

Topic: Nightforce Velocity™ Reticle Calculator

Attn: Nightforce Optics Customers Effective Date: October 31, 2011

### Nightforce Velocity™ Reticle Calculator

Nightforce Optics is proud to announce that our new advanced Velocity™ Reticle Calculator is now live. By visiting the link provided below, you can utilize the Nightforce Velocity™ Reticle Calculator to determine the best Velocity™ reticle for the ballistic profile of the chosen rifle and ammunition combination.

The Velocity™ Reticle Calculator features the ability to enter atmospheric conditions, use custom ammunition loads, and will return results on both Velocity™ 600 and the new Velocity™ 1000 reticles. It will also provide the current part number(s) of the appropriate Nightforce riflescope(s) that best matches the user's calculated results.

Please visit <u>www.nightforcereticlecalculator.com</u> to access the Velocity™ Reticle Calculator.

It is critical that you utilize this calculator in order to *accurately* determine the proper reticle selection for Velocity<sup>™</sup> series reticles.

In closing, there is a "Print Results Page" at the end of the calculation that lists all viable Nightforce riflescope part number(s) for that respective Velocity™ reticle/ riflescope combination.

Technical Support Phone: 208.476.9814 – Fax: 208.476.9817

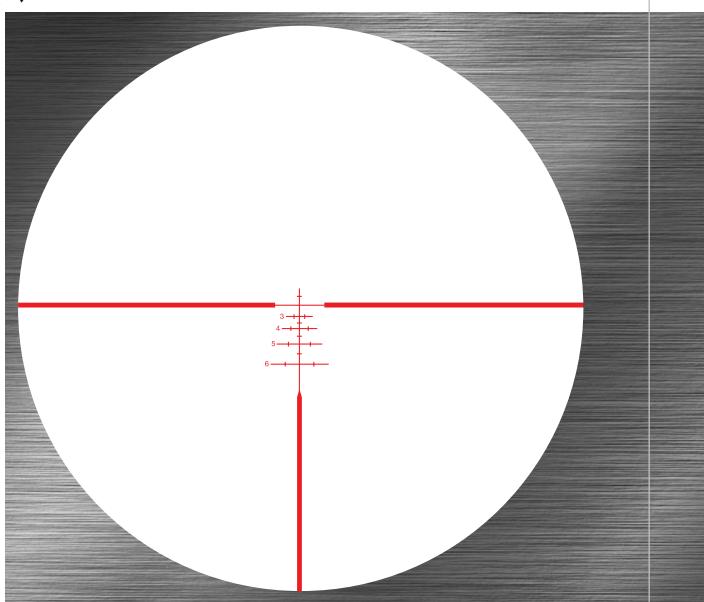
## RETICLEVELOCITY™600



**Available in:** Nightforce 2.5-10 x 32 NXS riflescopes

Precise shot placement to 600 yards Eliminates estimating holdover or counting elevation adjustments Matched to the specific ballistic profile of your chosen rifle and load Vastly superior to "one size fits all" drop compensating reticles





Reticle design parameters:

Sight-in distance/Zero: 200 yards (main horizontal bar)

Altitude: 2000 feet

Pressure @ Altitude: 27.48 (in Hg)

**Humidity:** 78% **Temperature:** 59 deg F

**Sight height above bore:** 1.8 inches **Incline angle:** 0 **Spin drift:** 0

**Applications:**General hunting
Mid-range shooting

Above: 185-point mule deer taken by Tom Bulloch with the Velocity  $^{\text{TM}}$  600 reticle in a Nightforce 2.5-10 x 32 NXS Compact scope. The hunter had only a small opening through the sagebrush at 267 yards in which to place the shot.

## RETICLEVELOCITY™600

The Nightforce Velocity<sup>TM</sup> 600 is a revolutionary solution to fast and precise shooting to 600 yards. Unlike "one size fits all" drop compensating reticles, the Velocity<sup>TM</sup> 600 reticle is tailored to the ballistic profile (muzzle velocity, bullet weight, ballistic coefficient, etc.) of your rifle and your load.

Up to twice as fast as traditional ballistic reticles, it eliminates guessing at holdover, calculating bullet drop or counting elevation adjustments. Once the reticle is properly sighted in, verify the distance to the target and simply hold dead on\* at the appropriate elevation mark. You can:

- Put ballistic science on your side
- Get the maximum possible performance from your ammunition and your rifle
- Reduce the learning curve of shooting at longer ranges while building confidence

### Using the Velocity™ 600 reticle

Our online calculator (www.nightforceoptics.com) allows you to enter the ballistic profile for your rifle and load. It will give you precise sight-in and specific ballistic data and recommend the proper Velocity $^{\mathsf{TM}}$  reticle.

