



# U.S. CONSUMER PRODUCT SAFETY COMMISSION WASHINGTON, DC 20207

OFFICE OF THE GENERAL COUNSEL

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May 23, 2000

J.W. MacKay, Jr. Route 9 Box 185, Highway 49 Mt. Pleasant, Texas 75455

Dear Mr. MacKay

Your letter dated April 11, 2000 requesting that the Commission issue a rule concerning the performance of non-wood baseball bats has been forwarded to the Office of General Counsel for a determination of whether your request should be docketed as a petition for rulemaking. You request that the Commission issue a rule requiring that non-wood baseball bats "perform like wood bats," recall "dangerous" bats, and "levy penalties" against bat manufacturers who have not reported injury information about their bats. Although your request for a standard meets the Commission's minimal requirements for docketing petitions as set forth in 16 C.F.R. Part 1051 and will therefore be docketed, there are a number of difficult issues that would need to be addressed before the Commission could consider issuing the kind of rule you request.

First, you assert that non-wood bats pose an unreasonable risk of injury, and you provide data reporting pitchers being struck by balls that were hit by such bats. However, the materials you provided do not establish a causal link between the particular bats and these injuries. You indicate that there has been an increase in injuries from batted balls. However, assuming this is true, numerous other factors, such as changes in the construction of the balls and increased strength of the players, may also explain these injuries.

Second, the materials you provide do not demonstrate that there has been an increase in injuries involving batted balls. Among the materials you recently submitted was a statement by Little League Baseball reporting a 76 percent decrease in reported injuries to pitchers resulting from batted balls from 1992 to 1999. As you acknowledge, the NCAA's injury reports are not complete. However, you also provided a news article indicating that the NCAA is seeing a decrease in injuries to pitchers so far this season compared to last year.

Third, several questions exist about development of a standard. For the Commission to issue a product safety standard, it must evaluate the potential benefits of a rule against its costs If the Commission set a standard for non-wood baseball bats, it would have to be able to conclude that the standard would reduce the risk of being hit by a batted ball by some specific

A copy of which is enclosed

amount. Presently the Commission does not have information that it could use to quantify the risk and make such a determination

Finally, it is unclear from your submissions what an acceptable level of risk would be You state that a non-wood bat should perform like a wood bat. But, what would this mean in terms of injury reduction? Extensive testing would likely need to be done to determine accurate performance measurements for wood bats and corresponding levels for non-wood bats. Moreover, even this information by itself would not provide the data needed to estimate the differences in risk between wood and non-wood bats. Human reaction time, which likely varies substantially between people, has not been well studied.

Your other two requests – for recalls and penalties – do not meet the Commission's requirements for docketing petitions. We can only docket as petitions requests for action that the Commission can take by issuing a rule 16 C F R. § 1051 5(a). Although, the Commission does have the authority to order recalls, 15 U S C § 2064(c), it does not do so through rulemaking. Similarly, when the Commission imposes penalties for failure to report a dangerous product, it does not do so through rulemaking 15 U S C. § 2064(b). Therefore, neither of these requests can be docketed as a petition. However, we are forwarding these requests to the Office of Compliance for consideration of any appropriate action.

In this letter, we have identified a number of areas for which additional data would be important to establish the role of non-wood bats in an increased risk of injury. To the extent that you or others have this additional data, we would encourage you to submit it to the Commission. I appreciate your sharing your concerns with the Commission. The staff will be reviewing your information concerning development of a performance standard.

Sincerely

Stephen Lemberg

Assistant General Counsel

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Enclosure



J. W. MACKAY

Route 9, Box 185, Highway 49 East Mount Pleasant, Texas 75455 Home: (903 572-1615 Mobile: (903) 577-2225 FAX: (903) 572-1575

CP00-1

April 11, 2000

Dr. Sue B. Kyle, Ph. D.
U. S. Consumers Product Safety Commission
Division of Hazard Analysis
4330 East West Highway
Bethesda, Maryland 20814

Products Identified

Excepted by

Processed.

Comments Processed.

Dear Dr. Kyle,

Attached find my petition as we have discussed by phone. It is my understanding you will deliver this to CPSC counsel.

I apologize for the length of the petition but I felt it was necessary to give you as much information as possible. The petition is supported by twenty-four notebooks of exhibits that are being shipped to you separately by U. P. S.

I have an identical copy of the exhibits so if there is any question you might have, we'll be looking at the same sheet of music. I am available day or night at 903-572-1615, for any additional information or explanations you might request.

As you are aware I settled my lawsuit with Hillerich & Bradsby (Louisville Slugger) November 2, 1998, and under the terms of that settlement I returned over 100,000 documents to Louisville, KY. The court ordered settlement calls for H & B to keep those documents in safe keeping for five years. I have an index of all of those documents that maybe you should subpoena from me. The index would then allow you to subpoena documents from H & B by bates number.

I certainly appreciate your help and patience in helping me get the petition in order and to the right place.

I hope to hear from you in the near future.

