rock climbing with mirrorless cameras of any kind. Both Savannah and Ted, who are professional photographers themselves, work with the latest 35mm mirrorless cameras and it was interesting to compare notes on how they use these new cameras for their work. While photographing Savannah on Soul Fire, I turned on the Face Detection and Eye AF and I was completely amazed at how well that AF mode held focus on Savannah's face allowing me to forget about focus and compose the image. I also learned a trick from Ted and saw how holding the camera stretched out tightly against the shoulder strap and using the rear LCD to compose helped me get some different perspectives without having to contort my body into very uncomfortable positions. Combined those two new ways of working were a revelation. Back in the film days and with previous DSLRs (that did not have a tilting screen)

you pretty much always had to look through the viewfinder while composing and contort yourself into very uncomfortable positions to get the shot while hanging from above. That is just how it was. And with finicky AF options and huge resolution cameras holding them out at arms length wasn't a great idea if you wanted sharp images. The IBIS built into the GFX 100 really helped steady the camera in this instance as well since I was hanging on a rope.

As can be seen in the opening spread of this article on pages 34-35, the images we captured of Savannah on Annunaki turned out pretty well. We positioned Ted and the strobe up in the alcove above the climb so it looked like a beam of light was coming through an opening at the top of the climb, where the giant tusk of rock Savannah was climbing on leaned against the main wall. For the launch of the GFX 100 in Tokyo, Japan this image of Savannah on Annunaki was the first image shown to the world. Fujifilm cropped the image down to a 2 MP close-up of Savannah and then zoomed out to the full image showing just how crazy 102 MP really is. When they zoomed out to the full image there was an audible gasp in the room, which helped me understand just how powerful the overall image was for the non-climbers in the room. For me personally being able to create the images and then to be there and see how the images were received at the product launch was a career highlight that I won't soon forget. As can be seen on my blog, in the [Fujifilm 2019](#) blog post, Fujifilm also set up a beautiful gallery show with a smattering of images and video content from all the photographers that were part of the GFX 100 launch. It was incredible to see the images printed so large and quite an honor to hear the responses from those viewing the gallery.

Portrait of Carson Storch.





Dusty Wygle catching some air off a hip jump in Virgin, Utah.





For the second part of the GFX 100 assignment we left Indian Creek and met up with Carson Storch and Dusty Wygle in Virgin, Utah—which is often referred to as the Mt. Everest of downhill mountain biking since the Red Bull Rampage, one of the biggest events in downhill mountain biking, is held in this area each fall. Carson knows the Virgin, Utah mountain biking scene especially well and on our scout day we looked at a wide variety of

terrain. Towards the end of the scout day we found a giant hip jump and the guys wanted to “session” it a bit as they were amped up to ride. The light was pretty much perfect and with strong backlighting I found a sweet shooting position about quarter-mile away from the jump. Since I was so far back, I opted for the GF 250mm f/4 lens and also put on the GF 1.4x teleconverter to get some extra reach. The night before Justin received a

brand new firmware update from Japan and we updated the camera immediately. Hence, at this point I hadn't fully tested the autofocus tracking or the high frame rates.

“While looking at the images later that evening I realized that this camera could work for a large percentage of my work, not just for portraits and slow moving sports.”

I set up the camera to shoot at the max frame rate (5 fps) and track the motion of the riders. On the first jump I mashed the shutter release to see what the camera could do. After blasting off fifteen images or so, I leaned back from the camera and had a huge smile on my face. Dave, my assistant, seemed just as surprised as I was at how fast the camera could fire. We high fived and laughed at the ridiculous notion of shooting 102 MP images at such a fast frame rate! Up to that point no one we talked to at Fujifilm seemed to know how fast a frame rate was possible with the GFX 100. After a few jumps we knew pretty much immediately that the camera could blast away at a decent clip and also track focus on the riders with relative ease. While looking at the images later that evening I realized that this camera could work for a large percentage of my work, not just for portraits and slow moving sports. The black and white image of Dusty Wygle (on pages 44-45) is one of my favorite from the entire assignment—and we captured it on the scout day no less.

