

Use of Aerial Photography in the Kansas Courts

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•AERIAL PHOTOGRAPHY frequently plays an important part in preparation of a condemnation appeal case for jury trial and in presentation of facts to the jury in Kansas. Generally, an aerial photograph is competent evidence in court on the same basis as oral testimony.

The aerial photographs discussed herein were furnished by the Photronics Department of the State Highway Commission of Kansas from photographs taken by the Photronics Department and printed in its laboratory. The Photronics Department owns and operates a Cessna 182 Skylane aircraft equipped with a Wild RC-8 camera. Cronar base film was used in taking the photographs at the usual image area size of 9 inches by 9 inches for each exposure. The current practice of the Photronics Department is to make two flights at a height of 6,000 feet above the ground—one along each side of the highway survey project. The ground area coverage of the adjacent matching side of each parallel strip of photographs contains the survey project corridor. In the preparation and trial of court cases involving real property, aerial photographs and enlargements are useful in several ways. Under Kansas law, compensation to landowners for real property taken or damaged by condemnation is determined by jury trial after an appeal is filed, by either the condemnor or the landowner, from the amount of compensation to the landowner determined by three court-appointed appraisers. Until January 1, 1964, expert appraisal witnesses appearing in condemnation appeal trials in Kansas were required to appraise the entire acreage under one ownership operated as one unit. The opinion testimony of these appraisal witnesses was the market value of the entire unit before the market value of the land taken, and the market values of the remaining land before and after the taking. After January 1, 1964, a new Kansas statute stipulates the measure of compensation shall be the difference between the market value of the entire property before and the market value of the remaining tract after the taking. To arrive at these values the appraiser must be aware of all pertinent features of the entire unit. If the taking is from a farm unit, this can involve hundreds of acres and all the improvements on the unit. Frequently, a review of an enlargement of an aerial photograph will reveal facts which were overlooked on actual inspection of the unit. Such features as erosion scars, watercourses, ponds, trails, roads, terraces, and trees are easily identified on an aerial photograph. Where improvements are altered or removed after the date of taking, an aerial photograph can be useful as a review and check of the inventory of improvements made by the appraiser (Fig. 1). Figure 1 is an enlargement of a photograph taken from a flight height of 1,500 feet during consideration of proposed alternatives for a highway location. This photograph was used to prepare a witness for anticipated cross-examination concerning the improvements on a farm unit when it was discovered he was not completely familiar with the improvements and had not inventoried them as of the date of taking. These buildings were more than a half-mile away from the highway right-of-way taken by condemnation, but since they were a part of the same unit, valuation witnesses were subject to cross-examination concerning the value of these buildings. This photograph was kept handy during trial as an aid in cross-examination of the landowner.

In highway condemnation appeal trials in Kansas, values are determined as of the date the amount of the court-ordered appraisal is paid into court. This date then becomes the "date of taking" of the property. The aerial photographs should be taken as nearly on that date as practicable. Any appreciable lapse of time between the date of

