FUJI GX680III

The ultimate medium format landscape camera

For several years, my all-purpose medium format SLR was a Contax 645 with lenses from 35mm to 350mm. Most of the time, however, I prefer to shoot 4x5 using my Ebony SV45U2. Using the Contax, many times I wished for camera movements such as tilt and rise. Seeking to solve this issue led me to investigate the Fuji GX680III for those times when shooting 4x5 isn't practical. On paper, it sounded like the ideal compromise between medium and large formats: full movement capability with any lens, image size nearly twice that of 645, yet the convenience of rollfilm and a prism viewfinder. My only qualm was the stream of opinions, mainly online by those who hadn't even used the camera, that it would be too large and bulky for landscape use where hiking and carrying the equipment any distance from the car would be necessary.

I did a lot of research into size and weight of the Fuji camera and lenses. I'm accustomed to carrying a fairly hefty load: 4x5 and Zeiss (all-metal) medium format equipment isn't exactly light, and I came to the conclusion that carrying the Fuji would require little more effort than my 4x5 system. I purchased the body and several lenses in November 2001; after deciding that I really liked the system, I completed my set of lenses and several additional accessory items the following month.

I've used the 680 on many major trips, plus numerous day trips and studio flower portrait work. While I continue to prefer shooting 4x5 whenever practical, I remain very favorably impressed by the 680 as a whole…it's well-designed and can do nearly anything one wishes. These days, my main uses for the 680 are for closeup work such as flowers (both wild and studio portraits), as well as landscape use when there are reasons not to use large format, namely in light rain (I cover the camera with a frosted shower curtain, having cut a hole for the lens) or at those times when I must use 400 speed transparency film, which isn't available in large format.

Body

I have the current model, GX680III; as the Roman numeral implies, there are two earlier versions as well. My remarks are limited to version III, as I have no personal experience with the prior models, and many of their accessories are incompatible with version III.

The camera is well-built of black composite material, which (I'm guessing) contains carbon fibre. With the lightest normal lens (135mm f/5.6) attached, it weighs just under 10 pounds. It is the largest of all SLRs, and the only one that shoots up to 6x8 format. Version III is a multi-format camera in that, with insertion of the proper mask, one can shoot 6x8, 6x7, 6x6, or 645 formats. The camera knows which mask is inserted and automatically adjusts film spacing and numbering; one must choose the desired format

prior to loading film, however, as format cannot be switched mid-roll.

Bellows focusing is accomplished via a large rubber-coated knob on either side of the camera; ground glass viewing is bright and easy to focus. Movements are handled from the front standard; all normal view camera style movements including tilt, rise/fall, swing and shift are available. While movements are not as extensive as those of a true view camera, they are sufficient for at least 98% of the shots that I want to take; for those extreme movements, a view camera would still be the best choice.

The camera has built-in close focus capability with every lens, thanks to bellows focusing and the availability of extension rails. Fuji makes these in 80mm and 40mm lengths; I cannot see any reason to buy the 40mm, since they can't be stacked and the 80mm length is necessary to obtain maximum close focus. In my experience, the 100mm f/4 makes the best "macro" lens, capable of 1.3:1 image size when used with the 80mm rails; even closer focus is possible if a screw-in "diopter" close-up lens is used. Canon's 500D dual element lens provides very high quality; the largest size available is 77mm, but it can be used with a 77-82mm step-down ring without vignetting.

A scale from 0 to 60mm is provided between the camera's focusing rails. In conjunction with this scale, I've developed a chart that instantly gives me the proper bellows extension factor for exposure in the closeup range with every lens that I own, both with and without the 80mm extension rails attached. I tape this to the back of the camera for effortless exposure compensation. I've posted this information here

A convenient bubble level is built into the camera's upper surface. I install grid screens in all of my cameras, which are normally sufficient for leveling horizons, but the bubble provides a nice alternative if desired. I sent my grid screen to Bill Maxwell of Maxwell Precision Optics for his special brightening treatment, which added about 1 1/2 stops' worth of brightness. It makes focusing easy for macro and low-light conditions.

