No Second Gunman Shown in Kennedy

-An analysis by one of the nation's top photographic laboratories has discredited a widely circulated theory that a second gunman was involved in the assassination of President Kennedy.

The Itex corporation disclosed today that a months-long study of an amateur movie of the actual shooting had shown no evidence of a rifleman on a grassy knoll pointing his weapon 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 employe who was standing among parade spectators in Dealey plaza. It shows the President hit by the fatal bullet and Mrs. Kennedy climbing onto the back of the convertible.

## Shows Picket Fence

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

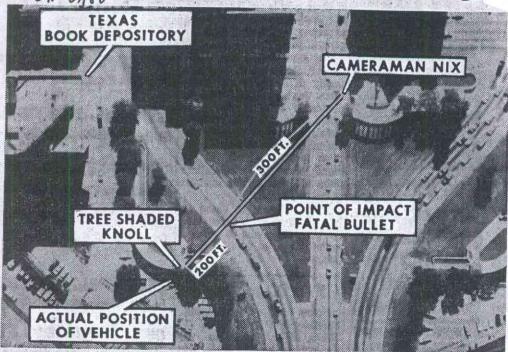
Enlargement of certain frames brings out what to the naked eye resembles a man, with one elbow resting on the roof of a station wagon behind the wall and sighting down a gun barrel at Elm street where Kennedy was shot.

Proponents of the conspiracy theory 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.

## They Study Film

Several persons in Dallas who witnessed the assassination have reported seeing smoke or flashes from the knoll area and even more reported hearing shots from that direction.

The gunman on the knoll



View shows scene where President Kennedy was assassinated in Dallas. Itek corporation says its analysis of an amateur movie of the shooting discredits theory that second gunman was involved. [UPI Telephoto]

gunman theories. Other theo-| made by the Surveyor space-| ries have put a second gunman craft. at other vantage points.

Nix first turned his film over to the Federal Bureau of Investigation and it was used, among other things, to determine the position of the President's car when the fatal bullet struck his head. The film subsequently became the property of United Press International Newsfilm.

Last February, the Itek corporation agreed at the request of U. P. I. N. to make an exhaustive scientific study of the 31 feet of film.

## Struck by Image

Itek is one of the major manufacturers of highly sophisticated aerial reconnaissance cameras. Its equipment was used in development of closeup

Itek photographic scientists improved the quality of the film content by utilizing ad-vanced image enhancement methods. They made precise measurements of a number of significant objects in the photographs to insure proper identification of the objects and to determine the possibility 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 image of a gunman. It was found, however to be nothing more than the shadows of tree branches and leaves on the side of the white pavilion.

theory is one of several second color pictures of the moon that the object which ap-

parently was a station wagon or some vehicle actually is in a parking lot behind the wooden picket fence and 20 feet behind the "shadow gunman."

Variety of Techniques

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 1/30th 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 Itek said the analysis showed made them even sharper, Nix, an employe of the Gen-

## Death Film

eral Services administration, took his first few seconds of film about 200 feet from Kennedy's car and 300 feet from the pavilion atop the knoll. Then he ran about 18 feet to his left and turned his camera on the scene again.

The resultant triangular pattern permitted stereoscopic analysis of the objects in the background and was fundamental in determining that the rifleman image was actually a blend of shadows.

The Nix photos showed no individuals in front of the wooden picket fence.

One of the persons who saw Kennedy shot and who is convinced that one report came from the knoll area is S. M. Holland, a signal supervisor of the Union Terminal company who was standing on the railroad overpass above Elm street.

Tells Four Sounds

Holland told the Warren commission that he heard four reports and that one of them came from beneath trees on the knoll.

"There was a shot, a report, I don't know whether it was a shot. I can't say that. And a puff of smoke came out from about 6 or 8 feet a b o ve the ground right from under those trees. And at just about this I o c a ti o n from where I was standing, you could see that puff of smoke, as if someone had thrown a firecracker, or something, out and that is just about the way it sounded. It wasn't as loud as the previous reports or shots."

The 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 impact of the fatal bullet, the Kennedy automobile was about three feet farther back than the spot where the Warren investigation placed it.