

UNITED STATES DISTRICT COURT  
DISTRICT OF MASSACHUSETTS

**FILED UNDER SEAL**

UNITED STATES OF AMERICA	)	
	)	
v.	)	CRIMINAL NO. 13-10200-GAO
	)	
DZHOKHAR TSARNAEV	)	

**MOTION TO EXCLUDE CELLPHONE GEOLOCATION EVIDENCE AND  
REQUEST FOR DAUBERT HEARING**

Defendant, Dzhokhar Tsarnaev, by and through counsel, respectfully moves, pursuant to Federal Rules of Evidence 104(a), 401 402, 403, 702, 703, and the Fifth and Sixth Amendments to the United States Constitution, to exclude the government's proposed expert testimony regarding cell phone tower geolocation at trial. Defendant submits that, at a minimum, the Court must schedule a *Daubert* Hearing to determine the admissibility of the proposed testimony.

As grounds therefore, defendant states: (1) the government has failed to provide a sufficient basis to determine whether the proposed testimony meets the requirements of *Daubert v. Merrell Dow Pharmaceuticals, Inc.*, 509 U.S. 579 (1993) and *Kumho Tire Co. v. Carmichael*, 526 U.S. 137 (1999), and (2) in any event the proposed testimony runs afoul of *Daubert*, *Kumho Tire*, as well as Federal Rules of Evidence 401, 402, 403 and 702. Defendant submits that, at a minimum, a voir dire hearing is required to determine the admissibility of the testimony.

## FACTS

This government's August 1, 2014 expert disclosure letter notices the proposed expert testimony of FBI Special Agent Chad Fitzgerald, currently assigned to the FBI's Cellular Analysis Survey Team (C.A.S.T.), to testify "primarily about the activity" of the cell phones possessed by Tamerlan and Dzhokhar Tsarnaev. The government proposes to have Agent Fitzgerald testify as follows:

Special Agent Fitzgerald will explain the mechanics of cellular telephone communications and how those communications are made possible by sending signals to nearby cell site towers. He will testify that cell sites are often divided into three 120-degree sectors and that service providers capture and record the sector and the specific antenna tower that is used at the beginning of a call or text message. From this data, it is possible to determine the general geographic location of the phone at a specific time and to use commercially available software to graph that information. Special Agent Fitzgerald will testify that the call detail records (CDR) for the above-referenced cellular telephone numbers show that the users . . . were in close proximity to the Boston Marathon bombing at the time it took place. He will also testify about the locations of the subject telephones before and after April 15, 2013. All of this testimony will be based on cellular site data (including longitude and latitude information) that has been produced in discovery.

Gov't Letter of August 1, 2014 at 7-8. Presumably, the government through this testimony intends to place Dzhokhar and Tamerlan Tsarnaev at particular places at particular times relevant to the Boston Marathon Bombings on April 15, 2013. But the disclosure is silent as to exactly what the proposed expert will testify to regarding these locations and times. Moreover, the disclosure contains the caveat that he will "also testify about the locations of the subject telephones before and after April 15, 2013" with absolutely no further elucidation or temporal limit, rendering the disclosure largely meaningless. The proposed testimony must be excluded because (1) the government has

provided insufficient detail of its expert testimony under Federal Rule of Criminal Procedure 16(a)(1)(G), (2) the government has not established that its proposed expert testimony meets the strictures of Federal Rule of Evidence 702 or *Daubert v. Merrell Dow Pharms., Inc.*, 509 U.S. 579, 589 (1993), and (3) the government cannot establish that the wholesale admission of the cellphone location data collected in this case survives Rules 401, 402, and 403. At a minimum, defendant requests a hearing prior to the admission of testimony related to cell site information to address *Daubert* reliability, relevance, and Rule 403 admissions issues.

### ARGUMENT

Federal Rule of Criminal Procedure 16(a)(1)(G) requires the government to provide a summary of any expert testimony it intends to use and must describe the witness's opinions, the bases and reasons for those opinions, and the witness's qualifications. While the government has given an elastic list of subjects about which Agent Fitzgerald will testify, it has not met the requirements of Rule 16. The government has not provided the defense with certain of Agent Fitzgerald's underlying opinions, for instance, why a particular phone may use one or more specific towers during a particular call. The disclosure merely states that Agent Fitzgerald will testify about the topic, but omits any actual expert opinion. No reasoning is found anywhere in the government's disclosure. The defense submits, therefore, that the letter cannot be considered a proper expert disclosure as it lacks the required information under Rule 16.

