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***Federal’s Black Cloud Product Line Grows By Adding a Smaller TSS Load***

*Federal Premium Black Cloud, the deadliest load in waterfowl hunting, continues to add new options with its 2020 release of 20-gauge Black Cloud TSS.*

Federal Premium Black Cloud has reigned as waterfowl hunting’s deadliest load for a decade. During that time, its FLITECONTROL wad and famous FLITESTOPPER pellets have earned a reputation for reliably delivering downrange devastation in any situation. But, Federal’s team of engineers did not let the product line rest. They continue to improve the list of options and the loads’ recipes. During the past few years, the team improved the product, upgrading many of its components and introducing the FLITECONTROL FLEX wad that performs great with any style of choke. Black Cloud’s lethal configuration is better than ever, offering sizeable gains in pattern density and killing power while slashing variations in velocity and reducing barrel residue.

The latest new products for Black Cloud with FLITECONTROL FLEX includes 12-gauge rounds loaded with Tungsten Super Shot (TSS). *Field & Stream* magazine recently recognized this Black Cloud TSS load with an Editors’ Choice honor for Best-of-the-Best in ammunition, as part of the magazine’s Field Test Buyer’s Guide in the December 2019 – January, 2020 issue.

“With No. 9 Tungsten Super Shot blended with FLITESTOPPER steel, Black Cloud TSS delivers forgiving patterns and long-range thump unlike any duck load I’ve ever tried,” stated Hunting Editor Will Brantley in the article.

New for 2020, waterfowl hunters can get that same performance in a new 20-gauge load that blends No. 3 FLITESTOPPER Steel with No. 9 TSS.

The following article provides many details about Federal’s New Black Cloud TSS loads and helps explain the performance components behind the entire Black Cloud lineup.

**TSS Solutions**

The new Black Cloud TSS recipe blends 60 percent HEAVYWEIGHT TSS pellets (instead of the traditional steel) and 40 percent FLITESTOPPER steel. These high-end loads feature No. 7 or No. 9 TSS mixed with BB or No. 3 FLITESTOPPER steel. The loads also feature Federal’s lead-free Catalyst primers and clean, fast-burning propellant. The FLITECONTROL FLEX wad provides the most consistent patterns in all types and port-styles of chokes. The new Black Cloud TSS extends effective range past 50 yards.

TSS is a metal alloy comprised primarily of tungsten. It has a density of 18 grams per cubic centimeter and is harder than steel. TSS is more than double the density of steel and 50 percent denser than lead. The increased density retains velocity, and penetrates deep. Hardness also prevents pellet deformation, which improves pattern efficiency and penetration. Because of its increased density, you can use a smaller TSS pellet to deliver the same amount of energy as much larger lead shot or steel shot. This means you can greatly increase the pellet count of a payload by using a smaller shot size, but the pellets penetrate as much or more because of the increased density. Overall patterns densities are increased, so there are more hits on the target. TSS is also certified non-toxic by the US Fish and Wildlife Service, so it can be used for waterfowl hunting.

The new Black Cloud TSS carries on a lethal legacy, blending proven FLITESTOPPER Steel pellets and 18 g/cc Tungsten Super Shot. The new 3-inch, 20 gauge option has a 1 ounce payload No. 3 FS Steel and No. 9 TSS. Two 12-gauge, 3-inch Federal Premium Black Cloud TSS loads are offered. The first load option is 1-¼ ounce BB FS Steel mixed with No. 7 TSS. The second load is 1-¼ ounce No. 3 FS Steel blended with No. 9 TSS. All are available in 10-count boxes.

**FLEX Wad Advantage**

Thanks to the FLITECONTROL FLEX wad’s ingenious design, the breakthrough waterfowl ammunition improves pattern density and consistency through both ported chokes and standard tubes.

“The wad’s redesigned, rear-deploying brake fins and side-mounted vents stimulate the payload for separation from the wad at precisely the right moment for the densest, most consistent patterns possible,” explained Dan Compton, senior ammunition product line manager for Federal.

To make it happen, Federal engineers beefed up the wad’s brake system.

They started by reinforcing the wad’s flexible rear fins with sturdy supportive gussets. “We rely on gas pressure coming from inside the barrel to flex the fins and keep them open, which triggers the shot to separate from the wad,” said Compton. “If there is insufficient gas pressure to keep the fins open, the wad doesn’t slow down enough for optimum separation.”

