In the United States Court of Federal Claims

No. 16-840C

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OPINION AND ORDER

On February 5, 2021, the United States Court of Appeals for the Federal Circuit vacated and remanded this Court's decision in *Bitmanagement Software GMBH v. United States*, 989 F.3d 938 (Fed. Cir. 2021)("*Bit II*"). The majority of the panel agreed with this Court's opinion, *Bitmanagement Software GMBH v. United States*, 144 Fed. Cl. 646 (2019) ("*Bit I*"), that there was an implied license between Bitmanagement Software GMBH ("Bitmanagement" or "Plaintiff") and the Navy regarding the Navy's use of Plaintiff's software. However, the majority found that the implied license required the use of the Flexera software to monitor the Navy's use of Plaintiff's software as a condition precedent to the implied license, observing that "this condition rendered reasonable the otherwise objectively unreasonable decision of

¹ This reissued Opinion and Order incorporates the agree-to redactions proposed by the parties. The redactions are indicated with "[]."

Bitmanagement to allow the Navy to make unlimited copies of its commercial product." *Bit II*, 989 F.3d at 950. Consequently, the Navy's copying of Plaintiff's software was an infringement.²

As a result, the Federal Circuit tasked this Court with determining damages taking the form of a hypothetical negotiation. *Id.* at 951-52 n.5. In order to do so, the Federal Circuit directed this Court to look at the *Gaylord* line of cases as a guide.³ The Federal Circuit further directed this Court to focus on the "actual usage" of Plaintiff's software because of the Navy's statement: "Contrary to Bitmanagement's argument [], it is not entitled to recover the cost of a seat license for each installation." *Id.* Instead, "the proper measure of damages shall be determined by the Navy's actual usage of BS Contact Geo in excess of the limited usage contemplated by the parties' implied license." *Id.*

In addition, concerning the computation of damages, the Federal Circuit recognized that the program was copied in two different ways: by an OCX file or EXE file. Regarding the OCX file, the Federal Circuit held that "at no point [was the OCX file] properly monitored by Flexera." *Id.* at 951-52. Regarding the EXE file version, the Federal Circuit held that the extent to which "the EXE version was monitored by Flexera [this] appears to be disputed." *Id.* The parties were, therefore, to take into consideration the distinction between the EXE file and the web plug-in file (OCX) in its damages' calculation. The parties, however, agree that this distinction is irrelevant to the calculation of damages.⁴

And finally, the Federal Circuit held that "[a]s the party who breached the Flexera requirement in the implied license, the Navy bears the burden of proving its actual usage of the BS Contact Geo software and the extent to which any of it fell within the bounds of any existing license." *Id.* at 951-52 n.5.

In response to the remand, Plaintiff filed a Motion for Entry of Judgment alleging damages in the amount of \$155,400,000. ECF No. 136. The United States ("the Navy" or "Defendant") filed its opposition and cross-motion. ECF No. 139. Neither party satisfied this Court with its reasoning for their damages' calculation; therefore, the Court requested additional briefing. After three rounds of additional briefing,⁵ the Court determined that the testimony of Defendant's expert witness, David Kennedy, who had been precluded from testifying in the original trial, was now relevant. *See* ECF No. 171. Therefore, the Court reopened the record and heard the testimony of Mr. Kennedy on June 14, 2022. Plaintiff was afforded the opportunity to

² "Thus, while the Navy had an implied-in-fact license to copy BS Contact Geo onto its computers, the Navy's failure to abide by the Flexera condition of that license renders its copying of the program copyright infringement." *Bit II* at 951.

³ See Gaylord v. United States, 678 F.3d 1339 (Fed. Cir. 2012) ("Gaylord II"); Gaylord v. United States, 112 Fed. Cl. 539 (2013), aff'd 777 F.3d 1363 (Fed. Cir. 2015) ("Gaylord III").

⁴ In their respective briefs, ECF No. 155 at 5, ECF No. 158 at 4, the parties state that the distinction between the Navy's use of BS Contact Geo's desktop executable file (EXE) and web browser plugin file (OCX) is irrelevant because the condition of the implied license "could not have been met by monitoring only half of each copy." ECF No. 155 at 5 (quoting *Bit II* at 951).

⁵ ECF Nos. 146, 148, 152, 154, 155, 160, 162, 162.

have the Court hear a rebuttal witness, but Plaintiff declined. Final briefs were then filed by the parties, ECF Nos. 184,186. Plaintiff's damages calculations remained the same. Defendant offered three damage calculations, \$115,800, \$235,00 or \$200,000 plus delay compensation, to be determined at a later date, with regard to each amount.⁶ ECF No. 186-1. The case is now ripe for a final decision on damages, notwithstanding the delay compensation award.

For the reasons set forth below, the Court awards \$154,400 plus delayed compensation (to be determined) in damages.

I. Findings of Fact

A. Bitmanagement I⁷

In 2002, Peter Schickel and Alex Koerfer created Bitmanagement, a German company. In 2005, Bitmanagement began working with David Collee of Planet 9 Studios to market and sell Bitmanagement's software in the United States. Bitmanagement sold its software on a "PC license" -basis as well as "website" or "subdomain licenses." Bitmanagement's "core product" was named BS Contact. In 2006, an upgraded product, BS Contact Geo, was released. At this time, Bitmanagement controlled the use of the downloaded products through separately-provided license keys.

In 2006, the Navy was developing a software product, SPIDERS 3D, a web-based platform that provided a virtual reality environment for use by the Navy to view and optimize configuration of Navy facilities. In developing this program, the Navy purchased one PC license of Bitmanagement's BS Contact Geo for \$990. This product was to work in tandem with a Navy product as the rendering component.

BS Contact Geo included both a desktop executable file (EXE version) and a web browser plugin file (OCX version). The standalone desktop executable version (EXE) allowed users to launch the software as a standalone application to view three-dimensional data. The plugin version (OCX) worked in conjunction with a web browser, such as Internet Explorer, so that when a user accesses three-dimensional data on the internet, the BS Contact Geo plugin is programmed to automatically launch within the web browser to render data.

The Navy determined that Bitmanagement's usual licensing scheme, a per-seat license, would not work for the Navy's secure environment; as a result, Bitmanagement expressed its

 $^{^6}$ The Defendant acknowledges that Plaintiff is entitled to delayed compensation. ECF No. 186 at 20. Prior to trial, the parties stipulated to the delay compensation rate. See Stip ¶ 101.

 $^{^{7}}$ As the Federal Circuit did not disrupt this Court's findings of fact in *Bit I*, the Court repeats the findings of fact as found in *Bit I* relevant to this opinion.

willingness to consider other licensing schemes. Therefore, Bitmanagement provided custom-designed licensing files to the Navy that were not PC specific.

In 2008, the Navy procured 100 seat licenses of BS Contact Geo for \$300 per license. By 2010 the Navy had deployed 80 of the 100 licenses purchased through the 2008 Navy Purchase Order, leaving it with 20 undeployed licenses. To upgrade these last 20 licenses, the Navy paid \$125 per license.

In 2011, the Navy suggested using the Flexera license manager application in conjunction with a floating license system. The server would track the users in the domain/sub-domain and, as a server-based license manager, it would limit the number of simultaneous users that can access a "Flexera enabled" software program by allowing the program to run only if the number of persons using the program is less than the number of available licenses. It is also referred to as "FlexWrapped" software. When a FlexWrapped program is opened, the program alerts the license server that the program is in use, and when the FlexWrapped program closes, it alerts the license server that it is no longer in use.

Late 2011, the Navy explained to Bitmanagement that the Navy would deploy the 20 licenses of the upgraded BS Contact Geo version 7.215 within the Navy's NMCI⁸ network. The Navy reiterated that it would be using a server-side license key management approach in order to track the usage and demand of the 20 license keys. The Navy and Bitmanagement understood that BS Contact Geo would be deployed over a broad spectrum of the network and that the use of BS Contact Geo would be limited by the Flexera license manager application.

Then, in 2012, the Navy procured 18 copies of BS Contact Geo 7.215 for \$305 per license for a total of \$5,490.