The next morning we got up early and Carson and Dusty warmed up on some smaller jumps then road the steep ridges descending from the mesas. To capture the descent I hiked up an adjacent ridgeline and shot across the valley at certain points. After one run, the wind came up

and shut us down. Wind is a major issue in the sport of downhill mountain biking. When airborne even a slight wind can blow the rider off their chosen line, resulting in serious catastrophe. We hungout for a while longer to

see if it would die down and then decided to head back to the hotel. That afternoon, we had plans for more ridge riding but when we got back out to the site the winds were howling even harder than they were that morning.

We got up early the next morning as well, since the mornings are when wind is typically light or nonexistent. We managed to get a few hours of riding and photography in before the winds revved up again. The riders were forced to look for smaller (for them at least) jumps that they could do a variety of tricks on instead of riding the big ridge lines. As shown on the following two-page spread Carson and Dusty were still able to throw down some pretty wild aerial maneuvers. We spent the another few hours out at the jumps capturing portraits of the riders and doing interviews for the behind the scenes video.

With two black flags, I was able to create a location portrait of Carson and Dusty that looked like a studio portrait, as shown on page 43. Those images showed me just how powerful the autofocus technology in the GFX 100 was compared to the DSLRs I have been shooting with previously. I turned on the Face Detection and Eye AF and the camera focused on the riders eyes even though they were wearing helmets and goggles. For the launch we



Page 46: Carson Storch and Dusty Wygle planning out the next jump in Virgin, Utah. This Spread: Carson Storch launching off a huge jump in Virgin, Utah.



needed a wide variety of images, not just action shots. Hence, with all of the athletes I made sure we had time to capture straight up portraits as well.

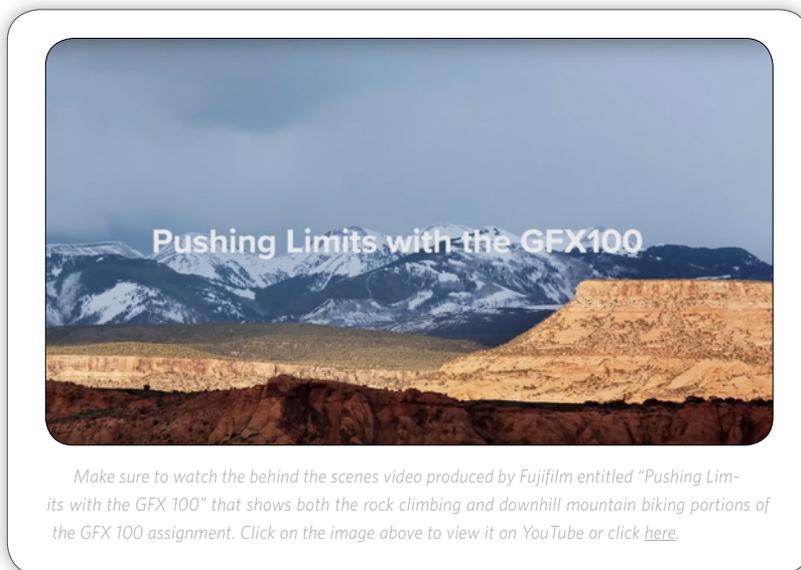
On the evening of the second day, we were again shut down by the winds. Adding insult to injury, the next day it rained all day. Luckily we had shot images on the scout day and captured enough material on the subsequent days that we could pack it up when the rains came in. We had enough for the launch of the GFX 100.

It is rare in my experience, especially in the commercial world, that a client allows a photographer to decide what they want to photograph and how they are going to go about creating images of that subject. It has only happened a handful of times in my career. Of course, in those cases, as with this assignment, I pitched a few different ideas and the client signed off on them beforehand, but still there is a huge amount of trust in the photographer. Fujifilm thankfully had that trust in me and signed off on this shoot for both the rock climbing and mountain biking ideas. Because the assignment and the subject matter was of my own making, I gave myself ten full days and two stellar locations to really get creative. In the end, I still had to create images that show how capable the GFX 100 really is—and push the camera as far as possible so that potential buyers

could get excited about it. The easy part for me in that scenario was that I was a certain customer and I was already very excited about the camera. “Giddy as a school boy,” might be a better analogy.

