1 Judge Robert S. Lasnik 2 3 4 5 6 7 8 9 UNITED STATES DISTRICT COURT FOR THE 10 WESTERN DISTRICT OF WASHINGTON AT SEATTLE 11 12 UNITED STATES OF AMERICA, NO. CR20-127 RSL 13 Plaintiff, 14 SENTENCING MEMORANDUM OF 15 THE UNITED STATES v. 16 GARY BOWSER, 17 Defendant. 18 I. INTRODUCTION 19 Defendant Gary Bowser was a key member of Team Xecuter, one of the most 20 prolific video game hacking groups. Team Xecuter created, manufactured, licensed, and 21 sold devices and software used to evade protections placed on video game consoles. Not 22 only did the group distribute these "circumvention devices," it also pirated and 23 distributed video games created for those consoles. For almost a decade, Team Xecuter 24 flaunted vulnerabilities found in video game consoles and undermined the integrity of 25 those systems and video game users' experiences. The group's activities spanned several

major game console manufacturers, causing losses exceeding \$65 million.

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Gary Bowser was the public face of Team Xecuter. In that capacity, he marketed the group's products, posted news releases about new and updated products, worked with retailers who distributed the group's products, and fielded inquiries from customers.

For the reasons set forth below, the United States respectfully recommends that the Court impose a sentence of 60 months, three years of supervised release, and apportioned restitution in the amount of \$4.5 million.

#### II. FACTUAL BACKGROUND

## A. The Video Game Industry

The video game industry is an ecosystem based on contributions from console manufacturers, video game creators and developers, and publishers and retailers. Presentence Report ("PSR") ¶¶ 11-12. Those entities work in tandem to create video games that can be played by end users around the world. To protect their investments and efforts, each relies on various forms of intellectual property protections, for instance copyrights and trademarks. Console manufacturers protect their devices and infrastructure through end user license agreements, game cartridge design, authentication protocols, and other means. *Id.* ¶ 14.

For almost a decade, Team Xecuter targeted consoles and related gaming infrastructure to allow its customers to hack those consoles and play pirated video games. Plea Agreement, Dkt. #40 ("PA") ¶ 8a; PSR ¶ 16.

# **B.** The Team Xecuter Criminal Enterprise

Team Xecuter was a profit-driven hacking group focused on developing, manufacturing, marketing, and selling circumvention devices for various video game consoles. The group was led by Defendant Bowser, and two other leaders: Max Louarn, who handled strategy and financing, and Yuanning Chen, who handled operations and manufacturing. While there were only a few leaders, the enterprise involved the participation of many entities, including software and hardware developers, device manufacturers, distributors, and customers. PA ¶¶ 8a-b; PSR ¶¶ 17-19.

The enterprise communicated with its customer base through several websites, but primarily through one administered by Mr. Bowser: maxconsole.com. PA ¶¶ 8i-j. Thus, while Team Xecuter comprised multiple members across the globe, Defendant served as the group's public voice and principal salesperson.

Team Xecuter attempted to hide its illegal activity under the homebrew<sup>1</sup> enthusiast umbrella. Indeed, several of Defendant's press releases promoted that falsehood. But the "predominant and primary design of the enterprise's products was to allow purchasers to play pirated ROMs." PSR ¶ 23; PA ¶ 8a (defining ROMs as pirated versions of copyrighted video games).

The devices created by Team Xecuter allowed users to play illegal versions of copyrighted games, which the group also created, distributed, and supported. The devices not only circumvented technological protections placed on and within consoles, but in some instances, also surreptitiously accessed video game company servers and online gaming ecosystems without authorization. PA ¶¶ 8f-g; PSR ¶ 21.

One of Team Xecuter's most lucrative products was the SX OS line of circumvention devices, which were designed to defeat technological protections on the Nintendo Switch. PSR ¶ 28. The SX OS was a custom operating system and hardware dongle/device that facilitated the circumvention of the technological measures on the Nintendo Switch and permitted users to, among other things, access and manipulate the copyrighted Nintendo Switch operating system and play pirated ROMs.