Personal regards

Petitioner

Cc:

James Demarco Ken Giles Eric B. Ault Lawrence S. Blend

CP00-1

# CONSUMER PRODUCT SAFETY COMMISSION

Petitioner:

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J. W. MacKay, Jr., et al Route 9, Box 185, Highway 49 Mt. Pleasant, Texas 75455 (903) 572-1615

ORIGINAL

#### **PETITION**

Petitioner hereby requests the Consumer Product Safety Commission ("CPSC") issue a rule requiring the wood-like performance of all non-wood baseball (aluminum, composite and graphite) bats due to the unreasonable danger and risk of injury to consumers that high-performance nonwood bats present, and recall all nonwood baseball bats that exceed the performance of wood baseball bats. The public has been assured by the manufacturers and governing bodies that non-wood bats perform like wood bats and are safe for use at all levels of play and this is simply not true.

### Authority

CPSC has jurisdiction and authority to issue a rule concerning the performance level of nonwood baseball bats and non-wood softball bats, recall the dangerous products from the marketplace, and levy penalties against the bat manufacturers who violated Federal Law by failure to report information that "reasonably supports the conclusion that its products creates an unreasonable risk of serious injury or death, pursuant to Section 30 (d) of CPSA, as amended by public law 94-284, 15 U.S.C. 1193 (d), 15 U.S.C. 2058 (d) (2), 15 U.S.C. 2076 (a), 5 U.S.C. 553 (c) and any other applicable authority, including, but not limited to, product codes 5041 – baseball, 5034 – softball. Additionally, petitioner requests pursuant to 1052.3 that he be allowed to conduct an oral presentation and explain the conduct of the bat manufacturers deceit, threats, and misrepresentation of performance and safety of non-wood bats, withholding requested information from

governing bodies, false statements to the governing bodies and public, falsifying test results, knowingly violating governing body rules, conspiring to fix performance testing in a manner to continue inflated profits, fixing prices that dealers must charge the public, changing testing procedures to accommodate existing models of bats, legal saber rattling to intimidate governing bodies, and many other unethical and illegal activities to prevent any meaningful change in the performance and safety of non-wood bats.

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Petitioner is unaware of any reports to CPSC concerning safety risks of non-wood bats. All manufacturers are aware of the injuries and deaths that have been caused by non-wood bats. The safety issue concerning non-wood bats has been on going since 1985 yet no information or studies have been forwarded to CPSC as required by Federal Law. Some manufacturers have been involved in lawsuits brought by injured players and there have been numerous rules committee meetings concerning non-wood bat safety and performance for over fifteen years.

# Summary

Although there is a certain level of risk involved in playing the sport of baseball, the level of risk associated with wood bats has generally been accepted by all associated with the game as the "reasonable" level of risk for over one hundred years. Therefore, any greater level of risk than that presented by traditional wood bats is unreasonable. After extensive testing and research, there is simply no question that the aluminum bats today substantially outperform traditional wood bats, and that the risk of serious injury to pitchers and infielders has become more prevalent. As evidenced by (Exhibit 1), both the frequency and the severity of injuries resulting from athletes being struck by baseballs hit by these high-performance aluminum bats indicates that the use of these bats present an unreasonable risk of injury. The consumer has been assured by the bat companies that metal bats perform like wood bats.

Since its beginnings, the sport of baseball has attracted participants of all ages and levels of ability - from amateur to professional, and from organized leagues to neighborhood sandlot games. In 1998, participation statistics revealed that approximately 5 million participants were playing the sport of baseball in some organized form, and of these 5 million participants, approximately 98% were under the age of 18. (Exhibit 2),

However, due to the extremely large number of organized baseball leagues throughout the country, many different governing bodies have been given the task of ensuring that the sport is both safe and enjoyable, and that the integrity of the game itself is maintained.

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Unfortunately, aluminum bat manufacturers have taken advantage of the fragmented nature of the sport's organization and rulemaking authority, and have used deceit, misinformation, bogus testing, threats of lawsuits, and the influence of money to prevent meaningful bat performance rules from being implemented. The course of events in the NCAA's recent attempt to enact a bat performance rule provides the perfect example of this conduct, and the powerful effect it has had on this governing body's inability to implement a bat performance rule that all persons involved except, the bat manufacturers, believe is necessary to ensure the safety of the athletes.

Therefore, due to the tremendous number of participants that are at risk, the large number of rulemaking bodies, and the conduct of the aluminum bat manufacturers that has rendered these numerous rulemaking bodies ineffective in enacting a meaningful bat performance rule, it is reasonably necessary that the CPSC issue a rule to eliminate or reduce the risk of injury, and to recall all nonwood baseball bats that exceed the performance of wood baseball bats. The failure of the CPSC to issue the rule requested, and to institute the requested recall, will continue to expose consumers to the unreasonable risk of injury that is presented by the use of these high-performance aluminum bats.