Beginning in July 2013, the Navy began to install another upgraded product, BS Contact Geo version 8.011, on all non-classified NMCI computers running Windows. Flexera was to monitor and restrict the program use.

The Navy and Bitmanagement had a good relationship and Bitmanagement touted the roll-out of its product to the Navy in advertising and presentations.

On September 15, 2015, the Navy executed a purchase of 88 BS Contact Geo application license keys for \$350 per license for a total of \$30,800, with an option to purchase an additional 80 licenses of BS Contact Geo version 8.001 for \$370 per license. Bitmanagement did not provide the license keys, and the contract was terminated.

⁸ "NMCI" refers to Navy Marine Corps Intranet, which is "the largest private computer network in the world" and comprises all Navy computers in the continental United States. Stip. ¶ 81; Tr. 843:7–15 (Chambers).

On July 15, 2016, Bitmanagement filed the present suit. In September 2016, the Navy uninstalled BS Contact Geo from all of its computers and subsequently reinstalled the software on 34 seats, for inventory purposes.

B. Additional Findings of Fact from Trial - April 2019

1. Bitmanagement Finances, Sales, and Types of Sales Offered

In 2013, Bitmanagement's yearly operating revenue was declining by approximately 50%, See D122.25-26, and was only completing a few licenses per year with respect to BS Contact Geo. See P011.2-4. As of August 2013, Bitmanagement's revenues were derived from sales of BS Contact, related variants (including BS Contact Geo), and associated services. See Stip. ¶ 23. For 2013, Bitmanagement reported sales revenues of €341,470.50 (compared with €736,269.07 in 2012), and a net profit of €936.55 (compared with a net loss of €92,477.85 in 2012). See D122.25-26.

Also, in mid-2013, the number of downloads of Bitmanagement's free test version of BS Contact Geo was declining. *See* D515.4. This, according to Bitmanagement, was due to the fact that potential customers for BS Contact Geo were also considering the use of X3DOM – a free, open-source framework for 3D graphics. *See* D131.47 (comparing rendering speeds); Tr. 123:8-25:25 (Schickel). X3DOM permits a user to view X3D rendering in a browser without separate plugin software. Tr. 75:6-9 (Schickel); Tr. 727:9-28:17 (Colleen); Tr. 1140:9-42:4, Tr. 1161:4-14 (Brutzman).

Discounts were offered as the number of licenses purchased increased. *See generally* J027.1. For instance, in 2005, Bitmanagement proposed offering 500 licenses of BS Contact VRML/X3D to the Navy for \$1.98/license. Stip. ¶ 40; J001.1-3; J002.5. Then, in 2010, Bitmanagement authorized Planet 9 to offer a license for 50,000 seats of BS Contact to the Navy for \$10/seat. *See* J009.2-7; Tr. 686:1-14 (Colleen); D209.1. And in 2014, in a sale of its BS Contact, Bitmanagement proposed a PC-license price of €85/license for an order of more than 251 licenses of BS Contact Geo, as well as offering "an unlimited business license for BS Contact Geo on up to 3000 PCs for a one-time package price of €125,000." *See* D149.1.

On the open market, Bitmanagement offered several standard licensing types for BS Contact Geo: PC licensing, Website licensing, OEM licensing, CD-ROM/DVD, and IP-range licensing. D108.1-3; J27.1-2; D136.2; Tr. 603:9-11; Tr. 160:5-9. OEM Licensing is defined as "the original equipment manufacturer." Tr. 1046:19 (McCarns). OEM Licensing is software that "is being integrated into something of the client, and that could be either hardware or software." Tr. 603:9-11 (Koerfer). An IP-Range License refers to a license in which "a number of computers" are placed in a "license file," and computers "with the right IP address" can view the content. Tr. 160:5-9 (Schickel). In its dealings with the Navy, Bitmanagement told the Navy

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⁹ This transcript is derived from the proceedings held on April 22, 2019, through April 25, 2019. (ECF Nos. 122-125).

that it was open to other types of licensing. *See* J005.4-5; D119.1; D120.1-2; *see also* D160.1 (citing the Navy as a "[s]pecial licensing model").

In trying to sell BS Contact, Bitmanagement told potential customers that its website licenses allowed for unlimited downloads, installations, and/or use of its software in connection with the website. *See* D016.1; D089.1; D094.1; D103.3; D108.2; D140.3; Tr. 605:18-06:3, 611:19-24 (Koerfer).

Bitmanagement's website licenses were also based "on the general expected usage of the viewer in a specific time from a respective Internet or Intranet-address" and identified, *inter alia*, the following factors as relevant to pricing:

- What concept BS Contact is used for (e.g. non commercial/small or commercial/big)?
- For how long do you need a license (e.g. one year or unlimited)?
- How many expected users downloading and using BS Contact on that website do you expect per month?

Stip. ¶ 25; J027.1; Tr. 513:5-25 (Graff) (testifying that the listed factors were appropriate for any type of negotiated license).

Sales included website/subdomain licenses of BS Contact Geo to approximately four customers. *See* Stip. ¶ 26; P011.3-4. None of Bitmanagement's website licenses restricted the number of downloads. *See* D029.1-47; D116.1-9; Tr. 121:12-23:7 (Schickel). None of the website licenses restricted the number of users. *See id*.

In addition, Bitmanagement sometimes offered IP- range licensing for its software. *See* Tr. 340:7-41:23 (Schickel) ("This is . . . an IP range way for licensing which is basically a website license."); D136.2. Using this scheme, Bitmanagement installed its software on 50,000 PCs for a university. *See* D119.1. Bitmanagement witnesses could not remember the details of the transaction, but Mr. Schickel described [] it as "a very minor sale." Tr. 341:19-23 (Schickel); Tr. 623:1-24 (Koerfer); Tr. 1165:17-66:20 (Brutzman).

Another option offered by Bitmanagement was OEM licenses for situations where its software was integrated into other hardware or software. *See* Tr. 603:7-11 (Koerfer). In an offer to a potential customer, Bitmanagement stated that the price for a PC license, website license, or OEM license was the "same[,] based on the number of users/licenses per year." D157.1; *see also* Tr. 617:7-10 (Koerfer).

2. The Navy's Tracking by Flexera and Use of BS Contact Geo

On February 9, 2014, the Navy sent Bitmanagement three Flexera usage reports from August 31, 2013, through February 1, 2014. *See* Stip. ¶ 95; D123. These reports only tracked the Navy's use of the BS Contact Geo executable file; they did not track the Navy's use of the plugin file because Flexera license manager did not monitor or control the use of the BS Contact Geo plugin as it was supposed to do. Stip. ¶ 95; P257 ¶¶ 120-121; Tr 889:5-90:25 (Chambers).

The Navy disabled Flexera for the EXE version altogether in 2015. Tr. 891:25-92:20 (Chambers). For the entire three-year period that the software was installed on computers across the Navy's network and elsewhere until it was removed in 2016, the Navy does not have access records for the plugin version of BS Contact Geo for any of those years, or of the desktop application for one of those years. Stip. 95; P257 120-121; Tr 889:5-90:25 (Chambers); P137.

The Navy used BS Contact Geo to render X3D for SPIDERS 3D between July 2013 and November 2017.¹¹ Stip. ¶ 28. The Navy did not need BS Contact Geo for any other purpose. *See* Tr. 905:10-17, 936:4-14 (Viana). The Navy admitted at trial to copying BS Contact Geo onto 429,604 NMCI computers. Tr. 1113:17-19 (Vadnais). The Navy also admitted that the software was on 21 ONE-Net computers ¹² in August 2016, and the Navy gave one copy to a Navy contractor who supported SPIDERS 3D. *See* ECF No. 139 at 32 n.18.

The date of the hypothetical negotiation is July 18, 2013. *See* ECF 162 at 7 (citing ECF 137 at 31; ECF 148 at 10).