A user generally would need to connect the Switch console to the internet to purchase a "license" from Team Xecuter. PSR ¶ 29. Doing so would unlock the full features of the operating system, thereby enabling the SX OS to play pirated video games. The full-featured SX OS bypassed the normal operation of technological

<sup>&</sup>lt;sup>1</sup> Homebrew encompasses gaming enthusiasts who wish to modify video game consoles, typically to add functionality, e.g., allowing a console to play games made by others or to perform functions other than playing video games. PA ¶ 8h; PSR ¶ 23.

measures designed to limit the use of the console to legitimately purchased games. The SX OS also used servers that Nintendo maintained to facilitate internet connectivity and to authenticate the use of genuine Nintendo software. In other words, the SX OS was designed to falsely represent to Nintendo's servers that the Nintendo Switch on which it was operating was using a legitimate version of the Nintendo operating system and legitimate Switch video games. Defendants' enterprise designed the SX OS to generate criminal proceeds from the fraudulent use of Switch consoles and the Nintendo servers that were dedicated to support legitimate gameplay on those consoles.

#### C. Team Xecuter's Victims

Team Xecuter targeted several major video game titles and console manufacturers. Team Xecuter created, manufactured, and distributed a handful of products for use in Nintendo systems. Those products hacked an existing console or facilitated the playing of pirated copies of video games that were to be played on legitimate consoles. In addition, the products mimicked legitimate gameplay on consoles, and in certain instances, surreptitiously accessed Nintendo's servers and online gaming ecosystem without authorization. *Id.* ¶¶ 8d & f. Team Xecuter's products damaged the integrity of Nintendo's gaming consoles, infrastructure, and gameplay. Team Xecuter similarly damaged video game developers by allowing easy access to pirated copies.

Nintendo undertook various measures to resist those attacks on its consoles and infrastructure, all of which were matched by new Team Xecuter products or software. For example, Nintendo released a new version of the Nintendo Switch and a new console, the Nintendo Switch Lite, with updated technological measures to prevent the console from being hacked by the SX Pro and SX OS. PSR ¶ 31. Shortly after the release of those updated Nintendo products, the enterprise responded by announcing the development of new circumvention devices, and even posted a video to the Team Xecuter blog showing the SX OS purportedly running on the Nintendo Switch Lite. In 2020, the enterprise announced two new circumvention devices designed to circumvent the

CR20-127 RSL - 4

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technological measures in different generations of the Nintendo Switch and the Nintendo Switch Lite. *Id.*  $\P$  32. Team Xecuter's cat-and-mouse game with Nintendo spanned close to a decade.

Team Xecuter's sales generated at least tens of millions of dollars and caused between \$65 million and \$150 million in losses to victims. Mr. Bowser knew that those losses were borne by copyright and trademark holders, console manufacturers, and others who made their living in the video game industry. PA ¶ 8r.

## D. Defendant's Role as a Team Xecuter Manager

Gary Bowser was a high-level manager within the Team Xecuter enterprise, responsible for developing and marketing circumvention devices. Mr. Bowser administered several websites operated by the enterprise, most of which were designed to promote the group's products, publish reviews and advertisements, provide support forms for circumvention devices, and link to distributors selling the devices in various countries. PA ¶¶ 8b-c, i-j; PSR ¶¶ 19, 24-25. In so doing, he exercised managerial and operational control over property, assets, and activities of the enterprise.

For instance, Mr. Bowser operated the website, maxconsole.com. PA ¶¶ 8i-j. That website was a significant part of Team Xecuter's efforts to market and distribute its circumvention devices, effectively serving as a central clearinghouse for information about the group's products. Mr. Bowser regularly posted announcements about new products and the group's responses to enforcement actions.

Mr. Bowser also administered a website called rom-bank.com, which contained illegal copies of over 10,000 video game titles. PA ¶ 81. That website was connected through posts and links to the other Team Xecuter websites, several of which were administered by Bowser, including maxconsole.com.

Mr. Bowser received a monthly stipend for his work, along with receiving revenue from advertisements placed on the Team Xecuter websites. PA  $\P$  8s.

