

SFChronicle

SEP 20 1971

Pentagon Plans Laser 'Death Ray'

By Robert Barkan
and Leonard Siegel
Pacific News Service

Washington

If Pentagon plans are successful, Buck Rogers' "Death Ray" will be operational by 1980. The laser, a beam of high-energy light popularly acclaimed for its potential applications in communications and medicine, is nevertheless making its greatest contributions to the military.

Presently, government engineers, working under secrecy comparable to that surrounding the World War II Manhattan Project (atomic bomb), are creating a warfare in which supersonic planes and missiles will color the sky with deadly beams of high energy light.

To the weapons engineer, the laser is appealing because it can rapidly and accurately focus vast amounts of energy, heating targets to the point where they melt, burn, or explode. Recognizing this, the Defense Department's Advances Research Project Agency (ARPA) launched its initial laser lethal weapons program in 1961, only two years after the first operating laser was demonstrated.

In 1968, United Aircraft developed the first efficient highpower laser, and ARPA set up a top secret project, code named "Eighth Card" to oversee further development. Under a subsidiary research project, "Black Eye," engineers studied the feasibility of equipping satellites with laser guns to disable sensors aboard "hostile" satellites.

Since that time, development of laser weaponry has continued at levels of \$30 million a year — and the research is paying off. Already the Army has used a laser to

years, laser devices have been used in Vietnam for searching out and spying on enemy troops. Laser-guided bombs, used daily in Indochina, are credited with a tenfold increase in the accuracy of weapons delivery.

In the near future, laser ray guns appear to be feasible for defense against low-flying targets at forward air bases, for on-board ship defense against guided missiles, and for disabling the enemy's spying devices.

Recently, ARPA requested \$5.8 million to study the feasibility of supplementing the costly Safeguard ABM system with laser weaponry. The Pentagon hopes to expand the use of lasers to destroy incoming ICBMs.

The government's attitude toward lasers may best be expressed by a management consultant who recently stated that the laser "will be the most revolutionary tool for mankind since the atom bomb."