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PART ONE: Understanding the Complexities of Today's Modern Sports Wagering Operations

Introduction - In the Beginning There Was PASPA.

Legendary New York Yankees manager Yogi Berra once famously quipped: "If you don't know where you are going, you might wind up someplace else."

When the U.S. Supreme Court struck down the Professional and Amateur Sports Protection Act (PASPA) in May 2018, it left many gaming regulators, operators, and suppliers wondering how to avoid winding up in that "someplace else." Without a roadmap and signposts to be guided along the way, it's easy to get lost in the dynamic, transactional, sophisticated, and often confusing landscape of sports wagering.

Part One of Gaming Laboratories International's (GLI®) two-part Sports Betting White Paper begins with a review of the current state of sports wagering in the United States in the wake of this momentous ruling. It looks at some of the recent newsworthy events that are remaking the sports wagering landscape in the U.S., describes some of the opportunities and commercial benefits of sports betting, presents a brief history and background of how PASPA came into being, and explains why PASPA was overturned.

IT IS THE OBJECTIVE OF PART ONE TO HELP GAMING OPERATORS, SUPPLIERS, AND REGULATORS BEGIN TO COMPREHEND THE MYRIAD OF COMPLEXITIES, RISKS, AND PITFALLS FACED WHEN CONTEMPLATING ESTABLISHING SPORTS BETTING OPERATIONS IN JURISDICTIONS THAT ARE NEW TO THIS UNIQUE FORM OF GAMBLING.

Therefore, Part One focuses on how and why sports wagering is different from other forms of traditional gaming, such as slots and table games. It goes behind the scenes and begins to dissect the anatomy of how a modern sports betting operation works. Various sports wagering roles and functions are described; such as oddsmakers, bookmakers, feed providers, system providers, and subscription packages. Key topics covered in Part One also include setting odds and managing risks; understanding the function of the trading platform as a sportsbook's core technology; and concluding with the legal and regulatory implications of the federal Wire Act.

Benefits and Commercial Opportunities of Sports Wagering

Sports betting is no longer conducted in smoky backrooms by shady characters straight from a Damon Runyon novel. Rather, sports wagering is a multi-billion-dollar gaming enterprise that spans the globe. This sophisticated form of wagering has been successfully conducted in gaming jurisdictions around the world for decades. In the United States, however, sports betting has largely been confined to a few states, such as Nevada, as noted below.

With the rapid expansion of sports wagering, many states are looking to cash in on this lucrative form of gambling. Tribal gaming jurisdictions are also eager to reap the benefits of sports wagering for their sovereign nations and citizens. Tribal casinos have enriched the lives of tribal members by providing muchneeded employment, healthcare, social, and other important services. Now, the prospect of new revenue opportunities with the development of tribal sportsbooks at existing casinos is getting a close look by tribal gaming regulators from coast to coast, as you shall see.

In addition, the expansion of legalized sports betting across the United States acts to counterbalance the multi-billion-dollar unregulated and/or illegal sports wagering black market by repatriating sports wagers that would otherwise go to those offshore sports wagering enterprises.

Sports Betting in the News

Major casino operators are also ready to enter the sports wagering game in a big way. According to published reports in the *Las Vegas Review-Journal* newspaper, Caesars Entertainment recently announced that it is teaming up with gaming equipment manufacturer Scientific Games to launch land-based and mobile sports betting in New Jersey and Mississippi. Similarly, MGM Resorts International and Boyd Gaming are forming a partnership that will allow each company to offer mobile sports betting and online gambling in states where only the other operator is present. This partnership will allow each company to potentially offer mobile sports betting and online gaming in 15 states. MGM Resorts is also creating a \$200 million sports betting and online gaming joint venture with U.K-based GVC Holdings, one of the world's largest bookmakers.

Casino Operators and Professional Sports Team Up

MGM Resorts also recently reached a landmark deal with the National Basketball Association (NBA) that could prove to be the model for future cooperation between sports leagues and casino operators. This first-ever agreement between the NBA and a casino operator is in sharp contrast to the historically hostile relationship between the sports betting industry and professional sports that spawned PASPA, as will be explored in greater detail below. It will allow MGM Resorts to use official NBA and WNBA data and branding on a non-exclusive basis across its land-based and digital sports betting operations. The NBA, in turn, will promote MGM Resorts across its far-flung digital assets, including NBA TV, NBA.com, the NBA app, and NBA social media.

