

DRAWING SHOWS HOW A 40-FOOT FLYING SAUCER WOULD LIFT FROM AN AIRPORT WITH ALL ITS JETS OPERATING IN VERTICAL TAKE-OFF OR IN LANDING.



"PROJECT Y," Frost's semisaucer, was a disk-shaped craft producing jet blast out the rear only.

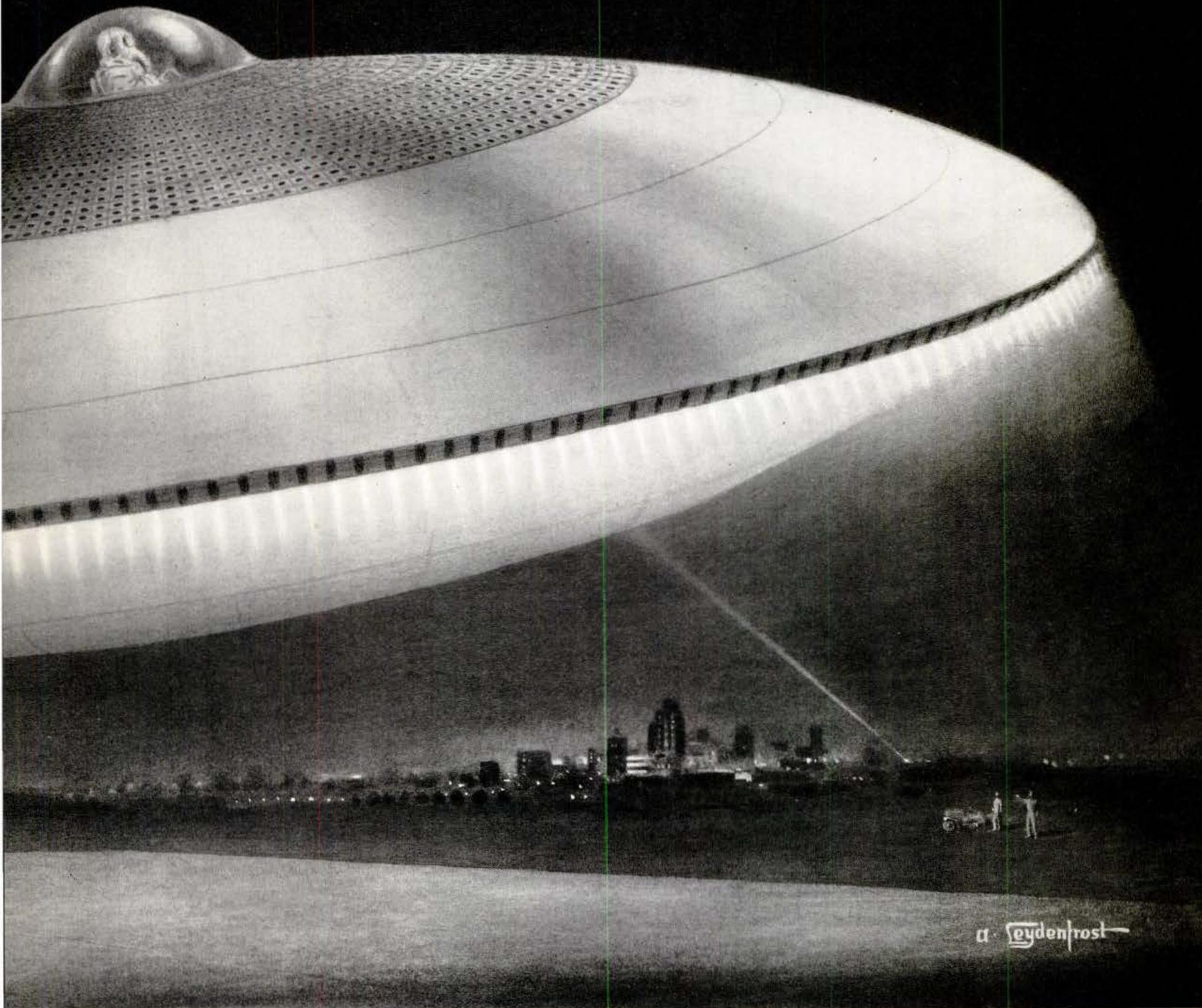
## FLYING SAUCER BOUNCES OFF

The U.S. is seriously considering building a flying saucer. It would, if its designers' expectations are fulfilled, take off vertically, have a speed of 1,800 mph and combat radius of 1,500 miles. It could hover in mid-air and go sideways or backward. It would have a pilot. It would probably look much like the one shown in the drawing above. It is still, however, in a highly experimental stage and some aerodynamics experts doubt strongly that it is possible today to build any saucer which will have great advantages over more conventional planes now on the drafting boards.

