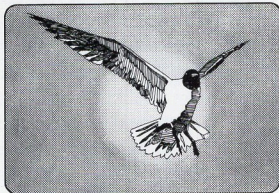
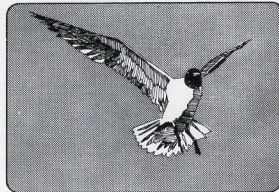


This hand-holdable telephoto lens virtually eliminates the mirror lens "hot-spot" in both still and ciné photography.

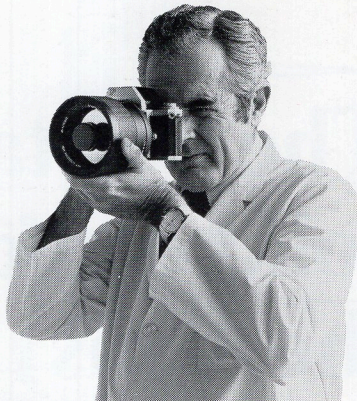
Mirror lenses allow the use of long effective focal lengths without the extreme length and bulk of refractive lenses. But the bane of the mirror lens has been the troublesome "hot-spot"; unevenness of illumination from center to edge of a full f-stop or more as simulated below.



Typical reflex—lens hot-spot.



Vivitar solid CAT reflex lens.



The optical design of the Vivitar Series 1 600mm f8 solid catadioptric lens virtually eliminates the "hot-spot." The fall-off in illumination from center to edge is one-third of an f-stop or less.

In addition to solving the "hot-spot" problem, the Vivitar 600mm CAT is an exceptionally durable and stable lens. Spherical elements are combined to

form what is a virtually solid element, thus eliminating the large air spaces and low tolerance to shock and temperature changes found in conventional mirror lenses. In fact, the primary element is 42.7mm thick.

At 100 yards the Vivitar 600mm CAT produces the same image on the 35mm format that a 50mm lens produces at 25 feet. An experienced photographer can hand-hold this compact lens at shutter speeds that would normally be impossible with a 600mm refractor type lens.

The lens is fully compatible with popular 35mm SLR cameras and is also a spectacular optic for 16mm ciné cameras accepting "C" mount adapters. The image produced on 16mm film is approximately equivalent to the image of a 2000mm lens on 35mm still film.

Like all mirror lenses the Vivitar 600mm telephoto lens has a fixed aperture. Exposure is controlled with shutter speeds and the use of neutral density filters supplied with the lens.

Vivitar's 600mm solid CAT is no futuristic pipe dream. It is in production and available now at Vivitar dealers.

Specifications: Focal length: 600mm. Aperture range: f8 (fixed f-stop). Construction: 9 elements, 7 groups. Angle of acceptance: 4°. Weight: 1.36kg (3 lbs.).

Length: 8.4cm (3.31 in.). Diameter: 10.6cm (4.18 in.). Accessory size: 35.5mm at the rear of the lens, inside the T-mount. Filters included are Series 1 VMC close tolerance UV haze, K2, 4X-ND, and 25A.

Closest focusing distance from film plane: 7 meters (23 feet). Screw-in hood, detachable tripod socket, filters, lens case, front and rear lens caps included. Mounts available to fit Nikon, Canon, Minolta, Konica, Olympus OM, Pentax, and universal thread mount cameras.

Vivitar Corporation, 1630 Stewart St., Santa Monica, California 90406. In Canada: Vivitar Canada Ltd./Ltée



actual size

Vivitar® Series 1™ 600mm f8 solid catadioptric lens.

©Vivitar Corporation, 1978

As seen in: Photomethods, Industrial Photography, Technical Photography, American Cinematographer.

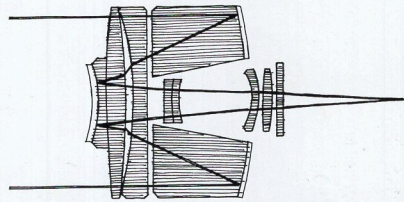
Here's a hand-holdable 600mm telephoto lens that's built to take on the toughest assignments.

