ATTACHMENT B

Lavabit uses 2048-bit Secure Socket Layer (SSL) certificates purchased from GoDaddy to encrypt communication between users and its server. SSL encryption employs public-key cryptography, in which both the sender and receiver each have two mathematically linked keys: a "public" key and a "private" key. "Public" keys are published, but "private" keys are not. In this circumstance, a Lavabit customer uses Lavabit's published public key to initiate an encrypted email session with Lavabit over the internet. Lavabit's servers then decrypt this traffic using their private key. The only way to decrypt this traffic is through the usage of this private key. A SSL certificate is another name for a published public key.

To obtain a SSL certificate from GoDaddy, a user needs to first generate a 2048-bit private key on his/her computer. Depending on the operating system and web server used, there are multiple ways to generate a private key. One of the more popular methods is to use a freely available command-line tool called OpenSSL. This generation also creates a certificate signing request file. The user sends this file to the SSL generation authority (e.g. GoDaddy) and GoDaddy then sends back the SSL certificate. The private key is not sent to GoDaddy and should be retained by the user. This private key is stored on the user's web server to permit decryption of internet traffic, as described above. The FBI's collection system that will be installed to implement the PR/TT also requires the private key to be stored to decrypt Lavabit email and internet traffic. This decrypted traffic will then be filtered for the target email address specified in the PR/TT order.

Depending on how exactly the private key was first generated by the user, it itself may be encrypted and protected by a password supplied by the user. This additional level of security is useful if, for example, a backup copy of the private key is stored on a CD. If that CD was lost or stolen, the private key would not be compromised because a password would be required to access it. However, the user that generated the private key would have supplied it at generation time and would thus have knowledge of it. The OpenSSL tool described above is capable of decrypting encrypted private keys and converting the keys to a non-encrypted format with a simple, well-documented command. The FBI's collection system and most web servers requires the key to be stored in a non-encrypted format.

A 2048-bit key is composed of 512 characters. The standard practice of exchanging private SSL keys between entities is to use some electronic medium (*e.g.*, CD or secure internet exchange). SSL keys are rarely, if ever, exchanged verbally or through print medium due to their long length and possibility of human error. Mr. Levison has previously stated that Lavabit actually uses five separate public/private key pairs, one for each type of mail protocol used by Lavabit.

PEM format is an industry-standard file format for digitally representing SSL keys. PEM files can easily be created using the OpenSSL tool described above. The preferred medium for receiving these keys would be on a CD.

EXHIBIT 21

IN THE UNITED STATES DISTRICT COURT FOR THE
EASTERN DISTRICT OF VIRGINIA

Alexandria Division

IN THE MATTER OF THE APPLICATION OF THE UNITED STATES OF AMERICA FOR AN ORDER AUTHORIZING THE USE OF A PEN REGISTER/TRAP AND TRACE DEVICE ON AN ELECTRONIC MAIL ACCOUNT	)	UNDER SEAL No. 1:13EC297
IN THE MATTER OF THE SEARCH AND SEIZURE OF INFORMATION ASSOCIATED WITH [redacted] THAT IS STORED AT PREMISES CONTROLLED BY LAVABIT LLC	)	No. 1:13SW522
In re Grand Jury	)	No. 13-1

ORDER

This matter comes before the Court on the motion of the government for sanctions for failure to comply with this Court's order entered August 2, 2013. For the reasons stated in the government's motion, and pursuant to Title 18, United States Code, Section 401, it is hereby

ORDERED that the motion for sanctions is granted;

It is further ORDERED that, if the encryption keys necessary to implement the pen register and trap and trace device are not provided to the FBI in PEM or equivalent electronic format by noon (CDT) on August 5, 2013, a fine of five thousand dollars ($5,000.00) shall be imposed on Lavabit LLC and Mr. Levison;

It is further ORDERED that, if the encryption keys necessary to implement the pen register and trap and trace device are not provided to the FBI in PEM or equivalent electronic

format by noon (CDT) each day thereafter beginning August 6, 2013, a fine of five thousand dollars ($5,000.00) shall be imposed on Lavabit LLC and Mr. Levison for each day of non-compliance; and

It is further ORDERED that the government's motion for sanctions and this Order shall remain under seal until further order of this Court.

/s/
Claude M. Hilton
United States District Judge

Alexandria, Virginia
August 5, 2013

EXHIBIT 22

IN THE UNITED STATES DISTRICT COURT FOR THE
EASTERN DISTRICT OF VIRGINIA
Alexandria Division

IN THE MATTER OF THE APPLICATION OF THE UNITED STATES AUTHORIZING THE USE OF A PEN REGISTER/TRAP AND TRACE DEVICE ON AN ELECTRONIC MAIL ACCOUNT	**FILED UNDER SEAL** No. 1:13EC297
IN THE MATTER OF THE SEARCH AND SEIZURE OF INFORMATION ASSOCIATED WITH [redacted] THAT IS STORED AND CONTROLLED AT PREMISES CONTROLLED BY LAVABIT LLC	No. 1:13SW522

NOTICE OF APPEAL

Notice is hereby given that Lavabit LLC ("Lavabit") and Mr. Ladar Levison ("Mr. Levison") in the above named case, hereby appeal to the United States Court of Appeals for the Fourth Circuit from the Orders of this Court entered on August 1, 2013 and August 5, 2013.

LAVABIT LLC
LADAR LEVISON
By Counsel

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Counsel for Lavabit LLC

Certificate of Service

I certify that on this 15th day of August, 2013, this Notice of Appeal was emailed and mailed to the person at the addresses listed below:

[redacted]

United States Attorney's Office
Eastern District of Virginia
2100 Jamieson Avenue
Alexandria, VA 22314

[redacted]

Jesse R. Binnall

IN THE UNITED STATES DISTRICT COURT FOR THE
EASTERN DISTRICT OF VIRGINIA
Alexandria Division

FILED UNDER SEAL

In re Grand Jury

No. 13-1

NOTICE OF APPEAL

Notice is hereby given that Lavabit LLC ("Lavabit") and Mr. Ladar Levison ("Mr. Levison") in the above named case, hereby appeal to the United States Court of Appeals for the Fourth Circuit from the Orders of this Court entered on August 1, 2013 and August 5, 2013.

LAVABIT LLC
LADAR LEVISON
By Counsel

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Eastern District of Virginia
2100 Jamieson Avenue
Alexandria, VA 22314
[redacted]

Jesse R. Binnall

EXHIBIT 23

IN THE UNITED STATES DISTRICT COURT FOR THE
EASTERN DISTRICT OF VIRGINIA
Alexandria Division

IN THE MATTER OF THE APPLICATION OF THE UNITED STATES AUTHORIZING THE USE OF A PEN REGISTER/TRAP AND TRACE DEVICE ON AN ELECTRONIC MAIL ACCOUNT	**FILED UNDER SEAL**
IN THE MATTER OF THE SEARCH AND SEIZURE OF INFORMATION ASSOCIATED WITH [redacted] THAT IS STORED AND CONTROLLED AT PREMISES CONTROLLED BY LAVABIT LLC	No. 1:13SW522

NOTICE OF APPEAL

Notice is hereby given that Lavabit LLC ("Lavabit") and Mr. Ladar Levison ("Mr. Levison") in the above named case, hereby appeal to the United States Court of Appeals for the Fourth Circuit from the Orders of this Court entered on August 1, 2013 and August 5, 2013.

LAVABIT LLC
LADAR LEVISON
By Counsel

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Certificate of Service

I certify that on this 16th day of August, 2013, this Notice of Appeal was emailed and mailed to the person at the addresses listed below:

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Jesse R. Binnall