SUPERVISED RELEASE, SEX-OFFENDER TREATMENT PROGRAMS, AND SUBSTANTIVE DUE PROCESS

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There is an inevitable tension between supervised release and liberty. But what should appellate courts do when trial judges impose conditions of supervised release that restrict constitutionally protected liberties? This Note seeks to resolve that issue through the lens of one particular condition of supervised release that district courts in nearly every federal circuit have imposed: mandated penile plethysmography testing.

The penile plethysmograph (PPG) is a treatment and diagnostic tool that measures a man’s arousal to sexually deviant stimuli. The test subject attaches a small mechanical device to his penis and is presented with audio or visual stimuli depicting normalized sexual behavior and coerced sex or child pornography. The PPG measures changes in the subject’s penis size as he is presented with different stimuli.

This Note argues that mandated PPG testing should be eliminated as a condition of federal supervised release. The test infringes on a constitutionally protected liberty interest against unwanted bodily intrusions and, as only the Second Circuit has held, any condition of supervised release that infringes on a constitutionally protected right may be mandated only where it is narrowly tailored to serve a compelling government interest. Because there are a number of viable, less intrusive alternatives, PPG testing as it stands today is not narrowly tailored enough to serve a compelling government interest.

As an alternative, district court judges should suggest the test as a voluntary treatment option. Making the test voluntary avoids the constitutional issues. Moreover, PPG test results are most useful when the subject is a willing participant and many of the reliability and validity issues subside when the test is not mandated. Voluntary PPG testing is appropriate both legally and scientifically and should be the only means by which PPG testing is used moving forward.

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INTRODUCTION

Try to picture Darren Sharper. Mr. Sharper was a successful professional football player accused of raping nine women. After initially denying the allegations, Mr. Sharper pled guilty to two counts of forcible rape, one count of simple rape, two counts of rape of an intoxicated victim, and one count of attempted sexual assault. Mr. Sharper committed sexual offenses against at least nine women and is now a convicted sex offender.

After pleading guilty to his crimes, Mr. Sharper was placed on supervised release for the rest of his life. As a condition of his supervised release, Mr. Sharper will be subject to a form of punishment few people are aware of—a lifetime of penile plethysmography (PPG) testing. PPG testing is a scientific assessment technique used to measure a man’s deviant sexual arousal to certain audio and visual stimuli. In theory and in practice, the arousal measurements are used to predict the subject’s potential for recidivism. Additionally, erectile response data can be used to target sexually deviant arousal, which can be used to guide treatment programs and assess the effectiveness of treatment.

The procedure generally begins with a clinician placing the test subject in a room by himself and explaining what the test entails. The subject is instructed to connect a measurement device to the midshaft of his penis and become fully aroused, either by self-stimulation or otherwise. The initial self-stimulation sets a baseline level against which to judge any subsequent arousal. The device will measure the subject’s arousal by detecting any slight variation in the blood flow to his penis.

After the man’s initial arousal subsides, he is shown a variety of audio or visual stimuli—including sexually violent scenes, scenes that mimic or

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3. Id.
5. Deviant sexual preferences are “recurring intense sexually arousing fantasies, sexual urges or behaviors, generally involving (1) nonhuman objects, (2) the suffering or humiliation of oneself or one’s partner, or (3) children or other nonconsenting persons.” Tony Ward & Anthony R. Beech, An Integrated Theory of Sexual Offending, 11 AGGRESSION & VIOLENT BEHAV. 44, 56 (2005). When used in this Note, sexually deviant arousal refers to the third category described above.
6. There is an alternative test for women, but it is not widely used and is not addressed in this Note. See Jason R. Odeschoo, Of Penology and Perversity: The Use of Penile Plethysmography on Convicted Child Sex Offenders, 14 TEMP. POL. & C.R. L. REV. 1, 2 n.9 (2004).
7. Id. at 9.
8. Id.
9. Id. at 6–7.
display child pornography, and sex between two consenting adults. As the man’s penis enlarges, clinicians seek insight into the subject’s innermost thoughts and sexual fantasies.

PPG testing is not uncommon. The test is a component of many sex offender treatment programs and is most often used to guide and track an offender’s treatment. As of 2009, 28 percent of inpatient treatment programs and 37 percent of outpatient programs use the test. Most of the participants in these programs are mandated to be there by the criminal justice system. Further, PPG testing has explicitly been ordered as a condition of supervised release in district courts within nearly all of the federal circuits. To quote Judge Marsha Berzon of the Ninth Circuit, “[a]lthough one would expect to find a description of such a procedure gracing the pages of a George Orwell novel rather than the Federal Reporter, plethysmograph testing has become routine in the treatment of sexual offenders and is often imposed as a condition of supervised release.”

Mr. Sharper’s case was highlighted above to illuminate that this Note treads in murky waters. Mr. Sharper is an unsympathetic character, and as one reads the description of his crimes above, that reader invariably will feel strongly that Mr. Sharper should be punished for those crimes and monitored and treated after his release. That same reader, however, likely was shocked upon reading the description of PPG testing above and would

10. Id. at 9, 35.
11. ROBERT J. McGRATH ET AL., CURRENT PRACTICES AND EMERGING TRENDS IN SEXUAL ABUSER MANAGEMENT: SAFER SOCIETY 2009 NORTH AMERICAN SURVEY 1, 60 (2010). But see Odeshoo, supra note 6, at 7 (noting that different studies have varied as to how prevalent the use of PPG testing is).
12. Due to mandatory reporting laws, those who are seeking treatment but have yet to be convicted of an offense are unlikely to voluntarily submit to a treatment program. See Telephone Interview with Dr. William Murphy, Professor of Psychiatry, Univ. Tenn. Cr. Health Sci. in Memphis (Nov. 2, 2015).
13. See United States v. Medina, 779 F.3d 55, 72 (1st Cir. 2015); United States v. Malenya, 736 F.3d 554, 563 n.1 (D.C. Cir. 2013); United States v. McLaurin, 731 F.3d 258, 260 (2d Cir. 2013); United States v. Dougan, 684 F.3d 1030, 1036 (10th Cir. 2012); United States v. Rhodes, 552 F.3d 624, 627–28 (7th Cir. 2009); United States v. Lee, 502 F.3d 447, 450 (6th Cir. 2007); Weems v. Little Rock Police Dep’t, 453 F.3d 1010, 1013 (8th Cir. 2006); United States v. Weber, 451 F.3d 552, 570 (9th Cir. 2006); Coleman v. Dretke, 395 F.3d 216, 223 (5th Cir. 2004); United States v. Dotson, 324 F.3d 256, 258 (4th Cir. 2003); Walker v. United States, Nos. 7:09-CV-90060, 7:07CR-30 H.L., 2010 WL 4026123, at *2 (M.D. Ga. May 24, 2010) (within the 11th Circuit). Despite the widespread use of the PPG, there is a paucity of legal scholarship on the test as a condition of supervised release. The leading legal analysis of PPG testing is an article published in the Temple Political & Civil Rights Law Review in 2004 by Jason Odeshoo. See Odeshoo, supra note 6. Mr. Odeshoo’s article provides in-depth analysis on PPG testing, however, it was written prior to all but one of the landmark cases discussing PPG testing, and offered a different legal analysis, primarily relying on the First Amendment and the Fifth Amendment’s protection against self-incrimination as to why the test should be eliminated as a condition of supervised release. It is also worth noting that there is some legal scholarship discussing the use of PPG test results as evidence during trial, however, that is outside of the scope of this Note. For further discussion, see Christopher Matthews et al., Debunking Penile Plethysmograph Evidence, 28 REPORTER 11 (2001).
be happier if such testing remained in George Orwell novels as opposed to being implemented in one-third of all U.S. treatment centers. 15 And therein lies the issue this Note explores. Society needs to punish (and treat) sex offenders for their crimes, but also must not trample on their constitutional and human rights by subjecting them to such an intrusive procedure.

This tension is not an easy one to resolve, which likely contributes to a circuit split regarding both the broad and narrow issues implicated by Mr. Sharpers’s case study. Broadly, what constitutional protections are afforded to individuals on supervised release, including society’s most heinous offenders? And more narrowly, how does the mandated imposition of PPG testing as a condition of supervised release fit into that analysis?

This Note argues that only the Second Circuit has correctly answered the broader question. While there is an inevitable friction between supervised release and liberty, constitutionally protected liberties may only be infringed upon where the infringement is narrowly tailored to serve a compelling government interest.

Further, this Note argues that no appellate court has correctly answered the narrow question presented above. First, this Note explains that PPG testing infringes on a constitutionally protected liberty. Accordingly, it should only be permitted if it is narrowly tailored to serve a compelling government interest. This Note explains that, as the test stands today, PPG testing cannot pass constitutional muster.

This Note is organized into four parts. Part I provides background information on both PPG testing and supervised release. Part II explains the scientific debate regarding PPG testing. It highlights that even after forty years of studying the test, researchers are conflicted as to its appropriate uses. Part III addresses the legal debate surrounding PPG testing, including: an explanation of constitutionally protected liberty interests, how appellate courts review conditions of supervised release that infringe on those liberties, how circuit courts have come to different conclusions regarding whether mandated PPG testing infringes on those liberties, and the various ways courts have ruled on the mandated use of PPG testing as a condition of supervised release.

Part IV seeks to resolve the broad and narrow issues discussed above. As a threshold matter, PPG testing implicates a constitutionally protected liberty interest. And, as held by only the Second Circuit, any condition of supervised release that infringes on a liberty interest should be subject to strict scrutiny. Because there are viable alternatives to PPG testing and because of the test’s lack of reliability and validity, mandated PPG testing in its current form will never survive exacting review. Instead, PPG testing should be suggested as a voluntary component of a more comprehensive treatment program because it is only useful enough to justify its intrusive nature when subjects voluntarily submit to the test.

15. See McGrath et al., supra note 11, at 60.
I. A BRIEF HISTORY OF PENILE PLETHYSMOGRAPHY TESTING AND SUPERVISED RELEASE

Sexual offenses are particularly devastating crimes that cause many innocent people to suffer severe psychological damage. Moreover, sexual offenses are high-frequency crimes. Measurements that assist in identifying potential offenders, or help to understand those that offend, are valuable to both the penal system and mental health professionals. At the same time, even sex offenders retain at least some level of humanity, and testing methods should not be unnecessarily intrusive or humiliating. The federal supervised release statute codifies this sentiment by explicitly barring any condition of supervised release that unnecessarily infringes on the liberties of the offender.

PPG testing seemingly pushes the boundary between what we consider appropriate assessment and unnecessarily intrusive treatment. Indeed, the imposition of PPG testing has bred controversy since the test’s inception. The test has complex roots, which help illuminate the controversy behind the test today.

This part provides background information on PPG testing and supervised release that is helpful to understand the legal questions implicated by the imposition of the test. Part I.A provides a history of PPG testing and a description of how the test is administered. Part I.B discusses the legislative history and stated goals of supervised release.

A. An Overview of PPG Testing

This part provides background information on PPG testing. Part I.A.1 discusses the history of the PPG, and Part I.A.2 explains how the test is generally administered today.

1. History of Penile Plethysmography

The penile plethysmograph dates back to 1908, when it was used on dogs to test the effect of drugs aimed at regulating blood flow. By 1930, European doctors were using penile plethysmographs on patients who were experiencing erectile dysfunction to see if they ever became erect at night while sleeping. In 1957, a Czech scientist named Kurt Freund invented the penile plethysmograph as it is known today. Freund’s intent was “to understand deviant male sexuality by measuring it.”

17. Id.
18. Id.
21. Id.
23. Id.
Freund invented his machine when homosexuality was criminalized in Czechoslovakia. The state forced Freund to use his PPG to “cure” or “change” homosexual men’s deviant impulses. The aversion therapy consisted of “giving the patient an electric shock whenever the plethysmograph showed he was [sexually aroused by] men.” Freund, however, opposed the persecution of homosexuals, and in 1960 he posited that homosexuality was “incurable.” Based on Freund’s findings as a result of his PPG tests, Czechoslovakia decriminalized homosexuality in 1961, becoming one of the first countries to do so.