Two of the primary purposes of the CPSC are to:

- 1.) protect the public against unreasonable risks of injury associated with consumer products, and
- 2.) develop uniform safety standards for consumer products and to minimize conflicting state and local regulations

Therefore, due to the presence of conflicting regulations regarding baseball bat performance, and the unreasonable risk of injury presented by high-performance aluminum bats, it is appropriate and necessary for the CPSC to issue the rule requested, and to institute the recall requested.

Accordingly, we request that, based upon the scientific studies and research that have already been performed regarding this issue, and the nature and severity of the risks involved, the CPSC issue a rule requiring the wood-like performance of all nonwood baseball bats, and recall all nonwood baseball bats that exceed the performance of wood baseball bats. As stated previously, petitioner is unaware of any reports on non-wood bat safety forwarded by the manufacturers to the CPSC and request appropriate penalties be levied against the bat manufacturers for their actions in violation of Federal Law.

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Petitioner has been assured that CPSC personnel can have full access to the Baum Hitting Machine at University of Massachusetts at Lowell by Jim Sherwood. Additionally, petitioner has been assured that the CPSC can have full access to the Baum Hitting Machine at Baum Research, Traverse City, Michigan, by Steve Baum. It would be a simple matter for CPSC's engineering personnel, compliance officer and inspectors to go to either testing facility and test for the wood bat speed standard to establish the rule requested. Wood bats, aluminum bats, and the BHM that can swing a bat up to 100 MPH and throw a ball up to 100 MPH are immediately available. CPSC personnel could in a matter of hours establish a base line wood speed, test metal bats to see that they perform at higher exit speeds, and discuss with lab personnel the balance point effect. This effect assures that bat swing speeds in the field would be consistent with bat swing speeds in the lab. Non-wood bats that have the same balance point, as wood bats will swing the same in field conditions. The BHM will show that non-wood bats hit much faster than wood bats. Any exit velocity faster than wood bats is an unnecessary risk to the consumer.

Petitioner feels it is necessary to give the CPSC extensive background on the bat performance and bat standard subject. This is the only way CPSC can understand the lengths that the manufacturers have gone, to delay the implementation of standards and to plan ahead to circumvent whatever rule is finally established. The plan to keep the implementation of standards in limbo is what has kept CPSC out of the loop. Petitioner apologizes for the length of the petition but it is accurate and supported by the documents attached as exhibits. It is necessary to show that bat manufacturers have had knowledge

of performance and safety concerns for years and have failed to report this information to CPSC, as required by Federal Law. Additionally, the manufacturers have conspired to keep any meaningful standard from being adopted since there are enormous profits in high performance bats. There is also enormous danger.

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# **Background**

In July of 1973, the NCAA approved the use of aluminum baseball bats for intercollegiate competition. The committee allowed the use of aluminum bats because they were more durable and, in the long run, much less expensive than wood bats which broke frequently. Coaches were frustrated with the high economic impact wood bats had on their budgets and were concerned that college baseball players received a lower grade of white ash than players at the professional level. (Exhibit 3)

1974 was the first season of NCAA baseball competition with aluminum bats. From a performance standpoint, players and coaches felt that aluminum bats were very similar to wood, and with the superior durability of aluminum, NCAA member schools were able to realize considerable savings. Metal bats in 1974 and 1975 cost approximately \$40.00 each. Some bats now cost approximately \$300.00 each and are not durable and must be replaced two to three times a season. (Exhibit 3-A) (Exhibit 3-B)

The NCAA first became concerned about an increase in the performance of aluminum baseball bats in July 1984, when the NCAA Baseball Committee discussed the "continual criticism" regarding the use of aluminum bats in collegiate baseball. The NCAA wrote to the aluminum bat manufacturers and asked them to conduct testing to compare the performance of aluminum bats with wood bats. The committee hoped "to put an end to the controversy." (Exhibit 4) In November 1985, the committee learned that the aluminum bat manufacturers were not willing to sponsor a neutral testing of aluminum vs. wood bats. In addition, representatives from Rawlings reported their testing revealed "no substantial difference between wood and aluminum." (Exhibit 5) Bat manufacturers by this time were selling non wood bats at approximately \$125.00 each and realizing tremendous profits.

In 1985, a subcommittee of the NCAA Baseball Committee was formed to study a trend toward higher performing aluminum bats. The subcommittee met with aluminum bat manufacturers at the American Baseball Coaches Association convention in January of 1986 and discussed the lighter, livelier aluminum bats and possible controls in bat design. In July of 1986, the manufacturers convinced the committee that aluminum bats "[had] reached their peak." (Exhibit 6)

The subcommittee, however, issued a report on aluminum bat performance to the full committee in November of 1986. The committee approved the following statement:

"The NCAA Baseball Committee strongly urges manufacturers to pursue the development of nonwood bats that feature the performance characteristics of wood bats (including sound, balance point and handle flex). Continued effort in this regard is considered to be in the best long-term interest of the collegiate game. Nonwood bats should not be designed to produce a greater hit distance than might be available in corresponding wood bats of the same weight and length." (Exhibit 7)

This committee statement was fourteen years ago.

