FISA and the FBI: Fixing Material Omissions, Overbroad Queries, and Antiquated Technology

Peter Margulies*

INTRODUCTION

Failures can be signals of either fate or opportunity. The Federal Bureau of Investigation (FBI) and its partner, the Justice Department's National Security Division (NSD) fell short in the flawed Carter Page "traditional FISA" request and in the FBI's overbroad queries under § 702 of the Foreign Intelligence Surveillance Act (FISA).\(^1\) Taken together, the Carter Page and § 702 episodes reveal material omissions, overbroad queries, inadequate documentation, and obsolete technology. Each of these problems also undermines the relationship of the FBI and NSD with the Foreign Intelligence Surveillance Court (FISC). Furthermore, the FBI's overbroad queries raise questions about whether current U.S. person queries of § 702 data are reasonable under the Fourth Amendment.\(^2\) Fixing each problem is necessary to preserve FISA's role in protecting both national security and privacy.

The FBI and NSD need to function as joint gatekeepers for the FISC. Gatekeeping is a familiar term from the private sector that refers to the lawyer's role in tempering corporate clients' aggressive tendencies.³ Lawyers and other professionals, including accountants, internalize legal norms and place their reputations on the line in policing clients' representations to regulators.⁴ In the FISA setting, gatekeeping relies a robust internal separation of powers between the Justice Department and its best-known constituent unit, the FBI.⁵ An open dialogue can ensure that targeting reflects intelligence needs and legal norms. Gatekeeping should expressly address the

^{*} Professor of Law, Roger Williams University School of Law (Rhode Island); B.A., Colgate; J.D., Columbia Law School.

¹ 50 U.S.C. § 1881a (2020). Congress added § 702 as part of the FISA Amendments Act of 2008, Pub. L. No. 110-261, 122 Stat. 2436 (2008). On problems with the Page FISA request, see Office of the Inspector General, U.S. Dep't of Justice, Review of Four FISA Applications and Other Aspects of the FBI's Crossfire Hurricane Investigation 145-58 (Dec. 2019) (hereinafter 2019 OIG FISA Review). On problems with FBI U.S. person queries under § 702, see In re Section 702 2018 Certification, For. Intell. Surv. Ct., at 65-75 (Oct. 18, 2018), https://www.intelligence.gov/assets/documents/702%20Documents/declassified/2018 Cert FISC Opin 18Oct18.pd f; In re Section 702 2019 Certification, For. Intell. Surv. Ct., at 66-69 (Dec. 6, 2019). I have addressed these issues in greater detail in a law review article. See Peter Margulies, Searching for Accountability Under FISA: Internal Separation of Powers and Surveillance Law, 104 Marquette L. Rev. (forthcoming 2021), https://ssrn.com/abstract=3695054. Portions of this paper borrow from the above-cited article.

² United States v. Hasbajrami, 945 F. 3d 641, 670-73 (2d Cir. 2019).

³ See John C. Coffee, Jr., Gatekeepers: The Role of the Professions and Corporate Governance 5 (2006).

⁴ See Stavros Gadinis & Colby Mangels, Collaborative Gatekeepers, 73 Wash. & Lee L. Rev. 797, 802 (2016).

⁵ See generally Neal Kumar Katyal, *Internal Separation of Powers: Checking Today's Most Dangerous Branch from Within*, 115 Yale L.J. 2314 (2006) (discussing benefits of internal divisions of authority in executive branch).

disturbing track record of surveillance from 1940 to the present: without due care, the burden of surveillance can all too readily fall on political opponents,⁶ civil rights advocates,⁷ and marginalized groups like Muslim Americans.⁸

Judicial review through the FISC⁹ should reinforce that internal gatekeeping dialogue.¹⁰ Courts cannot compensate for dialogue's collapse. However, they can craft rules that will promote the internal gatekeeping partnership of the FBI and NSD.

Unfortunately, the Carter Page and § 702 querying episodes demonstrate that the FBI and NSD are currently far removed from the joint gatekeeping that the FISA framework requires. Instead, the FBI has practiced the fine art of regulatory capture. Under the FISA framework, as in administrative law, regulatory capture entails claiming that conduct causing compliance problems is not a problem at all. The failure to comply simply constitutes the most practical way for the entity to do its work. Nudging the FBI from regulatory capture to a joint gatekeeping stance is essential for the FISA framework. This Article aims to diagnose the problems and provide a blueprint for reform.

The Article is in six Parts. Part I provides background on "traditional FISA," § 702, and the Carter Page and U.S. person querying issues. Part II-V deal concisely with problems in the FISA process: material omissions, overbroad querying, inadequate documentation, and obsolete technology. Part VI outlines remedies, including a special master for technology, using artificial intelligence (AI) to flag material omissions and overbroad queries, and a public advocate at the FISC.

I. "TRADITIONAL FISA" AND § 702: THE FRAMEWORK AND CURRENT FLAWS

In 1978, after revelations of decades-long surveillance on Americans by a succession of U.S. presidents, Congress enacted FISA, providing for judicial approval of surveillance conducted on a suspected agent of a foreign power.¹² The FBI typically drafts surveillance requests, which the lawyers from the Justice Department's National Security Division (NSD)—specifically the NSD's Office of Intelligence (OI)—submit to the Foreign Intelligence Surveillance Court (FISC).

⁶ United States v. United States District Court (Keith), 407 U.S. 297, 313-14 (1972).

⁷ See Frank Rudy Cooper, Surveillance and Identity Performance: Some Thoughts Inspired by Martin Luther King, 32 N.Y.U. Rev. L. & Soc. Change 517, 521-25 (2008) (discussing FBI's surveillance of Dr. King).

⁸ Shirin Sinnar, *Separate and Unequal: The Law of "Domestic" and "International" Terrorism*, 117 Mich. L. Rev. 1333, 1338 (2019) (discussing appearance of inequality in investigative, charging, and sentencing decisions).

⁹ See Timothy Edgar, Beyond Snowden: Privacy, Mass Surveillance, and the Struggle to Reform the NSA 113-31(2017) (describing operation and docket of FISC).

¹⁰ Cf. John Rappaport, Second-Order Regulation of Law Enforcement, 103 Calif. L. Rev. 205 (2015) (arguing that in criminal procedure, courts should prod law enforcement to develop structures of accountability to comply with the Fourth Amendment).

¹¹ Michael A. Livermore & Richard L. Revesz, *Regulatory Review, Capture, and Agency Inaction*, 101 Geo. L.J. 1337, 1367-70 (2013).

¹² 50 U.S.C. § 1801-1885(c) (2020); see also United States v. Duggan, 743 F.2d 59 (2d Cir. 1984) (upholding FISA's constitutionality).

Decisions of the FISC, which is composed of Article III lifetime-tenured federal district court judges, are subject to review by the Foreign Intelligence Surveillance Court of Review (FISCR).

Under current law, the acquisition of foreign intelligence information must be a "significant purpose" of the surveillance requested. To ensure that FISA applications adhere to this standard and provide all relevant information to the FISC, the FBI developed "accuracy procedures." Under these procedures, as FBI agents draft a FISA application, they conduct certain internal database searches—including a search for whether the proposed target of surveillance was ever a source for the FBI—and compile a file including all documentation of each claim in the FISA request.

