AD NUMBER

AD401271

NEW LIMITATION CHANGE

TO

Approved for public release, distribution unlimited

FROM

Distribution authorized to U.S. Gov't. agencies and their contractors; Foreign Government Information; DEC 1962. Other requests shall be referred to US Library of Congress, Attn: Aerospace Technology Division, Washington, DC.

AUTHORITY

ATD ltr, 2 Dec 1965

(5) 17511

44005
S/262/62/000/024/006/007
A154/A126

AUTHOR: (8) Nevstruyev, Ye.N.

TITLE: (6) Electrostatic ignition in carburetor engines

(15) TRANS. FROM
PERIODICAL: Referativnyy zhurnal, Silovyye ustanovki, no. 24, 1962, 51, abstract 42.24.351 (Avtomob. prom-st', (1962,) no. 1, 17 - 20) pp.

TEXT: Two models of an electrostatic ignition generator were developed and tested at the Tomsk Polytechnical Institute. The working principle of the electrostatic generator is described, and its schematic and description are given. Bench tests showed that the electrostatic system has a number of advantages over existing designs of electromechanical ignition systems. Stability of the voltage generated by the generator at any operating speed, as well as very low sensitivity towards comparatively high shunting conductivity of the plugs through the insulation, should be considered as positive aspects of the electrostatic ignition generator. The electrostatic ignition system, like the magneto, needs no outside source of electric power. The system is considered promising, it is thought that it may successfully replace the usual ignition system in multicylinder high-

speed piston and rotor engines, as well as in engines operating under special conditions (at high altitudes, with careful shielding, etc.). A complicating factor is the necessity to create a high air pressure in the generator of up to 20 - 22 kg/cm^2.

[Abstracter's note: Complete translation]