Nevada's biggest sportsbook operator, William Hill, has also sprinted out of the gates with plans to partner with the Las Vegas Golden Knights National Hockey League (NHL) team. Daily Fantasy Sports (DFS) giant FanDuel is partnering with Boyd Gaming, while Boston-based DraftKings has launched online betting in New Jersey and is ramping up its Nevada operations. Both FanDuel and DraftKings are active in more than 40 states and have more than 8 million customers each.

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Sports Betting – The Hot Topic

It should, therefore, come as no surprise that sports betting was the most talked-about topic of discussion at the 2018 Global Gaming Expo (G2E) in Las Vegas. Responding to demand by regulators, suppliers, and operators, the American Gaming Association (AGA) conducted a special sports betting symposium at the gaming conference, focusing on such hot-button topics as potential "integrity fees" proposed by professional sports leagues.

A Brief History of PASPA and the Supreme Court's Decision Overturning It

Since 1992, wagering on professional and amateur sports in America has been governed by the Professional and Amateur Sports Protection Act (PASPA). Also known as the Bradley Act, PASPA - 28 U.S.C. § 3701 (1992) - makes it illegal for a governmental entity or person to

"sponsor, operate, advertise, promote, license, or authorize by law or compact...a lottery, sweepstakes, or other betting, gambling, or wagering scheme based directly or indirectly (through the use of geographical reference or otherwise), on one or more competitive games in which amateur or professional athletes participate, or are intended to participate, or on one or more performances of such athletes in such games."

The Long and Winding Road to the Supreme Court

Not unlike Dorothy's first attempted steps along the Yellow Brick Road, the path toward the Supreme Court's final decision striking down PASPA has taken more than a few twists and turns along the way. To fully understand this historic decision, let's first examine the precursors that led up to it, beginning with a look at which states outside of Nevada were exempted from PASPA.

In addition to Nevada, Delaware, Oregon, and Montana already operated commercial gaming facilities for at least 10 years, or had existing laws regulating sports betting that were exempted from PASPA; allowing them to continue offering some version of legal sports betting in their respective states. Specifically:



A Federal Third Circuit Court of Appeals ruled that only laws in place prior to PASPA in 1992 are valid. Therefore, the Delaware Lottery is currently allowed to offer "three-team or more" NFL parlay cards; a limited form of sports wagering dating back to 1976.



At the time of PASPA's passage, Montana operated non-house-banked betting squares contests in establishments that were licensed to sell alcoholic beverages. These wagers were allowed under an exemption in the state's sports pool law. These regulations allowed for boards of up to 100 squares.



Back in 1989, Oregon began offering a "Sports Action" NFL parlay card system. NBA games were added the following year; although dropped due to lack of interest. Sports Action was ultimately outlawed in 2007.

While implicitly exempting sports-based gaming in these states, PASPA preserved the status quo in Nevada, including single-game sports betting. The State of New Jersey, however, wanted to come off the bench and get into this lucrative game. So, the state passed a sports betting referendum in November 2011 that led to Governor Christie signing the "Sports Wagering Act of 2012," which authorized "wagering at casinos and racetracks on certain professional and collegiate sports or athletic events."

Professional and Collegiate Sports Cry Foul

Almost immediately, a consortium of professional sports leagues comprised of the NFL, MLB, the NHL, and the NCAA blew their collective whistles, threw a yellow flag on the field, and obtained an injunction claiming that New Jersey's law violated PASPA. The quartet of professional sports leagues took New Jersey to court and won. However, a subsequent appellate court ruling opened the door, ever so slightly, for New Jersey to repeal its own ban on sports betting at any time.

The sublime workaround of PASPA was deceptively simple. In 2014, the state passed a law officially authorizing casinos and racetracks to offer sports wagering outside of the state's regulatory/licensing purview. In other words, the state effectively "washed its hands" of any sports wagering oversight. Since the state was not "sponsoring, advertising, licensing," or otherwise promoting sports wagering, they argued that PASPA no longer applied. This resulted in several more contentious circuit court legal maneuvers with both sides jockeying to push each other out of bounds to end the game. Playing some very long odds, the state looked like it would never get its day in court; especially after the U.S. Solicitor General informed the Supreme Court of the United States (SCOTUS) that New Jersey's appeals should not be heard. SCOTUS, however, thought otherwise and agreed to hear the case.

