Urban Aero joins Bell Helicopter to launch X-Hawk flying car

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Bell Helicopter will team with Urban Aero, an Israeli company in an attempt to develop the X-Hawk, a futuristic, vertical-takeoff-and-landing flying vehicle that would allow soldiers and police far greater mobility in urban environments.

The X-Hawk, as envisioned by Bell, would be an aircraft that could hold a pilot and up to 11 troops. It would be capable of navigating congested urban areas by flying above narrow streets and in between closely-spaced buildings.

Propelled by two jet turbine engines that drive both pusher propellers and downward thrust lift fans, similar to the design of the short-takeoff-vertical-landing version of the F-35 Joint Strike Fighter, the aircraft - or air-mobile - could operate in far more confined spaces than a helicopter.

“I do believe that the X-Hawk is more than a business opportunity,” says Yoeli, president and chief executive of Urban Aeronautics. “I see this as the forerunner to a new family of vehicles. Our vision is that there is a clear need for a craft that can operate in confined areas, particularly urban environments, to take people out of harm’s way and in some cases into harm’s way for certain missions.

The X-Hawk has the promise of quick, almost stealthy reaction and below nap-of-the-earth flight in urban areas. The shrouded rotor design permits operation right up to the side of buildings. Indeed, Bell believes the aircraft could be used to accomplish “midlevel structure infill,” loading and offloading people in a hover through windows above the ground floor. Sliding doors on both sides of the fuselage make this possible.

Urban Aero is leading the design activities during phase one, while Bell performs systems integration and production work. In phase two, Bell XworX will build an X-Hawk demonstrator. Though Bell is not fully committed to the X-Hawk yet, Tatro said the two companies have already discussed—and basically agreed upon—revenue sharing should the aircraft go into production.