Amazingly, having been a pro for 23 years, while on the assignment I was able to realize what a career highlight this assignment really was—and continues to be. It is incredible to see the accolades and the reviews having shot with it so much before it was launched. DPReview just

posted up their full-review of the camera and proclaimed it to be “the best camera we’ve ever reviewed” in terms of image quality. That might explain why the image quality seems to blow away every other camera I own.



My sincere thanks to Fujifilm, both the incredible team here in the USA and the engineers and crew in Japan, for trusting me with this incredible assignment and for rolling out the red carpet in Japan. In addition to Fujifilm, I also have to give a big shout out to all of the athletes and assistants who came together to help create these images. Lastly, a big thank you to the video crew (who weren’t necessarily used to the great outdoors) who hung in there and created not just one but three pretty cool behind-the-scenes videos which have been widely seen since the launch. Check out those behind the scenes videos on Fujifilm-x.com.



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Photo © Michael Clark | Athlete: Savannah Cummins | FUJIFILM GFX 100 Digital Camera with FUJINON GF32-64mmF4 R LM WR at 1/1250sec at f/4.0, ISO 200 and using ELB 500 TTL and ELB 1200 HS lighting equipment provided by Elinchrom LTD | Michael Clark is a Fujifilm compensated professional photographer.

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portfolio





The Big Switch

by Michael Clark

Many of my readers will note that I have been using Nikon cameras since the start of my career, over twenty-three years ago. My recent adoption of the FUJIFILM GFX 100 might come as a surprise, but it should not be that shocking. For the last four years I have used a Hasselblad H5D 50c WiFi camera along with my Nikon cameras. Nikon does not make medium format cameras and the Hasselblad was brought in to create new and different images. At the outset of my time with the GFX 100 I saw this new medium format camera as a replacement for my Hasselblad with a new, more advanced and higher resolution sensor. Over the course of working with the camera, on the assignment for the launch of the GFX 100, it became very clear that this new medium format camera was vastly more capable than any other I had ever worked with. After capturing remarkable images of both rock climbing and fast-paced freeride mountain biking, it became clear that the autofocus, IBIS technology and frame rate of the camera made it very capable for a large majority of my adventure sports photography.

To be clear, at no time has Fujifilm required me to convert to using Fujifilm cameras full time or for all of my work. I am not a Fujifilm X Ambassador. Fujifilm was looking for me to add their cameras to the mix of cameras that I use for my work. At this point, I have retained all of my Nikon cameras and lenses. As any working pro photographer

would understand, it takes quite a while to get used to a completely new camera system. I am still learning about the FUJIFILM GFX 100 and as such, I am still learning how and when it is the go-to option and where the Nikons might be a better option. In light of that, it will be an ongoing process to see when and where each system is the best fit. Obviously for those times when I need a lighter camera system or when I need an exotic fisheye or telephoto lens, the Nikons will be the go to kit. But for everything else I have yet to run into a scenario where the GFX 100 was not up to the task.

The point of this editorial is to show how a major shift in equipment is implemented on a professional level. As with any profession, the best tools available for any particular job are used to complete that assignment. In addition, I must say that Fujifilm has been phenomenal to work with and I have been incredibly impressed with their openness and passion to provide photographers with the best possible tools for creating images and motion content. The GFX 100 has been widely tested and has been called a “game-changer” by many reviewers. I will let the masses worry about the accolades but for my part I have found the GFX 100 to be a revolutionary camera that has changed the way I work and the quality of my images in a remarkable way. It will be my camera of choice over any other camera for the foreseeable future.



Mt. Cook (also known as Aoraki), seen here from the Hooker Valley, is the tallest peak in the southern alps of New Zealand. At 3,724 meters (12,218 feet) and with three separate summits it is a serious challenge for any mountaineer. It is also the peak that Sir Edmund Hillary used to train for his Everest climb.

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