Section 702 of FISA, which Congress enacted as part of the FISA Amendments Act of 2008, differs from "traditional FISA" requests. ¹⁵ Unlike "traditional FISA" requests, which require a specific court order, §702 requires only annual approval by the FISC of a certification by the Justice Department's NSD that procedures for gathering and using information are consistent with the statute. Under § 702, government can target communications of persons or entities reasonably believed to be located outside the United States. That authority includes "one-end foreign communications" in which one party is foreign and one is physically within the United States, a citizen, or an LPR. ¹⁶ The targeting of persons or entities abroad under § 702 results in the incidental collection of large amounts of data on U.S. persons. ¹⁷

Both the National Security Agency (NSA), which operates the monitoring and collection of information under the statute, and the FBI pose queries to this database that produce outputs

¹³ 50 U.S.C. § 1804(a)(6)(B); *see also* In re Sealed Case, 310 F.3d 717, 736-46 (For. Intell. Surv. Ct. Rev. 2002) (upholding this standard as consistent with the Fourth Amendment).

¹⁴ See 2019 OIG FISA Review, *supra* note 1, at 42; Memorandum from Michael J. Woods, Unit Chief, FBI Office of the General Counsel, National Security Law Unit, to FBI Field Offices (Apr. 5, 2001), https://www.americanbar.org/content/dam/aba/administrative/law_national_security/woods-procedures-memo-2001.pdf (hereinafter Accuracy Procedures); see also David Kris, *Further Thoughts on the Crossfire Hurricane Report*, Lawfare (Dec. 23, 2019), https://www.lawfareblog.com/further-thoughts-crossfire-hurricane-report (providing background on accuracy procedures).

^{15 50} U.S.C. § 1881a (2020); United States v. Hasbajrami, 945 F. 3d 641 (2d Cir. 2019); In re Section 702 2018 Certification, For. Intell. Surv. Ct. (Oct. 18, 2018), https://www.intelligence.gov/assets/documents/702%20Documents/declassified/2018 Cert FISC Opin 18Oct18.pd f; see also Privacy and Civil Liberties Oversight Board, Report on the Surveillance Program Operated Pursuant to Section 702 of the Foreign Intelligence Surveillance Act (July 2, 2014) (hereinafter PCLOB § 702 Report), http://www.pclob.gov/All%20Documents/Report%20on%20the%20Section%20702%20Program/PCLOB-Section-702-Report-PRE-RELEASE.pdf; In re Directives Pursuant to Section 105B of the Foreign Intelligence Surveillance Act, 551 F.3d 1004 (For. Intell. Surv. Ct. Rev. 2008) (upholding predecessor of § 702 with similar provisions).

¹⁶ Hasbajrami, 945 F.3d at 649-58 (discussing statutory requirements and implementation); David S. Kris & J. Douglas Wilson, National Security Investigations and Prosecutions § 17:17; Laura K. Donohue, Section 702 and the Collection of International Telephone and Internet Content, 38 Harv. J. L. & Pub. Pol'y 117 (2015); Emily Berman, When Database Queries Are Fourth Amendment Searches, 102 Minn. L. Rev. 577, 593-94 (2017); Rachel G. Miller, FISA Section 702: Does Querying Incidentally Collected Information Constitute a Search Under the Fourth Amendment?, 95 Notre Dame L. Rev. 139 (2020); Daphna Renan, The Fourth Amendment as Administrative Governance, 68 Stan. L. Rev. 1039 (2016).

¹⁷ *Hasbajrami*, 945 F.3d at 661-62.

regarding U.S. persons. The NSA's querying procedures have generally passed muster under the statute.¹⁸ The FBI is another matter. Because collection under § 702 takes in massive amounts of data internationally, querying that data for information about U.S. persons—citizens and lawful permanent residents (LPRs), along with persons located in the United States—triggers concerns under the statute and the Fourth Amendment.¹⁹ The FBI's failure to comply with its own standards on U.S. person querying raises the specter of regulatory capture.

Two other entities play at least an indirect role in the gatekeeping practiced by the Justice Department and the FBI. The Privacy and Civil Liberties Oversight Board (PCLOB) has examined surveillance law and practice, including an important report on § 702.²⁰ The Justice Department's Office of the Inspector General (OIG) reviewed the surveillance request for Carter Page, an erstwhile foreign policy advisor to the 2016 Trump presidential campaign.²¹

Recent concerns about "traditional FISA" and § 702 U.S. person queries stem from two sources. In the "traditional FISA" context, FBI agents failed to disclose material facts in the Carter Page FISA request. Specifically, the FBI case agent on the FISA request had access to evidence of Page's prior work with another U.S. government intelligence agency—apparently the Central Intelligence Agency (CIA)—yet omitted this information from the draft FISA application. Inclusion of this fact would have at the very least encouraged more senior FBI and Justice Department officials, as well as the FISC, to take a fresh look at other evidence in the case, in the course of deciding whether there was probable cause to believe that Page was an agent of a foreign power. The omission of this fact was therefore a major flaw in the request.

In the § 702 context, problems emerge from the FBI's practices regarding querying the massive § 702 database for results that include information about U.S. persons, including U.S. citizens and lawful permanent residents (LPRs). Under § 702 and its related statutory and administrative framework, the FBI can pose U.S. person queries only to gather foreign-intelligence information or evidence of crime. According to the FISC, the FBI's U.S. person queries included many that were not "reasonably likely" to meet this standard.²³ Those overbroad queries demonstrate a failure to comply with FISA requirements, and the possible absence of reasonableness for Fourth Amendment purposes.

¹⁸ See PCLOB § 702 Report, *supra* note 15; see also *In re Certification* at 66 (noting that NSA, along with the CIA and the National Counterterrorism Center, ran a total of 7,500 queries in 2017 linked to U.S. persons).

¹⁹ *Hasbajrami*, 945 F.3d at 671; see also Jennifer Stisa Granick, American Spies: Modern Surveillance, Why You Should Care, and What To Do About It 119-20 (2017) (describing scope of U.S. person data incidentally collected under § 702).

²⁰ See PCLOB § 702 Report, supra note 15.

²¹ See 2019 OIG FISA Review, supra note 1.

²² See id. at 157-58; see also Vol. 5 U.S. Senate Select Committee on Intelligence, Russian Active Measures Campaigns and Interference in the U.S. Election, 116th Cong., 1st Sess., at 530 (Aug. 2020) (describing Page's contacts with U.S. intelligence community agencies). For a valuable analysis of OIG's findings, see Bernard Horowitz, FISA, the "Wall," and Crossfire Hurricane: A Contextualized Legal History, 7 Nat'l Sec. L.J. 1 (2019).

²³ In re 2018 Certification, at 68.

II. MATERIALITY AND THE CARTER PAGE FISA REQUEST

One measure of the breakdown in gatekeeping between the FBI and NSD is the failure to disclose material facts in the Carter Page FISA request. Two facts stand out as material: Page's experience as a contact of a U.S. intelligence agency and his categorical denials to an FBI confidential human source (CHS) that he had met with senior Russian intelligence officials. NSD has now conceded that these facts were material, at least regarding the final two renewals of the surveillance order regarding Page. Spelling out why these facts were material is useful for understanding the failure of FBI-NSD gatekeeping in this matter. This Part provides that explanation, borrowing from precedent on false statements to federal investigators, which frames a fact as material if it could alter a government office's deliberations about investigation of a particular case. Second contact and the page of t

A. Theories of Materiality: Altering Deliberation or Changing Outcomes?

Courts use either a deliberative or an outcome test to ascertain materiality. The deliberative test often turns on the weight that investigators would have given to the omitted or misrepresented fact, compared with the weight that investigators placed on other facts. In other contexts, courts use an outcome test with a higher threshold. Under the outcome test, a court asks if a given outcome, such as issuance of a search warrant, would have been different if the search request accurately reported a particular fact.²⁷ In the FISA setting, the deliberative test is more appropriate.

