The Viator Series

The Only Truly “Multi-Role” Airframe

with

Highly Robust “Swing- Mission” Capabilities

The Viator Series
Multi-Role & Swing-Mission

True Multi-Role Capability - General Definition

True Multi-Role can only be achieved through real scalability of a fixed single airframe design.

Real Scalability can only be achieved through airframes entirely constructed of composite material based on a single design.

A wholly composite airframe of a single design is the only airframe that can be scaled into a number of standard models for traditional roles or finely tuned into custom airframes for specific missions.

Only an all composite blended or flying wing of a single design offers both real scalability and complete flexibility to support a variety of robust Swing-Mission requirements.

Only a blended flying wing constructed using a construction technique and process, known as Advanced Carbon Composite Monocoque, whereby the outer skin is the actual airframe, can deliver exceptional capacity and performance, and meet current and future mission requirements without changing the fixed airframe design.

The Viator Series
Multi-Role & Swing-Mission

Real Swing-Mission Capability – General Definition

The UAS must have the capability to employ a multi-role aircraft for multiple purposes during the same mission.

The UAS must have the capability to make quick role changes, either at short notice, or within the same mission.

The UAS must be able to change roles between different ISR functions on the same mission or sortie.

The Viator Series
Multi-Role & Swing-Mission

The Multi-Role – The Viator Series

The Viator Series is based on a single flying wing design which supports a fully scalable fleet of UAS’s with a wing span from three feet (3’) to forty feet (40’), carrying a payload of up to 2,268 pounds, supporting missions of up to 24 hours at maximum altitude of 25,000 feet over a distance up to 1, 344 nautical miles, and having a low stall speed of 15 mph to accommodate loitering in a figure 8 or oval pattern over a target area. The design most notably provides for any custom size needed for specific mission requirements. It can carry out a wide range of missions, comparable to a range of other UAS models from the Raven to the low end of the Long Endurance segment.

The Viator Series is an all composite UAS, constructed using a technique called Advanced Carbon Composite Monocoque where the outer skin is the actual airframe providing exceptional empty airframe to fully loaded ratios and high payload capacity.

The Viator Series is a flying wing with a totally blended body and therefore has no separate body or cylindrical fuselage. The UAS, therefore, is a strong, thick, but lightweight, air foil shaped fuselage which is integrated smoothly into the wings.

The Viator Series
Multi-Role & Swing-Mission

Swing-Mission Capability – The Viator Series

The Viator Series is a flying wing with the entire internal volume designed to accommodate a variable number of modular plug and play payloads to satisfy multiple mission objectives on a single sortie and a “hot” re-launch of the UAS with other plug and play payloads to support a single overall mission, and therefore is highly capable of switching ISR missions quickly.

With these capabilities, the UAS can switch quickly between ISR, targeting and light strike on the same mission or sortie.

Viator Series

Major Features

Autonomous Flight

The Viator Series of UAS’s operates autonomously using GPS under the control of our own command and control system which is comprehensive and feature rich.

Viator Series

Major Features

Mission Flexibility

The Viator Series of UAS’s operates in a number of environments and missions.

The UAS can operate from different size commercial and military ships and has sophisticated launch and return controls. The UAS can also take off and land on any unimproved surface without damaging the airframe.

The Viator Series offers a rich selection of ISR functions with a powerful command and control system which can manage up to four UAS’s flying together on a single mission.

Viator Series

Major Features

Advanced Carbon Composite Monocoque

All Viator Series airframes use a construction technique and process, known as Advanced Carbon Composite Monocoque, whereby the outer skin is the actual airframe.

The entire airframe is constructed from a single mold.

This construction technique and process dramatically increases payload capacity and the ratio of payload weight to airframe by being able to utilise the entire volume of the airframe for multiple payloads and fuel. Our UAS is able to achieve up to a three to one ratio of payload to the empty weight of the airframe whereas most other UAS’s empty weight is two or three times their payload weight.

Therefore this construction technique dramatically increases the number and types of payloads on each mission and the capability to carry more fuel. It offers a payload and fuel of up to 2,268 pounds and significantly increases flight endurance to 1,344 miles per mission.

Viator Series

Major Features

Scalability

The Viator Series is scalable with a wing span from three feet (3’) to forty feet (40’).

Each scaled aircraft is designed to utilize the identical, scalable design and construction, no matter the size of the airframe.

This scalability offers the capability to build a comprehensive line of UAS’s, which will meet military, civil, and civilian requirements without the cost of building or buying specific UAS’s for each and eve y type of application or mission and to fine tune it for highly specialised missions.

Viator Series

Major Features

Blended Wing

The Viator Series airframes have no separate body or cylindrical fuselage.

The body, consists of a strong, lightweight air foil shaped fuselage, integrated smoothly into the wings.

This design, called the “Blended Body” design, has many advantages over traditional cylindrical fuselage and tail designs.

The major advantages include: lower power consumption; ability to accommodate larger payload volumes and heavier payload weights; lower minimum stall speeds for more effective and efficient loitering, take-off from and landing on unimproved ground or runways and lower repair and maintenance costs.