Volume 230 Issue 1 2022

MILITARY LAW REVIEW

Articles

Academic Journal No. 27-100-230-1

Military Law Review

Volume 230 **Issue 1** **2022**

CONTENTS

Articles

Headquarters, Department of the Army, Washington, D.C.

Academic Journal No. 27-100-230-1, 2022

Military Law Review
Volume 230
Issue 1

Since its inception in 1958 at The Judge Advocate General's School, U.S. Army, in Charlottesville, Virginia, the *Military Law Review* has encouraged a full and frank discussion of legislative, administrative, and judicial principles through a scholarly examination of the law and emerging legal precepts. In support of that mission, the *Military Law Review* publishes scholarly articles that are relevant to, and materially advance, the practice of law within the military.

The *Military Law Review* does not promulgate official policy. An article's content is the sole responsibility of that article's author, and the opinions and conclusions that are reflected in an article are those of the author and do not necessarily reflect the views of the U.S. Government, the Department of Defense, the Department of the Army, The Judge Advocate General's Corps, The Judge Advocate General's Legal Center and School, or any other governmental or non-governmental agency.

WEBSITE: The *Military Law Review* is available online at https://tjaglcs.army.mil/mlr.

CITATION: Cite this issue of the *Military Law Review* as 230 MIL. L. REV. [page number] (2022).

MANUSCRIPT SUBMISSIONS: The *Military Law Review* accepts manuscript submissions from military and civilian authors. Any work submitted for publication will be evaluated by the *Military Law Review*'s Board of Editors. In determining whether to publish a work, the Board considers the work in light of the *Military Law Review*'s mission and evaluates the work's argument, research, and style.

No minimum or maximum length requirements exist. Footnotes should be numbered consecutively from the beginning to the end of the manuscript rather than by section. Citations must conform to *The Bluebook: A Uniform System of Citation* (21st ed. 2020) and the *Military Citation Guide* (24th ed. 2021). Submissions should include biographical data for each author, to include branch of service, duty title, present and prior positions or duty assignments, all degrees (with names of granting schools and years received), and previous publications. If submitting a lecture or paper prepared in partial fulfillment of degree requirements, the author should include the date and place of delivery of the lecture or the date and source of the degree.

Submissions must be in Microsoft Word format and should be sent via email to the Editor, *Military Law Review*, at usarmy.pentagon.hqda-tjaglcs.list.tjaglcs-mlr-editor1@mail.mil. If email is not available, please forward the double-spaced submission to the Editor, *Military Law Review*, Administrative and Civil Law Department, The Judge Advocate General's Legal Center and School, U.S. Army, 600 Massie Road, Charlottesville, Virginia 22903-1781.

MILITARY LAW REVIEW

Volume 230 Issue 1

COMPELLED DECRYPTION IN THE MILITARY JUSTICE SYSTEM: WHETHER THE ARTICLE 30A, UCMJ, INVESTIGATIVE SUBPOENA IS A LAWFUL AND PRACTICAL METHOD TO OBTAIN AN ACCUSED'S ELECTRONIC DEVICE IN AN UNENCRYPTED STATE

MAJOR JEFFREY C. SULLIVAN*

I. Introduction

The use of investigative subpoenas under Article 30a, Uniform Code of Military Justice (UCMJ), to compel decryption of electronic devices under the control of the accused is a lawful and practical method to obtain access to otherwise lawfully seized electronic media. Specifically, the Government should seize the device through the normal search authorization process and then seek a judicially issued Article 30a, UCMJ, investigative subpoena compelling the accused to produce the device in an unencrypted condition with any security features that would frustrate forensic extraction disabled. If the accused declines to obey a military judge's order directing compliance with such a subpoena, the Government should both request that the military judge impose contempt punishment under Article 48, UCMJ, and consider prosecution for the refusal to comply under any of a number of articles of the UMCJ.

The applicability of the Fifth Amendment protection against self-incrimination will turn on applying the act of production doctrine and the foregone conclusion doctrine. Under the act of production doctrine, an act such as decrypting a device can qualify for Fifth Amendment protection if

* Judge Advocate, United States Air Force. LL.M., University of Nebraska College of Law (2021); J.D., University of Virginia School of Law (2009); B.A., Boston College (2006)). Major Sullivan has served as a Senior Trial Counsel and an Area Defense Counsel in the Air Force JAG Corps. He is a member of the bars of Maryland and the District of Columbia. The views expressed in this article are those of the author and do not reflect the official policy or position of the United States Air Force, the Department of Defense, or the U.S. Government.

it is "testimonial, incriminating, and compelled."[1] The foregone conclusion doctrine, however, can render an act of production non-testimonial (and thus not protected by the Fifth Amendment) if any implied testimony is a "foregone conclusion."[2] Although military appellate courts thus far have declined to rule on the foregone conclusion doctrine and compelled decryption, an analysis of the UCMJ, the *Manual for Courts-Martial* (*MCM*), and military and civilian case law suggests that the foregone conclusion doctrine would apply to compelled decryption in the military justice system like in other Federal courts.

Employing the Article 30a, UCMJ, investigative subpoena to compel decryption would align military practice with the Federal civilian practice of using grand jury subpoenas to compel decryption. Although either a Government counsel-issued subpoena or a superior officer's extra-judicial order is lawful so long as the foregone conclusion doctrine applies, the judicially issued Article 30a, UCMJ, investigative subpoena is a more practical investigative tool that provides for more orderly litigation for a number of reasons. First, a pre-referral subpoena authorized by the general court-martial convening authority (GCMCA) and issued by Government counsel would be timely but would inevitably require judicial intervention to resolve a request for relief. Second, a superior officer's order would also be timely, but the Article 30a, UCMJ, process avoids placing defense counsel in the position of potentially advising a client to violate a superior officer's order and litigating its lawfulness at a later court-martial. Third, a subpoena issued either during a preliminary hearing or after referral comes too late in the military justice process to be a practical investigative tool. Therefore, in most cases, the Government should elect to pursue the Article 30a, UCMJ, judicially issued subpoena process over lawful alternatives. Where time is of the essence, however, the Government might elect more a more expeditious option, such as a superior officer's order.

---

[1] Hiibel v. Sixth Jud. Dist. Ct. of Nev., 542 U.S. 177, 189 (2004).

[2] Orin Kerr, *Compelled Decryption and the Privilege Against Self-Incrimination*, 97 TEX. L. REV. 767, 771 (2019).

II. Background

A. Decryption in Criminal Investigations

The accused's electronic devices, particularly mobile phones, "are potentially rich sources of evidence."[3] Evidence on the accused's mobile device may be contraband (e.g., child pornography) or it may be evidence of another offense (e.g., incriminating text messages, photographs, or videos). But efforts to search the accused's device may be frustrated if the device is encrypted.[4] Modern Apple and Android mobile phones, for example, are encrypted by default.[5] Thus, investigators with a proper search authorization will nonetheless need to overcome the decryption to obtain evidence. If the Government can overcome the encryption via technical means, there will be no legal impediment to using such evidence against the accused. It may not be possible, however, to decrypt a device by technical means, or the time required for technical decryption may be years or decades, making such decryption impracticable for prosecution.[6] In such cases, the Government's only option may be to compel the accused to decrypt the device and litigate likely Fifth Amendment based objections.[7]

---

[3] KRISTIN FINKLEA, CONG. RSCH. SERV., R444187, ENCRYPTION AND EVOLVING TECHNOLOGY: IMPLICATIONS FOR U.S. LAW ENFORCEMENT INVESTIGATIONS 4 (2016).

[4] The Third Circuit has explained encryption as follows:

> Encryption technology allows a person to transform plain, understandable information into unreadable letters, numbers, or symbols using a fixed formula or process. Only those who possess a corresponding "key" can return the information into its original form, *i.e.* decrypt that information. Encrypted information remains on the device in which it is stored, but exists only in its transformed, unintelligible format.

United States v. Apple MacPro Comput., 851 F.3d 238, 242 n.1 (3d Cir. 2017).

[5] David Nield, *How to Get the Most Out of Your Smartphone's Encryption*, WIRED (Jan. 29, 2020, 8:00 AM), https://www.wired.com/story/smartphone-encryption-apps.

[6] FINKLEA, *supra* note 3, at 9 (discussing the Federal Bureau of Investigation's difficulty in unlocking an iPhone in the San Bernadino shooting case); KRISTIN FINKLEA, CONG. RSCH. SERV., RL 44481, ENCRYPTION AND THE "GOING DARK" DEBATE 1 (2017) (discussing the challenges of "warrant-proof" encryption).

[7] David Rassoul Rangaviz, *Compelled Decryption & State Constitutional Protection Against Self-Incrimination*, 57 AM. CRIM. L. REV. 157, 157 (2020).

B. Military Subpoena Practice Prior to the Military Justice Act of 2016

Before addressing the ability to overcome an accused's Fifth Amendment objections to compelled decryption, it is necessary to review the mechanism by which the Government would seek to compel decryption. Prior to the enactment of Article 30a, UCMJ, the military justice system lacked a true pre-referral investigative subpoena process. The U.S. Army Criminal Investigation Division (CID), the Naval Criminal Investigative Service, and the Air Force Office of Special Investigations could request Department of Defense (DoD) Inspector General (IG) subpoenas.[8] Despite access to this mechanism, jurisdiction over a respondent's refusal to obey such subpoenas rested with U.S. district courts rather than courts-martial.[9] Additionally, the subject matter of DoD IG subpoenas is limited to subpoenas "necessary in the performance of the functions assigned by this [IG] Act."[10] Thus, a respondent could also challenge a DoD IG subpoena as irrelevant to the DoD IG's mission of investigating fraud, waste, and abuse.[11]

Prior to implementation of the Military Justice Act of 2016 (MJA 2016), military prosecutors did not obtain subpoena power until after referral of charges to a court-martial. Military practice thus contrasted with Federal civilian practice, in which civilian Federal prosecutors could seek grand jury subpoenas during the investigative process. The Military Justice Review Group (MJRG) recommended that Congress bring military practice in this area in line with civilian practice. The MJRG's report and recommendations are discussed in detail in Section III.A. Congress adopted this recommendation by adding Article 30a to the UCMJ and amending Article 46, UCMJ, as part of MJA 2016.[12]

---

[8] U.S. DEP'T OF DEF., DIR. 5106.01, INSPECTOR GENERAL OF THE DEPARTMENT OF DEFENSE (20 Apr. 2012) (C2, 29 May 2020); *see* United States v. Byard, 29 M.J. 803, 805 (C.M.R. 1989) (describing use of Department of Defense Inspector General subpoenas by Army, Navy, and Air Force investigators).

[9] 5 U.S.C. app. § 6.

[10] *Id.* § 6(a)(4).

[11] Major Joseph B. Topinka, *Expanding Subpoena Power in the Military*, ARMY LAW., Sept. 2003, at 15, 22; Major Stephen Nypaver III, *Department of Defense Inspector General Subpoena*, ARMY LAW., Mar. 1989, at 17, 17.

[12] The Military Justice Act of 2016 (MJA 2016) was part of the National Defense Authorization Act for the Fiscal Year 2017. *See* National Defense Authorization Act for Fiscal Year 2017, Pub. L. No. 114-328, § 5001, 130 Stat. 2000, 2894 (2016) ("This division may be cited as the 'Military Justice Act of 2016.'").

Serving a subpoena on the subject of an investigation remains a rarity in the military justice system. Indeed, there are no military appellate opinions involving the Government serving a subpoena on the accused. As a result, the use of investigative subpoenas in cases where the accused has an encrypted device will be a new procedure for many military prosecutors and judges. The reasons for this lack of historic practice in courts-martial are both legal and practical. As a legal matter, the Article 30a, UCMJ, investigative subpoena authority and the corresponding jurisdiction of courts-martial to hear motions to quash did not become effective until 1 January 2019.[13] As a practical matter, the issue of encrypted electronic devices is relatively new, and there are far fewer courts-martial than civilian prosecutions, so there have been fewer opportunities to develop case law in the military.

C. Federal Civilian Grand Jury Subpoena Practice and Decryption

In civilian Federal courts, prosecutors utilize grand jury investigative subpoenas to compel decryption. Federal Rule of Criminal Procedure 17 governs all subpoenas issued in Federal criminal proceedings, including grand jury subpoenas.[14] Rule 17(c)(1) permits a subpoena to "order the witness to produce any books, papers, documents, data, or other objects the subpoena designates."[15] The Rule further provides that "[t]he court may direct the witness to produce the designated items in court before trial or before they are to be offered into evidence."[16] The target of the investigation, like anyone else, may move to quash the subpoena under Rule 17(c)(2).[17]

Regarding subpoenas to the target of an investigation, the Department of Justice's *Justice Manual* provides that "[a] grand jury may properly subpoena a subject or a target of the investigation and question the target about his or her involvement in the crime under investigation."[18] The *Justice Manual* identifies several additional concerns when subpoenaing

---

[13] *Id.* § 5542; Exec. Order No. 13825, 3 C.F.R. 325 (2019).
[14] FED. R. CRIM. P. 17.
[15] *Id.* R. 17(c)(1).
[16] *Id.*
[17] *Id.* R. 17(c)(2).
[18] U.S. Dep't of Just., Just. Manual § 9-11.150 (2017) (citing United States v. Wong, 431 U.S. 174, 179 n.8 (1977); United States v. Washington, 431 U.S. 181, 190 n.6 (1977); United States v. Mandujano, 425 U.S. 564, 573–75, 584 n.9 (1976); United States v. Dionisio, 410 U.S. 1, 10 n.8 (1973)).

the target of an investigation, such as notification of target status and rights advisement. Nevertheless, these concerns are not legal bars to grand jury subpoenas to compel the production of evidence by the target.[19]

Under Federal Rule of Criminal Procedure 17(g), a "court (other than a magistrate judge) may hold in contempt a witness who, without adequate excuse, disobeys a subpoena issued by a federal court in that district."[20] Following noncompliance with a subpoena, a Federal civilian prosecutor will request that a Federal district judge hold the respondent in civil contempt to compel compliance. Federal prosecutors used this procedure to compel decryption in *United States v. Apple MacPro Computer*, discussed below in Section VII.B.1.[21]

D. The Military Justice Review Group and the Military Justice Act of 2016

As part of the National Defense Authorization Act (NDAA) for Fiscal Year (FY) 2017, MJA 2016 added the Article 30a investigative subpoena power to the UCMJ.[22] With regard to investigative subpoenas, MJA 2016 largely enacted the recommendations of the MJRG, which proposed amendments to the UCMJ to bring military subpoena practice into line with Federal civilian practice.[23] It also extended the military judge's contempt powers to Article 30a, UCMJ, proceedings.[24] As a result, the investigative subpoena power in the UCMJ now mirrors the Federal grand jury subpoena power, although military subpoenas are issued by a judge rather than a grand jury.

Accordingly, like Federal civilian prosecutors' use of the grand jury subpoena power, military prosecutors should be able to use the UCMJ investigative subpoena power to compel a Service member to produce a device in an unencrypted state in cases where the foregone conclusion doctrine renders the act of production non-testimonial under the Fifth Amendment and similar protections in military criminal law. To ensure that such subpoena practice is effective, the Government should (1) lawfully

---

[19] *Id.*
[20] FED. R. CRIM. P. 17(g).
[21] United States v. Apple MacPro Comput., 851 F.3d 238, 248 (3d Cir. 2017).
[22] National Defense Authorization Act for the Fiscal Year 2017, Pub. L. No. 114-328, § 5202, 130 Stat 2000, 2904 (2016).
[23] MIL. JUST. REV. GRP., REPORT OF THE MILITARY JUSTICE REVIEW GROUP—PART I: UCMJ RECOMMENDATIONS (2015) [hereinafter MJRG REPORT].
[24] UCMJ art. 48(a)(2)(B) (2017).

seize the device pursuant to a search authorization; (2) gather evidence to prove that the accused's ability to decrypt the device is a "foregone conclusion;" (3) draft a subpoena that directs the accused to provide the device in an unencrypted state with any security features disabled at a reasonable time after the service of the subpoena; and (4) if the accused has requested counsel, ensure counsel is present for both service and the accused's opportunity to comply to satisfy concerns under *Edwards v. Arizona*[25] and *United States v. Mitchell*.[26]

III. The History of the Article 30a, UCMJ, Investigative Subpoena

Proposals to add a pre-referral investigative subpoena to the UCMJ predate the MJRG report and MJA 2016. The MJRG report identifies several prior published calls for an investigative subpoena power.[27] In particular, a 1999 report by the National Academy of Public Administrators recommended granting service general counsel (or other appropriate officials) authority to approve subpoenas.[28] A 2001 DoD IG report noted the need for additional subpoena authority.[29] In 2003, Major Joseph Topinka published an article in *The Army Lawyer* advocating for investigative subpoena power in the military justice system.[30] Additionally, "[i]n 2011, the Department of Defense proposed several amendments to Article 47 in order to address the lack of investigative subpoena power in military practice."[31]

In August 2013, the Joint Chiefs of Staff recommended a "comprehensive and holistic review" of the UCMJ.[32] Following that recommendation, Secretary of Defense Chuck Hagel issued a memorandum

---

[25] Edwards v. Arizona, 451 U.S. 477 (1981).
[26] United States v. Mitchell, 76 M.J. 413, 418 (C.A.A.F. 2017).
[27] MJRG REPORT, *supra* note 23, at 405.
[28] Topinka, *supra* note 11, at 15 (citing NAT'L ACAD. OF PUB. ADM'RS, ADAPTING MILITARY SEX CRIMES INVESTIGATIONS TO CHANGING TIMES 20 (1999)).
[29] *Id.* (citing OFF. OF THE INSPECTOR GEN., U.S. DEP'T OF DEF., REP. NO. CIPO2001S004, EVALUATION OF SUFFICIENCY OF SUBPOENA AUTHORITY WITHIN THE DEPARTMENT OF DEFENSE IN SUPPORT OF GENERAL CRIMES INVESTIGATIONS 2–10 (2001)).
[30] *Id.*
[31] MJRG REPORT, *supra* note 23, at 404 (citing OFF. OF LEGIS. COUNS., U.S. DEP'T OF DEF., SIXTH PACKAGE OF LEGISLATIVE PROPOSALS SENT TO CONGRESS FOR INCLUSION IN THE NATIONAL DEFENSE AUTHORIZATION ACT FOR FISCAL YEAR 2012 sec. 532 (2011)).
[32] Memorandum from Chairman of the Joint Chiefs of Staff, to Sec'y of Def. (Aug. 5, 2013), *in* MJRG REPORT, *supra* note 23, at 1263.

"direct[ing] the General Counsel to conduct a comprehensive review of the Uniform Code of Military Justice (UCMJ) and the military justice system with support from military justice experts provided by the Services."[33] Secretary Hagel directed that "a report including a recommendation for any appropriate amendments to the UCMJ be submitted within 12 months and that a second report recommending any appropriate amendments to the MCM be submitted within 18 months."[34]

Acting on Secretary Hagel's direction, the DoD General Counsel established the MJRG. The General Counsel's "Terms of Reference" directed the MJRG to, among other things, "consider the extent to which the principles of law and the rules of procedure and evidence used in the trial of criminal cases in the United States district courts should be incorporated into military justice practice."[35] The MJRG was composed of a full-time staff of judge advocates directed by Judge Andrew Effron, a retired Chief Judge of the Court of Appeals for the Armed Forces (CAAF).[36] The MJRG was further advised by a civilian judge on the U.S. Court of Appeals for the D.C. Circuit, a former DoD General Counsel, and an experienced civilian prosecutor from the Department of Justice.[37] Thus, the MJRG was not simply an effort by judge advocates but a collaborative effort drawing on the experience of judge advocates as well as civilian DoD counsel, judges, and prosecutors.

Military courts have treated provisions of MJA 2016 as having been informed by the MJRG report. In *United States v. Cruspero*[38] and *United States v. Finco*,[39] the Air Force Court of Criminal Appeals (AFCCA) cited the MJRG report when describing the scope of the statutory remand authority in Article 66(f)(3), UCMJ.[40] Judge Ohlson of the CAAF has also described adopting MJA 2016 as Congress acting upon recommendations from the MJRG.[41] Judge Ohlson's remarks are consistent with the history of

---

[33] Memorandum from Sec'y of Def., to Chairman of the Joint Chiefs of Staff et al. (Oct. 18, 2013), *in* MJRG REPORT, *supra* note 23, at 1267.
[34] *Id.*
[35] MJRG REPORT, *supra* note 23, at 14.
[36] *Id.*
[37] *Id.* at 1279–80.
[38] United States v. Cruspero, No. ACM S32595, 2020 WL 6938016, at *6 (A.F. Ct. Crim. App. Nov. 24, 2020).
[39] United States v. Finco, No. ACM S32603, 2020 WL 4289983, at *7 (A.F. Ct. Crim. App. July 27, 2020).
[40] UCMJ art. 66(f)(3) (2021).
[41] United States v. Hale, 78 M.J. 268, 275 (C.A.A.F. 2019) (Ohlson, J., concurring) ("Therefore, upon the MJRG's recommendation, Congress amended Article 2(a)(3), . . . so

MJA 2016. As Professor David Schlueter observes, Congress did not hold hearings specifically addressing MJA 2016 because "Congress was content that the DoD had sufficiently vetted the proposals and believed that hearings would not provide any additional benefit, except for publicity purposes."[42]

A. The Military Justice Review Group Report

The MJRG published its report on 22 December 2015.[43] Consistent with the General Counsel's directive to consider incorporating civilian practice into military practice, the MJRG recommended revising military subpoena practice to more closely mirror civilian practice by adding a broad subpoena power at the investigative stage.[44] Under the heading "Major Legislative Proposals," the MJRG recommended seven categories of reforms to the UCMJ.[45] Investigative subpoenas were addressed in the second of these seven categories, entitled "Enhance Fairness and Efficacy in Pretrial and Trial Procedures."[46] As part of the effort to enhance pretrial procedures, the MJRG recommended "[e]xpanding authority to obtain documents during investigations through subpoenas and other process."[47]

The MJRG consistently cited to Federal civilian subpoena practice as a model for its proposal to add to the UCMJ what would become the Article 30a subpoena process. In particular, the MJRG noted that "[w]ith respect to subpoena practice, despite the similarities between military subpoenas and subpoenas issued under Fed. R. Crim. P. 17, federal prosecutors and law enforcement agencies have much broader authority to utilize subpoenas during the investigative, pre-indictment (pre-referral) stages of a case."[48] The MJRG cited to Federal grand jury practice in particular as a model for the capabilities proposed to be added to the military justice system. As the MJRG wrote, "Under Fed. R. Crim. P. 6 and 17, federal prosecutors have access to grand jury investigative subpoenas as soon as a grand jury is

---

as to eliminate jurisdictional gaps that previously arose within the interstices of blocks of time dedicated to inactive duty training.") (citation omitted).

[42] David A. Schlueter, *Reforming Military Justice: An Analysis of the Military Justice Act of 2016*, 49 ST. MARY'S L.J. 1, 21 n.90 (2017).

[43] MJRG REPORT, *supra* note 23, at 3.

[44] *Id.* at 14.

[45] *Id.* at 6–8.

[46] *Id.* at 6.

[47] *Id.*

[48] *Id.* at 410 (citations omitted).

summoned, which often happens before the accused is even aware of the investigation or afforded the right to counsel."[49] The MJRG also cited to analogous state prosecutorial investigative subpoena power, noting that, "in many states, prosecutors are given investigative subpoena authority by statute, to be exercised in advance of filing charges with the court or obtaining an indictment."[50]

The MJRG similarly referenced Federal civilian practice when proposing amendments to Articles 46 and 47, UCMJ. As the MJRG explained, its "proposal would amend Articles 46 and 47 to clarify the authority to issue and enforce subpoenas for witnesses and other evidence, and to enhance the Government's ability to use investigative subpoenas prior to trial, consistent with federal and state practice."[51] Specifically, the MJRG report recommended amending Article 46, UMCJ, "to allow the issuance of investigative subpoenas for the production of evidence prior to referral and preferral of charges" because "[*t*]*his will align UCMJ subpoena authority with that in federal and state jurisdictions*, and improve the operation of the military justice system in this area."[52]

The MJRG's analogue to Federal grand jury investigative subpoena power is particularly relevant when dealing with Article 30a, UCMJ, subpoenas to the accused. The Federal civilian grand jury power is used to compel decryption by the subject of an investigation in Federal civilian courts. The MJRG's analysis thus suggests no limitation on the proposed military investigative subpoena power excluding the accused or decryption. Rather, the MJRG report recommended moving the military into harmony with the civilian subpoena power that is deployed to compel decryption by subjects in Federal criminal investigations.

The MJRG recommended amendments to the UCMJ in part to enable obtaining electronic communications under the Stored Communications Act. Indeed, judge advocates may be most familiar with Article 30a, UCMJ, in the context of obtaining orders for the production of stored electronic communications. But the MJRG's references to the Stored Communications Act were not meant to limit the scope of the proposed investigative subpoena power. Rather, the MJRG proposed a broad scope of investigative

---

[49] *Id.*
[50] *Id.* (citing FED. R. CRIM. P. 6, 17; WAYNE LAFAVE ET AL., CRIMINAL PROCEDURE §§ 8.1(c), 8.3(c) (3d ed. 2013); Oman v. State, 737 N.E.2d 1131, 1136 (Ind. 2000); United States v. Santucci, 674 F.2d 624, 627, 632 (7th Cir. 1982)).
[51] *Id.* at 403.
[52] *Id.* at 109 (emphasis added).

subpoena power mirroring the scope of the Federal civilian investigative power. Indeed, it was only after describing the broad subpoena powers available to civilian Federal prosecutors that the MJRG went on to note that "[*i*]*n addition*, federal prosecutors and law enforcement agencies have several available means for obtaining electronic communications and other stored data protected by the Stored Communications Act, including—depending on the classification level of the information sought—grand jury investigative subpoenas, trial subpoenas, and search warrants and court orders."[53] The MJRG report goes on to recommend in a separate point that Congress amend the UCMJ to provide "military judges with the ability to issue warrants and court orders for the production of certain electronic communications under the Stored Communications Act, 18 U.S.C. § 2701 *et seq*."[54]

The MJRG also made clear that an important aspect of the pre-referral subpoena and Article 30a, UCMJ, proceeding was to move the subpoena power to a more useful time in the military justice process. Here, too, the MJRG references the timing of Federal civilian investigative subpoenas as a guide for the proposed reforms to the military process. As the MJRG report notes, "whereas probable cause is not required for the issuance of grand jury subpoenas, the vast majority of military subpoenas are issued post-referral, after the probable cause threshold has already been met. This difference provides Federal prosecutors with a superior investigative tool during the preliminary, investigative stages of a case."[55] The MJRG report goes on to state:

> The optimal time for use of subpoena power often occurs during the conduct of an investigation, making it possible to develop and analyze information for use in the decision as to whether to prefer charges, whether a preliminary hearing should be ordered, and for consideration during a preliminary hearing. The Article 32 proceeding, as recently revised, serves primarily as a preliminary hearing rather than as an investigative tool and will operate most efficiently and effectively when based upon information compiled prior to the hearing.[56]

---

[53] *Id.* at 410 (emphasis added).
[54] *Id.* at 109.
[55] *Id.* at 410 (citing United States v. Williams, 504 U.S. 36, 48 (1992)).
[56] *Id.* at 28.

Accordingly, the MJRG recommended a new investigative subpoena power decoupled from Article 32, UCMJ, proceedings. The sectional analysis for the MJRG's proposed revisions to Article 32, UCMJ, concludes that "the authority to issue pre-referral investigative subpoenas would be governed by a uniform policy that will apply throughout the process prior to referral, and would not be limited narrowly to Article 32 proceedings."[57]

The MJRG also proposes amendments to the contempt sanction using Federal practice as a model. The MJRG report recommends that Congress "extend the contempt power of military judges to pre-referral sessions and proceedings, consistent with the proposed amendments to Art. 26 and the authorities proposed in new Art. 30a."[58] The MJRG likewise proposes making appellate review of contempt punishments imposed in Article 30a proceedings.[59] The MJRG notes that this appellate procedure "will align the UCMJ more closely in this area with the review procedures applicable in federal district courts and federal appellate courts regarding the contempt power."[60]

In sum, while the MJRG report does not specifically address compelled decryption, the MJRG report recommends measures to bring military subpoena practice into line with civilian practice, where the target of an investigation is subject to subpoenas to compel decryption, and the MJRG report provides no indication that the accused in the military would be exempt.

B. The Legislative History

Article 30a, UCMJ, became law as part of MJA 2016, which was a subset of the FY17 NDAA.[61] The legislative history of the FY17 NDAA does not specifically address the issues of investigative subpoenas to the accused or compelled decryption, nor does it indicate any legislative intent to exempt the accused from Article 30a, UCMJ, subpoena practice. As Professor Schlueter notes, in light of the comprehensive work of the MJRG, Congress did not hold hearings specifically on MJA 2016.[62] Thus, the

---

[57] *Id.* at 330.
[58] *Id.* at 109.
[59] *Id.*
[60] *Id.* at 109–10.
[61] National Defense Authorization Act for Fiscal Year 2017, Pub. L. No. 114-328, § 5202, 130 Stat 2000, 2904 (2016).
[62] Schlueter, *supra* note 42.

legislative history of MJA 2016 consists of the committee reports on the FY17 NDAA, the conference report, and a few statements of legislators.

1. The Committee Reports

The Senate Armed Services Committee report on the FY17 NDAA summarily recommended adding an investigative subpoena power to the UCMJ and authorizing its enforcement by contempt in pre-referral proceedings. Specifically, the committee's report simply recommended "add[ing] a new section 830a (Article 30a of the Uniform Code of Military Justice (UCMJ)) to provide statutory authority for military judges or magistrates to provide timely review, prior to referral of charges, of certain matters currently subject to judicial review only on a delayed basis at trial."[63] Regarding subpoenas and other processes, the report went on to recommend amending Article 46, UCMJ:

> to clarify authority to issue and enforce subpoenas for witnesses and other evidence, to allow subpoenas *duces tecum* to be issued for investigations of offenses under the UCMJ when authorized by a general court-martial convening authority, and to authorize military judges to issue warrants and orders for the production of stored electronic communications . . . .[64]

The committee report did not address judge-issued pre-referral investigative subpoenas. That provision would be added later in conference with the House of Representatives. Regarding enforcement, the committee report recommended amending Article 48, UCMJ, "to authorize the contempt power for military judges and military magistrates detailed to pre-referral proceedings under the proposed Article 30a."[65]

The House Armed Services Committee report does not address the issue of pre-referral investigative subpoenas.[66] The initial House version of the FY17 NDAA did not contain a provision similar to Article 30a, UCMJ.[67]

---

[63] S. REP. NO. 114-255, at 599 (2016).
[64] *Id.* at 602.
[65] *Id.*
[66] *See generally* H.R. REP. NO. 114-537 (2016).
[67] *See generally* H.R. 4909, 114th Cong. (2016).

2. The Conference Report

The final language of Article 30a, UCMJ, was settled in the conference committee. The provision empowering military judges to issue pre-referral investigative subpoenas in addition to warrants and orders for stored electronic communications was added in the conference committee. Like the Senate committee report, the conference report does not specifically address the issue of compelled decryption. Yet, here too, there is no indication of legislative intent to limit the scope of the newly-created investigative subpoena power to exclude the accused.

Section 5202 of the FY17 NDAA, entitled "Certain proceedings conducted before referral," would ultimately contain the newly-enacted Article 30a, UCMJ.[68] The conference report noted that the Senate's version of the FY17 NDAA contained the new Article 30a, UCMJ, providing "statutory authority for military judges or magistrates to provide timely review, prior to referral of charges, of certain matters currently subject to judicial review only on a delayed basis at trial"[69] while the House version lacked such a provision. To resolve this difference, "[t]he House recede[d] with an amendment that would limit the matters which may be reviewed prior to referral of charges to pre-referral investigative subpoenas, pre-referral warrants or orders for electronic communications, and pre-referral matters referred by an appellate court."[70] There is no indication that this resolution was controversial or that the House sought to limit the subject matter or recipients of pre-referral investigative subpoenas.

The conference report concerning section 5228 of the FY17 NDAA, entitled "Subpoena and other process" followed a similar pattern. The conference report noted that the Senate bill included a version of section 5228 "to clarify the authority to issue and enforce subpoenas for witnesses and other evidence, to allow subpoenas duces tecum to be issued for investigations of offenses under the UCMJ when authorized by a general court-martial convening authority, and to authorize military judges to issue

---

[68] National Defense Authorization Act for Fiscal Year 2017, Pub. L. No. 114-328, § 5202, 130 Stat 2000, 2904 (2016).

[69] S. REP. NO. 114-255, at 599.

[70] H.R. REP. NO. 114-840, at 1516 (Conf. Rep.). "The terms *recede*, *insist*, and *adhere* have technical meanings in the legislative process. When the House or Senate 'recedes,' it withdraws from a previous position or action. . . ." ELIZABETH RYBICKI, CONG. RSCH. SERV., RESOLVING LEGISLATIVE DIFFERENCES IN CONGRESS: CONFERENCE COMMITTEES AND AMENDMENTS BETWEEN THE HOUSES 6 n.11 (2019).

warrants and orders for [Stored Communications Act materials]."[71] In response, the House of Representatives "recede[d] with an amendment that would authorize a military judge to issue an investigative subpoena before referral of charges to a court-martial."[72] Here, too, there is no indication that either the House or Senate sought to limit the scope of the subpoena power to exclude the accused.

The MJA 2016 revisions to Article 48, UCMJ, followed a similar pattern. Regarding the contempt power of military judges, the Senate bill contained a version of section 5230 amending Article 48, UCMJ, "to authorize the contempt power for military judges and military magistrates detailed to pre-referral proceedings under the proposed Article 30a."[73] The Senate bill further provided for "appellate review of contempt punishments consistent with the review of other orders and judgments under the UCMJ."[74] The House bill contained a similar (but not identical) provision amending Article 48, UCMJ, and "[t]he House recede[d] with an amendment that would exclude commissioned officers detailed as a summary court-martial from the officials authorized to punish a person for contempt."[75] There is no indication that the contempt power of military judges was controversial.

3. Legislators' Statements

The statements of legislators concerning the FY17 NDAA do not specifically address the investigative subpoena provision of MJA 2016. Rather, when addressing MJA 2016, the legislators' comments are general compliments for the MJRG report and modernization of the military justice system.

Senator John McCain of Arizona provided the most substantive commentary on MJA 2016 in either chamber's debates on the bill. Senator McCain remarked:

> The NDAA also implements the recommendations of the Department of Defense Military Justice Review Group by incorporating the Military Justice Act of 2016. The legislation modernizes the military court-martial trial

[71] H.R. REP. NO. 114-840, at 1519 (Conf. Rep.).
[72] *Id.*
[73] *Id.*
[74] *Id.* at 1519–20.
[75] *Id.* at 1520.

> and appellate practice, incorporates best practices from Federal criminal practice and procedures, and increases transparency and independent review in the military justice system.
>
> Taken together, the provisions contained in the NDAA constitute the most significant reforms to the Uniform Code of Military Justice in a generation. . . .[76]

Senator McCain's reference to the MJRG report provides at least some evidence that the MJRG report should be considered when determining legislative intent in enacting the MJA 2016. Moreover, Senator McCain's favorable description of modernizing military justice by incorporating best practices from Federal civilian criminal practice and procedure may be read to support interpreting MJA 2016 in a manner that harmonizes military practice with Federal civilian practice. Nevertheless, these were a sole senator's brief remarks that did not specifically address subpoenas issued to an accused.

Remarks on MJA 2016 in the House of Representatives were even more brief praise for modernization of the military justice system and steps to prosecute sexual assault, though these remarks did not specifically mention investigative subpoenas. Representative Mac Thornberry of Texas stated, "We have the first comprehensive rewrite of the Uniform Code of Military Justice in 30 years, and that is a big part of the reason that this bill is the size that it is."[77] Representative Denny Heck of Washington stated, "It modernizes the Uniform Code of Military Justice to improve the system's efficiency and transparency, while also enhancing victims' rights."[78] Representative Michael Turner of Ohio stated, "This bill calls for continued action to eradicate sexual assault in the military by providing greater transparency in the military criminal justice system."[79] Representative Bradley Byrne of Alabama stated, "It also updates the Uniform Code of Military Justice to promote accountability within our military."[80]

In sum, there is nothing in these legislators' statements to suggest that Articles 30a or 46, UCMJ, should be interpreted in a manner contrary to their plain text. To the extent that any intent can be gleaned from these

---

[76] 162 CONG. REC. S6871 (daily ed. Dec. 8, 2016) (statement of Sen. John McCain).
[77] 162 CONG. REC. H7123 (daily ed. Dec. 2, 2016) (statement of Rep. William Thornberry).
[78] *Id.* at H7130 (statement of Rep. Dennis Heck).
[79] *Id.* at H7126 (statement of Rep. Michael Turner).
[80] 162 CONG. REC. H7069-06, H7070 (daily ed. Dec. 1, 2016) (statement of Rep. Bradley Byrne).

statements, such intent would be to interpret MJA 2016 reforms in a manner consistent with the analogous civilian practice relied upon in the MJRG report.

IV. A Textual Analysis of Articles 30a and 46, UCMJ, and Implementation in the Rules for Courts Martial Following the Military Justice Act of 2016

To determine the applicability of Article 30a, UCMJ, subpoenas to the accused, one must first analyze the text of the statute. Like civilian courts,[81] military courts of appeals have embraced textualism in statutory interpretation. Although an accused might argue that Congress did not intend for investigative subpoenas to apply to an accused, there is no such limitation in the statutory text. Writing for the CAAF in *United States v. Bergdahl*, Judge Ohlson stated, "Any suggestion that we should interpose additional language into a rule that is anything but ambiguous is the antithesis of textualism."[82] In support of this statement, Judge Ohlson's majority opinion cited statements by three sitting Supreme Court Justices: "We're all textualists now" (Justice Kagan);[83] "The text of the law is the law" (Justice Kavanaugh);[84] and "The text of the statute and only the text becomes law. Not a legislator's unexpressed intentions . . ." (Justice Gorsuch).[85]

The CAAF applied similar reasoning in *United States v. McPherson*.[86] In that case, Chief Judge Stucky wrote for the majority that there was no geographic limitation on the Article 12, UCMJ,[87] prohibition on confining Service members with foreign nationals based on the article's text, which was "plain on its face."[88] In support, the court cited to the majority opinion in *Barnhart v. Sigmon Coal Co.*, in which Justice Thomas wrote:

---

[81] Jesse D.H. Snyder, *How Textualism Has Changed the Conversation in the Supreme Court*, 48 U. BALT. L. REV. 413 (2019).
[82] United States v. Bergdahl, 80 M.J. 230, 235 (C.A.A.F. 2020), *reconsideration denied*, 80 M.J. 362 (C.A.A.F. 2020).
[83] *Id.* (citing Harvard Law School, *The 2015 Scalia Lecture | A Dialogue with Justice Elena Kagan on the Reading of Statutes*, YOUTUBE (Nov. 25, 2015), https://youtu.be/dpEtszFT0Tg).
[84] *Id.* (citing Brett Kavanaugh, *Fixing Statutory Interpretation*, 129 HARV. L. REV. 2118, 2118 (2016) (reviewing ROBERT A. KATZMANN, JUDGING STATUTES (2014))).
[85] *Id.* (citing NEIL GORSUCH, A REPUBLIC, IF YOU CAN KEEP IT 132 (2019)).
[86] United States v. McPherson, 73 M.J. 393, 395 (C.A.A.F. 2014).
[87] UCMJ art. 12 (2016).
[88] *McPherson*, 73 M.J. at 395.

> As in all statutory construction cases, we begin with the language of the statute. The first step "is to determine whether the language at issue has a plain and unambiguous meaning with regard to the particular dispute in the case." The inquiry ceases "if the statutory language is unambiguous and 'the statutory scheme is coherent and consistent.'"[89]

The Court likewise cited to Justice Thomas's majority opinion in *Connecticut National Bank v. Germain*[90] for the propositions that "courts must presume that a legislature says in a statute what it means and means in a statute what it says there" and "[w]hen the words of a statute are unambiguous, then, this first canon is also the last: judicial inquiry is complete."[91]

A. The Text of Article 30a, UCMJ

Article 30a(a), UCMJ, provides that the President shall make regulations related to pre-referral investigative subpoenas.[92] The text of Article 30a(a)(1)(A), UCMJ, places restrictions on neither the proper recipients of an investigative subpoena nor the subject matter of such a subpoena.[93] Only Article 30a(a)(1)(B), UCMJ, is modified by the purpose of issuing warrants or orders for electronic communications.[94] Article 30a(a)(1)(A), UCMJ, contains no such limitation (or any other). The contrast between the text of Articles 30a(a)(1)(A) and 30a(a)(1)(B), UCMJ, is significant. Congress demonstrated that it knew how to limit the scope or purpose of the powers it created, yet chose not to include any such limitation in the text of Article 30a(a)(1)(A), UCMJ.

Arguments for implied limitations on the Article 30a(a)(1)(A), UCMJ, subpoena power thus must fail in light of the CAAF's admonition in *Bergdahl* that "Any suggestion that we should interpose additional language

---

[89] Barnhart v. Sigmon Coal Co., Inc., 534 U.S. 438, 450 (2002) (quoting Robinson v. Shell Oil Co., 519 U.S. 337, 340 (1997)).
[90] Conn. Nat'l Bank v. Germain, 503 U.S. 249, 253–54 (1992).
[91] *McPherson*, 73 M.J. at 395 (quoting *Germain*, 534 U.S. at 253–54).
[92] UCMJ art. 30a(a)(1)(A) (2019).
[93] *Id.*
[94] *Id.* art. 30a(a)(1)(B).

into a rule that is anything but ambiguous is the antithesis of textualism."[95] The CAAF's refusal in *McPherson* to read implied limitations into Article 12, UCMJ, based on policy considerations is likewise instructive.[96] Limiting Article 12, UCMJ, to make it inapplicable to civilian confinement in the United States might have made practical sense, but the text lacked any such limitation and the Court would not add it.[97] In the case of Article 30a, UCMJ, there is no similar policy argument for excluding the accused given that grand jury subpoenas are how civilian courts compel decryption.