Under the deliberative test, it does not take much to cross the materiality threshold; the bar is "fairly low."²⁸ For example, in one case the court held that a water treatment plant administrator's seemingly minor false entries about the purity of drinking water were material. The court explained that accurate entries about the presence of particulate matter in the water would have impelled federal regulators to scrutinize other entries to see if they also showed impurities.²⁹ On this view, facts are material if they would prompt additional questions by investigators.

In contrast, the outcome test raises the threshold for materiality, making it more difficult to show that a given fact is material. A fact may matter *so much* that its misrepresentation or omission would clearly change the final result. Courts use the outcome test in criminal procedure

https://www.intelligence.gov/assets/documents/702%20Documents/declassified/June 2020 FISC Opinion.pdf (noting government concession that third and fourth requests regarding Page "lacked adequate factual support"); *cf. id.* at 4 (noting that government, after the release of the OIG review of the Page request, has not argued that factual support was present for the first and second applications regarding Page, and that the FISC would therefore assume that those applications were similarly lacking).

²⁴ See 2019 OIG FISA Review, supra note 1, at 145-58.

²⁵ See Opinion and Order Regarding Use and Disclosure of Information, For. Intell. Surv. Ct., at 1-2 (June 25, 2020),

²⁶ See United States v. Moore, 612 F.3d 698, 701 (D.C. Cir. 2010).

²⁷ See Franks v. Delaware, 438 U.S. 154, 171-72 (1978)

²⁸ *Moore*, 612 F.3d at 701 (citing United States v. White, 270 F.3d 356, 365 (6th Cir. 2001)).

²⁹ White, 270 F.3d at 365-66.

cases that determine whether to exclude evidence from a search or wiretap.³⁰ The premise is the familiar "fruit of the poisonous tree" doctrine. If an affidavit supporting a search is inadequate, the court will suppress all of the evidence that the search revealed. When a trial court in a criminal prosecution suppresses evidence from a search because the affidavit seeking a warrant omitted an important fact, that decision may completely undermine the prosecution's case, leading to the defendant's acquittal. Similarly, if an appeals court determined that a trial court should have conducted a suppression hearing on an affidavit's omissions, that ruling may result in a convicted defendant getting a new trial.

Because of the high stakes dictated by the "fruit of the poisonous tree" doctrine, courts rightly consider whether other evidence cited in the affidavit would have sufficed to obtain a warrant.³¹ Suppose a court concludes that the other evidence, standing alone, would have sufficed. In that event the court will find that the omission or misrepresentation was not material, since accurate reporting of the fact would not have changed the outcome of the search request.³²

The higher threshold of the outcome test is inappropriate for assessing omissions in a matter like Carter Page's, involving a FISA request that never ripened into a criminal case involving the target. As in most FISA requests, there is no subsequent check on the legality of the surveillance order. There is no defendant to move to suppress evidence or on appeal to challenge a criminal conviction, and no prosecutor to argue to the trial court that her case will collapse if the court grants the defendant's suppression motion. The only safeguard for targets' privacy is the assessment of the FISC or some subsequent internal review by NSD or OIG.³³ It is therefore particularly appropriate to answer the question posed by the deliberative test: whether an accurate and comprehensive description would have changed the weight that lawyers, senior executive branch officials, and the FISC assign to respective facts.³⁴

³⁰ Franks v. Delaware, 438 U.S. 154, 171-72 (1978). Appellate courts first consider whether the trial court should hold a hearing on exclusion of evidence. *Id.* A defendant must also show that the affiant intentionally lied or acted with reckless disregard for the truth. *Id.* at 155-56.

³¹ United States v. Clark, 935 F.3d 558, 564-66 (7th Cir. 2019).

³² In most cases, courts find that other evidence would still have supported the warrant request. On relatively rare occasions, even the outcome test results in a finding that the omitted facts were material. *See id.* at 564-66 (finding affiant's omission of informant's criminal history and pending criminal charges material in drug-buy case, where neither the informant nor the affiant had witnessed the alleged drug transaction and no reliable informant corroborated the account).

³³ Indeed, even when prosecutors in a criminal case use evidence from a FISA request, secrecy built into the statute makes it almost impossible to challenge the adequacy of the request under *Franks*. *See* United States v. Daoud, 755 F.3d 479, 485-91 (7th Cir. 2014) (Rovner, J., concurring) (recounting statutory obstacles—based on need to cloak government sources and methods—to defendant learning of stated reasons for government's FISA request).

³⁴ In rare cases like Page's, the content of a FISA request may also become the subject of political disputes in Congress and between legislators and the president. See Peter Margulies, *Legal Dilemmas Facing White House Counsel in the Trump Administration: The Costs of Public Disclosure of FISA Requests*, 87 Fordham L. Rev. 1913 (2019). However, that kind of public dissection of a FISA request is uncommon, if not unique to Page's case. Based on the FISC's June 2020 opinion, the omissions in the Carter Page FISA request may also have met the higher outcome standard. But in the secret FISA context, which typically does not involve a criminal prosecution where the surveillance request is subject to a measure of judicial scrutiny, the deliberative test is superior to the outcome test.

B. Confirmation Bias and Adjudication of Materiality

Assessing whether including a fact would change the weighting of evidence is also useful because the contrasting outcomes test is subject to confirmation bias.³⁵ Human beings tend to fit new evidence into preconceived narratives. The *Franks* setting is a petri dish for this cognitive glitch.³⁶ Once a court has approved a warrant, to suppress evidence a court must find that other information in the request would have been insufficient to support a finding of probable cause. It is tempting to assess the other evidence as fitting the overall narrative of the defendant's factual guilt. There is no way to "unring the bell" and accurately determine whether a court lacking knowledge of the arc of the case would have denied the warrant. The deliberative test sidesteps this problem by focusing on whether inclusion of a fact would have changed the weight given to each relevant data point.

Facts that can affect weight in this fashion include both impeachment information about an informant and information that puts a target's activities in a different light. In a clear case, inclusion of this information might change the outcome, leading a senior official to decline to file a surveillance request or causing a court to deny that request if officials ultimately submit it. But even in cases where including such information does not change the outcome, it may change the weight that officials or the court give to evidence.

C. The Deliberative Test as Bayes' Theorem in Action

The soundest way to respond to a change in the weight given certain facts stems from Bayes' Theorem.³⁷ Bayes's pathbreaking work assesses the conditional probability of different scenarios based on emerging evidence. Under the theorem, a reduction in the weight given to certain inculpatory facts makes a scenario of guilt less likely—in other words, "probable cause" seems less probable. Correspondingly, the likelihood of an innocent explanation rises.