In 1968, Freund fled Czechoslovakia and settled in Canada. There, he used his machine to target sexually deviant pedophilic interests before his death.

In 1966, a scientist named John Bancroft and two of his colleagues at the Department of Psychiatry at St. George’s Hospital in London created a slightly different PPG machine and used it to test pedophiles. Bancroft showed pictures of children to the test subjects and instructed them to concentrate on sexually stimulating fantasies. When the subject’s penis became erect over a certain threshold level, the clinician administered “painful electric shocks” to the subject’s arm.

By 1969, PPG testing had made its way to America. The test was used in the United States to aid in diagnosing sexual deviancy and to punish test subjects via shock when they displayed deviant arousal. By 1986, PPG testing was used in approximately 30 percent of sex-offender treatment centers in the United States, a rate that has remained relatively unchanged since.

2. Measurement Methods

There are two general methods used in PPG testing—volumetric and circumferential.

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25. See id.; see also Friedman, supra note 22, at 232.
27. See Sokolova, supra note 24, at 86.
28. See id.
29. See Friedman, supra note 22, at 232–33.
30. See id. at 233.
32. Id.
33. Id.
35. Id.
36. See McGrath et al., supra note 11, at 60.
Freund’s PPG testing is commonly referred to as the “volumetric method.”

Freund’s machine was a glass tube that went over the man’s flaccid penis. The tube was filled with air and sealed with the “ominous-sounding ‘locknut.’” After being “strapped in,” the subject would be shown suggestive pictures or reading material, and as blood rushed to the man’s penis it would enlarge and displace the air in the tube. Electric wires attached to the tube measured even slight changes in the air volume inside of the glass, signifying to the clinician that the subject was aroused. Levels of arousal could be traced to the volume of air displaced.

Bancroft invented what he considered to be a less cumbersome and cheaper PPG testing method that is referred to as the “circumferential method.” Bancroft’s test used “a mercury strain gauge inside a stretchable band.” The band is usually a silicone ring wrapped around the penis. The mercury in the band surrounds the flaccid penis and is plugged with electrodes. As the penis’s circumference expands, the mercury is thinned out against the ring and increases the resistance, which the electrodes pick up to measure expansion of the penis.

The volumetric method is considered to be the more accurate and sensitive of the two, as it can detect even “the smallest changes in penis diameter.” The volumetric method, however, is more expensive and cumbersome to administer. Thus, the circumferential method is used more frequently.

Regardless of the method employed, there is a documented lack of standardization in the administration of PPG testing. Below, however, is

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37. See Odeshoo, supra note 6, at 6.
38. Friedman, supra note 22, at 231.
39. Id.
40. See id.; see also Odeshoo, supra note 6, at 6.
41. Odeshoo, supra note 6, at 6.
42. Id. at 6–7.
43. Friedman, supra note 22, at 232 n.*.
44. See Odeshoo, supra note 6, at 6.
45. See id.
47. Dominique Bourget & John M.W. Bradford, Evidential Basis for the Assessment and Treatment of Sex Offenders, 8 Brief Treatment & Crisis Intervention 130, 132 (2008).
48. See Laws, supra note 46, at 85; Odeshoo, supra note 6, at 7.
49. Laws, supra note 46, at 85. The results of both tests are equally reliable if a subject can reach 10 percent of full erection. See Vladimir Coric et al., Assessing Sex Offenders, 2 Psychiatry (Edgmont) 26, 27 (2005), http://www.ncbi.nlm.nih.gov/pmc/articles/PMC2993520/pdf/PE_2_11_26.pdf [https://perma.cc/3A3N-YTQ9]; see also Bourget & Bradford, supra note 47, at 132. When the penis is at the early stages of erection, under 10 percent, it usually thins out and expands lengthwise, which would not be picked up by the circumferential method and is the reason why the volumetric is considered the more sensitive of the two. See William D. Murphy & Howard E. Baribaree, Assessments of Sex Offenders by Measures of Erectile Response: Psychometric Properties and Decision Making 22 (1994).
a general description of how PPG testing is currently administered via the circumferential method.

In the supervised release context, PPG examinations are usually administered in privately operated treatment centers under contract with government probation services. The subject of the test and the administering clinician are usually in separate rooms, but it is important that the two can communicate with each other during the test. Clinicians may be separated from subjects by a window, one-way mirror, or a curtain if microphones are not available. The subject is instructed by the clinician to attach the gauge to the midshaft of his penis. Once the gauge is attached, the plethysmograph can be calibrated to set a baseline level and a ceiling for arousal. To set the ceiling, the patient must achieve a full erection, either by self-stimulation or by viewing sexually explicit material that he finds arousing. This process is generally called the “warm-up.” Once the subject “has regained the detumescent state, the testing can begin.”

The stimuli presented during the test can come in the form of audio or visual depictions of sexual activity. There is great variation among operators as to what stimuli they present to their subjects. Some offenders are even shown real child pornography. A number of treatment centers obtained confiscated visual images from law enforcement; however, this was unsurprisingly met with resistance and is now uncommon. Other treatment centers have used photos of nude children who were “reared in a nudist environment,” with written consent from the child’s parents. Due to the legal and moral implications of using real photographs of children,

51. See Odesho, supra note 6, at 8.
52. See Barker & Howell, supra note 20, at 16.
53. Id.; see also Odesho, supra note 6, at 8.
54. See Friedman, supra note 22, at 234.
55. See Barker & Howell, supra note 20, at 16.
56. See Odesho, supra note 6, at 9.
57. See Barker & Howell, supra note 20, at 16.
58. See Odesho, supra note 6, at 9.
60. Id. at 17.
61. See Dean Tong, The Penile Plethysmograph, Abel Assessment for Sexual Interest, and MSI-II: Are They Speaking the Same Language?, 35 AM. J. FAM. THERAPY 187, 191 (2007); see also Penile Plethysmograph (PPG), THE SKEPTIC’S DICTIONARY, http://skepdic.com/penilep.html (last visited Sept. 6, 2016) [https://perma.cc/9HKF-5Y4J]. There is a separate set of legal issues raised by using confiscated child pornography in the treatment of sex offenders, however, that is outside the scope of this Note. For a more in-depth discussion of the use of child pornography in the administration of PPG testing and issues raised with heightened sexualization of children by the government, see Odesho, supra note 6, at 33–42.
62. See Glen Kercher, Use of the Penile Plethysmograph in the Assessment and Treatment of Sex Offenders: Report of the Interagency Council on Sex Offender Treatment to the Senate Interim Committee on Health and Human Services and the Senate Committee on Criminal Justice 4 (1993) (report submitted to the Texas legislature); Odesho, supra note 6, at 33–42.
63. See Kercher, supra note 62, at 4.
however, the use of computer-fabricated images of children or nonsexual photographs of clothed children are becoming more common in the administration of PPG testing. The Association for the Treatment of Sexual Abusers (ATSA) makes clear that the administrator of the PPG must be “aware of the applicable legislation in their jurisdiction regarding the possession of sexually explicit materials.”

Regardless of how the test is administered, the stimuli presented will generally contain sexually deviant scenes and some “adult-appropriate sexual imagery,” but will occasionally depict neutral scenes, like clouds or trees. The PPG gauge measures the subject’s physiological response to the stimuli, and the clinician makes a determination as to the subject’s sexually deviant arousal. The test generally lasts ninety minutes or more.

**B. An Overview of Supervised Release**

Before discussing the scientific and legal debate regarding PPG testing, it is important to understand the context in which the test is imposed within the legal system. This Note specifically addresses the use of PPG testing as a condition of federal supervised release, and this section explains what supervised release is.

In 1984, Congress enacted 18 U.S.C. § 3583(d), granting courts the authority to impose terms of supervised release on convicted defendants. Section 3583(d) authorized courts to order conditions of supervised release with which defendants had to comply to the extent that the conditions were “reasonably related” to deterrence, rehabilitation, or protecting the public. Conditions can only be imposed to the extent they “involve[] no greater deprivation of liberty than is reasonably necessary.” Since the statute’s enactment, the relevant portion has not been amended.

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66. ASS’N FOR THE TREATMENT OF SEXUAL ABUSERS, PRACTICE GUIDELINES FOR THE ASSESSMENT, TREATMENT, AND MANAGEMENT OF MALE ADULT SEXUAL ABUSERS 71 (2014) [hereinafter PRACTICE GUIDELINES]. Many jurisdictions do not consider sexualized visual stimuli “pornography” if it is possessed by a licensed treatment center and is part of a standardized stimulus set. See Kercher, supra note 62, at 5.
67. Balmer & Sandland, supra note 64, at 603.
68. See Matthews et al., supra note 13, at 11.
69. See id.; see also Barker & Howell, supra note 20, at 17 (explaining that PPG measurements are used to determine whether the subject is “overly stimulated to an inappropriate fantasy as compared with an appropriate fantasy”).
70. See Tong, supra note 61, at 195.
71. PPG test results have also been used in other preconviction or presentencing capacities, but those are outside of the scope of this Note. See Matthews et al., supra note 13, at 13.
73. Id. § 3583(d)(1).
74. Id. § 3583(d)(2).
Supervised release was implemented with the primary goal of easing a defendant’s “transition into the community after the service of a long prison term . . . or to provide rehabilitation.”

A benefit of supervised release is that it gives judges more discretion as to whether postrelease supervision is necessary, as opposed to the more static statutory requirements of parole. Further, judges could order mandatory conditions of supervised release specifically tailored to the needs of the defendant, as long as the conditions were “reasonably related to the history and characteristics of the offender and the nature and circumstances of the offense, the need . . . to protect the public, and the need to provide the defendant with needed education or vocational training, medical care, or other correctional treatment.” However, judicial discretion is not unlimited. The statute provides that whatever conditions are imposed may not involve a “greater deprivation of liberty than is reasonably necessary” to protect the public and to provide needed rehabilitation or corrections programs.

Under 18 U.S.C. § 3583(d), PPG testing has been imposed as a condition of supervised release in nearly every federal circuit. District court judges impose mandatory PPG testing under the umbrella of numerous mandated physiological procedures. For example, an offender may be ordered to “abide by all rules, requirements, and conditions of sex offender treatment program(s) including submission to testing such as . . . [the] penile plethysmograph.” An offender is not released early if he agrees to submit to the treatment; rather, a judge either mandates the treatment as a condition of supervised release or does not impose the test at all.

II. THE SCIENCE BEHIND PPG TESTING

Despite the widespread use of PPG testing as a condition of supervised release, legal scholarship on the test is practically nonexistent. There has been only one in-depth review of PPG testing—a 2004 article in the Temple Political & Civil Rights Law Review written by Jason Odeshoo, which has since become the leading (and only significant) legal scholarship on the PPG. Other legal scholars have provided cursory critiques of the test, but have failed to meaningfully engage with the test’s utility or limitations. The same cannot be said, however, of the scientific community. For more than forty years, doctors, researchers, and clinicians have engaged in meaningful review and study of the PPG to understand what the test can and should be
used for. This part discusses the scientific debate regarding PPG testing, including whether the test can measure sexually deviant arousal or predict the risk of recidivism. This part also explains how reliability and validity issues lead to the test’s limited utility. Then, this part discusses some alternatives to PPG testing.

A. What Does PPG Testing Measure and What Do Its Results Say About the Risk of Reoffense?

PPG testing and the study of erectile response data are based on the “sexual preference hypothesis.”83 The sexual preference hypothesis is a “two-stage explanation of deviance.”84 The first stage suggests that sex offenders will show optimal arousal to deviant sexual cues or behavior.85 Second, sex offenders will express “a preference for these cues or for behaviors motivated by the stronger sexual arousal.”86 Because people are more likely to perform behavior that optimizes rewards or personal satisfaction, it follows that men with sexually deviant preferences will act on those preferences.87 In short, sex offenders are aroused by deviant acts and are more likely to act on their arousal.