Although the plain text of Article 30a(a)(1)(A), UCMJ, should end the inquiry from a textualist perspective, the context of the article further confirms the broad scope of the investigative subpoena power. Like Article 30a(a)(1), UCMJ, Article 30a(b), UCMJ, does not impose limits on the subject matter of the investigative subpoena or to whom such a subpoena may be directed. Indeed, the only restrictive language in Article 30a(b), UCMJ, requires Article 30a, UCMJ, proceedings to address only matters that a military judge could consider in a court-martial.[98] The President has the discretion to impose additional limitations under Article 30a(a)(2)(D), UCMJ, but the statutory language stating "may be ordered . . . as the President considers appropriate" in this subsection makes clear that any such additional limitations are not mandated by Congress but rather are at the President's discretion.[99]

In sum, by the plain text of Article 30a, UCMJ, any limitations on the subject matter or recipient of Article 30a, UCMJ, subpoenas must be found in the rules prescribed by the President because such limitations are not in the statute. As presented in Section IV.C below, the President has imposed no such limitations.

B. The Text of Article 46, UCMJ

The accused or other Service members are subject to subpoenas to obtain evidence issued under Article 46, UCMJ, which governs subpoenas and other process.[100] Article 46(b), UCMJ, provides that any subpoena

---

[95] United States v. Bergdahl, 80 M.J. 230, 235 (C.A.A.F. 2020), *reconsideration denied*, 80 M.J. 362 (C.A.A.F. 2020).
[96] United States v. McPherson, 73 M.J. 393, 395 (C.A.A.F. 2014).
[97] *Id.*
[98] UCMJ art. 30a(b).
[99] *Id.* art. 30a(a)(2)(D).
[100] *Id.* art. 46 (2016).

issued under that article "shall be similar to that which courts of the United States having criminal jurisdiction may issue; shall be executed in accordance with regulations prescribed by the President; and shall run to any part of the United States . . . ."[101] There is no carve-out for an accused or anyone else subject to the UCMJ as a subpoena recipient.

Subpoenas for the production of evidence fall under Article 46(d), UCMJ.[102] Article 46(d)(1)(C), UCMJ, provides that a subpoena "[m]ay be issued to compel production of evidence for an investigation of an offense under this chapter."[103] There is no exemption for the accused. Article 46(d)(2), UCMJ, addresses the authority to issue subpoenas pre-referral, providing that

> [a]n investigative subpoena under paragraph (1)(C) may be issued before referral of charges to a court-martial only if a general court-martial convening authority has authorized counsel for the Government to issue such a subpoena or a military judge issues such a subpoena pursuant to section 830a of this title (article 30a).[104]

Here, too, there is no carve-out for the accused.

The plain text of Article 46, UCMJ, thus provides for pre-referral investigative subpoenas like those in civilian courts, and nothing in the text of the article exempts an accused. Therefore, applying the CAAF's reasoning from *Bergdahl*, there is no basis for a court to "interpose additional language into a rule that is anything but ambiguous."[105] Moreover, even if there are prudential or policy arguments for exempting an accused, judicial imposition of such non-textual restraints would run afoul of the CAAF's reasoning in *McPherson*,[106] in which the CAAF refused to allow prudential concerns to read a non-textual exception into Article 12, UCMJ.

---

[101] *Id.*
[102] *Id.* art. 46(d).
[103] *Id.* art. 46(d)(1)(C).
[104] *Id.* Prior to MJA 2016, the Article 46, UCMJ, provision concerning subpoenas simply read: "Process issued in court-martial cases to compel witnesses to appear and testify and to compel the production of other evidence shall be similar to that which courts of the United States having criminal jurisdiction may lawfully issue and shall run to any part of the United States . . . ." UCMJ art. 46 (1956).
[105] United States v. Bergdahl, 80 M.J. 230, 235 (C.A.A.F. 2020), *reconsideration denied*, 80 M.J. 362 (C.A.A.F. 2020).
[106] United States v. McPherson, 73 M.J. 393, 395 (C.A.A.F. 2014).

C. The Text of the Rules for Courts-Martial Implementing Articles 30a and 46, UCMJ

Under the authority Congress provided in Article 30a, UCMJ, the President set forth rules governing the Article 30a, UCMJ, subpoena power in Executive Order 13825.[107] These amendments to the Rules for Courts-Martial (RCMs) do not contain any limitation exempting the accused or decryption from the scope of Article 30a, UCMJ, investigative subpoenas. Rather, RCM 309, entitled "Pre-referral judicial proceedings," mirrors Article 30a(a)(1)(A), UCMJ, in that no restriction is placed in the recipient or subject matter of an Article 30a, UCMJ, subpoena in RCM 309(b)(1). Likewise, mirroring Article 30a(a)(1)(B), RCM 309(b)(2) only limits the purpose of pre-referral warrants or orders—not investigative subpoenas—to electronic communications.

Rule for Courts-Martial 309(b)(3) provides procedures for relief from a subpoena. The text of the rule provides that "[a] person in receipt of a pre-referral investigative subpoena . . . may request relief on grounds that compliance with the subpoena or order is unreasonable, oppressive or prohibited by law."[108] The rule goes on to state that "[t]he military judge shall review the request and shall either order the person or service provider to comply with the subpoena or order, or modify or quash the subpoena or order as appropriate."[109] Here, too, the recipient of an investigative subpoena and the subject of the judge's order are described only as a "person" with no limitation excluding the accused.

In RCM 703(g)(3)(C), the provision referenced in RCM 309(b), the President likewise imposes no limitation that would shield an accused from a pre-referral investigative subpoena. Rather, the language of RCM 703(g)(3)(C)(i) states:

> In the case of a subpoena issued before referral for the production of evidence for use in an investigation, the subpoena shall command each person to whom it is directed to produce the evidence requested for inspection by the Government counsel who issued the subpoena or

---

[107] Exec. Order No. 13825, 3 C.F.R. 325 (2019). The executive order amended the *Manual for Courts-Martial*. *Id.*

[108] MANUAL FOR COURTS-MARTIAL, UNITED STATES, R.C.M. 309(b)(3) (2019) [hereinafter MCM].

[109] *Id.*

> for inspection in accordance with an order issued by the military judge under R.C.M. 309(b).[110]

Regarding the matters subject to subpoena, RCM 703(g)(3)(A) states, "The presence of witnesses not on active duty and evidence not under control of the Government may be obtained by subpoena."[111] Rule for Courts-Martial 703(g) thus provides for obtaining evidence broadly without any limitation shielding the accused.

Procedural rules related to investigative subpoenas likewise provide no indication that the President sought to exclude the accused from subpoenas for evidence. Rule for Courts-Martial 703(g)(3)(E), which concerns service, simply says that a subpoena shall be served by delivering a copy "to the person named" with no exclusion for the accused. With respect to motions to quash, RCM 703(g)(3)(G) allows a court to either "order that the subpoena be modified or quashed, as appropriate" or "order the person to comply with the subpoena."[112] Here, like in the UCMJ, these procedural rules use the broad term "person" rather than a term that would exclude an accused.

The only provision of RCM 703 that excludes Service members from subpoenas is the procedure for obtaining witnesses in RCM 703(g)(1), which simply provides that military witnesses may be obtained by requesting that the Service member's commander order the witness to attend.[113] This rule provides an easier means for compelling the attendance of military witnesses at a court-martial based on a commander's authority to order attendance. Nothing in RCM 703(g)(1) indicates that the President sought to exempt Service members from subpoenas for evidence.

In sum, the plain text of Articles 30a and 46, UCMJ, leaves any limitation excepting the accused from the Article 30a, UCMJ, investigative subpoena power to regulations prescribed by the President. But, if the President had intended to exclude the accused from the scope of pre-referral investigative subpoenas, surely the President would have made that clear when revising the RCMs after the enactment of Article 30a, UCMJ, particularly given the well-established Federal civilian practice of the accused being subject to subpoena.

---

[110] *Id.* R.C.M. 703(g)(3)(C)(i).
[111] *Id.* R.C.M. 703(g)(3)(A).
[112] *Id.* R.C.M. 703(g)(3)(F)(i)–(ii).
[113] *Id.* R.C.M. 703(g)(1).

V. The Subpoena and the Search Authorization

The Article 30a, UCMJ, subpoena is merely a tool for obtaining the unencrypted state of the device. The subpoena itself does not grant the Government authority to search or seize the device. The authority to search or seize the device must be based upon a valid search authorization. Thus, prior to issuing a subpoena to obtain a device in an unencrypted state, the Government must first obtain authorization to seize and search the device. The Government should also execute the seizure as soon as possible and store the device in a way that renders remote access impossible to preserve evidence pending service of the subpoena.

Any search of the accused's device in an unencrypted state must remain within the scope of the search authorization.[114] The Article 30a, UCMJ, subpoena, however, need not necessarily refer to the search authorization. Indeed, the Government need only describe the matters to be inspected in the subpoena if the Government is taking the conservative approach to subpoena drafting under the Eleventh Circuit's *In re Grand Jury Subpoena* opinion.[115] The scope of the authorization and the search will be valid or invalid on their own terms separate from the subpoena.

The language of the subpoena should specify the state of each particular device at issue that will allow for an effective search. The necessary state of the device will depend on the type of device and the type of search the Government wishes to conduct. For example, a subpoena regarding a mobile phone might require that the accused produce the phone in an unlocked state with all locking (and re-locking) features disabled. A subpoena for an encrypted hard drive might require the hard drive to be produced in a decrypted state. The necessary subpoena language might differ from device to device and could change over time as devices and encryption features evolve. Thus, it is incumbent on judge advocates to consult with law enforcement agents and the DoD Cyber Crime Center to ensure that subpoena language directs the device at issue be produced in a state that will allow for an effective search. The foregone conclusion doctrine would govern a court's inquiry in any case.

---

[114] *See* United States v. Osorio, 66 M.J. 632, 637 (A.F. Ct. Crim. App. 2008) ("[W]hen dealing with search warrants for computers, there must be specificity in the scope of the warrant which, in turn, mandates specificity in the process of conducting the search.").

[115] United States v. Doe (*In re* Grand Jury Subpoena Duces Tecum), 670 F.3d 1335, 1345–46 (11th Cir. 2012).

VI. Enforcement of Subpoenas to Compel Decryption in Military Courts

The UCMJ provides two avenues for enforcement of a subpoena if a Service member refuses to provide a device in an unencrypted state. The first is the military judge's contempt power under Article 48, UMCJ, and RCM 809. The second is follow-up prosecution for the same conduct under the UCMJ. Disobeying a judge's order compelling an accused to obey a subpoena could be prosecuted under Articles 90, 92(2), 131b, or 131f(2), UCMJ.[116] Article 133, UCMJ, could also apply if the accused is an officer.[117]

Like issuing a subpoena to an accused, contempt of court itself is a rarity in the military justice process. The reasons for this rarity are both practical and legal. Practically, the contempt power is rarely used simply because contemptuous conduct is rare. In the limited case law that exists, the most common contemners are civilian defense counsel, yet even this is rare.[118] Legally, appellate opinions on contempt are rare because punishment for contempt under the military judge's contempt power was not appealable to the service courts of criminal appeals until the FY17 NDAA.[119] As such, a military judge's contempt findings would be subject to appellate opinions only by way of arguments that the contempt finding prejudiced an accused on the merits of the case.[120] A conviction for contempt of court in a follow-on prosecution under the UCMJ has never made its way into a military appellate court opinion. Therefore, military appellate opinions on contempt of court are few and far between.

The best overview of the contempt sanctions available against a Service member is in Judge Cox's dissent in *United States v. Burnett*.[121] That case involved a civilian defense counsel held in contempt for in-court conduct,

---

[116] Because enumerated articles exist to address conduct, Article 134, UCMJ, would likely be preempted.
[117] UCMJ art. 133 (1950).
[118] *See, e.g.*, United States v. Burnett, 27 M.J. 99, 108 (C.M.A. 1988) (Cox, J., dissenting) ("One of the most difficult jobs for any military judge is to deal with a sarcastic, 'catty,' insulting, disrespectful civilian attorney . . . .").
[119] National Defense Authorization Act for Fiscal Year 2017, Pub. L. No. 114-328, § 5230, 130 Stat. 2000, 2913–14 (2016). Prior to the National Defense Authorization Act for Fiscal Year 2017, the convening authority reviewed contempt judgments under Rule for Courts-Martial 809. MANUAL FOR COURTS-MARTIAL, UNITED STATES, R.C.M. 809 (2016) [hereinafter 2016 MCM]; *Burnett*, 27 M.J. at 108 (noting that contempt judgments were not appealable at the time).
[120] *See, e.g.*, *Burnett*, 27 M.J. at 108 (Cox, J., dissenting).
[121] *Id.*

an obsolete contempt standard,[122] and a since-repealed contempt procedure, so the majority's holding and Judge Cox's specific disagreement with that holding have little relevance today.[123] Yet Judge Cox's explanation of options for dealing with a military contemner remains instructive. Judge Cox explained that "[i]f the contemner is a military person, Articles 89, 90, and 91, as well as Articles 133 and 134 . . . provide ample authority for dealing with the contemptuous conduct and handle it much more severely than does Article 48."[124] When prosecuting a Service member in a separate court-martial, these options remain as valid today as when Judge Cox described them in *Burnett*. Such follow-on prosecution under the UCMJ, of course, is not available against civilian contemners, where "[e]nforcement of a duly issued subpoena is initially a military judge function, followed if necessary by enforcement in a federal court."[125]

Unlike civilian Federal courts, there is no civil contempt in courts-martial. Rule for Courts-Martial 201 states that "[t]he jurisdiction of courts-martial is entirely penal or disciplinary."[126] Civilian Federal judges,

---

[122] At the time of *Burnett*, Article 48, UCMJ, read as follows:

> A court-martial, provost court, or military commission may punish for contempt any person who uses any menacing word, sign, or gesture in its presence, or who disturbs its proceedings by any riot or disorder. The punishment may not exceed confinement for 30 days or a fine of $100, or both.

Id. at 103–04 (citing UCMJ art. 48 (1956)).

[123] *Burnett* occurred at a time after the creation of the office of military judge in military courts but while the Article 48, UCMJ, power to punish contempt still rested with the "court-martial" (i.e., the members). Thus, the trial judge instructed the members on contempt procedures, and the members sentenced the civilian defense counsel to a fine of $100 and a reprimand. *Id.* at 103. The majority found error because the conduct at issue was not contemptuous under the narrow language of the then-current Article 48, UCMJ. *Id.* at 105–06. The majority also commented that the version of Article 48 under consideration was an "anachronism . . . made obsolete by the Military Justice Act of 1968" which created the office of military judge. *Id.* at 107. The Court of Military Appeals thus remanded to determine if the accused had been prejudiced by the wrongful contempt ruling against the civilian defense counsel. *Id.* at 108.

[124] *Id.* (Cox, J., Dissenting). Judge Cox also argued that Congress should amend Article 48, UCMJ, to provide military judges "limited summary contempt powers that are clearly applicable to military and civilian persons alike" because, at the time, that article had not been updated to reflect creation of the office of military judge. *Id.* Congress would later enact such an amendment to Article 48, UCMJ, in the Ike Skelton National Defense Authorization Act for Fiscal Year 2011. Ike Skelton National Defense Authorization Act for Fiscal Year 2011, Pub. L. 111-383, § 542, 124 Stat. 4173, 4218.

[125] United States v. Morrison, No. 9600461, 2005 CCA LEXIS 515, at *27 (A. Ct. Crim. App. July 5, 2005).

[126] MCM, *supra* note 108, R.C.M. 201(a).

by contrast, have the option of civil contempt where a person disobeys a subpoena or court order. The Department of Justice *Criminal Resource Manual* explains that civil contempt sanctions "are designed to compel future compliance with a court order."[127] This form of contempt is "coercive and avoidable through obedience" and "thus may be imposed in an ordinary civil proceeding upon notice and an opportunity to be heard. Neither a jury trial nor proof beyond a reasonable doubt is required."[128] For example, civilian trial judges imposing civil contempt to compel decryption was at issue in *United States v. Apple MacPro Computer*[129] and *In re Grand Jury Subpoena Duces Tecum*.[130]

Criminal contempt, by contrast, serves as post-hoc punishment for wrongdoing—"a crime in the ordinary sense."[131] Unlike civil contempt, which may be avoided through obedience, "criminal penalties may not be imposed on someone who has not been afforded the protections that the Constitution requires of such criminal proceedings."[132] As court-martial jurisdiction is "entirely penal or disciplinary," the only procedures for contempt in the military justice system are a punishment for wrongdoing, whether administered by a military judge under Article 48, UCMJ, or in follow-on prosecution under the UMCJ. Additionally, as a practical matter, the military lacks standing courts to provide ongoing supervision of civil contempt proceedings. Yet the UMCJ's criminal sanctions, and the ex-ante threat of their imposition, can serve much the same function for Service members in the military setting. Thus, although military courts lack civil contempt authority, a military judge can order a member to comply with a subpoena under RMC 309(b)(3) with the support of the contempt power in Article 48, UCMJ, and the threat of subsequent prosecution.

A. The Military Judge's Contempt Power Under Article 48, UCMJ

Service members ordered to comply with a subpoena in an Article 30a, UCMJ, proceeding are subject first to the military judge's contempt power under Article 48, UCMJ. Article 48(a)(1)(C), UCMJ, allows a "judicial

---

[127] U.S. Dep't of Just., Crim. Res. Manual § 754 (2020).
[128] *Id.* (quoting International Union, UMWA v. Bagwell, 512 U.S. 821 (1994)).
[129] United States v. Apple MacPro Comput., 851 F.3d 238, 248 (3d Cir. 2017).
[130] United States v. Doe (*In re* Grand Jury Subpoena Duces Tecum), 670 F.3d 1335, 1345–46 (11th Cir. 2012).
[131] U.S. Dep't of Just., *supra* note 127 (quoting Bloom v. Illinois, 391 U.S. 194, 201 (1968)).
[132] *Id.* (quoting Hicks v. Feiock, 485 U.S. 624, 632 (1988)).

officer" to "punish for contempt any person" who "willfully disobeys a lawful writ, process, order, rule, decree, or command issued with respect to the proceeding."[133] Article 48(a)(2)(B), UCMJ, provides that a "judicial officer" includes "any military judge detailed to a court-martial, a provost court, a military commission, or any other proceeding under [the UCMJ]."[134] Such a judicial officer may impose as punishment confinement for thirty days, a fine of $1,000, or both.[135] Under Article 66(h), UCMJ, a person subject to contempt punishment may appeal such a punishment to the service court of criminal appeals pursuant to procedures established by the service Judge Advocate General.[136] In the case of disobedience of an order to comply with an Article 30a, UCMJ, subpoena, the disobedience would likely occur outside the presence of the military judge, so the military judge would exercise the contempt power through disposition upon notice and hearing under RCM 809(b)(2). If the military judge directly witnesses the disobedience, summary disposition under RCM 809(b)(1) would be appropriate.

Nothing in the UCMJ or the RCMs exempts an accused or disobedience of orders regarding decryption from the military judge's contempt power. Indeed, Article 48, which governs contempt, expressly applies to "any person," with no carve-out for the accused. The *MCM*'s discussion of RCM 809(a) further clarifies that "[t]he words 'any person,' as used in Article 48, include all persons, whether or not subject to military law, except the military judge, members, and foreign nationals outside the territorial limits of the United States who are not subject to the UCMJ."[137]

B. Prosecution Under the UCMJ

Service members are subject to prosecution under the UCMJ in addition to the military judge's contempt power. Disobeying a military judge's order enforcing a subpoena could violate Articles 90, 92(2), 131b, 131f(2), and 133, UCMJ. Although the accused's conduct would be factually sufficient under any of these articles, the offenses of obstruction of justice under Article 131b, UCMJ, and noncompliance with procedural rules under

---

[133] UCMJ art. 48(a)(C) (2017).
[134] *Id.* art. 48(a)(1)(C).
[135] *Id.* art. 48(b).
[136] *Id.* art. 66(h).
[137] MCM, *supra* note 108, R.C.M. 809(a) discussion.

Article 131f(2), UCMJ, are most applicable, as these are specific to the military justice process and case law supports their application.

1. Disobeying Orders Under Articles 90 or 92, UCMJ

Refusal to comply with an Article 30a, UCMJ, subpoena and a judge's order to comply would first constitute disobeying the order of a superior commissioned officer under Article 90, UCMJ, or disobeying another lawful order under Article 92(2), UCMJ. Disobedience of the judge's order compelling obedience of a subpoena would satisfy the elements of Articles 90 or 92(2), UCMJ. Article 90, UCMJ, requires (1) a lawful order; (2) from a superior commissioned officer of the accused; (3) known by the accused to be the accused's superior commissioned officer; and (4) willful disobedience.[138] Article 92(2), UCMJ, requires (1) a lawful order; (2) the accused's knowledge of the order; (3) a duty to obey the order; and (4) a failure to obey.[139] In a case involving a military judge's order, these offenses are functionally identical, save the Article 90, UCMJ, requirement that the person issuing the order be the superior commissioned officer of the accused.

Judge Cox's dissent in *Burnett* suggests that a military judge's order would be enforced under Article 90, UCMJ.[140] Although judge advocates may not colloquially consider a military judge's order as enforceable under Articles 90 or 92(2), UCMJ, nothing in those articles excludes a military judge's order from their scope. There has not been a military appellate case involving prosecution under Articles 90 or 92, UCMJ, for disobeying a military judge's order. But, in most cases, such prosecution would be unnecessary to give a judge's order force because the UCMJ and the RCMs provide judges with other remedies in the course of a court-martial (e.g., suppression of evidence, unfavorable instructions, dismissal of charges).[141]

Despite a lack of historic examples, military judges, as commissioned officers of the Armed Forces, have the authority to issue orders enforceable under Articles 90 or 92(2), UCMJ. In the vast majority of cases, the military judge will be a superior officer relative to the accused, so the judge's order will be the order of a superior officer under Article 90, UCMJ. In the rare

---

[138] UCMJ art. 90 (2016); MCM, *supra* note 108, pt. IV, ¶ 16.
[139] UCMJ art. 92(2) (1950); MCM, *supra* note 108, pt. IV, ¶ 18.
[140] United States v. Burnett, 27 M.J. 99, 108 (C.M.R. 1988) (Cox, J., dissenting).
[141] *See, e.g.*, MCM, *supra* note 108, R.C.M. 905–907.

cases where the accused outranks the presiding military judge, Congress (in the UCMJ) and the President (in the RCMs) will have conferred on the judge the authority to give lawful orders to the accused relating to the proceeding, the disobedience of which could be punished under Article 92(2), UCMJ. An officer's authority under Article 90, UCMJ, "may be based on law, regulation, custom of the Service, or applicable order to direct, coordinate, or control the duties, activities, health, welfare, morale, or discipline of the accused."[142] Under RCM 801(a)(3), the military judge "is the presiding officer in a court-martial" and shall "exercise reasonable control over the proceedings to promote the purposes of these rules and this Manual."[143] Additionally, RCM 309(b)(3) provides that a military judge reviewing a request for relief from an Article 30a, UCMJ, subpoena "shall either order the person or service provider to comply with the subpoena or order, or modify or quash the subpoena or order as appropriate." Rules for Courts-Martial 801 and 309, part of the *MCM* issued by Executive Order, thus provide authority for the military judge's order.

The lawfulness of a judge's order would thus turn on the applicability of the foregone conclusion doctrine. As discussed in Parts III and IV, nothing in the UCMJ or the RCMs excludes subpoenas issued to the accused from this authority. Thus, the only question of lawfulness would be whether the accused may lawfully claim the Fifth Amendment privilege against self-incrimination. That question turns on the applicability of the foregone conclusion doctrine to the facts of the particular case. As explained in Part VII, if the foregone conclusion doctrine applies, the right against self-incrimination no longer shields the accused from the duty to provide the device in an unencrypted state. There being no other impediment to the lawfulness of the order, it would be lawful and the accused's refusal would violate Articles 90 or 92(2), UMCJ.

Additionally, although an officer who is not a judge is not acting under RCM 309(b)(3), an order from a non-judge officer would also be lawful. The test for the lawfulness of an order is found in the *MCM*'s explanation of Article 90, UCMJ:

> The order must relate to military duty, which includes all activities reasonably necessary to accomplish a military mission, or safeguard or promote the morale, discipline, and usefulness of members of a command and directly connected with the maintenance of good order in the

[142] MCM, *supra* note 108, pt. IV, ¶ 16(c)(2)(a)(iii).
[143] *Id.* R.C.M. 801(a)(3).

> Service. The order may not, without such a valid military purpose, interfere with private rights or personal affairs. However, the dictates of a person's conscience, religion, or personal philosophy cannot justify or excuse the disobedience of an otherwise lawful order.[144]

"Orders are clothed with an inference of lawfulness," and the burden is on the Service member disobeying the order to demonstrate that the order is unlawful.[145] Ordering a Service member to produce a device in an unencrypted state as part of a criminal investigation relates to an activity necessary to maintain good order and discipline. As the CAAF explained in *United States v. Ranney*, where the court upheld a conviction for violating an order to cease an unprofessional relationship, "with a sufficient nexus between the mandate and a stated military duty—good order and discipline—extant in the record, the presumption that the order was lawful remains intact."[146] The constitutional or statutory right against self-incrimination can, of course, render such an order unlawful despite its military purpose, but that is a matter to be resolved in litigation over the foregone conclusion doctrine.[147]

In the case of a military judge's order and a follow-up order by a superior officer in the accused's chain of command, the subsequent superior officer's order would not run afoul of the "ultimate offense doctrine" as set out in the *MCM*, *United States v. Landwehr*,[148] and *United States v. Phillips*.[149] The *MCM* provides that "[d]isobedience of an order which has for its sole object the attainment of some private end, or which is given for the sole purpose of increasing the penalty for an offense which it is expected the accused may commit, is not punishable under [Article 90, UCMJ]."[150]

---

[144] *Id.* pt. IV, ¶ 16(c)(a)(iv).
[145] United States v. New, 55 M.J. 95, 106 (C.A.A.F. 2001) (citing United States v. Hughey, 46 MJ 152, 154 (C.A.A.F. 1997)); United States v. Nieves, 44 M.J. 96, 98 (C.A.A.F. 1996).
[146] United States v. Ranney, 67 M.J. 297, 302 (C.A.A.F. 2009), *overruled on other grounds*, United States v. Phillips, 74 M.J. 20, 23 (C.A.A.F. 2015) (holding that the ultimate offense doctrine under Article 90, UCMJ, is limited to the language of the *MCM* rather than more expansive applications in prior case law including *Ranney*).
[147] United States v. Lee, 25 M.J. 457, 460 (C.M.A. 1988) ("[I]t is well established that if appellant was a suspect at the time of this inquiry, Article 31 precludes this regulation or orders purportedly based thereon from being used to compel him to incriminate himself."); United States v. Reed, 24 M.J. 80 (C.M.A. 1987); United States v. Lavine, 13 M.J. 150, 151 (C.M.A. 1982)).
[148] United States v. Landwehr, 18 M.J. 355, 356–57 (C.M.A. 1984).
[149] United States v. Phillips, 74 M.J. 20, 23 (2015).
[150] MCM, *supra* note 108, pt. IV, ¶ 16(c)(2)(iv).

Phillips made clear that the ultimate offense doctrine under Article 90, UCMJ, is limited to this language in the *MCM* rather than prior judicial formulations.[151]

In *Landwehr*, the Court of Military Appeals ruled that "an order given solely for the purpose of increasing the punishment for not performing a pre-existing duty should not be made the grounds of an Article 90 violation, but should instead be charged under Article 92 . . . ."[152] But *Landwehr* presupposes a situation in which the initial duty would be enforceable only under Article 92, UCMJ (i.e., it was not a specific order from a superior officer to the accused). In such a case, the subsequent order would increase the maximum punishment from a bad conduct discharge and six months' confinement[153] to a dishonorable discharge and five years' confinement.[154] Most military judges will be commissioned officers superior to the accused, so the purpose of enhancing punishment would not apply. Moreover, even if the accused outranked the judge, the accused could still face five years' confinement and a dishonorable discharge under Articles 131b or 131f(2), UCMJ.[155] Thus, the accused would likely face a charge with the same maximum punishment, and the Government would likely concede to merging the charges for sentencing, as courts view this concession as evidence that the Government is not seeking to unfairly punish the accused.[156] Therefore, although a subsequent superior officer's order is likely unnecessary to prosecute the accused, neither would it be an unlawful basis for prosecution.

In sum, a military judge's order to the accused to obey a subpoena would serve as the basis for prosecution under Articles 90 or 92(2), UCMJ. Nevertheless, in light of the lack of case law addressing violations of a judge's order, if the Government obtains such an order compelling compliance, the Government could also seek a commander's order to

---

[151] *Phillips*, 74 M.J. at 23.
[152] *Landwehr*, 18 M.J. at 356–57.
[153] MCM, *supra* note 108, pt. IV, ¶ 16(d)(2).
[154] *Id.* ¶ 18(d)(2).
[155] *Id.* ¶¶ 83(d), 87(d)(2).
[156] United States v. Hohenstein, No. ACM 37965 2014 CCA LEXIS 179, at *24–27 (A.F. Ct. Crim. App. Mar. 20, 2014) ("We find no evidence of prosecutorial overreaching or abuse, particularly in light of the fact that trial counsel conceded the Specifications should be merged for sentencing if the members convicted the appellant of both offenses. In sum, under *Campbell*, the military judge properly exercised his discretion by deferring his ruling on unreasonable multiplication of charges until the members returned their verdict, and then merging the specifications for sentencing rather than dismissing them.").

compel compliance as a basis for future prosecution without running afoul of the ultimate offense doctrine set forth in the *MCM*, *Phillips*, and *Landwehr*.[157]

2. Obstructing Justice Under Article 131b, UCMJ

Disobeying a judge's order to comply with a subpoena to provide a device in an unencrypted state could also constitute obstruction of justice under Article 131b, UCMJ. The text of Article 131b, UCMJ, which replaced the previous Article 134, UCMJ, offense, provides that:

> Any person subject to this chapter who engages in conduct in the case of a certain person against whom the accused had reason to believe there were or would be criminal or disciplinary proceedings pending, with intent to influence, impede, or otherwise obstruct the due administration of justice shall be punished as a court-martial may direct.[158]

Obstructing justice is comprised of three elements: (1) that the accused wrongfully do an act (2) in the case of the accused or another person whom the accused has reason to believe there would be criminal or disciplinary proceedings pending (3) with the intent to influence, impede, or otherwise obstruct the due administration of justice.[159] In the Article 30a, UCMJ, subpoena scenario, the accused would have the opportunity to move to quash and litigate the lawfulness of the subpoena, so the judge would settle whether disobedience is "wrongful." Having a device seized and having been served the pre-referral subpoena, the accused could have little doubt that there would be criminal proceedings pending. Finally, because the accused would know the purpose of the subpoena was to gather evidence, the intent to impede justice would be apparent from disobeying a judge's order compelling compliance.

Case law strongly suggests that disobedience of a military judge's order enforcing a subpoena would be factually sufficient for an obstruction conviction. The most analogous case is the Navy-Marine Corps Court of Criminal Appeals decision of *United States v. Watkins*.[160] In that case, the appellant was convicted of obstruction of justice for interfering with the

---

[157] *Id.*
[158] UCMJ art. 131b (2019).
[159] *Id.*
[160] United States v. Watkins, No. 201700246, 2019 CCA LEXIS 71, at *47–48 (N-M. Ct. Crim. App. Feb. 21, 2019).

Government's attempts to serve a subpoena on his spouse.[161] The evidence of the wrongfulness of the appellant's conduct included web searches such as "dodging being served a subpoena," web history researching the hotel where his spouse hid from Government agents, and violations of a military protective order prohibiting contact with his spouse.[162] The appellate court affirmed the factual and legal sufficiency of the appellant's obstruction conviction. The CAAF reversed, but not on the grounds that the conviction for obstruction of justice was factually or legally insufficient.[163] Rather, it found error in the trial judge's refusal to allow the appellant to dismiss his civilian defense counsel, thus denying the appellant the right of counsel of his choice.[164]

Given that the accused's interference with lawful process on a witness to obtain evidence can constitute obstruction, direct disobedience of a subpoena to the accused would also constitute obstruction. Indeed, the corrupt motive of obstruction can criminalize what might otherwise be a lawful act such as moving one's family member to a new residence (as in *Watkins*) or advising a person to invoke Article 31, UCMJ, rights.[165] In the case of disobedience of a judge's lawful order, the accused may not rely on such conduct being lawful sans the corrupt context. Thus, an accused's disobedience of a judge's order to comply with an Article 30a, UCMJ, subpoena could be punishable as obstruction of justice under Article 131b, UCMJ.

3. Prevention of Authorized Seizure of Property Under Article 131e, UCMJ

Disobeying a judge's order to comply with a subpoena would not violate the proscription in Article 131e, UCMJ, on prevention of authorized seizure of property. Article 131e, UCMJ, provides:

---

[161] *Id.*
[162] *Id.*
[163] *Id.*
[164] *Id.*
[165] *Watkins*, 2019 CCA LEXIS 71 at *47; Cole v. United States, 329 F.2d 437, 443 (9th Cir. 1964) ("We hold the constitutional privilege against self-incrimination is an integral part of the due administration of justice. . . . A witness violates no duty to claim it, but one who . . . advises with corrupt motive . . . to take it, can and does himself obstruct or influence the due administration of justice.").

> Any person subject to this chapter who, knowing that one or more persons authorized to make searches and seizures are seizing, are about to seize, or are endeavoring to seize property, destroys, removes, or otherwise disposes of the property with intent to prevent the seizure thereof shall be punished as a court-martial may direct.[166]

Disobeying a judge's order would meet neither the first nor the third elements of the offense. The first element requires that agents "were seizing, about to seize, or endeavoring to seize certain property."[167] In most cases involving compelled decryption, agents will have already seized the property before the accused is served a subpoena. The third element requires intent to prevent the seizure;[168] as with the first element, the seizure will have already occurred when the accused is served a subpoena.

Disobeying a judge's order arguably also fails to satisfy the second element as well, which requires that the accused "destroys, removes, or otherwise disposes of the property."[169] The *Military Judges' Benchbook* instructions define "dispose of" as "an unauthorized transfer, relinquishment, getting rid of, or abandonment of the property."[170] The failure to decrypt a device does not prevent the seizure of the device. So, failure to decrypt does not fall neatly within this definition. The *Benchbook* instructions go on to state, "[p]roperty may be considered 'destroyed' if it has been sufficiently injured to be useless for the purpose for which it was intended, even if it has not been completely destroyed."[171] Wrongfully leaving a device locked certainly renders such property "useless for the purpose for which it was intended" because every such use requires it to be unlocked, but it is not clear that leaving a device locked constitutes "injuring" the device.

The case law addressing Article 131e, UCMJ, and the analogous pre-MJA 2016 offense under Article 134, UCMJ, does not address decryption. Rather, such cases involve various means of disposing of or concealing physical evidence.[172] Thus, absent case law extending the language of

---

[166] UCMJ art. 131e (2019).
[167] MCM, *supra* note 108, ¶ 86(b)(1).
[168] *Id.* ¶ 86(b)(3).
[169] *Id.*
[170] *Electronic Benchbook 2.14.9*, U.S. ARMY JUDGE ADVOC. GEN.'S CORPS para. 3a-55e-1, https://www.jagcnet.army.mil/EBB (Mar. 15, 2022).
[171] *Id.*
[172] *See, e.g.*, United States v. Rogers, No. 20190032, 2019 CCA LEXIS 399, *5 (A. Ct. Crim. App. Oct. 8, 2019).

Article 131e, UCMJ, to decryption, disobeying an order to decrypt a device would likely not be punishable as prevention of authorized seizure of property under Article 131e, UCMJ.

4. Noncompliance with Procedural Rules by Failing to Comply with the Code Under Article 131f(2), UCMJ

A Service member disobeying a judge's order to comply with an Article 30a, UCMJ, subpoena would violate Article 131f(2), UCMJ, which applies where a Service member "knowingly and intentionally fails to enforce or comply with any provision of this chapter regulating the proceedings before, during, or after trial of an accused."[173] Military courts have consistently described Article 131f(2), UCMJ, as applying prior to referral. As the Navy Court explained in *United States v. Dossey*, the word "proceedings" in the old Article 98, UCMJ, is "broader than a particular court-martial" and "Article 98 explicitly refers to proceedings before and after trial, rather than simply referring to the 'proceedings of a court-martial.'"[174] Along the same lines, the CAAF observed in *United States v. McCoy* that a trial counsel wrongfully advising CID agents to withhold Article 31, UCMJ, rights advisement during an investigation would violate Article 98, UCMJ, by failing to comply with Article 31, UCMJ.[175] Likewise, in *United States v. Allen*,[176] the Court noted that the legislative history of Article 32, UCMJ, describes the failure to order an Article 32, UCMJ, investigation, which is by nature a pre-referral act, as a violation of the old Article 98, UCMJ. These three cases thus clarify that Article 131f(2), UCMJ, applies to pre-referral conduct.

Failing to obey a judge's order to comply with a subpoena constitutes failure to "comply with any provision of [the UCMJ] regulating the proceedings before, during, or after trial of an accused,"[177] thus satisfying the first element of Article 131f(2), UCMJ. In *United States v. McElhinney*,

---

[173] UCMJ art. 131f(2) (2016).
[174] United States v. Dossey, 66 M.J. 619, 624 (N-M. Ct. Crim. App. 2008). Under MJA 2016, the old Article 98, UCMJ, was renumbered as the current Article 131f, UCMJ, so the case law references the former. National Defense Authorization Act for Fiscal Year 2017, Pub. L. No. 114-328, § 5401, 130 Stat. 2000, 2938 (2016).
[175] United States v. McCoy, 31 M.J. 323, 324 (C.A.A.F. 1999).
[176] United States v. Allen, 5 U.S.C.M.A. 626, 633 (C.M.A. 1955).
[177] UCMJ art. 131f(2).

a military judge ordered the Government to produce witnesses.[178] The Court of Military Appeals wrote, citing the old Article 98, UCMJ, "[s]ince the judge's original decision was then nonappealable, the convening authority was bound in law to honor it . . . or, if he did not desire to do so, he had the option to dismiss the charges."[179] While this language is dicta, it is the most authoritative guidance available, and there is no authority contradicting *McElhinney*. There has not been a case involving an actual prosecution under Article 98, UCMJ, for failure to obey a judge's order. In fact, there has not even been a case where the accused was convicted of violating the prohibition in either Article 131f(1), UCMJ, on causing unnecessary delay in disposing of a case or Article 131f(2), UCMJ, on failing to enforce or comply with any provision of the UCMJ, leading one judge to describe the old Article 98, UCMJ, as an "illusory remedy."[180]

The first element would be the only controversial element in a prosecution under Article 131f(2), UCMJ, for disobedience of a judge's order to obey an Article 30a, UCMJ, subpoena. The second element (i.e., that the accused had a duty to comply) would be evident from the judge's order under RCM 309. The third and fourth elements (i.e., knowledge of the duty and intentionally failing to comply) would be clear from the judge's issuing the order to the accused and the accused's failure to comply.[181]

Like Articles 131b and 90, UCMJ, the maximum punishment under Article 131f(2), UCMJ, is a dishonorable discharge, total forfeiture, and confinement for five years.[182] Thus, in most cases, in light of the likelihood of multiple charges being merged for sentencing, the choice to proceed under Article 131f(2), UCMJ, alone or in conjunction with other charges would not affect the maximum punishment in sentencing.

---

[178] United States v. McElhinney, 21 U.S.C.M.A. 436, 439 (C.M.A. 1972).
[179] *Id.*
[180] United States v. Ward, 48 C.M.R. 588, 589 (C.M.R. 1974) (Lynch, J., concurring) ("Article 98, however, provides only an illusory remedy in view of the 23 years that the Code has been in operation and the absence of a single reported case involving a charge laid under Article 98 being prosecuted. In this case, in particular, Article 98 provides only a questionable remedy in view of the fact that the accused would have been one of the most senior Flag Officers in command in the Coast Guard, and the substance of the charge would be simply post-trial delay of the Supervisory Authority's action after conviction.").
[181] MCM, *supra* note 108, ¶ 87(b)(2)(c)–(d).
[182] *Id.* ¶ 87(d)(2).

5. Conduct Unbecoming an Officer Under Article 133, UCMJ

If the accused is an officer, refusing to obey a judge's order to obey a subpoena could constitute conduct unbecoming under Article 133, UCMJ. Conduct unbecoming is "behavior in an official capacity which, in dishonoring or disgracing the person as an officer, seriously compromises the officer's character as a gentleman, or action or behavior in an unofficial or private capacity which, in dishonoring or disgracing the officer personally, seriously compromises the person's standing as an officer."[183] "[A]cts of dishonesty, unfair dealing, indecency, indecorum, lawlessness, injustice, or cruelty" may qualify.[184] "[C]onduct need not be a violation of any other punitive article of the Code, or indeed a criminal offense at all, to constitute conduct unbecoming an officer."[185] There is authority for conduct designed to hide harmful facts constituting conduct unbecoming. In *United States v. Daniels*, the AFCCA upheld a conviction for conduct unbecoming where the accused asked another person to misrepresent the basis for a leave request to hide the fact that the accused was in jail.[186]

Unlike Article 134, UCMJ, a more specific offense does not preempt Article 133, UCMJ. Rather, "[a]n accused can be charged with either an Article 133, UCMJ, offense or the enumerated punitive article based on the same underlying conduct, provided the conduct is, in fact, unbecoming an officer and a gentleman."[187]

The maximum punishment under Article 133, UCMJ, is dismissal, forfeiture of all pay and allowances, and "and confinement for a period not in excess of that authorized for the most analogous offense for which a

---

[183] *Id.* ¶ 90(c)(2). Section 542 of the National Defense Authorization Act for Fiscal Year 2022 removes the "and a gentleman" language from Article 133, UCMJ, but there is no indication that this amendment changes the applicability of the article. National Defense Authorization Act for the Fiscal Year 2022, Pub. L. No. 117-81, § 542, 135 Stat. 1541, 1709 (2021).
[184] *Id.*
[185] United States v. Forney, 67 M.J. 271, 275 (C.A.A.F. 2009).
[186] *United States v. Daniels* had a robust appellate history involving *United Sates v. Briggs* and the statute of limitations, but this history did not question the Air Force Court of Criminal Appeals' holding regarding the factual sufficiency of the conduct unbecoming conviction. *United States v. Daniels*, No. ACM 39407, 2019 WL 2560041, at *5 (A.F. Ct. Crim. App. June 18, 2019), *aff'd*, 79 M.J. 199 (C.A.A.F. 2019), *cert. granted sub nom.* United States v. Collins, 140 S. Ct. 519 (2019), and *rev'd and remanded sub nom.* United States v. Briggs, 141 S. Ct. 467 (2020), and *vacated*, No. 19-0345/AF, 2021 WL 495963 (C.A.A.F. Jan. 25, 2021), and *review denied*, 79 M.J. 252 (C.A.A.F. 2019), and *rev'd and remanded*, No. 19-0345/AF, 2021 WL 495963 (C.A.A.F. Jan. 25, 2021).
[187] United States v. Conliffe, 67 M.J. 127, 133 n.2 (C.A.A.F. 2009).

punishment is prescribed in this Manual, or, if none is prescribed, for 1 year."[188] Each of the most analogous offenses—Articles 131b and 131f(2), UCMJ—have the same maximum confinement of five years.[189]

6. Contempt of Court Under Article 134, UCMJ

In the case of disobedience of a judge's order to comply with a subpoena, the conduct would meet the elements for prosecution under Article 134, UCMJ, but it would be preempted by Articles 90, 131b, and 131f(2), UCMJ. The *MCM*'s discussion of RCM 809 states that "a person subject to the UCMJ who commits contempt may be tried by court-martial or otherwise disciplined under Article 134 for such misconduct in addition to or instead of punishment for contempt."[190] The "punishment for contempt" is the military judge's contempt authority in Article 48, UCMJ. The discussion does not specify any particular type of contemptuous behavior, and this reference appears in the discussion as opposed to the text of the *MCM* enacted by the President. Thus, the preemption rule provided by the President supersedes the discussion where the conduct at issue is covered by a more specific punitive article.