Ultimately, New Jersey's landmark case transcended the realm of sports entirely and turned on the issue of state's rights, which pushed the Court's decision over the goal line in favor of New Jersey. As Justice Kennedy noted: "So the citizens of New Jersey are bound to obey a law that the state doesn't want but that the federal government compels the state to have?... That's precisely what federalism is designed to prevent." Without the concept of federalism in place, the federal government could block state-level reform on almost any issue. And so, the Supreme Court of the United States on May 14, 2018, struck down PASPA as unconstitutional and in violation of states' rights.

It was New Jersey's Hail Mary Pass that found the end zone.

Of course, what happened next was that the Court's ruling opened the floodgates, with many states throwing their hats in the ring; eager to cash in on the unbridled expansion of sports wagering across the land. According to a published report by Jefferies Financial Group, the annual sports betting handle in the U.S. could reach \$58 billion and gaming win \$3 billion. California-based Eilers & Krejcik Gaming predict that upwards of 44 states could approve sports betting by 2023.



Some Notes of Caution

There have been instances where sports wagering operators have found themselves in hot water with gaming authorities in the recent past. In some cases, fines have been levied ranging into the millions for a variety of transgressions ranging from accepting illegal wagers to assisting illegal online sports betting operations. In one case, an operator was fined for acceptance of out-of-state wagers and for taking bets on games after the games had ended, as well as for both under and overpaying bettors. Transgressions such as these hurt financially – either directly through fines or falling stock prices – or indirectly from a negative PR standpoint where end consumers take their betting action elsewhere.

In sum, both regulating and operating a modern sportsbook is no simple task. Even some of the most seasoned operators can quickly find themselves facing a red card and possible ejection from the game if they aren't scrupulous about every detail of their operation. The reason? Today's sports wagering operations are increasingly complex, dynamic, and people-driven enterprises that, to the untrained eye, offer a mind-boggling array of betting options and human interactions that make running them successfully a unique challenge for even the most experienced operators.

The Anatomy of a Sportsbook – A Look Behind the Curtain

The modern sports betting operation has a unique language of its own that few outside of this specialized gaming arena can comprehend. Concepts such as "in-play wagers," "KYC," "geofencing," "VIG," "data feeds," "subscription packages," "fast bets," "account-based wagering," and "buy-backs" are part of this confusing sports wagering lexicon.

The world of sports wagering is high frequency, highly transactional, prone to exceptions, and dependent on external feeds for stats and pricing that results in almost constant adjustments to betting lines. Unlike the static "plug-and-play" nature of a typical slot machine which can be regulated, tested, and certified with comparative ease, to the untrained eye the modern dynamic sportsbook operation appears to teeter on the brink of constant chaos.

In an article titled "An Introduction to Sports Betting Operations" published in the July 2018 issue of *Indian Gaming Magazine*, Andrew Klebanow, Senior Partner at Global Market Advisors, provides some valuable insight into the inner workings of today's sportsbooks. He defines some of the key terms and describes certain critical functions of a modern sportsbook. We share these insights (with permission) here.

According to Klebanow, sports betting operations consist of several specialties or service providers. Each of these, he notes, provides a unique role.



A **BOOKMAKER**, Klebanow states, is a person or company that accepts and pays off bets on sporting events at agreed upon odds. A bookmaker can be a person operating outside of the law. A bookmaker can also be a casino enterprise, licensed to operate a sports betting operation. (Editor's Note: the origin of the term "bookmaker" comes from the small books, or ledgers, that "bookies" carried with them to record wagers.)



Klebanow observes that an **ODDSMAKER** is a person or a service that reviews the various sporting events and attaches a handicapping number to that event. He notes that oddsmaker sets the price of the game including the money line, the total over/under, and spread. It is the oddsmaker's job, states Klebanow, to find the best odds for an event and change the odds based on the amount of money wagered. Oddsmakers, says Klebanow, typically start their day by monitoring the sports betting activity in various jurisdictions in the Caribbean. This is done for several reasons. Most Caribbean countries are in the Atlantic time zone, so their day starts earlier than in the United States, he explains. People who place bets in the Caribbean normally bet on the same sports as in the U.S. and include U.S. sports bettors that have found ways to place bets online directly with these sports betting operations. Also, betting information from sports wagering operations in these jurisdictions is readily available to oddsmakers. These wagers set a daily precedent and tell oddsmakers what they can expect in the United States as the day's wagering activities progress. Oddsmakers then watch data feeds from third-party providers to see where money is being wagered, adds Klebanow.