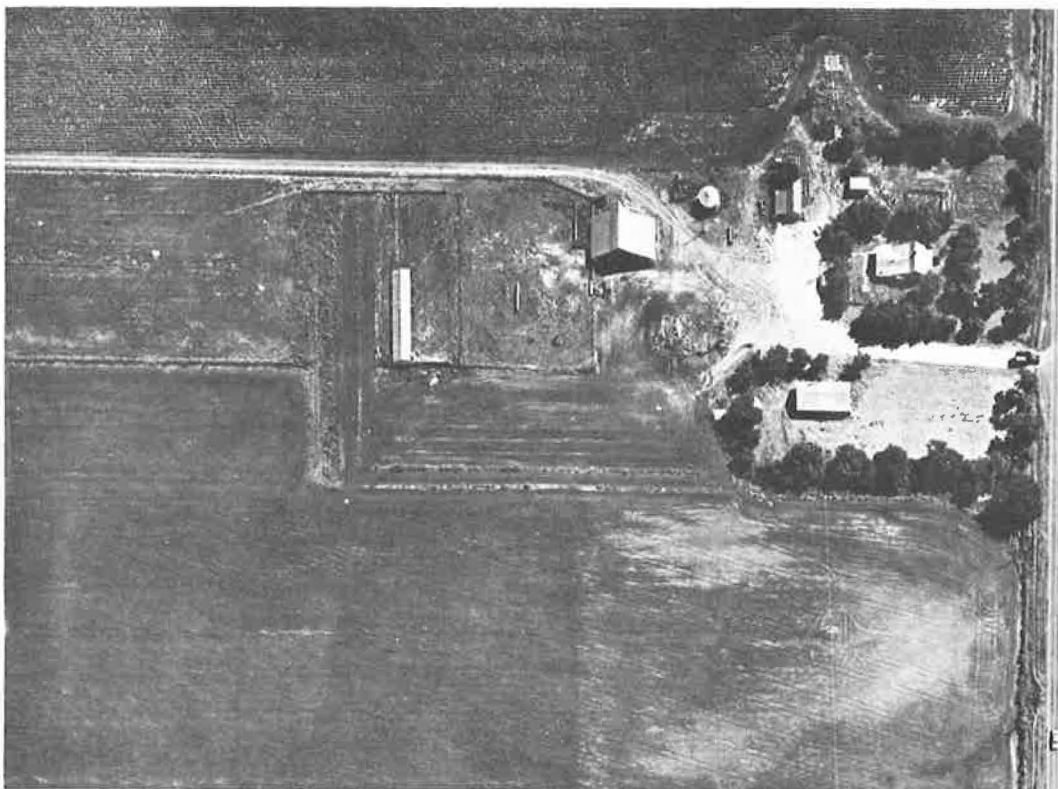


Figure 1.

taking and the date of photography increases the risk of material changes appearing in the premises and increases the risk of the court sustaining objections to the introduction of the photographs into evidence. Some photographs taken four years previously have been used by previous agreement with landowner's attorney.

An aerial photograph may become the very center of the trial. An enlargement of a photograph was described by a local attorney representing the highway commission in his final argument as the most important one item in the trial. An enlargement often is used by both parties and by most witnesses during their testimony. In some counties all exhibits, including the aerial photographs, are delivered to the jury room when the jury retires to deliberate, and in other counties an exhibit is delivered to the jury during deliberation only when that specific exhibit is requested. In the majority of the cases the aerial photograph is requested. Aerial photographs have become familiar enough to the average person serving as a juror to allow him to understand and utilize the information available through visual examination of the aerial photographs.

In his book, "Trial Technique," Irving Goldstein has this to say about the value of exhibits: "A good exhibit will continue to argue the merits of the attorney's cause long after his voice has been stilled. A jury may forget some of the oral testimony, but members of the jury cannot very well overlook or forget the exhibit which serves as an ever present reminder of the truth of testimony contentions."

Under Kansas law, the court exercises its discretion as to whether or not the jury is shown the land in question.

In some counties a view is never permitted, and in some counties the general practice is to show the land to the jury. Where the jury does not view the land, photographs are the only guide a jury has concerning actual conditions, apart from verbal descriptions and opinions expressed by witnesses who are presented by one party or the other.

Where the jury does view the land, the view is generally quite limited and does not detract from the usefulness of the photograph.

At present, Kansas has an inverse condemnation case approaching the trial stage. This case alleges that the highway commission took property and property rights without compensation by highway construction in 1959. This action was filed against the highway commission in 1961, and the hunt for convincing evidence of what occurred in 1959 followed. The Photronics Department was able to locate and obtain 1,000 feet to 1 inch scale contact print of an aerial photograph taken in 1956 for the United States Government. From this print a negative was made, and the portion pertaining to the area in question was enlarged to a scale 100 feet per inch (Fig. 2a). To people who work with photography this enlargement may be something less than a work of art, but to an attorney this enlargement is a thing of beauty, as it is an eyewitness who will not forget, and may even accompany the jury into the jury room during their deliberations. As a comparison, the Photronics Department made a photographic enlargement of the same ground area from a portion of an aerial photograph in its own files, which had been taken in 1960 (Fig. 2b). These enlargements provide a photographic record of "before" and "after" for comparison. The major point to be established is the location of the traveled ways before and after the construction in 1959.

In a condemnation appeal tried before a jury, the court generally instructs the jury that the burden of proof is on the landowner. Nevertheless, it is often thought the jury subconsciously expects the condemnor to pay for an item of damage which is testified to, or prove it does not exist. In other words, it may be the prevailing thought the landowner should not be forced to speculate or stand the risk of any loss. This idea is often forceably argued by landowners' counsel in final argument, where it is emphasized the landowner can never come back into court and sue again, if damage develops later from the improvement beyond any then anticipated. An aerial photograph often will place enough additional information before a jury to reduce speculation.