In the ordinary street crime context, suppose that a detective for a local police department had drafted a surveillance request regarding an individual the detective believed was engaged in drug trafficking. In the hypothetical, the detective also knew that the target worked on occasion as a confidential informant for the FBI. The target's FBI role would, under Bayes' Theorem, make it less likely that the target was engaged in drug trafficking on his own account and more likely that the target was merely participating in an operation under FBI supervision. Suppose that the

³⁵ See Russell Golman, David Hagmann & George Loewenstein, Information Avoidance, 55 J. Econ. Lit. 96, 101-03 (2017)

³⁶ Mary Nichol Bowman, Full Disclosure: Cognitive Science, Informants, and Search Warrant Scrutiny, 47 Akron L. Rev. 431, 465-68 (2014).

³⁷ See Mark Schweizer, De-biasing role induced bias using Bayesian networks, 18(4) L. Probability & Risk 255 (2019); Christian Dahlman & Anne Ruth Mackor, Coherence and probability in legal evidence, 18(4) L. Probability & Risk 275 (2019). For an example of a case that uses logic similar to Bayes' Theorem, see Hussain v. Obama, 718 F.3d 964, 969-70 (D.C. Cir. 2013) (suggesting that a Guantanamo detainee's living for a time in an Al Qaeda-affiliated group's guest house in Afghanistan, along with training with the Taliban, and presence with an automatic weapon near the front lines in Afghanistan, supported the inference that the detainee was part of the Taliban's fighting force); but see id. at 971-73 (Edwards, J., concurring) (asserting that majority's inference was unduly hasty, based on insufficient evidence, and too rigid to incorporate alternative explanations); cf. Shirin Sinnar, Separate and Unequal: The Law of "Domestic" and "International" Terrorism, 117 Mich. L. Rev. 1333, 1338 (2019) (asserting that inequality and bias toward Muslims, Arabs, and South Asians play a substantial role in outcomes of post-9/11 adjudication).

detective disclosed the target's FBI role to the court from which he was seeking a warrant. To determine which scenario was more likely, the court might seek more information, including further detail from the detective's own observation, the detective's other informants, and FBI agents who had worked with the target. If that information was already available, a court would scrutinize that data more carefully to determine whether it supported either the "drug trafficker" or the opposing "FBI undercover operation" narrative about the local detective's proposed target. That effort to obtain further information or focus more closely on other currently available information is the essence of materiality under the deliberative test.

In the Carter Page FISA request, Page's role as a contact for another U.S. intelligence agency is analogous to the disclosure in the hypothetical discussed above that the local detective's target was an FBI informant. Under FISA's "agent of a foreign power" standard, Page's U.S. intelligence contacts would create a counter-narrative to the draft request's scenario that Page was a Russian agent. All things being equal, a working foreign agent should not disclose to the U.S. government her contacts with her supposed foreign principal. Similarly, recall that the FBI sought to test Page's allegiance in August and then in October 2016 by setting up casual meetings between Page and an FBI CHS. Page's vehement denials to the CHS that he had met or even knew of certain senior Russian intelligence officials tended to rebut the Page-as-Russian-agent narrative.³⁸

The FBI case agent's failure to disclose this information to more senior officials considering the draft FISA request on Page meant that those officials could not respond like the court in our street drug hypothetical, by seeking more data or taking a fresh look at other currently available information. Since senior officials did not know about Page's contacts with another U.S. government intelligence agency or his denials to a CHS of links to senior Russian intelligence operatives, they also could not include that information in the FISA "read copy" application submitted on a preliminary basis to the FISC. The FISC legal advisor then lacked the opportunity to consider that information in Bayesian terms, as lowering the likelihood of the Russian agent narrative and raising the probability of a neutral explanation for Page's activities.

In addition, the omission of that information hindered a full assessment by senior U.S. officials and the FISC of the reliability of Christopher Steele, the former British intelligence agent who was the primary source for the allegations in the Page request. After probing by Justice Department lawyer Stuart Evans and the insistence of Evans and Mary McCord, who was then Acting Assistant Attorney General in charge of NSD, the FISA request included information about the U.S. partisan political origins of Steele's funding.³⁹ Inclusion of information about Page's U.S. intelligence contacts and denials of links to Russian operatives might have sharpened the FISC's and U.S. senior officials' scrutiny of Steele's claims, which turned out to be based on a network of sub-informants who also lacked personal knowledge of the events they described.⁴⁰ Under the

³⁸ 2019 OIG FISA Review, *supra* note 1, at 146-47; 168-69.

³⁹ *Id.* at 136-37.

⁴⁰ The FBI case agent who drafted the Page FISA request violated the FBI's own procedures by not ensuring that Steele's "handling agent" review and approve the draft's favorable characterization of Steele's reliability. The handling agent's own description, which the case agent did not include in the request, was more qualified. *Compare id.* at 161 (case agent's draft described Steele as source "whose reporting has been corroborated and used in criminal proceedings" and flows from "a number of ostensibly well-positioned sub-sources"), *with id.* (handling agent stated that "some of ... [Steele's] info has been corroborated when possible"). *Cf. id.* at 186-90 (noting that when FBI sought, after the 2016 election, to corroborate Steele's most sensational claims about Page with Steele's ostensible sub-source,

deliberative test, renewed focus on alternative scenarios and Steele's reliability reinforces the materiality of the information that the Page case agent failed to disclose.⁴¹

D. Material Omissions in Other FISA Requests

Moreover, the Justice Department has conceded that omissions or discrepancies in other FISA requests raised analogous issues of materiality. Consider a June 2020 supplemental filing with the FISC reviewing a very limited sample of cases. In that filing, the Justice Department conceded that it had omitted the material and relevant facts concerning a target earlier interview with a prosecutor. In a Bayesian sense, inclusion of the information about the interview with a prosecutor would have enhanced the probability that obtaining foreign intelligence was not a "significant" reason for the FISA request, and that officials had impermissibly sought surveillance merely as a end-run around the more robust protections of the criminal justice system. Similarly, the Justice Department in its July 2020 filing with the FISC had conceded that a request's claim that a target was "sympathetic" to a specific, named Islamic terrorist organization was materially inaccurate, since the relevant document in the accuracy file stated only that the target was sympathetic to radical Muslim "causes." In a Bayesian sense, a faithful account of the information in the accuracy file would have supported the counter-narrative that the target was merely one of millions of Americans with sympathy for a wide spectrum of radical causes on the Left and Right.

In each case, inclusion of the omitted or mischaracterized material might not have in itself caused the FISC to reject the FISA request. Indeed, perhaps driven by the confirmation bias that accompanies an already-granted application, the Justice Department asserted that in each case abundant other evidence supported the need for surveillance. However, the Justice Department's acknowledgement that these errors were material suggested that accurate descriptions would have at least intensified the focus on other information, to determine if that other data could support a

the sub-source informed the FBI that Steele had mischaracterized both the information that the sub-source had provided and the sub-source's level of personal knowledge about the claims); Horowitz, *supra* note ___, at 85-87 (discussing the FISA request's misleading description of Steele's reliability and sourcing).

⁴¹ Perhaps for similar reasons, the Department of Justice has now conceded and the FISC has assumed that this information was material. Opinion and Order Regarding Use and Disclosure of Information, For. Intell. Surv. Ct., at 1-4.

⁴² See U.S. Dep't of Justice, Nat'l Security Div., Supplemental Response to the Court's Order Dated April 3, 2020 and Motion for Extension of Time, In re Accuracy Concerns Regarding FBI Matters Submitted to the FISC, No. 19-02, at 9 (June 2020) (hereinafter NSD June Response).

