Mossberg 590A1: The new "shield" against drones for the US Army

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The landscape of modern warfare is changing under the constant push of small unmanned aerial vehicles (UAVs). To respond to the threat of "low-cost" commercial drones, the US Army has decided to rely on an old and reliable comrade-in-arms: the pump-action shotgun. **O.F. Mossberg & Sons** has indeed signed a contract worth **11.6 million dollars** with the US Army for the supply of a specific version of the famous **590A1**, optimized for countering short-range drones.

A tradition that evolves

The Mossberg 590A1 is not new to the Pentagon. First entering service in **1987**, it is the only pump-action shotgun to have passed the rigorous **Mil-Spec 3443E** tests, which include the uninterrupted firing of 3,000 12-gauge cartridges under extreme conditions. Until yesterday, its main tasks were "breaching" (door breaching), installation security, and prisoner control, but the new contract defines a radically different mission: **Counter-UAS (Unmanned Aircraft**

Systems) defense.

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The 17-inch configuration: why this choice?

The element that has aroused the most interest among experts is the barrel length set at **17 inches**. This is an unusual measure for the army:

- **Previous standards:** The army usually uses barrels of 18.5 or 20 inches (for greater fire capacity) or 14 inches (for maximum maneuverability).
- **"Submarine" origin:** Until now, the 17-inch barrel was a prerogative of the U.S. Navy, designed to allow the shotgun to fit perfectly into space-saving racks aboard submarines.
- **Anti-drone advantage:** The choice of this intermediate measure for the US Army seems dictated by the need to balance tactical compactness with optimal external ballistics for the new special ammunition.

The "secret" is in the Tungsten

A shotgun is as effective as the ammunition it fires. To shoot down small agile drones, which often fly too low or too fast to be intercepted by expensive missiles, the US Army will use cartridges loaded with **tungsten pellets**.

> "*Against a drone, a perfect shot is not needed. A dense and lethal cloud of metal is needed.*"

Tungsten has a higher density than lead, allowing the use of smaller pellets (like number 9) while maintaining the kinetic energy necessary to shatter propellers, sensors, and drone circuits. A single 3-inch cartridge can contain over **900 pellets**, creating a volume of fire that makes it almost impossible for a small quadcopter to avoid impact.

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Why a pump-action shotgun and not a semi-automatic?

In a world dominated by electronic and laser weapons, the return to the "pump" is a choice of pure pragmatism. Semi-automatic shotguns can be finicky with the pressures generated by heavy tungsten special ammunition. The **manual mechanism** of the 590A1 ensures that the weapon always functions, regardless of the cartridge load. Additionally, the structure of the 590A1 — with an anodized aluminum receiver, "heavy-walled" thickened barrel, and ambidextrous safety on the back — offers a robustness that more complex weapons cannot match on the dirty and grueling battlefield.

Conclusion

The 11.6 million dollar contract marks a turning point: it is the first time the army has officially purchased a massive batch of pump-action shotguns with the primary goal of countering drones. The Mossberg 590A1 thus confirms itself as a timeless tool, capable of transitioning from the trenches of the 20th century to defending against the technological threats of the 21st.

News link: https://www.armietiro.it/mossberg-590a1-anti-drone-per-lus-army