If your load changes, or you want to use your scope on a different rifle, the Velocity™ reticle will function as a "standard" reticle by using the main reticle intersection for your chosen zero point. Please note that by using this method your velocity reticle will no longer be calibrated for accurate holdovers.

### How to develop long-range shooting skills

In a word, practice. Then practice some more. Wind is always a huge variable; nothing allows you to better understand the effects of wind downrange than practice. Time spent in the field shooting will repay you many times over.

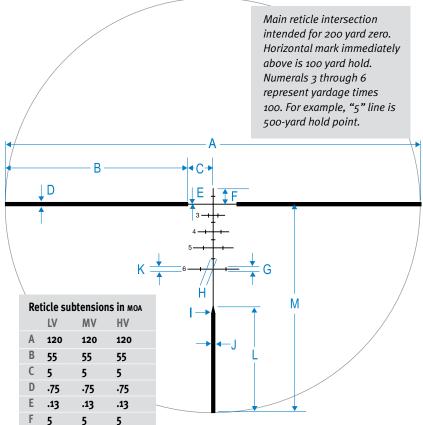
### Hunting with the Velocity™ 600 reticle

No matter how sophisticated and "smart" our reticle may be, shooting a game animal at longer ranges involves serious ethical considerations. We encourage you to do your homework, select a bullet that will deliver optimum terminal performance at the intended distance, and please remember that all of your equipment—including yourself—needs to yield maximum performance to make those shots count.



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- Provides accurate reticle holds to within zero to half minute of angle from 100 to 600 yards
- Elevation marks in 100 yard increments to 300 yards, then in incremental drops of 50 yards out to 600 yards
- Windage holds marked in 5 and 10 mph increments
- Illumination standard



The Velocity M 600 reticle is offered in three configurations, tailored to the ballistic profile of your load. The chart at right shows each configuration's deviation, in minutes of angle, from a 200-yard zero point.

.75

1.0

1.8

·75

1.0

43.5

.75

1.0

1.8

.75

1.0

45.4

60

G .75

H 1.0

K 1.0

L 41

1.8

.75

60

Note: these values are valid ONLY at highest magnification setting. Do not rely upon yardage markings at any other magnification.

### Ballistic drops in MOA (visit nightforceoptics.com for more information)

Yardage	HV	MV	LV
100	-1.16	-1.40	-1.80
200	0	0	0
300	1.92	2.25	2.71
350	2.98	3.50	4.25
400	4.16	4.92	5.90
450	5.41	6.40	7.77
500	6.70	8.00	9.71
550	8.07	9.75	11.85
600	9.57	11.56	14.00

\* Based on zero degree incline angle.
There are many variables that affect
the ultimate accuracy of the Velocity™
reticles. Environmental factors
(altitude, temperature, humidty, etc.)
can also affect actual deviation from
standard reticle markings. Please visit
nightforceoptics.com for details.

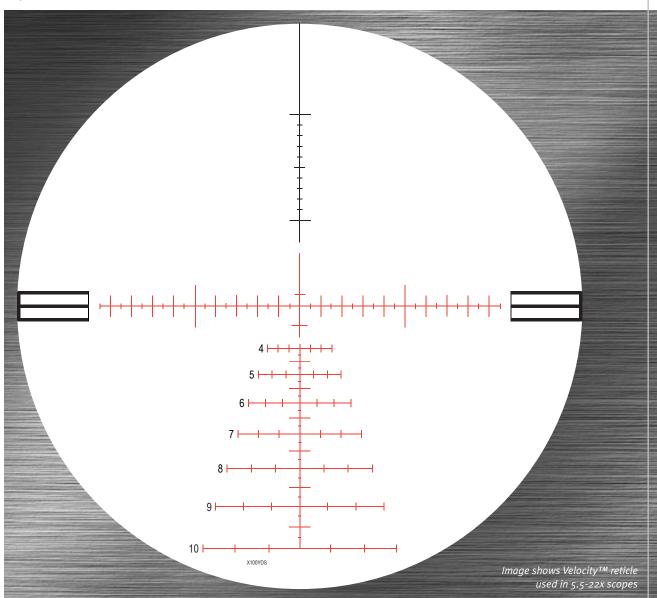
# RETICLEVELOCITY<sup>™</sup>1000



**Available in:** Nightforce 3.5-15x and 5.5-22x NXS riflescopes

Precise shot placement to 1000 yards Eliminates estimating holdover or counting elevation adjustments Matched to the specific ballistic profile of your chosen rifle and load Vastly superior to "one size fits all" drop compensating reticles





Reticle design parameters:

Sight-in distance/Zero: 200 yards (main horizontal bar)

Altitude: 2500 feet

Pressure @ Altitude: 27.32 (in Hg)

**Humidity:** 50% **Temperature:** 50 deg F

**Sight height above bore:** 1.8 inches **Incline angle:** 0 **Spin drift:** 0

### **Applications:**

Long-range shooting
Tactical shooting
Big game and varmint hunting
Competition shooting

Above: Leo Anderson, holder of several 1000 yard world records. Leo took this fine pronghorn with one shot at 1200 yards.