The flying saucer into which the Air Force is expected to soon sink a wad of money was designed by a shy, 35-year-old English-born

engineer named John C. M. Frost, whose passionate hobby is raising flowers. It is the outgrowth of a saucerlike craft called "Project Y" which Frost designed for his employers, A. V. Roe Canada Ltd.

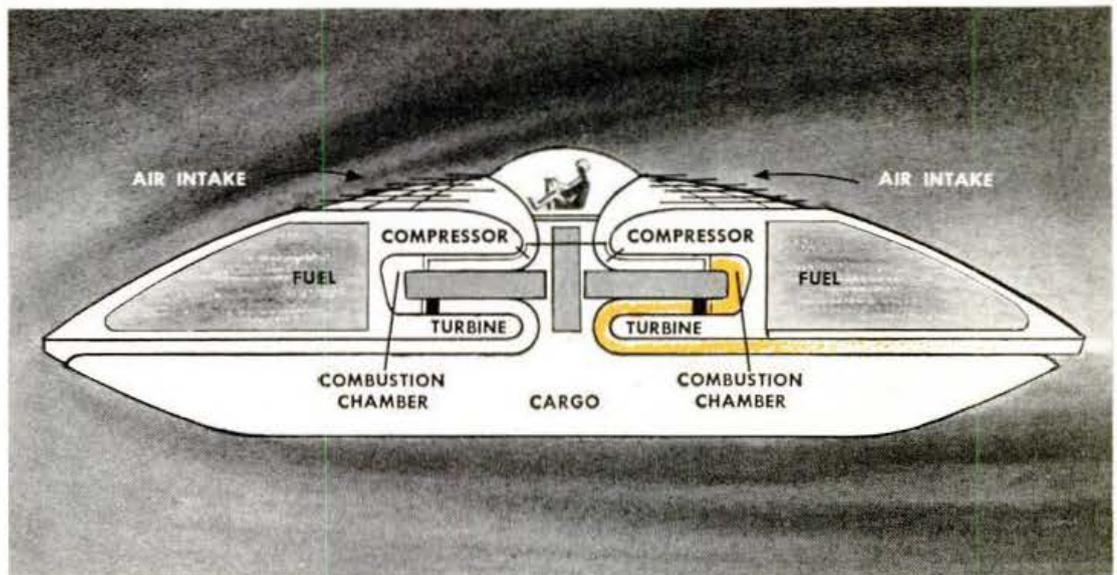
The principle of Frost's flying saucer is based on the 1930s' jet-outlet experiments of a Frenchman named Henri Coanda and is expected to work like this: jets of gas are propelled down and out from vents in the edge of the saucer, pulling air down over the saucer's top and diminishing the air pressure on the top surface. When this pressure is sufficiently less than that on the saucer's under surface, the saucer rises. (This difference in pressure is what gives any airplane wing its lift.)



AIR FOR JETS COMES IN ENGINE THROUGH GRILLED INTAKES AROUND COCKPIT. OTHER SAUCERS IN HORIZONTAL FLIGHT HAVE ONLY REAR JETS WORKING

## DESIGN BOARD

According to theory, the pilot—sitting in the center of the saucer atop the engine—will let go all 180 jet streams. Slowly the craft will rise. To level off, he cuts down power. By adjusting rear blasts to go out instead of down and then shutting all but rear ports he goes forward, the jets propelling the craft as in a conventional plane. As the pilot changes direction—shutting off ports on left to go left, or those in "back" to reverse—his cockpit will automatically revolve so he is always facing forward. He can, if he wishes, almost stop in mid-air, tilt it and have a look below. Even while the U.S. prepared for the saucer age, the Air Force received pictures of flying saucers, presumably Soviet, flying over Scandinavia.



**CROSS SECTION** shows how air enters compressor, mixes with fuel in combustion chamber.

Leaving it, hot gases (*in color*) run turbine (which turns compressor), go through jets to propel craft.