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On July 17, 1985, Worth Sports Corporation, sent a report to the NCAA Baseball Rules Committee that they had found in their testing for the previous ten years worth:

"The research indicates that there are some significant differences between wood and aluminum baseball bats which may lead to observable performance differences in the field. These differences relate to the comparative size of the "sweet spot" and weight effects."

"The "sweet spot" on aluminum bats appears to be substantially larger in effective size than on wood bats. This appears to be caused by several factors: Balance point, material strength and rigidity, weight distribution, and structural design."

"Average total weights on the most popular aluminum bats run 5 ounces less than the average weight of professional wood bats. Measurements indicate that this does not lead to any significant

increase in reaction time, bat speed, or hit distance; however, the effects on bat control have not been measured."

Worth further suggested the following two specifications:

- 1. "Specify a balance point for the official bat which duplicates that of the traditional wood bat. As noted in the studies, most aluminum bats have balance point about one inch closer to the hands than the traditional wood bats. This contributes to the larger sweet spot size for the aluminum bats. A more precise standard for "sweet spot" size must await the development of better test techniques."
- 2. "A minimum weight standard for the official bat could be adopted which would bring the total weight closer to that of traditional wood bats. A suggested minimum might be 32 ounces."

It's very interesting that as early as 1985 one company was admitting aluminum bats performed better than wood bats, had a larger sweet spot because of a lower balance point, and were lighter overall. Worth suggest a balance point that duplicates wood bats and an overall weight of 32 ounces. This information has been known by all manufacturers for over 15 years. (Exhibit 4-A)

Louisville Slugger in the fall of 1985, in a news report states the NCAA is considering going back to wood bats on the college level. The other coaches quoted in the article all state, "The game is played with it-wood is the thing." The first ten years of aluminum bat usage had been anything but smooth, (Exhibit 4-A). On June 24, 1986, Louisville Slugger in a memo to NCAA Baseball Committee states:

"One of the first things we need to establish is the objective of our discussion. It is our understanding that there is interest in modifying the rules on bats to bring the performance level of aluminum bats (or non-wood bats) closer to the performance of wood."

On July 7, 1986, Louisville Slugger in a memo to College Coaches states they have had a groundswell of interest from colleges on the costs and availability of going back to wood bats. (Exhibit 4-B)

The NCAA Baseball Committee Minutes of the October 5, 1984 meeting shows that NCAA was asking the manufacturers to sponsor neutral testing of aluminum vs. wood bats. The manufacturers were not agreeable to this test. Rawlings stated their testing showed there was no difference in wood and aluminum bats. (Exhibit 5)

On 10-10-86, Easton wrote to NCAA and suggested among other things a balance point restriction. (Exhibit 5-A)

On 6-21-85, Diamond Sports Company wrote the NCAA stating the ball was not the problem and NCAA had made a mistake in not monitoring aluminum bats clearly. (Exhibit 5-B)

On 12-18-87, the Department of Aerospace and Engineering,
Mississippi State University, wrote Worth, stating that aluminum bats have a
higher restitution coefficient than wood. (Exhibit 6-A)

On 11-7-86, NCAA requested balance point information for wood bats from Louisville Slugger. (Exhibit 6-B)

On 11-18-86, NCAA, in letters to Worth and bat manufacturers, requesting they develop non-wood bats that perform like wood. (Exhibit 7)

In an article in <u>Collegiate Baseball</u>, Worth's President Jess Heald, warned of a super bat and safety concerns. (Exhibit 7-B)

In June of 1992, the NCAA Baseball Rules Committee ("Rules Committee") surveyed college baseball coaches regarding the performance level of aluminum bats, the

competitive balance in the game, <u>safety concerns with respect to exit velocity</u>, and durability. The survey found that many of the coaches were concerned with

- the creation of a "super bat" (safety of players)
- too much offense
- longer games
- inflated batting averages
- an increase in pitchers' arm injuries as a result of having to throw more breaking pitches
- lack of durability in the bats
- rising costs
- and the fact that hitters do not learn how to hit properly with aluminum bats

(Exhibit 8)

In a memo to college coaches and bat manufacturers, on 6-9-92, NCAA Baseball Rules Committee states:

"The committee's goal was to maintain a balance between offense and defense, and that the safety factor was applied evenly to the defensive and offensive players. From our 1988 discussions, it was agreed that the B9 Easton Black Magic bat would be used as a benchmark to measure performance, mainly rebound performance (Coefficient of Restitution)—C. O. R."

"It is the belief of many coaches and committee members that most bats produced in the last 2-3 years are more lively than the 1988 models that were tested at the Aerospace Engineering Department at Mississippi State University."

