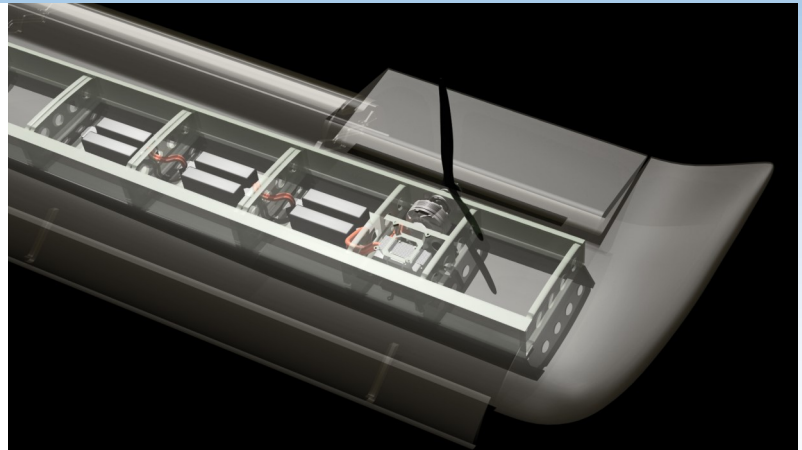
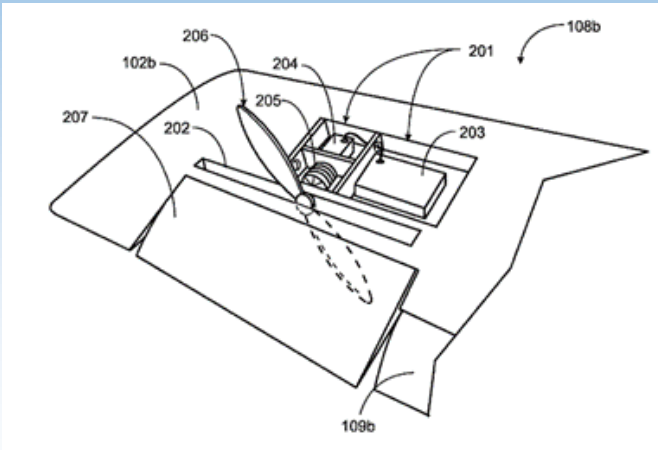


# DISTRIBUTED ELECTRIC POWER ON DEMAND—DEPOD

PATENT US11,144,070 B1

DEPOD Can double take-off thrust and shorten take-off distance by up to 75% \* Enhances control allowing slower approach speeds \* Reverse thrust on landing shortens landing distance by up to 75%



Aeromarine has independently invented a wing design enhancement which will move our Hyper-STOL aircraft design to a new and even more extreme level of performance.

This patented wing embedded DEPOD technology is incorporated into our high-left wing and provides the following benefits: 1) 100% added take-off thrust; 2) Active flight envelope protection; 3) Blown ailerons for lower approach speeds; 4) Reverse thrust for shorter landings; 5) Precise water operations; and 6) Extra thrust for beaching.

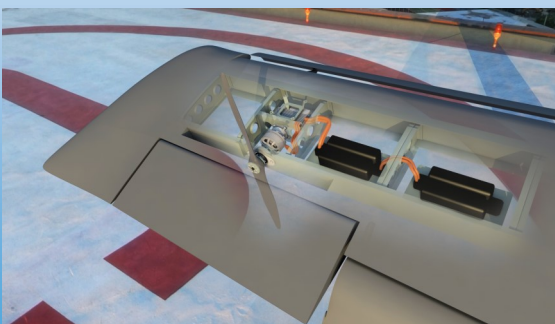
Our thrust is where we need it: Over the control surfaces. This allows the aircraft fly the landing approach at absolute minimal flying speed without the risk of control authority degradation.

With the use of full power on take-off we add 150 lbs. of thrust or more to each wing effectively doubling our take-off power for up to one minute which results in a 50% reduction of our take-off distances from the already STOL distances and positions the aircraft well above any obstacles.

As soon as there is any measurable weight on the aircraft landing gear the DEPOD motors reverse direction and spin up to full power. This reverse thrust combined with tricycle gear and hydraulic brakes bring the aircraft to a stop inside of most heli-pads.