⁴³ See U.S. Dep't of Justice, Nat'l Security Div., Supplemental Response to the Court's Order Dated April 3, 2020, In re Accuracy Concerns Regarding FBI Matters Submitted to the FISC, No. 19-02, at 4 (July 2020), https://assets.documentcloud.org/documents/7013140/NSD-Review-of-Woods-Procedures-IGAudit.pdf (hereinafter NSD July Response).

⁴⁴ Cf. Sinnar, supra note 37 (discussing bias toward Muslims in intelligence gathering, investigation, and prosecution); see also Sameer Ahmed, Is History Repeating Itself? Sentencing Young American Muslims in the War on Terror, 127 Yale L.J. 1520 (2017 (analyzing inequality in sentencing).

probable cause determination. Given this acknowledgment, the task for the FBI and NSD is to operationalize the deliberative test to materiality during the all-important drafting stage.⁴⁵

III. OVERBROAD QUERYING UNDER § 702

Given the vast quantities of information collected under § 702 and the statute's bar on targeting U.S. persons, U.S. person queries of incidentally collected § 702 information should be carefully tailored. The FBI has not complied with this foundational principle. Consider that the FBI in 2017 performed 3.1 million queries on its own database, which includes raw § 702 information.⁴⁶ That astronomical number does not allow for tailoring. Adding obstacles to adequate tailoring, the FBI lacks a dedicated § 702 database, instead dumping all information in one big vat of data.⁴⁷ As a result, virtually *any* query can return raw § 702 information.

The FISC agreed, finding that the FBI has posed a "large number of...queries that were not reasonably likely to return foreign-intelligence information or evidence of crime." The searches instead seemed to be "routine" and "maximal" checks, largely for the FBI's convenience. According to the FISC, the FBI has simply displayed "misunderstanding of the querying standard—or indifference toward it." ⁵⁰

For example, in 2017 or 2018 an agent queried 70,000 "communications facilities"—probably a mix of phone numbers and email accounts—"associated with persons with access to FBI facilities and systems." FBI agents ran queries that included § 702 information on a range of persons, including employees, contractors, and other visitors to FBI sites, without any concrete basis to believe that those queries would return evidence of a crime or foreign intelligence information. In a period stretching from 2018 through part of 2019, the FBI queried "identifiers"—presumably phone numbers or email addresses—for approximately 16,000 U.S. persons. According to the FISC, this querying operation was egregiously overbroad. Queries for a paltry total of *seven* of the persons that the FBI included had some ties to an official investigation. The queries of the remaining individuals—queries encompassing 15,900 U.S. persons—lacked that link. The FISC viewed this as another example of the "indiscriminate" queries that it had criticized robustly in its 2018 certification decision.

⁴⁵ The Justice Department and the FBI deserve commendation for candidly describing the material errors in these filings. That candor is difficult to achieve and—because of the need to preserve operational secrecy—delicate to execute. It is a valuable step toward lasting reform.

⁴⁶ In re Section 702 2018 Certification, at 66.

⁴⁷ *Id.* at 75.

⁴⁸ *Id.* at 68.

⁴⁹ In re Section 702 2018 Certification, at 72.

⁵⁰ *Id*.

⁵¹ *Id.* at 68-69.

⁵² In re Section 702 2019 Certification, For. Intell. Surv. Ct., at 66 (Dec. 6, 2019) (noting that FBI had posed queries regarding persons who had "visited ... [an] FBI office (e.g., for maintenance)") (emphasis omitted).

⁵³ *Id.* at 67.

⁵⁴ *Id*.

The FBI's ongoing track record on U.S. person querying has shown a marked *lack* of improvement over time. In its 2019 certification decision—released in September 2020—the FISC was charitable about the persistence of compliance issues. For example, the FISC noted that the FBI was "just starting" to implement remedial measures required in the 2018 certification decision, including methodical, *ex ante* documentation of the rationale for a particular U.S. person query. ⁵⁵ The FISC's equanimity was misplaced.

While reforming a massive institution like the FBI may be like trying to turn around a battleship, optimism about future compliance should stem from concrete evidence of improvement. After all, the FBI is an institution with a tradition of excellence and diligence.⁵⁶ If that institution is competent enough to investigate spies and terrorists, as well as members of organized crime, drug trafficking syndicates, and white-collar criminals of all kinds, it should be able to show improvement on a matter involving the privacy of U.S. persons.

The opportunity to partner with lawyers from the Justice Department should enhance the prospects for measurable increases in compliance. The *absence* of that demonstrable improvement suggests that compliance is simply not a high priority for either the FBI or Justice Department lawyers. The FISC's failure to order robust remedies for this persistent culture of noncompliance suggests that the FISC has acquired the Justice Department's habit of indulging the FBI instead of holding it to account. Here, as with materiality, tangible evidence of improvement is desperately needed.

IV. INADEQUATE OR NONEXISTENT DOCUMENTATION: EVIDENCE OF A FLAWED CULTURE

The lack of documentation of FBI actions is also a recurring problem. In the "traditional FISA" context, FBI policies require the assembly of accuracy files that include all documents mentioned in a surveillance request. However, the FBI has failed to comply with these procedures. In the § 702 context, the FISC and NSD have faced ongoing problems in obtaining clear written justifications for FBI U.S. person queries. The FBI's documentation deficits do not merely impede efforts to review compliance with statutes and the Constitution. More generally, the FBI's marked documentation deficit reveals an underlying problem with the Bureau's *culture* of adherence to legal norms.

Noncompliance with procedure on accuracy files takes two forms. In over 10% of cases studies, the FBI simply fails to assemble an accuracy file at all.⁵⁷ In a substantial cohort of other cases, the accuracy file is incomplete. For example, some assertions in the request lack support from documentation in the accuracy file. In other cases, the document in the accuracy file stands for a different proposition than the assertion in the request. The supported proposition may be more modest than a broad claim made in the request, or may indeed take the *opposite* view than

⁵⁵ *Id*. at 67.

⁵⁶ James Comey, A Higher Loyalty: Truth, Lies, and Leadership 137 (2018); Peter Strzok, Compromised: Counterintelligence and the Threat of Donald J. Trump (2020).

⁵⁷ See Office of the Inspector General, U.S. Dep't of Justice, Management Advisory Memorandum for the Director of the Federal Bureau of Investigation Regarding the Execution of Woods Procedures for Applications Filed with the Foreign Intelligence Surveillance Court Relating to U.S. Persons 7 (March 2020) (hereinafter OIG Memorandum).

the request's claim.⁵⁸ For example, the FBI alleged that Page did not provide to the FBI CHS in October 2016 any "specific details" to counter allegations that Page had met with senior Russian intelligence officials.⁵⁹ However, the documentation in the Woods file actually reflected that in the conversation with the CHS, Page had specifically denied meeting the senior Russian officials or even knowing of the existence of one of them.⁶⁰ NSD's response to the OIG March 2020 Memorandum acknowledges that NSD lawyers often had to discover support for allegations in surveillance requests through after-the fact interviews with FBI agents who had not adequately completed assembly of the accuracy file.⁶¹

Similarly, regarding § 702, through the dates covered by the 2018 FISC opinion, the FBI routinely did not document the bases for U.S. person queries of the § 702 database. Congress recently required that the Attorney General "ensure" that the FBI and other agencies used an effective "technical procedure" to record each U.S. person query. Unfortunately, the FBI as of the fall of 2018 had wholly failed to implement this technological fix. Indeed, as of 2018, the FBI's procedures for recording U.S. person queries seemed haphazard, at best. Often Justice Department lawyers had to try to prompt FBI agents to recall the rationale for certain queries. In a significant percentage of cases, the FBI agents failed to remember. The absence of any methodical, comprehensive approach to documenting U.S. person queries severely hinders compliance with both the statutory requirement that a query be likely to return "foreign intelligence information" or "evidence of crime" and the Fourth Amendment requirement that a search be "reasonable."