In what might be called a typical condemnation situation, the Highway Commission of Kansas, as a condemning agency, has a very limited possibility of reducing the origi-

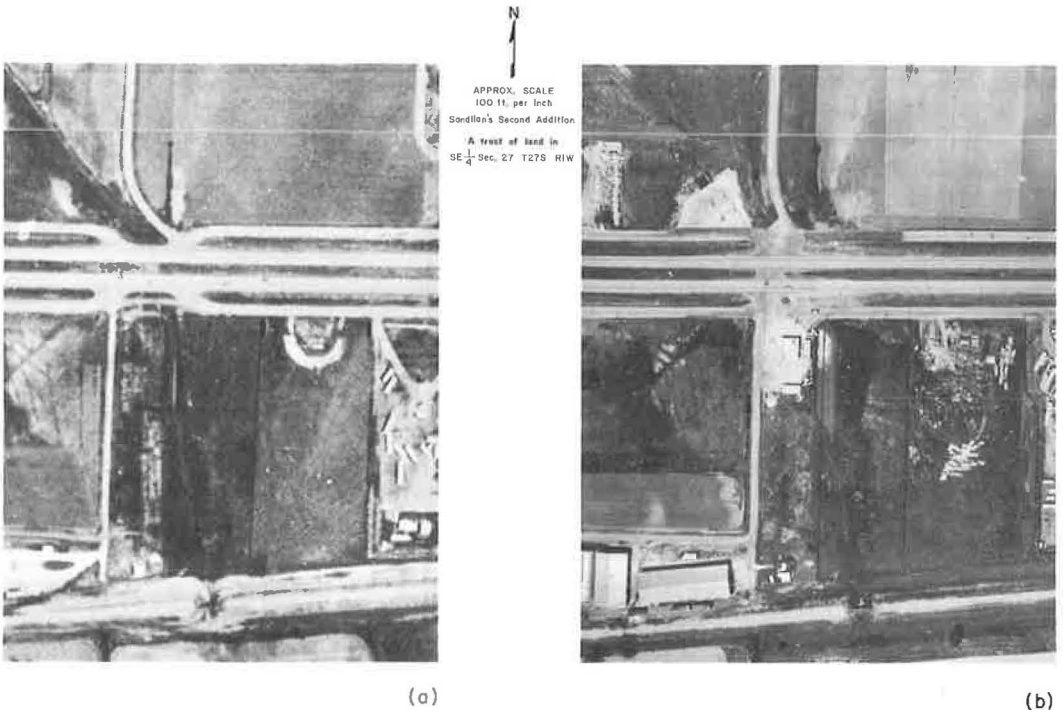


Figure 2. Representation of exhibit, not to scale.

nal award or even of maintaining it. It only takes an occasional substantial increase, however, to forcefully remind the attorney how essential it is to present all the information he possibly can to the jury

In a recent case, an aerial photograph was available but was not used because the local highway resident engineer professed to regard any aerial photograph or enlargement as "distorted" and declined to verify any photograph or markings on any photograph. The small amount of the original award did not appear to justify the expense or inconvenience to another department to bring an engineer from some distance away to testify. The landowner brought in testimony in excess of \$14,000 compared to a court award of \$1,600 appealed from. The jury awarded \$4,800 additional. It would be pure speculation to claim the presence of a photograph in the court would have reduced the verdict any definite amount. One portion of the land taken and adjacent damage to the remainder, however, could have been shown much more effectively to have been a swampy area. In another case, the sight of an aerial photograph (Fig. 3) on the attorney's table prompted the landowner to revise his testimony concerning his "level farm land" and to describe the terraces accurately. This occurrence is indicative of the respect and weight given any photograph, but more especially, an aerial photograph. In a third instance, a licensed real estate broker testified the land "sloped gently to the south," in support of his valuation testimony. A few minutes later, on cross-examination, this witness was confronted with an enlargement of an aerial photograph (Fig. 4) which clearly showed a drainage way across the tract and several large terraces. Mem-



Figure 3.