C. Expert Witnesses

1. Testimony of George L. Graff, April 2019

Bitmanagement called George L. Graff ("Mr. Graff") as its damages' expert. Mr. Graff is an attorney, a neutral mediator, and an arbitrator. Tr. 28:6-9. He has been involved in different aspects of hundreds of license agreements. Tr. 30:6-9. In his professional experience, he has also engaged in software valuation. Tr. 38:8-12.

Mr. Graff testified that damages would take the form of a hypothetical negotiation for the Navy's infringing use where the parties would have agreed to a final negotiated price of \$259 per copy for each of the 600,000 copies of BS Contact Geo made by the Navy. Graff Direct ¶¶ 63-65. Mr. Graff's damages calculations focused on the number of copies made, not actual usage. Mr. Graff further testified that the \$259 per copy price represented more than a 75% discount from Bitmanagement's full retail price for BS Contact Geo during the relevant time. Graff Direct ¶ 58; J027.

As a starting point in a hypothetical negotiation, Mr. Graff explained that the parties would have relied on the commercial price of a seat license for BS Contact Geo—approximately \$1,046—plus the parties' extensive commercial history negotiating for actual licenses to Bitmanagement's software. Graff Direct ¶¶ 41-48; J027.1. Thus, according to Mr. Graff, the

¹⁰ As stated previously, the parties indicate that the difference is irrelevant.

¹¹ The stipulation states that BS Contact Geo was used until November 2017. However, the damages period ended in 2016.

¹² "ONE-NET, for all intents and purposes, is a separate network which is quite simply an NMCI or the outside continental United States." *See* Tr. 849:3-6 (Chambers).

parties would have started the hypothetical negotiations using the price that the Navy agreed to pay for the closest equivalent to what the Navy actually copied: the \$350-\$370 per copy that the Navy agreed to pay to license BS Contact Geo in 2015. Graff Direct ¶ 48. The rate of \$370 per license already represented a 65% discount off the retail price for BS Contact Geo. Stip. ¶¶ 89-90; P257 ¶¶ 30-31; J027.1. This amount, Mr. Graff opined, would most likely be further reduced by an agreed volume discount. Graff Direct ¶¶ 52-56.

Mr. Graff relied on evidence of comparable negotiations of what he considered a comparable product. In particular, Mr. Graff reviewed the Navy's contract to purchase seat licenses for AutoCAD software, a 3D rendering software program. This contract, based on projected spending of \$81 million, was negotiated at a 22% discount off the list price as well as an additional discount of 1% for each million dollars in any single order up to a maximum additional discount of 10%, for a total maximum compounded discount of approximately 30%. *Id.* ¶¶ 54-55; *see also* P083.6-P083.79.

Using the AutoCAD software seat licenses as a reference, Mr. Graff concluded that Bitmanagement and the Navy would have agreed to a similar discount of 30% off the \$370 per copy price for BS Contact Geo 8.001, and the Navy would have ultimately purchased 600,000 PC licenses of BS Contact Geo for \$259 per license for a total price of \$155,400,000. Graff Direct ¶ 48, 52-58; 63-65; see also P083.6-P083.79.

2. Testimony of David Kennedy, June 14, 2022

Mr. David Kennedy ("Mr. Kennedy") graduated with a degree in accounting and became a certified public accountant ("CPA") in 1987. (2022) Tr. 31:21-32:2. ¹³ Then he began working for Coopers & Lybrand, which is now Pricewaterhouse Coopers. (2022) Tr. 31:25-32:2. In 2013, Mr. Kennedy became a Managing Director at Berkeley Research Group. (2022) Tr. 30:12-13. In this position, he "manage[s] a number of consulting teams that value intellectual property, negotiate intellectual property transactions, and then also assist[s] clients in litigation to determine the outcome of a hypothetical negotiation and therefore the damages that would be related to infringement." (2022) Tr. 30:17-22. Mr. Kennedy's responsibilities as a Managing Director also include working with companies to "value their intellectual property and help them establish their intellectual property royalty rates." (2022) Tr. 31:5-7. In addition, Mr. Kennedy has "helped investors raise capital to acquire intellectual property," and he has "helped companies that have patents to sell those patents when they're not using them to other companies who are interested in buying them." (2022) Tr. 31:8-12.

Mr. Kennedy has received an award, "IAM Strategy 300: The World's Leading IP," in recognition as the world's leading intellectual property strategists for the past ten years. (2022) Tr. 32:3-10. He has negotiated over 200 patent-related license agreements, which includes patent sales, negotiations between the parties where he negotiated on behalf of one of the parties, and software licenses. (2022) Tr. 32:12-17. While serving as an investor and the chairman of a company, he negotiated license agreements with other companies for their copyrighted software. (2022) Tr. 32:24-33:5.

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¹³ This transcript is derived from the proceedings held on June 14, 2022. (ECF No. 183).

In addition, he has reviewed over 1,000 different license agreements relating to intellectual property. (2022) Tr. 33:20-24. Mr. Kennedy has provided analysis in litigation involving intellectual property matters on 50 different occasions. (2022) Tr. 34:1-3. In cases involving intellectual property, Mr. Kennedy has been accepted by courts as either a damages expert or licensing expert, or both, approximately 10 to 12 times. (2022) Tr. 34:12-18. He has also been accepted as a damages' expert in the Court of Federal Claims about 7 times. (2022) Tr. 34:19-21.

On February 27, 2019, Bitmanagement moved *in limine* to partially exclude Mr. Kennedy's testimony. *See* ECF No. 53. Instead, the Court completely excluded his testimony holding that his focus on "actual use" improperly conflated the exclusive rights protected by copyright law with those protected by patent law. *See* ECF No. 80 at 4-5. Thus, the Court concluded that Mr. Kennedy used the incorrect legal standard, therefore, the testimony was unreliable. *Id.* at 5.

After the Federal Circuit's remand opinion which expressly indicated that "damages shall be determined by the Navy's actual usage," ECF No. 23 n. 5, the Defendant requested that this Court reconsider its exclusion of Mr. Kennedy's testimony, which it did. *See* ECF No. 171 at 2-4. Thereafter, the trial was re-opened to hear the testimony of Mr. Kennedy.

In his testimony, Mr. Kennedy assumed copyright infringement, *see*, *e.g.* (2022) Tr. 38:5-11, 47:10-19, and he opined on the fair market value of the Navy's actual use of the assumed infringing copies. In contrast to Mr. Graff, Mr. Kennedy specifically noted that there was a distinction between used and unused copies of BS Contact Geo. ¹⁴ (2022) Tr. 43:5-20.

To determine the number of actual users during the damages period, Mr. Kennedy analyzed SPIDERS 3D usage from 2013, the date of the hypothetical negotiation, through the end of the damages period in 2016. (2022) Tr. 47:10-49:23. As a first step, Mr. Kennedy determined a royalty base. To do so, Mr. Kennedy reviewed the Navy's "detailed usage logs of the Spiders 3D activity, which lets you know how many are logged on." (2022) Tr. 48:7-9. The Navy only had logs for September 2014 through September 2016, and thus Mr. Kennedy calculated a per year average for 2013, the year during which the Navy did not have the SPIDERS 3D logs, from the existing logs for September 2014 through September 2016. (2022) Tr. 48:7-15. Mr. Kennedy used the average of "the next two years to get within a reasonable degree of certainty, a reasonable number for July 2013 through August 2014." (2022) Tr. 49:1-4.

The logs showed that for the period from September 2014 through August 2015, there were 224 users, and from September 2015 through September 2016 there were 187 users. *See* (2022) Tr. 48:7-49:5. Mr. Kennedy then averaged these two numbers of uses, and he determined

¹⁴ Ordinarily the seat licenses would have been infringing copies, which is why this Court originally precluded Mr. Kennedy's testimony. But with the Federal Circuit's remand, usage will be considered.

that for the missing year he estimated that there would have been 206 users. *See id.* He then testified that "three figures add up to 617 unique users that used the software." (2022) Tr. 49:4-5. He concluded that "there were a maximum number of 617 unique users" during that period of time And they had 38 licenses. And so that means there's 579 unlicensed unique users during the damages period infringing." (2022) Tr. 49:15-16.

