

**STATE OF MINNESOTA**

**DISTRICT COURT**

**COUNTY OF HENNEPIN**

**FOURTH JUDICIAL DISTRICT**

State of Minnesota, )  
 )  
 Plaintiff, )  
 )  
 vs. )  
 )  
 **MOHAMED MOHAMED NOOR,** )  
 )  
 Defendant. )

**STATE’S OFFER OF PROOF IN  
SUPPORT OF LEICA FLYTHROUGH  
VIDEOS**

MNCIS No: 27-CR-18-6859

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To: THE HONORABLE KATHRYN QUAINANCE, HENNEPIN COUNTY DISTRICT COURT JUDGE; COUNSEL FOR DEFENDANT; AND DEFENDANT.

**INTRODUCTION**

The defendant is charged with second degree intentional murder, third degree murder, and second degree manslaughter. Trial is set for April 1, 2019. On February 15, 2019, the defendant moved the court to prohibit the State from presenting two 3D flythroughs of the crime scene that were created by the Minnesota Bureau of Criminal Apprehension. The defendant’s motion to exclude the flythroughs consists of one conclusory paragraph asserting, essentially, that the flythroughs are unrealistic and speculative. The defense raises no specific objection based on the Minnesota Rules of Evidence or case law. The court requested the State to submit a written offer of proof on foundation for the exhibit, which follows. Additionally, the parties agreed that the court should review the videos *in camera* and they are being provided to the court on a flash drive at the time of filing.

**OFFER OF PROOF**

The Minnesota Bureau of Criminal Apprehension, like any law enforcement agency, attempts to fully document the crime scenes that it investigates. This includes recording the relative

locations of objects and evidence, the distances between them, and other relevant measurements. Before the advent of various computer-aided forms of scene documentation, this used to be done with photographs and tape measures. The BCA's methods have evolved with the times.

The BCA previously used Panoscans, which have been admitted into evidence numerous times in Hennepin County District Court. Panoscans were panoramic pictures of crime scenes that allowed the viewer to see multiple aspects of a scene at once. However, Panoscans had certain limitations. For example, they generated a "fish eye" view that does not fully represent spatial dimensions and relative distances. They were also more time-consuming for the BCA to construct and required more on-scene efforts that were subject to human error.

Since early 2017, the BCA has been using Leica scanners to document crime scenes. Leica is a German company founded in 1914 that manufactures a variety of products, including cameras, binoculars, microscopes, and—pertinent to this case—3D laser scanners. *See* <https://leica-geosystems.com/en-US/products/laser-scanners>. These instruments were originally created for architectural scanning and surveying, but are now used by law enforcement agencies nationwide to document crime scenes. *See, e.g.,* <https://leica-geosystems.com/en-US/case-studies/public-safety/two-domestic-terrorist-attacks--documented-with-leica-scanstation> (discussing the use of Leica scans to document the mass shooting scene at Fort Hood, Texas).

The BCA agents who prepared the Leica scans in this case were trained by Leica to use their equipment and software. As an agency, the BCA tested the Leica scanner for approximately three to four months before using it at a crime scene. One of these tests included creating a 3D map of the interior of the U.S. Bank Stadium, which was successful. By the time of Ms. Ruszczyk's death, the BCA had used Leica scanners to document other crime scenes.