DEPOD offers active envelop protection which means the motors are controlled autonomously and independently to ensure that the aircraft is always flying within its flight envelope. This is a huge safety feature as well as enhancing and supplementing future autonomous operations.

Our battery weights are minimal as we are only using our DEPOD for less than 1 minute on take-off and 1 minute on landing. Furthermore, we locate the battery packs in the wing to reduce the loading on the airframe. And we avoid long, heavy, battery cables.



## **Our thrust is where we need it: Over the control surfaces.**

Our battery weights are minimal as we are only using our DEPOD for under 1 minute on take-off and only a few seconds on landing. Furthermore, we locate the battery packs in the wing to reduce the loading on the airframe.

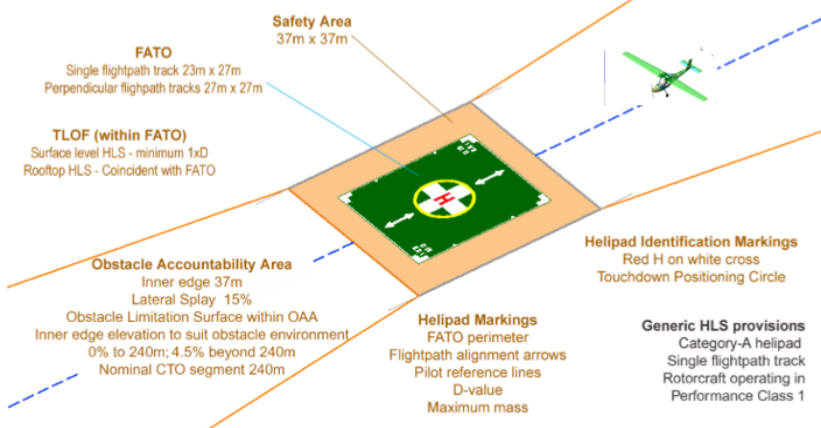
# Aeromarine's Extreme Short Take Off and Landing (STOL) Amphibious Utility Aircraft for CASEVAC, Resupply, ISR, and COVID Support



Aeromarine has designed a true Hyper-STOL amphibious aircraft that incorporates multiple high lift devices and a full DEPOD system. This aircraft converts in seconds to carry a full-size stretcher and is an extremely attractive alternative to helicopters for CASEVAC at a very small fraction of the cost to even be considered attritable.

## Aeromarine's Extreme STOL Aircraft with DEPOD

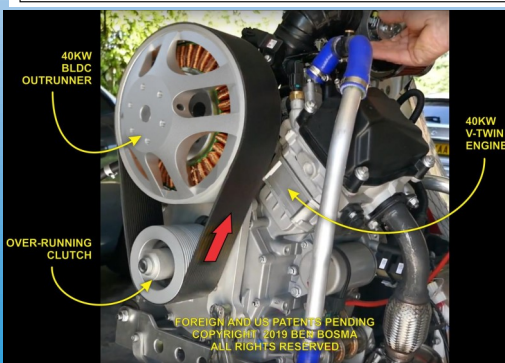
*Low Cost Short Take Off and Landing (STOL) Utility Aircraft for COVID-19 Support Capable of Take-Off and Landing on a Helipad*



- The Extreme STOL capabilities of this aircraft is made possible due to:**
- High power-to-weight ratio
  - Double-slotted Fowler flaps
  - Retractable leading-edge slats
  - Patent-pending blown ailerons using DEP
  - Clean low-drag 3D CAD design
  - Extreme off-field tundra landing gear

- Key Performance Parameters:**
- Take-off and land in under 100 feet
  - Cruise at over 140 mph
  - Endurance of greater than 5 hours
  - Range greater than 500 mile
  - Payload 500 lbs
  - Pilot-optional

Our STOL aircraft has both high-lift devices and **Distributed Electric Propulsion On Demand** (DEPOD) that allows it to land and take-off in under 100 feet which means we can use nearly any Helipad as our airport. As most hospitals have a helipads, we can support COVID-19 efforts with rapid sample and medicine transport.



**IN DEVELOPMENT:**

An affordable and practical hybrid power system. Patented parallel drive system. Run on electric, gas, or both. Over 100hp combined power when installed to the Aeromarine Vtwin.

**Aeromarine**  
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