Regarding price, Mr. Kennedy concluded that the Navy and Bitmanagement would have agreed to a price of up to \$200 per license for 579 licenses—which he attributed to be the number of "actual uses" of BS Contact Geo. (2022) Tr. 71:22-72:6. In determining the price, Mr. Kennedy testified that he looked "at the Navy's side of the equation, and what they had agreed to previously, and what their use ultimately was of the software, and the limited amount of use." (2022) Tr. 69:23-70:1.

For instance, one agreement dated May 2007 that Mr. Kennedy reviewed between [] and Bitmanagement, indicated that [] paid a lump sum amount of €5,900 for Bitmanagement's software. (2022) Tr. 52-54; see also J09. In addition, Mr. Kennedy looked at an email dated February 25, 2013, which was in reference to a lump sum license with an unrestricted number of citizens, or users, for [] for €45,000. (2022) Tr. 54:17-55:10; D9. He used this as a reference as it was around the time of the hypothetical negotiation. *Id.* This, according to Mr. Kennedy was useful to give some "idea of what Bitmanagement was discussing with others around that time regarding pricing." (2022) Tr. 55:14-16. Mr. Kennedy also noted that the was no differentiation between the "BS Contact and/or BS Contact Geo in price.

Mr. Kennedy further looked at a July 5, 2013, offer entitled, "Project offer Web-based software application for 3D visualization of Wind turbines." (2002) Tr. 55:20-56:5; D103. He found the offer relevant and considered it had price information for a domain license. (2002) Tr. 56:6-12. In particular, the domain license of the BS Contact Geo, was for €11,000. It included a license of the 3D view BS Contact Geo unlimited in time and number of users is included in the scope of services. (2002) Tr. 56:15-19.

And finally, Mr. Kennedy looked at an email chain with an attachment between Axel Koerfer and [] dated October 22, 2013. (2002) Tr. 57:6-11. This indicated a one-year license for BS Contact Geo from Bitmanagement to []. (2002) Tr. 57:6-17. []. (2002) Tr. 57:15-17. The agreement was for a perpetual license for €15,000. (2002) Tr. 57:18-23.

To determine possible volume discounts, Mr. Kennedy reviewed an email chain between Axel Koerfer and [] dated September 15, 2014, to support his report that Bitmanagement was willing to give significant discounts, even for relatively small volume differences from \$250 a seat for 10 licenses down to \$180 per seat for 30 licenses; and those licenses included PC licenses, domain licenses, and/or OEM licenses. (2022) Tr. 59:2-8. Looking at larger volume discounts, Mr. Kennedy found relevant evidence that Mr. Schickel, had contemplated a \$10 per seat license for 50,000 seats as well as another offer for a "one-time

fee for -- on a per license basis up to 500 licenses, at \$1.98, for a total of \$990 for up to -- up to 500 licenses." (2022) Tr. 62-63; J09; J2.5.

He also considered the profitability of the software by evaluating Bitmanagement's annual financial report as of December 31, 2013. D122.25. Referencing D122.25, Mr. Kennedy testified that that document shows "during that fiscal year, sales had dropped by it looks like 50 percent. So that's an indication of probably how competitive Bitmanagement would be willing to be to increase sales." (2022) Tr. 68:13-17.

Mr. Kennedy also looked at Bitmanagement's "cash position," referencing D122.23, and testified that "their total cash position at the time was only \$36,000." (2022) Tr. 68:18-21. Further, Mr. Kennedy testified that he considered "Bitmanagement's situation at the time, from a cash standpoint, and their willingness to negotiate." (2022) Tr. 70:2-3. He concluded that Bitmanagement "would have been very willing to negotiate with the government and with the Navy to get a license and get that revenue back up and their cash back up." (2022) Tr. 69:7-9.

Thus, Mr. Kennedy testified that his hypothetical negotiation was as follows:

Bitmanagement would come in with the price that they had received just about that year of \$305 [from the 2012 purchase]. The Navy would try to test that in the negotiation to see how low that they could get Bitmanagement to go for those 579 licenses, and they might offer \$75 to \$100. And then I believe the parties for that number of usage would have ended up agreeing on \$200 as a reasonable compensation for the use of that -- those licenses.

(2022) Tr. 70:5-11. He concluded that the royalty rate be that of a running royalty¹⁵ for a total damage number of \$115,000. (2022) Tr.50:13-16.

II. Legal Standards

A. The Gaylord Cases, Georgia-Pacific Objective Considerations, and the Book of Wisdom

1. The Gaylord Line of Cases

The *Gaylord* cases set forth the objective factors a court should consider in its construction of a hypothetical negotiation. Under 28 U.S.C. § 1498(b), Plaintiff is entitled to recover "fair and reasonable compensation" for the infringement. In *Gaylord II* and *III*, the Federal Circuit explained that a plaintiff may recover "the fair market value of a license covering the defendant's use." *Gaylord* II at 1342-43; *Gaylord* III at 1367. Both parties agree this standard controls. However, the parties diverge on the definition of "use."

¹⁵ Mr. Kennedy defines a "running royalty" as a royalty that you pay for "each time you use it." (2022) Tr. 44:5-6.

In its remand, the Federal Circuit indicated that damages should be assessed for "actual usage." *Bit II*, 989 F.3d at 951 n.5. Plaintiff argues that "[the Federal Circuit] envisioned a calculation of damages of each of the Navy's 'unauthorized cop[ies] of BS Contact Geo." ECF No. 184 at 7. Thus, according to Plaintiff, "use" equals "unauthorized copies made."

In contrast, the Defendant argues that "[t]he Federal Circuit **never** concluded that damages must be calculated on a per-copy basis in *Gaylord*." ECF No. 186 at 9. This, Defendant argues, is further supported by "*Gaylord*'s directive to consider whether 'different license fees are appropriate' for different uses," *id.*, and "whether an ongoing royalty or a one-time fee more accurately captures the fair market value" for each. *Id.* (citing *Gaylord II* at 1344-45). The type of royalty for each different use depended on "whether people used the [infringing copy] specifically because" of the copyrighted expression, or whether the value was driven by other considerations." *Gaylord II* at 1344-45.

2. Georgia-Pacific Objective Considerations

In light of the *Gaylord* line of cases, and the Federal Circuit's opinion, which states "[c]ontrary to Bitmanagement's argument [], it is not entitled to recover the cost of a seat license for each installation . . . [but] [i]nstead, "the proper measure of damages shall be determined by the Navy's actual usage of BS Contact Geo in excess of the limited usage contemplated by the parties' implied license," *Bit II*, 989 F.3d at 951 n.5, the Court "must consider all evidence relevant to a hypothetical negotiation" focusing on "objective considerations" using applicable tools "familiar from patent law." *Gaylord II* at 1344; *Gaylord III* at 1367-68. The Federal Circuit identified the use of objective factors found in *Georgia-Pacific Corp. v. U.S. Plywood Corp.*, 318 F. Supp. 1116, 1120 (S.D.N.Y. 1970). *See, e.g., Lucent*, 580 F.3d at 1324-35 (endorsing and applying factors from *Georgia-Pacific*). Objective factors ensure that a hypothetical negotiation does "not occur in a vacuum of pure logic," and objective factors include consideration of, *inter alia*, facts that relate to the parties' "relative bargaining strength." *Georgia-Pacific*, 318 F. Supp. at 1121.

3. Book of Wisdom

The parties also disagree on whether post-July 2013 facts may be considered by the Court as part of the hypothetical negotiation. The "Book of Wisdom" standard in patent law would allow for consideration of post-July 2013 facts. Focusing on "objective considerations" using applicable tools "familiar from patent law," see ECF No. 186 at 9, Defendant advances that the Court may implement the "Book of Wisdom," doctrine. ECF No. 186 at 10. Plaintiff disagrees, arguing that "[t]he Government's reliance on the so-called "book of wisdom" to smuggle in post-installation usage is misplaced" as the application of a patent-law standard is "contrary to the concept of a hypothetical negotiation which would have taken place before the infringement, introducing hindsight into the negotiations." ECF No. 184 at 9.

