

**MODERN  
PHOTOGRAPHY**

*reports on the*

**CANON AUTO ZOOM  
LENS**

*JANUARY 1970 ISSUE*

**GOVERNMENT  
PHOTOGRAPHY**

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**CANON ZOOMS  
LENS**

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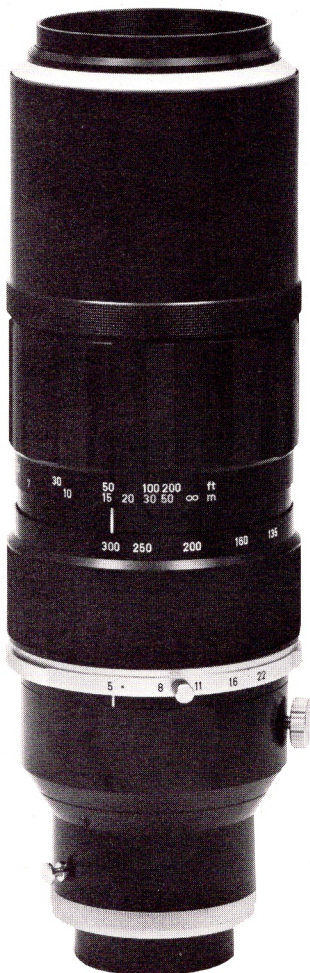


# MODERN PHOTOGRAPHY

## CANON AUTO ZOOM LENS HAS LONG RANGE

**MANUFACTURER'S SPECIFICATIONS:** 85-300mm f/5 Canon FL Zoom Lens for Canon SLR's. **FEATURES:** Automatic diaphragm, preview button, apertures to f/22, filter size 72mm, focusing to 12 ft. **PRICE:** \$548.50.

It isn't too often that a zoom lens makes it through the rigors of MODERN's testing maze. Of those that do, few with as vast a range as this Canon do so well—the 85-300 having the widest zoom ratio of those that have made it so far. Physically this is not a small lens, as you'd expect just by noting its specifications. From stem to stern the Canon measures 11 in. when at infinity position. Racked out to its minimum focusing distance (12 ft.) another inch is added.



85-300mm f/5 Canon Zoom No. 12750  
85mm

Aperture	Center Sharpness	Edge Sharpness
5	Excellent	Excellent
5.6	Excellent	Excellent
8	Excellent	Excellent
11	Excellent	Excellent
16	Excellent	Excellent
22	Excellent	Excellent

135mm

Aperture	Center Sharpness	Edge Sharpness
5	Excellent	Excellent
5.6	Excellent	Excellent
8	Excellent	Excellent
11	Excellent	Excellent
16	Excellent	Excellent
22	Excellent	Excellent

200mm

Aperture	Center Sharpness	Edge Sharpness
5	Very Good	Acceptable
5.6	Very Good	Excellent
8	Excellent	Excellent
11	Excellent	Excellent
16	Excellent	Excellent
22	Excellent	Excellent

300mm

Aperture	Center Sharpness	Edge Sharpness
5	Good	Good
5.6	Good	Acceptable
8	Very Good	Excellent
11	Excellent	Excellent
16	Excellent	Excellent
22	Very Good	Excellent

On camera the lens handles surprisingly easily for all its 9 lb. 3 oz. A tripod is recommended, of course, and Canon has thoughtfully provided a smoothly turning and locking collar near the rear of the lens. Still, during our field tests, we had reasonably good results hand holding the lens at 1/125 sec. and above. But this should be done only in emergencies.

The familiar Canon lens controls are all there but in king-sized versions. The depth-of-field preview button is located near the camera body at a spot easily reached by your left thumb. Proceeding outward, next comes the tripod collar and then the efficient clickstopped aperture setting ring. It has two raised knurled areas on either side and a protruding knob for quick setting. Then comes the zoom setting ring—actually a 1-in.-wide band with a pebble-grained surface. The focusing ring is also a wide band—a generous 1¾ in.—with alternating ribbed and smooth areas. Finally, there's a long, 3-in. built-on sliding sun shade.

All these controls worked efficiently and smoothly during our tests. Naturally, there were no problems with camera and lens on a tripod. But even during hand-held operation we were able to work the controls with little difficulty, although we could only do one at a time. It helps if you have a big left hand.

As with many long lenses, it was a bit hard to focus critically with the camera's central microprism or split-image rangefinder, but the surrounding fine ground area in the finder worked well. The 12-ft. minimum distance rules out portrait work at the 85 and 100mm focal length settings, but this is a zoom lens, geared primarily for telephoto work. And its range does cover the majority of long distance shooting situations.

Our tests, in and out of the lab, showed that our test lens exhibited good contrast at most apertures, the main exception, as expected, around the edges at full (f/5) aperture.

# GOVERNMENT PHOTOGRAPHY

## The Canon Zooms

### Top Performers

### in Ease of Operation, Quality of End Results, Durability

By Bob Bowen



"USE A ZOOM LENS? Nah, not me. Tried one a few years back, but the optics weren't sharp enough to give me the quality I like."

How many times have you heard that one? If you're like me, every time you mentioned thinking about getting a zoom lens someone was quick to butt in and explain all the pitfalls. And, maybe those arguments against variable focal length lenses carried some weight at one time, but not any more.