# III. THE PLEA AGREEMENT AND SENTENCING GUIDELINES CALCULATION

## A. The Plea Agreement

On October 28, 2021, Gary Bowser pleaded guilty to one count of Conspiracy to Circumvent Technological Measures and to Traffic in Circumvention Devices (Count 6), in violation of 18 U.S.C. § 371, and one count of Trafficking in Circumvention Devices (Count 9), in violation of 17 U.S.C. §§ 1201(a)(2)(A) and 1204(a)(l). PA ¶ 1. The plea agreement includes a statement of facts that summarizes Mr. Bowser's organizational role as the public-facing voice for the enterprise. *See* PA ¶ 8.

The plea agreement also contains the parties' agreement as to restitution. The harm caused by Mr. Bowser and his co-conspirators is extensive. For the purposes of sentencing, the parties stipulated that the actual loss to video game creators, console manufacturers, and other copyright and trademark holders was more than \$65,000,000 and less than \$150,000,000. See PA ¶ 8r. In Paragraph 11 of the plea agreement, Defendant agreed to pay restitution to Nintendo of America in the apportioned amount of \$4,500,000. See 18 U.S.C. § 3664(h). Accordingly, the United States requests that the Court enter a restitution judgment in this amount and specify that this obligation shall not be joint and several with any other co-defendant.

# **B.** The Presentence Report and the Offense Level Calculation

In the plea agreement, the parties agreed on most of the applicable guidelines: a base offense level of 8, a 24-level increase because the loss exceeded \$65 million, and a 2-level increase because the offense involved trafficking of circumvention devices. After a reduction for acceptance of responsibility, the defendant's total offense level is 31, for a range of 108-120 months.

The PSR does not apply the 3-level manager or supervisor enhancement to Mr. Bowser. An upward departure may be warranted for a defendant who "exercised management responsibility over the property, assets, or activities of a criminal organization." USSG § 3B1.1, Application Note 2. Here, Mr. Bowser administered and

operated several of the sales and marketing websites for an enterprise that involved numerous co-conspirators and thousands of customers. However, given the circumstances of this case, the government does not object to the final PSR and does not seek application of that sentencing enhancement.

#### IV. SENTENCING RECOMMENDATION

The United States recommends 60 months of imprisonment for Count 1 and 60 months of imprisonment for Count 2, to be served concurrently. As discussed below, the United States submits that, while this sentence is greater than the sentence recommended by the Probation Office, it is the right sentence for this significant case. A 60-month sentence is appropriate given "the nature and circumstances of the offense," "the history and characteristics of the defendant," and the need for the sentence "to reflect the seriousness of the offense, to promote respect for the law, and to provide just punishment for the offense," "to afford adequate deterrence to criminal conduct," and "to avoid unwarranted sentence disparities." 18 U.S.C. §§ 3553(a) (listing additional sentencing considerations).

#### A. The Nature and Circumstances of the Offenses

Team Xecuter's products targeted several companies over the course of almost a decade, resulting in tens of millions of dollars of loss. Defendant Gary Bowser played a critical role in the marketing, sale, and distribution of the products that caused that loss. Mr. Bowser acknowledges that his participation in the illegal enterprise harmed copyright and trademark holders, console manufacturers, and others who were entitled to the revenue from the use of the circumvented consoles and the purchase and playing of copyrighted video games.

Although the aggregate loss amount under the Guidelines is substantial, it does not adequately convey the harm that Mr. Bowser and his Team Xecuter co-conspirators caused to victims. Team Xecuter's self-described cat-and-mouse game with companies like Nintendo resulted in wasted time, money, and other resources. The group's conduct

negatively impacted numerous parties, including the companies whose products were hacked, the video game developers whose titles were stolen, and the individual users whose gameplay was marred. Mr. Bowser deserves a sentence that reflects the extent of the harm he caused to these victims. As the Probation Office recognized, while this cybercriminal enterprise held itself out as a supporter of coding innovation, instead of helping video game workers, it stole from them. A sentence of 60 months is appropriate to recognize this harm.

Defendant objected to the loss amount as *too high* and that it overstates Mr. Bowser's involvement and is an irrational measure for determining the sentence under Section 3553(a). *See* PSR, Objection 3. Sophisticated cybercriminals like Mr. Bowser and Team Xecuter should not be able to raise this argument for several reasons.