This documentation deficit is both a symptom and a cause of the FBI's failure to comply with legal norms. As FISC amicus curiae and former assistant attorney general for NSD David Kris put it, the FBI and NSD must develop a sound compliance culture.⁶⁶ That culture should

⁵⁸ 2019 OIG FISA Review, *supra* note 1, at 374.

⁵⁹ *Id.* at 170.

⁶⁰ Id. at 374.

⁶¹ See NSD June Response, *supra* note 42, at 6-7.

^{62 50} U.S.C. § 1881a(f)(1)(B).

⁶³ In re 2018 Certification, at 56-61.

⁶⁴ *Id*. at 74.

⁶⁵ Cf. United States v. Hasbajrami, 945 F. 3d 641, 669-73 (2d Cir. 2019) (holding that the querying of § 702 data for U.S. person information constitutes a Fourth Amendment search, and remanding to the district court to assess the reasonableness of procedures governing such queries for Fourth Amendment purposes).

⁶⁶ See Letter from David S. Kris, Esq. to Judge James E. Boasberg, For. Intell. Surv Ct., In re Accuracy Concerns **FBI** 19-02 Regarding Matters Submitted the FISC, No. 15, 2020), https://assets.documentcloud.org/documents/6656762/FISC-Misc-19-02-Amicus-Curiae-Letter-Brief.pdf (hereinafter Kris Amicus Letter Brief). Other intelligence agencies such as the National Security Agency (NSA) have made impressive strides in this area, as the transparency of the web site "IC on the Record"—the source of the FISC opinions discussed in this subsection—makes clear. But see Margo Schlanger, Intelligence Legalism and the National Security Agency's Civil Liberties Gap, 6 Harv. Nat'l Sec. J. 112, 113 (2015) (suggesting that lawyers in surveillance agencies need to do more to proactively address civil liberties concerns).

include what students of regulatory compliance in the private sector call gatekeeping.⁶⁷ A gatekeeping approach requires the internalization of norms. Rather than applying norms as an afterthought, a gatekeeping culture requires that norms be an integral component of everyday organizational practice. As part of that daily practice, FBI agents and lawyers should deliberate about the factual basis for a particular query or request.⁶⁸ The requirement of documentation—including assembling the accuracy file in a traditional FISA request and recording the justification for a U.S. person query of the § 702 database—plays a key role in impressing upon the FBI agent that care is necessary in making such inquiries. *Ex ante*—before a query's formulation—an agent's understanding that she needs to assemble documentation promotes methodical habits that guard against arbitrary or invidious criteria. After the fact (*ex post*), documentation facilitates review, which allows both the FISC and executive branch officials to detect mistakes and learn from them. Culture is dynamic, not static, and that review process promotes growth.

Moreover, the FISC's remedies and the remedies proposed in August 2020 by Attorney General William Barr are inadequate. The FISC has now required FBI agents to get approval from FBI lawyers and document the basis for any U.S. person queries. ⁶⁹ These are useful steps, although they fall short. Requiring approval from FBI lawyers will not be sufficient to change FBI culture. FBI lawyers are too close to the current ethos to be an effective check, although they could also be important players in cultural transformation. Documentation of justifications for querying is also useful, but would be far more effective with full technological resources—including artificial intelligence (AI)—for monitoring and analyzing all justifications. Similarly, Attorney General Barr's establishment of an FBI auditing office is a constructive step. ⁷⁰ However, without full technological capability, that office may also flounder.

V. ANTIOUATED TECHNOLOGY

The other problem with the FBI is the antiquated state of its technology. The FBI's clinging to cumbersome technology is an apt metaphor for its recurring issues with compliance. A

⁶⁷ See Coffee, Gatekeeping, supra note 3; William H. Simon, The Practice of Justice 37-40 (1998); John C. Coffee, Jr., Gatekeeper Failure and Reform: The Challenge of Fashioning Relevant Reforms, 84 B.U. L. Rev. 301 (2004); Schlanger, supra note 66, at 113.

⁶⁸ That deliberation need not be unduly time-consuming, since the need for a "traditional FISA" surveillance request or a § 702 U.S. person query may spring from exigent circumstances. Ideally, as a compliance culture takes hold, deliberation will occur within each agent as an integral part of the process of formulating a request or query.

⁶⁹ See In re 2019 Certification, at 64-65.

⁷⁰ See William P. Barr, Att'y Gen., U.S. Dep't of Justice, Augmenting the Internal Compliance Functions of the Federal Investigation (Aug. 2020), https://www.justice.gov/ag/page/file/1311696/download?utm_medium=email&utm_source=govdelivery. The other move requires additional review of case and accuracy files in "traditional FISA" cases and more in-depth review by senior officials of requests targeting federal elected officials, candidates for federal elected office, and their respective staffs. See William P. Barr, Att'y Gen., U.S. Dep't of Justice, Supplemental Reforms to Enhance Compliance, Oversight, and Accountability with Respect to Certain Foreign Intelligence Activities of the Federal Bureau of Investigation (Aug. 2020), https://www.justice.gov/ag/page/file/1311701/download?utm_medium=email&utm_source=govdelivery. See William P. Barr, Att'y Gen., U.S. Dep't of Justice, Augmenting the Internal Compliance Functions of the Federal Bureau Investigation (Aug. 2020), https://www.justice.gov/ag/page/file/1311696/download?utm_medium=email&utm_source=govdelivery.

determined effort to bring the FBI's technology up to date would also send a compelling signal about a positive change in FBI culture.⁷¹

The most important facet of needed technological change concerns U.S. person queries under § 702. That change has two elements: 1) the FBI's database, and, 2) the way in which it records queries. Both changes are vital.

The database issue arises because, as the FISC noted in its 2018 opinion, the FBI does not have a separate § 702 database. Instead, the FBI keeps all information in one big data "bucket," which agents then query.⁷² While this approach may seem more efficient at first blush, it also has significant downsides, which the FBI has not fully acknowledged.

The single-database system compounds flaws in FBI culture, because it encourages broad queries. Agents have the world at their fingertips. Unfortunately, that perspective encourages sweeping queries like those the FISC flagged, such as queries about U.S. persons with access to FBI facilities. In contrast, a query to a dedicated § 702 database would need to be a much more tightly crafted query—otherwise that query would be very difficult to justify. The FBI may already have the technology to construct a dedicated § 702 database. FBI agents currently can opt out of § 702 data when they pose queries. The first agency can enable agents to opt out, in order to avoid overbroad queries. If the agency can enable agents to opt out, it can also require agents to opt in if they wish to query § 702 data. Imposing an opt-in requirement would encourage greater deliberation about the breadth and urgency of § 702 queries at little or no cost to efficiency.