News photographers are quite properly suspicious of non-traditional, exotic lenses no matter how tempting the specs may be. But here is a lens that is exotic precisely because of its ability to survive in the company of photojournalists.

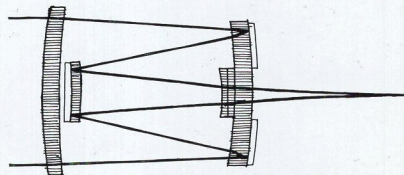
The Vivitar Series 1 600mm f8 solid catadioptric lens for 35mm SLR cameras is a different kind of mirror lens. It was developed from the required technology to meet NASA specs for on-board lenses in spacecraft and photographic missions. The 600 CAT lens withstands operating temperatures of 0°-140° Fahrenheit.

In the Vivitar 600mm lens spherically shaped elements are combined to form what is a virtually solid single element. All the optical elements share similar temperature coefficients, so the lens is extremely temperature stable. The glass elements along with the relatively simple focusing mechanism are enclosed in a state-of-the-art lightweight alloy barrel.

The optical design of the lens has virtually eliminated the troublesome



Series 1 600mm solid catadioptric lens.



Conventional reflex lens design.

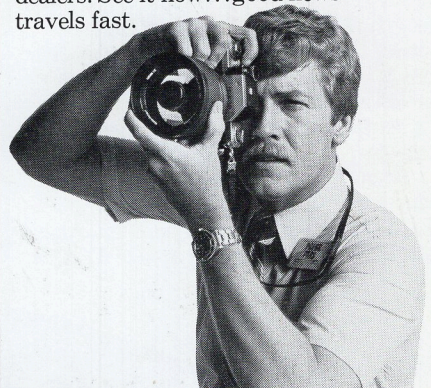
“hot-spot” common to mirror lenses; relative illumination varies from center to corner of the format by at most $\frac{1}{3}$ f-stop. As with all reflex lenses, the aperture is fixed. Exposure is controlled with shutter speed and the use of neutral density filters supplied with the lens.

Now that you know you can trust the lens to do the job, consider the job it

can do. At 100 yards you get the same picture a normal lens would give you at 25 feet. And at 25 feet it will give you a full-frame head and shoulders shot of your subject. That kind of stand-off shooting power comes in handy in a great many newsworthy situations.

This is a lens that can make it possible for you to get the picture when other photographers can't. We think that's the most impressive thing that can be said about any piece of photographic equipment.

The Vivitar Series 1 solid CAT is in production and available at Vivitar dealers. See it now... good news travels fast.



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Vivitar® Series 1™ 600mm f8 solid catadioptric lens.

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actual size

As seen in: News Photographer.

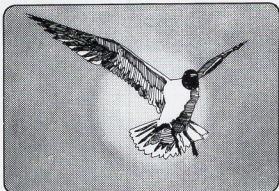


The Vivitar® 600mm solid catadioptric is the lens that has caused a revolution in telephoto lens photography, especially in the specialized fields of industrial photography, photo journalism and law enforcement use. Carefully crafted precision optics help to make the Vivitar 600 solid CAT the most versatile lens in telephoto photography.

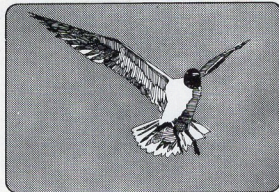
Series 1™ Lenses

This hand-holdable telephoto lens virtually eliminates the mirror lens "hot-spot" in both still and ciné photography.

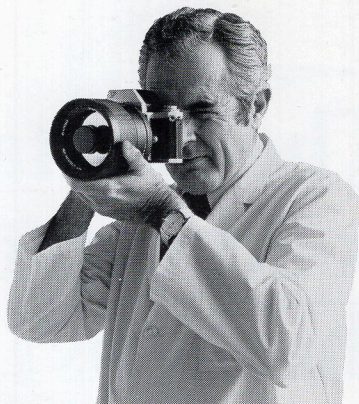
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