Klebanow explains that the **FEED PROVIDER** provides information based on an aggregate of sportsbook operators' betting lines. Feed providers send information to the oddsmakers on what the current odds are in other territories and what the estimated odds lines are in their territory. They also provide oddsmakers with injury reports and relevant statistical information to inform oddsmakers as to how to set or adjust their lines.



According to Klebanow, the **RISK MANAGER** makes sure that the sportsbook operation is mitigating its risk by looking at how much money is coming in on particular events. The risk manager and the oddsmaker work together to optimize their sportsbook's lines, hoping to attract bettors' wagers while managing the risk with taking those bets.



The **CUSTOMER SERVICE MANAGER** and his/her staff are there to assist customers, Klebanow notes. They are there to troubleshoot problems if a player is having trouble with their account or mobile app, confirm that bets have been made, and handle disputes. The customer service manager is integral to maintaining loyalty with bettors.



The **COMPLIANCE/AUDIT DEPARTMENT** produces and reviews the reports of each day's activities and submits them to their regulatory jurisdiction if required, Klebanow adds. They essentially perform the daily reconciliation.



Klebanow states that the **SYSTEM PROVIDER** is the company that provides the betting point-of-sales (POS) system, betting kiosks, applications, and software that transact and settle the bets. Systems says Klebanow, must be capable of providing daily audits, voided tickets, win amounts, loss amounts, and a complete audit trail based on the requirements of the jurisdiction.



Klebanow also explains the significance of the **SUBSCRIPTION PACKAGE**, noting that all professional leagues and promoters of sporting events sell subscriptions that allow individual casino sportsbooks to broadcast their matches. These packages, Klebanow emphasizes, are very expensive. They are based on the maximum occupancy of the sportsbook as defined in the property's fire inspection documents.

Now that these sports wagering basics are covered, it's time to inspect how these actual processes work. The first step is to compare how sports wagering differs from more traditional forms of gaming, providing a real-world example of how sportsbooks manage risk.

Unique Differences Between Traditional Gaming and Sports Wagering

SPALDING

Casino operators are well acquainted with the modern casino floor, with its dazzling array of blinking slot machines and rows of table games with friendly dealers ready to help eager customers try their luck. The way slot machines and table games work are straightforward when compared to the web of human and technical interactions that drive a modern sportsbook. Slot machines can be tested against long accepted regulatory standards to ensure they are compliant. Dealers and croupiers can be supervised and closely observed to ensure that they are dealing a square game. When someone plays a hand of Blackjack or drops some cash into slot machine, an operator doesn't have to know their betting history, their Social Security number, their home address, whether they represent an illegal betting syndicate, or even if their wager will be taken because the odds may be too much in their favor. And, unlike playing the slots or table games, sports bettors can't immediately claim their winnings; rather, they must wait for the wager to be reviewed and settled before cashing in their winning ticket. These are just some of the many considerations that sports betting operators must weigh with each wager.

When people play the slots or table games, they are betting against the house and that means the house has a built-in advantage. The odds are, essentially, always in the house's favor. But with sports betting, a wager is a contract between two entities: the person placing the bet and the person taking the bet. Both should, essentially, be on equal footing. The outcome of the wager depends on a multitude of possibilities and there is the potential for either side to lose.

Favorable Odds: How Sportsbooks Must Manage Risk

That's why managing risk is of paramount importance to sportsbook operators. What is a "good bet" versus a "bad bet?" There are a myriad data points that factor into whether a book should take a wager. An army of analysts and traders work behind the scenes, constantly adjusting betting lines and scrutinizing each bet to "balance" the outcome so that a roughly equal proportion of bets are taken on either side of the wager. Sportsbooks strive to set the betting line to encourage equal action on both teams. Point spreads are designed to influence bettors to place their wagers on a particular team until a "balanced book" is achieved. That way, the sportsbook can use the money lost by bettors to pay off the winners. But, sometimes, it's possible for a savvy bettor to play the odds just right and come out the winner.