⁷¹ The FBI has developed effective technology in automating the process of issuing National Security Letters for financial records and other documents. *See* Strzok, *supra* note 56; Kris Amicus Letter Brief, *supra* note 66, at 8.

⁷² In re Section 702 2018 Certification, at 75. The single-database approach may be more a *choice* about systems architecture, allowing the FBI to perform queries in a way that is arguably more efficient. *Id.* at 75-76. If the single-database approach is a choice, the FBI could also choose to segregate § 702 data. *Cf.* In re Section 702 2019 Certification, at 68-69 (noting that FBI, after 2018 FISC certification ruling, facilitated agents' opt-out of § 702 data when posing queries). But even if the single-database approach is a choice in that sense, the efficiency argument undergirding that choice is outmoded, given the current stress on ensuring that agents pose appropriately tailored queries to the § 702 database.

⁷³ *Id.* at 68-69.

⁷⁴ Cf. Ari Ezra Waldman, *Privacy Law's False Promise*, 97 Wash. U. L. Rev. 773, 827-28 (2020). For consumers confronting choices about whether they should visit sites that use their personal data, opt-in requirements may not provide sufficient protection. Opt-in requirements may be ineffective in this context because they cannot supply lay consumers with all the information necessary to make an informed decision. That concern is not germane to the § 702 query context, in which trained agents would make decisions on whether to use a database that includes *other people's* private information. In that situation, the only question is whether an opt-in regime that flags the potential for intruding on others' privacy is more effective than an opt-out regime.

⁷⁵ Perhaps FBI agents need more training in the basics of conducting research online. Internet research routinely involves consulting multiple databases. For example, a lawyer conducting legal research may do a search in a specialized legal database such as Lexis, WestLaw, or Pacer, but may also do a related search in a social science database or surf the Web with a search engine such as Google. Using a range of databases is not difficult or exotic. It is simply part of the modern researcher's toolkit. Since FBI agents often have legal or other professional training, using this toolkit should not be a stretch. *Cf.* Iantha M. Haight, *Digital Natives, Techno-Transplants: Framing Minimum Technology Standards for Law School Graduates*, 44 J. Legal Prof. 175, 208-14 (2020) (discussing benefits

Compounding the problem, the FBI has not yet implemented Congress's directive to develop "technological means" to record U.S. person queries. Following Congress's directive would optimize the ability to assess FBI queries. According to the FISC 2019 certification decision, the FBI has implemented a temporary system that requires FBI personnel to state whether a query relates to a U.S. person and explain how it satisfies the querying standard. According to the FBI, a log of the queries and explanations will be available for auditing. This is a helpful step, but updated technology would allow even more comprehensive monitoring, as well as the use of AI to flag overbroad queries in real time, suggest more tailored querying terms, and make finer distinctions between querying formulations.

Judging from the 2019 FISC certification decision, the new documentation requirement imposed by the FISC has not yet curbed "widespread violations" of the FBI's querying standard.⁷⁹ Perhaps over time, the documentation requirement will have the desired effect. However, a comprehensive technical solution would likely yield more decisive changes in FBI culture. A technological fix should therefore be a top priority of the FBI in the next 18-24 months.

VI. REMEDIES

Innovative remedies are necessary for the serious compliance issues discussed above. These remedies should include a more proactive role for the FISC and greater use of technology. Remedies such as a FISC special master for technology, use of AI to flag materiality and querying errors, and a public advocate will promote a richer dialogue between the FBI and the Justice Department on the imperative of nurturing a compliance culture.

A. Special Master for Technology

While the FISC has been vigorous in its criticism of FBI U.S. person querying practices, its remedies have been incomplete. In particular, the FISC should remedy the FBI's tardiness in updating its technology. Here, the FISC should appoint a special master to work with the FBI. Inherent judicial power that all Article III judges possess absent express congressional modification includes appointment of a special master to assist the court. Rederal courts have appointed special masters to assist the court in finding facts regarding progress toward remedying legal wrongs. The need for such assistance is clearest in matters that require particular expertise.

and drawbacks of various online research algorithms and search protocols). The prospect of additional training should be viewed as an opportunity, not a burden. Moreover, perhaps the FBI should revise its hiring practices to prioritize technological competence not just for specialists, but for generalist agents. This, too, is an opportunity that the FBI should embrace.

⁷⁶ In re 2019 Certification, at 64.

⁷⁷ *Id.* at 64-65.

⁷⁸ *Id.* at 64. *Cf.* Robert S. Litt, *The Fourth Amendment in the Information Age*, 126 Yale L.J. F. 8, 18 (2016) (discussing importance of using technology to audit electronic searches and queries).

⁷⁹ In re 2019 Certification, at 65-66.

⁸⁰ Cf. Nken v. Holder, 556 U.S. 418, 427 (2009) (discussing federal courts' inherent authority). The FISC has both inherent and statutory authority to appoint *amici curiae* to present legal arguments that oppose the government's position. See In re 2018 Certification, at 4 (noting participation of *amici*). The power to appoint a special master springs from the same well.

For example, special masters have participated in the remedial phase of litigation to reform institutions such as prisons, juvenile justice facilities, and state psychiatric hospitals.⁸¹

Because the FISA context entails both noncompliance over time and technical issues, a special master would be particularly appropriate. The FBI has argued to the FISC that technological changes would require massive expenditures of time, effort, and money. The FISC would benefit from an independent and informed perspective on whether the FBI has fully considered all feasible alternatives. If practicable alternatives exist, the FISC would benefit from input on implementing those alternatives in a timely fashion. Once appointed, the special master should gather information and report back to the FISC periodically on progress that the FBI is making toward, 1) ending its "single-database" approach to querying and requiring that agents "opt in" to receive § 702 data, 2) implementing "technological means" for documenting all U.S. person queries, and, 3) fully digitizing all accuracy files.

B. Artificial Intelligence and Contesting Assumptions

To consolidate the lessons learned through de novo review, the FBI and NSD should not merely rely on human intelligence; they should also use artificial intelligence (AI). AI techniques such as machine learning can efficiently address issues that the FISC, NSD, and FBI lawyers have detected and spot further issues that would otherwise escape attention.⁸³ While machine learning is far from perfect, software engineers who know law, technology, and institutional culture can minimize the risks from AI and maximize the benefits for legal compliance.⁸⁴

Machine learning models can look forward and backward. Looking at past work, models such as neural networks can identify patterns of errors that would elude human detection. Machine learners such as decision trees can break down past decisions into their component parts, discerning the precise branch where a decision went in the wrong direction. Looking toward the future, machine learners can spot flaws in the drafting process. They can also send alerts to agents

⁸¹ Peter Margulies, Searching for Federal Judicial Power: Article III and the Foreign Intelligence Surveillance Court, 85 Geo. Wash. L. Rev. 800, 815-16 (2017); see also James E. Pfander & Daniel D. Birk, Article III Judicial Power, the Adverse-Party Requirement, and Non-Contentious Jurisdiction, 124 Yale L.J. 1346, 1387 (2015) (discussing entering and enforcement of consent decrees regarding remedying illegal conditions); Home v. Flores, 557 U.S. 433, 459-70 (2009) (elaborating on principle that changed circumstances may require modification of consent decree to avoid undue judicial intrusion on political branches).

⁸² See In re 2019 Certification, at 65.

⁸³ Jack M. Balkin, The Constitution in the National Surveillance State, 93 Minn. L. Rev. 1, 24 (2008).