## RETICLEVELOCITY<sup>™</sup>1000

The Nightforce Velocity™ 1000 is a revolutionary solution to fast and precise long-range shooting. Unlike "one size fits all" drop compensating reticles, the Velocity™ 1000 reticle is tailored to the ballistic profile (muzzle velocity, bullet weight, ballistic coefficient, etc.) of your rifle and your load.

Up to twice as fast as traditional ballistic reticles, it eliminates guessing at holdover, calculating bullet drop or counting elevation adjustments. Once the reticle is properly sighted in, verify the distance to the target and simply hold dead on\* at the appropriate elevation mark. You can:

- Put ballistic science on your side
- Get the maximum possible performance from your ammunition and your rifle
- Reduce the learning curve of shooting at long ranges while building confidence

### Using the Velocity™ 1000 reticle

Our online calculator (www.nightforceoptics.com) allows you to enter the ballistic profile for your rifle and load. It will give you precise sight-in and specific ballistic data and recommend the proper Velocity $^{\mathsf{TM}}$  reticle.

If your load changes, or you want to use your scope on a different rifle, the Velocity™ reticle will function as a "standard" reticle by using the main reticle intersection for your chosen zero point. Please note that by using this method your velocity reticle will no longer be calibrated for accurate holdovers.

### How to develop long-range shooting skills

In a word, practice. Then practice some more. Wind is always a huge variable; nothing allows you to better understand the effects of wind downrange than practice. Time spent in the field shooting will repay you many times over.

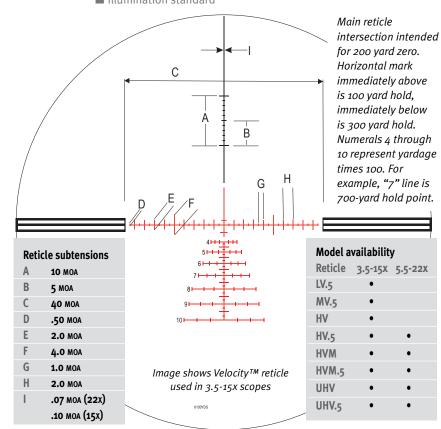
### Hunting with the Velocity™ 1000 reticle

No matter how sophisticated and "smart" our reticle may be, shooting a game animal at extreme ranges involves serious ethical considerations. We encourage you to do your homework, select a bullet that will deliver optimum terminal performance at the intended distance, and please remember that all of your equipment—including yourself—needs to yield maximum performance to make those shots count.



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- Capable of accurate reticle holds to within zero to half minute of angle to 1000 yards
- Elevation marked in 100 yard increments for 100, 200 and 300 yards, then in incremental drops of 25 yards out to 1000 yards
- Windage holds marked in 5, 10 and 15 mph increments
- Illumination standard



The Velocity 1000™ reticle is offered in several configurations, tailored to the ballistic profile of your load. The chart below shows each configuration's deviation, in minutes of angle, from a 200-yard zero point.

Note: these values are valid ONLY at highest magnification setting respective to each model of scope. Do not rely upon yardage markings at any other magnification.

**Ballistic drops in MOA** (visit nightforceoptics.com for more information)

Yardage	LV.5	MV.5	HV	HV.5	HVM	HVM.5	UHV	UHV.5
100	-1.84	-1.40	-1.19	-1.12	-1.11	-1.08	-0.96	-0.86
200	0	0	0	0	0	0	0	0
300	2.74	2.20	1.95	1.87	1.85	1.80	1.69	1.57
400	5.93	4.79	4.27	4.09	4.03	3.93	3.64	3.45
500	9.53	7.73	6.88	6.60	6.51	6.26	5.86	5.53
600	13.55	11.03	9.81	9.39	9.19	8.86	8.31	7.80
700	18.03	14.74	13.06	12.49	12.12	11.65	10.97	10.29
800	23.03	18.91	16.70	15.94	15.39	14.70	13.92	13.01
900	28.63	23.61	20.75	19.80	18.99	18.06	17.16	15.98
1000	34.91	28.92	25.30	24.10	22.93	21.68	20.71	19.22

<sup>\*</sup> Based on zero degree incline angle. There are many variables that affect the ultimate accuracy of the Velocity™ reticles. Environmental factors (altitude, temperature, humidty, etc.) can also affect actual deviation from standard reticle markings. Please visit nightforceoptics.com for details.