June 3, 1967

Mr. Franklin A. Lindsey, President
Itek Corporation
10 Maguire Road
Lexington, Massachusetts

Dear Mr. Lindsey:

I appreciate very much your writing me and sending me the copy of your report and the text of the United Press International story. It was thoughtful of you and Mr. Sprague and your associates to advise the members of the Commission of the report. I am sure the report will clear up certain allegations that have been made about the Commission.

Thanking you and with kind regards, I am

Sincerely yours,

John Sherman Cooper

JSC: ink
19 May 1967

Dear Senator Cooper:

Howard Sprague has told me of his talk with you yesterday concerning our analysis of the Nix film of President Kennedy's assassination. I am enclosing a copy of our technical report together with the text of the United Press International story.

I am glad that Itek could make a small contribution to further clarification of some of the events surrounding the tragedy.

Sincerely,

[Signature]

Senator John Sherman Cooper
United States Senate
Washington, D. C.
BY JACK V. FOX AND
MAURICE SCHONFELD
UNITED PRESS INTERNATIONAL
COPYRIGHT 1967
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 CORPORATION REVEALED THURSDAY THAT A MONTHS-LONG STUDY OF AN AMATEUR MOVIE OF THE ACTUAL SHOOTING HAD DISPROVED THE EXISTENCE OF A 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 GOVERNMENT EMPLOYEE WHO WAS STANDING AMONG THE PARADE SPECTATORS IN DEALY 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 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 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.

PROONENTS 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.


ITEK PHOTOGRAPHIC SCIENTISTS IMPROVED THE QUALITY OF THE FILM CONTENT BY UTILIZING ADVANCED IMAGE ENHANCEMENT METHODS. ITEK 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 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.
"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 object which apparently was a station wagon or some vehicle actually is in a parking lot behind the wooden picket fence and 20 feet behind the "Shadows 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-thirty-sixth 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 six-feet, six-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. 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.

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 8 or 10 feet above the ground right from under those trees. And at just about this location from where I was standing, you could see that puff of smoke, like 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."

Holland's testimony, along with NIX' pictures, have been used by a number of protagonists of the second gunman theory in public lectures and publications purporting to disprove the Warren Commission findings.

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.

422PED