Assuming that the sexual preference hypothesis is true, it raises two questions: First, do erectile response data gathered from PPG testing accurately measure deviant sexual arousal? More specifically, is it true that sex offenders will show greater arousal to sexually deviant stimuli than to normalized or socially acceptable stimuli? Conversely, do nonoffenders show more arousal to normalized stimuli than to sexually deviant stimuli? The short answer is that PPG testing can measure deviant sexual arousal, though it has limitations.

Second, assuming that PPG testing can accurately determine a test subject’s preference for sexually deviant material, what does that tell us about the subject’s risk of acting on that behavior? Or, what can PPG testing tell us about the risk of recidivism? This question is far more difficult to answer and has led to years of scholarly debate. These two questions are discussed in turn.

1. Can PPG Testing Accurately Measure Sexually Deviant Arousal?

As stated above, the short answer is that PPG testing can measure sexually deviant arousal. However, the test has significant limitations.

PPG testing’s effectiveness rests on the premise that a man’s level of tumescence is an objective measure of his sexual arousal to stimuli. Erectile responses, however, are not based on a stable individual trait, and
thus it is hard to directly correlate tumescence with arousal. Erectile responses are the result of a number of factors, including arousal, but also the subject’s emotional state, fatigue, intoxication, recency of an orgasm, and other unknown endocrine factors. Even the gender of the clinician may affect the subject’s level of tumescence.

Moreover, sexual stimulus is actually compound stimuli made up of multiple components. For instance, a subject may be presented with sadomasochistic sexual scenes that also include explicit descriptions of foreplay and intercourse. If the subject reaches 40 percent of full tumescence, was that a result of the violent depictions, the foreplay, the intercourse, or some combination of all three? That 40 percent may be a result of arousal to the violence. Or it may be a result of the intercourse, which would normally arouse the male to 80 percent, but his arousal was partially inhibited due to the violence. Based on the problem illustrated by this hypothetical, PPG test results can be unambiguous only when at least two depictions are shown, when all extraneous elements are similar as possible, and when there is only one key difference.

The selection of stimuli has a tremendous impact on the erectile response measures. For example, some studies have found that audio stimuli present different and more consistent results than videos, while other studies have found that only when the stimuli depict particularly violent scenes can the data be useful. Indeed, the selection of stimuli has such a great impact on the erectile response measures that “an experimenter could construct stimulus materials for use in a study in which any desired result could be obtained.”

Understanding that the clinician exhibits such a great degree of control over the test makes it troubling that there is practically no standardization in the administration or scoring of PPG testing. PPG testing was originally created as a research tool, not a method of clinical assessment. Thus no manual or standard practices were developed.

88. See Murphy & Barbaree, supra note 49, at 11, 13.
89. See id. at 11.
90. Id. at 17 (explaining that one study found that nonoffenders’ arousal levels are higher when a female clinician administers the test).
91. See id. at 31–34.
92. See id. at 33.
93. Id.
94. See Barbaree, supra note 84, at 120.
95. See Murphy & Barbaree, supra note 49, at 39.
97. See Barbaree, supra note 84, at 120.
98. See Murphy & Barbaree, supra note 49, at 23–30; Laws, supra note 46, at 87; William O’Donohue & Elizabeth Letourneau, The Psychometric Properties of the Penile Tumescence Assessment of Child Molesters, 14 J. Psychopath & Behav. Assessment 123, 123–74 (1992); Simon & Schouten, supra note 50, at 510–11; see also Telephone Interview with Dr. D. Richard Laws, supra note 65 (when asked about standardization of PPG testing, he explained that “there are no rules”).
99. See Murphy & Barbaree, supra note 49, at 85–86.
The lack of standardization across PPG testing leads to serious questions regarding the procedure’s scientific reliability. Reliability refers to “the extent to which an experiment, test, or measuring procedure yields the same results on repeated trials.”\textsuperscript{100} “[U]nless a test can be shown to be reliable, there is essentially no point in giving it further consideration.”\textsuperscript{101} PPG’s lack of reliability comes from a lack of standardization in administering and scoring the test, and the problem of faking.

In 1995, a researcher named R.J. Howes conducted a study assessing the reliability of PPG testing and the lack of standardization in the test’s administration.\textsuperscript{102} Howes examined forty-eight treatment centers throughout the United States and Canada.\textsuperscript{103} The centers had been administering PPG tests for an average of 5.5 years.\textsuperscript{104} The clinicians administering the test had been doing so for an average of 3.4 years.\textsuperscript{105} Seventy-six percent of the clinicians reported that they had been trained for one week or less, and 18 percent responded that they had never been formally trained to administer the PPG at all.\textsuperscript{106} A former president of ATSA noted that the lack of training was “truly appalling.”\textsuperscript{107} Without training and without standard procedural guidelines, the following aspects of PPG testing vary greatly from center to center:

(1) Type of gauge used (mechanical, mercury) and transducer placement
(2) Type of stimuli used (audiotapes, slides, videotapes)
(3) Content of stimuli used (differences in models)
(4) Duration of stimulus presentation (2 sec to > 4 min)
(5) Length of interstimulus (detumescence) intervals (fixed time vs. return to baseline)
(6) Nature of stimulus categories sampled . . .
(7) Number of categories and of stimuli used for each category
(8) Instructions to subjects (imagine sexual behavior with target vs. no instructions)
(9) Whether a warm-up was used and number of assessment sessions
(10) Type of recording instrumentation used . . .
(11) Whether calibration was used to correct for any nonlinear characteristics of recording
(12) Data sampling rate (every 5 sec vs. every min)
(13) Whether methods were used to attempt to assess for faking
(14) Gender and other characteristics of the evaluator
(15) Type of data transformation ($z$-score vs. a deviance index)
(16) Characteristics of the laboratory . . .
(17) Type of sample and setting (outpatient, prison).\textsuperscript{108}

\textsuperscript{100} Reliability, MERRIAM-WEBSTER’S COLLEGIATE DICTIONARY (11th ed. 2006).
\textsuperscript{101} Marshall & Fernandez, supra note 96, at 133.
\textsuperscript{102} Richard J. Howes, A Survey of Plethysmographic Assessment in North America, 7 SEXUAL ABUSE 9, 14 (1995). While published more than twenty years ago, Howes’s findings are likely as relevant today as they were back then. Not only had PPG testing already been in use for thirty years by that point, but any changes in PPG testing since are aesthetic “artifacts of technological change. The basic procedure is what it has always been and is still subject to all of the same shortcomings.” Laws, supra note 46, at 99.
\textsuperscript{103} See Howes, supra note 102, at 14.
\textsuperscript{104} Id.
\textsuperscript{105} Id. at 15.
\textsuperscript{106} Id.
\textsuperscript{107} See Laws, supra note 46, at 87.
\textsuperscript{108} Id. at 87–88.
Howes concluded that such inconsistencies across treatment facilities “discredit” PPG testing and cast serious doubt on its results.109

Further, there are numerous documented issues that arise from “faking.”110 As both supporters and critics of PPG testing agree, those subjects who wish to trick the PPG will likely be successful.111 Individuals may fake responses by fantasizing about deviant sexual scenes while being presented with nondeviant stimuli or may try to distract themselves while deviant stimuli are presented.112 Even tests designed to ensure that the subject is paying attention to the stimuli are not foolproof, as many studies have shown that men can exert control over their erectile response or suppress their response entirely.113

Despite the significant limitations of PPG testing, it is still “generally considered the most accurate measure of sexual arousal.”114 PPG testing’s erectile response data can be used to distinguish between offenders and nonoffenders, as well as to distinguish between different subgroups of offenders.115

PPG testing’s data is most useful to distinguish between child sex offenders and nonoffenders.116 Specifically, nonfamilial child molesters show significantly greater arousal to children than nonoffenders do.117 Incestuous child molesters do not always exhibit strong erectile responses to children but show only moderate arousal to adult targets and moderate arousal to adolescent females.118 Men who have not offended show strong responses to adult women and substantially less response to children or adolescents.119 One meta-analysis of a number of PPG testing studies could find only two studies in which pedophilic offenders could not be distinguished from other offenders.120 Thus, PPG testing has utility in determining arousal to children, which can be helpful in guiding treatment programs.

109. See Howes, supra note 102, at 22.
110. See Murphy & Barbaree, supra note 49, at 70–72.
111. Telephone Interview with Dr. D. Richard Laws, supra note 65; Telephone Interview with Dr. William Murphy, supra note 12.
112. See Tong, supra note 61, at 190.
113. Telephone Interview with Dr. D. Richard Laws, supra note 65; see also Barker & Howell, supra note 20, at 23.
116. See Murphy & Barbaree, supra note 49, at 35–42.
117. Id. at 35.
118. Id. at 36.
119. Id.
120. Id. at 39. But see Bourget & Bradford, supra note 47, at 133 (“Although numerous studies have reported the accurate classification of child molesters using PPG, few of the observed differences have been replicated.”).
The data are not as conclusive regarding identification of rapists. Although a number of studies have shown that PPG testing can distinguish rapists from nonrapists, a significant number of researchers suggest that it cannot. Those in the latter explain that a number of studies have resulted in ambiguous results or even severe misclassifications of rapists and nonrapists, and thus the studies that have distinguished between rapists and nonrapists lack reliability and should not be trusted.

Perhaps unsurprisingly, a high percentage of nonoffenders are misclassified as rapists when coercive stimuli are presented. In fact, nonoffenders may show equal or more deviant arousal to coerced or violent scenes than rapists.

PPG testing has very limited utility in measuring past offense history for rapists as well. PPG tests were unable to determine subjects’ number of victims or whether violence was used and to what extent violence was used in the commission of the subjects’ rapes.

PPG test results have meaningfully distinguished rapists from nonrapists when the patients themselves identify as force-oriented in their behavior toward women. Those findings are representative of many other studies that have found that, in general, those who admit their conduct are much more likely to be correctly classified as an offender than those who deny their deviant arousal. One study found that 90 percent of “admitters” were correctly classified as sex offenders using a PPG, while only 55 percent of “non-admitters” were correctly classified. In the context of postrelease supervision, however, the discrepancy between admitters and nonadmitters becomes less relevant because those subjects have already been convicted of a sexual offense and thus are less likely to be in denial.

Again, despite these limitations, the majority position is that PPG testing is a valid measure of deviant sexual interest. While erection response is just one factor within the subject’s overall sexual arousal, “it is the one behavior in the chain that can be (more or less) objectively measured.”

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121. See Barker & Howell, supra note 20, at 20; Vernon L. Quinsey et al., Actuarial Prediction of Sexual Recidivism, 10 J. INTERPERSONAL VIOLENCE 85, 86 (1995); see also Murphy & Barbaree, supra note 49, at 42–44; Howes, supra note 102, at 12.

122. See Murphy & Barbaree, supra note 49, at 44; Howes, supra note 115, at 191.

123. See Howes, supra note 115, at 184–85.

124. See Murphy & Barbaree, supra note 49, at 60; Howes, supra note 115, at 191.

125. Howes, supra note 115, at 191; see also Friedman, supra note 22, at 233.

126. See Murphy & Barbaree, supra note 49, at 51.

127. Id.

128. Id. at 49–50; see also Quinsey et al., supra note 121, at 101–02.

129. Murphy & Barbaree, supra note 49, at 40.

130. Telephone Interview with Dr. William Murphy, supra note 12.

131. See Laws, supra note 46, at 90; see also Murphy & Barbaree, supra note 49, at 55 (noting that PPG testing is “the best measure of erotic preference”); Barker & Howell, supra note 20, at 22 (explaining that PPG testing is the “best objective measure of male sexual arousal because blood flow to the genital area does not seem to be influenced by factors other than sexual eroticism”); Howes, supra note 102, at 12.

