

UNCLASSIFIED

AD 400 305

*Reproduced
by the*

**ARMED SERVICES TECHNICAL INFORMATION AGENCY
ARLINGTON HALL STATION
ARLINGTON 12, VIRGINIA**



UNCLASSIFIED

NOTICE: When government or other drawings, specifications or other data are used for any purpose other than in connection with a definitely related government procurement operation, the U. S. Government thereby incurs no responsibility, nor any obligation whatsoever; and the fact that the Government may have formulated, furnished, or in any way supplied the said drawings, specifications, or other data is not to be regarded by implication or otherwise as in any manner licensing the holder or any other person or corporation, or conveying any rights or permission to manufacture, use or sell any patented invention that may in any way be related thereto.

FTD-TT- 63-20

CATALOGED BY ASTIA
AS AD 100 400 305

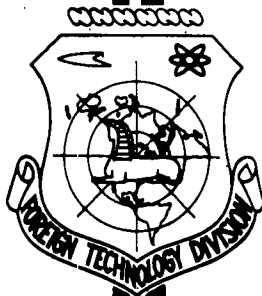
TRANSLATION

LIGHT-ACCELERATOR

By

A. Midler

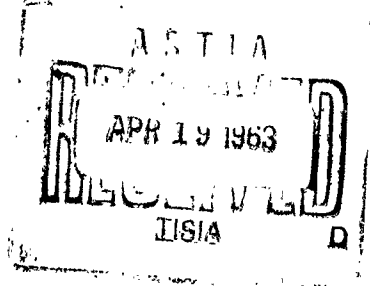
FOREIGN TECHNOLOGY DIVISION



AIR FORCE SYSTEMS COMMAND

WRIGHT-PATTERSON AIR FORCE BASE

OHIO



400 305

UNEDITED ROUGH DRAFT TRANSLATION

LIGHT-ACCELERATOR

BY: A. Midler

English Pages: 2

SOURCE: Russian Newspaper, Izvestiya,
24 October 1962, p 5

THIS TRANSLATION IS A RENDITION OF THE ORIGINAL FOREIGN TEXT WITHOUT ANY ANALYTICAL OR EDITORIAL COMMENT. STATEMENTS OR THEORIES ADVOCATED OR IMPLIED ARE THOSE OF THE SOURCE AND DO NOT NECESSARILY REFLECT THE POSITION OR OPINION OF THE FOREIGN TECHNOLOGY DIVISION.

PREPARED BY:

TRANSLATION DIVISION
FOREIGN TECHNOLOGY DIVISION
WP-AFB, OHIO.

Light- Accelerator

by

A. Midler

It is possible to construct an accelerator on light waves.

Such an idea came up for the first time. Its authors Soviet physicists prof. Andrey Kolomenskiy and cand. of Phys. Math Sc. Andrey Lebedev.

The scientists made the following experiment. They ran a powerful beam of light into the interior of a long coil with current. The light travelled along the axis of the coil, and into here was also let in a stream of charged elementary particles. Before the scientists originated a curious picture. The particles in the interior of the coil began moving in tact with the light waves. The light began accelerating same.

The experimentors assume, that in this way the beam of light is capable of accelerating particles to very high velocities.

Soviet scientists proposed to utilize the new physical effect in acceleration technique . In their opinion this is principally possible.

In this way, is opened the possibility of constructing original accelerators, working on a powerful beam of light. They will not be similar to modern devices and will be free of many deficiencies.

The scientists assume, that this phenomenon can also be utilized for amplification of radio waves of various ranges.