First, the asymmetry between the limited investment of resources by cybercriminals and the enormous harm they cause is exactly the problem. Here, if Team Xecuter had not existed, the enterprise's customer base of hundreds of thousands of users each would have had to discover a vulnerability and design hardware and software to exploit it. Team Xecuter offloaded the hours of work and cost investment associated with the design and manufacturing of a device that allowed users with relatively minimal technical knowledge to circumvent several consoles and obtain illegal copies of video games. In other words, by making circumvention so easy, Team Xecuter amplified the misconduct by orders of magnitude. And Mr. Bowser was the megaphone through which Team Xecuter's products were introduced to the public. He therefore cannot fairly invoke disproportionality when he knows the massive scale of the enterprise.

Second, criminal proceeds from cybercrime are almost always substantially less than the harm suffered by victims. That is particularly true in a case like this. Team Xecuter discovered and monetized technical vulnerabilities by selling a product that took advantage of those flaws. Team Xecuter's customers do not pay hundreds or thousands of dollars to use those products. The harm from Team Xecuter's conduct—the loss of

integrity of the consoles and gameplay—could never be recovered by selling a \$50 circumvention device. Mr. Bowser cannot contend that he is entitled to a sentencing discount because he received only a portion of the profits made by the criminal enterprise that he knows causes so much harm to its victims.

The scale and sophistication of the Team Xecuter criminal enterprise is also an aggravating factor. Team Xecuter approached its task with the premeditated discipline and refinement of a multinational business operation, which it essentially was, albeit with an illegal and nefarious business plan. Team Xecuter's structure assigned discrete aspects of the hacking and monetization processes across members and groups, all subject to a management hierarchy. For instance, certain members developed and improved the existing circumvention devices and software, while others created tools to circumvent new consoles. At the same time, Mr. Bowser managed the public-facing infrastructure of the operation, including issuing press releases, soliciting distributors, and fielding customer questions. For example, as discussed in one victim impact statement, Team Xecuter was sophisticated enough create a "stealth mode" to evade Nintendo enforcement efforts. Mr. Bowser knew how important this feature would be to certain customers and promoted it.

Only a sophisticated enterprise like Team Xecuter, with sophisticated actors like Gary Bowswer, could have integrated these diverse roles in a cohesive and scalable manner that allowed the enterprise to have such a detrimental effect. Indeed, the size of the harm was the foreseeable and intended result of this type of criminal organization.

Mr. Bowser was not a peripheral player in the criminal enterprise. A five-year sentence is appropriate even though Mr. Bowser received fewer proceeds than some of the enterprise's other participants. During his seven-year tenure with Team Xecuter—there can be little doubt that Mr. Bowser would be working for Team Xecuter today if he

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had not been arrested<sup>2</sup>—Bowser was a high-level manager who shaped the group's public image and voice. Mr. Bowser was the link between the Team Xecuter enterprise and its customer base. This is not a peripheral role but an essential one. For this role, he should be sentenced to 60 months' imprisonment.

### B. Defendant's History and Characteristics

Mr. Bowser's history and characteristics suggest a five-year sentence. The recommended five-year sentence reflects Mr. Bowser's history—he was charged with uttering a forged document and fraud under \$5000 in Canada in 2004, for which he received a suspended sentence and probation. PSR ¶ 58. In addition, the sentence considers Mr. Bowser's current physical condition.

However, the recommended sentence also reflects the fact that Mr. Bowser still poses a risk of recidivism. Mr. Bowser has worked in this criminal space for a significant part of his adult life. After he is released, the same financial hardships and social isolation that led to his becoming the public voice of the Team Xecuter enterprise will be present when he reenters society after serving his sentence. If he is deported, the ability for supervision is minimal, and it remains to be seen whether he will resist the lure of the asymmetric rewards he could reap by again leveraging his technical expertise to commit crime.