132. Laws, supra note 46, at 91.
Even those who criticize the use of PPG testing acknowledge that it can, at times, accurately measure deviant sexual arousal.133

2. What Do PPG Test Results Say About the Risk of Recidivism?

Understanding that PPG testing can measure deviant sexual arousal does not answer what may prove to be an even more important question: What is the relationship between PPG results and recidivism?134 “It is, after all, the behavior that is the crime, not the arousal . . . .”135

When a man engages in sexually deviant behavior, it may or may not be based on his preference for sexually deviant activity.136 Nondeviant activity simply may have been unavailable to the offender.137 By contrast, a man may be aroused by sexually deviant stimuli, but engage in exclusively nondeviant activity because he is aware of social and penal sanctions that come with acting on his deviant arousal.138 Such concerns, among others, leave PPG testing’s ability to predict the risk of recidivism largely unsettled.139

Supporters of PPG testing believe that clear evidence that an offender has deviant sexual interests is a significant predictor of reoffense.140 Indeed, some studies found that PPG testing has a significant relationship with rates of recidivism, albeit a small one.141 One study found that PPG evaluation “was the most powerful predictor of recidivism.”142 However, even supporters of the PPG believe that test results should be used in conjunction with other assessments to judge the patient’s risk of reoffense.143

Other researchers believe the relationship between PPG testing and recidivism is usually weak144 or, further, “that predicting who is at risk to commit a sexual crime and who is likely to recidivate cannot be predicted with even a moderate level of confidence.”145 Due to issues with the standardization of PPG testing, the test’s lack of reliability, and the potential for faking, PPG testing’s ability to predict the “likelihood of reoffending is beyond the scope of the test’s validity.”146

Critics of the PPG find it problematic that some researchers have been content to use erectile response data without conducting meaningful

133. Telephone Interview with Dr. D. Richard Laws, supra note 65.
134. See Howes, supra note 102, at 12.
135. FRIEDMAN, supra note 22, at 233.
136. See MURPHY & BARBAREE, supra note 49, at 13, 15.
137. Id. at 16.
138. Id.
139. See Laws, supra note 46, at 93.
140. Telephone Interview with Dr. William Murphy, supra note 12.
141. Quinsey et al., supra note 121, at 100–01.
143. See Howes, supra note 102, at 12.
144. See FRIEDMAN, supra note 22, at 233; MURPHY & BARBAREE, supra note 49, at 53–54; Coric et al., supra note 49, at 27; Laws, supra note 46, at 93.
145. Barker & Howell, supra note 20, at 22.
146. Id.
inquiries into issues that implicate the test’s validity. The lack of standardization across the administration and scoring of the PPG makes any data derived from the procedure “idiosyncratic, unamenable to normative comparisons, if not impossible to interpret from a traditional psychometric perspective.” Moreover, there may be significant biases resulting from studies that exclude data from nonresponders or low responders, an exceedingly common practice among PPG practitioners. The sheer lack of evaluations of the test’s validity regarding the biases associated with the exclusion of nonresponders suggests that PPG test results cannot be trusted to predict recidivism.

Further, just as the risk of faking casts doubt on the reliability of PPG testing, it also is usually identified as the most significant hurdle to using test results to forecast recidivism. As one study found, “[s]erious as [standardization] problems are, they are secondary to a more fundamental problem: the utility of the plethysmograph with offenders is severely handicapped by subjects’ ability to distort their responses.” The consensus that fakers will be successful in faking casts significant doubt on any predictive value of the PPG.

Considering PPG’s validity issues, many researchers believe the test should not be used as a predictor of recidivism, especially when making decisions regarding periods of civil confinement, setting the length of a prison sentence, or determining an offender’s culpability. Even those who believe PPG testing has clinical utility believe that PPG testing does not have a place prior to treatment, meaning that it should be excluded from the postconviction/presentencing context. More ardent critics believe that because PPG testing is susceptible to a high rate of false negatives and false positives, either through faking or failure to interpret the data correctly, it should never be used as a predictor of recidivism.

B. PPG’s Limited Utility

At least one doctor believes that the PPG has a fairly strong relation to recidivism. If a patient shows erectile responses to children, yet no erectile response to adults, that has meaning. Despite the controversy surrounding PPG testing, this idea is plainly uncontroversial. Problems

147. See Simon & Schouten, supra note 50, at 511.
148. Id. at 510–11.
149. See id. at 511.
150. See id.
151. See id.; see also Telephone Interview with Dr. D. Richard Laws, supra note 65.
152. Simon & Schouten, supra note 50, at 511.
153. Telephone Interview with Dr. D. Richard Laws, supra note 65; Telephone Interview with Dr. William Murphy, supra note 12.
154. See Simon & Schouten, supra note 50, at 511.
155. See Barker & Howell, supra note 20, at 22.
156. Telephone Interview with Dr. William Murphy, supra note 12.
157. See Howes, supra note 102, at 13; Simon & Schouten, supra note 50, at 510–11; see also Telephone Interview with Dr. D. Richard Laws, supra note 65.
158. Telephone Interview with Dr. William Murphy, supra note 12.
159. Id.
arise when test subjects show no response—those results can likely be thrown out—but to ignore clear signs that the subject has deviant sexual arousal is throwing out the baby with the bath water.

If present, sexually deviant interests need to be targeted. Identifying sexually deviant arousal has value in pinpointing a treatment target and measuring the success of a treatment program as it progresses. “[M]ost clinicians recognize [the procedure] as enormously beneficial.” Identifying an offender’s sexual urges is the first step in managing those urges, and PPG testing can provide the basis for identifying deviant arousal.

This theory is only viable for those who show arousal to the deviant stimuli. Subjects who fail to produce erectile responses present “noninterpretable” data, even though such failure could be due to a number of factors, including faking or a real lack of sexual arousal to the stimuli. Rapists and incestuous child sex offenders often provide ambiguous sexual arousal results and have similar responses to nonoffending populations. It is nonfamilial child molesters whose erectile data appear most deviant, but even within that subgroup, “no more than 50 [percent] of those who admit to offending and who have multiple victims display deviant arousal.”

If PPG testing is only useful for those offenders who admit their deviant thoughts and harbor some of the most deviant impulses imaginable, one might posit that those individuals would be identified without the use of PPG testing. Further, if the test, at its best, can identify 50 percent of one subgroup of offenders, is it worth subjecting every offender to such an intrusive procedure? It is questionable whether the test, with its limited capacity to measure sexual arousal or predict deviant behavior, has any meaningful utility.

C. PPG Testing’s Utility in Postconviction Treatment

To better understand how the scientific debate regarding PPG testing applies to its use in the context of supervised release, Dr. William Murphy and Dr. D. Richard Laws were interviewed for this Note. Dr. Murphy and Dr. Laws both have extensive experience with the test, and come out on opposing sides regarding the use of PPG as a condition of supervised release. Dr. Murphy is a Professor of Psychiatry at University of Tennessee Center for Health Science in Memphis. Dr. Murphy has administered and observed thousands of PPG examinations, and he published a monograph

160. Id.; see also MURPHY & BARBAREE, supra note 49, at 72.
161. Telephone Interview with Dr. William Murphy, supra note 12.
162. Howes, supra note 102, at 22.
163. Telephone Interview with Dr. William Murphy, supra note 12.
164. Id.; see also MURPHY & BARBAREE, supra note 49, at 85; LAWS, supra note 46, at 97.
165. MURPHY & BARBAREE, supra note 49, at 85.
166. See Marshall & Fernandez, supra note 96, at 139.
167. Id.
168. See id.
on PPG testing in 1994. Dr. Laws is the director of Pacific Behavioural Assessment in Victoria, British Columbia, a group committed to studying and developing methods for treating sex offenders. Dr. Laws also served as the president of ATSA for one year. Dr. Laws trained and supervised clinicians in the administration of PPG testing off and on for over thirty years.

Dr. Murphy explained that the test is a useful clinical tool to identify a subject’s treatment target and guide treatment programs moving forward. He saw no problem with the use of the test in postrelease supervision. Because risk assessments are very valuable in planning treatment, and because the PPG has a fairly strong relation to reoffending for those who show sexually deviant arousal, it can be a useful tool for treatment programs. Dr. Murphy views the test as a way to help the patient achieve the best results because it helps tailor the treatment plan to his specific needs and assists the patient in managing deviant urges.

Dr. Laws disagrees. Dr. Laws believes the test has no utility whatsoever for monitoring offenders in the community. It is far too easy for the subjects to suppress erectile responses and cheat the test. Thus, he thinks the test should not be imposed on anyone. However, Dr. Laws acknowledged the test’s utility in identifying deviant arousal on the “front-end of treatment” to help get a picture of the subject’s arousal patterns. He suggested that doctors should inform patients about PPG testing, along with viable alternatives, and that the patient should be able to choose which procedure to undergo. If the PPG is mandated, however, the test is practically worthless due to the ease with which the subject can suppress his arousal.

Dr. Laws is not the only critic who acknowledges that the test can be useful. Most doctors who have analyzed PPG testing acknowledge that the test can be used as part of a broad and comprehensive treatment package. However, as this section makes clear, there are a number of contradictory studies and findings as to what the appropriate use of PPG testing is. After extensive analysis of the test, one may easily find himself just as confused about the proper uses of it as he was before he tried to understand it. Indeed, reasonable scientific minds have differed on its utility for decades.

171. Telephone Interview with Dr. William Murphy, supra note 12.
172. Id.
173. Id.
174. Telephone Interview with Dr. D. Richard Laws, supra note 65.
175. Id.
176. Id.
177. Id.
178. Id.
D. Alternatives to PPG Testing

PPG testing is not the only method used to measure sexually deviant arousal. There are a number of alternatives to PPG testing. This Note discusses two: self-reporting and the Visual Reaction Time (VRT) test.179

Self-reporting is just as it sounds, where the patient reports his own levels of deviant sexual arousal. Self-reporting assessments are usually conducted through questionnaires but can also be done via card sorting. Card sorting is where a subject views multiple slides and ranks how attractive he finds each slide. One study found that card sorting is more accurate in classifying sex offenders and sex offender subgroups than PPG testing.182

In practice, card sorts and other self-report measures are often used in conjunction with PPG testing or other assessment methods.183

Self-reporting measures are also easily susceptible to faking, though, and thus many of the issues with the reliability and validity of the PPG are applicable to self-reporting. Ultimately, the study cited above found that the most predictive results came from a combination of data from PPG testing and card sorting.185

VRT testing may be the most viable alternative to PPG testing. In fact, it is already used in more treatment centers than PPG testing.186 VRT testing is premised on the assumption that a man will view an image for longer if he is interested in the type of person or activity displayed in that image. Dr. Gene Abel, a pioneer of VRT testing, used the test to successfully discriminate between child sex offenders and nonoffenders as well as to distinguish between child sex offenders and nonchild sex offenders. Dr. Abel combined VRT testing with self-reporting questionnaires, together commonly referred to as “the Abel Assessment,” to achieve results that “speak[] the same language” as PPG testing.189

179. While the VRT is being presented as an alternative to PPG testing, it is already used more frequently. See McGrath et al., supra note 11, at 59. It is also important to note that the polygraph test may be used in lieu of the PPG. Polygraph testing, however, raises some other constitutional concerns beyond the scope of this Note. For an in-depth discussion of the use of the polygraph on convicted sex offenders, see Douglas C. Maloney, Lies, Damn Lies, and Polygraphs: The Problematic Role of Polygraphs in Postconviction Sex Offender Treatment (PCSOT), 84 Temp. L. Rev. 903 (2012).

