Lockheed Martin to build Transformer TX—Autonomous flying payload carrier

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(Phys.org) —Lockheed Martin has announced that it intends to build a new kind of extraction and payload delivery craft that can be flown remotely or at times autonomously. The craft is to resemble a helicopter, but will use tilting ducted fans instead of rotors—Lockheed says it will be safer to fly and will allow for landing in a smaller zone.

The Transformer TX reportedly began as another attempt to build a flying car. But, as engineering designs were proposed, it became clear that simply allowing a car to be flown would limit the flexibility of the craft. The most recent design calls for a pod-carrying ability, which could at some point include a car or other ground based vehicle.

Helicopters have been used in warfare for years—images of Huey helicopters extracting soldiers from battle sites in Vietnam come to mind. But helicopters, despite the skill of the best pilots, are still difficult to fly. Also, whenever extractions are executed or supplies delivered, there is always the chance of enemy fire bringing the craft down.

For that reason, DARPA has been doling out contracts looking for a better way to do both. The Transformer TX appears likely to be that vehicle.

Lockheed, courtesy of its world famous Skunk Works engineering team, will be designing and building the craft along with Piasacki Aircraft—they report that they expect flight tests to begin as early as 2015. Once complete, the craft is expected to travel at 200 knots with a 250-mile range. The finished design will rely on a pod-carrying facility that allows for assisted loading and autonomous unloading. The idea is that a military unit could load whatever is needed in the pod and have it delivered quickly and safely to a war zone. Of course, the craft could be used in reverse as well, carrying cargo or people out and away from the action to a predetermined location.

In addition to payload delivery and extraction, Lockheed expects the craft to be used for reconnaissance missions and at some point and as

a vehicle with a strike capability, as well.

More information:
www.lockheedmartin.com/us/prod …
/Transformer_TX.html

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