# C. The Need for the Sentence to Reflect the Seriousness of the Offenses, to Promote Respect for the Law, and to Provide Just Punishment

These factors weigh strongly in favor of a lengthy term of incarceration. Given Team Xecuter's notoriety, this case will be used nationally as a benchmark for sentences in other major piracy and technology circumvention cases. Crimes like those committed by Mr. Bowser and his cohorts are a serious threat to video gaming users' experiences,

<sup>&</sup>lt;sup>2</sup> There was a level of leadership above Defendant Bowser that likely received the majority of the criminal proceeds. In entering the plea deal and recommending only a five-year sentence, the United States considered that Defendant did not make millions—although he was paid hundreds of thousands of dollars. PSR ¶ 34.

content creators, console manufacturers, and video game businesses. A five-year custodial sentence would send a message that there are consequences for participating in a sustained effort to undermine the video game industry.

The need to promote respect for laws that prohibit cybercrime is particularly high given the major increase in attacks by foreign actors against domestic entities. It is rare that a member of a sophisticated cybercriminal organization is identified, arrested, and extradited for prosecution in the United States. Too often, international cybercriminals can conceal their identities or hide in countries where they assume that they are beyond the reach of law enforcement (as is true with the Defendants in this case). Accordingly, this case presents a rare opportunity to punish bad actors for attacking U.S. businesses and consumers.

Finally, no discussion of these factors would be complete without additional mention of the substantial harm that Mr. Bowser caused to numerous victims, including "copyright and trademark holders, console manufacturers, and others who were entitled to the revenue from not only the use of the circumvented consoles, but also from the purchase and playing of copyrighted video games." PA ¶ 8r. The victim impact statements detail the impact of Team Xecuter's conduct on that company and the video game industry. As one victim statement explains: "Rampant piracy—such as that facilitated by the SX OS and Defendant's criminal enterprise—jeopardizes those [small studio] publishers' entire businesses and ability to recoup their capital investments and continue operating." Another victim statement notes that, "When video games are illegally copied and when circumvention devices become readily available, the video game industry—and the broader economy—experience a negative ripple effect. . . . This leads, at a minimum, to fewer incentives to create, and a less vibrant game scene." A five-year sentence is needed to provide just punishment and to vindicate the interests of those victims.

#### D. The Need to Afford Adequate Deterrence to Criminal Conduct

In the realm of cybercrimes, appropriately severe sentences are necessary to blunt the high rewards and low risk of detection and attribution that criminals face. Because computer hackers are some of the most sophisticated criminals, achieving general deterrence in this area is important. See United States v. Martin, 455 F.3d 1227, 1240 (11th Cir. 2006) (because "economic and fraud-based crime are more rational, cool, and calculated than sudden crimes of passion or opportunity, these crimes are prime candidates for general deterrence").

The existence of criminal outfits such as Team Xecuter is predicated on their ability to recruit technologically skilled and connected individuals such as Gary Bowser. A five-year sentence will put potential recruits on notice that engaging in this type of criminal conduct will subject them to significant prison sentences that are commensurate with the harm they cause. A five-year sentence also will send a message to current Team Xecuter members still engaged in criminal activity. Team Xecuter members appear to be splitting into their own groups and continuing their misconduct. See https://gbatemp.net/threads/sx-save-manager-is-now-on-atmosphere.605249/ (discussing software created by Team Xecuter and now updated by "Team Xcalibur (A team of former Xecuter members)"). It is important that they know the consequences they face not just for their past crimes, but any future crimes. A serious sentence here will show that there are repercussions for any continued criminal conduct.

There can be no question that any sentence imposed in this case will be widely disseminated within the video gaming community, as this case is being watched closely by the industry. See, e.g., "Bowser agrees to \$10 million fine for selling Nintendo Switch hacks," available at https://www.theverge.com/2021/12/8/22823767/team-xecuter-garybowser-nintendo-lawsuit-10-million (Dec. 8, 2021)<sup>3</sup>; "Modder pleads guilty to piracy charges, will pay Nintendo \$4.5 million," available at

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<sup>&</sup>lt;sup>3</sup> The Verge is a 10-year-old website covering news at the intersection of technology, science, art, and culture. SENTENCING MEMORANDUM/BOWSER UNITED STATES ATTORNEY CR20-127 RSL - 12

https://arstechnica.com/gaming/2021/11/hacker-will-pay-nintendo-4-5-million-in-team-2 3 4 5 6

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xecuter-plea-bargain/ (Nov. 2, 2021)<sup>4</sup>; "Nintendo hacker Gary Bowser pleads guilty" available at https://www.eurogamer.net/articles/2021-11-02-switch-hacker-gary-bowserpleads-guilty (Nov. 2, 2021). As the Probation Office recognized, in this case a significant custodial sentence is a necessary signal to the community that there are consequences for criminal behavior. This case has the possibility of a real deterrent effect.