180. See id.


182. Laws, supra note 46, at 92.

183. See id.

184. Telephone Interview with Dr. D. Richard Laws, supra note 65.

185. Laws et al., supra note 181, at 1307.

186. See McGrath et al., supra note 11, at 59.

187. See Tong, supra note 61, at 191.

188. Id.

189. Id. at 200. This is not to say that the Abel Assessment does not have its own detractors. See In re CDK, 64 S.W.3d 679, 683–84 (Tex. App. 2002) (“For all we know, they and their components could be mathematically based, founded upon indisputable empirical research, or simply the magic of young Harry Potters’ mixing potions at the Hogwarts School of Witchcraft and Wizardry.”).
Dr. Laws, an advocate for VRT testing, acknowledged that a willing treatment participant might get finer-grained results from the PPG than from the VRT. However, if the assessments are mandated, VRT is likely the better test because it is harder to fake and less intrusive than the PPG. Additionally, VRT testing is far less expensive and cumbersome, and it can be completed in a few minutes, as opposed to the ninety-minute duration of the PPG.

III. DIVIDED RULINGS ON THE USE OF PPG TESTING AS A CONDITION OF SUPERVISED RELEASE

Despite PPG’s real limitations, it has been imposed as a condition of supervised release in district courts within nearly every federal circuit. Some circuits have afforded trial courts deference in imposing PPG testing, while other circuits have found that PPG testing is only appropriate in select cases or none at all. It is no surprise that judges across the country have reached different conclusions regarding PPG testing, given that the scientific community has hotly debated the test since its inception.

In addition to the debate regarding the reliability and validity of the test, there are two legal issues at play as courts review PPG testing as a condition of supervised release. The first is whether mandated PPG testing infringes on a constitutionally protected liberty interest against unwanted bodily intrusions. The second is what the standard of review is for conditions of supervised release that infringe on constitutionally protected rights. Circuits are split on both issues.

In addition to the aforementioned narrow issues, mandated PPG testing as a condition of supervised release also implicates the question of what constitutional protections should be afforded to individuals on supervised release. Do offenders, including sex offenders, retain their fundamental liberty interests? And if so, how should appellate courts review conditions of supervised release that infringe upon constitutionally protected rights? This part analyzes all of these questions.

Part III.A explains what a constitutionally protected liberty interest is. Next, Part III.B discusses how different circuits have treated conditions of supervised release that infringe on liberty interests. Then, Part III.C explores whether PPG testing does, in fact, implicate a liberty interest. Finally, Part III.D discusses how appellate courts have reviewed PPG testing as a condition of supervised release.

A. Constitutionally Protected Liberty Interests

The Fifth and Fourteenth Amendments to the Constitution guarantee that no person may be deprived of life, liberty, or property without the due

190. Telephone Interview with Dr. D. Richard Laws, supra note 65.
191. Id.
192. Id.
193. See supra note 13 and accompanying text.
process of law.194 The Due Process Clause protects more than just procedural “fair process.”195 It also provides substantive due process, which ensures “heightened protection against government interference with certain fundamental rights and liberty interests.”196 Those certain fundamental rights and liberty interests include those enumerated in the Bill of Rights, as well as rights and liberties “deeply rooted in this Nation’s history and tradition.”197 Such deeply rooted interests include the right to marry, the right to direct the education and upbringing of one’s children, and the right to bodily integrity.198 The Constitution provides heightened legal protection when the government attempts to infringe on these rights.

The government can infringe on constitutionally protected rights and liberties when the infringement is narrowly tailored to serve a compelling government interest. The U.S. Supreme Court has not created bright-line rules to determine where a compelling government interest exists. Instead, it addresses the issue on a case-by-case basis.199 The Court often takes “an astonishingly casual approach to identifying compelling interests”200 or a “‘know it when I see it’ approach.”201

To be narrowly tailored, an infringement on a constitutionally protected right must be specifically and narrowly framed to fit the compelling goal.202 Narrow tailoring does not require exhaustion of every conceivable alternative, but “requires serious, good faith consideration of workable” alternatives.203 In practice, narrow tailoring has frequently been construed to mean that the “the classification at issue must ‘fit’ with greater precision than any alternative means.”204

B. Appellate Review of Conditions of Supervised Release That Infringe on Fundamental Liberty Interests

While the Constitution provides heightened protection against government interference of fundamental rights and liberty interests, “[i]t is beyond hope of contradiction that those who are convicted of crimes against society lose a measure of constitutional protection.”205 Indeed, there is a natural tension between fundamental liberty interests and conditions of supervised release. By its very nature, supervised release restricts the liberty of those under its regime.

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194. U.S. CONST. amends. V, XIV.
196. Id. at 720.
197. Id. at 721 (quoting Moore v. East Cleveland, 431 U.S 494, 503 (1977)).
198. Id. at 720.
200. Id. at 1321.
203. Grutter, 539 U.S. at 339.
205. United States v. Smith, 436 F.3d 307, 310 (1st Cir. 2006).
The federal supervised release statute, 18 U.S.C. § 3583(d), requires supervised release conditions to be reasonably related to deterrence, rehabilitation, or protecting the public and proscribes unnecessary deprivations of the defendant’s liberty. Circuits are split about what level of scrutiny should be used to review conditions of supervised release that infringe on fundamental liberty interests. Some circuits read heightened scrutiny into § 3583(d) where fundamental rights are implicated by the condition of release, but others do not.

The Ninth Circuit has held that the reasonableness of any condition of supervised release depends on whether the district court’s record “reflects rational and meaningful consideration” of the enumerated factors in § 3583(d). In practice, however, the Ninth Circuit does not generally require district judges to explain on the record why certain conditions of supervised release were imposed. Only where a condition of supervised release implicates a significant liberty interest does the judge need to explain why the condition is necessary. That does not mean that conditions of supervised release that infringe on fundamental rights are rejected per se—it simply means the judge imposing them must adequately explain the necessity of those conditions.

The Ninth Circuit has pointed to three conditions of supervised release that always implicate fundamental liberty interests. Those conditions are (1) “compelling a person to take antipsychotic medication,” (2) the imposition of PPG testing, and (3) chemical castration over an objection from the subject. If any of these are imposed as conditions of supervised release, the district court must explain on the record why the condition is reasonably related to deterrence, rehabilitation, and protecting the public and why the condition is not an unnecessary deprivation of the defendant’s liberty.

Other circuits are more deferential to district judges. For example, the Seventh Circuit explained that it “will not strike down conditions of release, even if they implicate fundamental rights, if such conditions are reasonably related to the ends of rehabilitation and protection of the public from recidivism.” The court made clear that “[t]he constitutional rights of a convict on supervised release or parole are not unfettered,” though the court failed to elucidate in what ways their constitutional rights were preserved, if at all. Thus, in the Seventh Circuit, all conditions of supervised release are reviewed under the same level of scrutiny. That is not to say that the

206. See supra Part I.B.
207. United States v. Wolf Child, 699 F.3d 1082, 1090 (9th Cir. 2012) (quoting United States v. Rudd, 662 F.3d 1257, 1261 (9th Cir. 2011)).
208. Id.
209. Id. at 1094.
210. United States v. Stoterau, 524 F.3d 988, 1005 (9th Cir. 2008) (also holding that VRT testing, an alternative to PPG, did not infringe on any constitutionally protected rights).
211. Id.
212. United States v. Schave, 186 F.3d 839, 843 (7th Cir. 1999).
213. Id. at 844.
Seventh Circuit has never struck down conditions of supervised release,\textsuperscript{214} it simply means the Seventh Circuit does not see a distinction between those conditions of supervised release that implicate liberty interests and those that do not.

The Fourth Circuit punted on deciding the issue of whether conditions of supervised release that infringe on fundamental rights are subject to heightened scrutiny in 2012 and has not addressed the issue since.\textsuperscript{215} However, the court has been very deferential to district court judges in the past. When the Fourth Circuit ruled on a case in which PPG testing was mandated as a condition for supervised release, the court did not review the condition under heightened scrutiny.\textsuperscript{216}

The First, Third, Sixth, and D.C. Circuits all apply varying degrees of heightened scrutiny to conditions of supervised release that infringe on fundamental rights. The First Circuit held that conditions that implicate a “very significant deprivation of liberty . . . require a greater justification.”\textsuperscript{217} However, as conditions become “fairly standard,” they meet less exacting scrutiny, even if they involve a significant deprivation of liberty.\textsuperscript{218}

The Sixth Circuit ruled that conditions of supervised release “that implicate fundamental rights . . . are subject to careful review, but if primarily designed to meet the ends of rehabilitation and protection of the public, they are generally upheld.”\textsuperscript{219}

In the Third Circuit, conditions of supervised release that infringe on constitutionally protected rights, such as “restrictions on employment and First Amendment freedoms,” are acceptable as long as they are narrowly tailored to serve deterrence or protection of the public.\textsuperscript{220} While that standard is practically strict scrutiny, the court somewhat retreated, holding that most conditions of supervised release will be upheld even if they infringe on fundamental rights, as long as they are “directly related” to advancing deterrence, rehabilitation, or protecting the public.\textsuperscript{221}

The D.C. Circuit acknowledged that the statutory language of 18 U.S.C. § 3583(d) does not create a clear standard for lower courts to follow.\textsuperscript{222}

\textsuperscript{214} The Seventh Circuit has struck down a lifetime ban of consumption of alcohol, requiring computer and Internet monitoring, and banning unsupervised contact with children, though those conditions were vacated for being overly vague. See United States v. Kappes, 782 F.3d 828 (7th Cir. 2015).

\textsuperscript{215} United States v. Worley, 685 F.3d 404, 408–09 (4th Cir. 2012) (noting that the Eighth Circuit requires that “conditions that interfere with a defendant’s constitutional liberties, such as raising his child or associating with a loved one, must be adequately explained or else their imposition undermines the fairness and integrity of our judicial proceedings” but reserving judgment on the issue).

\textsuperscript{216} See United States v. Dotson, 324 F.3d 256, 261 (4th Cir. 2003); see also discussion infra Part III.D.

\textsuperscript{217} United States v. Del Valle-Cruz, 785 F.3d 48, 62 (1st Cir. 2015).

\textsuperscript{218} Id. at 65 (Torruella, J., concurring).

\textsuperscript{219} United States v. Ritter, 118 F.3d 502, 504 (6th Cir. 1997) (emphasis added).

\textsuperscript{220} United States v. Crandon, 173 F.3d 122, 128 (3d Cir. 1999).

\textsuperscript{221} Id. (quoting Ritter, 118 F.3d at 504).

\textsuperscript{222} United States v. Malenya, 736 F.3d 554, 559–60 (D.C. Cir. 2013).
The circuit explained that “reasonably necessary” is “quite vague in many legal contexts,” but § 3583(d) “is tethered to deprivation of liberty in terms that in effect require the court to choose the least restrictive alternative.”223 The D.C. Circuit found justification for heightened scrutiny in the statutory language itself. The word “liberty” implies that courts must choose the least restrictive alternative or, in other words, narrowly tailor conditions of supervised release.

The Second Circuit also has notably weighed in on the standards of appellate review for conditions of supervised release that infringe on constitutionally protected rights. Then-Judge Sonia Sotomayor authored the opinion in United States v. Myers,224 where she laid out a clear legal standard that must be met by any condition of supervised release that infringes on fundamental rights.225

Then-Judge Sotomayor explained that “the statutory architecture for evaluating conditions of supervised release” is the same whether those conditions infringe on fundamental interests or not.226 As the statute requires, each condition must carefully be examined “to determine whether it is ‘reasonably related’ to the pertinent factors, and ‘involves no greater deprivation of liberty than is reasonably necessary.’”227 However, her analysis did not end there. She explained that while the “statutory architecture” remains the same for all conditions of supervised release, the application of the architecture “must reflect the heightened constitutional concerns” where they are implicated.228 Thus, where a condition of supervised release infringes on a constitutionally protected liberty interest, “a deprivation of that liberty is ‘reasonably necessary’ only if the deprivation is narrowly tailored to serve a compelling government interest.”229

Then-Judge Sotomayor explained that the statute cannot override constitutional protections—even in the context of supervised release. Thus, if any condition of supervised release infringes on a constitutionally protected right, it must be reviewed under strict scrutiny—just as any other government action that infringes on a fundamental right must be.