⁸⁴ David Freeman Engstrom, Daniel E. Ho, Catherine M. Sharkey & Mariano-Florentino Cuellar, Report Submitted to the Admin. Conf. of the United States, *Government by Algorithm: Artificial Intelligence in Federal Administrative Agencies* 28-29 (2020) (discussing how securities regulators use AI to detect insider trading), https://www-cdn.law.stanford.edu/wp-content/uploads/2020/02/ACUS-AI-Report.pdf; Emily Berman, *A Government of Laws and Not of Machines*, 98 B.U.L. Rev. 1277, 1286-90 (2018); David Lehr & Paul Ohm, *Playing with the Data: What Legal Scholars Should Learn About Machine Learning*, 51 U.C. Davis L. Rev. 653 (2017); Peter Margulies, *Surveillance by Algorithm: The NSA, Computerized Intelligence Collection, and Human Rights*, 68 Fla. L. Rev. 1045, 1063-71 (2016); cf. Margaret Hu, *Small Data Surveillance v. Big Data Cybersurveillance*, 42 Pepp. L. Rev. 773, 812–16 (2015) (urging validation of machine learning models).

who are using improper queries for § 702 or omitting material information from "traditional FISA" requests. 85

Machine learning models can help identify and diagnose tendencies among FBI agents to make mistakes in either traditional FISA applications or § 702 U.S. person queries. Connecting a machine learning model, such as a neural network, to the devices used by FBI agents can identify biases and missteps, and help educate agents to avoid those mistakes in the future. A machine can also provide an alert to an agent about a potential First Amendment issue in a FISA request or an overbroad U.S. person query that could raise Fourth Amendment problems. That capability can assist in remedying discrimination against Muslim-Americans in surveillance.

Consider a discrepancy noted earlier in this Article between a FISA request and the agent's accuracy file, as reported by the Justice Department in a filing with the FISC. The FISA request stated that the target had "become sympathetic toward a particular terrorist group." However, the support document in the accuracy file reported only that, according to an informant, the target had "become more sympathetic to radical Muslim causes." This difference is material, as the Justice Department acknowledged. A machine learning model with comprehensive inputs from FISC submissions, accuracy files, legal precedents, and other databases could have spotted this gap and sent out an alert.

Of course, machine learning can also reflect bias. 90 Both detecting bias in AI and tuning up AI to spot bias in other systems involve careful assembly of training data and validation of outputs. 91 With a creative, inclusive, and responsible approach, AI can serve the gatekeeping model.

C. Adversarial Testing Through a Public Advocate

As a key addition to enhance the gatekeeping model, FISA should provide for adversarial testing of requests. Currently, FISC proceedings are almost exclusively ex parte, except for a limited range of cases in which the court names amici curiae to address legal issues. Amici have played a salutary role in cases like the 2018 FISC § 702 certification review. ⁹² Commentators

⁸⁵ Cf. Litt, supra note 78, at 18 (discussing role of technology).

⁸⁶ See Cass R. Sunstein, Algorithms, Correcting Biases, 86 Soc. Res'ch 499 (2019).

⁸⁷ See Sinnar, supra note 37; cf. Faiza Patel & Megan Koushik, Brennan Center for Justice, Countering Violent Extremism.

https://www.brennancenter.org/sites/default/files/publications/Brennan%20Center%20CVE%20Report.pdf (arguing that countering violent extremism (CVE) programs are intrusive and ineffective) (2017)

⁸⁸ See NSD July Response, *supra* note 43, at 4; see *supra* notes 43-44 and accompanying text.

⁸⁹ See NSD July Response, *supra* note 43, at 4.

⁹⁰ See Ashley S. Deeks, *Predicting Enemies*, 104 Va. L. Rev. 1529, 1563-65 (2018); Aziz Z. Huq, *Racial Equity in Algorithmic Criminal Justice*, 68 Duke L.J. 1043, 1080-81 (2019); Katherine J. Strandburg, *Rulemaking and Inscrutable Automated Decision Tools*, 119 Colum. L. Rev. 1851, 1877-78 (2019).

⁹¹ See Hu, *Big Data Cybersurveillance*, supra note 84, at 812-16.

⁹² In re Certification, at 85.

have long called for a public advocate to address factual as well as legal issues. ⁹³ It is time to take that step through creation of a public advocate at the FISC as part of legislative reform efforts now underway in Congress in the wake of the OIG Carter Page FISA report. ⁹⁴

A public advocate could engage in true adversarial testing of both certifications under § 702 and court orders under "traditional FISA." Under § 702, a public advocate could periodically sample § 702 selectors or query terms, to determine that the selectors had a bona fide connection to the purposes of the statute and the queries were related to foreign intelligence. Under traditional FISA, the public advocate could appear in all cases seeking surveillance or a sample of cases. That sample could be chosen randomly, or based on certain criteria, including cases likely to raise civil liberties issues.

A sampling approach would reduce the disruption caused by an additional party to FISC proceedings, while retaining the "demonstration effect" that a public advocate would have on the FBI and NSD. Both of these units would internalize the lessons learned in contested proceedings and adopt those lessons in cases across the board. The need to anticipate opposing arguments on facts and law would also strengthen the hand of civil liberties and privacy officers within the FBI and the rest of the intelligence community. The FISC would benefit from the rigor of adversarial proceedings and apply that learning to the rest of its docket.

CONCLUSION

FISA functions best when the FBI and NSD are joint gatekeepers. That posture relieves pressure on the FISC, which is dependent on information it receives from the executive branch. Unfortunately, the Carter Page and § 702 querying episodes demonstrate that the FBI and NSD have chafed at this gatekeeping role.

The FBI is the prime mover in this resistance to gatekeeping, but NSD has served as the Bureau's enabler. Deficits include materiality under "traditional FISA," § 702 querying breadth, documentation, and technology. Without effective remedies, FISA will become a little more than a complex organizational flow chart, not a framework for national security surveillance.

To bridge this gap, the FISC should appoint a special master and mandate machine learning to analyze materiality, bias, and tailoring under both "traditional FISA" and § 702. Congress should establish a public advocate to provide adversarial testing of the government's position. These remedies will not solve all of FISA's problems. But they will give gatekeeping a chance to hold its own.

⁹³ See Margulies, *Searching for Judicial Power*, *supra* note 81; Stephen I. Vladeck, *The FISA Court and Article III*, 72 Wash. & Lee L. Rev. 1161, 1170–80 (2015); Faiza Patel & Raya Koreh, *Improve FISA on Civil Liberties by Strengthening Amici*, Just Security (Feb. 26, 2020), https://www.justsecurity.org/68825/improve-fisa-on-civil-liberties-by-strengthening-amici/; Andrew Weissman, *The Need for Increased Amicus Role in the FISA Process*, Just Security (Jan. 14, 2020), https://www.justsecurity.org/68047/the-need-for-increased-amicus-role-in-the-fisa-process/; see also Marty Lederman & Steve Vladeck, *The Constitutionality of a FISA "Special Advocate"* (Nov. 4, 2013), available at http://justsecurity.org/2013/11/04/fisa-special-advocate-constitution/ (concluding that public advocate would be constitutional).

⁹⁴ On these efforts generally, see Julian Sanchez, *A Chance to Fix FISA*, Just Security (March 27, 2020), https://www.justsecurity.org/69437/a-chance-to-fix-fisa/.