Here's an example: Let's say the Denver Broncos are playing the Oakland Raiders. The line opens with the Broncos at -7. However, a situation develops where oddsmakers move the line to -10. This opens a vulnerability where a bettor can take the Broncos at -7 originally and when the lines moves also take the Raiders at +10. If the Broncos win by only 9 points, the bettor wins both bets and the book takes a heavy loss. This is a very advantageous position for the bettor who has a seemingly high probability of winning both bets based on how the book views the game and is risking very little. If the result is outside the "middle" created between -7 on the Broncos and +10 on the Raiders, the only "loss" the bettor incurs is the "VIG," (short for "vigorish") which is the percentage (usually 10 percent of the amount wagered) that the sportsbook charges to take the bet. So, for example, a player must wager \$110 to win \$100.

The Trading Platform: Sports Wagering's Core Technology

The main core technology that runs today's modern sportsbooks is the trading platform. This system is where the wagers are created, be they point spread, money line, or prop bets. The event screen is where the operator enters all the information on an event. As the event progresses, there is someone who watches the event unfold and enters data about the event into the system in real time. Typically, these trading platforms are operated by experts who have years of experience knowing how to appropriately price events.

More and more sports betting operations are employing traders who are supported by external data feed providers, as was previously mentioned. It's critical that traders work in the sportsbook if the sportsbook is setting its own lines. Even if the lines are coming from an external source, the sportsbook needs someone on the ground with the knowledge and experience to interpret the data correctly because the sportsbook is essentially gambling against the public and there's always a possibility of a loss, as we saw in our earlier example.

Sports wagering systems themselves are unique because they are highly dependent on operational procedures. For instance, they are subject to such things as adjustments, overrides, event cancellations, schedule changes, rain delays, rejected wagers, canceled wagers, and myriad other variables.

Both operations and these back-end systems must, therefore, work seamlessly together to manage risk. In the case of very large wagers, the sportsbook must decide as to the relative risk of taking the action or choosing not to accept the wager. The system will use a process of algorithms as well as old-fashioned "horse sense" to determine if the book's position is favorable enough to take the risk of accepting the wager. In this sense, there truly is an "art" and a "science" to this somewhat mystifying process.

The operations that set the lines and decide which wagers to accept are so complex that the skillset is not easily learned. This is an important fact to consider for those contemplating starting sports wagering operations from the ground up because there are literally thousands of variables to account for. There are many companies that employ teams of traders in one location, analyzing data from multiple games and pushing that data out to the sportsbook via a secure interface. This is an alternative to consider when contemplating ramping up one's own in-house odds setting and trading capabilities.

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Complications Arising from the Wire Act

However, there are some problems with this approach; namely the Federal Wire Act. This landmark legislation was created decades ago, prior to the advent of modern communications technologies such as the internet and mobile devices. Still on the books, the Wire Act makes it illegal to accept sports wagers across state lines. But this is open to interpretation. Some would argue that if the servers generating the data are in a legal market, then it's permissible to access that data across state lines. Others say no, that's not the case. Others would argue that the Wire Act only applies to the actual placing of bets across state lines, but not necessarily transmitting the information used by bettors to assist them in making the wager. This is but one of the many gray areas that must be addressed by anyone in the U.S. who operates, or is considering operating, a sports betting business. (It should be noted that these issues most likely will be subject to litigation.)

A Look Back. And A Look Ahead.

Part One of GLI's Sports Betting White Paper summarized a brief history of how PASPA came to be and why it was overturned by the Supreme Court. It also highlighted some of the newsworthy developments that have taken place in the sports wagering industry since PASPA's repeal. Also covered in Part One was an examination of how sports wagering differs from other forms of gaming. This included a description of the primary functions of a modern sportsbook, how sportsbooks manage risks, and the impact of the Wire Act on interstate sports wagering activities.

COMING IN PART TWO: Introducing GLI-33 Event Wagering Systems Technical Standard and a Solutions-Based Approach to Sports Betting.

Part Two of GLI's Sports Betting White Paper continues to examine the many issues facing regulators, suppliers, and operators when contemplating establishing sports betting operations. Some of the key topics that will be featured in Part Two include how sports betting should be regulated and distributed; what kind of bets should sportsbooks take; the significance of clearly defining wagering rules; the challenges, risks, and opportunities presented by the explosive growth of mobile wagering; the race for new sports betting customers; and the brave new world of Artificial Intelligence (A.I.) and sports betting.