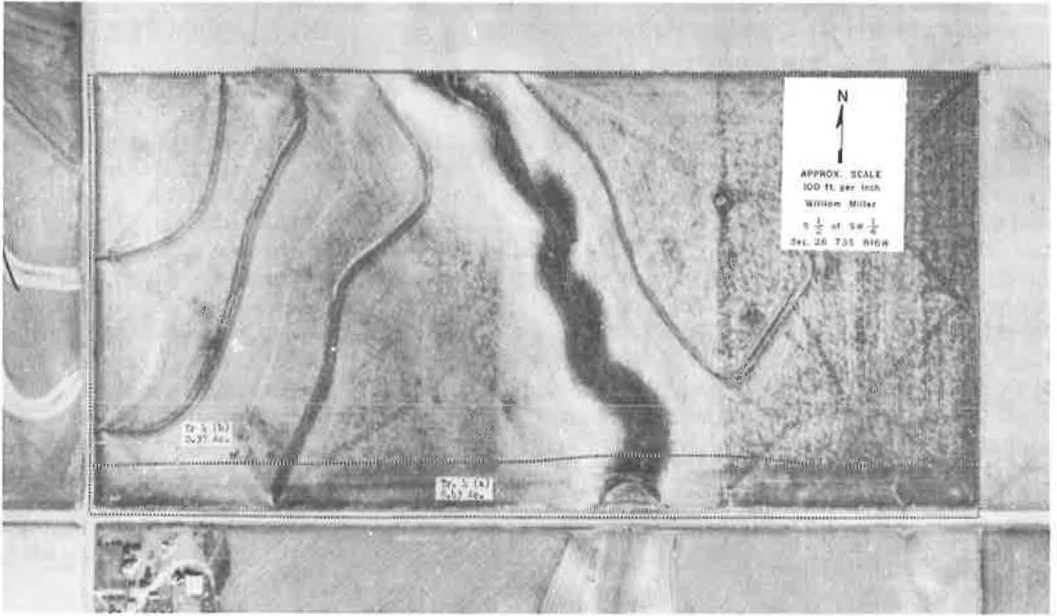


Figure 4. Representation of exhibit, not to scale.

bers of the jury might have seen this topographic condition when they viewed the land, but the jury would view the land at some convenient interval during the trial and possibly would not readily recall the discrepancy, whereas the photograph was instantly available and the contradiction was immediate and apparent.

An aerial photograph or a photographic enlargement of it is not a diagram or map, or a substitute for either one, but is a record of what all the property looked like on the date of photography, and stands as continuing testimony of the appearance of the property each time the jury's attention is directed toward the photograph, both during trial and during the jury's deliberations at the conclusion of the trial. It should be noted a properly taken aerial photograph speaks impartially. The fairest verdict should be one based, however, on the least amount of speculation and guesswork.

The process of properly preparing a photographic enlargement of an aerial photograph and marking it for use as an exhibit is a task requiring extreme care and double checking. A most important consideration is accuracy of the work. It should be stressed this does not mean precision. A photographic enlargement will not be to an exact scale, so delineations on it should be done with great care, supplemented by as much checking by measurements from landmarks to land survey description corners or property and other lines as is feasible.

The photographic enlargements used have ranged in scale from 50 feet per inch to 200 feet per inch, with the most common scale being 100 feet per inch. As a minimum, a square print of 28 inches dimension along each side would cover a quarter section tract of land. A larger print is desirable, as it tends to place the land in question in its proper setting in relation to surrounding properties and landmarks. It should be kept in mind use of the photographic enlargement is primarily for the benefit and information of the jury, and some of the jurors will be 10 to 20 feet away from the enlarged aerial photograph when it is most important that they see it during presentation of opinion testimony concerning the value of the property. Generally, at a trial, the attorney for the landowner attempts to focus all attention on the area taken, whereas the attorney for the condemnor seeks to show the area taken is small in comparison to the owner's entire acreage. This is important because one element of damage to the remainder of the owner's land frequently asserted is the injury to the owner's business operation and



Figure 5. Representation of exhibit, not to scale.

income resulting from the reduction in size of the owner's remaining land. Unless there is a specific object to be illustrated, the aerial photograph or enlargement should show the entire unit serving as the basis for valuation of testimony and for the jury to achieve a verdict.

On a case involving two adjacent quarter sections of land, the Photronics Department printed a photographic enlargement at the scale of 100 feet to 1 inch with the print measuring approximately 30 inches by 60 inches in size (Fig. 5). This photographic enlargement revealed a large portion of the pasture land in question had once been cultivated and later allowed to grow back in native pasture grass, a fact which was not noticed on actual inspection. This type of pasture is referred to as "grow back," and its market value is usually reduced.