Contempt of court is not an enumerated offense under Article 134, UCMJ. Thus, contempt would be prosecuted as a general offense for conduct prejudicial to good order and discipline and/or conduct of a nature to bring discredit upon the service. While no case specifically addresses disobedience of a subpoena under Article 134, UCMJ, case law concerning obstruction of justice when that offense fell under Article 134, UCMJ, indicates that failure to obey a subpoena would be conduct prejudicial to good order and discipline.[191] In *United States v. Watkins*, the Article 134, UCMJ, obstruction case discussed in Section VI.B.2 above, the accused's efforts to frustrate service of a subpoena on his spouse were "prejudicial to good order and discipline in the armed forces and was of a nature to bring

---

[188] MCM, *supra* note 108, ¶ 90(d).
[189] *Id.* ¶¶ 83(d), 87(d)(2).
[190] *Id.* R.C.M. 809 discussion.
[191] Prior to MJA 2016, obstructing justice was a specified offense under Article 134, UCMJ. 2016 MCM, *supra* note 119, pt. IV, ¶ 96. The Military Justice Act of 2016 added obstructing justice as Article 131b, UCMJ, and removed that offense from the purview of Article 134, UCMJ. National Defense Authorization Act for Fiscal Year 2017, Pub. L. No. 114-328, § 5445, 130 Stat. 2000, 2956 (2016).

discredit upon the armed forces."[192] Military courts have also held that disobeying court orders satisfied the Article 134, UCMJ, terminal element. In *United States v. Dominguez*, failure to appear in civilian court as ordered in a ticket summons was service discrediting because the appellant "flouted judicial authority by failing to appear" and his contempt toward a court proceeding was "injurious to the military's reputation."[193]

The common threads of disobedience and obstruction in any prosecution raise the issue of preemption in light of the specified prohibitions in Articles 90, 131b, and 131f(2), UCMJ. "The preemption doctrine prohibits application of Article 134 to conduct covered by Articles 80 through 132."[194] In the case of disobedience of a judge's order to compel decryption, a prosecution for contempt of court under Article 134, UCMJ, would likely be preempted by Articles 90, 92(2), 131b, and 131f(2), UCMJ. These articles would not bar all contempt of court prosecutions under Article 134, UCMJ. Disruptive behavior in a court, for example, might be conduct not covered by another article and thus fall under Article 134, UCMJ. But, in the specific case of disobeying a judge's order to comply with a subpoena, several other articles would apply to the conduct. Contempt of court arguably protects a different interest (i.e., the court's authority) than do other articles, but the preemption doctrine applies to "conduct," not interest.[195]

In the event that prosecution under Article 134, UCMJ, was not preempted, because contempt of court is an unspecified offense under Article 134, UCMJ, the maximum punishment is determined under RCM 1003(c)(1)(B). Where the Article 134, UCMJ, offense is included in or "closely related" to another offense in the UCMJ, the maximum punishment is that of the included or related offense. If there is no included or closely related offense, the offense is punishable as authorized in the U.S. Code or by the custom of the service. The most closely related offenses to disobeying a judge's order enforcing a subpoena are "noncompliance with procedural rules by failing to comply with the Code" under Article 131f(2), UCMJ, and obstructing justice under Article 131b, UCMJ. Article 90, UCMJ, may be

---

[192] *See, e.g.*, United States v. Jones, 20 M.J. 38, 40 (C.M.A. 1985) ("It is clear that the willful destruction of contraband seized by commissioned officers of the armed forces prejudices good order and discipline. It does not matter how the evidence is ultimately used. Willful destruction of potential evidence harms the orderly administration of justice. The accused was properly charged, tried, and convicted.").

[193] United States v. Dominguez, No. ACM S28658, 1993 CMR LEXIS 587, at *3–4 (A.F.C.M.R. Dec. 13, 1993).

[194] MCM, *supra* note 108, ¶ 91(c)(5)(a).

[195] *Id.*

less specifically analogous, but the maximum punishment is the same, so the relative strength of the analogy is immaterial. The only case in which finding another provision more analogous would matter is the rare case where the military judge is not a superior officer to the accused so Article 92(2), UCMJ, could apply in lieu of Article 90, UCMJ. While applicable, Article 92(2), UCMJ, is not specific to the court-martial context like Articles 131f(2) and 131b, UCMJ, and is thus not the most closely related offense.

C. Warrants of Attachment—Lawful, But Unnecessary, for Service Members

A military judge need not issue a warrant of attachment to the accused to enforce an Article 30a, UCMJ, subpoena. Rule for Court-Martial 309 provides military judges with the authority to "order the person or service provider to comply with the subpoena or order."[196] Having received such an order from a military judge, Articles 90, 131b, and 131f(2), UCMJ, would apply to a Service member with no need for an additional warrant.

Warrants of attachment are generally issued to obtain evidence or testimony from civilians.[197] Rule for Court-Martial 703(g)(3)(H)(i) states, "If the person subpoenaed neglects or refuses to appear or produce evidence, the military judge . . . may issue a warrant of attachment to compel the attendance of a witness or the production of evidence, as appropriate."[198] As the discussion of RCM 703(g)(3)(H)(i) explains, "a warrant of attachment is a legal order addressed to an official directing that official to have the person named in the order brought before a court" and "has as its purpose the obtaining of the witness' presence, testimony, or documents."[199] The rule thus does not exclude Service members—it is simply unnecessary. Service members may be compelled to attend courts-martial by order of their commander without the need to resort to warrants.[200] And, as the discussion further explains, when a civilian disobeys a subpoena, it is the

---

[196] *Id.* R.C.M. 309.

[197] *See, e.g.*, United States v. Williams, 23 M.J. 724, 726 (A.F.C.M.R. 1986) (providing that a civilian's refusal to appear gave the military judge authority to direct a warrant of attachment be issued); United States v. Harding, 63 M.J. 65, 66 (C.A.A.F. 2006) (noting that a warrant of attachment was issued to obtain evidence from a civilian but the U.S. Marshals did not enforce the warrant).

[198] MCM, *supra* note 108, R.C.M. 703(g)(3)(H)(i).

[199] *Id.* discussion.

[200] *Id.* R.C.M. 703(g)(1).

disobedience of the subpoena, not the warrant of attachment, that serves as a basis for prosecution.[201] So, too, with Service members, the disobedience triggers criminal liability under Articles 90, 131b, and 131f(2), UCMJ, not the warrant of attachment.

Warrants of attachment nevertheless might have some practical utility in securing compliance. There is nothing wrong with issuing a warrant of attachment for an active-duty Service member, but it is unnecessary. Thus, a military judge could issue a warrant of attachment to provide a second chance for compliance with the implicit threat of a document entitled "warrant." But nothing in the UCMJ or the RCMs requires the military judge to provide the accused with this second chance to comply.

VII. The Foregone Conclusion Doctrine, the Fifth Amendment, and Article 31, UCMJ

A. The Act of Production Doctrine and Foregone Conclusion Doctrine Generally

Under the act of production doctrine, an act qualifies for Fifth Amendment protection if the act is "testimonial, incriminating, and compelled."[202] A compelled act of production by the accused is "testimonial" if it would "'disclose the contents of his own mind' and therefore communicate a 'factual assertion' or 'convey[] information to the Government.'"[203]

The foregone conclusion doctrine, however, can render an act of production non-testimonial and thus not protected by the Fifth Amendment. As Professor Orin Kerr has explained: "The foregone conclusion doctrine teaches that when the testimonial aspect of a compelled act 'adds little or nothing to the sum total of the Government's information,' any implied testimony is a 'foregone conclusion' and compelling it does not violate the Fifth Amendment."[204]

The foregone conclusion doctrine has its roots in *United States v. Fisher*.[205] In *Fisher*, two taxpayers under investigation by the Internal

---

[201] *Id.* R.C.M. 703(g)(3)(H) discussion.
[202] Hiibel v. Sixth Jud. Dist. Ct. of Nev., 542 U.S. 177, 189 (2004).
[203] Kerr, *supra* note 2 (quoting Doe v. United States, 487 U.S. 201, 208, 210–11, 215 (1988)).
[204] *Id.* at 773 (quoting United States v. Fisher, 425 U.S. 391, 411 (1976)).
[205] *Fisher*, 425 U.S. 391 (1976).

Revenue Service (IRS) obtained from their accountants documents that they transferred to their lawyers.[206] Upon learning that the lawyers had the documents, the IRS served summonses on them that directed production of the documents.[207] The IRS also served summonses on the accountants to appear and testify regarding the documents.[208] The Supreme Court found that this compelled production did not violate the Fifth Amendment.[209] The act of production doctrine applied because production communicated that the documents (1) existed, (2) were in the target's possession, and (3) were authentic.[210] The foregone conclusion doctrine, however, rendered this act of production non-testimonial because the production "adds little or nothing to the sum total of the Government's information."[211] Such documents were the type "usually prepared by an accountant working on the tax returns of his client," so the existence of the documents and their location in the target's possession was a "foregone conclusion," and the authenticity of the documents could be independently confirmed by the accountants who created them.[212] Therefore, the Government did not rely on "truthtelling" by the taxpayers to prove the existence of the documents, the taxpayers' access to the documents, or the documents' authenticity. As a result, compelling production did not violate the taxpayers' constitutional rights because the production was not "testimony" but mere "surrender."[213]

The Supreme Court went on to address the foregone conclusion doctrine in three more cases lower courts frequently cite in applying the doctrine: *United States v. Doe* (*Doe I*),[214] *Doe v. United States* (*Doe II*),[215] and *United States v. Hubbell*.[216]

Doe I provides an example in which the Government was unable to prove that the testimonial aspects of a compelled act were a foregone conclusion. In *Doe I*, a grand jury investigating corruption in awarding Government contracts issued subpoenas directing Doe to turn over

---

[206] *Id.* at 394.
[207] *Id.* at 395.
[208] *Id.* at 394–95.
[209] *Id.* at 402.
[210] Kerr, *supra* note 2, at 773 (citing *Fisher*, 425 U.S. at 411–13).
[211] *Fisher*, 425 U.S. at 411.
[212] *Id.*
[213] *Id.*
[214] *United States v. Doe*, 465 U.S. 605 (1984) (*Doe I*).
[215] *Doe v. United States*, 487 U.S. 201 (1988) (*Doe II*).
[216] United States v. Hubbell, 530 U.S. 27 (2000).

telephone and business records from several sole proprietorships.[217] The Supreme Court found that the act of production compelled by the subpoenas was protected by the Fifth Amendment.[218] Like in *Fisher*, the act of production would communicate that the records existed, were in Doe's possession, and were authentic.[219] Unlike in *Fisher*, though, the district court and Third Circuit had determined that the Government did not know whether the documents sought were in Doe's possession or control, and the Supreme Court did not disturb these findings of fact.[220] Thus, the existence, possession, and authenticity of the documents in *Doe I* was not a foregone conclusion, so the Fifth Amendment privilege against self-incrimination applied.[221]

By contrast, in *Doe II*, compelling Doe to execute a consent directive allowing the release of records for bank accounts over which he might have control was not testimonial. In *Doe II*, a grand jury was investigating fraudulent manipulation of oil cargoes and tax evasion.[222] In response to a grand jury subpoena for records of transactions with banks in the Cayman Islands and Bermuda, Doe appeared, produced some records, and testified that no additional records were in his possession or control.[223] Doe claimed the Fifth Amendment privilege as to the existence and location of any other records. The grand jury then issued subpoenas to the foreign banks for records of accounts over which Doe had authority. The banks refused to comply, invoking bank secrecy laws in their home countries.[224] The district court then ordered Doe to execute a consent directive releasing records of accounts where Doe had a right of withdrawal. The directive did not name any specific account or even acknowledge the existence of any accounts—it simply applied to any accounts over which Doe had authority generally.[225] After Doe refused to sign the directive, the district court found Doe in contempt, and the Fifth Circuit affirmed. The Supreme Court affirmed, finding the consent directive not testimonial. As the Court explained, because the directive only generally provided consent for release of records in the event that any such records existed, the directive

---

[217] *Doe I*, 465 U.S. at 613–16.
[218] *Id.* at 616.
[219] *Id.* at 613 (citing *Fisher*, 425 U.S. at 410).
[220] *Id.* at 613–14.
[221] *Id.* at 616.
[222] *Doe II*, 487 U.S. 201.
[223] *Id.* at 202–03.
[224] *Id.* at 203.
[225] *Id.* at 206.

did not admit the existence of any accounts or that Doe controlled them.[226] Nor did the directive itself "admit the authenticity of any records produced by the bank."[227] Rather, if the Government received records in response, "the only factual statement made by anyone will be the bank's implicit declaration, by its act of production in response to the subpoena, that it believes the accounts to be petitioner's."[228] Therefore, the Court found that "As in *Fisher*, the Government is not relying upon the 'truthtelling' of Doe's directive to show the existence of, or his control over, foreign bank account records."[229]

United States v. Hubbell,[230] on the other hand, provides another example of the *Fisher* framework's application in a case in which the Government failed to prove that communicative aspects of the act of production were a foregone conclusion. Hubbell pleaded guilty to mail fraud and tax evasion.[231] As part of his plea bargain, he promised to provide the independent counsel in the Whitewater investigation "full, complete, accurate, and truthful information."[232] Investigating whether Hubbell had broken that promise, the independent counsel served Hummel a subpoena to produce eleven categories of documents before a grand jury.[233] Hubbell appeared before the grand jury and invoked his privilege against self-incrimination, refusing "to state whether there are documents within [his] possession, custody, or control responsive to the Subpoena."[234] The prosecutor served Hubbell an order "directing him to respond to the subpoena and granting him immunity 'to the extent allowed by law.'"[235] Hubbell produced 13,120 pages of documents, which led to a second prosecution for mail fraud, wire fraud, and tax offenses.[236] As in *Fisher*, the act of production doctrine applied because the production communicated that the documents "existed, were in his possession or control, and were authentic."[237] Unlike in *Fisher*, however, in *Hubbell* "the Government

---

[226] *Id.* at 215.
[227] *Id.*
[228] *Id.* at 218.
[229] *Id.* at 215.
[230] United States v. Hubbell, 530 U.S. 27 (2000).
[231] *Id.* at 30.
[232] *Id.*
[233] *Id.* at 31.
[234] *Id.*
[235] *Id.*
[236] *Id.*
[237] *Id.* at 36.

ha[d] not shown that it had any prior knowledge of either the existence or the whereabouts of the 13,120 pages of documents ultimately produced by respondent."[238] Thus, in *Hubbell*, the foregone conclusion doctrine did not apply, so the Fifth Amendment privilege applied to Hubbell's production. The immunity granted to Hubbell was coextensive with his Fifth Amendment privilege, so *United States v. Kastigar* required dismissal of the second prosecution unless the Government could show the indictment was obtained from wholly independent sources, which the Government could not do.[239]

B. The Foregone Conclusion Doctrine and Compelled Decryption in Civilian Courts

The various Federal circuit,[240] Federal district,[241] and state court[242] opinions addressing compelled decryption agree that the foregone conclusion doctrine can apply. The Federal Circuits that have considered the issue have set out two differing tests for applying the foregone conclusion doctrine. These tests differ in terms of what conclusions must be foregone. The Third Circuit has suggested that the Government need only show the accused's ability to decrypt the device is a foregone conclusion.[243] The Eleventh Circuit, by contrast, also requires the Government to show with "reasonable particularity" what evidence will be found on the device.[244]

---

[238] *Id.* at 45.
[239] *Id.* (citing United States v. Kastigar, 406 U.S. 441 (1972)).
[240] *Compare* United States v. Apple MacPro Comput., 851 F.3d 238, 248 n.7 (3d Cir. 2017), *with* United States v. Doe (*In re* Grand Jury Subpoena Duces Tecum), 670 F.3d 1335 (11th Cir. 2012).
[241] *See, e.g.*, United States v. Spencer, No. 17-cr-00259-CRB-1, 2018 U.S. Dist. LEXIS 70649 (N.D. Cal. Apr. 26, 2018); United States v. Jimenez, No. 19-10278-RWZ, 2020 U.S. Dist. LEXIS 5198, at *2 (D. Mass. Jan. 13, 2020).
[242] *See, e.g.*, Commonwealth v. Gelfgatt, 11 N.E.3d 605 (Mass. 2014); State v. Johnson, 576 S.W.3d 205 (Mo. Ct. App. 2019); State v. Pittman, 452 P.3d 1011 (Or. 2019).
[243] *Apple MacPro Comput.*, 851 F.3d at 248 n.7.
[244] *Doe (In re Grand Jury Subpoena Duces Tecum)*, 670 F.3d 1335.

1. The Third Circuit

The Third Circuit has suggested that the only conclusion that need be foregone is the accused's ability to decrypt the device.[245] Put another way, if the Government already has information sufficient to show that the accused can unlock a device, the accused may be ordered to do so. As the Third Circuit wrote in *United States v. Apple MacPro Computer*:

> [A] very sound argument can be made that the foregone conclusion doctrine properly focuses on whether the Government already knows the testimony that is implicit in the act of production. In this case, the fact known to the Government that is implicit in the act of providing the password for the devices is "I, John Doe, know the password for these devices."[246]

In *Apple MacPro Computer*, agents lawfully seized several encrypted devices that required passcodes to unlock.[247] Agents seized these devices pursuant to a valid search warrant executed at the appellant's home. The appellant refused unlock a computer, hard drives, and an application on a mobile phone. Forensic examination of the computer found one child pornography image, logs showing the computer had been used to visit sites with child exploitation titles, and evidence that the appellant had downloaded to the hard drives files known to be child pornography.[248] A witness had also seen the appellant unlock the computer and view child pornography on the computer.[249] The district court ordered the appellant to unlock the devices and held him in contempt when he claimed not to be able to remember the passwords.[250]

The Third Circuit, on plain-error review, affirmed.[251] As the Court explained, under the foregone conclusion doctrine, "the Fifth Amendment does not protect an act of production when any potentially testimonial component of the act of production—such as the existence, custody, and authenticity of evidence—is a 'foregone conclusion' that 'adds little or nothing to the sum total of the Government's information.'"[252] The Third

---

[245] *Apple MacPro Comput.*, 851 F.3d at 248.
[246] *Id.* n.7.
[247] *Id.* at 242.
[248] *Id.* at 242–43.
[249] *Id.* at 248–49.
[250] *Id.* at 249.
[251] *Id.*
[252] *Id.* at 247.

Circuit affirmed the district court's finding that the decryption was non-testimonial because the Government had already established that "(1) the Government had custody of the devices; (2) prior to the seizure, [the appellant] possessed, accessed, and owned all devices; and (3) there are images on the electronic devices that constitute child pornography."[253] The Third Circuit went on to strongly suggest that the third point was unnecessary because the foregone conclusion doctrine would only apply to the control of the device implicit in the act of production—not the evidence that would later be obtained from the device.[254] But the Third Circuit did not have the occasion to so hold because the Government had presented evidence there was child pornography on the devices.[255]

2. The Eleventh Circuit

The Eleventh Circuit, on the other hand, has applied a more stringent test. *In re Grand Jury Subpoena Duces Tecum*[256] saw the Eleventh Circuit hold that a suspect can only be compelled to unlock his device via passcode if the Government can show with "reasonable particularity" what evidence will be found on the device.[257] In that case, a grand jury investigating child pornography charges issued a subpoena to the accused to decrypt electronic devices.[258] The Government, however, was unable to provide evidence showing that the drives contained child pornography or that the accused had access to the encrypted portions of the drives. The Government's expert in that case conceded that it was possible that the encrypted drives contained nothing.[259] The Eleventh Circuit, therefore, found that

> [n]othing in the record before [it] reveals that the Government knows whether any files exist and are located on the hard drives; what's more, nothing in the record illustrates that the Government knows with reasonable particularity that Doe is even capable of accessing the encrypted portions of the drives.[260]

---

[253] *Id.* at 248.
[254] *Id.* n.7.
[255] *Id.*
[256] *Doe (In re Grand Jury Subpoena Duces Tecum*), 670 F.3d 1335.
[257] *Id.* at 1346.
[258] *Id.* at 1337.
[259] *Id.* at 1346.
[260] *Id.*

3. Subpoena Practice Under the Circuit Split

The Third Circuit approach is better reasoned than the Eleventh Circuit approach. The Third Circuit in *Apple MacPro Computer* questioned the Eleventh Circuit's requirement that the Government articulate with reasonable particularity what would be found on the device. As the Third Circuit explained, the foregone conclusion doctrine focuses on only that which is implicit in the "act of production."[261] In decryption cases, the only testimony implicit in decryption is that the accused can decrypt the device. Put another way, the accused is only being compelled to unlock the device, and the only fact the act of unlocking communicates is the accused's ability to unlock, so the only "foregone conclusion" the Government should have to establish is the ability to unlock.

In analyzing the Third Circuit and the Eleventh Circuit approaches, Professor Kerr concluded that the Third Circuit approach is correct. As he explained:

> The Eleventh Circuit appears to have held that the Government can compel decryption only when it can first describe with reasonable particularity what decrypted files will be found on the device. This holding is incorrect. It erroneously equates the act of decrypting a device with the act of collecting and handing over the files it contains. The two acts may seem similar at first, but they have very different Fifth Amendment implications.[262]

Professor Kerr goes on to explain the differing Fifth Amendment implications of ordering decryption of a device on the one hand and ordering collection and production of files on the other as follows:

> If evidence is in a locked box, investigators might order a suspect to unlock the box and do no more. Investigators can then take over the search, investigating the contents of the box themselves and looking for the evidence. On the other hand, investigators might order a suspect to unlock the box and then execute the search himself on the Government's behalf. The suspect might be ordered to unlock the box, search it, find a particular set of documents described, and then bring those responsive documents to the Government.

---

[261] United States v. Apple MacPro Comput., 851 F.3d 238, 248 n.7 (3d Cir. 2017).
[262] Kerr, *supra* note 2, at 770 (citations omitted).

> The first target role is unlocking; the second target role is unlocking and searching.
>
> . . . .
>
> When a suspect is ordered to produce a decrypted version of an electronic device, the compelled act ordinarily will be only to unlock the device. Any additional searching is the Government's job, and the Government need not know what it will find when it begins to look. Whether the Government knows enough about the incriminating evidence it hopes to find to describe it with reasonable particularity is simply irrelevant if the Government, not the target, is going to look for it. If the target doesn't have to search for the evidence the Government is seeking, the target doesn't need a specific description to establish a foregone conclusion.[263]

Thus, when drafting subpoenas, the Government should be careful to avoid an "implicit search requirement."[264] Such a requirement could be an order to take steps beyond simply producing an unlocked device, such as producing decrypted versions of certain files on the device. That implicit search request would move the production from *Fisher* to *Hubell* by relying on the accused's knowledge of particular files on the device.[265]

Although the Third Circuit approach is better reasoned, the circuit split remains. Prosecutors must thus choose between the Third Circuit and Eleventh Circuit approaches when drafting Article 30a, UCMJ, subpoenas. The more aggressive approach would be for the subpoena to simply compel surrender of the device in an unlocked state, like the subpoena in *Apple MacPro Computer*. Under this approach, the Government would simply use the subpoena to obtain the unlocked state and then conduct the search to the extent allowed by the search authorization. The more conservative approach would be for the subpoena to compel unlocking to allow inspection of only limited items that Government agents can describe with "reasonable particularity" based on *In re Grand Jury Subpoena Duces Tecum*. If the Government can show with "reasonable particularity" what will be found on the device, the Government may follow this approach if it wishes to avoid the Third Circuit versus Eleventh Circuit argument in motions practice.

---

[263] *Id.* at 787.
[264] *Id.* at 784.
[265] *Id.*

Under either the *Apple MacPro Computer* approach or the *In re Grand Jury Subpoena Duces Tecum* approach, the search following decryption must comply with the search authorization. Thus, regardless of whether the subpoena specifies the items to be inspected, the search of the device must be limited to the terms of the search authorization, which is itself limited by probable cause.

4. The Originalist Approach

Professor Kerr recently explored a different approach to compelled decryption based on an originalist understanding of the Fifth Amendment from the 1807 treason trial of Aaron Burr.[266] The evidence at issue in *United States v. Burr* was a letter encoded with a cypher.[267] Under an originalist understanding from *Burr*, the applicability of the Fifth Amendment to compelled disclosure of a password would depend on the evidence the Government seeks. Professor Kerr argues that *Burr* would not prevent compelled disclosure of a password if the Government were merely searching for evidence of a crime as opposed to material on the device that was itself contraband.[268] On the other hand, *Burr* would prevent compelled disclosure of a password where the Government sought evidence that itself was contraband, such as child pornography.[269] The distinction arises because disclosing a passcode in a contraband case would directly establish elements of the offense (i.e., knowledge or control of the contraband).[270] Disclosing a passcode in an evidence case, by contrast, would merely provide a link in the chain of evidence, which the Fifth Amendment would not protect under *Burr*.[271]

Regarding compelled entry of a password, Professor Kerr argues that the Fifth Amendment's application would depend on the choice of historic analogy.[272] If compelled entry was analogized to merely compelling a person to admit knowledge of the password, there would be no Fifth Amendment distinction between compelling disclosure of a password and

---

[266] Orin S. Kerr, *Decryption Originalism: The Lessons of* Burr, 134 HARV. L. REV. 905 (2021).
[267] *Id.* at 918–19.
[268] *Id.* at 913, 952–57.
[269] *Id.* at 913, 957–60.
[270] *Id.* at 958.
[271] *Id.* at 954.
[272] *Id.* at 960–61.

compelling entry of a password under *Burr*.[273] Thus, the same distinction between evidence cases and contraband cases would apply. If, on the other hand, compelled entry was analogized to a forcing the accused to produce the deciphered letter, the Fifth Amendment would bar compelled entry of a password entirely.[274]

Professor Kerr's analysis of *Burr* is comprehensive and could support an Article 30a, UCMJ, subpoena where the Government was seeking evidence of an offense as opposed to contraband in and of itself. Likewise, in the case of an Article 30a, UCMJ, subpoena seeking contraband, defense counsel might rely on Professor Kerr's analysis of *Burr*. Absent more recent military or civilian case law applying *Burr*, the Government would be well-advised to model Article 30a, UCMJ, subpoena practice on *Apple MacPro Computer* or *In re Grand Jury Subpoena* at the outset and argue *Burr* in the subsequent briefing.

Additionally, *Burr* may not apply to the accused's statutory Article 31, UCMJ, rights in the military justice system. *Burr* dealt only with claims of constitutional privilege. Article 31, UCMJ, is a later-enacted statute providing Service members with rights in addition to the Fifth Amendment (e.g., the guarantee in Article 31, UCMJ, of rights advisement even in non-custodial settings).[275] Thus, military case law since the 1956 enactment of Article 31, UCMJ, may supersede *Burr* with respect to Service members' statutory Article 31, UCMJ, rights. Indeed, Article 31, UCMJ, was enacted against the backdrop of Congress's understanding of the Fifth Amendment at that time. Additionally, Congress has not amended Article 31, UCMJ, since its 1956 enactment, despite decades of military case law and significant amendments to other provisions the UCMJ. Thus, revising Article 31, UCMJ, case law based on *Burr* may not be consistent with the intent of Congress when enacting Article 31, UCMJ, and confirmed by decades of declining to amend Article 31, UCMJ. Accordingly, even if civilian Federal courts revisited Fifth Amendment case law based on *Burr*, military courts might not correspondingly revisit Article 31, UCMJ, case law.

---

[273] *Id.* at 961.
[274] *Id.* at 913, 961.
[275] UCMJ art. 31 (1950).

C. The Foregone Conclusion Doctrine in Military Courts

Military appellate courts have not yet ruled on the specific question of the foregone conclusion doctrine and decryption in courts-martial. To date, three opinions have referenced the foregone conclusion doctrine in relation to decryption: the dissent (but not the majority) in *United State v. Mitchell*,[276] the AFCCA opinion (but not the CAAF opinion) in *United States v. Robinson*,[277] and the Army Court of Criminal Appeals' unpublished opinion in *United States v. Suarez*.[278] Nevertheless, applying the existing military case law reveals that the Article 30a, UCMJ, subpoena and the foregone conclusion doctrine remains a viable means of compelling decryption in courts-martial.

1. United States v. Mitchell

Although the parties and amici curiae in *United States v. Mitchell* submitted arguments regarding passcode entry as a compelled and testimonial act, the CAAF expressly declined to rule on this issue.[279] Instead, it applied MRE 305(c)(2) and *Edwards v. Arizona*[280] to hold that it was not permissible for investigators to first ask the accused for his passcode and then ask him to unlock his phone after his invocation of the right to counsel.[281] As the Court explained: "In light of this holding, we need not reach the question of whether the Government directly violated Appellee's Fifth Amendment privilege against compelled self-incrimination. We thus do not address whether Appellee's delivery of his passcode was 'testimonial' or 'compelled,' as each represents a distinct inquiry."[282] The CAAF's opinion in *United States v. Robinson*, which it decided shortly after *Mitchell*, added the caveat that it was permissible to ask for consent to search after a request for counsel and then ask for the passcode if the accused had first consented to a search.[283]

---

[276] United States v. Mitchell, 76 M.J. 413 (C.A.A.F. 2017).
[277] United States v. Robinson, 76 M.J. 663, 669 (A.F. Ct. Crim. App. 2017), *aff'd*, 77 M.J. 303 (C.A.A.F. 2018).
[278] United States v. Suarez, No. 20170366, 2017 WL 4331014, at *2 (A. Ct. Crim. App. Sept. 27, 2017).
[279] *Mitchell*, 76 M.J. at 419.
[280] Edwards v. Arizona, 451 U.S. 477 (1981).
[281] *Mitchell*, 76 M.J. at 419.
[282] *Id.* (citing Hiibel v. Sixth Jud. Dist. Ct. of Nev., 542 U.S. 177, 189 (2004)).
[283] United States v. Robinson, 77 M.J. 303 (C.A.A.F. 2018).

In *Mitchell*, investigators sought to question the accused, who invoked his right to counsel.[284] Investigators then obtained a search authorization for the accused's mobile phone and seized the phone while the accused was in custody in his commander's office.[285] While still in the office, investigators saw that the phone was locked and asked the accused for his passcode.[286] When the accused refused, investigators asked him to unlock the phone, and the accused complied by entering the passcode three times: once to unlock the phone, then two more times to disable security features.[287] The CAAF applied the plain language of MRE 305(c)(2), which provides: "any statement made in the interrogation after such request [for counsel], or evidence derived from the interrogation after such request [for counsel], is inadmissible."[288] The CAAF suppressed the contents of the phone because it was evidence derived from interrogation after the accused requested counsel. As the Court explained, "The agents' initial request—'can you give us your PIN?'—is an express question, reasonably likely to elicit an incriminating response."[289] The follow-on request to unlock the phone with the passcode "was part of the same basic effort to convince Appellee to provide the information necessary for the Government to access and search the contents of his phone, and to help prove that he himself had the same ability . . . ."[290]

Mitchell thus would not bar a subpoena to compel decryption. Because the majority in *Mitchell* expressly declined to reach whether entry of the passcode was testimonial or compelled, it also did not reach the foregone conclusion doctrine. Rather, *Mitchell* was decided based on the *Edwards* and MRE 305(c)(2) issue; that is, the CAAF held that asking the accused for his passcode was a statement made in an interrogation after a request for counsel under MRE 305(c)(2). Indeed, the *Mitchell* majority does not mention the foregone conclusion doctrine, much less hold that a doctrine applied in Federal civilian courts since the Supreme Court decided *Fisher* in 1976 does not apply in the military. *Mitchell*'s only mention of the foregone conclusion doctrine comes in the dissent, which would have found it necessary to reach the questions of whether entering the passcode

---

[284] *Mitchell*, 76 M.J. at 415.
[285] *Id.* at 416.
[286] *Id.*
[287] *Id.*
[288] MCM, *supra* note 108, M.R.E. 305(c)(2).
[289] *Mitchell*, 76 M.J. at 418.
[290] *Id.*

was testimonial or incriminating and resolved those questions in the Government's favor. The majority, however, did not reach that question.

2. United States v. Robinson

The AFCCA in *United States v. Robinson* applied a line of foregone conclusion doctrine cases to investigators requesting a mobile phone passcode.[291] In *Robinson*, the accused invoked his right to counsel, then agents asked for consent to search his phone, which he provided; agents then asked for the passcode to execute the search, which the accused provided.[292] The AFCCA affirmed the trial court's denial of Robinson's motion to suppress, reasoning that "[b]ecause there was no dispute as to Appellant's ownership, dominion, or control over the phone, his knowledge of the passcode did not incriminate him. Investigators had no reason to believe that the passcode itself would be incriminating or communicate any information about the crime."[293] In reaching this conclusion, the AFCCA cited the Fourth Circuit's opinion in *United States v. Gavegnano* for the proposition that asking for a passcode did not violate the Fifth Amendment where "[a]ny self-incriminating testimony that he may have provided by revealing the password was already a 'foregone conclusion' because the Government independently proved that [he] was the sole user and possessor of the computer."[294] Yet the AFCCA also found civilian case law regarding the foregone conclusion doctrine and compelled decryption "only marginally relevant to our analysis as the existence of an order to produce the information is not present in Appellant's case and there is no argument that Appellant's provision of his passcode was either compelled or mere acquiescence to an otherwise-valid order."[295]

The CAAF affirmed the AFCCA's holding. Though its reasoning differed from the AFCCA's, the CAAF majority did not criticize the lower court's reasoning or suggest that the foregone conclusion doctrine does not

---

[291] United States v. Robinson, 76 M.J. 663, 669 (A.F. Ct. Crim. App. 2017), *aff'd*, 77 M.J. 303 (C.A.A.F. 2018).
[292] *Id.* at 665.
[293] *Id.* at 671.
[294] *Id.* at 669 (alteration in original) (citing United States v. Gavegnano, 305 F. App'x 954, 956 (4th Cir. 2009)).
[295] *Id.* (citing United States v. Apple MacPro Comput., 851 F.3d 238 (3d Cir. 2017); United States v. Doe (*In re* Grand Jury Subpoena Duces Tecum), 670 F.3d 1335, 1345–46 (11th Cir. 2012)).

apply in the military. Instead, the CAAF reasoned that requesting a passcode after the appellant gave consent to search was "merely a natural and logical extension of the first permissible inquiry" under *United States v. Frazier*, in which the CAAF held that requests for consent are not interrogations and that consent to search is not a statement.[296] Judge Stucky's dissent in *Robinson* argued that *Mitchell* should control the outcome, but not because the foregone conclusion doctrine would not apply in the military. Rather, Judge Stucky simply would not have found the distinction between a consent search and a search authorization sufficient to distinguish *Robinson* from *Mitchell*.[297]

In a nutshell, the rules from the CAAF's opinions in *Mitchell* and *Robinson* are that after a request for counsel: (1) investigators may ask for consent to search a device, and, if the accused consents, investigators may ask for the passcode; (2) investigators may not ask for a passcode or for entry of a passcode without first asking for consent to search; and (3) investigators may not ask for a passcode or for entry of a passcode if the accused refuses consent to search. As explained in Section VII.C.4 below, these rules do not prevent obtaining the unlocked state of a device via subpoena in cases where the foregone conclusion doctrine applies.

3. United States v. Suarez

In *United States v. Suarez*, the Army Court of Criminal Appeals mentions civilian foregone conclusion doctrine case law in dicta without ruling on the issue.[298] The holding in *Suarez* was based on the accused making a statement without having been advised of his rights and without having waived his rights—not the foregone conclusion doctrine.[299] In *Suarez*, Army CID agents seized the accused's mobile phone pursuant to a search authorization. After seizing the phone, the agents asked the accused for his passcode, which he provided. Unlike in *Robinson*, the accused had not consented to a search prior to agents asking for the passcode.[300] The trial counsel conceded that agents asking for the passcode was a request for

[296] *Robinson*, 77 M.J. at 304 (quoting United States v. Frazier, 34 M.J. 135, 137 (C.M.A. 1992)).
[297] *Id.* at 307–08 (Stucky, J., dissenting).
[298] United States v. Suarez, No. 20170366, 2017 WL 4331014, at *2 (A. Ct. Crim. App. Sept. 27, 2017).
[299] *Id.* at *5.
[300] *Id.* at *1.

incriminating information that would trigger Article 31(b), UCMJ, and the Fifth Amendment.[301] The Army Court of Criminal Appeals thus denied the Government's Article 62, UCMJ,[302] appeal without reaching the foregone conclusion doctrine because the Government had waived the issue in the trial court.[303] The court went on to discuss *Mitchell* in dicta, stating that "[i]t is also unclear, whether *Mitchell* dispatched the foregone conclusion doctrine as a general matter or just based on the facts of that particular case."[304] In posing this question, the court cited to the Supreme Court's articulation of the foregone conclusion doctrine in *Fisher*, the Third Circuit's opinion in *Apple MacPro Computer*, and the Eleventh Circuit's opinion in *In re Grand Jury Subpoena Duces Tecum*.[305] The Army court, however, does not provide an answer to the question it poses, as the Government's waiver made reaching *Mitchell* and the foregone conclusion doctrine unnecessary.[306]

4. Applying Mitchell*,* Robinson*, and* Suarez *to Article 30a, UCMJ, Subpoenas*

The Article 30a, UCMJ, subpoena remains a lawful means to obtain the accused's device in an unencrypted state. In response to the question posed in *Suarez*, the CAAF in *Mitchell* did not rule that the foregone conclusion doctrine does not apply in the military. Rather, the CAAF applied the plain language of MRE 305(c)(2): "evidence derived from the interrogation after such request [for counsel], is inadmissible . . . unless counsel was present." Thus, at most, *Mitchell* stands for the proposition that the language of MRE 305(c)(2) would prevent the foregone conclusion doctrine from applying to the results of further interrogation after a request for counsel. Accordingly, the AFCCA's reasoning in *Robinson* might have been different after *Mitchell*, but not because *Mitchell* entirely bars the foregone conclusion doctrine from the military. Instead, the AFCCA in *Robinson* might merely have concluded that MRE 305(c)(2) rendered civilian case law such as

---

[301] *Id.* at *3.
[302] UCMJ art. 62 (2017).
[303] *Suarez*, No. 20170366, 2017 WL 4331014, at *5.
[304] *Id.* at *2 (citing United States v. Apple MacPro Comput., 851 F.3d 238 (3d Cir. 2017); United States v. Doe (*In re* Grand Jury Subpoena Duces Tecum), 670 F.3d 1335, 1345–46 (11th Cir. 2012)).
[305] *Id.*
[306] *Id.*

United States v. Gavegnano dealing with law enforcement continuing interrogations inapplicable.[307] As the AFCCA recognized, the case law dealing with court orders compelling decryption represent a distinct factual scenario.[308]

Serving an Article 30a, UCMJ, subpoena that directs the accused to provide a device in an unencrypted state is distinct from *Mitchell* in three ways. First, an Article 30a, UCMJ, subpoena would not direct the accused to provide a passcode to investigators. Rather, like in *Apple MacPro Computer*, such a subpoena would simply direct that the accused provide the device in an unlocked state at a future time.[309] How the accused accomplished this unlocking would be left to the accused. The provision of the device in an unlocked state is thus not a statement but a potentially testimonial act. The CAAF in *Mitchell* did not decide that providing a device in an unlocked state was *de facto* testimonial. Rather, the CAAF did not reach that question because the agents' request that the accused unlock the device followed both the invocation of the right to counsel and a request for the passcode and was thus further interrogation under MRE 305(c)(2).[310]

Second, a subpoena is not an interrogation. MRE 305(c)(2) suppresses only statements "made in the interrogation after such request [for counsel]." *Edwards* likewise bars only interrogation after a request for counsel. Thus, *Mitchell*'s holding based on both MRE 305(c)(2) and *Edwards* would not bar an Article 30a, UCMJ, subpoena. The most apposite civilian case is *Application of Martin*,[311] which involved a subpoena duces tecum to produce evidence. In *Martin*, the respondent moved to quash a subpoena to produce records and to attend a hearing and give testimony on the grounds that it violated the Fifth Amendment right against self-incrimination; the court denied the motion.[312] As the Court explained, the "mere service of a subpoena duces tecum cannot be equated with testifying as a witness against oneself."[313] Thus, it was "premature for the petitioner to invoke the Fifth Amendment until such time as he appears at a hearing before the

---

[307] *Compare* United States v. Robinson, 76 M.J. 663, 669 (A.F. Ct. Crim. App. 2017), *aff'd*, 77 M.J. 303 (C.A.A.F. 2018), *with* United States v. Mitchell, 76 M.J. 413 (C.A.A.F. 2017).
[308] *Robinson*, 76 M.J. at 669.
[309] *Apple MacPro Comput.*, 851 F.3d 238.
[310] *Mitchell*, 76 M.J. at 419.
[311] Application of Martin, 188 N.Y.S.2d 566, 568 (N.Y. Sup. Ct. 1959).
[312] *Id.* at 567.
[313] *Id.*

Commission and is then required to respond to interrogation and to produce the records referred to in the subpoenas duces tecum."[314]

The Ninth Circuit in *United States v. Kilgroe* similarly held that service of a subpoena and the obligation to appear was not an interrogation requiring rights advisement.[315] In that case, Kilgroe was in-house counsel for a business where another employee was prosecuted for mail fraud. Kilgroe received a subpoena to testify at the employee's trial. During his testimony, Kilgroe made self-incriminating statements and was later prosecuted for mail fraud.[316] Kilgroe moved to suppress his statements on the grounds that he was not advised of his rights prior to testifying. The Ninth Circuit found no error in the trial court's denial of Kilgroe's motion to suppress. The subpoena merely created an "obligation to appear and testify truthfully."[317] This obligation did not itself "'constitute compulsion to give incriminating testimony' of the sort that implicates *Miranda*'s policies."[318] As the court explained, "[u]nlike custodial interrogation—which usually takes place without warning and, therefore, without the chance for reflection or legal advice—the subpoena gives the witness the opportunity in advance to obtain whatever counsel he deems appropriate and carefully contemplate his testimony."[319] The court went on to explain that the right against self-incrimination would apply at the hearing had Kilgroe been asked questions the answers to which would tend to incriminate him, explaining that "[Kilgroe] remains free, of course, to refuse to answer questions that would incriminate him" at such a proceeding.[320]

One can also glean from the lack of Federal civilian case law criticizing service of subpoenas on subjects of investigations that there is no constitutional issue with the practice. In *United States v. Kelly*, Federal prosecutors obtained a grand jury subpoena directed to an accused who had invoked his right to counsel.[321] While the subpoena in that case was not served, the Eighth Circuit provides no indication that a subpoena after invocation of the right to counsel was improper.[322] If such a subpoena were unlawful, surely the Eighth Circuit would have at least commented on that

---

[314] *Id.*
[315] United States v. Kilgroe, 959 F.2d 802 (9th Cir. 1992).
[316] *Id.* at 803.
[317] *Id.* at 804.
[318] *Id.* (quoting Miranda v. Arizona, 384 U.S. 436 (1966)).
[319] *Id.* at 804–05.
[320] *Id.* at 805 (citing United States v. Jenkins, 785 F.2d 1387, 1393 (9th Cir. 1986)).
[321] United States v. Kelly, 329 F.3d 624, 629 (8th Cir. 2003).
[322] *Id.*

matter, yet the Eighth Circuit appears wholly unconcerned with the procedure. Likewise, the two most cited cases concerning compelled decryption—the Third Circuit's *Apple MacPro Computer* and the Eleventh Circuit's *In Re Grand Jury Subpoena*—make no mention of service of a subpoena as a potential *Edwards* issue.[323] If there were a rule prohibiting service of a subpoena after invocation of rights, there would likely be some mention of that rule, but there is none.