According to the data, 71% of the coaches believed aluminum bats used in 1992 outperformed aluminum bats used in 1988, even though aluminum manufacturers had agreed in 1988 that the Easton B9 Black Magic bat would be the performance benchmark for all nonwood bats. In addition, 83% of the coaches were concerned that performance would increase, 57% wanted to see performance standards comparable to professional wood bats, and 97% felt that performance standards were necessary. (Exhibit 8-A)

On April 17, 1992, Easton wrote NCAA admitting manufacturers had been told not to improve performance of aluminum bats. Easton further states they have only improved durability and balancing of the bats. This is simply not true, as Easton had gone to another aluminum alloy EA70, and knew that lowering the balance point of the bat would let the player swing it faster and produce higher exit speeds. (Exhibit 8-C)

On June 15, 1992, George Manning of Louisville Slugger, in a memo to Chuck Schupp, also of Louisville Slugger, states:

"Competitive advantage comes to those who can operate within the rules to maximum advantage. We need to be represented at the meeting by someone who protects our business interests while the NCAA is protecting the integrity of the game." (Exhibit 8-D)

At the NCAA Baseball Committee meeting on July 9, 1992, NCAA stated they were going to protect the integrity of the game and the safety of the student athlete. Smeltzy said the committee would make a decision on performance standards for aluminum bats with or without the help of the bat manufacturers. NCAA asked for performance recommendations from the manufacturers. All of the manufacturers agreed to give the recommendation to NCAA and work with NCAA in every way. Archer, President of Louisville Slugger, stated safety was the most important thing to Louisville Slugger and that it was not incumbent to Louisville to intentionally and voluntarily become less competitive. Additionally, Archer stated Louisville would have to remain innovative to remain competitive. He stated Louisville would abide by the rules of NCAA. George Manning of Louisville, stated that Louisville was always looking for an edge to get players to use their product and the idea of making all bats totally equal is abhorrent. Easton stated aluminum bats were not performing better than in the past and that aluminum bats had made the college game exciting. Easton also stated aluminum bats were at their zenith with respect to performance. (Exhibit 8-E)

In September 1992, George Manning in a memo to the Louisville Slugger engineering personnel stated:

"After considerable consideration and discussion we decided to make no recommendation to the NCAA Baseball Rules Committee for additional constraints on aluminum bats used by college teams. Their vague fear of a "superbat" development does not seem to be sufficient justification to constrain our development efforts nor our attempts to gain competitive advantage by providing at least the conception of superior performance."

Manning makes this statement after Archer has assured the NCAA Rules

Committee six weeks before that Louisville will make recommendations for constraints
on aluminum bats. Louisville is by this time making tremendous profits on performance
bats and certainly doesn't want to make them more wood like. Manning also stated in the
same memo:

"Our competition, particularly in softball, has gained ground on us because we are not showing innovation fast enough. We need to continue to give our customers more reasons to buy our products. Performance always has to be foremost, but it needs to be wrapped in the most attractive inviting, and exciting package that we can develop. Cosmetics that are "fresh" have to be annually renewed and evolved or they become "stale" quickly."

"Promotional efforts and documented statistics of field performance need to be further developed to be used to get maximum benefit to us and our product. (Do more home runs per times at bat really get hit with Worth Power Cell softball bats? Does the greater hitting velocity of our TPS baseball bats show itself with more home runs, higher batting averages, greater slugging percentage, or in some meaningful statistic that would catch the attention of ballplayers?" (Exhibit 8-F)

In a Manning memo to Marty Archer 10-21-92, Manning states Louisville should not share testing information with NCAA. He further states:

"Paranoia itself can be dangerous, but let me carry it to an extreme. Should we accept the rules changes and proceed to develop new bats that stand out in performance so that our bat again becomes the "bat of choice" to the colleges, what would then prevent the Rules Committee from adopting further measures to attempt to make the bats generic and keep ours from offering performance advantages? Doing a good job of meeting our objectives could continuously be challenged by new rules. The incentives under this scenario could be negative."

"College coaches should have a stake in insuring that their suppliers stay healthy and interested because it is mutually advantageous. How do we get them to realize this and how do we get them to act on meaningful data that is supportable rather than on convoluted fears and "possible" concerns?"

"By this time I think you can get a flavor of where I am coming from and why I cannot get excited about becoming a "team" player with the Rules Committee.

Realize that I am coming at this from a technical viewpoint mixed with my impression of where it leads. If business reasons compel a decision to endorse their position, be assured that both Jack and I see technical opportunities to move forward and design around the restrictions." (Exhibit 8-G)

In an 11-24-92 memo, Manning wrote to Archer:

"In order to have some advance notice and to check out how we might fare if the NCAA takes the proposed action (2 oz. Less than length and 2-5/8" O. D. maximum), Jack MacKay and I decided to do some testing. We selected an M110 as representative of a bat made with walls heavy enough to meet the new rule, Additionally, we took a TPL and loaded the handle to get to -2 oz. To be representative of intelligent designing around the rule. The results attached show that if the Rules Committee takes the proposed action, then we certainly aren't dead in the water."