To place the area taken in its proper perspective, the boundary of the entire acreage of the owner should be outlined on the photograph exhibited, also the boundary of the area taken should be similarly outlined with colored tape. Commercial tapes in a variety of colors and widths are available. The Photronics Department uses tape $\frac{1}{32}$ in. wide on photographic enlargements printed to the scale of 100 feet per inch. When a tape width of $\frac{1}{64}$ in. was used it became evident the tape was too narrow to be visible to some of the jurors. Yellow or orange tape is most commonly used to outline the boundary of the entire parcel of land ownership, and red is used for indicating the boundary of the areas to be taken. Yellow and orange are thought to be the dominant colors. By use of the dominant color for the entire unit emphasis is placed on the unit in place of spotlighting the area to be taken. The coloring material on this tape sometimes will separate from it after a few months. After the coloring material peels off a white tape is left. Such occurrences have not presented a serious problem because trial exhibits are stored by the clerk of the court after trial and rarely ever unrolled again. Each land area taken is marked by a small typewritten note, for example:

Tr. 3(b)
3.32 Ac

This note is trimmed down as small as possible and is taped within the area taken so nothing of significance on the photograph is obscured. At some location on the photographic enlargement away from the taking, where no landmark is covered, a short identifying description, the scale, and a north directional arrow are affixed.

To avoid as far as possible any grounds for objection by the opposing party only a minimum number of markings should be added. The photograph should be allowed to speak for itself. The identifying number, the photograph used, and the date of photography may be written on the back of the photographic enlargement or omitted.

One chronic problem in use of aerial photographs in jury trials has been introduction of the photographs into evidence. In Kansas, the Highway Commission selects a local attorney for each project in the original condemnation proceeding. All appeals from the condemnation are assigned to the selected local attorney, and the Highway Commission's staff attorney is assigned to assist that attorney. This procedure provides a wide variety in the manner of handling and use of the aerial photographs. In many cases, an aerial photograph is admitted into evidence by agreement among the attorneys. In occasional cases, such admission gives the landowner's attorney the opportunity to put his own exhibit into evidence in exchange for allowing the aerial photograph into evidence, or, as a part of his strategy, simply prevents admission of the photograph or enlargement into evidence. The alternative is to be prepared to call a witness to verify the photograph and the tape delineations on it.

In situations where the one party seeks to place a photographic enlargement in evidence at a trial over the objections of the opposite party, there are two problems to be faced. First, the photograph itself, and second, any markings placed on the photograph must be verified by some witness. What is expected of a witness in verifying a photograph in a trial can best be explained by the following quote from the American Law Reports (9 ALR 2nd, pages 903-904):

General statements in the cases to the effect that the party offering photographs in evidence must show that they are correct and accurate must be taken in a relative sense. It seems to be impossible to produce a photograph which is correct in the minutest details, because there are certain natural limitations on correct representations through photography. For example, if a photograph is taken of two identical automobiles, and the front of one is ten feet from the camera and the front of the other is fifty feet from the camera, the one fifty feet from the camera will appear to be much smaller than the one ten feet from the camera. And there are various inaccuracies or differences in results depending upon the type of equipment and photographic aids employed and the use made of them, which are explained and illustrated by pictures in Part I. of Scott on Photographic Evidence. In view of the practical impossibility of obtaining photographs which perfectly represent their subject, it would seem that when the courts state that one offering photographs in evidence should prove that they are accurate and correct, they really mean that it must be shown merely that the photographs are sufficiently correct to be helpful to the court and jury. In accord with this view it was said, in *Hassam v. Safford Lumber Co.* (1909) 82 Vt 444, 74 A 197, that photographs must be "properly verified; that is to say, preliminary evidence is required to show that they are sufficiently accurate to be helpful to the jury." It was similarly stated in *Leland v. Leonard* (1921) 95 Vt 36, 112 A 198, wherein it was conceded that there were certain defects in the taking, developing, and printing of pictures, that all that is required to entitle photographs to admission in evidence is that they be "sufficiently accurate to be of aid to the trier in ascertaining the truth." And in *Blake v. Harding* (1919) 54 Utah 158, 180 P 172, the court said: "As a matter of course, before a photograph is admissible under the circumstances disclosed in this case, it must be made to appear that it is a true or correct picture or representation of the objects photographed and in question. By that is not meant that it must be shown that the photograph is a true and correct picture or representation of the object photographed in the minutest details, but it must be made to appear that the photograph is a substantially true and correct picture or representation of the objects, and not a distorted or false one." There has not been any complete judicial definition of "verification" in connection with the introduction of photographs in evidence, but much may be inferred from the decisions. Primarily a verification of a photograph consists of evidence that the photograph is substantially correct with respect to the matters concerning which it is offered in evidence, and this includes an "identification" or statement concerning what the photograph shows. See §3, *infra*. The verification of a photograph sometimes seems to include evidence concerning matters not readily apparent from the photograph, such as additions to or deletions from the original negative, heights and distances, and inherent inaccuracies, distortions, and defects in the photographs; and a verification may include evidence concerning the circumstances under which the picture was taken and the equipment and method used in taking the picture, developing the negative, and printing the photograph.