#### Ε. The Need to Avoid Unwarranted Sentencing Disparity

This case is unique, so it is difficult to compare cybercriminal schemes that utilize different methodologies and impact different victims, particularly given the variety of facts underlying recent cybercrime prosecutions. And cases involving the creation, manufacture, and distribution of circumvention devices on this scale are not common. Thus, comparing sentences imposed on defendants who participated in different cybercriminal enterprises to the sentence in this case is challenging.

For example, two 2012 convictions for trafficking in circumvention devices (17 U.S.C. § 1201(a)(2)(A)) provide comparisons. In *United States v. Reichert*, No. 1:12-CR-00177 (N.D. Ohio), the defendant was one of the moderators of a site dedicated to discussing hacking video game consoles to allow playing illegal copies of games. *United* States v. Reichert, 747 F.3d 445 (6th Cir. 2014). He modified a Nintendo Wii with and sold it to an undercover agent for a \$50 profit. A jury convicted defendant of trafficking in circumvention technology, after which he was sentenced to just over a year in prison based on a guideline range of 15-21 months. In *United States v. Silvius*, No. 1:12-CR-00172 (N.D. Ohio), the defendant operated a site that sold modification chips that could circumvent protections in video game consoles, allowing them to play pirated copies of games. See United States v. Silvius, 559 Fed.Appx. 490 (6th Cir. 2014). After entering a

<sup>&</sup>lt;sup>4</sup> Ars Technica is a 24-year-old news and information portal focusing on technology science, politics, and society.

Eurogamer is a two-decade-old British video game journalism site.

plea agreement, defendant was sentenced to two years of probation and 100 hours of community service.

The *Reichert* and *Silvius* cases involved schemes that were orders of magnitude smaller than the Team Xecuter criminal enterprise. In the former case, only one modified system was sold. Here, Team Xecuter generated at least tens of millions of dollars of proceeds from the sale of hundreds of thousands of mass-manufactured circumvention devices and licenses. PA ¶ 8r. In the latter case, the defendant did not design, manufacture, market, and distribute the modification chips like the criminal conspiracy in this case. Accordingly, a sentence of five years in this case appropriately balances the differences between the cases and reaches a just result.<sup>6</sup>

This case is unlike any other criminal case known to the government. Mr. Bowser deserves a higher sentence than those imposed in these reported cases, particularly given the size and breadth of the Team Xecuter conspiracy, which lasted for years and included multiple types of circumvention devices.

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<sup>&</sup>lt;sup>6</sup> A low sentence would create a severe disparity with not only the two cases above, but also with cases involving less sophisticated and much smaller schemes. For example, in *United States v. Klimecek*, No. 1:05-CR-00910 (N.D. Ill.), the defendant pleaded guilty to willfully infringing copyrights (under 18 U.S.C. § 2319) for the purpose of private financial gain by participating in a group that developed software to override copyright protections embedded in software and videos. This defendant was sentenced to 30 months' imprisonment.

1 V. **CONCLUSION** For the reasons set forth above, the United States respectfully requests that the 2 Court impose a total sentence of 60 months on Counts 6 and 9, three years of supervised 3 release, restitution in the amount of \$4,500,000, and a \$200 special assessment. 4 5 DATED this 3rd day of February 2022. 6 Respectfully submitted, 7 NICHOLAS W. BROWN 8 **United States Attorney** 9 /s/ Brian Werner 10 **BRIAN WERNER** 11 Assistant United States Attorney United States Attorney's Office 12 700 Stewart Street, Suite 5220 13 Seattle, Washington 98101-1271 Telephone: (206) 553-2389 14 Email: Brian.Werner@doj.gov 15 ANAND B. PATEL 16 Senior Counsel 17 Computer Crime and Intellectual Property Section, Criminal Division 18 U.S. Department of Justice 19 20 21 22 23 24 25 26 27