"However, if the Rules Committee is determined to reduce performance (as they have stated), the proposed rule may be just the first rule with others to follow until they achieve their objective. This could become a game of wits and ability; they make their move and we counter. Jack's facility, our knowledge, and potentially some information a few professors at Purdue can give us should provide opportunity to us. I am still not convinced that there is a problem or "danger" with the equipment under the present rules, but our relationship with the NCAA, the Rules Committee, and the college coaches is important enough that we should not be so fixed in our position that we alienate any of them. Arrogance hardly ever gets true respect. Believe it or not, Jack MacKay has helped me alter my strong position in this regard."

The results of this test in 1992 showed that the -2 weight, 2-5/8" diameter barrel and handle loading of 3 oz., actually created a faster exit speed bat. This is the exact bat Louisville put into college play as a -3 weight in 1999 and 2000. (Exhibit 8-I)

It is interesting to note that Louisville's liability insurance on 10-7-92 was \$10,000,000.00. As talk of high performance bats continued and players started to get hit by batted balls, that insurance was increased to \$15,000,000.00, on 6-24-96, and \$20,000,000.00 on 6-26-97. Louisville had knowledge aluminum bats were hitting faster and faster because petitioner did the performance testing at Louisville's Research Center in Mt. Pleasant, Texas, on the bat machine owned by Louisville. All of those test results were tendered to all Louisville management upon completion of each test. Additionally, all testing files were turned over to Louisville in the settlement of the MacKay vs. Louisville lawsuit. Louisville has been ordered by the court to maintain those records for five years from November 2, 1998.

In November of 1993, at a time when NCAA and NFHS had told bat manufacturers not to increase performance of their aluminum bats and the manufacturers had agreed not to, Worth, Louisville and Easton entered a development effort with Alcoa Aluminum to produce a premium strength alloy, which became C-405 alloy. The

protocol called for the alloy to increase performance, be more durable, and streamline manufacturing. The protocol shows that the new alloy would have 10% increase in yield strength and produce 21% increase in energy storage and increase exit velocity 8 to 12%, over the CU31 alloy used in 1993. (Exhibit 8-L)

On June 30, 1993, Petitioner filed for a patent on a new design full barrel, (straight barrel bat and end cap). This concept issued as patent #5,421,572 on June 6, 1995. This design was prototyped in late 1991 and early 1992. It was delivered to contract college programs, (exclusive users of Louisville products), in the fall of 1992, when the contracts were signed with the colleges. This design was a white bat, Model WTPXFBXL.

Petitioner did not realize at the time that all other companies would follow this design and that he had opened the door to a terrific performance increase if the bat walls were thinned to increase trampoline and hoop flex, the handle of the bat was loaded and if new high performance aluminum alloys were introduced in this full barrel design. It is important to note that Louisville made some agreement with the other bat manufacturers and never fought for Louisville's exclusive rights under the patent. All manufacturers were working with Alcoa on the new C405 alloy at this time and all manufacturers went to the full barrel design.

Bill Thurston, the NCAA Rules Committee Editor, called Petitioner in August of 1993. Mr. Thurston asked Petitioner if the white full barrel design bats out performed the 1988 Easton Black Magic bat. Petitioner assured Mr. Thurston that the full barrel bat would out perform the Easton 1988 bat by a wide margin. Mr. Thurston then told Petitioner that there was an agreement with the manufacturers that no bat would exceed the agreed upon benchmark of the 1988 Black Magic Easton. Petitioner advised Thurston that it wasn't in the rulebook, and that Petitioner had never been told by Louisville of the agreement. Thurston faxed Petitioner the agreement previously discussed and Petitioner immediately contacted Louisville and stated that he and Louisville would have to "de-tune" the bats. This information is evidenced by a letter

from George Manning discussing Petitioner's suggestion of de-tuning. (Exhibit 8-M) Additionally, in September 1993, Manning enters the de-tune project as, Item 21, on the project list. (Exhibit 8-N)

In a Manning memo to Petitioner on 9-26-94, Manning states:

"All of you must realize that these standards, if accepted, could potentially lead to some embarrassment and product that might need to be removed from the marketplace because of a non-conforming test result. We almost certainly will need to duplicate the recommended test procedure so that we won't be subject to surprises."

"Unfortunately, some type of limit will be imposed on performance so that we don't have the prerogative of doing nothing. What we want is something that we can live with – does this meet that requirement?" (Exhibit 8-O)

In an 8-6-94 memo, Manning states to Archer and Petitioner, "that the testing Louisville does, "by swinging each bat at the same velocity would bias the data to favor the heavier bats". Louisville was constantly trying to get lighter and lighter bats down to -5 differential. (Exhibit 8-P)

In April 1994, a Manning memo to engineering personnel states:

"Initial investigation has started on the development of a bottle-type Little League bat. Testing has shown that the largest hitting diameter does have performance advantage. A youth batting against live pitching probably has need for the maximum hitting area at least as great as for fast pitch softball." (Exhibit 8-Q)