Lenses

Fuji has a reputation of extremely high-quality lenses, and the GX680 series is no exception. They are available from 50mm to 500mm, and each lens that I've tested is of stellar quality in every way. Like so many things about this camera, they are a unique blend of medium- and large formats; each is built into a box-like black lensboard, which like the camera appears to be a carbon fibre blend. All lenses include a leaf shutter, with maximum speed of 1/400 second. Maximum apertures tend to be conservative, mostly f/5.6, with three f/3.2 lenses in the lineup; the long lenses are slower, i.e. 300mm f/6.3 and 500mm f/8. Minimum aperture is generally f/45 for shorter lenses, f/64 for longer. The lenses are mostly quite lightweight, due to their composite construction, slow speeds and lack of helical mounts. In particular, the 500mm is amazingly light at only about 3.5 pounds/1.6kg. On the other hand, the 65mm and 50mm are large and heavy due to the amount of glass in them; the 50mm has a 112mm filter thread! Most others have an 82mm thread, save for a few which require 95mm.

A quirk of the 680 system is that there are a number of closely-spaced lenses in the "normal" range. My lenses include 65, 80, 100, 135, 210, and 300mm. While all give truly superb results, special mention is needed for the 50 and 500mm, both of which I formerly owned. The 50mm, despite its great size, is the only lens in the lineup that cannot be used in conjunction with full available movements due to its smaller image circle. It will vignette if shifted more than 9mm, or if tilted excessively; making this worse, the full image is never visible due to the camera's mirror/body construction, meaning that vignetting is impossible to determine without shooting a Polaroid! The 500mm is supplied with a large mounting rail, which Fuji insists must be mounted under the camera body (necessitating removal of any quick release plate), along with a ring-and-roller gadget attached to the lens front. The purpose is to allow the now-supported lens to roll along the rail during focusing, eliminating sagging of the lens caused by its long length. Naturally, this eliminates the possibility of tilt or other movements with this lens. After testing both with and without the support rail, I determined that the difference in sharpness is vanishingly small, if present at all. Accordingly, under normal use I won't use the rail. However, in April 2002, atop Clingman's Dome in the Smokies, I used the 680 in high wind and took no chances: I used the mounting rail in conjunction with Bogen's "extra arm" stabilization unit (see Michael Reichmann's Luminous Landscape site for description and information on this device) and every frame was razor sharp, even at slow speeds.

An adapter is available to mount large format lenses to the 680; in my opinion this is more trouble than it's worth, due to limitations of focal length and cumbersome mode of use.

Film backs

Among the many nice features of the 680 are its film backs. Besides the multi-format capabilities mentioned above, the backs revolve at the touch of a button…no tipping the camera for verticals. They're also electronic marvels, each with its own LCD screen that displays frame number, format in use, film type, and more. They will indicate (via flashing icon) whether a lens is incorrectly attached, darkslide has not been removed, or other problem. They are programmable to imprint each film frame edge with a variety of data, including time and date, aperture and exposure time, sequential number and user data. For some reason they don't imprint the lens focal length, which would have been useful.

Individual 120 or 220 film inserts are necessary, unlike those for Contax 645…adopting Contax's "swivel" film insert, which takes either 120 or 220 format, would have been a nice touch. As is, I have two 120 and two 220 inserts to allow flexibility with my three film backs.

Two CR2 batteries are needed to operate the film back; again, it would have been convenient to use the same battery (C123A) as is needed (quantity 3) in the body. Batteries seem to be long-lasting in both body and film backs.