Insofar as the foregone conclusion doctrine is concerned, there is no meaningful distinction between a civilian grand jury subpoena and an Article 30a, UCMJ, subpoena. The function of the subpoena is the same: directing the accused to provide a device in an unlocked state at some time after the service of the subpoena. Accordingly, a military court should consider the lack of Federal civilian case law questioning the practice of issuing a subpoena duces tecum to civilian defendants as indicative that such service does not raise an *Edwards* issue.

Third, even if serving a subpoena were somehow considered "further interrogation" after the invocation of the right to counsel, the Government could easily satisfy *Edwards* (and thus *Mitchell*) by serving the subpoena and providing the opportunity to comply in the presence of the accused's counsel. The right to counsel does not bar further interrogation outright; rather, it bars further interrogation without counsel present.[324] Indeed, MRE 305(c)(2) provides that statements made after a request for counsel are "inadmissible against the accused unless counsel was present for the interrogation."[325] Providing for the availability of counsel is also a matter of professional courtesy to defense counsel, who will likely be in the position of litigating a motion to suppress.

In most cases involving an investigative subpoena, the accused's right to counsel will arise only under the Fifth Amendment and Article 31, UCMJ, rights rather than the Sixth Amendment. The Sixth Amendment right to

---

[323] United States v. Apple MacPro Comput., 851 F.3d 238, 248 (3d Cir. 2017); United States v. Doe (*In re* Grand Jury Subpoena Duces Tecum), 670 F.3d 1335, 1345–46 (11th Cir. 2012).

[324] Edwards v. Arizona, 451 U.S. 477 (1981); Minnick v. Mississippi, 498 U.S. 146, 153 (1990) ("In our view, a fair reading of *Edwards* and subsequent cases demonstrates that we have interpreted the rule to bar police-initiated interrogation unless the accused has counsel with him at the time of questioning. Whatever the ambiguities of our earlier cases on this point, we now hold that when counsel is requested, interrogation must cease, and officials may not reinitiate interrogation without counsel present, whether or not the accused has consulted with his attorney.").

[325] MCM, *supra* note 108, M.R.E. 305(c)(2).

counsel does not attach until preferral of charges in the military justice system.[326] But applying the Sixth Amendment right to counsel would not change the outcome if a subpoena were served after preferral. Like MRE 305(c)(2) ("Fifth Amendment Right to Counsel"), the corresponding MRE 305(c)(3) ("Sixth Amendment Right to Counsel"), applies to "interrogation" after the accused requests or obtains counsel and includes the same "unless counsel was present for the interrogation" exception.[327]

D. Biometric Decryption

The Article 30a, UCMJ, subpoena process may be used to obtain a device in an unlocked state regardless of the method of unlocking. Thus, in cases involving biometrics, the Government might elect the Article 30a, UCMJ, subpoena process, though it may prove impracticable for biometric decryption. Biometric decryption may automatically become disabled when a device has not been unlocked for a certain period of time or if it has been powered down and powered back up.[328] Thus, the biometric option may expire during the Article 30a, UCMJ, process.

Invoking the foregone conclusion doctrine may be unnecessary to compel biometric decryption. Courts are split as to whether biometric unlocking is a testimonial act that would require application of the foregone conclusion doctrine. But even those courts holding that biometric unlocking is a testimonial act recognize that the foregone conclusion doctrine can render such unlocking non-testimonial. Thus, the Government can bulletproof biometric unlocking by gathering evidence to show that the accused's ability to unlock the device is a foregone conclusion.

1. Whether Biometric Decryption is a Testimonial Act

Military appellate courts have not yet ruled on whether biometric decryption is a testimonial act protected by the Fifth Amendment. Civilian courts are split on whether biometric decryption implicates the Fifth Amendment. Several Federal district courts and state courts have held that biometric data, such as fingerprints and facial recognition, are not

---

[326] United States v. Kerns, 75 M.J. 783, 788 n.1 (A.F. Ct. Crim. App. 2016).
[327] *Compare* MCM, *supra* note 108, M.R.E. 305(c)(2), *with* M.R.E. 305(c)(3).
[328] *See, e.g.*, APPLE INC., FACE ID SECURITY 2 (2017).

testimonial and thus not protected by the Fifth Amendment.[329] These cases reason that the biometric information used to unlock the device (e.g., the accused's face or fingerprints) do not themselves communicate anything. For these courts, facial characteristics and fingerprints are simply physical characteristics displayed to the world, and any evidence that might result from recognizing these characteristics is not testimony inherent in the characteristics. The Northern District of Illinois, for example, argued for focusing the Fifth Amendment analysis on the compelled act at issue. As that court explained in *In re Search Warrant Application*, the fact that biometric data may lead to an incriminating inference does not make such data itself testimony.[330]

The cases holding biometric decryption is not testimonial rely on a series of Supreme Court cases holding that displays of physical characteristics are not testimonial in other contexts: fingerprinting,[331] photographing,[332] appearing in a line-up for visual identification,[333] saying a phrase during a line-up for voice identification,[334] providing a voice exemplar,[335] providing a handwriting exemplar,[336] and putting on clothing to test fit.[337] Most relevant are the holdings that appearing for a lineup, photographing, and fingerprinting are not testimonial because facial recognition and fingerprints are the most common biometric methods for decrypting mobile phones.

On the other hand, several U.S. district courts have held that biometric decryption is testimonial in nature.[338] These cases reason that unlocking a

---

[329] *See* Commonwealth v. Baust, 89 Va. Cir. 267 (Va. Cir. Ct. 2014); *In re* Search Warrant Application, 279 F. Supp. 3d 800 (N.D. Ill. 2017); *In re* Search of [Redacted] Wash., D.C., 317 F. Supp. 3d 523, 539 (D.D.C. 2018); State v. Diamond, 905 N.W.2d 870 (Minn. 2018); *In re* Search of a White Google Pixel 3 XL Cellphone in a Black Incipio Case, 398 F. Supp. 3d 785 (D. Idaho 2019); United States v. Barrera, 415 F. Supp. 3d 832 (N.D. Ill. 2019).

[330] *In re Search Warrant Application*, 279 F. Supp. 3d at 805.

[331] Schmerber v. California, 384 U.S. 757, 764 (1966); United States v. Wade, 388 U.S. 218, 222 (1967).

[332] *Schmerber*, 384 U.S. at 764; *Wade*, 388 U.S. at 222.

[333] *Wade*, 388 U.S. at 222 (holding that appearing for a line-up was not testimonial because "[i]t is compulsion of the accused to exhibit his physical characteristics, not compulsion to disclose any knowledge he might have.").

[334] *Id.*

[335] United States v. Dionisio, 410 U.S. 1 (1973).

[336] Gilbert v. California, 388 U.S. 263 (1967).

[337] Holt v. United States, 218 U.S. 245 (1910).

[338] *See In re* Application for a Search Warrant, 236 F. Supp. 3d 1066 (N.D. Ill. 2017); *In re* Search of a Residence in Oakland, 354 F. Supp. 3d 1010 (N.D. Cal. 2019); United States

device with biometric data communicates information that the suspect had unlocked the device before, had set up the security on the device, and had control over the device. These cases also rely on the Supreme Court's articulation in *Riley v. California* of the importance of mobile phones in modern society and the volume of information stored on such devices to argue that biometric decryption is not the equivalent of the biometric displays for identification in prior Supreme Court cases.[339]

The opinions finding biometrics testimonial fail to distinguish what the compelled act itself communicates as opposed to the evidence that might be inferred from the device's reaction to the compelled act. As the U.S. District Court for the District of Columbia explained in *In re Search of [Redacted] Washington, D.C.*,[340] only the present unlocking is compelled—not any past use of the device—so the accused's prior conduct is not relevant to the Fifth Amendment inquiry. And, as the Northern District of Illinois explained in *United States v. Barrea*, the Supreme Court's applying the Fourth Amendment warrant requirement to mobile phones in *Riley* did not eliminate precedent holding that displays of physical characteristics were not testimonial.[341] Indeed, as the Supreme Court has warned lower courts, "If a precedent of this Court has direct application in a case, yet appears to rest on reasons rejected in some other line of decisions, the Court of Appeals should follow the case which directly controls, leaving to this Court the prerogative of overruling its own decisions."[342] Thus, just as a witness identifying an accused from a line-up or mugshot does not render the act of appearing in the line-up or mugshot testimonial, neither should an electronic device reacting to the accused's face make the display testimonial. Likewise, just as a hit in a fingerprint database as a result of compelled fingerprinting does not render the fingerprinting testimonial, a mobile device recognizing the accused's fingerprint should not render the application of the accused's finger testimonial. In either case, agents are simply applying the accused's physical characteristic to an electronic sensor lawfully in the Government's possession.

---

v. Sealed Warrant, 2019 U.S. Dist. LEXIS 147836 (N.D. Cal. Aug. 16, 2019); United States v. Wright, 431 F. Supp. 3d 1175 (D. Nev. 2020).

[339] *In re Application for a Search Warrant*, 236 F. Supp. 3d at 1073–74 (citing Riley v. California, 573 U.S. 373 (2014)).

[340] *In re* Search of [Redacted] Wash., D.C., 317 F. Supp. 3d 523, 539 n.12 (D.D.C. 2018).

[341] United States v. Barrera, 415 F. Supp. 3d 832, 842 (N.D. Ill. 2019).

[342] Rodriguez de Quijas v. Shearson/Am. Express, Inc., 490 U.S. 477, 484 (1989).

2. Biometric Decryption as a Foregone Conclusion

Even courts that consider biometric decryption testimonial also recognize that the foregone conclusion doctrine applies and can render the use of biometrics non-testimonial in a particular case. For instance, the District Court for the Northern District of California has held that biometric decryption is testimonial but that the Government could compel biometric unlocking if a "particular individual's ability to unlock a particular electronic device is a foregone conclusion."[343]

So, before taking steps to unlock a device with biometrics, agents should be able to articulate how they already know the phone belongs to the accused and that the accused can unlock it. Sources of such evidence may include: (1) surveillance of the accused; (2) the origin of the phone (e.g., if the accused had the phone on their person or in their vehicle); (3) calling or texting the accused's personal phone number obtained from a co-worker or a recall roster to see if the phone reacts;[344] (4) witnesses who have seen the accused unlock the device; (5) witnesses, including the victim, who have seen the accused use their phone; (6) the accused's fingerprints on the phone;[345] (7) statements of the accused, if available; and (8) evidence of a person's regular use of the device because "[i]ndividuals ordinarily must know the password of devices they regularly use."[346] The Government would be well-advised to draw from as many of these sources as possible.

If foregone conclusion doctrine evidence is not available, the Government should still pursue biometric unlocking because the better-reasoned cases find biometric unlocking non-testimonial. If foregone conclusion doctrine evidence can be found, however, the Government can eliminate litigation risk to the mobile phone unlocking by gathering such evidence prior to compelled biometric unlocking.

3. Determining if Biometrics Are Enabled

Military courts have not yet ruled on whether asking if biometrics are enabled would be impermissible interrogation under *Mitchell* or a permissible preliminary question incident to an authorized search under

---

[343] United States v. Sealed Warrant, 2019 U.S. Dist. LEXIS 147836, at *7–11 (N.D. Cal. Aug. 16, 2019).
[344] Kerr, *supra* note 2, at 783.
[345] *Id.*
[346] *Id.*

United States v. Poole.[347] In *Poole*, the AFCCA found the question, "Do you have a cell phone?" was proper, as it "was designed to assist in the execution of the search warrant and not to elicit an incriminating response."[348] As it further explained, "We find the rationale of our sister service court applicable in this case that certain preliminary questions to assist in the execution of a search authorization do not require rights advisement where the questions were 'mere preliminary vocal aids to the ongoing legal search.'"[349] The AFCCA distinguished *Mitchell* on the grounds that *Poole* did not involve custodial interrogation or invocation of rights.[350] Likewise, in *United States v. Neely*, agents asked an Airman for his locker key and to identify his locker after he had invoked his right to counsel.[351] The AFCCA found no Fifth or Sixth Amendment violations because the identification "was only preliminary assistance in the search, which defined and limited its area, and which could have been readily defined and localized without his assistance."[352] The questions and the accused's answers were thus "not within the protection of Article 31."[353]

Because courts have not ruled on asking whether biometrics are enabled, Government agents ideally should determine that fact without asking the accused. This information can come from the phone itself (e.g., if the phone's lock screen displays whether biometrics are enabled). This information could also come from witnesses who have seen the accused unlock the device with biometrics.

4. The Adequacy of Biometric Unlocking

Biometric unlocking may also prove inadequate for investigative purposes. In some cases, forensic extraction tools may not work unless a device's security features such as automatic re-locking are disabled. Some mobile phones require entering a passcode to disable these security features.

---

[347] United States v. Poole, No. ACM 39308, 2019 CCA LEXIS 235, at *17–18 (A.F. Ct. Crim. App. May 15, 2019).
[348] *Id.*
[349] *Id.* at *6 (quoting United States v. Bradley, 50 C.M.R. 608, 621 (N.C.M.R. 1975)).
[350] *Id.* n.4 (citing United States v. Mitchell, 76 M.J. 413 (C.A.A.F. 2017)).
[351] United States v. Neely, 47 C.M.R. 780, 782 (A.F.C.M.R. 1973).
[352] *Id.*
[353] *Id.*; *see Bradley*, 50 C.M.R. at 621 (holding that no Article 31, UCMJ, rights warning was required before law enforcement asked a Sailor subject to a lawful search if he had any money, directed him to remove the money from his wallet and count it, and seized money with a particular serial number as evidence).

If biometric unlocking alone will not enable the Government to perform the necessary search, then the Government should utilize the Article 30a, UCMJ, subpoena process to compel production of the device in an unlocked state with such security features disabled.

VIII. Alternatives to the Article 30a, UCMJ, Investigative Subpoena

Provided that the foregone conclusion doctrine applies, Article 30a, UCMJ, is not the only lawful means to compel an accused to decrypt an electronic device. There are four other means available to the Government in cases where a passcode is necessary to decrypt the device. First, a superior officer may order an accused to surrender a device in a decrypted state without any action by a court. Second, the convening authority may authorize Government counsel to issue pre-referral subpoenas. Third, the Government may obtain evidence for an Article 32, UCMJ, preliminary hearing by means of a military judge-issued investigative subpoena or a Government counsel-issued investigative subpoena authorized by the GCMCA. Fourth, after referral, trial counsel may issue a subpoena to the accused. While all of these options could be lawful under the foregone conclusion doctrine, the Article 30a, UCMJ, subpoena provides the most orderly process for litigating the accused's rights. In cases where biometric decryption is possible, a fourth option of using reasonable force to compel biometric decryption may be available and may be most practical if biometric decryption will become impossible before Article 30a, UCMJ, litigation can be resolved.

A. The Commander's Order—Lawful, But No Immediate Avenue for Relief

So long as the foregone conclusion doctrine applies, a superior officer's order to the accused to provide a lawfully seized device in an unencrypted state would be lawful. The foregone conclusion doctrine does not require a particular means of compulsion—it simply determines whether the accused's Fifth Amendment rights apply to the compulsion.[354]

The Government should nevertheless select the Article 30a, UCMJ, process in most cases. Article 30a, UCMJ, provides the accused with the

[354] *See generally* discussion *supra* Part VII.

motion to quash to obtain a ruling on the lawfulness of the subpoena. The superior officer's order, by contrast, requires the accused to decide whether to risk future prosecution for disobeying the order without an immediate avenue for relief. If the accused disobeys a superior officer's order, the only practical avenue for relief is to litigate the issue in a later prosecution under Article 90, UCMJ. Air Force Instruction ("AFI") 90-301 provides that punishments under the UCMJ are not appropriate for the Inspector General system.[355] Likewise, AFI 51-505 provides that Article 138, UCMJ,[356] review is not appropriate for matters related to disciplinary action under the UCMJ where "the petitioner may seek redress through other forums which provide the petitioner notice, opportunity to be heard, and review by an appellate authority."[357] Article 131f, UCMJ, is not practically available to the accused, and it would not apply in any event. The CAAF in *United States v. McElhinney* noted that the convening authority's refusal to order production of witness would violate Article 131f(2), UCMJ, only after a final court order directing production of witnesses.[358] A superior officer's order to the accused, by contrast, would be issued prior to a judge's order with the good faith belief that the foregone conclusion doctrine rendered the order lawful. Thus, the officer would not have "knowingly and intentionally" violated a provision of the UCMJ under Article 131f(2) except in the unlikely event an officer acted after a judge's order to the contrary.[359]

In sum, while the foregone conclusion doctrine could render a commander's order lawful, the Government should nonetheless prefer the Article 30a, UCMJ, subpoena in most cases. There may be circumstances, however, where time is of the essence and the Government simply cannot wait for the Article 30, UCMJ, process. Moreover, as Professor Schlueter notes, "providing for judicial rulings and relief before the referral of charges may actually delay the proceedings if the parties are permitted to appeal a judge's pre-referral ruling through extraordinary writs to a service appellate court."[360] If Article 30a, UCMJ, litigation and appellate review render the

---

[355] U.S. DEP'T OF AIR FORCE, INSTR. 90-301, INSPECTOR GENERAL COMPLAINTS RESOLUTION para. 2.3, tbl.3.7 (20 Dec. 2018) (C1, 30 Sept. 2020).
[356] UCMJ art. 138 (1950).
[357] U.S. DEP'T OF AIR FORCE, INSTR. 51-505, COMPLAINTS OF WRONGS UNDER ARTICLE 138, UNIFORM CODE OF MILITARY JUSTICE para. 1.3.3.8 (4 Apr. 2019).
[358] United States v. McElhinney, 21 U.S.C.M.A. 436, 439 (C.M.A. 1972).
[359] UCMJ art. 131f (2016).
[360] Schlueter, *supra* note 42, at 48.

pre-referral subpoena impractical due to delay, the superior officer's order may be preferable.

B. Convening Authority Authorized Investigative Subpoena Under Article 46, UCMJ—Lawful and Timely, But Enforcement and Relief Inevitably Require Judicial Intervention

Article 46(d)(2), UCMJ, and RCM 703(g)(3)(D)(v) allow the GCMCA to authorize Government counsel to issue pre-referral investigative subpoenas. Such a subpoena directed to the accused, however, will almost certainly require judicial intervention for enforcement or relief. Article 46(e), UCMJ, provides the procedures for relief from subpoenas issued under that article, stating that:

> If a person requests relief from a subpoena or other process under this section (article) on grounds that compliance is unreasonable or oppressive or is prohibited by law, a military judge detailed in accordance with section 826 or 830a of this title (article 26 or 30a) shall review the request and shall—
>
> (1) order that the subpoena or other process be modified or withdrawn, as appropriate; or
>
> (2) order the person to comply with the subpoena or other process.[361]

Rule for Courts-Martial 703(g)(3)(G) concerning relief from subpoenas mirrors Article 46(e), UCMJ, providing that:

> (G) Relief. If a person subpoenaed requests relief on grounds that compliance is unreasonable, oppressive, or prohibited by law, the military judge or, if before referral, a military judge detailed under Article 30a shall review the request and shall—
>
> (i) order that the subpoena be modified or quashed, as appropriate; or
>
> (ii) order the person to comply with the subpoena.[362]

Thus, in the case of a GCMCA-authorized pre-referral investigative subpoena issued by counsel for the Government, an Article 30a, UCMJ, proceeding will become necessary given the near certainty that the accused

---

[361] UCMJ art. 46(e) (2016).
[362] MCM, *supra* note 108, R.C.M. 703(g)(3)(G).

will request relief from the subpoena. Under RCM 905(j), the recipient of the subpoena could request relief from the convening authority,[363] but such a request is without prejudice to a later request for relief from a military judge, so the accused would almost certainly pursue judicial relief if the convening authority declined to grant relief. Therefore, given the near inevitability of judicial intervention, the Government would be well advised to pursue a judicially issued Article 30a, UCMJ, subpoena from the outset.

C. Subpoena for Production of Evidence During the Article 32, UCMJ, Process—Lawful, But Too Late and with No Immediate Avenue for Relief in the Article 32, UCMJ, Process

In most cases, the Government should proceed with investigative subpoena practice well before the Article 32, UCMJ, preliminary hearing. The preliminary hearing superficially resembles a civilian grand jury in that the preliminary hearing officer (PHO) makes a probable cause determination.[364] But the Article 32, UCMJ, process is untimely when compared with the civilian grand jury process. An Article 32, UCMJ, hearing is not available until after preferral of charges, at which point investigative work ideally will have been completed.[365] Moreover, in some cases, it might not be possible to even get to an Article 32, UCMJ, hearing without obtaining an unencrypted electronic device. An Article 32, UCMJ, hearing comes after preferral, and the Service member preferring charges must certify that they have investigated the matters set forth in the charges and that such matters are true to the best of their knowledge and belief.[366] The Government might not reach this threshold absent evidence obtained from an encrypted electronic device.

The investigative subpoena powers used to obtain evidence for a preliminary hearing are the same powers that could be utilized earlier in an investigation.[367] Delaying the use of such powers until a preliminary hearing offers no advantages. The Article 32, UCMJ, preliminary hearing itself does not provide a forum to obtain a ruling on the merits of a subpoena. Indeed, the PHO has no authority to rule on the merits of a motion to quash

---

[363] *Id.* R.C.M. 905(j).
[364] UCMJ art. 32 (2016).
[365] *Id.*
[366] MCM, *supra* note 108, R.C.M. 307(b)(2).
[367] *Id.* R.C.M. 405(h)(3)(B)(i).

a subpoena or impose any penalty on an uncooperative respondent.[368] Enforcement of a subpoena issued to a Service member will thus inevitably fall to a military judge's contempt powers, a subsequent court-martial, or both.

Therefore, prosecutors are unlikely to delay investigative subpoena practice until an Article 32, UCMJ, preliminary hearing as a means of addressing encrypted devices. These disadvantages, however, would not render investigative subpoenas relating to an Article 32, UCMJ, hearing unlawful. Like any other pre-referral investigative subpoena, the lawfulness of the subpoena would depend on the applicability of the foregone conclusion doctrine.

D. Trial Counsel Subpoena After Referral—Lawful, But Too Late

After referral, trial counsel detailed to a court-martial may also issue subpoenas, but such subpoenas come even later in the military justice process than subpoenas related to Article 32, UCMJ, hearings.[369] As a result, trial counsel subpoenas after referral, although lawful, are even less useful as an investigative tool than subpoenas authorized by a GCMCA in connection with an Article 32, UCMJ, proceeding.

E. Use of Force to Compel Biometric Decryption

A subpoena or order will not be the Government's only option in cases involving biometric decryption. Biometric decryption may automatically become disabled when a device has not been unlocked for a certain period of time or if it has been powered down and powered back up.[370] Thus, if a device can be unlocked with biometrics, time may be of the essence in unlocking the device.

Where agents have lawful authority to conduct a search and seizure, agents may use reasonable force to execute that search and seizure.[371] To avoid Fifth Amendment concerns, Opher Schweiki and Youli Lee of the Department of Justice recommend that agents obtain biometric decryption

---

[368] UCMJ art. 32.
[369] MCM, *supra* note 108, R.C.M. 703(g)(3)(D)(ii).
[370] *See, e.g.*, APPLE INC., *supra* note 328.
[371] *See* Graham v. Connor, 490 U.S. 386, 394 (1989) (providing that the Fourth Amendment reasonableness standard governs claims of excessive force during searches and seizures).

with as little action by the accused as possible.[372] Thus, agents ideally should determine what method of biometric decryption to apply without asking the accused. Additionally, agents should also hold the phone up to the accused for facial recognition or select the finger used for fingerprint identification if possible.[373]

Schweiki and Lee also recommend the Government obtain a search warrant specifically authorizing the use of the accused's biometrics to unlock a device. They note that the Fourth Amendment generally "does not require specificity as to how the warrant will be executed" beyond the Fourth Amendment's reasonableness requirement.[374] They nevertheless recommend obtaining specific authorization language out of an abundance of caution in light of the novelty of compelled decryption case law and a recent opinion by the District Court for the District of Columbia stating that the judge "expect[ed] that, absent exigent circumstances, the government will continue to seek prior authorization for the compelled use of an individual's biometric features to unlock digital devices even where the search of such devices is permitted by a warrant."[375]

F. The Article 30a, UCMJ, Subpoena and Order and the Rights of the Accused

The prospect of a military judge issuing a subpoena and ordering the accused to produce evidence under Article 30a, UCMJ, raises concerns for the rights of the accused. The UCMJ has reflected Congress's concern for the rights of the accused since its inception. For example, Congress enacted Article 31, UCMJ, requiring rights advisement for the accused in 1956—a decade before the Supreme Court decided *Miranda v. Arizona* in 1966.[376] Yet an Article 30a, UCMJ, subpoena to compel decryption is merely a part of the search and seizure process, where the Fourth Amendment and MRE

---

[372] Opher Shweiki & Youli Lee, *Compelled Use of Biometric Keys to Unlock a Digital Device: Deciphering Recent Legal Developments*, 67 DEP'T JUST. J. FED. L. & PRAC. 23, 39 (2019).
[373] *Id.*
[374] *Id.* at 27–28 (citing Dalia v. United States, 441 U.S. 238, 247–48 (1979)).
[375] *Id.* at 32 (quoting *In re* Search of [Redacted] Wash., D.C., 317 F. Supp. 3d 523, 533 n.8 (D.D.C. 2018)).
[376] Miranda v. Arizona, 384 U.S. 436 (1966); *see* United States v. Mayo, No. Army 20140901, 2017 CCA LEXIS 239, at *20–23 (A. Ct. Crim. App. June 16, 2017) (describing that Congress's enactment of court-martial voting provisions was based on concerns about unlawful command influence).

311 already protect the rights of the accused. Moreover, applying the foregone conclusion doctrine in the military justice system merely places the accused in the same position as the recipient of a subpoena in a civilian Federal court. Accordingly, the Article 30a, UCMJ, subpoena process should generally be used as the forum to litigate the rights of the accused in cases involving compelled decryption.

IX. Admissibility of the Accused's Conduct at Trial

The admissibility of the accused's actions will depend on whether (1) the accused's actions were voluntary or compelled and (2) the accused consents or refuses to decrypt the device. If the accused voluntarily consents to a search and decrypts the device, that action will be admissible against the accused. In such a case, the accused will have waived the right against self-incrimination. The Government could thus use the accused's conduct as evidence of ownership and control of the device.

If the accused refuses to decrypt a device voluntarily, that refusal will not be admissible against the accused because it would be treated as an invocation of rights. Just as an accused's request for a lawyer or invocation of the right to remain silent is inadmissible against the accused, so too would the invocation of the right against self-incrimination in response to a voluntary request to decrypt a device be inadmissible.[377]

If the accused is compelled to provide a device in an unencrypted state, the act of providing the device in that state will not be admissible against the accused to show ownership or control of the device.[378] But the Government's evidence used to prove up the foregone conclusion doctrine in motions practice would be admissible to show the accused's ownership of the device because such evidence was gathered independent of any compulsion.

If, on the other hand, the accused refuses to comply with a judge's order to decrypt a device, such refusal would be admissible against the accused. Once a judge has ruled on the validity of the subpoena, the accused's

---

[377] MCM, *supra* note 108, M.R.E. 301(f)(2); United States v. Riley, 47 M.J. 276, 279–80 (C.A.A.F. 1997).

[378] United States v. Davis, 767 F.2d 1025, 1040 (2d Cir. 1985) ("Judge Conner's carefully crafted order specifically provided that the Government could not use the directive as an admission that the bank accounts existed, that Davis had control over them, or for any other purpose. These limitations on the use of the direction obviate any claim of testimonial compulsion.").

conduct is not a proper invocation of rights but deliberate disobedience of a court order to frustrate an investigation. As such, the accused's conduct would be admissible as evidence of consciousness of guilt much like other conduct to frustrate a lawful search or seizure. Military and civilian courts recognize that "an inference of consciousness of guilt can be drawn from the destruction of evidence is well-recognized in the law."[379]

X. Conclusion

As the MJRG report recommended, MJA 2016 created a military investigative subpoena practice based on the model of civilian investigative subpoena practice. Thus, just as Federal civilian practitioners employ grand jury subpoenas to compel decryption, so too should military practitioners use Article 30a, UCMJ, subpoenas to compel decryption. Such practice will avoid the incongruous situation in which different evidence might be available to prosecutors in a court-martial as opposed to a Federal district court. While issuing a subpoena to the accused will be a new practice for many judge advocates, it is not a novelty to Federal civilian prosecutors, and military courts can draw on a substantial body of Federal civilian case law.

Digital evidence is already common in courts-martial, and it will only become more ubiquitous. Such evidence is not limited to cases in which data on a device is itself contraband. In many cases, messages, photos, videos, application data, and other data may serve as evidence of an offense where the digital data itself is not contraband. The Article 30(a), UCMJ, subpoena will allow prosecutors to level the playing field with the defense's utilization of RCM 703 to access victim mobile devices. It is common in courts-martial for the defense to request that the Government compel crime victims to surrender data from their mobile phones and to issue subpoenas for that purpose. The defense can then utilize the threat of remedies under RCM 703 to compel access to data on a victim's device if the prosecution is to proceed, functionally compelling decryption by the victim. The Article 30a, UCMJ, subpoena now gives the Government a tool in the investigative stage to compel the accused to provide a device in an unencrypted state when executing the lawful authority to search and seize.

---

[379] United States v. Moran, 65 M.J. 178, 188 (C.A.A.F. 2007); *see* Sullivan v. Gen. Motors Corp., 772 F. Supp. 358, 360 (N.D. Ohio 1991); State v. Strub, 355 N.E.2d 819, 825 (Ohio Ct. App. 1975); United States v. Howard, 228 F. Supp. 939, 942 (D. Neb. 1964).

Effective use of the Article 30a, UCMJ, subpoena will require judge advocates to work closely with investigators during the investigative stage of a case. In particular, judge advocates can work with investigators on how to lay the factual groundwork for the foregone conclusion doctrine. Judge advocates must keep in mind that the Government will bear the burden of putting on evidence establishing the foregone conclusion doctrine in motions practice. In the military context, such evidence may be more readily available than in the civilian context. In the case of mobile phones, for example, the Government will know where the accused works and have access to both co-workers and the workplace, potentially enabling surveillance of phone use or interviewing witnesses of phone use.

In the event that an accused disobeys a military judge's order to provide a device in an unencrypted state, prosecutors should aggressively pursue such disobedience either in a separate court-martial or by adding additional charges to the case at bar. The lack of civil contempt in military courts is a disadvantage relative to civilian courts. Indeed, confinement for civil contempt in civilian courts can be lengthy.[380] But the availability of UCMJ articles with a maximum punishment of up to five years confinement and a dishonorable discharge in criminal prosecutions nevertheless provides the military justice system with significant consequences for noncompliance.

This article recommends the Article 30a, UCMJ, judicial subpoena process over the other lawful processes available. The most significant advantage of the judicially issued Article 30a, UCMJ, subpoena process is providing the defense with an immediate forum in which to litigate the lawfulness of the subpoena. But the foregone conclusion doctrine is agnostic as to the means of compulsion. Thus, if Article 30a, UCMJ, practice becomes practically untenable, the Government might elect more expedient means of obtaining a device in an unencrypted state.

---

[380] *E.g.*, Chadwick v. Janecka, 312 F.3d 597 (3d Cir. 2002) (permitting civil contempt confinement of over seven years).

FIXING THE RANDOLPH-SHEPPARD ACT: SERVING UP SOME COMMON UNDERSTANDING

MAJOR COLLIN S. ALLAN*

I. Introduction

Congress passed the Randolph-Sheppard Act (the Act) to give blind persons more economic and employment opportunities and to help them become more self-sufficient.[1] To this end, the Act provides blind vendors with a priority for contracts for the operation of cafeterias for Federal agencies.[2] Consequently, blind vendors often compete for cafeteria contracts on Federal installations, including military bases. Unfortunately, both the Act and its implementing regulations fail to define all key terms, such as "priority," "operate," "operation," and "competitive range." This creates confusion and disagreement among interested parties as to how to implement the statute properly, and that leads to lengthy arbitration and litigation.

On average, from the time a complainant files an arbitration complaint with the Department of Education (DoEd),[3] Federal agencies wait 685 days for a decision from an arbitration panel organized pursuant to the Act[4]—a

* Judge Advocate, United States Air Force. Presently assigned as Acquisition Counsel, Air Force Materiel Command Law Office, Wright-Patterson Air Force Base. LL.M., 2021, The Judge Advocate General's School, United States Army, Charlottesville, Virginia. J.D., 2013, J. Reuben Clark Law School; B.A., 2010, Brigham Young University. Previous assignments include Chief, Contingency Contracting Branch, Air Force Legal Operations Agency, Joint Base Andrews, Maryland, 2018–2020; Contract and Fiscal Law Attorney, Combined Security Transition Command–Afghanistan, Headquarters Resolute Support, 2017; Chief, Military Justice, Space and Missile Systems Center, Los Angeles Air Force Base, California, 2016–2018; Chief, General Law, Offutt Air Force Base, 2014–2016. Member of the bar of Idaho. This paper was submitted in partial completion of the Master of Laws requirements of the 69th Judge Advocate Officer Graduate Course. The views expressed herein do not necessarily represent the views of the Department of the Air Force, Department of Defense, or any other department of the U.S. Government.

[1] 20 U.S.C. § 107(a).

[2] *Id.* §§ 107(b), 107d-3(e).

[3] Congress charged the Department of Education (DoEd), through its subordinate agency, the Rehabilitation Services Administration, to administer the Randolph-Sheppard Act (the Act). *Id.* § 107a.

[4] *See infra* app.

bewildering length of time that leaves all parties in limbo.[5] This delay is particularly relevant to the Armed Forces because military cafeterias are involved in fifteen of the seventeen posted arbitration decisions[6] between Federal agencies and a state licensing agency (SLA), which is the entity designated to represent blind vendors in submitting proposals for contract solicitations[7] and adjudicating disputes with Federal agencies.[8] While changing a statute about cafeterias may seem minor compared to the overall Department of Defense (DoD) mission set, the costs associated with this delay can add up when considering there is at least one cafeteria at many, if not most, DoD installations. This is all the more important when considering that the DoD has identified improving acquisition and fiscal efficiency and discipline as one of its primary goals.[9]

The majority of these cases arise from the solicitation or award of a contract. Each state has an SLA, and each SLA can file an arbitration request when it determines a Federal agency "is failing to comply with the provisions of [the Act]."[10] There is no statutory or regulatory bar on when an SLA can file for arbitration. Upon receipt of the request, the DoEd, which Congress charged with implementing the Act, is required to convene arbitration.[11]

Parties contend with not only lengthy arbitrations but also a lack of statutory and regulatory definitions, often forcing agencies (and, subsequently, arbitration panels) to guess at Congress's intent. The lack of definitions also allows arbitration panels to apply whichever definitions they favor, regardless of the impact on the Federal acquisition system. To make matters worse, there is no requirement for any panel member to have experience with the Federal acquisition system or the Act.[12] Panels are

---

[5] This period does not include any subsequent litigation time in Federal court. See *infra* app., for a discussion of the average times an arbitration takes from the filing of the complaint to the receipt of a decision from the arbitration panel.

[6] The DoEd publishes on its website arbitration panel decisions issued over the previous seven years. *See Arbitration Panels*, REHAB. SERVS. ADMIN., https://rsa.ed.gov/about/programs/randolph-sheppard-vending-facility-program/decisions-of-arbitration-panels (last visited Feb. 8, 2022).

[7] 34 C.F.R. § 395.33(b) (2021).

[8] 20 U.S.C. § 107d-2(b)(2).

[9] U.S. DEP'T OF DEF., SUMMARY OF THE 2018 NATIONAL DEFENSE STRATEGY OF THE UNITED STATES OF AMERICA 10 (2018).

[10] 20 U.S.C. § 107d-1(b).

[11] *Id.* § 107d-2(a).

[12] See Stephanie Villalta, *Shepherd Away from Arbitration: Rethinking the Randolph-Sheppard Act's Arbitration Scheme for Randolph-Sheppard Bid Protests*, 48 PUB. CONT. L.J.

comprised of three individuals:[13] the SLA selects one,[14] the Federal agency selects another, and then those two members select the panel chairperson.[15] If the two selected members cannot agree on a panel chairperson, the DoEd selects the third member.[16] The panel's rulings often come down to the panel chairperson, who may be interacting with the Federal acquisition system and the Act for the first time.

To mitigate this unfamiliarity, improve implementation of the Act, and decrease the time devoted to arbitration and litigation, Congress should revise the Act and its implementing regulations by defining at least the terms "priority," "operate," and "competitive range" and identifying their relation to the overall Federal acquisition scheme. These terms often form the basis of arbitration and litigation, as parties disagree on their definitions and how (and sometimes, whether) they relate to the overall Federal acquisition scheme. This article will discuss each term in turn. Each section will examine the relevant statutory and regulatory language, discuss the court cases that shed light on their meaning, and identify where arbitration panel decisions have strayed from the law. This article will conclude with a discussion of several potential solutions to better incorporate the Act into the Federal acquisition scheme and reduce confusion, arbitration, and litigation.

II. "Priority": Not a Guarantee of Contract Award

The meaning of "priority" has been the subject of litigation since shortly after Congress included the term in the Act in 1974.[17] Since then, its meaning has continued to be a source of confusion in arbitration and litigation, making it difficult for agencies to know how to implement the Act in cafeteria solicitations. State licensing agencies have argued that priority almost guarantees the award of a contract for the operation of a cafeteria to SLAs, while Federal agencies have countered that priority is not so generous. Arbitration panels and courts have described the Act's priority

637 (2019), for a discussion of issues with the Act's arbitration scheme and an argument to give the Government Accountability Office and the Court of Federal Claims jurisdiction over Act-related protests.

[13] 20 U.S.C. § 107d-2(b)(2).

[14] *Id.*

[15] *Id.*

[16] *Id.*

[17] Randolph-Sheppard Vendors of Am., Inc. v. Harris, 628 F.2d 1364 (D.C. Cir. 1980).

as a "prior right,"[18] something other than an "absolute right,"[19] and simply the regulatory contract award process.[20] Panels have also described it as taking precedence over all other socioeconomic preferences.[21] The failure to define "priority" clearly is a significant oversight because it is one of the key measures that implements the Act's primary purpose. This section examines the statutory and regulatory background of "priority," how courts have interpreted the term, and how arbitration panels have expanded the meaning of the term beyond what the statutory and regulatory plain language requires and how courts have interpreted it.