C. Does PPG Testing Implicate a Fundamental Right?

Almost every circuit court that has considered challenges to PPG testing has concluded that the test is more intrusive than most conditions of supervised release. In fact, some circuits have concluded that the test is so intrusive that it violates constitutionally protected substantive due process. To better understand the courts’ analysis of PPG testing, it is important to

223. Id. at 559.
224. 426 F.3d 117 (2d Cir. 2005).
225. See id. at 125–26.
226. Id.
227. Id. at 126.
228. Id. at 125–26.
229. Id. at 126.
understand the evolution of the constitutional protection against unwanted bodily intrusions.

Since 1952, the Supreme Court has recognized a constitutionally protected right against unwanted bodily intrusions. In *Rochin v. California*, the Court held that the police violated the defendant’s right to substantive due process where they pumped the defendant’s stomach so that he would vomit contraband he had swallowed. The Court held that such intrusion into one’s body “shocks the conscience” and was “bound to offend even hardened sensibilities.” *Rochin*, however, did not create a per se ban on unwanted government intrusions or manipulations of one’s body.

In 1957, the Supreme Court retreated on some of the ground made by *Rochin*. In *Breithaupt v. Abram*, the Court found no due process violation where blood was drawn from an unconscious defendant’s arm to determine whether he had alcohol in his system following a driving accident. The Court reasoned that the procedure of drawing blood has become routine in everyday life and, in contrast with the stomach pump used in *Rochin*, drawing blood “would not be considered offensive by even the most delicate.”

There is no bright-line test to determine whether a procedure implicates a fundamental liberty interest against unwanted bodily intrusion. *Rochin* and *Breithaupt*, however, created a rough framework in which the routineness and offensiveness of the procedure are analyzed to determine whether it implicates a fundamental liberty interest.

Applying the holdings from *Rochin* and *Breithaupt* to PPG testing, the First Circuit found that the test is “hardly routine.” The court added “[o]ne does not have to cultivate particularly delicate sensibilities to believe degrading the process of having a strain gauge strapped to an individual’s genitals while sexually explicit pictures are displayed in an effort to determine his sexual arousal patterns. The procedure involves bodily manipulation of the most intimate sort.” Ultimately, the First Circuit was reviewing a civil rights action and the court only answered the question of whether a reasonable fact finder could find that forcing someone to undergo PPG testing involves a substantive due process violation. The court did not answer the question itself.

232. Id. at 172.
233. Id.
236. Id. at 435–36; see also Schmerber v. California, 384 U.S. 757, 759–60 (1966) (holding that even where the defendant is conscious and objects, drawing blood is not a violation of due process).
238. *Harrington*, 977 F.2d at 44.
239. Id.
240. Id.
241. Id. at 45.
The First Circuit again analyzed PPG testing more than twenty years later, but this time it considered a constitutional challenge to the test’s imposition.\textsuperscript{242} The court did not explicitly rule on whether PPG testing infringes on a fundamental right, but it did cite to a D.C. Circuit dissent that said PPG testing “implicates significant liberty interests.”\textsuperscript{243} Additionally, the court noted that there is a clear distinction between PPG testing and other conditions of supervised release.\textsuperscript{244} The court specifically highlighted the test’s “distinctive invasiveness and unusual physical intrusion into an individual’s most intimate realm.”\textsuperscript{245}

By contrast, the Fifth Circuit in \textit{Coleman v. Dretke},\textsuperscript{246} held that PPG testing and other aspects of sex-offender treatment programs do not infringe on a constitutionally protected right.\textsuperscript{247} The court did note, however, that sex-offender treatment programs are “qualitatively different” from other conditions of supervised release, and thus offenders subject to those conditions are entitled to additional procedural safeguards.\textsuperscript{248} It is worth noting, though, that the Sixth and Ninth Circuits have cited the \textit{Coleman} opinion for the proposition that PPG testing \textit{does} implicate a liberty interest.\textsuperscript{249}

The Sixth Circuit has not directly addressed whether PPG testing infringes on a constitutionally protected right against unwanted bodily intrusions, but in \textit{United States v. Lee},\textsuperscript{250} the court has looked to its sister circuits’ opinions in noting that “penile plethysmograph testing implicates significant liberty interests.”\textsuperscript{251} The Sixth Circuit added that the test might be held to violate substantive due process in future decisions.\textsuperscript{252} The Seventh Circuit also has not directly decided whether PPG testing infringes on a liberty interest. However, it cited \textit{Lee} for the proposition that PPG testing, “implicates significant liberty interests, and further, its reliability is questionable.”\textsuperscript{253} Both the Sixth and Seventh Circuits punted on the question because they doubted that the intrusive PPG still would be in use by the time challenges to the testing became ripe in those circuits.\textsuperscript{254}

The D.C. Circuit also has not directly ruled on whether PPG testing infringes on a fundamental liberty interest. In \textit{United States v. Malenya},\textsuperscript{255}
however, the court vacated every condition of an offender’s supervised release, including PPG testing. In a dissenting opinion, Judge Brett Kavanaugh disagreed with the majority and would not vacate any of the conditions except for PPG testing because of “the significant liberty interests infringed by this invasive procedure.”

The Second, Ninth, and Tenth Circuits explicitly have held that PPG testing implicates a constitutionally protected liberty interest. The Second Circuit held that “there can be no serious doubt that the liberty interests” implicated by mandated PPG testing “are of a high order.” The Ninth Circuit held that “the procedure implicates a particularly significant liberty interest.” The Tenth Circuit also held that making offenders “submit to possible penile plethysmograph testing” implicates “significant liberty interests.”

Ultimately, there is a split among the circuits regarding whether mandated PPG testing infringes on a constitutionally protected liberty interest. However, every court that has taken up a challenge to the test has noted, to varying degrees, that the test is especially intrusive and different from other conditions of supervised release.

D. Standards of Review for Mandated PPG Testing

There is great variance among the circuits regarding how to review lower courts’ imposition of PPG testing as a condition of supervised release. There is, unsurprisingly, a correlation between those circuits that find the test infringes on a fundamental liberty interest and those that subject the imposition of PPG testing to more exacting appellate review, and vice versa.

The Fourth Circuit has been extremely deferential to district courts’ imposition of PPG testing. In United States v. Dotson, Dotson pled guilty to attempting to receive in commerce a child pornography videotape. He corresponded with an undercover agent and asked for videotapes of two girls between nine and twelve years old and provided graphic depictions of what he wanted on the tapes. As a condition of his supervised release, Dotson was required to participate in treatment programs, including PPG testing, at the discretion of his probation officer.

Dotson challenged the potential use of the PPG, but the Fourth Circuit rejected his challenge, ruling that PPG testing serves the purpose of

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256. See id. at 562.
257. Id. at 566 (Kavanaugh, J., dissenting).
258. United States v. McLaurin, 731 F.3d 258, 261 (2d Cir. 2013) (quoting Bailey v. Pataki, 708 F.3d 391, 402 (2d Cir. 2013)).
262. 324 F.3d 256 (4th Cir. 2003).
263. Id. at 258.
264. Id.
265. Id.
deterrence, protection of the public, and rehabilitation and would not unreasonably deprive a convicted sex offender of his liberty. The court did not actually analyze, however, whether imposition of the test resulted in an unnecessary deprivation of liberty. In fact, the court made no mention of 18 U.S.C. § 3583(d) at all. Rather, the Fourth Circuit accepted the imposition of PPG testing, explaining that it is useful to treat sex offenders—relying on the reputation of the test as “an accepted tool” and “a standard practice” in the field of sex offender treatment. The court classified the test as “an accepted tool” based on expert testimony excerpted from a 1997 District of Maine case, where the expert said it was “pretty much a standard practice in treatment programs for sex offenders,” but later described the test as “the least worse of a bad lot.” The Dotson Court did not address whether PPG testing implicates a liberty interest and summarily dismissed the challenge to PPG testing in two paragraphs.

By contrast, three years later, the Ninth Circuit held that PPG testing implicated a significant liberty interest and thus must be subject to heightened scrutiny. In United States v. Weber, Weber was arrested after child pornography was found on his computer when he brought it to a shop for a routine repair. Weber was sentenced to a prison term, followed by three years of supervised release. Among the conditions of his supervised release, Weber was required to participate in sex-offender treatment programs, “including submission to . . . plethysmograph.”

The Ninth Circuit held that generally a district court is not required to explain a condition of supervised release on the record. If, however, the condition involves restriction on an “especially significant liberty interest,” then the court must make findings addressing why the condition meets “one or more of the factors listed in § 3583(d)(1).” The court went on to hold that when PPG testing is considered by a district court, the court must also take into account the existence of alternatives to the test, such as self-reporting and the Abel Assessment. Only if those alternatives are inadequate can PPG testing be mandated. In Weber, the district judge had not made any findings regarding PPG testing or alternatives, so the case was remanded.

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266. Id. at 260–61.
267. See id. (explaining that no condition can involve a greater deprivation than is reasonably necessary, but not applying the facts of the case to that standard).
268. Berthiaume, 142 F.3d at 17.
269. See Dotson, 324 F.3d at 260–61.
270. See United States v. Weber, 451 F.3d 552, 563 (9th Cir. 2006).
271. 451 F.3d 552 (9th Cir. 2006).
272. Id. at 555.
273. Id. at 559.
274. Id. at 560 (quoting United States v. Williams, 356 F.3d 1045, 1057 (9th Cir. 2004)).
275. Id. at 567–68.
276. Id. at 568.
277. Id. at 570.
a condition of supervised release, the judge was instructed to make on the record findings justifying the condition.\textsuperscript{280}

\emph{Weber} created heightened scrutiny of the imposition of PPG testing, but it did not set out a strict scrutiny scheme for future analysis. The imposition of PPG testing only needs to be “reasonably related” to the stated goals of supervised release, as opposed to needing to serve a compelling government interest, the standard required by strict scrutiny. The Ninth Circuit left the door open for PPG testing, explaining that it may be a valid condition of supervised release, although “a thorough inquiry is required” before a court may order it.\textsuperscript{281}

In a concurring opinion, Judge John Noonan expressed his view that the court should have taken the opportunity to eliminate the use of PPG testing altogether. He explained that he would hold the “Orwellian procedure . . . to be always a violation of the personal dignity of which prisoners\textsuperscript{282} are not deprived.”\textsuperscript{283} Judge Noonan did not directly cite to any precedent regarding which liberty interest PPG testing infringes. However, he was unequivocal in his view that PPG testing infringes on a fundamental right.\textsuperscript{284} He wrote: “The procedure violates a prisoner’s bodily integrity by affecting his genitals. The procedure violates a prisoner’s mental integrity by intruding images into his brain. The procedure violates a prisoner’s moral integrity by requiring him to masturbate.”\textsuperscript{285} Further, Judge Noonan emphasized that convicts do not lose their humanity. He explained that the government would certainly not be allowed to force a convict into prostitution to help secure evidence of a crime or to force a criminal to perjure himself to secure a conviction of another.\textsuperscript{286} Judge Noonan found these situations analogous to mandated PPG testing, adding that “a prisoner should not be compelled to stimulate himself sexually in order for the government to get a sense of his current proclivities.”\textsuperscript{287} He concluded by writing, “[t]here is a line at which the government must stop. Penile plethysmography testing crosses it.”\textsuperscript{288}

Taking it a step further than the majority in \emph{Weber}, and aligning more closely with Judge Noonan, the Second Circuit held that PPG testing triggers a liberty interest so great that it can only be imposed where the testing “is narrowly tailored to serve a compelling government interest.”\textsuperscript{289} In \emph{United States v. McLaurin},\textsuperscript{290} the Second Circuit explained that convicted sex offenders retain their right to substantive due process, “even

\textsuperscript{280} Id.
\textsuperscript{281} Id. (quoting \textit{Williams}, 356 F.3d at 1055).
\textsuperscript{282} This case involved conditions of supervised release, though Judge John Noonan used the word “prisoner” repeatedly throughout his concurring opinion.
\textsuperscript{283} \textit{Weber}, 451 F.3d at 570 (Noonan, J., concurring).
\textsuperscript{284} See id. at 570–71.
\textsuperscript{285} Id.
\textsuperscript{286} Id. at 571.
\textsuperscript{287} Id.
\textsuperscript{288} Id. (emphasis added).
\textsuperscript{289} \textit{United States v. McLaurin}, 731 F.3d 258, 262 (2d Cir. 2013) (quoting \textit{United States v. Myers}, 426 F.3d 117, 126 (2d Cir. 2003)).
\textsuperscript{290} 731 F.3d 258 (2d Cir. 2013).
if it is sharply diminished in many respects.” The court held that when PPG testing is mandated, “[w]e think there can be no serious doubt that the liberty interests implicated here are of a high order.”

