

## No spot for a Motor to Conk

● When aircraft engines start lifting a land plane off the deck of a carrier, there can't be any "let down" in engine power. A plane can bounce safely a couple of times in a ground take-off but there is no bounce to the ocean. And when a plane, with heavy bombs hanging below its belly, lifts clear of a solid deck, it's a comfortable feeling to see it stay clear.

Engine power depends largely on valve efficiency. A burned, warped, or sticking valve seriously impairs power output. The exhaust valve in an aircraft engine must withstand the white heat of constant explosions, while it holds true and seats accurately under trip-hammer battering.

When Thompson Products developed the heat-resisting Silchrome steel valve in 1922, it opened new horizons

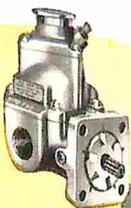
for aircraft engine speed and reliability. Today, Thompson Products manufactures the famous sodium-cooled exhaust valve for aviation—a vital part, of complex steel, its hollow head and stem partly filled with sodium. Engine heat melts the sodium. The liquid rapidly dissipates the heat, cooling the valve. On its seat and stem tip, points of hardest wear, the valve is armored with super-hard Stellite.

The Thompson Sodium-Cooled Valve is but one of many aircraft engine and airplane parts built by Thompson. Six thousand Thompson Products workers are engaged in producing these high precision parts at top speed.

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# AVIATION

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