A. Statutory and Regulatory Background

The plain language of the statute makes clear that Congress did not intend for every single SLA proposal submission on behalf of a blind vendor to result in that SLA receiving a contract award. Instead, Congress left it to the DoEd to "prescribe regulations to establish a priority for the operation of cafeterias on Federal property."[22] The DoEd established priority by creating two selection methods for contracts to operate cafeterias.[23] The first method provides that priority may be afforded by Federal agencies when entering into "direct negotiations" with an SLA for a contract to operate a cafeteria.[24] The only limitation is the agency must determine the SLA can provide the services at a "reasonable cost, with food of a high quality comparable to that currently provided employees."[25] The agency is not

[18] Opportunities for Ohioans with Disabilities v. U.S. Dep't of the Air Force, Wright-Patterson Air Force Base, No. R-S/16-08, at 16 (2018) (LeRoy, Arb.).
[19] Dep't of the Air Force—Reconsidered, 72 Comp. Gen. 241, 244 (1993); *see Randolph-Sheppard Vendors of Am., Inc.*, 628 F.2d at 1367 ("It would be unreasonable to require agency heads to grant unqualified priorities to blind vendors to operate cafeterias, despite the vendor's anticipated cost. In fact such a scheme, unlike the present one, would actually exceed the authority delegated to the Secretary by the Amendments.").
[20] *See* NISH v. Cohen, 247 F.3d 197 (4th Cir. 2001).
[21] *Opportunities for Ohioans*, No. R-S/16-08, at 9; Okla. Dep't of Rehab. Servs. v. U.S. Dep't of the Army, Fort Sill, No. R-S/15-10, at 18 (2016) (Geister, Arb.); Ga. Vocational Rehab. Agency v. U.S. Dep't of Def., Dep't of the Army, Fort Stewart, Ga., No. R/S 13-09, at 28 (Harris, Arb.).
[22] 20 U.S.C. § 107d-3(e).
[23] 34 C.F.R. § 395.33 (2021).
[24] *Id.* § 395.33(d).
[25] *Id.*

required to use this selection method, but if this method fails, the agency must use the second selection method.[26]

The second selection method is a competitive selection process with three requirements.[27] First, the Federal agency must invite the SLA "to respond to solicitations for offers when a cafeteria contract is contemplated."[28] Second, the solicitations "shall establish criteria under which all responses will be judged."[29] Third, if the SLA's proposal is "judged to be within a competitive range and has been ranked among those proposals which have a reasonable chance of being selected for final award," the Federal agency must consult with the Secretary of Education (SecEd) to ensure the SLA's services can be provided at a reasonable cost and provide "food of a high quality comparable to that currently provided employees."[30] The opportunity to choose between these two selection methods—one allowing direct negotiation with an SLA to the exclusion of other potential sources and the other allowing competition among multiple offerors—shows the DoEd's intent clearly: it did not see Congress's use of "priority" as a mandate for contract award to SLAs under all circumstances, nor would it mandate the use of SLAs for all cafeteria contracts.

B. Judicial Approach to Priority

Courts have tended to support this approach. In *NISH v. Cohen*, the U.S. Court of Appeals for the Fourth Circuit explained a Federal agency honors the established priority when it employs one of the two selection methods.[31] *NISH v. Cohen* revolved around the definition of "cafeteria"[32] and the application of the Competition in Contracting Act (CICA) to the Act.[33] In exploring CICA's application, the Fourth Circuit confirmed two important points about the Act's priority. First, that Congress charged the DoEd with establishing regulations to implement priority.[34] Second, that the DoEd "regulations offer two options by which a federal agency may implement

---

[26] *Id.*
[27] *Id.* § 395.33(b).
[28] *Id.*
[29] *Id.*
[30] *Id.* § 395.33(a).
[31] *See* NISH v. Cohen, 247 F.3d 197 (4th Cir. 2001).
[32] *Id.* at 199.
[33] *Id.* at 204.
[34] *Id.* at 203.

the priority mandated for blind vendors."[35] The court then outlined the two selection methods discussed above (i.e., direct negotiation and competitive selection). The court concluded that the Act's inclusion of procurement procedures exempts it from CICA's full and open competition requirement.[36] Based on this case, applying the priority appears straightforward so long as the Federal agency chooses one of the two selection methods outlined in the DoEd's implementing regulations. It also supports the notion that a Federal agency is not required to award a cafeteria contract to an SLA.

The D.C. Circuit similarly confirmed that the Act's priority is not a guarantee of award.[37] Shortly after Congress amended the Act in 1974 and the DoEd implemented its regulations, a U.S. senator, blind vendors, and several advocacy groups for blind people sued the DoEd.[38] The plaintiffs were concerned that the new implementing regulations did not go far enough in capturing Congress's intent with regard to priority.[39] The court concluded that priority is not an "unqualified" right to contract award, explaining it would be "unreasonable to require agency heads to grant unqualified priorities to blind vendors to operate cafeterias, despite the vendor's anticipated cost."[40] Based on this, while a Federal agency has the authority to negotiate directly with the SLA, when the competitive selection method is employed, priority does not guarantee contract award. Mandating award to the SLA in the competitive selection method would seem to undercut the purpose of having a competitive selection method, which is to allow multiple potential vendors the opportunity to compete for contract award.

While priority may not guarantee award in every circumstance, courts have examined how it compares to other programs in the Federal acquisition scheme designed to benefit certain groups or entities such as small businesses. This understanding is helpful because small businesses are often SLAs' primary competitors, and agencies may seek to incorporate small business programs and the Act into their solicitations. Those cases hold that the Act priority does not necessarily conflict with other set-asides, such as the historically underutilized business zones (HUBZone) set-aside[41] and

---

[35] *Id.*
[36] *Id.* at 204 (reasoning that the Act satisfies the Competition in Contracting Act's "except in the case of procurement procedures otherwise expressly authorized by statute" exception).
[37] Randolph-Sheppard Vendors of Am., Inc. v. Harris, 628 F.2d 1364, 1367 (D.C. Cir. 1980).
[38] *Id.* at 1365.
[39] *Id.* at 1367.
[40] *Id.*
[41] Automated Commc'n Sys., Inc. v. United States, 49 Fed. Cl. 570, 577–80 (2001).

other small business set-asides.[42] Because the preference in the Javits-Wagner-O'Day (JWOD) Act[43] is in direct conflict with the Act priority, courts have historically found that the Act controls because it is more specific than the JWOD Act.[44] The case discussing the HUBZone preference determined that, although the Act is more specific than the HUBZone preference, the Act and the HUBZone preference were not incompatible.[45] Practitioners should understand that while the Act's priority does not guarantee award in every solicitation, it might carry greater weight when in conflict with other Federal acquisition program benefits.

C. Arbitration Problems with Priority

Unfortunately, the plain language understanding has not borne out in arbitration. Panel members' general lack of expertise in and disregard for the Federal acquisition process has led to panels incorrectly applying priority to the exercise of contract options, expanding the plain language meaning of "priority," and outright rejecting the Federal Acquisition Regulation (FAR)—the very regulation that controls Federal acquisitions. This misapplication of law can have a chilling effect on contracting officers tasked with balancing how an arbitration panel might rule, small business acquisition requirements, and installation food service needs. Some agencies choose to forgo the nearly two-year arbitration fight knowing arbitration panels will likely rule against them if they do not award to the SLA.

---

[42] Intermark, Inc., B-290925, 2002 CPD ¶ 180 (Comp. Gen. Oct. 23, 2002).
[43] 41 U.S.C. §§ 8501–8506.
[44] NISH v. Rumsfeld, 348 F.3d 1263, 1272 (10th Cir. 2003); NISH v. Cohen, 247 F.3d 197, 204–05 (4th Cir. 2001). Congress addressed this in part by instituting a "no poaching" rule that entailed cafeteria contracts on military installations awarded under the Javits-Wagner-O'Day (JWOD) Act to remain subject to the JWOD Act. Where cafeteria contracts on military installations were previously awarded under the Act, those contracts would remain subject to the Act. John Warner National Defense Authorization Act of Fiscal Year 2007, Pub. L. No. 109-364, § 856, 120 Stat. 2083, 2347 (2006). This did not resolve all of the issues between the competing applications of these two statutes. In 2014, Congress next directed the Secretary of Defense to promulgate "regulations explaining how the two Acts should apply to new contracts." Kansas v. SourceAmerica, 874 F.3d 1226, 1234 (10th Cir. 2017). Confusion remains as to the how the Act and the JWOD Act apply as there has been recent litigation on the subject. *See* SourceAmerica v. U.S. Dep't of Educ., 368 F. Supp. 3d 974 (E.D. Va. 2019), *aff'd in part, vacated in part sub nom.*, Kansas v. SourceAmerica, 826 F. App'x 272 (4th Cir. 2020).
[45] *Automated Commc'n Sys., Inc.*, 49 Fed. Cl. at 577–78.

As an example, a panel improperly invoked priority in a dispute about the exercise of an option in an arbitration case at Fort Sill, Oklahoma.[46] In this case, the Army decided not to exercise an option on a cafeteria contract it held with the Oklahoma SLA.[47] Rather, it decided to resolicit the contract.[48] The SLA requested arbitration to determine if the decision not to exercise the option violated the Act and whether the SLA's exclusion from the competitive range violated the Act.[49]

The first allegation in the arbitration centered on whether the Army's decision not to exercise an option was a limitation that the SecEd should have previously cleared.[50] An agency's discretion to exercise an option is governed by FAR 17.207[51] and is typically within the sole discretion of the contracting officer.[52] The arbitration panel rejected the FAR, concluded the Army violated its obligations under the Act, and turned to the Act priority to, at least in part, justify its holding.[53] Speaking on the agency's discretion to exercise an option, the panel held that "[w]hen conducting a procurement subject to the [Act], a federal agency's discretion is limited by the priority given to blind vendors."[54] While the arbitration panel's assertion may be true in some circumstances, it is not true in all situations. For example, it is not true when it comes to the exercise of an option because the implementing regulations make clear that the priority applies at contract award.[55] The decision to exercise an option comes at the end of a term of performance, only after a contracting officer determines that it is in the best interest of the agency to exercise the option; it has nothing to do with contract award.[56]

---

[46] Okla. Dep't of Rehab. Servs. v. U.S. Dep't of the Army, Fort Sill, No. RS/18-09, at 37 (2020) (Sellman, Arb.).
[47] *Id.* at 8.
[48] *Id.*
[49] *Id.* at 3.
[50] *Id.*
[51] *See* 48 C.F.R. § 17.207 (2021). The Federal Acquisition Regulation (FAR) is codified in Title 48 of the *Code of Federal Regulations*.
[52] *See, e.g.*, Mktg. & Mgmt. Info., Inc. v. United States, 62 Fed. Cl. 126, 130 (2004) (citing Gov't Sys. Advisors, Inc. v. United States, 847 F.2d 811, 813 (1988)).
[53] *Okla. Dep't of Rehab. Servs.*, No. RS/18-09, at 37.
[54] *Id.*
[55] *See* discussion *infra* Section II.A.
[56] *See* FAR 17.207 (2022). Before an option may be exercised, contracting officers must determine the "requirement covered by the option fulfills an existing Government need" and the "exercise of the option is the most advantageous method of fulfilling the Government's need, price and other factors . . . considered," among other things. *Id.*

The arbitration panel was wrong in relying on priority in its decision about the exercise of an option.

As others have done,[57] this panel also incorrectly determined the FAR did not apply to this situation. The panel relied on *NISH v. Cohen* to support its conclusion that the FAR does not apply "when the [Act's] priority applies."[58] This is simply an incorrect application of *NISH v. Cohen* and the Act's priority. As previously discussed, the Fourth Circuit determined in *NISH v. Cohen* that solicitations conducted pursuant to the Act are not subject to CICA, not that they are exempt from *every* procurement regulation included in the FAR.[59] Any time an arbitration panel relies on *NISH v. Cohen* for the proposition that the FAR does not apply to solicitations subject to the Act, it misapplies the law. Furthermore, to the extent that Act procurements exist outside normal acquisition procedures, the DoEd's implementation of priority allows an agency to apply as much of the FAR that does not contradict with the Act to contracts for the operation of a cafeteria.[60] The second requirement in the competitive selection method requires solicitations to "establish criteria under which all responses will be judged."[61] Nothing here precludes the application of the FAR to contracts for the operation of a cafeteria.

Arbitration panels have rejected the plain meaning of the term "priority," using it instead as a magic carpet to take SLAs to any destination they want. When agencies cannot rely on the plain meaning of the Act, it creates confusion in the statute's application. This, if anything, results in

---

[57] *See* Opportunities for Ohioans with Disabilities v. U.S. Dep't of the Air Force, Wright-Patterson Air Force Base, No. R-S/16-08, at 9 (2018) (LeRoy, Arb.) (relying on *NISH v. Cohen* in holding that neither the FAR nor the Defense Federal Acquisition Regulations apply to Act procurements); S.C. Comm'n for the Blind v. U.S. Dep't of the Army, Nos. R-S/12-09, R-S/15-07, at 18–20 (2016) (Hudson, Arb.) (Gashel, S. concurring) (relying on the Competition in Contracting Act to argue that the FAR does not apply to Act procurements). *But see* Ill. Dep't of Hum. Servs., Div. of Rehab. Servs. v. U.S. Dep't of Energy-Fermi Nat'l Accelerator Lab'y, No. R-S/16-12, at 7 (LeRoy, Arb.) (holding that Department of Energy procurement regulations "do not apply to R-S Act procurements, insofar as they conflict with the regulations implementing the R-S Act"); N.J. Comm'n for the Blind & Visually Impaired v. Dep't of the Air Force, Joint Base McGuire-Dix-Lakehurst, No. R-S/15-19, at 12–13 (Weisenfeld, Arb.) (holding that the FAR and the Act did not contradict each other in that particular case).

[58] *Okla. Dep't of Rehab. Servs.*, No. RS/18-09, at 37.

[59] *See* discussion *supra* Section II.B.

[60] 34 C.F.R. § 395.33(b) (2021).

[61] *Id.*

more arbitration and litigation. A clear definition of "priority" and its application will mitigate confusion and time spent in arbitration.

III. "Operation": A Cafeteria by Any Other Name

Congress has left undefined the terms "operate" and "operation," which are key to understanding which cafeteria contracts the Act covers. Currently, the Act provides that blind vendors get priority in cafeteria contracts only if the contract is for the operation of a cafeteria.[62] That is, if a contract is for the operation of a cafeteria, the Act applies; if the contract is not for the operation of a cafeteria, the Act does not apply. Unfortunately, because "operation" is undefined, this tautology is wholly unhelpful in practice. Two general approaches have filled the void—one broad and one narrow. The broad approach has the effect of giving almost any contract having anything to do with a cafeteria to the SLA, effectively removing any agency discretion in the award of the contract. The narrow approach covers contracts where the contractor will exercise management or control over the cafeteria's operations, which allows contracting officers some measure of discretion in tailoring contracts to meet the agency's needs.

A. Broad Approach

The U.S. Court of Appeals for the Fifth Circuit has favored the broad approach. It held the terms "operate" and "operation" were ambiguous before determining that an expansive definition should apply on a case-by-case basis.[63] The Fifth Circuit case stems from a contracting officer's decision to solicit two contracts—one for limited services, including custodial and sanitation services for a cafeteria and another for full food services—where both contracts were historically solicited as the same cafeteria contract.[64] The question before the court was whether the first contract qualified as a contract for the "operation" of a cafeteria.[65] The court found the term "operate" ambiguous for two reasons. First, the statute does

---

[62] *See* 20 U.S.C. §§ 107, 107d-3(e).
[63] Tex. Workforce Comm'n v. U.S. Dep't of Educ., Rehab. Servs. Admin., 973 F.3d 383, 386 (5th Cir. 2020).
[64] *Id.* at 385.
[65] *Id.*

not define the term.[66] Second, the court concluded that, even following a review of case law and multiple dictionary definitions, the definition could not be narrowed.[67]

Finding the term ambiguous, the court relied generally on the statute's overall purpose and specifically on a letter from the SecEd to a member of Congress to determine that, under the circumstances presented, the Act applied.[68] In examining the term in light of the Act's objective, the court concluded that a "broader reading of 'operate' which includes more than only executive-level functions would further the Act's purpose."[69] The court viewed the SecEd's assertion in her letter that the definition of "operate" did not require a "vendor to participate in every activity of the cafeteria in order to 'manage' or 'direct the working of' the cafeteria"[70] supported this end. However, the court explained that "operate" may not apply to contracts "which are limited to discrete tasks."[71] While the court's ruling was limited to this particular contract,[72] its approach brings almost any contract related to a cafeteria within the Act's purview. If custodial services—something reasonably viewed as ancillary to a cafeteria's operation and management—qualify as "operating" a cafeteria, it is difficult to see what would not qualify. This expansive view of the term "operate" was at odds with a narrower characterization coming, up until recently, out of the Fourth Circuit.

B. Narrow Approach

Conversely, the District Court for the Eastern District of Virginia took a narrower approach to "operate" and "operation."[73] The court relied on the "plain language of the [Act's] preference, the meaning of 'operate' in other parts of the [Act], and the regulations issued pursuant to the [Act]."[74] In doing so, the court stated that the "plain language of the [Act] makes clear

---

[66] *Id.* at 386, 388.
[67] *Id.* at 386–89.
[68] *Id.* at 389–90.
[69] *Id.* at 389.
[70] *Id.* at 389–90.
[71] *Id.* at 390.
[72] *Id.* at 390–91.
[73] SourceAmerica v. U.S. Dep't of Educ., 368 F. Supp. 3d 974, 991–92 (E.D. Va. 2019), *aff'd in part, vacated in part sub nom.*, Kansas v. SourceAmerica, 826 F. App'x 272 (4th Cir. 2020).
[74] *Id.* at 992.

that its preference applies only where the vendor exercises control or management over the functioning of the vending facility as a whole."[75] The court added that "'[o]peration' requires control or management of the vending facilities. One cannot be said to operate something unless one is in some sense in charge; operation requires more than mere performance of assigned tasks."[76] This approach meant that the Act would not apply unless the SLA was actually managing the cafeteria or controlling its functions.

Until recently, the district court's narrow approach created a circuit split as to the definition of "operate." In September 2020, the Fourth Circuit weighed in on the Act by vacating the district court's opinion on grounds unrelated to the definition of "operate."[77] However, it did not address the meaning of the term.[78]

While the Fourth Circuit's decision resolved the circuit split for the time being, it did not obviate the need for a precise definition of "operate" and "operation." If anything, parties need greater clarity as to which contracts the Act applies now more than ever. Currently, Federal agencies, blind vendors, and SLAs are left with a term deemed ambiguous and court-provided direction for agencies to look at each contract individually and apply the "standard" correctly. Given the low threshold for initiating Act arbitration, without more clarity on the meaning of the terms "operate" and "operation," litigation will likely only increase.

IV. "Competitive Range": Starting to Get It Right—Not the Finish Line

The failure to define "competitive range" on its own or in relation to the Federal acquisition system is an oversight that confuses parties and makes it difficult for contracting officers to accomplish their mission. In Federal acquisition, competitive ranges are a tool for contracting officers to refine proposals in an effort to ensure the Government gets what it needs.[79] They provide an opportunity for agencies and contractors to identify and resolve significant weaknesses and deficiencies before contract award, alleviating

---

[75] *Id.*
[76] *Id.*
[77] *SourceAmerica*, 826 F. App'x at 286–87.
[78] *Id.*
[79] *See* David A. Whiteford, *Negotiated Procurements: Squandering the Benefit of the Bargain*, 32 PUB. CONT. L. J. 509, 544–47 (2003) (discussing changes to the establishment of competitive ranges and discussions following the FAR Part 15 rewrite).

contract management issues that might otherwise arise during the life of a contract.[80]

A competitive range is by no means a finish line, though, as the competition among offerors continues into the competitive range.[81] Because it is not an end point, it makes no sense to use it as such whereby a Federal agency must award a contract to the SLA, especially when the SLA's proposal is rife with weaknesses and deficiencies that the SLA refuses to fix.

A 2016 Fort Stewart arbitration panel took this exact approach when it reviewed a contracting officer's decision to remove an SLA from the competitive range because, after discussions, the SLA failed to address its deficiencies.[82] In this case, the contracting officer received five proposals, including one from an SLA.[83] One determining factor in establishing a competitive range was that none of the five proposals was good enough for contract award; each proposal had weaknesses and deficiencies that the offeror needed to address.[84] The contracting officer sent letters outlining each offeror's deficiencies and requesting revised proposals.[85] The SLA's proposal had anywhere from thirty-two to sixty-six weaknesses and deficiencies.[86] The SLA addressed the deficiencies in a letter to the contracting officer but failed to revise its proposal.[87] Because of this, the contracting officer subsequently eliminated the SLA's proposal from the competitive range.[88] In response, the SLA requested arbitration to protest its elimination, and the DoEd convened a panel to determine if the "Army's

---

[80] FAR 15.306(d) (2020).

[81] Federal Acquisition Regulation; Part 15 Rewrite; Contracting by Negotiation and Competitive Range Determination, 62 Fed. Reg. 51224 (Sept. 30, 1997). Those who rewrote Part 15 explained that they wanted to make it clear to potential offerors that getting into the competitive range required them to continue "compet[ing] aggressively" and "those eliminated from the range [would be] spared the cost of pursuing an award they have little or no chance of winning." *Id.* at 51227.

[82] S.C. Comm'n for the Blind v. U.S. Dep't of the Army, Nos. R-S/12-09, R-S/15-07, at 10 (2016) (Hudson, Arb.).

[83] *Id.*

[84] *Id.* at 11.

[85] *Id.*

[86] *Id.* at 12. The parties debated the actual number at the hearing. *Id.*

[87] *Id.* at 11.

[88] *Id.*

failure to apply the priority to the solicitation was in violation of the Randolph-Sheppard Act."[89]

The panel concluded that "[a]t the point where the [contracting] officer found that the SLA proposal was within the competitive range, he was required to apply the Act's priority requirement."[90] In essence, even though the contracting officer included all offerors in the competitive range (because none of them were initially good enough for award), the panel determined that because the SLA was placed in the competitive range, it should have received the contract award. However, in Federal acquisition, a competitive range provides a tool for offerors to improve their proposals and a chance for contracting officers to winnow competition for reasons including efficiency.[91] A contracting officer even has the discretion to remove an offeror from the competitive range if the contracting officer "decides that an offeror's proposal should no longer be included in the competitive range."[92] The panel decision reinforces the incorrect notion that a competitive range is merely a finish line, and it flies in the face of the common understanding of a competitive range's purpose: to improve proposals and provide the best value to the Government.[93]

The DoEd previously attempted to formalize this "finish line" perspective in a manual it rescinded in 2017[94] and has not since replaced. Regardless, in a 2020 arbitration, the panel relied on the following passage from the rescinded manual to determine that the contracting officer should have placed the SLA within the competitive range so the contracting officer could examine the possibility of making the SLA's proposal acceptable.

---

[89] *Id.* at 4. It is worth noting the DoEd's characterization of the central issue in the arbitration makes the determination at the outset, without any evidence or argument, that the Army failed to apply priority. This is incredibly problematic. Whether the Army failed was for the arbitration panel to resolve, not the DoEd to dictate. If the DoEd makes conclusions based on a complaint rather than evidence presented, it makes one wonder about the purpose of conducting arbitration at all.

[90] *Id.* at 15.

[91] FAR 15.306 (2022).

[92] *Id.* This determination takes place only after conducting discussions with offerors in the competitive range, but removal from the competitive range can occur even if the offeror has not had an opportunity to submit a revised proposal.

[93] *Id.*

[94] REHAB. SERVS. ADMIN., U.S. DEP'T OF EDUC., RSA-PD-17-01, RETIREMENT OF CERTAIN POLICY ISSUANCES (2017). Aside from a citation to the *Code of Federal Regulations* on the DoEd's Act website, there is no current policy guidance discussing DoEd's views on the competitive range. Reasonable questions can arise regarding the applicability of the rescinded guidance and the weight it should be afforded, but those are irrelevant because of its rescission.

> [T]he determining factor for judging whether a proposal [of the SLA] should be within the competitive range is if the offer can be made acceptable by conducting meaningful discussions. To be more specific, this should be interpreted as meaning whether the contracting officer is of the opinion that clarification, modification, or appropriate minor revision to the SLA proposal may result in the offer being fully acceptable. This judgment would be consistent with an action involving a commercial offeror under comparable circumstances. The proposal must be considered within the competitive range unless it is technically inferior or contains unduly high selling prices to patrons that the possibility of being made acceptable through meaningful negotiations is precluded.[95]

Essentially, an SLA's offer should be included in a competitive range after a determination that meaningful discussions can make it acceptable. As just demonstrated, there is no way for a contracting officer to know if discussions will make an SLA's offer acceptable. A contracting officer cannot know at the outset whether an SLA will revise its proposal once in the competitive range. Because of the very generous nature of the finish-line theory, though, SLAs continue to rely on this manual despite its rescission. The next paragraph requires agencies to award the contract to an SLA when it is within the competitive range.[96] However, reliance on this passage is problematic not only because it has been rescinded but also because it presupposes the establishment of a competitive range at all. Agencies are not required to establish competitive ranges under the Act or the FAR.[97] Award can still be made to an SLA (or any other offeror) in the absence of a competitive range.

---

[95] Okla. Dep't of Rehab. Servs. v. U.S. Dep't of the Army, Fort Sill, No. RS/18-09, at 43 (2020) (Sellman, Arb.) (second alteration in original). The arbitration panel did not include in its opinion a citation to the manual, which is currently located in an online archive. *See* U.S. DEP'T OF EDUC., ADMINISTRATION OF THE RANDOLPH-SHEPPARD VENDING PROGRAM BY FEDERAL PROPERTY MANAGING AGENCIES (1988), https://archive.org/embed/in.ernet.dli.2015.157187.

[96] U.S. DEP'T OF EDUC., *supra* note 95, at 37.

[97] The DoEd regulations do not require the establishment of a competitive range. The regulatory requirement is to consult with the DoEd only if the SLA's proposal is within the competitive range and has been ranked among those proposals that have a reasonable chance of being selected for final award. *See* 34 C.F.R. § 395.33(b) (2021). Under the FAR, there is no requirement to establish a competitive range as long as agencies provide notice to potential offerors that award may be made without discussion. *See* FAR 15.306(a)(3) (2022).

The finish-line approach strains the common understanding of a competitive selection method and belies the purpose of the two selection methods the DoEd established. The term "competitive range" appears only when using a competitive selection method. It seems absurd for an agency to put together a competitive solicitation and review multiple offers if the agency must ultimately award the contract to the SLA once it "crosses the competitive range finish line." The agency may as well have entered into direct negotiations with the SLA rather than set up the ruse of getting several different small businesses' hopes up only to disappoint them because a potentially flawed SLA proposal made it into the competitive range. Defining what is otherwise a common term and its relation to the overall Federal acquisition process will reduce confusion and frustration for contracting officers trying to implement the Act and reduce arbitration and litigation.

V. Proposed Solutions: Mandatory Source or Room for Agency Discretion

Reform efforts should focus on the amount of discretion Congress wants agencies to exercise in making contracting decisions. The amount of discretion an agency's contracting officer exercises will inform how the terms are defined or whether they remain in the Act and its implementing regulations at all. If Congress wants to remove all discretion for contract award from contracting officers, making SLAs (and the blind vendors they represent) mandatory sources will accomplish this. If, on the other hand, Congress wants to balance the purpose of the Act with a contracting officer's traditional discretion, it can do so by clearly incorporating the Act into the overall Federal acquisition scheme. In any case, Congress should define the terms with an eye towards minimizing arbitration and improving implementation.

A. Mandatory Source: Simple and Straightforward—Reduced Agency Discretion

Establishing the Act as a mandatory source statute would simplify its implementation and remove much of the discretion an agency traditionally exercises. A mandatory source designation requires Federal agencies to

procure certain products or services from a particular source.[98] This is not a novel concept; Congress is familiar with mandatory sources. For example, it has statutorily designated as mandatory sources in the Federal acquisition system both Federal Prison Industries, Inc.[99] and the Committee for Purchase from People Who Are Blind or Severely Disabled pursuant to the JWOD Act.[100] These statutes differ from the Act in that they include "shall procure" language instead of the Act's "priority" language.[101] A mandatory source designation would require amending the Act to remove the priority language and insert language along the following lines: "**An entity of the Federal Government intending to procure services for the operation of a cafeteria shall procure the service from the state licensing agency of the state where the services will be performed.**"[102] With this requirement, there would be confusion about neither the meaning of "priority" nor how competitive range fits into an Act acquisition because there would be no competitive selection method. Making SLAs mandatory sources would also clarify the role of competitive ranges in cafeteria procurements. Simply put, because there would be no competition in the award of these contracts, there would be no need for a competitive range. Removing the agency's discretion in this way would reduce arbitration and litigation by eliminating confusion

---

[98] FAR 8.002, 8.003 (2022); *cf.* FAR 8.004.

[99] *See* 18 U.S.C. § 4124.

[100] *See* 41 U.S.C. § 8504.

[101] For example, the JWOD Act states:

> An entity of the Federal Government intending to procure a product or service on the procurement list referred to in [41 U.S.C. § 8503] shall procure the product or service from a qualified nonprofit agency for the blind or a qualified nonprofit agency for other severely disabled in accordance with regulations of the Committee and at the price the Committee establishes if the product or service is available within the period required by the entity.

41 U.S.C. § 8504. Congress requires Federal agencies to procure items from Federal Prison Industries, Inc. by stating the "several Federal departments and agencies and all other Government institutions of the United States shall purchase at not to exceed current market prices, such products of the industries authorized by [18 U.S.C. §§ 4121–4130] as meet their requirements and may be available." 18 U.S.C. § 4124(a). Compare this to the two instances of priority in the Act: "In authorizing the operation of vending facilities on Federal property, priority shall be given to blind persons licensed by a State agency as provided in this chapter," 20 U.S.C. § 107(b), and "[t]he Secretary, through the Commissioner, shall prescribe regulations to establish a priority for the operation of cafeterias on Federal property by blind licensees," *id.* § 107d-3(e).

[102] This article's recommended legislative changes appear in bold typeface.

about who should get these contracts and how the contracts should be awarded.

One alternative for enacting the mandatory source approach is folding the Act's cafeteria contract aspects into the JWOD Act.[103] The JWOD Act requires contracting officers to purchase products or services identified on a procurement list from non-profit agencies organized for the benefit of the blind or severely disabled.[104] This would not be a significant shift because the JWOD Act procurement list already provides cafeteria services for many military installations and other Federal agencies.[105] Listing cafeteria services on the JWOD Act procurement list would maintain both economic opportunities for the blind and the mandatory source designation for cafeteria contracts.

One significant problem with the mandatory source solution is that once Congress makes that designation, it removes the incentives inherent in a competitive selection process to control prices and produce quality food. Once a vendor knows the agency has no recourse, there is no effective method to ensure prices remain reasonable, which can be a problem when agency budgets are tight. An engorged cafeteria budget diverts money from other agency priorities. Similarly, when freed from competition, the advantage in serving high quality food disappears. Under a mandatory source regime, there is little to encourage a vendor to rein in cost and produce quality food.

While a mandatory source regime would resolve priority and competitive range issues, the term "operate" would still be in play to the extent it is used to determine for which cafeteria contracts SLAs would serve as the mandatory source. If Congress intends to follow the broad approach

---

[103] There is significant history between Act litigants and JWOD Act litigants. Perhaps the most recent altercation took place in the *SourceAmerica* litigation in the Fourth Circuit. SourceAmerica v. U.S. Dep't of Educ., 368 F. Supp. 3d 974, 991–92 (E.D. Va. 2019), *aff'd in part, vacated in part sub nom.*, Kansas v. SourceAmerica, 826 F. App'x 272 (4th Cir. 2020). The tension between the Act and the JWOD Act often results in beneficiaries of each act on opposite sides of cafeteria contract litigation. That history is beyond the scope of this article, though it does form some of the basis for this recommendation.

[104] *See* 41 U.S.C. § 8504.

[105] Congress authorized JWOD Act beneficiaries to operate cafeterias at some Federal installations in limited circumstances in 2006. *See SourceAmerica*, 368 F. Supp. 3d at 980–82 (briefly discussing the history of and interplay between the Act and the JWOD Act). A search of the JWOD Act procurement list for "food service" and "food" yields seventy-three results of food service contracts at different Federal agency locations. *Procurement List*, U.S. ABILITYONE COMM'N, https://www.abilityone.gov/procurement_list/index.html (Feb. 9, 2022).

outlined above, it should remove "services for the operation of a cafeteria" from the definition proposed above and replace it with "any cafeteria-related services," making clear that an agency must award any contract for cafeteria-related services to an SLA. However, if Congress intends to limit the types of cafeteria contracts to which the Act applies to preserve agency discretion, it should define "operate" in a way that is easy to understand and implement. For example, Congress could define "operation" and "operate" as, "**management or control over the cafeteria. Ordering food, writing a menu, preparing the food, and serving the food, when together, qualify as 'operating' a cafeteria. Services performed in a cafeteria or in relation to a cafeteria do not qualify as 'operating' or the 'operation' of a cafeteria unless the contract is also for the management function of the cafeteria. Custodial services, by themselves, do not qualify as 'operating' a cafeteria.**" This definition would make clear that "operate" means more than an ancillary activity like custodial services—it requires overall control of the cafeteria. Alternatively, "operation" and "operate" could be changed to "**manage and exert overall control over the cafeteria's operations.**" There may be greater understanding about what it means to manage something than there appears to be with operating a cafeteria. While these are not a cure-all for arbitration and litigation, they would help to offer clarity and create space for agency discretion in determining how to best meet its food service requirements.

B. Balanced Approach

A balanced approach can preserve the benefits the Act affords and those inherent in competition while also reducing Act arbitration and litigation. If Congress wants to preserve agencies' discretion to determine how to best satisfy cafeteria requirements at military installations, a nuanced approach is necessary. To maximize discretion while preserving the Act's benefits, Congress should define priority as a price preference, "operate" as a management function, and "competitive range" as it is in the FAR.

In most Federal acquisition programs designed to benefit a certain group, a contract is specifically designated, or set-aside, for that group in the solicitation.[106] The difficulty with defining priority as a set-aside for SLAs is that there is only one SLA in each state, so creating a set-aside approach would, in effect, make the SLA a mandatory source in that state. Defining

[106] FAR 6.2 (2022).

priority as a price preference, where either the SLA's price is adjusted downward by a certain percentage or the other offerors' prices are adjusted upward at the evaluation stage would mark a clearer reflection of congressional intent under these circumstances than the statute's current language. It would also give agencies the freedom to consider multiple factors (e.g., price, management plan, food quality) when soliciting a cafeteria contract. This is similar to the approach for HUBZone contracts.[107] This approach recognizes that an SLA might not be able to diffuse its overhead costs across many contracts like other contractors. This straightforward benchmark would reduce arbitration and litigation because it would be easier to determine if and how priority was applied in the contract selection process.

Similarly, defining "operate" and "operation" as providing management services for cafeterias would provide flexibility to the agency in determining its needs while preserving the benefit for the blind vendors on those contracts that would involve a management function. This approach does not prevent an agency from lumping all cafeteria-related services into the same contract, nor does it preclude contracting for ancillary services with non-SLA vendors outside of the auspices of the Act if agencies determine that is in their best interest. It does remove the inherent ambiguity in terms and encourage a common understanding among SLAs and agencies, thereby reducing the need to turn to arbitrators for a solution.

Finally, the implementing regulations should clearly state that the concept and definition of "competitive range" as implemented in the FAR govern in Act acquisitions. There is no compelling reason to have one term mean two things in the same area of the law. This approach requires an agency to consult with SecEd only if the SLA's proposal is both within a competitive range and among those that have a reasonable chance of selection for final award. If, after being included in a competitive range, an SLA's proposal still has weaknesses and deficiencies such that it is not ranked among those proposals that have a reasonable chance of final award selection, the agency may award to a different offeror without having to seek SecEd's approval. Not only will this reduce the administrative burden of coordinating with another Federal agency to award what should be a relatively straightforward contract, but it will also reduce arbitration and litigation because agencies will no longer have to guess at what meaning

[107] *See* 15 U.S.C. § 657a; FAR 52.219-4.

an arbitration panel will give "competitive range." Instead, its meaning will be clearly outlined in the FAR.

VI. Conclusion

Because most military installations have cafeterias, the Act has a significant impact across the DoD. Disagreements about the meanings of key terms in the Act and its implementing regulations can lead to lengthy arbitration and litigation. Congress can clarify the process for awarding cafeteria-related contracts for all parties by defining these key terms in the following ways: "priority" as a price preference, "operate" as a management function, and "competitive range" as defined in the FAR. While differences may remain about other aspects of the Act, making the recommended changes will go a long way to freeing valuable time and resources for agencies, SLAs, and blind vendors. These changes will ensure all parties are on the same page with regard to these key terms, which will reduce confusion about implementation and minimize the time and money spent in arbitration and litigation.

Appendix: Average Arbitration Timeline

Case[109]	Hearing Requested	Hearing Date	Decision Date	Days from Hearing Request to Decision	Days from Hearing to Decision
R-S/10-07	N/A[110]	7 Jan. 12	13 May 13	N/A	492
R/S 13-09	20 May 14	14 July 15	11 Jan. 16	601	181
R-S/15-10	3 Feb. 15	27 July 16	23 Dec. 16	689	149
R-S/13-13	N/A	19 July 16	2 Nov. 16	N/A	106
R-S/15-07	13 Jan. 15	4 May 16	2 Sept. 16	598	121
RS/15-15	7 May 15	20 Jan. 17	9 May 17	733	109
R-S/15-13	24 Apr. 15	15 Nov. 16	2 Feb. 17	650	79
R-S/16-09	9 May 16	13 Dec. 16	28 Feb. 17	295	77
R-S/16-07	1 Apr. 16	9 Feb. 17	31 July 17	486	172
R-S/16-04	15 Mar. 17	17 Oct. 17	30 Jan. 18	321	105
R-S/16-08	16 Apr. 16	29 Nov. 17	22 Feb. 18	677	85
R-S/15-19	18 Aug. 15	10 Jan. 18	24 Apr. 18	980	104
R/S 15-20	24 Aug. 15	3 May 18	8 Oct. 18	1,141	158
R-S/16-13	7 Dec. 16	27 Jan. 19	1 May 19	875	94
R-S/17-03	31 Mar. 17	9 Jan. 19	13 June 19	804	155
R-S/16-12	14 Sept. 16	13 Nov. 19	30 Apr. 20	1,324	169
RS/18-09	19 Apr. 18	14 Jan. 20	22 June 20	795	160

[109] Any inconsistencies in arbitration designations are a product of panels' naming conventions.
[110] "N/A" indicates that the information was not available.

Congress has required the DoEd to publish arbitration panel decisions on its website,[111] which it has done since 2013. This table covers only those cases between an SLA and a Federal agency; it does not include arbitrations between a blind vendor and an SLA. The average number of days between the arbitration hearing request and the actual hearing was 685.6 days. The average number of days between the hearing date and the decision's publication was 140 days. Thirteen arbitrations took longer than 100 days from the hearing to produce a decision. Four took less than 100 days, but the shortest period from filing to decision in those cases took 295 days; the longest took 875 days, with the other 2 taking 650 days and 677 days. The cases were still incredibly long when compared to the time it takes to get a decision on a protest from either the Government Accountability Office or the Court of Federal Claims. From filing to decision, the arbitration cases take much longer than the mandatory maximum of 100 days at a Government Accountability Office protest[112] or the average 133 days from filing to decision at the Court of Federal Claims.[113]

---

[111] 20 U.S.C. § 107d-2(c). The decisions are available on the DoEd's website. *Decisions of Arbitration Panels*, U.S. DEP'T OF EDUC. (May 28, 2021), https://www2.ed.gov/programs/rsarsp/arbitration-decisions.html. There are at least four other cases of which the author is aware that have not yet been posted on the Department of Education's website at the time of writing.

[112] 4 C.F.R. § 21.9 (2021).

[113] MARK V. ARENA ET AL., RAND CORP., ASSESSING BID PROTESTS OF U.S. DEPARTMENT OF DEFENSE PROCUREMENTS: IDENTIFYING ISSUES, TRENDS, AND DRIVERS 54 (2018).

NO EFFORT SPARED: BUILDING A NEW PROTOCOL TO THE BIOLOGICAL WEAPONS CONVENTION IN THE PANDEMIC AGE

MAJOR A. GRAYSON IRVIN*

> *The States Parties to this Convention,*
> . . . .
> *Determined, for the sake of all mankind, to exclude completely the possibility of bacteriological (biological) agents and toxins being used as weapons,*
> *Convinced that such use would be repugnant to the conscience of mankind and that no effort should be spared to minimize this risk,*
> *Have agreed as follows . . . .*[1]

I. Introduction

The United States recognized the ongoing threat of biological incidents, whether natural or manmade, in the 2018 *National Biodefense Strategy*: "Biological threats—whether naturally occurring, accidental, or deliberate in origin—are among the most serious threats facing the United States and the international community."[2] Written two years before the SARS-CoV-2 (COVID-19) global pandemic, these words were grimly prophetic. Of the

* Judge Advocate, United States Marine Corps. Presently assigned as Deputy Staff Judge Advocate, United States Marine Corps Forces Pacific, Camp H. M. Smith, Hawaii. J.D., 2011, University of Georgia School of Law; B.A., 2008, University of Georgia. Previous assignments include Student, 69th Judge Advocate Officer Graduate Course, The Judge Advocate General's School, United States Army, Charlottesville, Virginia, Deputy Staff Judge Advocate, 1st Marine Logistics Group, Camp Pendleton, California, 2017–2020. Staff Judge Advocate, Special Operations Task Force 511.2, Special Operations Command Pacific, 2019; Company and Series Commander, 2d Battalion, Recruit Training Regiment, Marine Corps Recruit Depot Parris Island, 2015–2017; Trial Counsel, Legal Services Support Team, Parris Island, South Carolina, 2013–2015. Member of the bar of Georgia. This paper was submitted in partial completion of the Master of Laws requirements of the 69th Judge Advocate Officer Graduate Course.

[1] Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction, Apr. 10, 1972, 26 U.S.T. 583, 1015 U.N.T.S. 163 [hereinafter Biological Weapons Convention].

[2] WHITE HOUSE, NATIONAL BIODEFENSE STRATEGY, at i (2018).

349.64 million confirmed cases of COVID-19 reported between 30 December 2019 and 24 January 2022, 5.59 million people worldwide have died from the virus.[3] The United States has reported more cases and deaths than any other country.[4] The origins of COVID-19 remain unclear, controversial, and the subject of great international political debate.[5] The State Department released a statement at the end of former President Donald Trump's term that publicly raised the possibility that the virus outbreak could have been the result of an accident at the Wuhan Institute of Virology (WIV), stating, "The WIV has engaged in classified research, including laboratory animal experiments, on behalf of the Chinese military since at least 2017."[6] This statement evokes the horrors of industrial biological warfare programs from the last century.

From the early 1900s to 1972, when the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction (BWC) entered into force, the most powerful states in the world had national programs dedicated to maximizing the destructive power of biological weapons.[7] Since 1972, BWC states parties have promised to cease offensive biological weapons research and either destroy their weapons and equipment stockpiles or divert them to peaceful purposes.[8] The BWC is nearly universal, with almost every state a party to the convention with the notable exception of Israel and a handful of smaller states, mostly in Africa.[9]

---

[3] *WHO Coronavirus Disease (COVID-19) Dashboard*, WORLD HEALTH ORG., https://covid19.who.int (last visited Jan. 24, 2022).