Accessories

The 680 system includes many accessories; I'll review only those that I actually have. The camera ships with a waistlever finder; in my opinion a prism viewfinder is absolutely necessary. Without it, one is limited to composing at a much lower height than can be accomplished with a straight-through prism, and the prism is brighter and easier to see focus, tilt, and so forth. A non-metering prism is available; I chose the AE finder although I nearly always use a handheld meter and set the camera's controls accordingly. There is no in-viewfinder display with any of these viewing methods. The AE finder's metering capabilities are very limited; according to Fuji's brochure, it is center-weighted, while the manual implies that it is a spot-meter; in actuality I find that it is somewhere in-between, without a good way to determine exactly what area is being metered. It also includes a flash meter for studio use; convenient if one wishes to meter from a grey card or other subject that virtually fills the frame, but once again I prefer to use a handheld flash meter.

A cable release is a necessity for sharp images; I use this along with mirror lockup for each and every frame, of course in conjunction with a sturdy tripod. Fuji claims that the camera can be used handheld, although I find this idea quite amusing; the huge mirror gives out a mighty THWACK which I can only assume would lessen sharpness even when tripod-mounted.

I use a grid screen for all my cameras; this is available from Fuji. I also use the 80mm extension rails as discussed above. Finally, the standard bellows supplied with the camera is worthless in my opinion; it is stiff and inflexible, allowing minimal movements. Instead, I use the extended wide-angle bellows for general purposes; it extends all the way to the end of the 80mm extension rails while allowing full movements. Its only limitation is when used with 50mm and 65mm lenses focused at infinity, along with extensive movements, in which circumstances it becomes difficult to use due to its 4-pleat thickness when collapsed. I have the ordinary wide-angle bellows for these instances, although I find that it's very rare that I actually need to make the switch. This is fortunate, since bellows changing is tedious and difficult compared to doing so on a 4x5 field camera.

My method of use in the field

Initially, I carried the system in a Lowepro ProTrekker, except for the camera itself. The latter was (and is) carried by the neckstrap and supported by one hand. While this doesn't exactly render it weightless, it's manageable. However, the loaded backpack is very heavy…it can certainly be done for some distance, but is heavier than is comfortable, especially over uneven ground. I now use a larger Lowepro Commercial AW shoulder bag, which holds lenses from 65 to 300mm (one lens remaining on the neckstrap-mounted camera), plus plenty of accessories while maintaining a reasonable weight. The camera and AE prism live in a Lowepro Magnum AW shoulder bag, slightly smaller than the Commercial, but are removed and carried via the neckstrap once I leave the car. To reduce weight, I keep a few less-used items in a Lowepro Micro Trekker backpack, which is virtually weightless compared to the full-size Lowepro backpacks. I take it if I expect to use any of these items. Finally, If I know that I will need a certain piece of less-used gear, I can substitute it into a bag before starting out, or simply return to the car if I'm close and time is not a problem.

Once again, while I prefer shooting 4x5 whenever practical, the Fuji GX680III is an ideal compromise between the speed and convenience of medium format and the flexibility of large format. It's a true hybrid in many physical features as well. While I've done little more than dabble with architectural subjects, I'm sometimes asked about the 680's suitability for this use. Frankly, you'd do better to shoot large format: you'll get more movements and flexibility. I gather that most architectural photography is carried out in close proximity to one's car, making it relatively easy to use bulkier types of LF equipment such as a monorail camera. Likewise there isn't ordinarily an issue with a need to shoot quickly. For these reasons, I'd consider the 680 as a second-best choice for this purpose.

Feel free to email me if you have particular questions about the camera or its use; if you are presently shooting with this camera, please keep my drum scanning service in mind!

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UPDATE: EQUIPMENT FOR SALE!

As of March 2015, I've decided to sell my Fuji GX680III system. Please email me to discuss. Here are the only items remaining:

Magnifying hood (replaces waistlevel or AE finder) - wonderful for closeup use - $100

Lens hood - intended for GXM 65mm, GXM 80mm, GXMD 115mm, GXMD 125mm, and GXMD 180mm lenses. Can also be used with 100mm square sheet filter - new $60