Canon changed all that with its family of three zooms, the 100-200mm, the 55-135mm and the 85-300mm. All produce negatives of excellent optical quality at all focal lengths, all are fully automatic, and with the exception of the 85-300mm, can be hand-held with ease.

I carried all three Canon zooms to Vietnam on a recent assignment for Leatherneck magazine. The idea was to check them out for ease of operation, quality of the end result and durability. They came through with flying colors in every department.

OF THE THREE, I preferred the Canon FL 55-135mm f3.5. It gave me a normal lens and a medium telephoto all in one, leaving me one less piece of equipment to carry. Focusing is a snap with the crystal clear viewfinder screen of the Canon FT/QL body, and there's little chance of zooming when you want to focus or focusing when you mean to zoom because of the placement of the two rings controlling these movements. The focusing ring is well forward and knurled, while the zoom ring is farther back and covered with a rough rubber-like material. The lens weighs less than two pounds, has a focusing range of from seven feet to infinity, an aperture scale of f3.5 to f22, and angles of view ranging from 13 degrees at 55mm to 18 degrees at 135mm.

The heaviest member of the family is the FL 85-300mm f5. It weighs in at a little over four pounds and for all practical purposes cannot be considered an in-bag piece of equipment. It is, however, ideal for sport events, or any other event where the activity is confined to a prescribed area. A tripod is a must although it can be hand-held if the situation demands it and you're in a position to steady yourself. It is very similar in design to the 55-135mm although it has a built-in hood and a protruding knob on the aperture ring for easier operation. It has a focusing range of from 15 feet to infinity, an aperture scale of f5 to f22, and angles of view from 29 degrees at 85mm to 8 degrees at 300mm. Canon recommends the use of contrast filters when the lens is zoomed all the way out.

LASTLY, we have the Canon FL 100-200mm f5.6, and while it bears no resemblance to the other Canon zooms, it produces the same excellent quality. Focusing and zooming with this lens is accomplished by the same ring. Rotating the ring determines focus and pushing or pulling back on the ring sets the desired focal length. Unlike the other zooms, which are outfitted with pre-set aperture buttons, the 100-200mm has an automatic-manual change ring. It weighs a

little under one and a half pounds, focuses from 8 feet to infinity, has an aperture scale of f5.6 to f22, and angles of view from 24 degrees at 100mm to 12 degrees at 200mm.

From a quality standpoint, all three lenses delivered excellent visual results without resorting to tests to determine resolving power. If I can make a 16x20 print of a 35mm negative with minimal grain and no distortion, I'm happy. Such was the case with all three of Canon's zooms at practically every focal length.

As far as ease of operation is concerned, there are no complaints other than the weight of the 85-300mm. But, then again, you wouldn't go to an indoor pistol range with a .30 caliber rifle. Each lens was developed with a specific use in mind and walking around with four pounds of lens dangling from your neck was never considered.

The 100-200mm is ideal for the photographer who wants a variety of telephoto lengths to complement his normal 50mm or 35mm lens. The 55-135mm suited me best because my basic lens is the 35mm, or in the case of Canon equipment, the 28mm or super wide 19mm.

Durability? Well, I don't make a habit of subjecting lenses to conditions which make or break them, but there was an incident in Vietnam that proved to me, beyond a doubt, that Canon's equipment is built to last.

I WAS WALKING around Da Nang, making color photographs of civilians, and my Canon FT/QL with 55-135mm caught the eye of a larceny-minded Vietnamese. I was just lowering the camera from my eye after making a picture when I was almost yanked off my feet. The man, riding on the back of a Honda, driven by another man, had come roaring up the street behind me, grabbed the neck strap and was attempting to rip the camera over my head. He succeeded, but the initial resistance combined with the momentum of the motorcycle, dumped him and my camera on the street.

He jumped up and ran, leaving me with one slightly bent camera body, a busted filter, and a lens that wobbled. Needless to say, I was worried about light leaks in the camera body, the intricate metering system, and whether or not the lens could ever be used again.

After prying the busted filter off, I made two quick shots to finish off what I thought to be a wasted roll of Ektachrome-X. You can imagine my surprise when the film returned with no trace of light leaks, nor exposure discrepancy on the last two frames. Not only had the camera body survived the crash, the metering system showed no adverse effects.

And the lens? Well, after a little loose-screw tightening and straightening out the friction bayonet ring, I continued to use it. It still had a slight wobble, but you couldn't tell it from the results.

"Use a zoom lens? Nah, not me. That is, not unless Canon makes it!"

# Canon

*The articles "CANON AUTO ZOOM LENS HAS LONG RANGE," and "THE CANON ZOOMS—TOP PERFORMERS IN EASE OF OPERATION, QUALITY OF END RESULTS, DURABILITY" are reprinted through the courtesy of MODERN PHOTOGRAPHY MAGAZINE, published by Billboard Publishing Co., 165 W. 46th St., New York, N. Y. 10036, and GOVERNMENT PHOTOGRAPHY, published by Force Four, Inc., 1317 F St., N.W., Washington, D.C. 20004.*

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