

OSS 'Dagger' Unloaded

# 'Bow and Arrow' Report Reveals Rubber Bands Stretched for the Kill

By Daniel S. Greenberg  
Staff Reporter

The Defense Department released the so-called "bow and arrow report" yesterday, revealing a series of strange-looking, murderous rubber-band-operated weapons developed during World War II for the Office of Strategic Services.

The war ended before the weapons saw combat, but tests showed that one model could lob a 60 mm. mortar shell short distances with considerable accuracy, while others could fire deadly steel darts up to 140 yards. In short-range tests, the darts were driven through up to 12 inches of horsemeat.

The man who headed the

research project is Paul E. Klopsteg, an eminent physicist and archery expert who is now president-elect of the American Association for the Advancement of Science. He said that when he tried to have it declassified in 1949, he was told, "it would be of value

to the criminal element."

Klopsteg described that notion as "utter nonsense."

The first public word of the project came Jan. 21 when Wallace R. Brode, new science adviser to the Secretary of State, testified before the House Government Information Subcommittee.

Brode cited the still-confidential report as an example of over-classification of scientific research.

Following his disclosure, the Defense Department traced the report to the National Archives and forwarded it to the Army Adjutant General's office where it was declassified Friday.

The project, conducted at Northwestern University by Klopsteg during 1943 and 1944, was designed to meet OSS specifications for "silent, flashless weapons" suitable for use by the famous cloak and dagger organization. The propelling force in each was pro-

vided by specially-treated gum rubberbands.

"The idea," Klopsteg said yesterday, "was conceived by British commandos and the research was carried out by the Office of Scientific Research and Development for the OSS."

Out of the project came:  
• Little Joe, a one-handed model, weighing 3.1 pounds, capable of inflicting a fatal dart wound up to 25 yards. It was described as "... potentially useful to saboteurs as it can be carried under a coat, is flashless and silent and is lethal and accurate at short ranges."

• Little Joe 1½, an adaptation of Little Joe, capable of shooting a heavier dart.

• Big Joe 4, a shoulder model, weighing 7 pounds. "It can kill up to 50 yards with reasonable certainty, and 10 darts have been regularly placed in a 2-foot diameter circle at 140 yards."

• Big Joe 5, a shoulder model for shooting either flares or projectiles.

• Big Joe 6, a shoulder model which "... should be considered a killing weapon to a range of 80 yards."

• And Elmer or Joe Louis E 5, "... designed to throw flashlessly and nearly silently either the standard rifle grenade or the 60 mm mortar shell."

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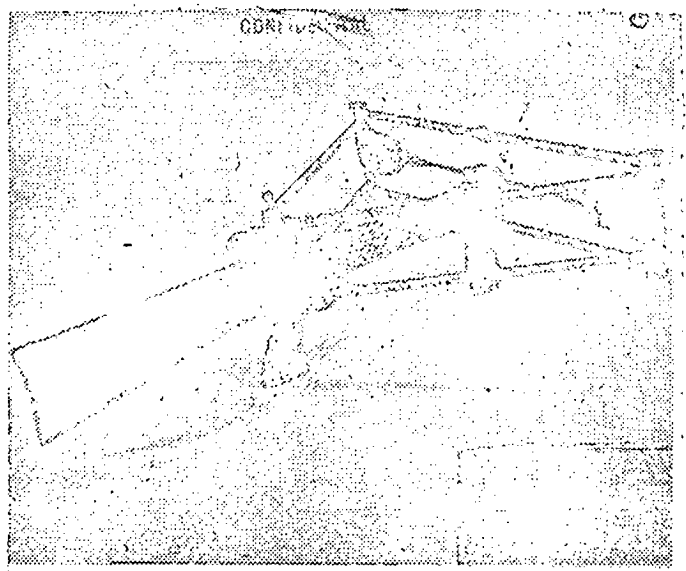
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meet; an example of how basic research can lead to practical developments.

"At the time the research was conducted," Klopsteg said, "there were valid grounds for keeping it classified. But the lesson apparent in keeping it classified all these years isn't clear to the people responsible for classifying scientific research. I don't know what can make it clear."



This is a reproduction of a page from the Defense Department's Report on Silent, Flashless Weapons, released yesterday, on which data was listed about a bow and arrow invented during World War II. Note that the word "Confidential" at the top has been partially obliterated.