In McLaurin, the defendant was a registered sex offender who had pled guilty in 2001 to taking photographs of his thirteen-year-old daughter with her breasts exposed. In 2011, McLaurin failed to register as a sex offender in Vermont after he moved there. He pled guilty to violating the Sex Offender Registration and Notification Act (SORNA) and was sentenced to fifteen months’ imprisonment and a term of supervised release. A condition of his release was that he was required to “participate in an approved program of sex offender evaluation and treatment, which may include . . . plethysmograph examinations.”

As stated above, the Second Circuit had previously held in Myers that any condition of supervised release that infringes on a liberty interest must pass strict scrutiny. Because the court found that PPG testing infringes on a liberty interest, it is appropriate only if it is narrowly tailored to serve a compelling state interest. The Second Circuit then quoted a portion of Judge Noonan’s concurrence in Weber, explaining that PPG testing crosses a line “at which the government must stop.” Because viable alternatives to PPG testing existed, the condition did not pass strict scrutiny and was vacated.

The Second Circuit went further, explaining that even if PPG testing was indisputably reliable, it would not be appropriate because “supervised release is properly directed at conduct, not at daydreaming.” The court dismissed the trial judge’s classification of PPG testing as a “standard” procedure. First, the Second Circuit found that a procedure where a man’s penis is hooked up to a device while he is presented illicit pornographic material is far from “standard.” The Second Circuit held that before a district court can impose a nonstandard condition as intrusive as PPG testing, the court must, at a minimum, make defendant-specific findings “that the test is therapeutically beneficial, that its benefits substantially outweigh any costs to the subject’s dignity, and that no less intrusive alternative exists.” Next, the Second Circuit held that if PPG is

291. Id. at 261.
292. Id. (quoting Bailey v. Pataki, 708 F.3d 391, 402 (2d Cir. 2013)).
293. Id. at 260.
294. Id.
295. Id.
296. Id. at 259 (quoting United States v. McLaurin, No. 2:11-cr-00113 (WKS) (D. Vt. Aug. 22, 2012)).
297. Id. at 261.
298. Id. at 262 (quoting United States v. Weber, 451 F.3d 552, 571 (9th Cir. 2006) (Noonan, J., concurring)).
299. Id. at 264.
300. See id. at 263 (“[A] proposition about which we have serious doubts.”).
301. Id.
302. See id.
303. See id.
304. Id.
ordered as a condition of supervised release, the trial court must make findings that the technique is reliable and effective, subject to peer review, and generally accepted in the scientific community.305

The Second Circuit also held that PPG testing could not be construed as a means to protect the public. Even if there was a strong correlation between sexual thoughts and rates of recidivism, “unacted-upon prurient sexual thoughts, just like a defendant’s abstract beliefs, however obnoxious to most people, may not be taken into consideration by a sentencing judge.”306 Even convicted sex offenders are entitled to freedom of thought, and the court found “no reasonable connection between fluctuating penis size and public protection.”307

Finally, the Second Circuit found it perplexing to impose PPG testing as a means of deterring future criminal conduct.308 The panel questioned why the government would require a convicted sex offender to become aroused to sexual conduct that closely mirrors the conduct for which he was incarcerated.309 If anything, the court posited, the PPG testing would reinforce sexually deviant thoughts by regularly presenting sexually deviant imagery to the offender.310 In sum, the Second Circuit held that, as applied, PPG testing did not serve any of the goals of supervised release and was a greater deprivation of liberty than necessary.311

In 2015, the First Circuit weighed in on the issue of PPG testing as a condition of supervised release in United States v. Medina.312 Moises Medina was a convicted sex offender who violated SORNA.313 Medina failed to register as a sex offender after moving to Puerto Rico, and, as a result, he was sentenced to thirty months’ imprisonment and twenty years of supervised release.314 As a condition of his supervised release, he was required to attend a treatment program and submit to PPG testing if mandated by the program.315

The First Circuit held that PPG testing, “whether contingent on a treatment program’s prescription or otherwise” was unreasonable as applied to Medina.316 The court quoted one of its decisions from 1991, describing PPG testing as “bodily manipulation of the most intimate sort” and

305. Id. (adopting the Daubert Standard, usually reserved for admissibility of scientific evidence at trial, for imposing PPG testing as a condition for supervised release, adding yet another hurdle to its imposition).
307. Id. at 264.
308. See id.
309. Id.
310. Id. But see Telephone Interview with Dr. D. Richard Laws, supra note 65 (explaining that he saw no problem with showing offenders stimuli that represented depictions of their offenses in a treatment setting).
311. McLaurin, 731 F.3d at 260–64.
312. 779 F.3d 55 (1st Cir. 2015).
313. Id. at 57.
314. Id.
315. Id. This is a common condition—mandated if the (mandatory) treatment program requires it.
316. Id. at 69.
explaining that “[o]ne does not have to cultivate particularly delicate sensibilities to believe degrading the process of having a strain gauge strapped to an individual’s genitals while sexually explicit pictures are displayed in an effort to determine his sexual arousal patterns.”

The court, however, was not prepared to categorically rule out the use of PPG testing in the context of supervised release for convicted sex offenders. Instead, the First Circuit required district courts to provide “substantial justification, at least once a defendant objects,” as to why PPG testing is a necessary condition of supervised release. Adopting the Ninth Circuit’s approach, the First Circuit now requires its district courts to make thorough on the record findings as to all of the statutory requirements of 18 U.S.C. § 3583(d) and any viable alternatives before mandating PPG testing.

Notably, the court in Medina included the following exchange from the lower court:

[Medina’s Counsel]: Okay. And just for purposes of the[] record, we object to the imposition of that treatment, in particular to the PPG. We understand it’s invasive, it’s humiliating, it hasn’t even passed the Daubert standard.

THE COURT: What he has done in his life is humiliating.

[Medina’s Counsel]: Excuse me?

THE COURT: What he has done in his life is humiliating to victims.

Now we’re talking about humiliating him.

This exchange shows the district judge’s punitive intent when implementing PPG testing as a condition of Medina’s supervised release. Such punitive conditions are directly contrary to the stated goals of supervised release, which are to help reintegrate the defendant back into society and continue to protect the public. The First Circuit’s inclusion of the exchange in its opinion suggests that the panel took umbrage with the trial judge’s intent to humiliate Medina.

The Sixth and Seventh Circuits have declined to directly weigh in on the issue, despite challenges to PPG testing as a condition of supervised release brought in both circuits. Instead, the Sixth and Seventh Circuits held that

317. Id. at 71 (alteration in original) (quoting Harrington v. Almy, 977 F.2d 37, 44 (1st Cir. 1992)).
318. Id.
319. Id. at 72.
320. Id.
321. Id. (alteration in original).
322. However, there have been cases in which conditions of supervised release were put in place strictly to humiliate. While those conditions did not infringe on constitutionally protected rights, they still were mandated with the sole purpose of humiliation, and reviewing courts have been oddly deferential to such cases. See United States v. Gementera, 379 F.3d 596, 609 (9th Cir. 2004) (upholding a condition of supervised release for a convicted mail thief where the offender had to stand outside of a post office wearing a sandwich board that read: “I stole mail. This is my punishment.”).
323. See United States v. Rhodes, 552 F.3d 624, 627–28 (7th Cir. 2009); United States v. Lee, 502 F.3d 447, 450 (6th Cir. 2007).
the issue was not ripe for review because the defendants had numerous years left on their prison sentences prior to their term of supervised release when they would be subject to PPG testing. The circuits offered to take the issue up again once the defendants had been released or once the PPG testing was actually implemented, adding that the test has limitations so great that PPG testing may no longer be in favor when the defendants actually get out of prison.

IV. FINDING AN APPROPRIATE USE FOR PPG TESTING IN THE POSTRELEASE CONTEXT

The starkly different ways that circuit courts treat PPG testing is troubling. Judges seem too eager to make conclusory statements—like declaring the test standard and well accepted, or immediately rejecting it as Orwellian—without meaningfully engaging with the utility and limitations of the test. As elucidated in Part II, PPG testing deserves a more nuanced analysis.

With a better grasp of PPG testing, including how it is administered, how it should be used, and what its limitations are, this part seeks to resolve the circuit splits highlighted above, as well as offer an original solution as to how PPG testing should be used in the context of supervised release. Within that analysis, this part also seeks to resolve the broader, more difficult circuit split regarding how to review conditions of supervised release that infringe on constitutionally protected liberty interests. This part argues that only the Second Circuit has applied the correct standard of review.

Part IV.A explains that PPG testing infringes on a fundamental liberty interest. Part IV.B suggests that conditions of supervised release that infringe on constitutionally protected liberty interests should be reviewed under strict scrutiny, the Second Circuit’s standard. Then, Part IV.C suggests that because mandated PPG testing infringes on a constitutionally protected liberty interest, it can only be implemented if it passes strict scrutiny. Part IV.C also concludes that mandated PPG testing, as it stands today, cannot pass strict scrutiny and thus should not be mandated as a condition of supervised release. Finally, Part IV.D argues that PPG testing does have value in postrelease treatment, but only if it is voluntary.

A. Mandated PPG Testing Infringes on the Fundamental Right to Be Free from Unwanted Bodily Intrusions

Following *Rochin* and *Breithaupt,* the routineness and offensiveness of a procedure are often determinative of whether the procedure implicates a constitutionally protected liberty interest against unwanted bodily

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324. See *Lee,* 502 F.3d at 450; see also United States v. Kappes, 782 F.3d 828, 855 (7th Cir. 2015).
325. See *Rhodes,* 552 F.3d at 628–29; *Lee,* 502 F.3d at 451.
326. See *supra* Part III.C.
PPG testing is plainly nonroutine, and, if pumping one’s stomach is “bound to offend even hardened sensibilities,” there is no doubt that strapping a device around a man’s penis while forcing him to watch pornographic material is offensive.

Other than the Fourth Circuit, all of the courts that have confronted PPG testing acknowledge that the nature of the procedure makes it “qualitatively different” than other conditions of supervised release. To say that the PPG procedure is “standard,” as the Fourth Circuit does, is simply a mischaracterization. PPG testing is widely used in the treatment of sex offenders, but such use does not make it a “standard” or “routine” procedure. Moreover, the PPG “not only encompasses a physical intrusion but a mental one, involving not only a measure of the subject’s genitalia but a probing of his innermost thoughts as well.” PPG testing is neither routine nor standard—rather, it is an unusual intrusion into a subject’s most private areas.

The Second, Ninth, and Tenth Circuits have thus accurately found that PPG testing implicates a liberty interest—likely an interest of the “highest order.” As Judge Noonan expounded, a procedure that violates a person’s bodily integrity by affecting his genitals, mental integrity by intruding pornographic images into his head, and moral integrity by forcing him to masturbate, most certainly infringes on a fundamental right.