In some States the test of admissibility of a photograph into evidence is expressed as follows: "A photograph or copy thereof is receivable in evidence when it is shown to look like the person or object sought to be identified." It should be emphasized that a witness in verifying a photograph is expressing an opinion. The witness verifying the photograph generally needs no qualification except sufficient knowledge of the property to recognize it and a photograph of it sufficiently to be able to express his opinion that the

photograph is a fair representation of the land on the date of taking. The foregoing discussion outlines the minimum requirement.

Regardless of the court's requirements on verification, a witness should collect all the background information he can obtain on flight height, who took the photograph, purpose for the photography, who made the photographic enlargement, equipment used, etc., to enable the witness to answer questions from either party. A witness who verifies a photograph or photographic enlargement, and then must answer "I don't know" to elementary questions concerning details seen on the photograph lowers the prestige of both himself and the photograph in the eyes of the court and the jury.

The second problem concerns admittance into evidence of the markings and boundary delineations on the photograph; the lines drawn or taped on an aerial photograph represent property lines and bound the areas taken. Are these lines to be considered as a scale drawing superimposed on an aerial photographic enlargement or are they more properly considered as only illustrative markings on a photograph? Maybe the answer is a bit of both. From the standpoint of insuring the photograph or its photographic enlargement will be admitted in evidence, the safer approach seems to be to consider the taped property lines as "markings" or "boundary delineations."

Any person with sufficient knowledge to testify the markings or boundary delineations are reasonably accurate and fairly represent the property lines and outline the area taken can verify the markings and delineations on the witness stand. This is the opinion of the witness. It is perhaps more impressive to have the engineer in charge of the project as the verifying witness.

Immediately following the verification, helpful identification and explanation of the existing roads, improvements, landmarks, areas taken, etc., can be brought into the case by testimony of the verifying witness. The more familiar a verifying witness is with the subject property, at the date of taking, the more effective his testimony is.

Another theory in respect to the use of photographs in evidence has been advanced. This theory is that a photograph, markings and delineations on a photograph, diagrams, plats, etc., are only a method by which the witness testifies and illustrates his testimony, and that the exhibit introduced is a part of his testimony. The end result seems to be the same inasmuch as the photograph is placed before the jury during the verifying testimony of the witness and is shown to the jury at various times after the witness leaves the stand.

Most of the recorded court cases, and the total is small, concerning aerial photographs place them in the same category as an ordinary photograph taken from a position on the ground or from an object or building supported by the ground. One aerial photograph, either admitted or excluded as evidence would rarely appear important enough to furnish the sole basis for an appeal case; therefore, most cases concerning aerial photography treat it as only one point among several to consider on appeal.

Effective January 1, 1964, the State of Kansas has adopted both a new code of civil procedure and a new eminent domain code. It is anticipated admission of aerial photographs into evidence will be easier under the new code. It does not appear that enlargements of aerial photographs will be any less useful under the new laws.

The courts have been aware of the impact of photographs upon jurors and have referred to them as "dumb witnesses," "mute witnesses," and to what appeared on the photograph as "unvarnished testimony." The thought has been expressed that people are likely to accept any photograph as completely accurate.

It seems the maximum potential use of aerial photographs and photographic enlargements has not, as yet, been realized. As recently as 1956, the Kansas Supreme Court had this to say concerning photography. "Photography is recognized more and more by the courts as being helpful in presenting facts." With added experience, it is felt witnesses, judges, jurors, engineers, and attorneys will rely on aerial photographs more and more.