Such pressure problems are a common concern with ported choke tubes, which vent gas to the side before it exits the muzzle.

“FLITECONTROL FLEX makes it a non-issue with all chokes,” he said. “Brake fins open and remain deployed, so payloads separate exactly when they’re supposed to, regardless of the gas pressure behind them.”

Ever the innovators, the company’s engineers also replaced original wad’s window-like side flaps with straight slits running parallel to the shotshell.

“The slits allow an even flow of air inside the wad, to equalize internal pressure,” said Compton. “This balances the force propelling pellets down the barrel with the air pressure in front of them, maximizing the potential for consistent shot and wad separation.”

Collectively, these tweaks yielded sizeable increases in pellet concentration with all types of chokes.

“Extensive testing with 3½-inch shotshells and a variety of choke styles revealed that the new Black Cloud with FLITECONTROL FLEX reduces variation in pattern efficiency by 36 percent in ported choke tubes and 41 percent in all other choke tubes with all shot sizes,” said Compton.

Pattern performance is measured by total pellet count within a 30-inch circle at 40 yards. This testing was conducted at Federal Premium’s facility by its ammunition engineers.

**First-Class Components**

Along with delivering tighter, more consistent patterns, new Black Cloud also carries a deadlier cargo than ordinary duck and goose ammo.

“FLITESTOPPER steel pellets make up a full 40 percent of the payload,” said Compton.

A raised cutting ridge encircling the exterior gives the pellets an unparalleled ability to slice through feathers and flesh, with no loss of penetration or adverse effect on ballistics and flight characteristics.

“FLITESTOPPER steel creates significantly larger wound channels than standard round pellets or other designs, devastating game on impact,” he added.

Compton notes that hard-hitting round steel pellets make up the remaining 60 percent of the Black Cloud payload.

“That steel is precisely blended with the FLITESTOPPER pellets to produce ideal patterns and flight characteristics for the target species and conditions at hand,” he said.

New Black Cloud with FLITECONTROL FLEX also boosts reliability in all weather conditions.

“Federal Premium’s new Catalyst lead-free primer provides surefire ignition and efficient powder burn in all conditions,” said Compton.

“Our engineers also tweaked the powder composition to reduce temperature-related variations in velocity,” he adds. “Creating greater performance uniformity in variable weather gives hunters more consistent leads while shooting in different temperatures.”

As a result, hunters can use similar leads to put pellets on target from the balmy, shirtsleeve afternoons of early goose season through the hunt’s waning moments in winter.

When the shooting stops, Black Cloud with FLITECONTROL FLEX provides yet another benefit—less time devoted to the drudgery of gun-cleaning chores.

“The high-efficiency Catalyst lead-free primer and clean-burning, temperature-stable propellant significantly decrease residue in the barrel,” said Compton.

Shotshell enhancements also include an updated look, complete improved quality printing on the hull and a black nickel-plated head that is highly effective at inhibiting corrosion.

“As a bonus, a sealed crimp keeps moisture at bay, even in extremely wet conditions,” Compton adds.

**Lots of Loads**

New Black Cloud Flex continues the waterfowl ammunition revolution. In any choke—it is always lethal.

Besides the long list of standard loads, Black Cloud with FLITECONTROL FLEX is also offered in alternative load types.

Including the three TSS options detailed above, the entire Black Cloud with FLITECONTROL FLEX consists of 33 different loads. The standard steel options range from 10-gauge 3 ½-inch 1 5/8 ounce to 12-gauge 2 ¾-inch 1 1/8-ounce and 20-gauge 3-inch 1 ounce loads in various shot sizes as appropriate. Those shot sizes can include BBB, BB, 1, 2, 3, and 4.

High Velocity option such as the 12-gauge 3-inch 1 1/8-ounce load that advertises a muzzle velocity of 1,635 feet-per-second (fps). Also available are 100-percent FLITESTOPPER payload in Close Range offerings. These patterns open fast and wide for close-up hunting situations.

For more information on the loads mentioned in this article and all other products from Federal ammunition, visit: [www.federalpremium.com](http://www.federalpremium.com).

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