On 5-16-95, Manning memo to Bradley at Louisville discusses that

Petitioner has advised Manning that certain models of Louisville softball bats don't comply with NFHS Rules. Manning asked Bradley, "do we do something about it or do we let sleeping dogs lie?" Bradley makes a note on the memo stating MacKay is right but "Let it lie". These models were clear violations of established rules yet Louisville increased the performance and refused to correct the problem. (Exhibit 8-R)

On July 26, 1995, Manning wrote H & B personnel that he had checked Easton bats that MacKay had obtained from colleges who had switched over to Louisville contracts. Manning observed that Easton is supplying their contract schools with extremely thin wall high performance bats or game bats. Manning makes the following observation:

"They have gotten the message and now are going to what I consider extremes to provide super performance. While I don't recommend matching these very low wall thicknesses, particularly in light of the NCAA Rules Committee's concern for performance, we must develop a strategy that we can live with as to what we will provide our contract schools to keep them competitive with Easton. A consideration should be grooved bats. Nothing is totally clean from a NCAA Rules Committee standpoint, but to me the message is very clear-performance of the product is very key to its usage. If we allow our competition to outperform us, we can become spectators to the action. How do we respond?" (Exhibit 8-S)

On June 29, 1995, Manning writes Archer about the upcoming Baseball Rules Committee meeting and he states:

"We all agree that the Performance Level Standards are the responsibility of the NCAA Rules Committee. No recommendations on these levels should come from us. Instead, we should work with the ASTM Committee to develop a test method that can measure the performance level of baseball bats."

"My biggest concern is that it has been difficult to develop a face-to-face discussion of the issues and concerns with the NCAA. The last thing we want to do is to suggest to them that a dialog and relationship is not desired. We want a

basis to understand and discuss each other's problems and hopefully resolve them before they become serious. If the Independent sessions give us a way to develop these relationships, then by all means, let's take advantage of it. Our position on this is more related to the politics of the relationship than it is to any specific technical issue of the testing."

"However, much of the preliminary evaluation of a possible test method has been done with the Slow-Pitch Softball Program. Now we need to extend it to the higher energy levels of baseball bat/baseball impacts. Dr. Brandt expects to cover this in detail in his presentation to the group. Since I believe we and most of the other manufacturers want to endorse this approach, it may be advantageous to make our presentations jointly rather that independently."

"Before application of any standard that limits performance, we think that there necessarily has to be consideration given to the game's popularity and the financial impact on manufacturers, users, and NCAA member institutions. While we agree that this is not a topic of discussion at this meeting, we do want to note its relevance to any final decisions."

"Balance point and overall weight limitations also can be designed around.

Therefore, other than as a temporary expedient, we see nothing that can limit performance effectively and efficiently other than actually measuring performance." (Exhibit 8-T)

On 7-13-95, the SGMA wrote the NCAA after the performance standard meeting and agreed to go back to 1994 performance levels. The memo stated:

"Pending NCAA establishment of performance standards, manufacturers will produce bats to the 1994 in line performance levels on or before February 1, 1996."

This letter was initialed and agreed to by all manufacturers but 1994 performance standard bats were never produced. The exact model bats used in the 1995 College World Series were produced for 1996 from C405 alloy. 1994 bats were manufactured from CU31 alloy aluminum. (Exhibit 8-U)

Accordingly, the Rules Committee convened a meeting of the manufacturers in July of 1995. The result of the meeting was a gentleman's agreement that would cap aluminum bat performance at 1994 levels until such time as a permanent bat performance standard could be developed. With the assistance of the Sporting Goods Manufacturers Association, the rules committee agreed to use Richard Brandt's Bat Performance Factor (BPF) on an interim basis. The Brandt test was developed in conjunction with the aluminum bat manufacturers, and mandated that the BPF value for all bats used in competition after 1995 could not exceed 1.15. The NCAA later learned that the Brandt BPF test was not applicable for baseball bat performance testing and in fact the test had been prepared by the bat manufacturers under Dr. Brandt's signature. The BPF test simply allowed bat manufacturers to continue the performance race well above 1994 performance levels. (Exhibit 10-B) Petitioner told Bill Thurston of NCAA that the Brandt Test was hogwash.

On August 3, 1995, Manning wrote Archer and stated:

"Of concern is that we have Rules Bodies who are telling us of their concerns for performance, while at the same time the market continues to demand improved performance. Competitors are obviously going the route of satisfying the market and flaunting the Rules Bodies. This makes for a very uncertain marketplace that demands strong leadership and direction. We need to tell manufacturing what to manufacture and be willing to address the consequences of whatever decision is made."

Manning's message here was, we will tell the plant to build illegal high

performance bats because our competitors are building illegal bats and we will just have to except the consequences if we get caught. (Exhibit 8-V)

Easton admitted in 1995 to supplying its "contracted" schools with a thin-walled high performance bat that was to be used only in games at the Division I Baseball Championship and the College World Series. A total of 48 home runs were hit at the College World Series.