As stated above, the Federal Circuit supported use of "tool[s] familiar from patent law," *Gaylord III* at 1367. In addition, this Court has used the Book of Wisdom in *Gaylord* and in *Davidson*, both Section 1498(b) cases. *See Gaylord v. United States*, 112 Fed. Cl. 539, 542 n.1

(2013) ("Pursuant to the 'Book of Wisdom' approach, the Court also considers facts about sales and market information from after July 27, 2003."); *Davidson v. United States*, 138 Fed. Cl.159, 179 (2018) ("The court [may] consider[] information that comes to light after the hypothetical negotiation [pursuant to] the "book of wisdom.").

Additionally, Plaintiff's argument is inconsistent because it too relies on facts *after* the July 2013 negotiation date for its damages' calculations. For instance, Plaintiff relies on its expert's royalty base calculations, in part, on computers added to the Navy's network between 2013 and 2016. *See* ECF 184 at 13 (citing Graff Direct ¶ 59). Plaintiff's expert further relies on the per-license price in the Navy's unfulfilled 2015 purchase order claiming that it "provides the best analog for the hypothetical negotiation." *Id.* at 16-17 (citing Graff Direct ¶ 48); *see also id.* at 4 (applying a rate sourced "just two years after . . . July 2013"). Thus, because Plaintiff's objections to the Book of Wisdom are inconsistent with its own reliance on subsequent facts in its damages model, the Court will consider information after the hypothetical negotiation.

III. Discussion

As stated previously, on remand, the Federal Circuit has directed this Court to determine damages using the form of a hypothetical negotiation guided by the *Gaylord* line of cases. This opinion will, therefore, first address the *Gaylord* holdings related to a hypothetical negotiation. Thereafter, the Court will turn its attention to the royalty base, then the royalty rate, and then the proper type of license to determine the fair market value of a license.

A. Using The Hypothetical Negotiation Objective Considerations, The Navy Had a Stronger Bargaining Position.

1. The Hypothetical Date

Before turning to the objective factors, the Court notes that the parties agree on a hypothetical negotiation date of July 18, 2013; therefore, this Court adopts that date. *See* ECF 162 at 7 (citing ECF 137 at 31; ECF 148 at 10).

2. Objective Considerations

The Court finds that the objective considerations establish that the Navy would have been in a stronger bargaining position than Bitmanagement during the hypothetical negotiation. The evidence showed that the parties had a good relationship. See Tr. 260:22-61:12, 294:18-95:15 (Schickel); Tr. 933:20-35:3 (Viana); see also Tr. 1186:20-87:18 (Brutzman) (supporting Bitmanagement with testing and marketing). In addition, the parties successfully resolved several licensing and technical issues before the hypothetical negotiation. See Bit I at 649-54. Furthermore, the parties hoped for increased use of their respective software products over time. See, e.g., Bit I at 658 ("both anticipated a future purchase of additional licenses to cover the Navy's usage."); Tr. 699:9-700:5 (Colleen) ("Both . . . hoped the program [would] grow . . . sometimes there were false signals of this growth."); Tr. 720:10-25 (Colleen) ("the uptake of actual users . . . was ramping up at a fairly modest rate").

With regard to the parties' "commercial relationship," *Georgia-Pacific*, 318 F. Supp. at 1120, the evidence showed that the Navy was one of Bitmanagement's most important customers for BS Contact Geo. For example, Bitmanagement touted its work with the Navy in its advertising and presentations to potential customers. *See Bit I* at 654 (citing D103.32; Stip. ¶ 79; D104.1; D131.11-17; D197.2, .26; Tr. 320:5-23:17 (Schickel); D150.4, .27; D151.6, .51; D197.26, .75); *see also* D145.1-2; Stip. ¶ 96; Tr. 306:4-07:1 (Schickel); P170.1-2; P257 ¶ 78.

Georgia-Pacific further instructs that the "profitability of the [work,] . . . its commercial success[,] and its current popularity," are relevant to the hypothetical negotiation. *Id.* at 1120. In particular, the evidence showed that in July 2013, Bitmanagement was in poor financial condition. *See* (2022) Tr. 67:2-69:12; D122.11, 16. The evidence further showed that Bitmanagement's market for BS Contact Geo was limited, *see* Tr. 93:19-24 (Schickel), and that Bitmanagement was only completing a few licenses per year, at a low total dollar rate. *See* P011.3-4. In addition, the free test version of BS Contact Geo was being downloaded at a lower pace than in previous years. *See* D515.3-4; Tr. 110:5-17 (Schickel).

However, favorable to the hypothetical negotiation for Plaintiff, is the consideration of "alternatives available to a potential licensee [that] provide an important constraint in a hypothetical negotiation." *Gaylord III*, 777 F.3d at 1370. Bitmanagement argues that its software was the only available product to work in conjunction with SPIDERS 3D. Although this is true, the Court notes that there were alternatives to Bitmanagement's software that did not require meshing with SPIDERS 3D. The evidence shows that there were other X3D viewers available in 2005, see Tr. 667:15-68:22 (Colleen); see also Tr. 903:16-22 (Viana), as well as a government-owned viewer, in July 2013. Additionally, presently, the Navy uses X3DOM as the rendering component of SPIDERS 3D. See Tr. 901:1-17, 944:8-46:2 (Viana); Tr. 1106:5-12 (Vadnais); Tr. 1139:13-42:7, 1160:25-61:3 (Brutzman); see also Bit I at 654.

B. The Royalty Base

1. Number of Infringing Copies

Defendant asserts that based on the evidence in the record, the Navy made 429,660 copies of BS Contact Geo 8.001. ECF No. 155 at 3-4. According to Defendant, based on the law of the case and its defenses, 429,567 copies were infringing. ECF No. 186 at 14. To arrive at the infringing number, Defendant subtracted all licensed and extraterritorial copies from the total number of copies made, as summarized in the chart below:

Source	Proven	Record	Infringement	Infringing
	Copies	Citations	Defense	Copies
NMCI Original	429,604	P010.8; Tr. 884:10-13	License	429,566
Deployment		(Chambers); Tr. 1110:9-14:3	(38 computers)	
		(Vadnais)		

NMCI	34	P010.8	License	0
Re-Deployment			(38 computers)	
ONE-Net	21	P010.8-9	Extraterritorial	0
Individual			(all computers)	
Deployments				
Distribution to	1	Tr. 941:22-43:4 (Viana)	None	1
SPIDERS 3D				
Contractor				
Total				

ECF No. 155 at 4.

In contrast, Plaintiff alleges that the number of infringing copies is at least 600,000. ECF No. 184 at 9. In arriving at this number, Plaintiff asserts that its "royalty base comprises four components." *Id.* at 9-11. First, Plaintiff asserts that the Navy planned to install 558,466 copies of the software beginning in July 2013. *Id.* Second, Plaintiff adds an additional 40,000 computers to its royalty base arguing that these 40,000 were cycled onto the NMCI network between July 2013 and July 2016. *See* ECF 184 at 10. Third, Plaintiff adds an additional 28,000 ONE-Net installations some of which Plaintiff alleges were installed in U.S. Territories. *Id.* at 10-11. Fourth, and finally, Plaintiff alleges that the Defendant may have given additional copies to other contractors. *Id.* at 11.

The Court notes that Plaintiff's royalty number calculations are couched in speculative terms. *See* ECF 150 at 9 ("would necessarily have," "may have undercounted"); ECF 146 at 5-8 ("an unknown subset," "[a]n unknown number"). Although the Defendant has the burden of proof (according to the Federal Circuit), if the Defendant presents concrete, credible numbers, the Court may not just accept Plaintiffs numbers. Here, Plaintiff's numbers seem to be less grounded than the Defendant's, as explained below. *See Gaylord III* at 1368 (cautioning against "undue speculation"). Consequently, the Court finds that evidence presented showed that the Navy made 429,604 copies of BS Contact Geo 8.001 on NMCI computers before the Navy uninstalled the software in September 2016. *See* P010.6-9; Tr. 1110:9-14:3 (Vadnais); Tr. 884:10-13 (Chambers).

