

THE MAGNIFICENT AIR-POWERED JET!

I propose a theoretical design for a jet engine variant that would produce its own oxidiser from the oxygen and nitrogen in the air. This oxidiser would improve the efficiency of combustion - think nitrous in a racing car - and produce the same power as a regular jet for less fuel.

TELOS

The engine's purpose is to allow aircraft to use less fuel (all airlines' biggest expense), thereby reducing the aircraft's greenhouse gas emissions, cost of operation, and therefore ticket costs for passengers, and improving range.

ECONOMICS

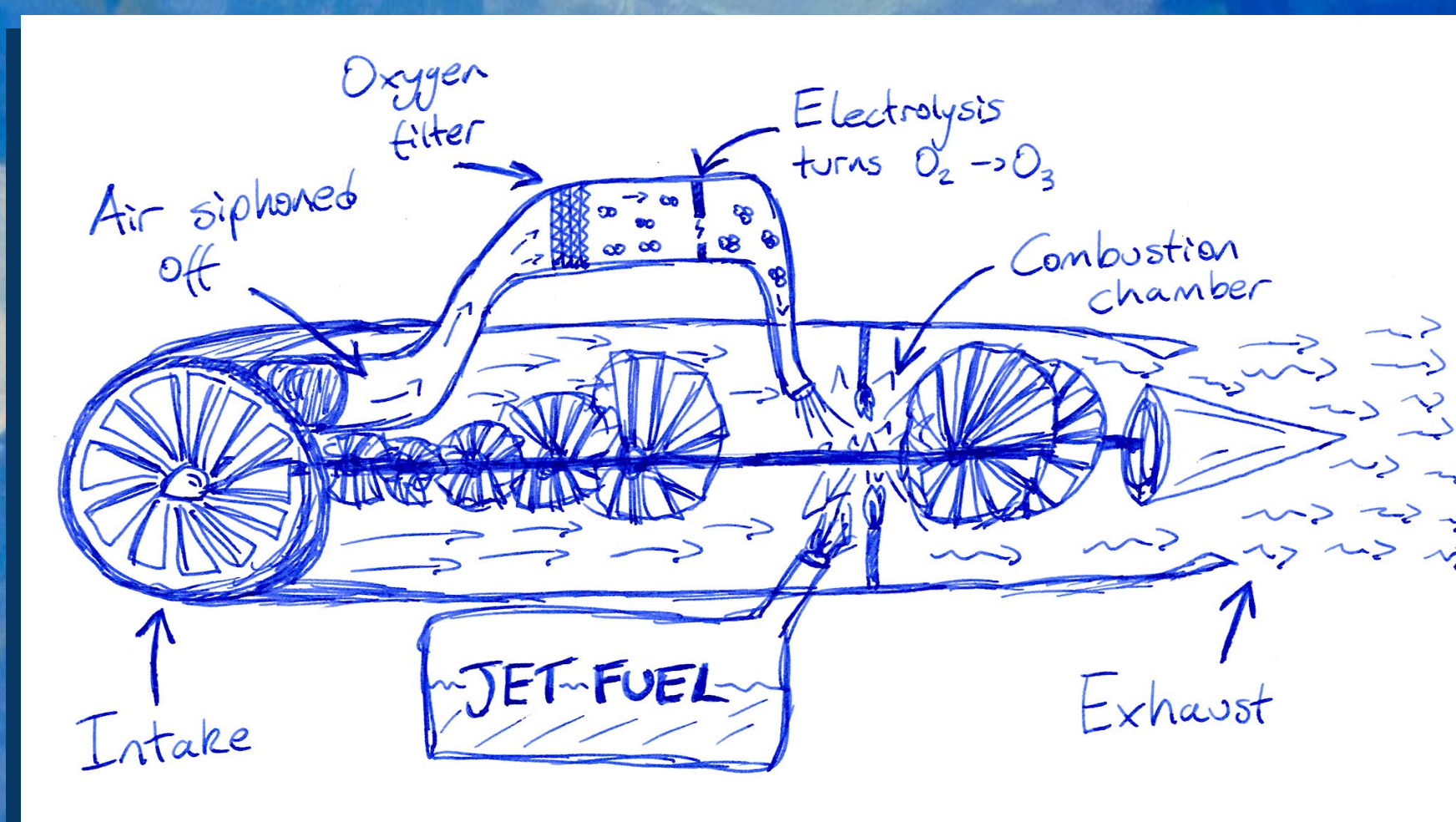
Fuel is the largest cost of any airline - by reducing fuel consumption, airlines would save money and so would be able to offer seats at lower prices - this would make flying a more accessible mode of travel and contribute to the economy (manufacturing, travel, airline revenue).

WHO WOULD IT AFFECT?

The effects of this design would be wide-reaching: people of all backgrounds would more easily be able to afford plane tickets, and the planet would benefit from the reduction in harmful jet engine emissions.

DESIGN

Air coming into the engine would be siphoned off into side chambers where oxidiser would be produced, and then fed back into the engine for combustion.
See below:



AFFECT ON HUMAN FLOURISHING

I would argue that any reduction of human impact on the environment contributes towards human flourishing. General productivity could also be increased by lowering airfares. The design should also inspire innovation in the slow-paced aerospace industry, where changes are typically incremental, conservative and money-focused.

USER POLICIES

Since the design is simply an evolution of existing jet engines and would operate in a similar way, pilots would have no difficulty flying planes with the technology, and maintenance workers would not have to make a large adjustment.