Additionally, Part Two will also feature an explanation of GLI's sports wagering testing and submission protocols, as well as introduce the GLI-33 Event Wagering Systems technical standard. GLI-33 is the world's first set of event-wagering technical standards developed by GLI that provides a framework for regulating and implementing sports/event-wagering systems. This description includes how GLI-33 was created collaboratively in consultation with industry stakeholders, and how it can be effectively deployed by jurisdictions across the U.S. and elsewhere around the world to ensure the integrity of a jurisdiction's expanding sports betting opportunities.

Gaming Laboratories International: Your Winning Sports Betting Partner

For nearly 30 years, GLI has been at the forefront of helping suppliers, operators, and regulators around the world develop successful sports wagering strategies. GLI tests and certifies a wide variety of sports wagering, including online, non-sports event-based wagering, fixed-odds betting, pool betting, parlay betting, and betting exchanges. This testing assures that wagers made online for events comply with appointed jurisdictional standards and that these wagers are accepted in a fair and secure manner.

GLI's testing of sports wagering systems also assures that all wagers placed are correctly resolved and paid on the correct odds and rules corresponding to the game or event. Additionally, GLI's veteran team of experts help to ensure the integrity of the betting process and that appropriate mechanisms and controls are in place for adherence to technical requirements associated with the handling of wager disruptions, cancellations, abandoned events, and refunds. Both front and back-end wagering activity is analyzed to confirm a complete and accurate log of transactions, performance, and payments for regulatory, taxation, player disputes, and other purposes.

GLI's extensive sports wagering knowledge, technical capabilities, and expertise also help ensure that the platform functionality, payment, and third-party integration of sports wagering operations will be successful right out of the gate.

Additionally, GLI has also been at the vanguard of pioneering testing for Daily Fantasy Sports (DFS), including developing a unique service for fantasy sports applications which does not depend on the historical performance of actual fantasy players; allowing for such analysis to take place even before new games come to market.

Tested. Proven. Trusted. Choose GLI.

The repeal of PASPA has opened an exciting, challenging, and potentially rewarding new playing field for sports betting regulators, suppliers, and operators across the country. The explosive growth of sports wagering has captured the headlines and dominated the discussion at gaming industry trade events such as the Global Gaming Expo (G2E). Move up to the big leagues and get into the game with the sports betting experts at Gaming Laboratories International, the world's sports wagering leader.

For more information, please visit us online at gaminglabs.com. To view our informative, free GLI Webinar: "Understanding Sports Betting – Policy Issues That Need to be Addressed," please click here.

And click here to download your free copy of GLI-33 Event Wagering Systems.

Or contact us at: **Gaming Laboratories International** 600 Airport Road • Lakewood, NJ 08701 USA Main number: 732-942-3999 Fax number: 732-942-0043

About GLI

Gaming Laboratories International (GLI®) is the world's leading land-based, iGaming and lottery testing laboratory. For nearly 30 years, Gaming Laboratories International, LLC has continuously delivered the highest quality land-based, lottery and iGaming testing and assessment services with supreme accuracy while reducing time to market.

With over 23 laboratory locations spread across Africa, Asia, Australia, the Caribbean, Europe, North America and South America, GLI holds U.S. and international accreditations for compliance with ISO/IEC 17025, 17020, and 17065 standards for technical competence in the gaming, wagering and lottery industries.

GLI's Professional Services Qualifications:

- Certified Quality Software Engineer (CSQE)
- Certified in Risk and Information Systems Control (CRISC)
- Certified Information Security Manager (CISM)
- Certified Information Security Auditor (CISA)
- ISO 27001 Lead Auditor (LA)
- Payment Card Industry Qualified Security Assessor (QSA)
- Payment Card Industry Professional (PCIP)
- Certified Quality Software Engineer (CSQE)
- Certified Ethical Hacker (CEH)

FOR MORE INFORMATION

For more information on the services offered by GLI, please visit gaminglabs.com.

REQUEST A CALL

To request a call or to ask a question, contact one of GLI's North American office locations listed. A GLI representative will respond to your inquiry within two business days.

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