The evidence showed that the deployment schedule included Windows XP seats that never received the software. *Compare* J025.8-9 with *Bit I* at 654 ("BS Contact Geo [was installed] on all non-classified NMCI computers running Windows 7"); Tr. 1093:1-94:1 (Vadnais); *see also* D129.5 (identifying Windows 7 as a prerequisite for using SPIDERS 3D); Tr. 474:22-75:14 (Graff) ("I never saw anything one way or the other as to whether or not they actually met their goal of installing it on the 558,000 seats."). From this number of copies made, the Navy had 38 licenses. Thus, 38 computers were authorized to use BS Contact Geo version 8.00. *Bit I* at 658 n.10; *see Bit II* at 951 n.4. Therefore, the Defendant was correct in subtracting them from the NMCI original deployment amount arriving at 429,566 infringing copies. And although the Navy "reinstalled the software on 34 seats," *Bit I* at 654 (citing P010.8), the Defendant correctly relies on the 38 licenses it currently held so that these computers with the

reinstalled software were covered by the license and were not infringing. This re-deployment did not add or subtract to the infringement claim.

ONE-Net is the Navy's "computer network outside the United States" and its users "are located outside the United States." Stip. ¶ 86. In January 2014, NAVFAC uploaded BS Contact Geo 8.001 to the self-service catalog for ONE-Net, the Navy's computer network outside the United States. See Stip. ¶¶ 85-87; P010.8-9. In August 2016, the Navy determined that the software was installed on 21 ONE- Net seats; and in March 2017, the Navy determined that the software was installed on 13 ONE- Net seats. See P010.8-9; D206.1; D207.1.

The evidence further showed that ONE-NET computers were those based in the European Union ("EU1") or the Far East ("FE1"). See P010.8; D207; See P010.8-9; Stip. ¶ 86. Although Plaintiff alleges some of these computers were located in the U.S. Territories, and as such are not extraterritorial, Plaintiff has not advanced a number as to how many copies were copied onto those computers. Thus, Plaintiff's allegations are too speculative to add to the infringing number of copies. Therefore, the Court finds that the 21 copies used cannot be counted as infringing copies as the Defendant has proven that the copies used were outside the U.S. and are jurisdictionally barred from liability. See 28 U.S.C. § 1498(c); Zoltek Corp. v. United States, 672 F.3d 1309, 1326 (Fed. Cir. 2012) ("[T]he plain language of § 1498(c) eliminates Government liability for claims 'arising in a foreign country."").

And finally, the Navy further admitted that one copy of SPIDERS 3D was distributed to a contractor. *See* Tr. 941:22-43:4 (Viana). Plaintiff's claim that there might have been more copies given to other contractors is too speculative. The Defendant admits and the Court accepts that one copy was all that was given away.

2. Actual Use Versus Available For Use

The Federal Circuit has instructed this Court as follows: "Contrary to Bitmanagement's argument [], it is not entitled to recover the cost of a seat license for each installation." *Bit II at* 951 n.5. Instead, "the proper measure of damages shall be determined by the Navy's actual usage of BS Contact Geo in excess of the limited usage contemplated by the parties' implied license." *Id*.

Plaintiff argues that "use" equates to the number that were copied onto Navy computers and *accessed* as well as those that were downloaded and *available* for use. ECF No. 150 at 15. The Flexera condition was not met for either category. Thus, according to Plaintiff, no copy "fell within the bounds of any existing license," as the Federal Circuit instructed this Court to determine, id. at 951 n.5; therefore, the total number of copies made is the appropriate number in determining usage." *Id.* According to Plaintiff, that number was 600,000, the amount of PC copies made.

In contrast, the Defendant presented evidence to the actual use of the software as well as how the Navy planned to use the software. According to the Defendant, for the hypothetical negotiation in 2013, not only would the parties have considered the total number of copies, but

4. Relying on this, Defendant argues that "this **hypothetical** approach is entirely consistent with the parties' **actual** approach in negotiating the 2012 purchase order." *Id.* (citing *Bit I* at 651-52); D026.1 ("Let's go for the floating license server approach."); J018.1 ("we will push it out . . . to begin tracking the usage and demand signal of the 20 license keys"). It is also supported by both parties' reliance on implementing Flexera in order to count the number of uses and actual demand of the software.

At trial, evidence was admitted by the Defendant which showed the tracking of SPIDERS 3D during the last two years of liability. *See* J035.1-51. The testimony at trial confirmed the reliability of the weblogs. Tr. 854:5-14; 861:2-6; 865:14-17 (Chambers). The weblogs showed that between 8/30/2014-9/2/2016 the maximum uses per day was 36, the number of unique users was 411 and the total users was 1,142. ECF No. 186 at 5.

Although the Court finds the logs to be accurate, the Court further notes that logs are missing for the first year of usage of SPIDERS 3D. According to the Plaintiff, during this missing year, Navy personnel would most likely have used the software more frequently. ECF No. 184 at 12. In fact, in December 2012, Mr. Viana told Bitmanagement that within the first six months the Navy anticipated an increased demand for the software. P242.1. The Court agrees with this assumption. However, the Plaintiff has not provided any calculations that would capture this year. But Mr. Kennedy has.

For his calculations, Mr. Kennedy calculated an average number of uses for the missing year by averaging the two reliable weblog user data. His calculations provided for a total of 617 unique user (224 users for September 2014 through August 2015 + 187 users for September 2015 through September 2016 + 206 users for the missing year). (2022) Tr. 49:4-5. However, because the Court finds that the Navy admitted that it anticipated an increase in demand of the software in the first year, the Court will take the highest year of users, 224 users for September 2014 - August 2015, for the missing year. Thus, the Court finds a total of 635 unique users. The Court finds up from Mr. Kennedy's calculations subtracting the 38 paid for licenses. The Court finds 597 unlicensed unique users during the damages period.

The next step in the hypothetical negotiation would have been for the parties to determine the number of additional licenses necessary to cover the Navy's use of the software. As previously indicated, the Navy owned 38 licenses. Those licenses were also intended to allow a maximum of 38 simultaneous uses of the software. Because the maximum number of uses per day of SPIDERS 3D was found to be 36, the 38 simultaneous-use licenses would have covered the Navy's actual use during the three years of liability.

However, the evidence further showed that the Navy would have agreed to procure more than 38 simultaneous-use licenses in 2013. The facts showed that both parties hoped to increase its use of SPIDERS 3D and BS Contact Geo after the Navy-wide deployment of the software. See Bit I at 658 ("Bitmanagement and the Navy both anticipated a future purchase of additional licenses to cover the Navy's usage."). Indeed, both Plaintiff and Defendant engaged in discussions to purchase approximately 100 additional licenses between 2013 and 2015. See

J023.1-7 (Bitmanagement draft license agreement for 93 licenses in March 2013); Stip. ¶ 78; Bit I at 654 (citing J031.1-5, 31) (Navy unfulfilled purchase order for 88 licenses in September 2015). Although neither order was fulfilled, the Defendant (and Plaintiff) allege, and the Court agrees that these orders provide relevant information regarding actual negotiations of the parties and the parties intent to purchase additional simultaneous-use licenses. The Defendant admits that it may have purchased an additional 100 licenses in 2013 and in doing so the amount would have covered the Navy's actual use during the three years of liability. The Court agrees, and therefore, concludes that the Navy would have agreed to procure 100 additional simultaneous-use licenses from Bitmanagement in a hypothetical negotiation in 2013.

The Court, therefore, finds that the royalty base includes 429,567 copies of BS Contact Geo 8.001 with 597 unique users and 100 additional simultaneous-use licenses.

C. The Royalty Rate

Both parties agree in principle that the Court should consider other licenses and offers that may be relevant in constructing the hypothetical negotiation to determine the royalty rate. ¹⁶ ECF No. 186 at 8.