This lack of detail in the government's disclosure runs afoul of Federal Rule of Evidence 702 and the Supreme Court's pronouncements in *Daubert* and *Kumho Tire Co.*

*v. Carmichael*, 526 U.S. 137 (1999). Federal Rule of Evidence 702 provides that an expert “may testify in the form of an opinion or otherwise” if: (1) the expert’s knowledge will aid the trier of fact; (2) if the testimony is based on sufficient facts or data; (3) if the testimony is the product of reliable principles and methods; and (4) the expert has reliably applied the principles and methods to the facts of the case. The government has not established that Agent Fitzgerald’s testimony meets these requirements. As noted above, the government has failed to provide the methodology for Agent Fitzgerald’s opinions regarding locations, let alone whether such methodology has been reliably applied to the facts of this case. Without such information, this Court cannot determine that Agent Fitzgerald’s testimony is inadmissible and should be excluded.

Furthermore, the government’s proposed testimony does not meet the requirements of *Daubert*. In *Daubert*, the Supreme Court held that district courts are the gatekeepers to the admissibility of scientific evidence under Rule 702. *Daubert*, 509 U.S. at 597. The Court required that such scientific evidence be both relevant and reliable. *Id.* This gatekeeping responsibility, as well as the relevance and reliability requirements, was subsequently extended to all expert testimony in *Kumho Tire*, 526 U.S. at 150.

Beginning first with the testimony regarding the locations of cell towers and their relation to purportedly relevant locations, it appears that the government has made the assumption that a cell phone call must necessarily utilize the nearest tower and that the individual making the call must therefore be within a certain geographic range. But the government has provided no basis or methodology for this theory. Without providing any support, the location of cell phone towers, especially in comparison to purported

relevant locations, is irrelevant. The government cannot simply admit evidence regarding the cell phone tower used during a certain call and leave the jury with the inference that the tower used is the tower nearest to the phone. Rather, the government must demonstrate that this is, in fact, how cell phones work. Nothing in its disclosure letter provides any detail regarding how the evidence is relevant or reliable. Rather, the evidence is highly prejudicial because the jury will intuitively assume that the nearest tower is the tower used by a cell phone.

*Daubert* laid out non-exhaustive general criteria for assessing the reliability and validity of an expert's testimony including whether the expert's methodology in question can or has been tested, whether it has been subjected to peer review and publication, the methodology's known or potential error rate and the existence and maintenance of standards controlling its operation, and whether the methodology has attracted widespread acceptance within a relevant scientific community. *Id.* at 593-4. Because the government has not detailed to any reasonable degree the methodology that Agent Fitzgerald will employ, this Court can make no finding as to whether the methodology is reliable.

In regard to the government's intention to have Agent Fitzgerald testify to geolocation of the cellphones "before and after April 15, 2013," the government's disclosure without further description not only fails Rule 16 and lacks sufficient basis for admission under Rule 702, it almost certainly violates Rules 401, 402, and 403. The government, at a minimum, must be directed to provide specifics as to each instance where the government proposes to have Agent Fitzgerald testify as to geolocation.

In sum, the government's extremely general disclosure, which only provides that the testimony will be based on data a provided without disclosure of methodology or the qualifications to testify as to the conclusions, is insufficient. The Court should exclude the testimony and data. Alternatively, the defense requests a hearing to determine the admissibility of cell site data and Agent Fitzgerald's conclusions therefrom under *Daubert*, at which the government will be required to demonstrate scientific reliability and as well as relevance, and for the Court to determine whether considerations of unfair prejudice and confusion outweighs any probative value in admitting the testimony and evidence.

### CONCLUSION

For the forgoing reasons, the Court exclude the government's proposed expert testimony regarding cell phone tower geolocation at trial. At a minimum, the Court must schedule a hearing to determine the admissibility of the proposed testimony.

Respectfully submitted,

DZHOKHAR TSARNAEV  
By his attorneys



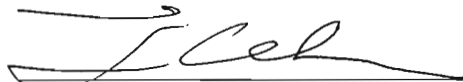
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I hereby certify that this document was served on counsel for the government by email and paper copy by interoffice delivery on December 5, 2014.

  
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