

Freedom Motors Group

Brief Overview:

There are two multi-trillion-dollar world markets where the extraordinary power to weight of the **Rotapower® rotary engine is essential.**

AIR TAXI MARKET: [Morgan Stanley](#) predicts that the advanced air mobility (AAM) market will total \$9 trillion by 2050 (mostly air taxis). The low power of existing engines will not allow an air taxi to take off vertically while the low energy of batteries gives it a very short range.

PORTABLE ENGINE MARKET: Over 165 million non-automotive engines are produced annually. Original equipment manufacturers (OEM's) consider an engine's power per weight and its life to be the most important engine requirements.

THE OPPORTUNITY:

In 2024 \$10 billion could be wasted developing **five to seven passenger** ridesharing air taxis. [[AAM Aircraft Review](#)]. **76.4%** of automotive trips carry one person, **7.5%** carry two persons **while ridesharing carries a declining 9%**. Thus, one person air taxis will dominate this future air taxi market.

EXPLOITING THIS OPPORTUNITY:



125 HP and weighs 33 pounds

All air taxis use distributed propulsion patented by Dr. Moller ([Patent 3614030](#)) which needs engines with a very high power per weight. The lightest four stroke engine produces less than one horsepower per pound while **the Rotapower® engine produces over three horsepower per**



Skycar® 100X Prototype

pound and has a wear surface life of over 20,000 hrs. Freedom Motors is integrating its 5-stroke Rotapower® engines into a one-person air taxi [[Brochure](#)] with the quickest path to FAA approval. [[Future of air taxis](#)]. In 1989 and 2002 Freedom Motors and its **exclusive engine licensor** Moller International, flew air taxis before the world press. This was the first distributed propulsion air taxis powered by engines.

FM will exclusively manufacture Rotapower® engines using the production equipment and IP, it acquired from General Motors (GMC), Outboard Marine Corporation (OMC) and Infinite Engine Company (IEC). These three companies are estimated to have spent over \$2.5 billion in today's dollars developing or manufacturing Wankel rotary engines. **These acquisitions helped in the development of the Rotapower® engine.**

FM's engines are also being used to power airplanes, mud and jet boats, ATVs, hybrid cars, motor scooters, gensets and the drones developed for the U.S Army, Navy, and Airforce.