[4] *Id.*

[5] Some posit that the virus may have originated from an animal before transference to humans, but the exact origins remain unknown. *See Basics of COVID-19*, CTS. FOR DISEASE CONTROL & PREVENTION, https://www.cdc.gov/coronavirus/2019-ncov/cdcresponse/about-COVID-19.html (Nov. 4, 2021); WORLD HEALTH ORG., REPORT OF THE WHO-CHINA JOINT MISSION ON CORONAVIRUS DISEASE 2019 (COVID-19) (2020).

[6] *Fact Sheet: Activity at the Wuhan Institute of Virology*, U.S. DEP'T OF STATE (Jan. 15, 2021), https://2017-2021.state.gov/fact-sheet-activity-at-the-wuhan-institute-of-virology/index.html.

[7] See W. SETH CARUS, NAT'L DEF. UNIV., A SHORT HISTORY OF BIOLOGICAL WARFARE: FROM PRE-HISTORY TO THE 21ST CENTURY 20–25 (2017), for an overview of state biological warfare programs in the twentieth century.

[8] Biological Weapons Convention, *supra* note 1.

[9] Meeting of the States Parties to the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction, *Report on Universalization Activities*, U.N. Doc. BWC/MSP/2019/3 (Oct. 8, 2019) [hereinafter *Universalization Report*].

Since the early 1990s, across multiple administrations, the U.S. view on the BWC has had two constant features: first, that the convention is not effective because it lacks a method to verify compliance, and second, that efforts to improve the convention would not make it more effective.[10] The ineffectiveness of the convention has become a common observation in both academic research and public discourse.[11] The states parties to the BWC formed an ad hoc group in the 1990s to create a system that would help solve the BWC's problem with compliance verification.[12] In 2001, the ad hoc group released its Protocol to the Convention on the Prohibition of the Development Production and Stockpiling of Bacteriological Biological and Toxin Weapons and on Their Destruction (Draft Protocol).[13] The United States rejected this protocol, arguing that it imposed excessive burdens on industry through inspections without advancing the goals of the BWC.[14] Since the failure of the Draft Protocol, biological research has increased and led to the development of new technologies that make genetically engineered or synthetic biological weapons more readily attainable.[15] In 2021, the State Department reported that North Korea and Russia had active offensive biological weapons programs and that it could not conclude that Iran and China have abandoned their programs.[16] These four states also

---

[10] U.S. GEN. ACCT. OFF., NSIAD-93-113, ARMS CONTROL: U.S. AND INTERNATIONAL EFFORTS TO BAN BIOLOGICAL WEAPONS 18 (1992).

[11] *See generally* Jack M. Beard, *The Shortcomings of Indeterminacy in Arms Control Regimes: The Case of the Biological Weapons Convention*, 101 AM. J. INT'L L. 271 (2007) (discussing the weaknesses caused by a lack of precise definitions in the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction (BWC)); Jonathan B. Tucker, *Seeking Biosecurity Without Verification: The New U.S. Strategy on Biothreats*, ARMS CONTROL TODAY, https://www.armscontrol.org/act/2010-01/seeking-biosecurity-without-verification-new-us-strategy-biothreats (last visited Jan. 27, 2022) (discussing the Obama administration's decision not to support a new verification regime).

[12] U.S. GEN. ACCT. OFF., *supra* note 10, at 5.

[13] Biological Weapons Convention Ad Hoc Grp., Protocol to the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction, BWC/AD HOC GROUP/CRP.8 (May 30, 2001) [hereinafter Draft Protocol].

[14] *U.S. Rejection of Protocol to Biological Weapons Convention*, 95 AM. J. INT'L L. 899, 900 (2001).

[15] U.S. GOV'T ACCOUNTABILITY OFF., GAO-20-273, NATIONAL BIODEFENSE STRATEGY: ADDITIONAL EFFORTS WOULD ENHANCE LIKELIHOOD OF EFFECTIVE IMPLEMENTATION 5–6 (2020).

[16] U.S. DEP'T OF STATE, ADHERENCE TO AND COMPLIANCE WITH ARMS CONTROL, NONPROLIFERATION, AND DISARMAMENT AGREEMENTS AND COMMITMENTS 46–52 (2021).

happen to be the biggest challengers to U.S. national security interests and power.[17]

Despite the risk of biological incidents, strengthening the BWC through a verification system has not been a priority for the United States since 2001. This article argues that this is a mistake because the danger of biological outbreaks and attack is unacceptably high, the biggest state challengers to U.S. national interests may still possess biological weapons, and modest changes to the BWC to improve verification and enforcement could be an effective way to reduce the threat of biological attacks and incidents. It is in the United States' national security interests[18] to lead an international effort to strengthen the enforcement of the BWC at the next conference of states parties in 2022.[19] States parties should use the Draft Protocol as inspiration for a new U.S.-led international effort to strengthen the BWC by requiring states parties to declare the most dangerous biological agents and to allow inspection of their high-containment laboratories. This risk-based approach will encourage global awareness of the location of the world's deadliest biological agents, incentivize improved laboratory security, and increase the risk and cost of discovery for states choosing to conduct secret offensive bioweapons research.

The first part of this article briefly discusses pandemics in recorded history before reviewing the history of biological warfare with a focus on the first half of the twentieth century, which featured industrialized states applying the scientific method to create biological weapons. The second part examines the history of the BWC, its strengths and weaknesses, and the effort to improve it that led to the 2001 Draft Protocol. The third part reviews the goals and options for strengthening the BWC through verification. The fourth section offers a specific proposal for using the Draft Protocol as inspiration to create a simplified verification and transparency system to

---

[17] WHITE HOUSE, NATIONAL SECURITY STRATEGY OF THE UNITED STATES OF AMERICA 25 (2017).

[18] The White House signaled a possible shift in policy and a willingness to strengthen the BWC in November 2021. Jake Sullivan, Nat'l Sec. Advisor, Statement on the U.S. Approach to Strengthening the Biological Weapons Convention (Nov. 19, 2021).

[19] The Ninth Review Conference was planned for 2021 but was delayed due to COVID-19. The preparatory committee met on 20 December 2021, and the parties agreed to hold the conference in Geneva, Switzerland, from 8 to 26 August 2022. Interim Rep. of the Preparatory Comm., Ninth Review Conference of the States Parties to the Convention on the Prohibition of the Development, Production and Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction, BWC/CONF.IX/PC/2 (Dec. 20, 2021) [hereinafter Interim Report of the Preparatory Committee].

strengthen the BWC. The final part discusses how a strengthened BWC supports U.S. national security in the era of strategic competition and includes a case study focusing on the origin of COVID-19 and the WIV.

II. Pandemics and Biological Warfare in History

A. Pandemics

The threat of a pandemic, defined simply as a "contagious infectious disease that has spread to multiple geographic areas,"[20] has been a constant feature of human history, even though the biological causes of disease were poorly understood until recently. The Black Death plague outbreak in Europe killed an estimated 200 million people.[21] Despite recent advances in science and sanitation, the Spanish Flu killed around 50 million people, AIDS has killed around 35 million people, and the Swine Flu killed around 200 thousand people from 2009 to 2010.[22] Because many pandemic diseases start with animal to human transmission, and the process of mutation is continuous and dynamic, the threat of a pandemic is likely a permanent part of the human condition.[23]

The ability to understand disease and to genetically modify biological agents and toxins to make them more deadly is a new development. As technology advances, a virus could conceivably be created or modified to be as deadly as possible, unleashing a new type of global pandemic with devastating mortality.[24]

---

[20] Silvio Daniel Pitlik, *COVID-19 Compared to Other Pandemic Diseases*, 11 RAMBAM MAIMONIDES MED. J. 1, 4 (2020).
[21] *Id.* at 11.
[22] *Id.*
[23] *Id.* at 3.
[24] See generally Nicole H. Kalupa, *Black Biology: Genetic Engineering, the Future of Bioterrorism, and the Need for Greater International and Community Regulation of Synthetic Biology*, 34 WIS. INT'L L.J. 952 (2017), for a detailed analysis of the threat of synthetic biology and engineered biological weapons.

B. Biological Warfare in History

1. Early History

The fear of plague and pestilence spreading from group to group is as old as recorded history. The biblical description of the plague of boils in the book of Exodus sounds vaguely like a biological attack:

> Then the Lord said to Moses and Aaron, "Take handfuls of soot from a furnace and have Moses toss it into the air in the presence of Pharaoh. It will become fine dust over the whole land of Egypt, and festering boils will break out on people and animals throughout the land."[25]

Some medical historians have argued that anthrax spores in the ash that Moses took from the furnace may have caused the plague of the boils.[26] A more recent infamous example of attempted biological warfare occurred in 1763, when European colonists gave Native Americans blankets from a smallpox hospital with the hope that they would become ill.[27]

Despite the widespread fear of disease in human history, the effective use of biological weapons prior to the twentieth century was rare because scientists did not understand that microorganisms cause disease until the 1860s.[28] This profound ignorance of basic biology for most of military history made biological warfare planning practically impossible until the 1900s. With the rise of modern industrial warfare came the development of state-sponsored biological warfare programs. Starting in World War I, Germany became the first industrial nation to develop and use biological agents.[29] Although the program was secret and its effectiveness uncertain, it is notable as the first state use of scientific principles for biological warfare, including coordination across several fronts, in both the United States and Europe.[30]

---

[25] *Exodus* 9:8–9.

[26] Peter Gorner, *From Bible to Battlefield, Anthrax Has a Widespread Past*, CHI. TRIB. (Oct. 21, 2001), https://www.chicagotribune.com/news/ct-xpm-2001-10-21-0110210054-story.html.

[27] CARUS, *supra* note 7, at 7.

[28] *Id.*

[29] *Id.* at 12.

[30] *Id.* at 13. The Germans specifically cultivated diseases to sicken enemy pack animals in Europe, and even developed a secret lab in Silver Spring, Maryland, to make biological agents for attacks on U.S. ammunition factories. *Id.*

2. Industrial Biological Warfare

Germany's use of biological weapons and the widespread use of mustard gas in World War I led to the 1925 Geneva Protocol, which was the first international agreement to directly ban biological weapons in war.[31] Still in effect, and ratified by the United States in 1975, the protocol bans only the *use* of biological weapons in war amongst signatory states rather than the *possession* of biological weapons.[32] It was ultimately ineffective in preventing the use of biological weapons in war, especially since Japan did not sign the agreement and instead developed a large, state-sponsored biological weapons program beginning in the 1930s that would become the most comprehensive and notorious state program in history.[33]

Japan's biological warfare program in the 1930s and 1940s is notable for both its ambitious scope and its horrific abuses of prisoners of war and Chinese civilians.[34] Commonly referred to as "Unit 731," the program involved experiments on humans in an attempt to develop military applications of plague and other biological agents.[35] Operating from occupied Manchuria, Unit 731 attempted to poison Russian water supplies and dropped bombs containing plague-infested fleas on Chinese targets.[36] Detailed accounts of the program and casualties are difficult to find because the Imperial Japanese Army destroyed the program's buildings and records when the Soviet Army invaded northern China in 1945.[37] Despite the incredible cruelty of the human experimentation, including vivisection, the United States did not join the Soviet-led war crimes trial against Unit 731

---

[31] Prohibition of the Use in War of Asphyxiating, Poisonous or Other Gases, and of Bacteriological Methods of Warfare, June 17, 1925, 26 U.S.T. 571 [hereinafter Geneva Protocol].
[32] *Id.*
[33] U.S. ARMY MED. RSCH. INST. OF INFECTIOUS DISEASES, USAMRIID'S MEDICAL MANAGEMENT OF BIOLOGICAL CASUALTIES HANDBOOK 3 (9th ed. 2020).
[34] Most of the information about Unit 731 comes from recorded testimony of Japanese soldiers and workers assigned to the unit and associated facilities. Records and facilities were destroyed at the end of World War II, and it appears that no prisoners or victims of biological experiments survived to bear witness. Despite the destruction of evidence, several authors have compiled testimonies of Japanese workers and soldiers who worked on the project. *See generally* HAL GOLD, JAPAN'S INFAMOUS UNIT 731: FIRSTHAND ACCOUNTS OF JAPAN'S WARTIME HUMAN EXPERIMENTATION PROGRAM (2019); DEREK PUA ET AL., UNIT 731: THE FORGOTTEN ASIAN AUSCHWITZ (2d ed. 2020).
[35] CARUS, *supra* note 7, at 15–19.
[36] U.S. ARMY MED. RSCH. INST. OF INFECTIOUS DISEASES, *supra* note 33, at 2–3.
[37] *Id.*

members.[38] The Soviets prosecuted a few former members, but the United States gave the scientists immunity from prosecution as war criminals in exchange for information about the weapons program and research.[39]

At the beginning of the Cold War, both the United States and the USSR developed large, state-run offensive biological weapons programs.[40] In 1969, President Richard Nixon announced that the United States would unilaterally abandon offensive biological weapons research;[41] the United States destroyed its supply of biological munitions between 1971 and 1972.[42] This announcement led the way for international talks leading up to the BWC.

Despite the success of the BWC, the Iraqis under Saddam Hussein reportedly experimented on live prisoners in the 1980s, exposing them to biological agents and recording the results, similar to the Unit 731 Japanese atrocities during WWII.[43] More recently, the anthrax letters in 2001 poisoned and killed several people across the United States, serving as a reminder that the threat of biological attacks from both state and non-state actors remains, despite improvements over time.[44] There is also a risk that terrorists or other non-state actors could acquire or develop biological weapons, like the Aum Shinrikyo cult's 1995 attempt to unleash anthrax and botulism in Japan.[45]

With the advent of computers and advancements in technology, future biological weapons threats may include not only naturally occurring substances, but also synthetic, lab-created organisms. A prospective bioterrorist could create a virus or bacteria that may be entirely novel or one that is a synthetically modified version of an existing anthrax or plague bacterium that is especially virulent or resistant to antibiotics.[46] Scientists may discover new ways to make deadly biological weapons, which places increased importance on reinforcing the BWC's international norm against all forms of offensive biological research.

---

[38] CARUS, *supra* note 7, at 19.
[39] *Id.*
[40] *Id.* at 27.
[41] *Id.* at 39.
[42] U.S. ARMY MED. RSCH. INST. OF INFECTIOUS DISEASES, *supra* note 33, at 3–4.
[43] *Id.*
[44] *Id.*
[45] *Id.* at 6–7.
[46] *See* Kalupa, *supra* note 24.

II. The Biological Weapons Convention

A. Structure and Requirements

Entering into force on 26 March 1975, the BWC "was the first multilateral disarmament agreement banning an entire category of weapons of mass destruction."[47] Unlike the 1925 Geneva Protocol, the BWC bans offensive biological weapons at *any* time—not only in war. Article I sets up the key requirement of the treaty. Rather than an outright ban on specific biological agents and toxins, the agreement restricts the use of biological agents and equipment to peaceful purposes only:

> Each State Party to this Convention undertakes never in any circumstances to develop, produce, stockpile or otherwise acquire or retain:
>
> (1) microbial or other biological agents, or toxins whatever their origin or method of production, of types and in quantities that have no justification for *prophylactic, protective or other peaceful purposes*;
>
> (2) weapons, equipment or means of delivery designed to use such agents or toxins for hostile purposes or in armed conflict.[48]

Article II creates a complimentary obligation for each state party to "undertake[] to destroy, or to divert to peaceful purposes, as soon as possible but not later than nine months after the entry into force of the Convention, all agents, toxins, weapons, equipment and means of delivery specified in Article I of the Convention."[49]

Under Article VI, if a state party to the BWC believes a party has violated the convention, that state may lodge a complaint with the United Nations Security Council (UNSC).[50] The UNSC may initiate an investigation, solicit the cooperation of states parties, and share the results with the parties.[51] The BWC creates no independent body to investigate any such complaint. No state party has invoked Article VI to date.[52]

---

[47] UNITED NATIONS OFF. OF DISARMAMENT AFFS., THE BIOLOGICAL WEAPONS CONVENTION: AN INTRODUCTION 1 (2017).
[48] Biological Weapons Convention, *supra* note 1, art. I (emphasis added).
[49] *Id.* art. II.
[50] *Id.* art. VI.
[51] *Id.*
[52] Eighth Review Conference of the States Parties to the Convention on the Prohibition Development, Production and Stockpiling of Bacteriological (Biological) and Toxin

With 183 states parties,[53] the BWC has been the primary instrument for creating a strong international norm against the development of biological weapons. Almost every industrialized state in the world, with the notable exception of Israel, has signed the convention, with the remaining handful of non-signatory states concentrated in Africa.[54] States parties meet for a review conference every five years in Geneva, with the next conference expected in August 2022.[55] Despite the apparent success of the BWC in preventing biological attacks, the BWC has widely been criticized as ineffective, primarily on the ground that it has neither precise definitions nor a verification regime. Although there have been no major biological attacks by states parties since the treaty entered into force, there have been several flagrant violations of the BWC,[56] most notably Russia's revelation that in the 1990s it had violated the BWC by maintaining an offensive biological weapons capacity for years after the BWC entered into force.[57]

B. Shortcomings of the Biological Weapons Convention

1. Definitional Defects

The lack of precise definitions is a fundamental flaw in the BWC. The ban on biological weapons applies only to agents or toxins if they are "of types and in quantities that have no justification for prophylactic, protective or other peaceful purposes."[58] The BWC offers no definitions or clarifying rules on the types of biological agents that have "no justification for prophylactic, protective or other peaceful purposes."[59]

The practical result is that the definition of "peaceful purposes" is left to each state to determine. Because the BWC lacks a verification regime, state definitions of "peaceful purposes" have not been subject to international scrutiny and the cost of compliance is low.

Weapons and on Their Destruction, *Final Document of the Eighth Review Conference*, at 14, U.N. Doc. BWC/CONF.VIII/4 (Jan. 11, 2017) [hereinafter *Eighth Review Conference Final Document*].

[53] *See Universalization Report*, *supra* note 9 (reviewing the current status of states parties, signatory states, and non-signatory states).

[54] *Id.*

[55] Interim Report of the Preparatory Committee, *supra* note 19.

[56] CARUS, *supra* note 7, at 28.

[57] U.S. ARMY MED. RSCH. INST. OF INFECTIOUS DISEASES, *supra* note 33, at 5.

[58] Biological Weapons Convention, *supra* note 1, art. I.

[59] *Id.*

2. Verification Void

States parties have long viewed this lack of verification[60] as a weakness in the BWC. Recognizing this, the states parties formed the ad hoc group in the 1990s to develop a draft protocol with a declaration and verification regime,[61] and the group released the text of the Draft Protocol in April 2001.[62] The Draft Protocol would have required annual declarations of biodefense facilities, and it would have implemented a system of random transparency visits to states parties.[63] It would have included a robust investigation mechanism and created an independent organization dedicated to enforcing the BWC and the Draft Protocol's new features.[64] Despite participating in years of negotiations and being heavily involved in shaping the text, the United States rejected the Draft Protocol the year it was released, leaving the BWC without a verification system to this day.[65]

The United States' negotiator summarized the U.S. position on the Draft Protocol, and these statements appear to reflect current U.S. policy:

> In short, after extensive analysis, we were forced to conclude that the mechanisms envisioned for the Protocol would not achieve their objectives, that no modification of them would allow them to achieve their objectives, and that trying to do more would simply raise the risk to legitimate United States activities.[66]

Although not explicitly stated by the U.S. negotiator, a primary reason for the change in U.S. position was the potential impact on the pharmaceutical industry.[67] The Draft Protocol defined "facility" broadly, including

> [*a*]*ll facilities* conducting research and development on pathogenicity, virulence, aerobiology or toxinology at any site at which *15 or more* technical and scientific person years of effort or 15 or more technical and scientific personnel were engaged on such research and development

---

[60] As used in this article, "verification" means some combination of mandatory declarations and inspections which are common features of both the Chemical Weapons Convention and the Draft Protocol to the BWC.

[61] UNITED NATIONS OFF. OF DISARMAMENT AFFS., *supra* note 47, at 22.

[62] *See* Draft Protocol, *supra* note 13.

[63] *Id.* arts. 4, 6(B).

[64] *Id.* arts. 9, 16.

[65] Beard, *supra* note 11, at 284.

[66] *U.S. Rejection of Protocol to Biological Weapons Convention*, *supra* note 14.

[67] Beard, *supra* note 11, at 284.

> as part of the national biological defence programme(s) and/or activities.[68]

This could apply to thousands of sites, making management of inspections and U.S. treaty obligations overly cumbersome and requiring domestic resources to monitor.

Since the rejection of the Draft Protocol, BWC review conferences continue to emphasize confidence-building measures, encouraging cooperation and the sharing of technical information among states parties under the auspices of the Implementation Support Unit.[69] However, there has been no serious effort to reestablish a true verification regime or an independent organization to implement the BWC since 2001. Verification is still as necessary as it was twenty years ago. The State Department reported in 2021 that several near-peer states and regional state actors may still possess offensive biological weapons in violation of the BWC.[70] In particular, the State Department assessed that North Korea and Russia operate active offensive weapons programs and that it could not determine if China and Iran are complying with their Article I and Article II obligations.[71] As signatories to the BWC, these countries presumably believe the benefits of developing and stockpiling prohibited weapons outweigh the risk accountability for violating the BWC. When challenged, a state can either deny access to an installation or simply claim that its research is for peaceful purposes. Without a verification regime, the risk of being caught is low, and the international community has no way of knowing whether these (or any other) states parties are complying with their BWC obligations.

The Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction (CWC) is a useful comparison for analyzing the lack of verification in the BWC. The CWC requires the declaration[72] and destruction[73] of chemical weapons

---

[68] *See* Draft Protocol, *supra* note 13, art. 4(C) (emphasis added).
[69] *See generally* Seventh Review Conference of the States Parties to the Convention on the Prohibition Development, Production and Stockpiling of Stockpiling of Bacteriological (Biological) and Toxin Weapons and on Their Destruction, 14 BWC/CONF.VII/7 (Jan. 13, 2012) (reviewing confidence-building measures).
[70] U.S. DEP'T OF STATE, *supra* note 16, at 46–52.
[71] *Id.*
[72] *See* Convention on the Prohibition of the Development, Production, Stockpiling and Use of Chemical Weapons and on their Destruction art. I, Jan. 13, 1993, 1974 U.N.T.S. 45 [hereinafter Chemical Weapons Convention].
[73] *Id.* art. III.

stockpiles and production facilities, and it creates a tiered list of chemical schedules based on how likely they are to be used for non-military purposes.[74] The CWC also includes provisions for inspections to verify the destruction of weapons and facilities.[75] The CWC created the Organization for the Prohibition of Chemical Weapons as an independent international body to enforce the CWC's mandates.[76] Unlike the BWC, the CWC requires actual destruction of chemical weapons rather than just diversion to peaceful purposes.[77] States parties who violate the CWC face penalties and referral to the UNSC.[78]

This combination of mandatory declarations, robust inspections, and an independent organization tasked to implement inspections stands in stark contrast to the BWC's ambiguous language and its lack of both inspections and an independent enforcement body other than the UNSC. The Draft Protocol would have brought the BWC in closer alignment to the CWC, but the distinctions have become even more glaring since its failure in 2001.[79] The next session will analyze the specific structure and requirements of the Draft Protocol to see what almost came to fruition.

C. Trying to Be Better: The Draft Protocol

The Draft Protocol represents a twenty-year effort to enhance the BWC by adding "specific measures to improve its implementation and effectiveness."[80] At 162 pages, it is remarkably thorough because it was essentially ready to enter into force—that is, until the United States unexpectedly withdrew support. The two major features are declarations and random "transparency visits."[81] The Draft Protocol would have created the independent Organization for the Prohibition of Bacteriological (Biological)

---

[74] *Id.* annex B.
[75] *Id.* arts. IV, V.
[76] *Id.* art. VIII.
[77] *Compare id.* art. 1, *with* Biological Weapons Convention, *supra* note 1.
[78] Chemical Weapons Convention, *supra* note 72, art. XII.
[79] This is not a claim that the CWC is without problems. Implementation can be cumbersome, and compliance relies on strong state party enforcement. Chemical weapons are still in use. In 2017, the Syrian government used chemical weapons on its own citizens, prompting international condemnation and a retaliatory strike by the United States. HUM. RTS. WATCH, DEATH BY CHEMICALS: THE SYRIAN GOVERNMENT'S WIDESPREAD AND SYSTEMATIC USE OF CHEMICAL WEAPONS 1–2 (2017).
[80] Draft Protocol, *supra* note 13, pmbl.
[81] *Id.* arts. 3, 6(B).

and Toxin Weapons "in order to strengthen the effectiveness and improve the implementation of the Convention and to ensure the implementation of this Protocol, and to provide a forum for consultation and co-operation among States Parties."[82] This body would have included an Executive Council and a Technical Secretariat to manage the new requirements, significantly expanding the size and scope of the administrative support to BWC implementation, which is currently limited to the modest Implementation Support Unit within the United Nations Office for Disarmament Affairs.[83]

Unlike the CWC, which divided chemical weapons into three categories based on potential for weaponization, the Draft Protocol focused on annual declarations of facilities.[84] Some scholars have argued that the Draft Protocol was not truly a verification regime in the same spirit as the CWC,[85] as the Draft Protocol referred to transparency rather than verification. Regardless of terminology, however, the Draft Protocol significantly increased the risk of non-compliance by allowing states parties to request investigations of suspected violators and affirmatively requiring states parties to declare certain biological research facilities.

The Draft Protocol's facility declarations were complex. Article 4 required states parties conducting national biodefense programs to declare annually to the Technical Secretariat

> [a]ll facilities conducting research and development on pathogenicity, virulence, aerobiology or toxinology at any site at which *15 or more* technical and scientific person years of effort or *15 or more* technical and scientific personnel were engaged on such research and development as part of the national biological defence programme(s) and/or activities.[86]

The Draft Protocol also required declarations of high- and maximum-containment facilities, plant pathogen containment facilities, certain

---

[82] *Id.* art 16.
[83] UNITED NATIONS OFF. OF DISARMAMENT AFFS., *supra* note 47, at 23.
[84] *See* Draft Protocol, *supra* note 13, art. 3.
[85] *See* Lynn C. Klotz, *The Biological Weapons Convention Protocol Should Be Revisited*, BULL. OF THE ATOMIC SCIENTISTS (Nov. 15, 2019), https://thebulletin.org/2019/11/the-biological-weapons-convention-protocol-should-be-revisited (arguing that verification is not the purpose of the Draft Protocol and that focusing on verification over transparency is bad policy).
[86] Draft Protocol, *supra* note 13, art. 4 (emphasis added).

production facilities, and any facility engaged in specified activities with the biological agents listed in Annex A of the Draft Protocol.[87]

Once states parties declared the above facilities, the Technical Secretariat was charged with conducting up to 120 random "transparency visits" per calendar year.[88] Each state party could receive no more than seven visits per calendar year, and no individual facility would be inspected more than three times in a five-year period.[89] The Technical Secretariat was required to provide fourteen days' notice prior to each inspection.[90] These transparency visits served three purposes:

> (a) Increasing confidence in the consistency of declarations with the activities of the facility and encouraging submission of complete and consistent declarations;
> (b) Enhancing transparency of facilities subject to the provisions of this section;
> (c) Helping the Technical Secretariat, subject to the provisions of this section, to acquire and retain a comprehensive and up-to-date understanding of the facilities and activities declared globally.[91]

States parties could also request from the Technical Secretariat a voluntary assistance visit, which would focus on technical assistance, information, and advice for complying with the BWC.[92]

Under Article 9, states parties had a right to request an investigation of non-compliance stemming from either a suspicious outbreak of a disease (i.e., a field investigation) or an investigation of a specific facility suspected of violating the BWC (i.e., a facility investigation).[93] Finally, Article 12 provided a mechanism for addressing non-compliance. The Executive Council could address violations by suspending the rights and privileges of the offending state party, recommending collective measures against the state party, or in particularly grave cases, referring the information to the United Nations General Assembly or the UNSC.[94]

When viewed as a whole, the Draft Protocol outlined a detailed, complex, and interlocking structure for improving the BWC. Most notably,

---

[87] *Id.*
[88] *Id.* art. 6(A)5.
[89] *Id.* art. 6(A)7.
[90] *Id.* art. 6(B)22.
[91] *Id.* art. 6(B)15.
[92] *Id.* art. 6(C).
[93] *Id.* art. 9.
[94] *Id.* art. 12.

it created a mechanism to expose cheaters through inspections. By focusing primarily on facilities and capabilities rather than specific biological agents, the Draft Protocol relied more on detailed descriptions of facilities rather than bright-line rules based on the risk posed by specific activities or agents. In this sense, it differed from the tiered substance approach of the CWC, which the United States ultimately supported.

III. The Need for Verification Remains

Despite its faults, the Draft Protocol is an excellent starting point to inspire efforts to revitalize the BWC, which is vital considering that the threat of biological weapons remains prominent. The Draft Protocol represents almost two decades of work to improve the BWC. Rather than start anew with talks and discussions, the international community would be better served by using simplified and streamlined declarations and inspections focused on high-risk agents and toxins and on high-containment facilities as the baseline requirement for an improved BWC.

Any efforts to add a verification regime to the BWC should include a system that both imposes costs when states parties obscure offensive biological research and answers the following questions: (1) What are the most dangerous substances? (2) Where are they located? (3) What is the purpose of researching these substances?

The answers to each of these questions in the below subsections will demonstrate improvements to the BWC to ensure biological weapons and equipment are used for peaceful purposes. The Draft Protocol failed because its solution was too complex and burdensome, particularly to the United States. Ideally, a new protocol would develop the simplest effective solution that all states parties would accept. States parties should recognize the disadvantages of focusing on intricate definitions of facilities and attempt to simplify the language whenever possible while focusing on risk.

A. The Deadliest Biological Agents

If the fundamental flaw in the BWC is its lack of precise definitions, logical analysis begins with the terms of the agreement. Although the BWC bans the offensive use of any biological material, some microbes are much more dangerous than others. Recognizing this problem, the Draft Protocol included specific substances in Annex A for declaration and additional

scrutiny, including both human, animal, and plant pathogens.[95] The CWC also recognized this problem and created three tiers of chemicals to focus scrutiny on those that pose the greatest risk if weaponized.[96] However, instead of declaring specific substances, the Draft Protocol focused primarily on declaring facilities.[97] The U.S. Congress also recognizes that some biological agents are more dangerous than others, and it has passed several laws that require registration and impose strict regulations on agents and toxins that "have the potential to pose a severe threat to public health and safety."[98] The text of the BWC, however, makes no mention of specific substances, nor does it establish risk tiers. It applies broadly to "microbial or other biological agents, or toxins whatever their origin or means of production."[99] This broad language is useful in establishing a strong norm against the use of *any* biological material as a weapon of war, but it does not recognize that some biological materials are much more dangerous than others.[100]

In recognizing that some microbes are more dangerous than others, the Draft Protocol took an important step in tightening the regulatory power of the BWC. Listing specific substances puts states parties on notice that they must explain how their possession and research of these substances is peaceful. Publishing the most dangerous substances would make it more difficult for states to continually affirm that they are meeting their BWC obligations and impose higher costs if they were caught lying. It creates a consistent international consciousness of which agents are the most dangerous and puts the burden on states parties to explain the specific reasons for their use rather than simply affirm that their research is for defensive purposes.

---

[95] *Id.* annex A.
[96] Chemical Weapons Convention, *supra* note 72, annex B.
[97] Draft Protocol, *supra* note 13, art. 4.
[98] CTRS. FOR DISEASE CONTROL & PREVENTION & NAT'L INSTS. OF HEALTH, BIOSAFETY IN MICROBIOLOGICAL AND BIOMEDICAL LABORATORIES 416 (6th ed. 2020).
[99] Biological Weapons Convention, *supra* note 1, art. I.
[100] For example, the Ebola virus may have up to an 80% fatality rate, which is astronomical compared with other pathogens. U.S. ARMY MED. RSCH. INST. OF INFECTIOUS DISEASES, *supra* note 33, at 96.

B. High-Containment Facilities

Having identified which agents are the most dangerous, the next logical question to ask is where these agents are located. The exact definition and use of biological safety levels can vary by country, and there are no international biosafety standards.[101] With the progress in technology, many countries have built high-containment research facilities to reduce the threat of exposure or contamination of the most dangerous pathogens.

Recognizing the need to secure dangerous biological materials, the World Health Organization (WHO) hosted the first Consultative Meeting on High/Maximum Containment (BSL-4) Laboratories Networking in Lyon, France, in December 2017.[102] In the United States, BSL-4 protection is recommended "for work with dangerous and exotic agents that pose a high individual risk of aerosol-transmitted laboratory infections and life-threatening diseases that are frequently fatal, agents for which there are no vaccines or treatments, or work with a related agent with unknown risk of transmission."[103] As of 2017, there were about fifty BSL-4 laboratories capable of working with the most dangerous biological agents, with several more planned or under construction worldwide.[104] All of these laboratories are located in BWC states parties.[105]

The BWC imposes no obligation on states parties to disclose where they conduct biological research, requiring only that states parties use such research for peaceful purposes. The Draft Protocol went further, proposing declaration requirements that would help to answer the question of where these materials are located. The Draft Protocol proposed an initial declaration of all biological warfare activity between 1946 and 1972, coupled with proof of diversion to peaceful purposes.[106] After this initial declaration, states parties would be required to file annual declarations of high-containment facilities and any facility with more than fifteen

---

[101] Although there is not a universal standard or requirement for required features of a BSL-4 high-containment laboratory, both the World Health Organization and the U.S. Government have published standards requiring the laboratory to have a controlled air system with HEPA filtration. WORLD HEALTH ORG., LABORATORY BIOSAFETY MANUAL 62 (4th ed. 2020); CTRS. FOR DISEASE CONTROL & PREVENTION & NAT'L INSTS. OF HEALTH, *supra* note 98, at 50.

[102] WORLD HEALTH ORG., WHO CONSULTATIVE MEETING ON HIGH/MAXIMUM CONTAINMENT (BIOSAFETY LEVEL 4) LABORATORIES NETWORKING (2018).

[103] CTRS. FOR DISEASE CONTROL & PREVENTION & NAT'L INSTS. OF HEALTH, *supra* note 98, at 51.

[104] WORLD HEALTH ORG., *supra* note 102, at 46.

[105] *See Universalization Report*, *supra* note 9.

[106] Draft Protocol, *supra* note 13, art. 4(B)(3), annex A.

researchers engaged in biological research.[107] In rejecting the 2001 proposal, the United States rightly noted that this annual requirement was impossibly broad and could apply to thousands of pharmaceutical labs.[108] The United States also noted that the requirement to declare laboratories would not improve biosecurity but did not elaborate on this point.[109]

The principal reason underlying a requirement to declare laboratory locations is that such declarations would increase the cost of non-compliance, especially if a state chooses to maintain a secret biological weapons program. Because the locations of high-containment laboratories are well established, the most dangerous microbes are likely to be located in specific places. If there were an outbreak of disease in *another* location, that fact would constitute strong circumstantial evidence that a state was conducting unauthorized biological research. If those agents show up in other places within a state's territory, the state should have to explain why it is not honoring its commitments. In its current form, the BWC imposes almost no cost on non-complying states.

C. Peaceful Purposes

Having addressed the "what" and the "where," the most difficult question remains: what is the *purpose* of biological research? The simple answer of the BWC is that it must be "peaceful," but the text fails to define that term. Peaceful research is the only acceptable purpose of biological research under the BWC, but a state can simply declare that its research is peaceful without further inquiry. The Draft Protocol does not define "peaceful purpose," but it does give examples such as "peaceful uses of genetic engineering, the prevention, diagnosis and treatment of diseases caused by microbial and other biological agents or toxins, in particular infectious diseases, and for other relevant fields of biosciences and biotechnology for peaceful purposes."[110] This presents a low bar for states parties; to show compliance, a state must simply declare that their research is for peaceful purposes, whatever that means.

The most well-known example of a transition to biological research for peaceful purposes occurred after the United States abandoned its offensive

---

[107] *Id.* art. 4(C).
[108] *U.S. Rejection of Protocol to Biological Weapons Convention*, *supra* note 14, at 900.
[109] *Id.* at 901.
[110] Draft Protocol, *supra* note 13, art. 14(4)(G).

biological weapons program in 1969.[111] The United States converted from offensive to defensive research to develop vaccines and expertise in biological response.[112] This research continues today at the United States Army Medical Research Institute of Infectious Diseases, the mission of which is to "[p]rovide leading edge medical capabilities to deter and defend against current and emerging biological threat agents."[113] There are also examples of states, most notably Russia, failing to convert offensive programs to peaceful purposes.[114]

It may not be possible to properly define "peaceful" or imagine every type of research that could be applied to "peaceful purposes." There is a distinct possibility that a state could turn its research for "peaceful purposes to research for improper purposes. This "dual-use" problem should be seen as a barrier to overcome rather than an excuse to refrain from any attempt to improve the BWC. The need for a verification regime remains, and the most practical way to achieve useful results is to create a new protocol requiring the declaration of the most dangerous substances and inspections of high-containment facilities.

Some scholars have argued that the ad hoc group intended the Draft Protocol not to serve as a verification regime that would ensure compliance through inspections, but rather as a good-faith effort to increase transparency.[115] Increasing transparency is a valid aim, but if transparency increases while states maintain active biological warfare programs, the ultimate goal of the BWC will not be realized. The Draft Protocol would have implemented random laboratory transparency visits (not inspections) with fourteen days' notice and created an independent body to investigate and respond to allegations of BWC violations.[116] Although these were termed "transparency visits" rather than "verification inspections," they have the practical effect of verifying whether a facility's activity mirrors its declarations. However, as in the original BWC, the Draft Protocol's

---

[111] Statement on Chemical and Biological Defense Policies and Programs, PUB. PAPERS 968 (Nov. 25, 1969).
[112] *Id.*
[113] ABOUT USAMRIID, U.S. ARMY MED. RSCH. INST. OF INFECTIOUS DISEASES, https://www.usamriid.army.mil/aboutpage.htm (Nov. 19, 2018).
[114] *See generally Assessing the Biological Weapons Threat: Russia and Beyond: Hearing Before the Subcomm. on Eur., Eurasia, & Emerging Threats of the H. Comm. on Foreign Affs.*, 113th Cong. (2014).
[115] *See* Klotz, *supra* note 85.
[116] Draft Protocol, *supra* note 13, art. 4.

enforcement body remained the UNSC, referral of a matter to which is the most drastic enforcement option.[117]

With the Draft Protocol's shortcomings and benefits in mind, the next section argues for specific changes to the BWC to require declarations, inspect certain laboratories, and increase the cost of non-compliance.

IV. Declarations, Inspections, and Implementation

A. Declarations

Almost twenty years after the Draft Protocol failed, the BWC continues to drift aimlessly. Every time the parties meet, they declare solemnly to abide by a treaty that demands little from them in terms of transparency or changed behavior. In the pandemic age where global travel and commerce allow disease to spread freely across borders, it is time for a change: parties must declare the location of the most dangerous biological materials and allow inspections of high-containment laboratories.

The United States Department of Health and Human Services and the United States Department of Agriculture have jointly produced the "Select Agents and Toxins List," which provides a convenient and well-established list of biological materials that states parties could declare.[118] United States law already regulates these sixty-eight agents, requiring those in possession to register in a national database.[119] Agents and toxins are placed on the list specifically because they pose a threat to human or animal health.[120] Of the listed agents and toxins, fourteen are designated "Tier 1," meaning that they "present the greatest risk of deliberate misuse with significant potential for mass casualties or devastating effect to the economy, critical infrastructure, or public confidence, and pose a severe threat to public health and safety."[121] Because these Tier 1 agents pose the greatest risk to humankind, the BWC should require their declaration. In addition to these Tier 1 agents, the BWC signatories should declare any coronavirus research, such as the research

---

[117] *Id.* art. 12.

[118] *Select Agents and Toxins List*, FED. SELECT AGENT PROGRAM, https://www.selectagents.gov/sat/list.htm (Apr. 26, 2021).

[119] CTRS. FOR DISEASE CONTROL & PREVENTION & NAT'L INSTS. OF HEALTH, *supra* note 98, at 45.

[120] *Select Agents and Toxins List*, *supra* note 118.

[121] *Biosafety/Biocontainment Plan Guidance*, FED. SELECT AGENT PROGRAM (Sept. 9, 2020), https://www.selectagents.gov/compliance/guidance/biosafety/definitions.htm.

conducted at the WIV. The rationale is that though coronaviruses are not Tier 1 agents, the worldwide COVID-19 pandemic has shown that they can cause massive harm, especially when a new strain emerges.[122]

The Draft Protocol required annual declarations of specific types of facilities and their capabilities, in addition to all labs that work with the substances listed in Annex A.[123] Although this requirement was comprehensive and provided a great deal of transparency about biological research in states parties, it also imposed high costs of implementation by requiring careful monitoring and technical expertise to verify capabilities and activities.

A new requirement to declare research with Tier 1 agents and toxins could be much simpler than the proposed Draft Protocol regime. States would annually certify whether they possess any of the listed substances, where those substances are located, and an explanation of the peaceful research involved. For example, a hypothetical declaration of COVID-19 related research would read, "SARS-associated coronavirus, Center of Disease Control, Atlanta, Georgia, vaccine research." States would also declare the location and purpose of their high-containment laboratories, to include the type of research performed at these facilities.

While the Draft Protocol declaration language[124] is a start, it is ineffective. Using that language as a guide, this article proposes the following required substance declaration:[125]

> **ANNUAL DECLARATIONS**
> ***National biological activities involving Tier 1 bacteriological (biological) and toxins conducted during the previous year***
> **Each State Party shall declare:**
> **(a) Whether private or government facilities conducted research or other activities using Tier 1 agents and toxins and/or Coronaviruses;**
> **(b) The peaceful purpose of the research in section (a) above and the location of the research; and**
> **(c) All BSL-4 facilities, both animal and human focused, and a list of the research activities conducted at these facilities. BSL-4 facilities are those designed for**

---

[122] *See WHO Coronavirus Disease (COVID-19) Dashboard*, *supra* note 3.
[123] Draft Protocol, *supra* note 13, art. 4.
[124] *Id.*
[125] This article's recommended legislative changes appear in bold typeface.