Plaintiff's expert witness, Mr. Graff, testified that the parties would have agreed to a royalty base of \$259 per seat license. *See also* Tr. 511:3-17 (Graff) ("the primary consideration is what would the customer be willing to pay"). To arrive at this number, Mr. Graff looked at three purchase orders between Bitmanagement and the Navy. He looked at the 2008 purchase order whereby the Navy procured 100 seat licenses of BS Contact Geo for \$300 per license and the 20-seat upgrade for an additional \$125.00.¹⁷ He further looked at the 2012 purchase order for 18 licenses for \$305 per license. And finally, Mr. Graff, looked at the 2015 purchase order for 88 BS Contact Geo application license keys for \$350 per license for a total of \$30,800, with an option to purchase an additional 80 licenses of BS Contact Geo version 8.001 for \$370 per license. (This contract was never fulfilled.) Mr. Graff then found that the best analog for the hypothetical negotiation would be to use the unfulfilled 2015 purchase order. Although never fulfilled, Mr. Graff noted that this purchase order was the only purchase order for the product, BS Contact Geo version 8.001, that the Navy copied *en masse*. Stip. ¶ 67; Graff direct ¶ 48. He then applied the 30% discount to arrive at \$259 per copy.

In response, Defendant notes that Mr. Graff rejected using Bitmanagement's agreements and offers between other countries and entities despite the Federal Circuit's instruction to contemplate "objective considerations." *Bit II* at 951-52 n.5 (The Court is to use the *Gaylord* line of cases as a guide.). ECF No. 186 at 24. Instead, Mr. Graff relied on only three

¹⁶ Curiously, the Court notes again that although Plaintiff argues against using the Book of Wisdom doctrine, Plaintiff employs it by using the 2015 agreement to construct its damages model.

¹⁷ The Plaintiff misstates the evidence with regard to this upgrade. Only 20 licenses were upgraded for a total cost of \$425, not all 100 licenses. *See* ECF No. 184 (\$425 per license header).

agreements and offers between Bitmanagement and the Navy. He did not use the other agreements because they involved: (1) different software (*i.e.*, BS Contact), (2) different customers, and (3) a different "commercial history." ECF No. 148 at 27 citing Graff Direct ¶ 49. Therefore, according to the Defendant, because Mr. Graff does not take into consideration all the objective considerations as instructed by the Federal Circuit, Mr. Graff's analysis is wrong.

Mr. Kennedy began his analysis by first locating comparable license agreements and looking at what technology was being licensed, who the licensor and licensee were, and the date to determine comparability. Complementing this approach, Mr. Kennedy also concentrated his opinion on how the Navy planned to use the software. Using this hypothetical approach, Defendant argues that this "is entirely consistent with the parties' actual approach in negotiating the 2012 purchase order." ECF No. 155 at 4; See, e.g., Bit I at 651-52; D026.1 ("Let's go for the floating license server approach."); J018.1 ("we will push it out . . . to begin tracking the usage and demand signal of the 20 license keys"). Thus, as a starting point for the hypothetical negotiation, Mr. Kennedy found that the 2012 agreement for 18 licenses for \$305 was the most relevant as this agreement was for the software right before the hypothetical negotiation date. (2022) Tr. 50:1-5. He then compared various potential offers and actual offers dated near the hypothetical date of July 18, 2013. (2022) Tr. 100:13-21; (2022) Tr. 50:2-51:8. He compared discounts offered, sales, and the financial position of Bitmanagement. (2022) Tr. 59:2-5; (2022) Tr. 68:13-17; (2022) Tr. 68:18-69:12. After his analysis, he then concluded that the parties would have agreed to a volume discount of a little more than 30% to arrive at a conclusion that the Navy would have paid \$200 per license. (2022) Tr. 59:22-61:23.

The Court notes that the parties are very close in its royalty rate—\$259 versus \$250. The Court also notes that both parties agree on a volume discount of approximately 30%. Plaintiff argues that Mr. Kennedy's approach "suffered from several flaws that render Bitmanagement's rate more reliable." ECF No. 184 at17. Plaintiff argues that Mr. Kennedy did not point to any evidence to support his assumption that Bitmanagement's financial condition would have applied a downward pressure on the hypothetical negotiation. Id. In fact, Plaintiff argues there were many other factors that Mr. Kennedy did not address that would have supported upward pressure on the price in the hypothetical negotiation. *Id.* For instance, Mr. Kennedy did not acknowledge in his hypothetical negotiation that Bitmanagement was the only product the Navy found to work well with the Navy's SPIDERS 3D. Id. Nor did Mr. Kennedy acknowledge that the Navy expected high usage of its product. Id. Specifically, during cross-examination, Plaintiff asked Mr. Kennedy whether he considered several emails between Bitmanagement and the Navy leading up to the hypothetical negotiation—he did not. These emails, between November 2011 through July 2013, indicated that the Navy intended high usage of the software, more licenses. See (2022) 87:13-89:14-91; 91:17-97:4; 106:7-108:2. Mr. Kennedy agreed that these were relevant to the hypothetical negotiation. (2022) Tr. 106:7-108:2. In addition, Mr. Kennedy agreed that the Navy derived a "convenience factor" having BS Contact Geo installed on every computer in the network, also relevant to the hypothetical negotiation. (2022) Tr. 106:7-14.18

¹⁸ The Court is attracted to the "convenience factor" argument. However, yet again, the Plaintiff has failed to provide the cost of convenience in its damages' calculations.

Although the cross-examination of Mr. Kennedy showed weaknesses in his valuation, the Court has no idea how these emails would have impacted the damages calculation because Plaintiff has limited its evidence to only undermining Mr. Kennedy or to the per seat license damages calculation. Thus, the Court does not find the weaknesses to be substantial, especially because Mr. Graff's valuation did not take into consideration the objective considerations. *Gaylord III* at1344, 1368 ("evidence of past license agreements for the work in question is certainly relevant to a hypothetical negotiation analysis.") ("The hypothetical-negotiation determination must be tied to the particular work at issue and its marketplace value"). Thus, the marketplace value is informed by all licenses and offers, not only the three agreements reviewed as relevant by Mr. Graff.

Furthermore, the Court notes that "BS Contact Geo" and "BS Contact" were used interchangeably in their communications and their agreements. *See* Tr. 832:1-11(Colleen) ("BS Contact and BS Contact Geo were interchangeable terms in our daily discussions."); Tr. 835:10-15 (Colleen) (stating that it was "common parlance" to refer to BS Contact Geo as BS Contact); see also J017.21; J022.13; J023.7; J027.1; D108.1; Tr. 817:3-8, 828:19-30:7, 839:3-24 (Colleen). Therefore, Mr. Graff's attempt to discredit Mr. Kennedy's reliance on the distinction between the versions of the software fails. For instance, in fulfilling the 2008 purchase order, "Bitmanagement delivered BS Contact Geo" to the Navy "despite the [order's] express reference to BS Contact." *Bit I* at 650. Furthermore, witnesses who were familiar with both products testified that there were few differences between the products. *See* Tr. 832:13-18 (Colleen); Tr. 1160:11-21 (Brutzman) ("I had trouble distinguishing any difference between [BS Contact and BS Contact Geo]."). Even Mr. Schickel admitted that Bitmanagement sometimes sold the products at the same price. *See* Tr. 334:22-24. Accordingly, the BS Contact licenses are relevant, objective evidence.

The evidence further showed that in its past BS Contact Geo license negotiations, the Navy would also have looked to the available budget. In 2013, when discussing the possibility of implementing an unlimited licensing scheme for 500,000 copies, Mr. Colleen testified that "[he was] pretty skeptical about [the Navy] even coming up with a 1 million for such a license." Tr. 720:1-2 (Colleen). One reason, according to Mr. Colleen, is that in 2013, the Navy had a lot of budget problems. Tr. 720: 3-17 (Colleen).

