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Second-Assassin Theory-Fades on Film

By JACK V. FOX and MAURICE SCHONFELD

LEXINGTON, Mass. (UPI)-An analysis by one of the nation's top photographic laboratories has demolished a widely circulated theory that a second gunman was involved in the assassination of President Kennedy,

The Itek Corp. revealed Thursday that a months-long study of an amateur movie of the shooting had disproved the existence of a supposed rifleman pointing his weapon from a grassy knoll at the Kennedy car in Dallas on Nov. 22, 1963. Itek made the study as a public service.

The 8-millimeter color motion picture was shot that day by Orville Nix, a federal anvernment employe who was standing mong the parade spectators in Dealey Plaza. It shows the President hit by the fatal bullet and Mrs. Kennedy climbing

onto the back of the convertible.

In the background is the knoll and ator it a wooden picket fence and a white concrete pavilion with a low wall.

Enlargement of certain frames brings out what to the naked eye bears a resemblance to a man with one elbow resting on the roof of a station wagon behind the wall and squinting down a gun barrel at Elm Street where Kennedy was shot.

Proponents of the theory of a conspiracy have sought to use the photographs as evidence that the Warren Commission was wrong in finding that Lee Harvey Oswald acted alone and that all the shots were fired from the Texas School Book Depository Building.

Several persons in Dallas who were eyewitnesses to the assassination have reported seeing smoke or flashes from the knoll area and even more thought they heard, shots from that direction.

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The gunman on the knoll theory is one of several second gunman theories. Other theories have put a second gunman at other vantage points.

Nix first turned his film over to the FBI and it was used, among other things, to determine the position of the President's car at the moment the fatal bullet struck his head.

The Nix film subsequently became the property of United Press International Newsfilm (UPIN).

Last February, the Itek Corp. agreed at the request of UPIN to make an exhaustive scientific study of the 31 feet of film. Lek is one of the major manufacturers of highly sophisticated aerial reconnaissance dameras.

Itek photographic scientists improved

the quality of the film content by utilizing dvanced image enhancement methods. Tek photogrammetrists and photointerpreters made precise measurements of a number of significant objects in the photographs to insure proper identification of the objects and to determine the feasibility of the fatal shot being fired from certain points.

Several objects on and behind the grassy knoll were unclear in the original films, and the Itek scientists were themselves at first struck by the apparent image of a gunman.

"The man with the rifle," however, was found to be nothing more than the shadows of tree branches and leaves on the side of the white pavilion.

Itek said the analysis showed that the doject which apparently was a station water on or some vehicle actually is in a parking lot behind the wooden picket fence and so feet behind the "shadow gunman."

A rifleman at that location would have had to fire from nine feet above the ground for his trajectory to clear existing vertical obstructions, it said. No person was visible on the roof of the vehicle. Even assuming a gunman was at sufficient height, the timing of the cavalcade was such that he would have had less than one thirtieth of a second to get off the fatal shot, Itek said.

The laboratory used a variety of techniques in studying the photographs. A method known as "dodging" produced an amazing clarity of light and dark tones. Use of color filters made them even sharper.

Nix, an employe of the General Services Administration and a man 6 feet, 6 inches tall, took his first few seconds of film approximately 200 feet from Kennedy's car and 300 feet from the pavilion atop the knoll.

Then he ran through the crowd about

18 feet to his left and zoomed his camera in on the scene again. The resultant triangular pattern permitted stereoscopic analysis of the objects in the background and was fundamental in determining that the so-called rifleman was actually a blend of shadows.

The Nix photos showed no individuals in front of the wooden picket fence up to the concrete wall.

The independent Itek conclusions on the Nix film were in keeping with the Warren report with one exception. The Itek study indicated that at the moment of the impact of the fatal bullet, the Kennedy automobile was about three feet farther back than the spot where the Warren investigation placed it. That finding, however, would make it even more unlikely if not impossible — for a second gunman to have hit Kennedy from the aperture between the picket fence and the pavilion on the knoll.