> **maximum containment of biological material and include features such as handling units, breathing air systems for suit laboratories, supply and exhaust high-efficiency particulate air (HEPA) filters, material transport docks (dunk tanks, pass-through chamber, autoclaves), shower barriers, effluent treatment systems, and built-in redundancy for critical systems.**[126]

By focusing declarations on the most harmful substances and the highest-containment laboratories, states parties would be required to determine where the most dangerous biological materials are located within their borders, if they are not already aware. This is a powerful incentive to comply with the treaty, and it encourages both internal biosecurity and greater transparency about where the most dangerous substances are located. The United States' compliance would be comparatively straightforward because domestic law already requires registration and a national database of Tier 1 agents. Domestic law reinforces compliance from the U.S. perspective, increases the chances of U.S. cooperation, and lowers the cost of sharing information and best practices. This also aligns with previous national security strategies. Focusing on substances recognizes the difficulty of monitoring research activities in a large, industrial nation and incentivizes compliance by focusing on the shared goal of safety.

This proposal would abandon entirely the Draft Protocol requirements to declare specific activities, equipment, and small laboratories. These requirements discourage compliance by requiring additional investment to measure compliance. This approach maximizes the spirit of transparency of the Draft Protocol without the burdensome requirements of monitoring small laboratories. Importantly, this approach complements U.S. domestic law, which will increase the chances of U.S. support and add legitimacy to the process.

B. Inspections

Rather than the Draft Protocol's random transparency visits, states parties should agree to regular international inspections of BSL-4 laboratories. The random transparency visits would have covered a huge

---

[126] This language incorporates the World Health Organization's recommended design features. *See* WORLD HEALTH ORG., *supra* note 102, at 5.

variety of facilities, with limited utility depending on the facility visited. A much better use of time and resources is to focus on safety and research activities of BSL-4 laboratories. This is a not a novel concept. In fact, the United States and Russia already submit to regular WHO inspections of CDC and VECTOR[127] laboratories, the only two known locations of the variola (smallpox) virus.[128] The WHO produces a report with the findings after the biennial inspections.[129] There are few BSL-4 laboratories worldwide, and most are already subject to rigorous regulation and inspections under domestic law.[130] Annual or semi-annual inspections of BSL-4 laboratories would impose much less of a burden on states parties than the Draft Protocol's transparency visits, which could have subjected hundreds of private labs in the United States to random visits with only fourteen days' notice. Most BSL-4 labs are state-run, and the inconvenience to the few private labs is well worth the benefit of increased safety and transparency.

The Draft Protocol established a new Organization for the Prohibition of Bacteriological (Biological) and Toxin Weapons with a Technical Secretariat, which it charged with implementing random transparency visits to covered biological facilities. This was one of the more ambitious changes recommended in the Draft Protocol. The Technical Secretariat monitored and coordinated the inspections of a potentially huge list of facilities worldwide. The approach above intends to reduce the administrative burden of inspections by focusing on BSL-4 facilities, which are relatively few in number worldwide. Instead of focusing on inspecting just a few facilities at random, the goal should be to inspect all BSL-4 facilities in each five-year period between BWC review conferences. This would create an expectation of regular inspections and would be fair because all states parties would know that they would be inspected. At each BWC conference, the states parties could agree to an international inspection team and a schedule, with inspections beginning after the 2022 conference and enduring over the following five years.

---

[127] VECTOR is the common name for Russia's state-run BSL-4 laboratory.

[128] *Variola Virus Repository Safety Inspections*, WORLD HEALTH ORG., https://www.who.int/activities/variola-virus-repository-safety-inspections (last visited Jan. 28, 2022).

[129] *Id.*

[130] The United States Army Medical Research Institute of Infectious Diseases, for example. *See Biological Safety at USAMRIID*, U.S. ARMY MED. RSCH. INST. OF INFECTIOUS DISEASES https://www.usamriid.army.mil/biosafety/index.htm (Apr. 21, 2017).

The sample language could look as follows:

> **INSPECTIONS**
> **Each state party shall agree to allow an international inspection team access to its BSL-4 facilities once every five years. This team will inspect safety procedures and verify that research is for peaceful purposes and declared activities and agents match actual research conducted and declared.**

In developing the inspection team, states parties could look to the WHO to provide expertise on laboratory best practices and to find international experts with the experience and qualifications to conduct inspections. The likely source for these experts would be BSL-4 facilities worldwide. The experts already meet periodically, as evidence by the WHO meeting.[131] Choosing these experts will be critical to establishing the credentials and credibility of the inspection team. The states parties should identify experts within their own bioresearch facilities and select those who have the most knowledge of BSL-4 operations and could have the most impact. To promote legitimacy, it is important that no single country dominate the inspection team.[132] Each team should have a cross section of global experts who can inspect the labs free from governmental or national influence.

C. Implementation

The Draft Protocol recommended a robust investigation system within the proposed Organization for the Prohibition of Bacteriological (Biological) and Toxin Weapons.[133] This investigation mechanism would allow states parties to self-regulate, but the Executive Council could ultimately refer the most serious cases to the UNSC.[134] This outcome is similar to the current procedure in Article VI of the BWC.[135]

This article recommends establishing an independent implementation body similar the Draft Protocol's proposed Organization for the Prohibition of Bacteriological (Biological) and Toxin Weapons. This independent body

---

[131] WORLD HEALTH ORG., *supra* note 102.

[132] For example, a team of majority Chinese experts inspecting the WIV would not serve the purpose of open and unbiased reporters, nor would a team of majority American experts inspecting the CDC.

[133] Draft Protocol, *supra* note 13, art. 16.

[134] *Id.*

[135] Biological Weapons Convention, *supra* note 1, art. VI.

is necessary to implement the facility inspections recommended above and to provide technical and administrative assistance to states parties. However, this body should not have a mandate to investigate violations and should instead focus its limited time and resources on inspections and technical assistance. The burden of fact-finding and building a case against an offending state party will fall largely on individual states, which can present that information to the UNSC through existing BWC processes. The goal of the recommendations is to begin to increase the independence and strength of the BWC. The modest, limited declarations and inspections recommended above could provide a basis for more dramatic changes in the future, including eventual investigations of violations by an independent body. For now, however, the independent body should function more like the Technical Secretariat proposed by the Draft Protocol, focusing on technical assistance and facility inspections.

D. Why Bother?

1. Recognize the Threat

The limited declare-and-inspect approach recommended above is notably less ambitious than the Draft Protocol recommendations. The agents and facilities covered are limited in scope, and it does not recommend an investigation mechanism other than the one already contained in the BWC. It is intended to be an initial step towards strengthening the BWC rather than the comprehensive reworking the Draft Protocol envisioned. But if the threat of cheating remains, why bother reforming the BWC at all? The simplest answer is that despite all its weaknesses, the BWC is the best way to coordinate international biosecurity efforts in an increasingly globalized world that relies on the free movement of goods, people, and information.

Even with increased disclosures and regular inspections, a state could still conduct offensive biological weapons research in secret. That does not mean that regulating biological weapons is hopeless, however. Because the BWC has never included an independent inspection or enforcement body, critics and cynics will be quick to note the unique challenges of enforcing the BWC while downplaying its benefits. This problem is particularly acute because the current cost of compliance with the BWC is almost non-existent, other than declaring that a state party's biological programs are for peaceful use.

Because the United States rejected the Draft Protocol, the proposal for new declarations and inspections is aligned with current U.S. national strategic priorities. It is also designed to be modest because there will likely be some warranted skepticism, and perhaps even bitterness, towards U.S. efforts in this area, given the last-minute decision to reject the Draft Protocol in 2001. While modest, it will accomplish two basic goals. First, it will create an enforceable standard and common awareness of which biological agents and toxins are the most dangerous; second, it will reinforce safety in the highest-containment laboratories worldwide. Creating an independent body tasked with technical implementation and inspections will establish an international center of expertise for biological threats.

By creating a common understanding of the select agents and toxins that are most dangerous to human and animal health, the declarations would raise the cost of compliance and discourage cheating. A state party could intentionally fail to make proper declarations, but any outbreak of disease from one of the listed agents would be met with increased scrutiny. This will also force states to take an accounting of the types of agents that are currently within their borders (assuming they have not done so already). It may have the additional benefit of identifying gaps in tracking these materials and allow closer regulation and scrutiny at a national level than before. Most importantly, it would solve the problem of the meaningless conference declarations that simply restate the international norm "condemn[ing] any use of biological agents or toxins other than for peaceful purposes at any time."[136] Although it has succeeded in creating and reinforcing the international norm against the use of biological agents and toxins in war, the BWC has not demanded concrete action from states parties. By focusing on the most dangerous substances, the proposed declarations would provide an incentive for state cooperation (i.e., internal security) and thus promote international cooperation in reducing the danger from the most toxic substances.

2. Reinforce Safety

There is no international standard for the features of a BSL-4 laboratory, nor is there a global organization that certifies high-containment laboratories.[137] Although there is consensus that certain substances should

---

[136] *Eighth Review Conference Final Document*, *supra* note 52.
[137] WORLD HEALTH ORG., *supra* note 102, at 4.

be contained in secure laboratories, states vary in defining high-containment facilities, with some distinguishing between animal and human containment levels. Even without specific agreement, the WHO has published guidelines, as has the United States, for its own laboratories.[138] Despite regional variations, there are some common features in BSL-4 laboratories:

> On a simplified level, all forms of maximum-containment laboratories have many commonalities. Design features include air handling units, breathing air systems for suit laboratories, supply and exhaust high-efficiency particulate air (HEPA) filters, material transport docks (dunk tanks, pass-through chamber, autoclaves), shower barriers, effluent treatment systems and built-in redundancy for critical systems.[139]

The recommended language above uses this language for inspections of all state party BSL-4 laboratories, with the goal of inspecting every laboratory every five years. These regular inspections will serve to ensure safety protocols and to discourage cheating and secret weapons development. This will have the additional benefit of reinforcing common safety standards and best practices across states parties because each of the approximately fifty known BSL-4 laboratories exist in BWC states, including three in China and one in Russia.[140]

V. The BWC and U.S. National Security

A. National Biosecurity

Despite its rejection of the Draft Protocol, the last twenty years have seen U.S. policymakers increasingly recognize the threat of both deliberate biological attacks from state and non-state actors and the threat of naturally occurring or accidental outbreaks of disease. One example is President George W. Bush's publication of a presidential directive on biodefense in 2004.[141] After the anthrax attacks in the early 2000s, Federal regulation of

---

[138] *Id.*; CTRS. FOR DISEASE CONTROL & PREVENTION & NAT'L INSTS. OF HEALTH, *supra* note 98, at 51.
[139] WORLD HEALTH ORG., *supra* note 102, at 5.
[140] *Id.*
[141] WHITE HOUSE, HOMELAND SECURITY PRESIDENTIAL DIRECTIVE—10: DEFENSE FOR THE 21ST CENTURY (2004), *reprinted in* STAFF OF H. COMM. ON HOMELAND SEC., 110TH CONG.,

biological threats shifted in focus, more explicitly linking national security to both biological weapons and the threat posed by pandemic diseases.[142]

In 2009, the National Security Council under President Barack Obama published the *National Strategy for Countering Biological Threats*. The strategy introduced three lines of effort:

> (1) improving global access to the life sciences to combat infectious disease regardless of its cause;
> (2) establishing and reinforcing norms against the misuse of the life sciences; and
> (3) instituting a suite of coordinated activities that collectively will help influence, identify, inhibit, and/or interdict those who seek to misuse the life sciences.[143]

The Obama strategy was guided by the assumption that "[t]he rapid detection and containment of, and response to, serious infectious disease outbreaks—whether of natural, accidental, or deliberate origin—advances both the health of populations and the security interests of States."[144] It also reaffirmed the United States' commitment to the BWC and explicitly mentioned "revitalizing" the convention, although it made no mention of the Draft Protocol.[145] Finally, it noted that

> [t]here are a relatively small number of high-risk pathogens and toxins that have properties which enable them to be used in a deliberate attack. . . . [I]t is reasonable to seek to reduce the risk by limiting ready access to known virulent strains of high-risk pathogens and toxins. In addition, the use of proper safety controls and practices is a key contributor to risk management.[146]

The tiered approach to declaring substances recommended above reflects the logic of President Obama's biosecurity strategy. Despite the Obama administration's commitment to the BWC, it explicitly rejected pursuing a BWC verification protocol in December 2009, with the Under

---

COMPILATION OF HOMELAND SECURITY PRESIDENTIAL DIRECTIVES (HSPD) 57 (Comm. Print 2008).

[142] *See* Laura K. Donohue, *Pandemic Disease, Biological Weapons, and War*, *in* LAW AND WAR 84 (Austin Sarat et al. eds., 2014) (analyzing the constitutional problems with using the U.S. military to enforce public health measures).

[143] NAT'L SEC. COUNCIL, NATIONAL STRATEGY FOR COUNTERING BIOLOGICAL THREATS 3 (2009).

[144] *Id.* at 4.

[145] *Id.* at 19.

[146] *Id.* at 13.

Secretary for Arms Control and International Security stating, "The Obama administration will not seek to revive negotiations on a verification protocol to the Convention. We have carefully reviewed previous efforts to develop a verification protocol and have determined that a legally binding protocol would not achieve meaningful verification or greater security."[147]

In President Trump's 2018 *National Biodefense Strategy*, the trend of reframing natural and accidental disease outbreaks as a national security threat continued: "Enhancing the national biodefense enterprise will help protect the United States and its partners abroad from biological incidents, whether deliberate, naturally occurring, or accidental in origin."[148] The 2018 strategy also highlighted the risk of poorly secured biological agents and poor biocontainment that "could lead to an outbreak through a laboratory acquired infection or if a pathogen is accidentally released into the environment."[149] In a break with the general tone of President Trump's foreign policy, this document also recognizes the international scope of biological threats and commits to multilateralism, stating that the United States "will work with multilateral organizations, partner nations, private donors, and civil society to control disease outbreaks at their source by supporting the development and implementation of biodefense and health security capabilities, policies, and standards."[150] While this language is clearly at odds with the stance the Trump administration took regarding the WHO after the COVID-19 pandemic began, it shows that the United States recognized the international nature of the problem.[151]

In keeping with the previous national documents, the 2018 strategy notes that "[p]reventing acquisition of dangerous pathogens, equipment, and expertise for nefarious purposes, and maintaining the capability to rapidly control outbreaks in the event of a biological attack, are strategic interests of the United States."[152] Unlike the Obama-era strategy, however, the 2018 strategy makes little mention of the BWC, other than to note its existence

---

[147] Ellen Tauscher, Under Sec'y for Arms Control & Int'l Sec., Address to the Annual Meeting of the States Parties to the Biological Weapons Convention (Dec. 9, 2009).
[148] WHITE HOUSE, *supra* note 2, at 1.
[149] *Id.* at 2.
[150] *Id.* at 3.
[151] *See* Christina Morales, *Biden Restores Ties with the World Health Organization That Were Cut by Trump*, N.Y TIMES (Jan. 20, 2021), https://www.nytimes.com/2021/01/20/world/biden-restores-who-ties.html (discussing differences in approach to the World Health Organization between the Trump and Biden administrations).
[152] WHITE HOUSE, *supra* note 2, at 2.

and obligations.[153] The trend in both documents is a focus more on domestic biodefense than on international partnership. This is a mistake because a stronger BWC offers many benefits to the United States and the international community. The Biden administration has already declared that the United States will "revitalize and expand global health and health security initiatives for all nations to reduce the risk of future biological catastrophes, whether naturally occurring, accidental, or deliberate."[154] More recently, the National Security Advisor released a statement ahead of the Ninth Review Conference signaling a shift toward collective action:

> [T]he United States will also be proposing immediate action at the Review Conference on a number of practical measures that will build capacity to counter biological threats and benefit BWC members. The United States is committed to working with all States Parties to strengthen the BWC, and with all responsible nations to end the development of biological weapons and the threat they pose.[155]

Those practical measures should include some form of declarations and lab inspections and a willingness to reengage with the spirit of the Draft Protocol, rather than continuing to reject it.

The threat of intentionally developed biological weapons remains real for the United States, as does the risk of natural or accidental biological incidents. China, Russia, Iran, and North Korea likely have some level of biological weapons capability that could threaten the United States,[156] and all four happen to be among the greatest threats to U.S. national security.[157] On 15 January 2021, the State Department explicitly accused China of violating the BWC in Wuhan, declaring that, "[d]espite the WIV presenting itself as a civilian institution, the United States has determined that the WIV has collaborated on publications and secret projects with China's military. The WIV has engaged in classified research, including laboratory animal experiments, on behalf of the Chinese military since at least 2017."[158]

---

[153] *Id.* at 14.
[154] WHITE HOUSE, INTERIM NATIONAL SECURITY STRATEGIC GUIDANCE 12 (2021).
[155] Statement by Jake Sullivan, *supra* note 18.
[156] U.S. DEP'T OF STATE, *supra* note 16, at 56.
[157] WHITE HOUSE, *supra* note 17.
[158] *Fact Sheet: Activity at the Wuhan Institute of Virology*, *supra* note 6.

B. The BWC Supports U.S. National Security Goals

Just as U.S. policymakers have come to see both natural and intentional biological incidents as threats to national security, the BWC can be viewed as more than just an arms treaty. Although it focuses primarily on banning biological weapons, it also functions as a forum for discussing biosecurity. As stated by the United Nations Office for Disarmament Affairs:

> Besides addressing disarmament and security issues, the BWC also supports the promotion of the peaceful uses of biological science and technology and thereby helps to prevent the global spread of diseases. Article X of the BWC requires States Parties to "facilitate, and have the right to participate in, the fullest possible exchange of equipment, materials and scientific and technological information" for the use of biological agents and toxins for peaceful purposes.
>
> . . . .
>
> The BWC also helps to build capacity to respond to disease outbreaks and provides a multilateral framework in which States Parties can meet regularly to advise and assist each other in developing their national capacities in such areas as disease surveillance, detection and diagnosis; biosafety and biosecurity; education, training and awareness-raising; emergency response; and legal, regulatory and administrative measures.[159]

The goals of the 2018 *National Biodefense Strategy* align with the functions of the BWC. It is the exact type of multilateral instrument with which the United States pledges to work to combat biological threats, yet the document refers to the BWC only in appendices.[160] This is a missed opportunity to connect the ends of U.S. policy to an obvious means to achieve them.

The BWC presents several benefits to advance U.S. security. First, it is already well established and has a history of debate and cooperation spanning decades. Second, it promotes steady engagement on a critical issue through regular meetings. Finally, it is currently somewhat integrated with the WHO and the United Nations, which means efforts to improve the BWC

---

[159] UNITED NATIONS OFF. OF DISARMAMENT AFFS., *supra* note 47, at 11.
[160] *See generally* WHITE HOUSE, *supra* note 2.

can influence other organizations working with biological security.[161] Rather than seeing the BWC as a footnote to unilateral efforts, the United States can advance its national security interests by recognizing the BWC for what it is: the only well-established international forum dedicated to eliminating biological weapons and promoting biosecurity, which could be a key part of improving U.S. biosecurity through international cooperation.

C. Wuhan Hypothetical

The ongoing COVID-19 pandemic provides an apt example of how regular inspections and declarations could increase biosecurity and improve public health, both domestically and internationally. The WIV is a Chinese BSL-4 laboratory located near the suspected outbreak site. After SARS outbreaks in the early 2000s, the Chinese government began to expand the laboratory in 2005, intending for it to "become the prevention & control research and development center for China's emerging infectious diseases, virus culture collection centers and WHO reference laboratory, which shall play a basic and technical role in China's emerging infectious diseases prevention and control, and biosafety."[162]

As the outbreak gained global attention and concern in February 2020, the WHO created a "joint mission" involving experts from multiple countries, including the United States and China. The goal of the mission was "to rapidly inform national (China) and international planning on next steps in the response to the ongoing outbreak of the novel coronavirus disease (COVID-19) and on next steps in readiness and preparedness for geographic areas not yet affected."[163] The joint mission identified some basic assertions that are now widely known, even if disputed, such as that COVID likely transferred to humans from an animal source and that large-scale precautions like social distancing and wearing masks could slow the spread of the virus.[164]

In January 2021, the WHO sent a team to investigate the origins of the virus amidst an environment of widespread distrust and speculation.[165] In

---

[161] UNITED NATIONS OFF. OF DISARMAMENT AFFS., *supra* note 47, at 12.
[162] *About WIV*, WUHAN INST. OF VIROLOGY, http://english.whiov.cas.cn/About_Us2016/Brief_Introduction2016 (last visited Jan. 28, 2022).
[163] WORLD HEALTH ORG., *supra* note 5, at 3 (citation omitted).
[164] *Id.*
[165] The final report was completed on 30 March 2021. WORLD HEALTH ORG., WHO-CONVENED GLOBAL STUDY OF ORIGINS OF SARS-COV-2: CHINA PART (2021). Some of this

the final week of President Trump's presidency, the State Department issued a strong statement condemning the Chinese government's secrecy surrounding the outbreak.[166] The statement mentioned longstanding doubts about China's compliance with the BWC and the fact that China had ruled out the possibility that the outbreak could have originated with a laboratory outbreak at the WIV.[167] By March 2021, with the preliminary report pending, the WHO joint study team came under heavy criticism for perceived bias towards the Chinese animal origin theory and the lack of transparency about is procedures—many of the same concerns raised by the State Department in January.[168]

A group of international medical experts was so concerned that it issued an open letter to the international community, in which they claimed that the study could not be trusted because it was not equipped with the proper expertise, data, or resources to reach an unbiased conclusion of the pandemic's origins.[169] The letter cited concerns that the animal origin theory had been accepted without any real data to confirm it and that the lab accident hypothesis had not been seriously considered.[170] Soon after, the WHO team abandoned its plan to release an interim report; when the report was finally released in March 2021, it was inconclusive about the origins of the virus.[171] The report has been tainted by the intense distrust rampant in the international community and by the nagging doubt that the team was not properly resourced, unbiased, and permitted to access pertinent information. Even the United States intelligence community is divided on the likely origins of the virus, and the true cause of the virus will likely remain unknown.[172] This political tension has come at great cost to efforts to

---

distrust has been fueled by the United States' accusations against China, longstanding suspicions that China has not abandoned its biological weapons program, and China's refusing access and denying any culpability in the origins of the disease. *See* John Sudworth, *Covid: Wuhan Scientist Would 'Welcome' Visit Probing Lab Leak Theory*, BBC (Dec. 21, 2020), https://www.bbc.com/news/world-asia-china-55364445.

[166] *Fact Sheet: Activity at the Wuhan Institute of Virology*, *supra* note 6.

[167] *Id.*

[168] Betsy McKay et al., *WHO Investigators to Scrap Plans for Interim Report on Probe of Covid-19 Origins*, WALL ST. J. (Mar. 5, 2021), https://www.wsj.com/articles/who-investigators-to-scrap-interim-report-on-probe-of-covid-19-origins-11614865067.

[169] Colon D. Butler et al., *Open Letter: Call for a Full and Unrestricted International Forensic Investigation into the Origins of COVID-19* (Mar. 4, 2021), https://int.nyt.com/data/documenttools/covid-origins-letter/5c9743168205f926/full.pdf.

[170] *Id.*

[171] WORLD HEALTH ORG., *supra* note 165, at 6–10.

[172] OFF. OF THE DIR. OF NAT'L INTEL., UPDATED ASSESSMENT ON COVID-19 ORIGINS (2021).

understand the origin of the disease and prevent a future pandemic: the lab's considerable expertise and experience with coronaviruses has become a source of great suspicion rather than a potential asset to be leveraged in the global fight against the virus.

Imagine that the proposed changes to the BWC had been in effect when COVID-19 emerged in late 2019. If international teams agreed upon by China and the other states parties had been allowed to inspect the WIV, there would be a baseline of knowledge and trust about what occurred there. Because the WIV is a BSL-4 laboratory working with coronaviruses, China would have been required to declare the nature of the research done at the facility, specifically its coronavirus research. There would already be a baseline of public international disclosure for analysis and comparison. There would also be a set of facts on the ground, resistant to political spin and manipulation. Perhaps this record would encourage the Chinese government to be more forthcoming about the origins of the virus and make it more difficult for political leaders in the United States to make claims about the origins of the disease for geopolitical reasons. Rather than peeling back layers of mistrust and suspicion to get to the truth, the international community could benefit from a shared understanding of a threat and act accordingly. An international body perceived as independent could ease tensions and act as a neutral arbiter for the benefit of all.

The inspections proposed in this article would not eliminate tension and distrust between the United States and China, but they could go a long way toward creating a shared understanding of biological threats and capabilities. Since its inception, the BWC has allowed states to make low-cost claims of compliance, with little chance of being exposed or held accountable for abuses. If the WIV had been subject to annual international inspections, there would be a history and an understanding that could build mutual trust and confidence. There would be a factual basis and record against which to assess the conspiracy theories and claims of governments. Inspection reports could serve as a guarantee against rampant speculation and finger pointing in the international community, especially if inspection teams contained multi-national, well-respected experts who the world perceived as unbiased public health officials. This type of international cooperation among peers is not some unattainable, utopian ideal—it already happens between Russia and the United States in smallpox laboratories. Even among competitors and state rivals, cooperation to stop a global pandemic can occur, and the changes to the BWC would facilitate that.

VI. Conclusion

States parties will meet at the ninth BWC review conference that is planned for summer 2022.[173] This will be the first meeting since the outbreak of COVID, with the full awareness of the massive economic and social costs of a global pandemic. Rather than the usual norm-reinforcing declarations against offensive biological weapons programs, the United States should lead an effort for a new verification protocol to increase transparency and accountability for biological research. The recent interim *National Security Strategic Guidance* recognizes both the need for American leadership and that the global nature of biological threats requires international cooperation:

> Recent events show all too clearly that *many of the biggest threats we face respect no borders or walls, and must be met with collective action*. Pandemics and other biological risks, the escalating climate crisis, cyber and digital threats, international economic disruptions, protracted humanitarian crises, violent extremism and terrorism, and the proliferation of nuclear weapons and other weapons of mass destruction all pose profound and, in some cases, existential dangers. None can be effectively addressed by one nation acting alone. And none can be effectively addressed with the United States on the sidelines.[174]

Given the complexity of the Draft Protocol and the limited organizational resources of the BWC secretariat, the best way ahead is to draw inspiration from the spirit of the Draft Protocol, focusing on limited declarations of the most dangerous biological agents and toxins and on limited inspections of high-containment facilities. The BWC has succeeded in upholding a strong norm against the use of biological weapons in war for almost fifty years, but in the age of the global pandemic, the world needs more. The states parties, led by the United States and sobered by the toll of COVID-19, should come to the ninth review conference in August 2022 with a renewed dedication to spare no effort to minimize the risk of biological weapons.

---

[173] UNITED NATIONS OFF. OF DISARMAMENT AFFS., *supra* note 47.
[174] WHITE HOUSE, *supra* note 154, at 7.

SLOW IS SMOOTH AND SMOOTH IS FAST: HOW MANDATORY TECHNOLOGY READINESS ASSESSMENTS WILL ENABLE RAPID MIDDLE TIER ACQUISITIONS

MAJOR MACAYN A. MAY*

I. Introduction

The 2017 *National Security Strategy of the United States* proclaimed that "[t]he United States must retain overmatch—the combination of capabilities in sufficient scale to prevent enemy success and to ensure that America's sons and daughters will never be in a fair fight."[1] Achieving overmatch requires the development and deployment of superior weapon systems and capabilities while "eliminat[ing] bureaucratic impediments to innovation" and "work[ing] with industry to experiment, prototype, and rapidly field new capabilities."[2] The National Defense Authorization Act (NDAA) for Fiscal Year (FY) 2016 created the middle tier of acquisition (MTA) to achieve those goals.[3] However, in the four years since Congress introduced the MTA authority, the Department of Defense (DoD) has failed to fully reap its benefits, as programs have experienced significant cost overruns and delays.

---

* Judge Advocate, United States Army. Presently assigned as the Command Judge Advocate, 414th Contracting Support Brigade, Caserma Ederle, Italy. LL.M., 2021, The Judge Advocate General's Legal Center and School. J.D., 2010, The John Marshall Law School; B.A., 2007, University of Illinois: Urbana-Champaign. Previous assignments include Student, 69th Graduate Course, Administrative Law Attorney, United States Army Combined Arms Center, Fort Leavenworth, Kansas, 2019–2020; Defense Counsel, Great Plains Region, Fort Leavenworth, Kansas, 2017–2019; Deputy Command Judge Advocate, 411th Contracting Support Brigade, Camp Coiner, Republic of Korea, 2015–2017; Trial Counsel, 89th Military Police Brigade, Fort Hood, Texas, 2014–2015; Administrative Law and Contract and Fiscal Law Attorney, United States Forces-Afghanistan, New Kabul Compound, Afghanistan, 2013–2014; Legal Assistance Attorney, III Corps, Fort Hood, Texas, 2011–2013. Member of the bar of Illinois. This paper was submitted in partial completion of the Master of Laws requirements of the 69th Judge Advocate Officer Graduate Course.

[1] WHITE HOUSE, NATIONAL SECURITY STRATEGY OF THE UNITED STATES OF AMERICA 28 (2017).

[2] *Id.* at 29.

[3] National Defense Authorization Act for Fiscal Year 2016, Pub. L. No. 114-92, § 804, 129 Stat. 726, 882–85 (2015).

The DoD could remedy this by adjusting its policy to require a technology readiness assessment (TRA) as part of MTA program initiation. While this may initially slow the process, it will contribute significantly to a smooth-running program and ultimately faster prototyping and fielding of new capabilities. In support of this proposal, Part II explains the background of the MTA and the other acquisition pathways it was intended to supplement. Part III provides an overview of the root causes of program failure, the dangers of delayed TRAs, and the effects of TRA timing on four current MTA programs. Part IV proposes changes to DoD Instruction 5000.80, *Operation of the Middle Tier of Acquisition (MTA)*, that would mandate TRAs for MTA program initiation and notice to the Under Secretary of Defense (Acquisition and Sustainment) (USD(A&S)) when programs use immature technologies.[4]

II. Background

A. Department of Defense Acquisition Framework

The DoD has traditionally utilized two major pathways for acquiring new capabilities: urgent capability acquisitions (UCA), which are intended to fulfill relatively small-scale urgent needs arising from combat operations,[5] and major capability acquisitions (MCA), which are intended to provide a deliberate process for obtaining complex and enduring systems.[6] The DoD has tried to develop and implement new capabilities using these pathways, but near-peer competitors continue to narrow the technological gap between themselves and the United States.[7] Congress has

---

[4] U.S. DEP'T OF DEF., INSTR. 5000.80, OPERATION OF THE MIDDLE TIER OF ACQUISITION (MTA) para. 1.2(b) (30 Dec. 2019) [hereinafter DoDI 5000.80].

[5] U.S. DEP'T OF DEF., INSTR. 5000.02, OPERATION OF THE ADAPTIVE ACQUISITION FRAMEWORK para. 4.2(a)(2) (23 Jan. 2020) [hereinafter DoDI 5000.02]; U.S. DEP'T OF DEF., INSTR. 5000.81, URGENT CAPABILITY ACQUISITION para. 1.2(a) (31 Dec. 2019) [hereinafter DoDI 5000.81]; U.S. DEP'T OF DEF., DIR. 5000.71, RAPID FULFILLMENT OF COMBATANT COMMANDER URGENT OPERATIONAL NEEDS para. 3(a) (24 Aug. 2012) (C2, 29 May 2020) [hereinafter DoDD 5000.71].

[6] DoDI 5000.02, *supra* note 5, para. 4.2(c)(2); U.S. DEP'T OF DEF., INSTR. 5000.85, MAJOR CAPABILITY ACQUISITION para. 3.1(a)(1) (6 Aug. 2020) (C1, 4 Nov. 2021) [hereinafter DoDI 5000.85].

[7] Terri Moon Cronk, *Near-Peer Adversaries Work to Surpass U.S. in Technology, Official Says*, U.S. DEP'T OF DEF. (May 4, 2018), https://www.defense.gov/Explore/News/

recognized this modernization issue and has taken several steps to reform the DoD acquisition system, customarily through the annual NDAA.[8]

In section 804 of the FY 2016 NDAA, Congress created the MTA to increase the speed at which the DoD develops new systems and capabilities.[9] To improve speed, MTA grants the DoD the authority to determine whether and how to eliminate, abbreviate, or overlap certain steps in the development process, among them the TRA.[10] Middle Tier of Acquisition programs were intended only to pursue capabilities with a certain level of technological maturity to balance the risk of a delayed or skipped TRA.[11] As Part III discusses, this caused more delay than it saved. Before addressing the different acquisition paths it is important to understand what a TRA is.

B. Technology Readiness Assessments

At its most basic level, a TRA produces a score assigned at a single point in time that indicates the maturity level of technology "critical to the performance of a larger system or fulfillment of a key objective of the acquisition program."[12] The identified technologies are referred to as "critical technologies."[13] A TRA completed early in the acquisition can identify risks that may not otherwise be realized until well into system development.[14] The TRA accomplishes this by systematically assessing the maturity of, and risks associated with, a given technology using pre-

---

Article/Article/1512901/near-peer-adversaries-work-to-surpass-us-in-technology-official-says; Marcus Weisgerber, *Slow and Steady Is Losing the Defense Acquisition Race*, GOV'T EXEC., https://www.govexec.com/feature/slow-and-steady-losing-defense-acquisition-race (last visited Feb. 14, 2022).

[8] MOSHE SCHWARTZ & HEIDI M. PETERS, CONG. RSCH. SERV., R45068, ACQUISITION REFORM IN THE FY2016–FY2018 NATIONAL DEFENSE AUTHORIZATION ACTS (NDAAS) 1 (2018).

[9] *Id.*; National Defense Authorization Act for Fiscal Year 2016, Pub. L. No. 114-92, § 804, 129 Stat. 726, 882–85 (2015).

[10] National Defense Authorization Act for Fiscal Year 2016 § 804(c)(4)(E), (G). The Under Secretary of Defense (Acquisition and Sustainment) (USD(A&S)) has further delegated the authority to streamline procedures to the service components. DODI 5000.80, *supra* note 4.

[11] DODI 5000.80, *supra* note 4.

[12] U.S. GOV'T ACCOUNTABILITY OFF., GAO-20-48G, TECHNOLOGY READINESS ASSESSMENT GUIDE: BEST PRACTICES FOR EVALUATING THE READINESS OF TECHNOLOGY FOR USE IN ACQUISITION PROGRAMS AND PROJECTS 1 (2020) [hereinafter GAO TECHNOLOGY READINESS GUIDE].

[13] *Id.* at 10.

[14] *Id.* at 12.

determined metrics.[15] It can be conducted internally or independently from the organization developing the technology.[16]

The TRA will produce a technology readiness level (TRL) score, which is "based on the amount of development completed, prototyping, and testing within a range of environments from lab . . . to operationally relevant."[17] The DoD uses nine technology readiness levels.[18] The lowest level of technology readiness is TRL 1, the point at which "[s]cientific research begins to be translated into applied research and development."[19] At TRL 6, a "[r]epresentative model or prototype system . . . [has been] tested in a relevant environment."[20] Generally, a TRL 6 score is a major milestone for technological development; any technology rated below TRL 6 is considered immature and a risk to the program.[21] At TRL 9, the final version of the system or technology has been tested and proven in mission operations or similar conditions.[22]

The TRL scores are not a risk assessment; rather, they provide principal data for programs to balance technical risks with program priorities or determine if a program is ready for the next phase.[23] A TRA completed periodically during program development also provides concrete data to justify costs, schedules, and progress to governing bodies like Congress.[24] Each acquisition pathway, including the UCA and MCA, discussed below, rely on different maturity levels for success.

C. Urgent Capability Acquisition

The goal of the UCA pathway is to put new equipment into the warfighter's hands as quickly as possible when current equipment cannot address new threats that arise during actual or anticipated contingency operations.[25] To achieve this, UCAs have a significantly streamlined

---

[15] *Id.* at 9; MITRE CORP., SYSTEMS ENGINEERING GUIDE 509 (2014).
[16] MITRE CORP., *supra* note 15, at 509.
[17] *Id.* at 511.
[18] U.S. DEP'T OF DEF., TECHNOLOGY READINESS ASSESSMENT (TRA) GUIDANCE para. 2.5 (2011) [hereinafter DOD TRA GUIDE].
[19] *Id.*
[20] *Id.*
[21] *Id.*; MITRE CORP., *supra* note 15, at 512.
[22] DOD TRA GUIDE, *supra* note 18.
[23] GAO TECHNOLOGY READINESS GUIDE, *supra* note 12, at 4, 71, 80.
[24] *Id.* at 80.
[25] DODD 5000.71, *supra* note 5, para. 3(a); DODI 5000.81, *supra* note 5.

acquisition process.[26] Each service component can validate an urgent capability need that is specific to that component, and then initiate the acquisition program.[27] Urgent joint needs are staffed through a streamlined version of the Joint Capabilities Integration and Development System (JCIDS), the formal process for defining and validating requirements for MCAs.[28]

Once an urgent need is validated, the milestone decision authority (MDA) must determine if the program: (1) can be completed within two years, (2) requires minimal development, (3) is based on technologies that are proven and available, (4) can be acquired under a fixed price contract, and (5) provides any necessary exceptions.[29] Production and fielding should be complete within a few months of final design approval.[30] The program may adjust requirements in order to field a partial solution or shift to a different acquisition pathway if it does not appear that the necessary equipment is deployable within two years.[31]

The UCA pathway's aggressive timeline for delivering capabilities introduces significant risk to program success.[32] Utilizing mature technologies helps to manage this risk and meet program deadlines by avoiding the time, cost, and uncertainty of significant system development.[33] A $525 million cap on research, development, and testing and a $3.065 billion cap for the entire procurement limits the scale of the program and the potential cost of failure.[34] Since their goals differ, MCAs and MTAs balance technology, time, and cost risks differently from UCAs.

D. Major Capability Acquisition

The purpose of MCAs is "[t]o acquire and modernize military unique programs that provide enduring capability."[35] To achieve the goal of delivering advanced and complete systems, MCA programs rely on a

---

[26] DODI 5000.81, *supra* note 5, para. 4.1(a).
[27] *Id.* para. 3.2(b).
[28] *Id.* para. 3.2(a).
[29] *Id.* para. 4.3(a)(2)(a)–(b).
[30] *Id.* fig.3.
[31] *Id.* para. 2.7(b).
[32] *Id.* para. 4.3(b)(1).
[33] *See* U.S. DEP'T OF DEF., RISK, ISSUE, AND OPPORTUNITY MANAGEMENT GUIDE FOR DEFENSE ACQUISITION PROGRAMS para. 2.1.1 (2017).
[34] DODI 5000.81, *supra* note 5, para. 1.2(b).
[35] DODI 5000.02, *supra* note 5, para. 4.2(c)(1).

structured and deliberate approach to development and acquisition.[36] The DoD divides these programs into acquisition categories based on cost, special interests, and complexity.[37] The deliberate nature of MCAs helps to control risk by ensuring each step is well researched and thoroughly developed, but it also means programs move at an incredibly slow pace.[38]

A significant feature (and common source of complaint) of MCA programs is the JCIDS requirement validation process.[39] The JCIDS process is meant to enable the Joint Requirements Oversight Council (JROC) to identify capability gaps affecting the joint force, validate new requirements based on those gaps, ensure that new capabilities can operate in a joint environment, and prevent services from developing redundant capabilities.[40] The JROC validates requirements based on initial determinations regarding the viability of a materiel solution and the risk of exceeding cost, schedule, and technological maturity metrics.[41] Validation can take fifteen to twenty-two months to complete.[42] Once approved, the program can transition to the technology maturation and risk reduction (TMRR) phase.

---

[36] *Id.* para. 4.2(c)(2).

[37] DODI 5000.85, *supra* note 6, at 19 tbl.1. Acquisition category (ACAT) I includes major defense acquisition programs (MDAP) and special interest acquisitions. *Id.* A program is designated as an MDAP if research, development, test, and evaluation costs will exceed $525 million or the total acquisition will cost more than $3.065 billion. *Id.* Acquisition category I is further subdivided into ACAT IB, IC, and ID, with different approval authorities for each subcategory. *Id.* Acquisition category II includes any program that does not meet ACAT I criteria and is a "major system," defined as a program that will cost more than $200 million in research, development, test, and evaluation costs or the total acquisition will cost more than $920 million. *Id.* Acquisition category III includes any program that does not meet the dollar thresholds for ACAT I or II and is not a "major system." *Id.*

[38] *See* Michael Bold & Margaret C. Roth, *A New Era of Acquisition*, ARMY AL&T, Winter 2020, at 9, 13–14.

[39] *Id.*; JOINT CHIEFS OF STAFF, INSTR. 5123.01I, CHARTER OF THE JOINT REQUIREMENTS OVERSIGHT COUNCIL AND IMPLEMENTATION OF THE JOINT CAPABILITIES INTEGRATION AND DEVELOPMENT SYSTEM encl. D, para. 1 (30 Oct. 2021) [hereinafter CJCSI 5123.01I].

[40] CJCSI 5123.01I, *supra* note 39, encl. A, para. 1(a)(1)–(2); *id.* encl. D, para. 2(c)(4).

[41] *JCIDS Process Overview*, ACQNOTES, http://www.acqnotes.com/acqnote/acquisitions/jcids-overview (June 7, 2021); *Capabilities Based Assessment (CBA)*, ACQNOTES, http://www.acqnotes.com/acqnote/acquisitions/capabilities-based-assessment-cba (June 16, 2021); *Initial Capabilities Document (ICD)*, ACQNOTES, http://www.acqnotes.com/acqnote/acquisitions/initial-capabilities-document-icd (Dec. 21, 2021).

[42] Jarrett Lane & Michelle Johnson, *Failures of Imagination: The Military's Biggest Acquisition Challenge*, WAR ON THE ROCKS (Apr. 3, 2018), https://www.warontherocks.com/2018/04/failures-of-imagination-the-militarys-biggest-acquisition-challenge; ARMY ACQUISITION REV., ARMY STRONG: EQUIPPED, TRAINED, AND READY 35 (2011).