B. Strict Scrutiny for Conditions of Supervised Release That Implicate a Fundamental Right

As laid out in Part III.B, there is a circuit split regarding how courts review conditions of supervised release that infringe on constitutionally protected liberty interests. It is an inherently complex problem, as there will always be a tension between fundamental liberty interests and conditions of supervised release, which necessarily restrict liberty. However, Congress created a framework for courts to use when imposing conditions of release, which established that no condition can involve a “greater deprivation of liberty than is reasonably necessary.” When the deprivation is of a liberty protected by the Constitution, the stakes are raised, and it is imperative to ensure that the deprivation is not unreasonable or unnecessary.

The Second Circuit has provided the clearest and most legally sound standard for how to review conditions of supervised release that infringe on liberty interests. Any condition of supervised release must be reasonably

327. See Harrington v. Almy, 977 F.2d 37, 44 (1st Cir. 1992); see also supra Part III.C.
329. See supra Part III.C.
330. See supra notes 268–69 and accompanying text.
332. See supra Part III.C.
333. See supra note 285 and accompanying text.
334. See supra Part III.B.
335. See supra Part I.B.
336. See supra notes 226–29 and accompanying text.
related to deterrence, rehabilitation, or protecting the public, and, it cannot involve a greater deprivation of liberty than is reasonably necessary to meet the goals of supervised release.337 When the liberty in question is a fundamental liberty protected by the Constitution, however, the court’s review of the condition must “reflect the heightened constitutional concerns.”338 Where fundamental liberties are infringed upon, the condition will only survive where it is narrowly tailored to serve a compelling government interest.339 All circuits should adopt this standard.

The schemes currently used in other circuits either grant too much deference to trial judges or fail to create a clear standard to use moving forward.340 For instance, the Seventh Circuit’s holding that conditions infringing on fundamental rights are acceptable as long as they are reasonably related to rehabilitation or protecting the public flatly ignores the second prong of the supervised release statute.341 Not only must conditions be reasonably related to deterrence, rehabilitation, and protecting the public, but they also cannot unnecessarily deprive the defendant of liberty.342 The Seventh Circuit explained that those on supervised release do not have unfettered constitutional protections; however, the rule effectively strips defendants of any constitutional protections where a trial judge chooses to mandate a condition of supervised release that infringes on one.

Other circuits have attempted to craft an intermediate level of scrutiny, like the Sixth Circuit’s “careful review”343 or the Third Circuit’s requirement that conditions that infringe on constitutional rights must be “directly related” to the goals of deterrence, rehabilitation, or protecting the public.344 The intermediate standards do not provide a clear roadmap for courts to follow in future cases. What does “careful review” entail? How should courts determine if conditions are “directly related” to the goals of supervised release?

By contrast, the Second Circuit’s strict scrutiny requirement makes clear what findings must be made on the record before a condition of supervised release can deprive a defendant of his fundamental liberties.345 Where constitutionally protected liberties are at stake, clear guidelines are necessary.

337. See supra notes 226–29 and accompanying text; see also United States v. Myers, 426 F.3d 117, 125–26 (2d Cir. 2005).
338. Myers, 426 F.3d at 126.
339. Id.
340. See supra Part III.B.
341. See supra notes 212–13 and accompanying text.
342. See supra Part I.B.
343. See supra note 219 and accompanying text.
344. See supra note 220 and accompanying text.
345. If strict scrutiny is adopted for conditions of supervised release that infringe on constitutionally protected liberty interests, the compelling government interest prong of the inquiry likely will be easily satisfied. Many of the offenders, sex offenders especially, may pose a serious risk to the public or need treatment. Thus, finding ways to treat those offenders or ensure that they do not reoffend likely would be compelling government interests.
C. PPG Can Never Survive Strict Scrutiny and Thus Should Never Be Mandated

Mandated PPG testing infringes on a constitutionally protected liberty interest, and, as such, any decision to implement the test as a condition of supervised release must pass strict scrutiny. PPG testing, as it stands today, cannot survive strict scrutiny under any circumstance.

To survive strict scrutiny, PPG testing must be narrowly tailored to serve a compelling government interest. As the Second Circuit explained, to serve a compelling government interest, the test must have rehabilitative or deterrence benefits, or protect the public. The Second Circuit found that, as applied in McLaurin, PPG testing did not serve any of those goals.

The Second Circuit’s analysis failed to accurately consider PPG testing’s value. The test does, in fact, have rehabilitative utility because it can help identify treatment goals and measure the progress of sex offenders who are willing to undergo treatment. Even Dr. Laws, a harsh critic of the PPG, acknowledged that PPG testing has utility in identifying treatment targets and can be a useful treatment tool when subjects are willing participants. Thus, the test serves a compelling government interest—helping to rehabilitate sex offenders interested in receiving treatment.

However, PPG testing is not narrowly tailored to achieve this compelling government interest. Under no circumstance can PPG testing, in its present form, be narrowly tailored to serve the goals of supervised release. An infringement is not narrowly tailored where viable and less intrusive alternatives exist. In every case, there are a number of viable and less intrusive alternatives to PPG testing. Specifically, self-reporting and VRT tests, as well as combinations of the two, provide results that mimic the PPG without subjecting the test subject to a severe physical intrusion. PPG testing may collect more telling data than the alternatives where the subject is a willing participant, but when subjects reject the test and fake their responses, they are usually successful and the erectile response data can become practically useless. Thus, mandated PPG testing is no more effective than significantly less intrusive alternatives.

Moreover, a narrowly tailored procedure must be narrowly framed to “fit” the compelling interest. Mandated PPG testing is never a narrowly framed fit. There is so much doubt regarding the test’s validity and reliability, especially when it is mandated, that some argue it has no utility.

346. See supra Part III.A.
347. See supra notes 303–07 and accompanying text.
348. See supra note 311 and accompanying text.
349. See supra Part II.B–C.
350. See supra Part II.C.
351. See supra Part III.A; see also United States v. Medina, 779 F.3d 55, 73 (1st Cir. 2015); United States v. McLaurin, 731 F.3d 258, 263 (2d Cir. 2013); United States v. Weber, 451 F.3d 552, 567–68 (9th Cir. 2006).
352. See supra Part II.D.
353. See supra Part II.D.
354. See supra Part II.B–C.
355. See supra Part III.A.
once patients are forced to undergo it. Further, as argued above, the compelling government interest is present only where subjects are willing to undergo the test. It is illogical to say that mandated testing is narrowly framed to serve the goal of rehabilitation of willing treatment seekers.

The only legitimate argument in favor of mandated PPG testing is that the test may help identify treatment targets for patients who show clear deviant sexual arousal. That may be true, but at what point are we willing to accept such an intrusive test if it only works on a portion of the subjects? If 50 out of 100 patients can be helped, is that narrowly tailored? What about 5 out of 100? Such figures are unavailable and have been hotly debated within the scientific community for over forty years, with still no clear resolution. As long as such fierce scientific debate rages regarding the utility of the test when it is mandated, it cannot pass constitutional muster.

In sum, PPG testing infringes on a fundamental right against unwanted bodily intrusions, and any condition of supervised release that infringes on a fundamental right should be reviewed under strict scrutiny. Considering that after more than forty years of research, the test seems just as dubious and unreliable as it was at its inception, the test cannot currently be considered narrowly tailored when mandated. Thus, mandated PPG testing should be eliminated as a condition of supervised release.

D. Preserving PPG Testing in an Appropriate Legal and Scientific Capacity

Almost all of the analysis of the PPG within the federal legal context comes from explanations offered by the circuit judges that face challenges to mandated PPG testing. Many of the judges who have discussed the test believe that the results of the PPG could not possibly be worth the heavy price that the subjects have to pay in humiliation and loss of human dignity by undergoing the procedure. However, judges often reach that conclusion without meaningfully considering the utility that PPG testing may have. The most critical circuit judges’ analyses of the test often sound aligned with groups like the bloggers at false-rape-society.blogspot.com and fails to consider why some researchers have been content to use this test for over forty years.

Other judges took drastically different positions and were quick to dismiss any advocacy for the rights of sex offenders. Indeed, the transcript from Moises Medina’s trial presented in Part III is both troubling

356. Telephone Interview with Dr. D. Richard Laws, supra note 65.
357. See supra Part II.A–C.
358. See supra note 13 and Part III.C.
359. See supra Part II.C.
361. See supra Part III.C.
and particularly illustrative of judges who are quick to dismiss the rights of convicted sex offenders. There, the trial judge stated, on the record, “[w]hat he has done in his life is humiliating to victims. Now we’re talking about humiliating him.”

It is valuable to contrast both judicial positions with the positions of Dr. Laws and Dr. Murphy. These doctors are not in the business of humiliation or punishment. These doctors sought to treat offenders. Dr. Laws and Dr. Murphy seemed to personify the goals of supervised release: to rehabilitate, deter, and protect the public. Both have also, at points in their careers, used PPG testing to treat offenders. So, it is logical to wonder whether PPG testing should still retain a place in supervised release aimed at the rehabilitation and safe reintegration of sex offenders into our community.

The sections above show that PPG does have some utility. As Dr. Murphy put it, if an offender is tested and shows significant arousal to photographs of children, yet no arousal to consensual sex between two adults, that has meaning. That data can be used to treat the offender. Further, if this test can be used on those who are eager to be treated, how can it be banished from the postrelease supervisory regime aimed at rehabilitating and reintegrating criminals into society?

As Dr. Laws explained, however, the test loses its utility once it is imposed on an offender. Thus, the test cannot justifiably be mandated. However, even the appellate courts most scrutinizing of the test will accept mandated PPG testing as a condition of supervised release if the trial judge makes on the record findings as to its appropriateness. One may then wonder: If a pioneer of the test believes there is no justification for the test to be coercively administered, how can trial judges be expected to make on the record findings sufficient to demonstrate that the test is narrowly tailored to serve the goals of supervised release? There is simply no way for a judge to narrowly frame mandated PPG testing to serve the goals of rehabilitation, deterrence, or protecting the public.

Thus, this Note offers a resolution—a way to use PPG testing where it is appropriate both legally and scientifically: PPG testing should be suggested as a voluntary form of treatment during supervised release, but it should never be mandated.

Under this recommendation, judges could explain PPG testing to the defendant during sentencing and suggest that, if he was interested in treatment and willing to undergo the test, it may be a very helpful tool in guiding a successful treatment program. The judge, however, could not

362. See supra note 321 and accompanying text.
363. See supra note 321 and accompanying text.
364. See supra Part II.C.
365. See supra Part II.C.
366. See supra Part II.B–C.
367. See supra note 159 and accompanying text.
368. See supra note 175 and accompanying text.
369. See supra Part III.D.
mandate the test. This may effectively eliminate the test as a condition of supervised release, but this Note should make clear that no PPG testing is better than mandated PPG testing. Forcing patients to undergo this intrusive test leads to unreliable and likely invalid results, not to mention the constitutional concerns it raises. Allowing judges to suggest the test, however, will allow it to play a useful role in helping those offenders who genuinely are interested in treating their sexually deviant impulses.

Under the aforementioned framework, the test is truly voluntary. Failure to undergo PPG testing would not result in any additional conditions of supervised release or other punishment or supervision. Similarly, agreeing to undergo the test would not result in any preferential treatment or benefit to the defendant. That is, of course, other than the benefit afforded to those willing participants who will undergo the test and use the results to attain the best treatment possible.

Further, while the test would be wholly voluntary, a recommendation from a federal judge likely carries substantial weight. Not so much weight as to be coercive but, hopefully, enough so that a defendant coming out of prison and presumably not wanting to return seriously will consider the benefits of the test. With a firm suggestion from the judge, as well as clear instructions that the testing is not required, that there is no adverse consequence if refused, and no legal benefit if accepted, those offenders committed to rehabilitating themselves may see the test as a way to achieve rehabilitation.

Allowing the test to be utilized in a voluntary capacity ensures that those offenders who are interested in getting the best treatment available will have all options available to them. Voluntary PPG testing serves the goals of supervised release—encouraging rehabilitation, deterrence, and protecting the public—while ensuring that our constitutionally protected liberties, even those of our most heinous offenders, are not unnecessarily trampled.