And finally, Mr. Graff's rationale that he excluded other offers or agreements that "do not reflect the commercial history that the Navy had with Bitmanagement and the value of BS Contact Geo to the Navy" *see* Graff Direct ¶ 49, is in conflict with the use of objective considerations under *Gaylord II*. *Gaylord II* at 1344. As the Federal Circuit has stated: "the trial court must consider *all* evidence relevant to a hypothetical negotiation." *Id*.

Mr. Kennedy reviewed several offers and agreements that the Court finds relevant around the hypothetical date. For instance, other customers' orders were clearly relevant. Other pricing schemes were clearly relevant. His conclusion, that the Navy would have paid \$200 per license is, therefore, more reliable. The Court further finds that Mr. Kennedy arrived at his conclusions using objective considerations, examining "the perspectives of the two parties to the hypothetical

negotiation," *Gaylord III* at 1370-71, as well as relying on the objective consideration found in *Georgia-Pacific*, 318 F. Supp. at 1120, as mandated by the Federal Circuit.

D. Proper License Type and Calculation of Damages

In order to determine the proper license type, the Federal Circuit's remand instructed:

Contrary to Bitmanagement's argument, see J.A. 10002 ¶ 5, it is not entitled to recover the cost of a seat license for each installation. If Bitmanagement chooses not to pursue statutory damages, the proper measure of damages shall be determined by the Navy's actual usage of BS Contact Geo in excess of the limited usage contemplated by the parties' implied license. That analysis should take the form of a hypothetical negotiation. See Gaylord v. United States, 777 F.3d 1363, 1368–72 (Fed. Cir. 2015); Gaylord I, 678 F.3d at 1342–45.

Bit II at 951 n.5.

In the usual copyright case, recovery is for infringing copies. Here, however, the Federal Circuit has mandated that Plaintiff is not entitled to damages based on the "cost of a seat license for each installation." Instead, the Federal Circuit's directive to this Court was to consider actual usage. In addition, the Federal Circuit directed this Court to consider the method of calculation of damages in the *Gaylord* line of cases, which would include other licensing options, not just a per-copy license. ¹⁹ Thus, damages cannot be based on number of copies made. Instead, it appears that the Federal Circuit wants this Court to account for the number of licenses needed to allow for the number of users that the Navy contemplated at the time of the hypothetical negotiation. Using the Book of Wisdom, the number of actual users may be calculated. Therefore, the essence of the damages' inquiry is how much would the Navy agree to a license covering this usage.

In contradiction to the Federal Circuits' mandate, Plaintiff argues that it is entitled to recover an award for a license for each copy. ECF No. 184 at 1. Specifically, Plaintiff argues:

The Federal Circuit observed in dicta that "[c]ontrary to Bitmanagement's argument, see J.A. 10002 ¶ 5, it is not entitled to recover the cost of a seat license for each installation." Bitmanagement II, 989 F.3d at 951 n.5. The Court's citation is to the complaint's request for \$596,308,103 in damages, Compl. ¶ 5, which was based on the commercial list price of \$1,067.76 per license, id. ¶ 26. Bitmanagement no longer seeks anywhere near that perlicense price, and its proposed damages figure incorporates a significant volume discount to reach a perlicense royalty rate of \$259.

¹⁹ From the evidence at trial, the Court could have found that for the hypothetical negotiation, Plaintiff and Defendant would have negotiated a price *per copy* of \$10 for 429,567 copies resulting in a fair market price of \$4,295,670. But this result would not comply with the Federal Circuit's mandate.

ECF No. 184 at 5 n.1 (citation omitted). Therefore, Plaintiff argues that it should be awarded a PC license for each copy made because that is what the Navy took, arguing that the Federal Circuit's directions were dicta. *Id.* The Court disagrees. The Court finds it difficult to find that a sentence that includes the word "shall" is pure dictum: "the proper measure of damages *shall* be determined by the Navy's actual usage of BS Contact Geo" *Bit II*, 989 F.3d at 951 n.5 (emphasis added).

Notwithstanding the Federal Circuit's mandate, Plaintiff has been persistent in focusing on a per-copy license, despite the Court's indication that it would follow the Federal Circuit's mandate regarding actual usage. And this is despite many opportunities to do so, such as additional briefing and reopening the trial record to specifically take testimony on actual usage. *See* ECF No. 183 (transcript of proceedings held on June 14, 2022). At this subsequent trial, Plaintiff did not call a rebuttal witness, although this Court gave Plaintiff the opportunity. Instead, Plaintiff continued its damages theory in disregard to the Federal Circuit's mandate, heedless of its own peril. Because the Plaintiff does not engage the Federal Circuit's mandate for alternative licensing schemes, the Court turns its attention to the Defendant's proposals.

The Defendant proposes three different licensing options for the Court, two of which are found only in its briefs²⁰ and one of which was presented by Mr. Kennedy, namely, a unique-user license; a website license (also known as a domain or subdomain license); and a mixed license. ECF No. 186 at 20, 22; (2022) Tr. 49:1-16.

But the only option supported by Mr. Kennedy's testimony is a unique-user license. Here, Mr. Kennedy opined that the parties may have negotiated a purchase of unique-user licenses. (2022) Tr. 49:1-16. Under this scenario, Mr. Kennedy used a running royalty for 579 unique users at \$200 per license. This would have resulted in a purchase of the software for a total of \$115,800. (2022) Tr. 50:13-16, 59:22-63:9.

In a hypothetical negotiation, the parties would have considered the types of licenses that would have best fit the Navy's anticipated use of BS Contact Geo. Historically, in 2011, Bitmanagement offered "three different licensing options" to the Navy, with at least two of the options based on a set number of "running" clients "in the same sub-domain." *Bit I* at 651 (quoting D026.3-4). Upon further negotiation, the parties agreed to use a "floating license system" to manage 38 licenses of BS Contact Geo. *Id.* at 650-54; D026.1 ("Let's go for the floating license server approach."). By July 2013 the parties had agreed to non-standard license terms. Those agreements included negotiations that Bitmanagement was "open for any licensing scheme" for the Navy and was "willing to do our utmost to enable [another] licensing functionality." *Bit I* at 649 (quoting J005.4-5).

The Court concludes that the evidence put forth by Mr. Kennedy is the appropriate means to calculate the proper license. However, in addition to the unique-user licenses, the Court adds

²⁰ Two of the options included a damages award of \$200,000 for a website license. There is no evidence, besides Defendant's briefs, to support this number.

100 simultaneous-use licenses. *See supra* p.17. These licenses are included in the second and third options in Defendant's briefs and are tantamount to an admission. The unique-user licenses and simultaneous-use licenses combine to form a mixed license. Therefore, the Court finds that the parties would have negotiated this kind of mixed license in 2013.

The Court finds a total of 635 unique users. The Court further finds that Mr. Kennedy's price per license of \$200 is reliable. As noted previously, in determining the price, Mr. Kennedy testified that he looked "at the Navy's side of the equation, and what they had agreed to previously, and what their use ultimately was of the software, and the limited amount of use." The Court feels that Mr. Kennedy's conclusion is also supported by the "objective considerations" that he discussed. Furthermore, the Court has no other concrete figure because Plaintiff's calculations were based only on per-seat licenses and were determined without examining objective considerations. From the 635 unique users, the Court must subtract the 38 existing Navy licenses for a royalty base of 597 unique unlicensed users. Adopting the \$200 per license rate from Mr. Kennedy, the Court finds that Plaintiff is entitled to \$119,400 for the unique-user licenses, a price that the Court finds to be fair and reasonable.

With regard to the simultaneous-use licenses, for the reasons set for forth *supra* p. 17, the Navy would have agreed to the \$350/license for these 100 as evidenced by both the draft agreement and the 2015 unfulfilled purchase order. The Court, therefore, adds \$35,000 to the award for a total of \$154,400, excluding an award for delayed compensation.

IV. Conclusion

For the reasons set forth above, the Court hereby **AWARDS** Plaintiff \$154,400 for the Defendant's copyright infringement.

IT IS SO ORDERED.

s/Edward J. Damich
EDWARD J. DAMICH
Senior Judge

²¹ This number includes the Court's projection of increased, first-year use based on the Navy's weblogs as explained *supra* p.17.