The DoD intends for the TMRR phase to reduce program risk before production.[43] During this phase, a program manager typically conducts a risk assessment; completes a TRA; and develops testing and evaluation plans, systems engineering plans, and cost estimates.[44] This allows the program manager to determine which technologies will be included and which technologies require additional development.[45] Early identification of gaps between a technology's maturity and the requirements for the program is essential to reducing risk.[46] Though TRAs are a necessary component of the TMRR phase, they are not required until contracting for prototypes or development services is about to begin, which occurs months or years into the program.[47] The program manager will typically schedule an additional TRA after a contract has been awarded.[48] This is in anticipation of a JCIDS decision point to begin production and show the system is ready to perform in an operational environment.[49]

The JCIDS process was intended to avoid redundant capabilities and consolidate spending on military acquisitions across service components. Developing capabilities that incorporate input from multiple sources, sometimes with competing interests, has the potential to produce high quality, reliable materiel solutions (e.g., the joint light tactical vehicle), but only as products of processes that can take years from inception to delivery.[50] All the while, near-peer competitors have accelerated their systems development and acquisition procedures, allowing them to move from research and development to prototyping and production in a fraction of the time.[51] The result is a rapidly closing gap in the technological

---

[43] DODI 5000.85, *supra* note 6, para. 3.8(a); *Technology Maturation & Risk Reduction (TMRR) Phase*, ACQNOTES, http://www.acqnotes.com/acqnote/acquisitions/technology-development-phase (June 22, 2021).
[44] DODI 5000.85, *supra* note 6, para. 3.8(b)(1)–(2).
[45] *Id.* para. 3.8(a).
[46] U.S. GEN. ACCT. OFF., GAO/NSIAD-99-162, BEST PRACTICES: BETTER MANAGEMENT OF TECHNOLOGY DEVELOPMENT CAN IMPROVE WEAPON SYSTEM OUTCOMES 3 (1999) [hereinafter GAO BEST PRACTICES].
[47] 10 U.S.C. §§ 2366b, 2448b.
[48] U.S. GOV'T ACCOUNTABILITY OFF., GAO-12-339, DEFENSE MANAGEMENT: GUIDANCE AND PROGRESS MEASURES ARE NEEDED TO REALIZE BENEFITS FROM CHANGES IN DOD'S JOINT REQUIREMENTS PROCESS 3–8 (2012) [hereinafter GAO DEFENSE MANAGEMENT]; DODI 5000.85, *supra* note 6, para. 3.11(b)(6).
[49] GAO DEFENSE MANAGEMENT, *supra* note 48; DODI 5000.85, *supra* note 6, para. 3.12(b).
[50] ANDREW FEICKERT, CONG. RSCH. SERV., RS22942, JOINT LIGHT TACTICAL VEHICLE (JLTV): BACKGROUND AND ISSUES FOR CONGRESS 2 (2020); Weisgerber, *supra* note 7.
[51] Weisgerber, *supra* note 7.

superiority that has given the United States its overmatch capabilities.[52] The MTA is the most recent attempt to address this issue.

E. Middle Tier of Acquisition

Congress created the MTA to fill the gap between the immediate, relatively small-scale demands of UCAs and the deliberative, risk-averse process of MCAs. The MTA is divided into two separate authorities: rapid prototyping and rapid fielding.[53] While UCAs require fully matured technology and MCAs develop technology over a lengthy period, MTA programs are supposed to develop and utilize relatively mature technology that will result in a residual or fieldable operational capability within five years.[54]

The MTA rapid prototyping path is intended to develop a prototype in an operational environment or with a residual capability that can be fielded later.[55] Rapid prototyping programs can be initiated as stand-alone projects that will result in complete systems, used to develop prototypes that will be incorporated into a larger MCA program, or transitioned into an MTA rapid fielding program to introduce production-level quantities of systems within an additional five years.[56] Unlike MCAs, the DoD excludes MTA programs from the JCIDS process.[57]

Each service component developed its own merits-based process for validating requirements and initiating an MTA program.[58] For the Army, requirements are validated with an abbreviated capability development document (A-CDD), which is based on the capability development

[52] *Id.*
[53] *Id.*
[54] DODI 5000.02, *supra* note 5, para. 4.2(b)(1)–(2).
[55] DODI 5000.80, *supra* note 4, para. 1.2(c).
[56] *Id.* para. 1.2(b). While there is some flexibility to develop, test, and demonstrate technology before final fielding, initial program production must begin within six months of program start and once the five-year limit is reached, the program must end or transition to operations and sustainment. *Id.* para. 1.2(d).
[57] *Id.* para. 1.2(e).
[58] *Id.* para. 3.1(a). Programs that exceed the MDAP or major systems thresholds must have: an acquisition decision memorandum signed by the milestone decision authority, an initial program introduction document, an approved requirement, an acquisition strategy, a cost estimate, and a written decision by the USD(A&S). *Id.* para. 4.1(a)–(f).

document used in JCIDS but not developed to the same extent.[59] Both the A-CDD and the MTA acquisition strategy must address technology maturity and technical risk; however, there is no requirement to conduct a TRA prior to or during the program.[60] Instead of a formal TRA, program managers sometimes rely on their familiarity with a technology or paper-based technology reviews.[61]

The MTA pathway promised to accelerate modernization and acquisition efforts by removing unnecessary bureaucracy, streamlining program initiation requirements, and driving decision-making authority to lower levels.[62] Unfortunately, some MTA programs traded excessive technical risk for earlier program initiation.[63] Ultimately, this cost those programs the very speed they had hoped to achieve.

III. Postponing or Eliminating Technology Readiness Assessments Negatively Impacts Middle Tier of Acquisition Program Success

The relatively short timeline for MTA programs puts pressure on program managers to start prematurely. As a result, some programs delay TRAs until late in the prototyping process, long after the development of program requirements.[64] Programs that do not conduct an initial TRA experience significant cost overruns and schedule delays. These issues place the programs and the MTA pathway at risk of failure.[65]

---

[59] Pol'y Memorandum, Assistant Sec'y of the Army (Acquisition, Logistics & Tech.), subject: Office of the Assistant Secretary of the Army (Acquisition, Logistics and Technology) Middle Tier of Acquisition Policy (20 Mar. 2020) [hereinafter ASA(ALT) Policy Memo]; Memorandum for Record, Gen. John M. Murray, subject: Army Futures Command Abbreviated Capability Development Document Definition (7 June 2019).
[60] DoDI 5000.80, *supra* note 4, tbl.1, n.4.
[61] GAO TECHNOLOGY READINESS GUIDE, *supra* note 12, at 48.
[62] U.S. GOV'T ACCOUNTABILITY OFF., GAO-19-439, DOD ACQUISITION REFORM: LEADERSHIP ATTENTION NEEDED TO EFFECTIVELY IMPLEMENT CHANGES TO ACQUISITION OVERSIGHT 27–28 (2019) [hereinafter DOD ACQUISITION REFORM].
[63] *See generally* GAO TECHNOLOGY READINESS GUIDE, *supra* note 12.
[64] U.S. GOV'T ACCOUNTABILITY OFF., GAO-20-439, DEFENSE ACQUISITIONS ANNUAL ASSESSMENT: DRIVE TO DELIVER CAPABILITIES FASTER INCREASES IMPORTANCE OF PROGRAM KNOWLEDGE AND CONSISTENT DATA FOR OVERSIGHT 100, 104, 106 (2020) [hereinafter DEFENSE ACQUISITIONS ANNUAL ASSESSMENT].
[65] *See* discussion *infra* Section III.A.3.

A. Root Causes of Program Failure

Acquisitions of new equipment or vehicles face a range of challenges as the program moves from initial concept to final delivery. Some of these challenges may simply set the program back while others are root causes for program failure, including the following items: requirement issues, cost overruns, schedule delays, and congressional intervention.

1. Requirement Issues

Requirement issues surface in several different forms. They can be too aggressive, often in the form of an extensive list of system capabilities that must be met to achieve operational goals.[66] Some capabilities may conflict with one another, such as high armor requirements in conjunction with low gross weight.[67] Though some individual capabilities may require less development than others, integrating a long list of capabilities often requires extensive development, which can lead to cost overruns or schedule delays.[68] New threats may impose additional requirements or render the original requirements invalid and the capability under development no longer relevant or useful.[69] This occurs when the development phase has taken too long or when there is a failure to assess the service component's needs thoroughly before validating system requirements.[70] Reliance on technology that is immature and based on "too many technical unknowns and not enough knowledge about the performance and production risks they

[66] U.S. GOV'T ACCOUNTABILITY OFF., GAO-15-469, DEFENSE ACQUISITION PROCESS: MILITARY SERVICE CHIEFS' CONCERNS REFLECT NEED TO BETTER DEFINE REQUIREMENTS BEFORE PROGRAMS START 8–9 (2015); ANDREW FEICKERT, CONG. RSCH. SERV., R45519, THE ARMY'S OPTIONALLY MANNED FIGHTING VEHICLE (OMFV) PROGRAM: BACKGROUND AND ISSUES FOR CONGRESS 2–3, 9, 12 (2021).

[67] FEICKERT, *supra* note 66, at 9; U.S. GOV'T ACCT. OFF., GAO-02-201, DEFENSE ACQUISITIONS: STEPS TO IMPROVE THE CRUSADER PROGRAM'S INVESTMENT DECISIONS 19 (2002).

[68] GAO TECHNOLOGY READINESS GUIDE, *supra* note 12, at 49.

[69] CAPTAIN MATTHEW R. BOGAN ET AL., NAVAL POSTGRADUATE SCH., NPS-AM-18-011, FAILURE IS NOT AN OPTION: A ROOT CAUSE ANALYSIS OF FAILED ACQUISITION PROGRAMS 32–33, 39 (2017).

[70] *Id.* at 23; U.S. GOV'T ACCOUNTABILITY OFF., GAO-08-408, DEFENSE ACQUISITIONS: 2009 IS A CRITICAL JUNCTURE FOR THE ARMY'S FUTURE COMBAT SYSTEM 23 (2008) [hereinafter GAO-08-408].

entail" may fail to deliver the desired capability.[71] Attempts to overcome these requirement issues usually lead to other root causes of failure such as cost overruns and schedule delays.[72]

2. Cost Overruns and Schedule Delays

Cost overruns and schedule delays are closely related causes of program failure. Senior service component and DoD leaders, as well as Congress, monitor DoD budgets for procurement of major systems.[73] When programs fail to consider accurately their technology requirements or the timetable to develop necessary but immature technology, one of the few options to maintain the schedule is to "crash" it by requesting additional resources and funding or overlapping development and production schedules.[74] There is no set threshold at which congressional involvement or project cancellation occurs, but both become more likely as costs increase, scheduling delays extend, and program requirements become obsolete.[75]

---

[71] BOGAN ET AL., *supra* note 69, at 23 (quoting U.S. GOV'T ACCOUNTABILITY OFF., GAO-09-501T, DEFENSE ACQUISITIONS: DOD MUST PRIORITIZE ITS WEAPON SYSTEM ACQUISITIONS AND BALANCE THEM WITH AVAILABLE RESOURCES 8 (2008)).

[72] The Future Combat System was intended to modernize the entire brigade, introducing new vehicles, Soldier-enhancing equipment, and advanced networking capabilities. However, it suffered from an overreliance on immature technology. Halfway through development, forty-two of the forty-four critical technologies necessary were not mature enough to function in an operational environment. GAO-08-408, *supra* note 70, at 5, 16; GAO TECHNOLOGY READINESS GUIDE, *supra* note 12, at 48–49; GAO BEST PRACTICES, *supra* note 46, at 17.

[73] Planning, programming, budgeting and execution is a DoD process for generating DoD's portion of the President's annual budget request to Congress. The process typically begins more than two years before the fiscal year in question. BRENDAN W. MCGARRY, CONG. RSCH. SERV., IF10429, DEFENSE PRIMER: PLANNING, PROGRAMMING, BUDGETING, AND EXECUTION (PPBE) PROCESS (2020); Sydney J. Freedberg Jr., *Can the Army Convince Congress It's Learned from FCS?*, BREAKING DEF. (Mar. 16, 2020, 5:41 PM), https://breakingdefense.com/2020/03/can-the-army-convince-congress-its-learned-from-fcs.

[74] Schedule crashing adds resources to a project (typically in the form of personnel or overtime hours) in order to decrease a program's schedule; however, schedule crashing only works for certain types of problems. Programs can also fast-track phases, executing simultaneously instead of sequentially. Both add risk if not carefully assessed and managed. *Schedule Compression*, ACQNOTES, http://acqnotes.com/acqnote/tasks/schedule-compression (June 15, 2021); BOGAN ET AL., *supra* note 69, at 24.

[75] BOGAN ET AL., *supra* note 69, at 41.

3. Congressional Intervention

As cost overruns and schedule delays manifest, Congress may begin to question whether the program can achieve its objectives within an acceptable budget and timeframe.[76] Congress often calls senior leaders to testify when programs fall behind schedule or request additional funding.[77] While Congress may consider continuing a program, new priorities may arise where money can be better spent, leaving the struggling program with a drastically reduced or completely eliminated budget.[78]

Congress's growing frustration with DoD implementation and use of the MTA pathway is prompting increased congressional involvement in individual programs. When the FY 2016 NDAA created the MTA, it directed the DoD to issue MTA program guidance within 180 days.[79] After seventeen months, the DoD was only able to issue initial guidance, as each service component advocated for different MTA guidelines.[80] The Government Accountability Office (GAO) questioned if "middle-tier acquisition programs represent sound investments and are likely to meet the objective of delivering prototypes or capability to the warfighter within 5 years."[81] In response, the House Armed Services Committee Chairman, Congressman Mac Thornberry, introduced section 837 of the FY 2020 NDAA, withholding 75% of funds for MTA programs if the DoD did not issue guidance by 15 December 2019.[82] Since the FY 2020 NDAA was

---

[76] GAO TECHNOLOGY READINESS GUIDE, *supra* note 12, at 111; GAO-08-408, *supra* note 70, at 40–41.

[77] Freedberg Jr., *supra* note 73.

[78] BOGAN ET AL., *supra* note 69, at 42.

[79] *GAO Finds DOD Middle-Tier Acquisition Pathway Needs More Oversight*, SMALLGOVCON (July 1, 2019), https://smallgovcon.com/reports/gao-finds-dod-middle-tier-acquisition-pathway-needs-more-oversight.

[80] *Id.*

[81] DOD ACQUISITION REFORM, *supra* note 62, at 36. The Government Accountability Office is Congress's independent watchdog that provides "objective, non-partisan, fact-based information to help the government save money and work more efficiently." *About GAO*, U.S. GOV'T ACCOUNTABILITY OFF. https://www.gao.gov/about/ (last visited Feb. 14, 2022); Eric Lofgren, *Too Many Cooks in the DoD: New Policy May Suppress Rapid Acquisition*, DEF. NEWS (Jan. 2, 2020), https://www.defensenews.com/opinion/commentary/2020/01/02/too-many-cooks-in-the-dod-new-policy-may-suppress-rapid-acquisition.

[82] Sandra Erwin, *Congress Worries Authorities It Gave DoD Might Backfire*, SPACENEWS (May 23, 2019), https://spacenews.com/congress-worries-authorities-it-gave-dod-might-backfire; Mike Schaengold et al., *The FY 2020 National Defense Authorization Act's Substantial Impact on Federal Procurement Law—Part I*, 62 GOV'T CONT. ¶ 6, Jan. 15, 2020, at 1, 7.

signed after 15 December 2019, the DoD was able to avoid the funding cut when it issued DoD Instruction 5000.80 on 30 December 2019.[83]

Congress has continued to impose new requirements that threaten individual programs and the potential success of the MTA pathway. The FY 2017 NDAA introduced a requirement for all MTA programs that exceeded the major defense acquisition programs (MDAP) threshold to provide a summary report to Congress with "estimated cost, schedule, and technology risks information."[84] The FY 2020 NDAA expanded the Secretary of Defense's quarterly acquisition report to Congress to include any non-MDAP program (i.e., MTA programs that went above the MDAP threshold).[85] The FY 2020 NDAA also introduced a requirement for the Secretary of Defense to report updates on procedures for tailoring MTA acquisition methods.[86] Both of these NDAA sections imposed additional layers of oversight and bureaucracy on a process that Congress intended to streamline. Finally, in the 2020 budget report, the House Appropriations Committee raised concerns about an Air Force MTA program and "significant reprogramming requests to keep the program on schedule . . . [and] whether the use of authorities for middle tier acquisition . . . is appropriate . . . ."[87] Continued mismanagement or misuse of the MTA pathway risks additional bureaucracy and restrictions on the flexibility that was intended to empower MTA programs. The four MTA programs discussed in the next section show the link between TRAs and the root causes for failure that can prompt congressional intervention.

B. Case Studies

1. Optionally Manned Fighting Vehicle

In 2019, the Army used the MTA to initiate the optionally manned fighting vehicle program, its third attempt to replace the M2 Bradley

---

[83] Schaengold et al., *supra* note 82; Lofgren, *supra* note 81.
[84] SCHWARTZ & PETERS, *supra* note 8, at 5; National Defense Authorization Act for Fiscal Year 2017, Pub. L. No. 114-328, § 808, 130 Stat. 2000, 2262–65 (2016).
[85] National Defense Authorization Act for Fiscal Year 2020, Pub. L. No. 116-92, § 830, 133 Stat. 1198, 1492 (2019).
[86] Schaengold et al., *supra* note 82, at 1, 6.
[87] H.R. REP. NO. 116-84, at 280 (2019); Erwin, *supra* note 82.

Fighting Vehicle.[88] In order to field units by FY 2026, the Army issued a request for proposals (RFP) with aggressive requirements and a tight schedule.[89] The original requirements included several advanced technologies or incongruous metrics: "remotely controlled operations," troop capacity limits, air transportability, "dense urban terrain operation" capabilities, survivability metrics, lethality metrics, support for "preplanned product improvements," "embedded platform training," operational range, reactive armor, active protection, artificial intelligence, and the ability to field directed energy weapons.[90] The first TRA was not scheduled until after prototypes had been received and the decision to enter production was imminent.[91]

Though multiple companies had originally expressed interest, only two prepared prototypes in response to the RFP.[92] One company was unable to deliver their prototype in accordance with the RFP and was eliminated from further consideration, leaving only one prototype as the potential replacement.[93] The Army cancelled the RFP and tacitly acknowledged its failure to incorporate mature technologies, stating "a combination of requirements and schedule overwhelmed industry's ability to respond within the Army's timeline."[94]

---

[88] FEICKERT, *supra* note 66, at 9.

[89] *Id.* "Requests for proposals (RFPs) are used in negotiated acquisitions to communicate Government requirements to prospective contractors and to solicit proposals." FAR 15.203(a) (2019).

[90] "A [directed energy (DE)] weapon is a system using DE primarily as a means to incapacitate, damage, disable, or destroy enemy equipment, facilities and/or personnel. . . . [Directed energy] examples include active denial technology, lasers, [radio frequency] weapons, and DE anti-satellite and [high-powered microwave] weapon systems." JOINT CHIEFS OF STAFF, JOINT PUB. 3-13.1, ELECTRONIC WARFARE I-16 (8 Feb. 2012); FEICKERT, *supra* note 66, at 2–3.

[91] DEFENSE ACQUISITIONS ANNUAL ASSESSMENT, *supra* note 64, at 106.

[92] FEICKERT, *supra* note 66, at 9–12. The original manufacturer for the Bradley, BAE Systems, declined to submit a prototype, stating it did not meet their goals and business plan. Jen Judson, *Major Combat Vehicle Player Won't Play in US Army's Optionally Manned Fighting Vehicles Race*, DEF. NEWS (June 10, 2019), https://www.defensenews.com/land/2019/06/10/major-combat-vehicle-player-wont-participate-in-us-armys-optionally-manned-fighting-vehicle-competition.

[93] Sydney J. Freedberg Jr., *Bradley Replacement: Army Risks Third Failure in a Row*, BREAKING DEF. (Oct. 7, 2019, 4:02 PM), https://breakingdefense.com/2019/10/bradley-replacement-army-risks-third-failure-in-a-row.

[94] *Army Decides to Cancel Current OMFV Solicitation*, U.S. ARMY (Jan. 16, 2020), https://www.army.mil/article/231775/army_decides_to_cancel_current_omfv_solicitation.

In July 2020, the Army requested comments from industry regarding a draft RFP with drastically reduced requirements and preferred characteristics.[95] Industry has been receptive to the adjusted approach, but there have still been repercussions for the initial misstep.[96] In July 2021, the Army chose five companies to develop "rough digital concept designs" for the optionally manned fighting vehicle with prototyping beginning in FY 2025.[97] Meanwhile, Congress has reduced the program's budget by 11.1%.[98] Despite the requirement issues, schedule delay, and early congressional involvement, an adjusted TRA schedule has not been adopted.[99]

2. Medium Unmanned Surface Vehicle[100]

The medium unmanned surface vehicle (MUSV) is one component of the Navy's effort to accelerate development of a next-generation fleet of unmanned and partially manned ships to counter near-peer competitors like China.[101] The MUSV will independently "function as a sensor and

---

[95] Ashley Roque, *Industry Set to Weigh in on U.S. Army's Latest OMFV Plan*, JANES (July 21, 2020), https://janes.com/defence-news/news-detail/industry-set-to-weigh-in-on-us-armys-latest-omfv-plan.

[96] Sydney J. Freedberg Jr., *OMFV: Can Army Exorcise the Ghost of FCS?*, BREAKING DEF. (Apr. 13, 2020, 4:09 PM), https://breakingdefense.com/2020/04/omfv-can-army-exorcise-the-ghost-of-fcs.

[97] Jen Judson, *US Army Chooses Competitors to Design Infantry Fighting Vehicle Replacement*, DEF. NEWS (July 23, 2021), https://www.defensenews.com/land/2021/07/23/us-army-chooses-competitors-to-design-infantry-fighting-vehicle-replacement.

[98] Sydney J. Freedberg Jr., *Army Boosts Big Six 26%, but Trims Bradley Replacement*, BREAKING DEF. (Feb. 10, 2020, 2:07 PM), https://breakingdefense.com/2020/02/army-boosts-big-six-26-but-not-bradley-replacement.

[99] U.S. GOV'T ACCOUNTABILITY OFF., GAO-20-579, NEXT GENERATION COMBAT VEHICLES: AS ARMY PRIORITIZES RAPID DEVELOPMENT, MORE ATTENTION NEEDED TO PROVIDE INSIGHT ON COST ESTIMATES AND SYSTEMS ENGINEERING RISKS 18–20 (2020) [hereinafter GAO-20-579].

[100] The publicly available information about the Navy's acquisition planning for the medium unmanned surface vehicle is limited. Some assumptions and inferences about the program are made in discussing this case. This does not diminish the program's usefulness as a case study since the program has still drawn congressional interest due to inadequate assessments of technological maturity and the associated risks to the program's cost and schedule.

[101] RONALD O'ROURKE, CONG. RSCH. SERV., R45757, NAVY LARGE UNMANNED SURFACE AND UNDERSEA VEHICLES: BACKGROUND AND ISSUES FOR CONGRESS 1 (2020).

communications relay" in the fleet.[102] The technology supporting the MUSV is based on the Defense Advanced Research Projects Agency's unmanned anti-submarine ship.[103] Specific details on the list of critical technologies and TRAs have not been released; however, public announcements have confirmed that the MUSV must be capable of "maneuvering autonomously and complying with international Collision Regulations, even in operational environments,"[104] integrating with the Navy's "command and control (C2) solution . . . developed . . . for the [Large Unmanned Surface Vehicle (LUSV)] program,"[105] and capable of operating independently for at least sixty days.[106] This will likely require development of artificial intelligence for the autonomous maneuverability and integration with the command and control solution as well as development of propulsion systems that can operate away from normal maintenance support.[107] Rear Admiral Casey Morton, Program Executive Officer, Unmanned and Small Combatants, acknowledged, "While LUSV and MUSV may push the envelope, nothing entirely new is being created."[108] The Navy's approach to development and modernization has drawn criticism from Congress.[109]

---

[102] Sam LaGrone, *Navy to Contract New Class of Unmanned Surface Vehicle by Year's End*, USNI NEWS, https://news.usni.org/2019/03/06/navy-contract-new-class-unmanned-surface-vehicle-years-end (Aug. 14, 2019, 1:19 PM).
[103] O'ROURKE, *supra* note 101, at 15.
[104] *L3Harris Technologies Awarded Medium Unmanned Surface Vehicle Program from US Navy*, L3HARRIS TECHS. (Aug. 18, 2020), https://www.l3harris.com/newsroom/press-release/2020/08/l3harris-technologies-awarded-medium-unmanned-surface-vehicle.
[105] O'ROURKE, *supra* note 101, at 14.
[106] Sam LaGrone, *Navy Awards Contract for First Vessel in its Family of Unmanned Surface Vehicles*, USNI NEWS, https://news.usni.org/2020/07/14/navy-awards-contract-for-first-vessel-in-its-family-of-unmanned-surface-vehicles (July 15, 2020, 6:38 AM).
[107] Captain Pete Small, Unmanned Maritime Systems Update, at slide 4 (Jan. 15, 2019), https://www.navsea.navy.mil/Portals/103/Documents/Exhibits/SNA2019/UnmannedMaritimeSys-Small.pdf?ver=2019-01-15-165105-297; Megan Eckstein, *Navy Claims a Strong Technical Foundation Ahead of Testing New Classes of Unmanned Ships*, USNI NEWS (Sept. 9, 2019, 4:38 PM), https://news.usni.org/2019/09/09/navy-claims-a-strong-technical-foundation-ahead-of-testing-new-classes-of-unmanned-ships.
[108] Eckstein, *supra* note 107.
[109] *See, e.g.*, U.S. GOV'T ACCOUNTABILITY OFF., GAO-18-238SP, NAVY SHIPBUILDING: PAST PERFORMANCE PROVIDES VALUABLE LESSONS FOR FUTURE INVESTMENTS (2018).

Over the last decade, the Navy has struggled to develop and deploy new, state-of-the-art vessels.[110] Congress has attributed this to the Navy's failure to thoroughly understand and assess a given technology's maturity before incorporating it into a new vessel.[111] Congress has specific concerns with the Navy's LUSV.[112] The Senate Armed Services Committee report for the FY 2020 NDAA raised concerns with the Navy's approach to "design, technology development, and integration as well as a limited understanding of the LUSV concept of employment, requirements, and reliability for envisioned missions."[113] Those concerns have grown to include the MUSV. The FY 2021 NDAA imposed restrictions on the MUSV program that include testing and qualification of propulsion and electrical generation systems for 720 continuous hours without maintenance or repair, and congressional notification before contract award or the obligation of funds.[114]

The MUSV contract was awarded in July 2019; there had not been any reports of significant development delays, but in 2021 the contractor received a $60.48 million contract modification for "continued engineering and technical support."[115] The Navy has expressed its confidence in relying on technology that has already been developed to unstated levels of maturity. The Navy has not confirmed whether it completed a formal TRA, but Congress's mandate in the FY 2021 NDAA to test certain systems suggests the Navy is relying on its familiarity with the critical technologies instead of a formal TRA. Captain Pete Small, Program Executive Office, Unmanned and Small Combatants, acknowledged there are a multitude of challenges the program will have to overcome to be successful, but noted "we're starting to procure these things, we're going into fabrication, they're going to start coming off the production lines soon, and we need to have

---

[110] Paul McLeary, *Congress Pumps the Brakes on Navy, Demands Answers from OSD*, BREAKING DEF. (July 2, 2020, 11:46 AM), https://breakingdefense.com/2020/07/congress-pumps-the-brakes-on-navy-demands-answers-from-osd.

[111] H.R. REP. NO. 116-442, pt. 1, at 20 (2020).

[112] Paul McLeary, *Navy Awards Study Contracts on Large Unmanned Ship—As Congress Watches Closely*, BREAKING DEF. (Sept. 4, 2020, 5:46 PM), https://breakingdefense.com/2020/09/navy-awards-study-contracts-on-large-unmanned-ship-as-congress-watches-closely.

[113] S. REP. NO. 116-84, at 80 (2019).

[114] William M. (Mac) Thornberry National Defense Authorization Act for Fiscal Year 2021, Pub. L. No. 116-283 § 122(b), 134 Stat. 3388, 3425–26.

[115] *MUSV Development Continues for L3Harris*, SHEPHARD MEDIA (July 7, 2021, 12:15 PM), https://www.shephardmedia.com/news/naval-warfare/musv-development-continues-l3harris.

solid plans to go employ them, test them and field them."[116] The statements of Rear Admiral Morton and Captain Small suggest that the Navy rushed the start of the MUSV without fully assessing its technological requirements even though it is "push[ing] the envelope."[117] This may have started the acquisition process sooner, but puts the program at serious risk for significant cost overruns and delays if there are any problems with maturing critical technologies. The next two programs have avoided these issues by utilizing early TRAs.

3. Mobile Protected Firepower

The mobile protected firepower (MPF) is an armored, direct-fire vehicle intended to support infantry brigade combat teams.[118] Though the Army originally developed this requirement through the JCIDS process, the program was approved for the MTA pathway in October 2018.[119] An independent TRA completed before the Army initiated the program found all of the required technologies were at or near maturity.[120] The GAO still considered the schedule proposed for the MPF program to be aggressive and that success would depend on the ability to utilize mature technology.[121] The GAO noted the integration of existing technologies as a potential cause for a lowered TRL score because it could change "the form, fit, or functionality of those technologies."[122] To mitigate these risks, contractors "underwent design maturity reviews 6 months after contract award" to verify that the proposed technology remained at an acceptably mature level.[123] Having leveraged early TRAs to develop its requirements, the program has thus far proceeded within its budget, field-tested two prototypes, and is expected to begin production in June 2022.[124]

---

[116] Megan Eckstein, *Navy Planning Aggressive Unmanned Ship Prototyping, Acquisition Effort*, USNI NEWS (May 15, 2019, 10:31 AM), https://news.usni.org/2019/05/15/navy-planning-aggressive-unmanned-ship-prototyping-acquisition-effort.
[117] *Id.*; Eckstein, *supra* note 107.
[118] DEFENSE ACQUISITIONS ANNUAL ASSESSMENT, *supra* note 64, at 107.
[119] *Id.*
[120] *Id.* at 108.
[121] *Id.*
[122] *Id.*
[123] *Id.*; GAO-20-579, *supra* note 99, at 27.
[124] Ethan Sterenfeld, *Murray: One MPF Prototype Potentially Airdrop-Capable*, INSIDE DEF. (June 21, 2021, 4:22 PM), https://insidedefense.com/insider/murray-one-mpf-prototype-

4. Integrated Visual Augmentation System

The integrated visual augmentation system (IVAS) is an "augmented reality" system that "includes a heads-up display, sensors, [and] an on-board computer" to improve situational awareness and target acquisition.[125] The Army initiated the IVAS MTA rapid prototyping program in September 2018.[126] Two months later, the Army awarded a contract to Microsoft to develop the IVAS.[127] The program called for four prototype iterations to utilize Agile software development techniques, which incrementally expand capabilities in each iteration.[128]

Before issuing the solicitation, the Army conducted a TRA and identified fifteen critical technologies that it needed for IVAS to succeed.[129] The Army determined all fifteen technologies were mature or approaching maturity at program initiation.[130] The Office of the Under Secretary of Defense (Research and Engineering) disagreed, finding the technology supporting the display module too immature to support daytime use and limit "light emissions to ensure light security for night operations."[131] The program took steps to mitigate the potential technology risks and is now has a contract with Microsoft worth up to $21.88 billion to produce the IVAS.[132] Despite a delay in fielding due to low resolution at the edges of the field of view, the program remains on schedule.[133]

Programs with early TRAs were better positioned to develop and adhere to cost estimates and schedules because they had a firm understanding of the level of effort necessary to develop critical technologies. This avoided

---

potentially-airdrop-capable; DEFENSE ACQUISITIONS ANNUAL ASSESSMENT, *supra* note 64, at 107.

[125] DEFENSE ACQUISITIONS ANNUAL ASSESSMENT, *supra* note 64, at 101.

[126] *Id.*

[127] *Id.*

[128] *Id.* at 18, 101–02.

[129] *Id.* at 102.

[130] *Id.*

[131] *Id.*

[132] *Id.* at 101–02; Sydney J. Freedberg Jr., *IVAS: Microsoft Award by Army Worth up to $21.9B*, BREAKING DEF. (Mar. 31, 2021 4:08 PM), https://breakingdefense.com/2021/03/ivas-microsoft-award-worth-up-to-21-9b.

[133] Karen Saunders & Gen. John M. Murray, *Joint ASA ALT and AFC Statement on the Integrated Visual Augmentation System*, U.S. ARMY (Oct. 18, 2021), https://www.army.mil/article/251258/joint_asa_alt_and_afc_statement_on_the_integrated_visual_augmentation_system.

the root causes of failure: schedule delays, cost overruns, and congressional intervention.

IV. Mandatory Technology Readiness Assessments as a Method to Ensure Middle Tier of Acquisition Program Success

A. Early Technology Readiness Assessments Allow Middle Tier of Acquisition Programs to Avoid Development Problems Later

Conducting TRAs before initiation or in early program phases allows the development of realistic requirements based on the current state of technology. In 2007, the Under Secretary of Defense (Acquisition, Technology, and Logistics) acknowledged that programs have relied heavily on proposals from industry or white papers developed during research phases in making acquisition decisions.[134] These paper proposals typically do not have sufficient information to allow a realistic assessment of technical risk or to generate estimates for developing technology during the life of a program.[135] A complete understanding of a technology's maturity level is essential to generating these estimates.[136]

An early TRA would validate the maturity of the critical technologies that the program would likely incorporate into the system and challenge any misconceptions from paper proposals being used to define the program's requirements.[137] If the TRA indicates critical technologies are immature before program start, or early on, program managers have the flexibility to consider changes to the requirements, identify alternative technologies, develop plans to mature the necessary technology, or pursue a different pathway for the program.[138]

---

[134] Memorandum from Under Sec'y of Def. (Acquisition, Logistics & Tech.) to Sec'ys of the Mil. Dep'ts et al., subject: Prototyping and Competition (19 Sept. 2007); U.S. GOV'T ACCOUNTABILITY OFF., GAO-17-309, WEAPON SYSTEMS: PROTOTYPING HAS BENEFITED ACQUISITION PROGRAMS, BUT MORE CAN BE DONE TO SUPPORT INNOVATION INITIATIVES 6–7 (2017) [hereinafter GAO-17-309].

[135] GAO-17-309, *supra* note 134, at 16.

[136] U.S. GOV'T ACCOUNTABILITY OFF., GAO-19-336SP, WEAPON SYSTEMS ANNUAL ASSESSMENT: LIMITED USE OF KNOWLEDGE-BASED PRACTICES CONTINUES TO UNDERCUT DOD'S INVESTMENTS 48–51 (2019) [hereinafter GAO-19-336SP].

[137] *Id.*

[138] GAO TECHNOLOGY READINESS GUIDE, *supra* note 12, at 87.

An early TRA can also enable more accurate cost estimates and reasonable program schedules. If a program intends to incorporate a technology with a low TRL score, then the design may have a flawed technical base.[139] The Future Combat System (FCS), part of the Army's first attempt to replace the M2 Bradley, is a prime example. The FCS program did not have "firm requirements and mature technologies, [and] its knowledge levels have consistently lagged behind its calendar schedule."[140] The Army did not know what the "network need[ed] to be, what may be technically feasible, how to begin building the network, and how to eventually demonstrate it" until five years into the program.[141] An overabundance of immature technology in the program meant development funds were spread thin.[142] An early TRA can avoid incorporating an abundance of immature technologies, as happened with the FCS program, so programs can focus funds and resources on truly critical technologies.[143]

Finally, both the GAO and the Congressional Research Service frequently report to Congress that shifting requirements and lengthy development of immature technologies have delayed programs.[144] Early TRAs will enable senior DoD officials to better defend individual MTA programs and the implementation of the MTA pathway when questioned by Congress. With the benefit of a TRA report, DoD leaders can outline the steps taken to evaluate proposed technology, how technological maturity influenced requirement validation, and how the necessary technology has developed since program initiation. By demonstrating a more thoughtful approach to initiating MTA programs, the DoD can avoid the budgetary uncertainty and risk of program failure that come with congressional intervention.

---

[139] GAO-19-336SP, *supra* note 136.
[140] GAO-08-408, *supra* note 70, at 9.
[141] *Id.* at 11.
[142] GAO TECHNOLOGY READINESS GUIDE, *supra* note 12, at 49.
[143] *Id.*
[144] *See* FEICKERT, *supra* note 66, at 13; GAO-08-408, *supra* note 70, at 3. The Congressional Research Service's mission is to "serve Congress with the highest quality of research, analysis, information and confidential consultation to support the exercise of its legislative, representational and oversight duties in its role as a coequal branch of government." *History and Mission*, LIBR. OF CONG., https://www.loc.gov/crsinfo/about/history.html (Sept. 16, 2021).

B. Potential Barriers to Conducting Early Technology Readiness Assessments

There are potential barriers to incorporating TRAs into the early stages of a program or pre-initiation. Unlike MCAs, MTA programs have a rigid suspense date. With waivers of the five-year limitation withheld to the USD(A&S), time is a precious commodity.[145] Programs already subject to a range of "statutory, regulatory, and Service-level oversight needs" may struggle to meet timelines when faced with additional bureaucratic requirements.[146] While time restraints are a legitimate concern, a TRA does not have to negatively impact the schedule. "When planned and executed well, TRAs are complementary to existing program management activities, system development efforts, and oversight functions . . . ."[147] The timeline for an MTA program begins once the decision authority approves the program for the MTA pathway. Even a lengthy TRA process would not affect the timeline if completed before program initiation. For programs like the optionally manned fighting vehicle, which lost a year of development and 11.1% of its budget, the additional cost and time spent on an early TRA would be preferable.[148] Finally, reliance on established technology may lure program managers and approval authorities into believing that a TRA is not necessary. Utilizing mature technology can still introduce unexpected development costs, schedule delays, or performance issues if applied in new ways or new environments.[149]

---

[145] DODI 5000.02, *supra* note 5, para. 1.2(c).

[146] JEFFREY A. DREZNER ET AL., RAND CORP., ISSUES WITH ACCESS TO ACQUISITION INFORMATION IN THE DEPARTMENT OF DEFENSE 14 (2020); Scott Maucione, *DoD Releases Long Awaited Policy on Mid-Tier Acquisition*, FED. NEWS NETWORK (Jan. 3, 2020, 3:44 PM), https://federalnewsnetwork.com/contracting/2020/01/dod-releases-long-awaited-policy-on-mid-tier-acquisition.

[147] GAO TECHNOLOGY READINESS GUIDE, *supra* note 12, at 18.

[148] DODI 5000.80, *supra* note 4, glossary; Freedberg, *supra* note 98.

[149] GAO TECHNOLOGY READINESS GUIDE, *supra* note 12, at 48; GAO-17-309, *supra* note 134, fig.5. The joint light tactical vehicle was supposed to include mature or almost mature technologies; however, concerns about the feasibility of combining these technologies required an expanded technology maturity plan before development could begin. FEICKERT, *supra* note 50.

C. Implementing Mandatory TRAs

Due to the limited window to complete an MTA program, program managers must have a realistic understanding of the technology being utilized for the program is. This is especially pertinent when developing a nearly complete system prototype, as tends to be the focus in the DoD.[150] Current policy guidance does not require a TRA in an MTA program. As the case studies have shown, allowing programs to delay or omit the TRA can have significant repercussions. To avoid this issue, USD(A&S) should adjust the current policy to require that all MTA programs complete a TRA before program initiation.

Paragraphs 3.1(b) and 3.2(c) of DoD Instruction 5000.80 outline the requirements for acquisition and funding strategies for rapid prototyping and rapid fielding programs.[151] The USD(A&S) could mandate TRAs for program initiation by adjusting language already in these paragraphs to read: "DoD Components will develop a process to implement acquisition and full funding strategies for the program. This process will result in an acquisition strategy, which includes security, schedule and production risks, [technical readiness evaluation results,] and a cost estimate."[152] The DoD should also adjust Table 1, entitled "MTA Entrance Documentation Deliverables," to require the acquisition strategy for major and non-major systems to make it clear that TRAs are required for both.[153] This may delay the start of an MTA program, but programs would maintain the ability to scale the TRA to the complexity of the technology being considered while avoiding additional costs and delays from unexpected technology development problems.[154]

The MTA pathway uses tailored procedures for each program; however, baselines are still necessary to ensure programs accomplish their goals. Due to the limited window for completion of an MTA program, utilization of immature technologies should be closely supervised. With TRAs mandated for all MTA programs, the USD(A&S) should require any program that intends to use a critical technology below TRL 6 to notify the next higher approval authority. Under the current policy, the Assistant Secretary of the

---

[150] Eric Spero et al., *The Importance of Early Prototyping in Defense Research, Engineering, Acquisition, and Sustainment*, 7 DSIAC J., no. 2, 2020, at 46, 51.
[151] DoDI 5000.80, *supra* note 4, paras. 3.1(b), 3.2(c).
[152] *Id.*
[153] *Id.* at 10 tbl.1.
[154] The average time to complete a technology readiness assessment changes based on the complexity of the technology and the intended use of the information. GAO TECHNOLOGY READINESS GUIDE, *supra* note 12, at 39–43.

Army (Acquisition, Logistics and Technology) is the approval authority for Army MTA programs under the MDAP threshold.[155] The next higher authority would be the USD(A&S).[156] Implementing the notification requirement with the USD(A&S) would ensure that even smaller programs are utilizing sufficiently mature technology or have detailed plans to mature critical technologies before program initiation. This can be accomplished by adding a new paragraph, between paragraphs 4.1(c) and 4.1(d), that reads: "Any MTA program expected to include technology with a Technology Readiness Level score of 5 or below at program initiation requires written notice to USD(A&S)." The proposed language would ensure that TRAs are completed DoD-wide for MTA programs and promote the rapid nature of these prototyping and fielding programs.

V. Conclusion

The MTA pathway has the potential to improve the quality and speed of defense acquisitions significantly. Adaptability, flexibility, and streamlined procedures allow MTA programs to meet unique requirements on a far shorter timeline than traditional MCA programs permit. While moving with deliberate speed is the key to success for the MTA, programs cannot build realistic requirements unless they ascertain the current state of needed technologies. Realistic requirements, schedules, and costs for achieving them can be developed by taking the time to assess the maturity of critical technologies at or before program initiation. Programs that have taken the extra time to conduct an early TRA have experienced smoother development and been able to achieve the intended rapidity of the MTA pathway. The programs that have not conducted an early TRA have stumbled through delays and incurred additional costs. Congress expects competent use of the MTA pathway, and the warfighter deserves modern systems and capabilities that ensure overmatch against any enemy. Early TRAs may necessitate a slower start to the program, but they will ensure the program runs smoother—which is ultimately faster.

---

[155] National Defense Authorization Act for Fiscal Year 2016, Pub. L. No. 114-92, § 804(c)(4)(F), 129 Stat. 726, 884 (2015); ASA(ALT) Policy Memo, *supra* note 59, para. 4a.
[156] Approval from USD(A&S) is already required for MTA programs that exceed the MDAP threshold. DODI 5000.80, *supra* note 4, para. 2.1(b).