While aluminum bat manufacturers assured the NCAA that their bats were not performing at a higher rate than aluminum bats in 1994, statistics generated annually by the NCAA's statistics staff showed a sharp increase in offensive levels, especially in 1996 with the introduction of the C405 space-age alloy. Exit velocity tests and reaction time studies performed at Louisville Sluggers' Mt. Pleasant, Texas facility by Petitioner and Dr. Brandt showed 1994 performance had been exceeded and reaction times were unsafe. (Exhibit 9-A) (Exhibit 9-B)

The following figures detail the rise in annual Division I offensive statistics and earned-run averages for pitchers dating from 1995.

	Batting Average	Scoring Average	Home Runs Per Game	<u>ERA</u>
1995	.289	6.20	0.70	5.19
1996	.294	6.48	0.77	5.47
1997	.304	7.00	0.96	5.93
1998	.306	7.14	1.07	6.09

Statistical increases also have been felt at the College World Series. The following are statistics for 1994, the year before Easton introduced its "super bat" to the College World Series, and 1998.

	<u>Games</u>	At-Bats	<u>Hits</u>	Home Runs	Batting Average
1994	13	930	244	29	.262
1998	14	1028	327	62	.318

A total of 48 records, including nearly all of the major offensive records, were broken, and 32 records were tied at the 1998 College World Series. Common sense dictates that if non-wood bats hit the ball faster, more frequently than their wood counterparts, the risk of injury increases dramatically.

On September 21, 1995, NFHS advised SGMA that C405 bats would not be allowed in high schools unless they meet the 1994 performance levels and the interim bat (BPF) test. NFHS didn't know that the BPF test was not applicable to baseball bats. (Exhibit 8-X)

On October 20, 1995, NCAA, Thurston wrote Archer explaining that MacKay had been helpful to the rules committee and he appreciated MacKay not sending the C405 bats to colleges and honoring the manufacturers agreement with the NCAA Rules Committee. MacKay had refused to ship the C405 bats to college contract programs, even though he had been ordered to by Archer. Easton had already shipped C405 bats to their contract programs and violated the agreement with the NCAA Rules Committee. (Exhibit 8-Y)

In August of 1995, Dr. Brandt had been sent to Mt. Pleasant, Texas to get "MacKay on the team", with the manufacturers. Petitioner had been very vocal about the bogus BPF test and Brandt agreed to do a human reaction time study at Louisville's Mt. Pleasant facility. Petitioner observed the test and made notes on charts that showed dangerous reaction times existed in relation to feet per second and MPH. Petitioner wrote, "Deadly as Hell", on the softball speeds chart at .362 seconds reaction time and "Deadly", on the baseball reaction time chart at .409 seconds reaction time. Brandt wrote Archer on 10-2-95, thanking Archer for the use of the facility and telling Archer the test was completely successful. MacKay sent the reaction time charts he had written on to Louisville's management and Dr. Brandt was told by Archer not to publish the study. The study was discovered in a file by FOX Network in 1997 and in 1998 Brandt stated he had destroyed the file which had all of the raw test data. (Exhibit 8-Z)

On October 11, 1995, Easton wrote the American Baseball Coaches Association and asked for the associations help in stopping NCAA from passing a performance rule.

Many of the coaches in the ABCA were under monetary and equipment contracts with the bat manufacturers. (Exhibit 9)

On November 10, 1995, Easton wrote Bill Thurston, NCAA Rules Editor, and stated their 1996 bats were built to 1994 performance standards. This was a complete lie. Additionally, Easton says if the NCAA changes the rule it will obsolete all of their inventory and Easton would suffer economic consequences. These bats were already supposed to be no higher performing than the 1988 Easton Black Magic, which Easton had violated in 1989. (Exhibit 9-A)

On November 28, 1995, Cedric Dempsey, Executive Director of NCAA, wrote Easton and stated:

"The committee has indicated, and the manufacturers have agreed, that the interim performance level for 1996 should parallel the performance of the 1994 nonwood bats."

This 1994 performance level was never produced by Easton or any other manufacturer after 1994, even though it became the agreed upon performance standard. (Exhibit 9-B)

On October 10, 1995, Worth wrote NFHS and said C405 bats were not any higher in performance than previous models. Worth suggested NFHS not necessarily follow NCAA specifications. This is an untrue statement and Worth knew it at the time it was made. (Exhibit 9-C)

On October 20, 1995, NFHS wrote Worth and stated they were concerned about bat performance and were watching with interest the testing procedure being considered by NCAA, (BPF test), which the NFHS said they understood that SGMA and the manufacturers had initiated the test. NCAA was unaware the BPF test had been proposed by the manufacturers, although NFHS had figured it out. (Exhibit 9-D)

NFHS advised its State Executive Officers of their concern with the performance level of non-wood bats on October 27, 1995. (Exhibit 9-d)

On 10-30-95, the ASTM Baseball Committee wrote:

"I am convinced that the "reaction time problem" associated with the current bat and ball standards development has caught the attention of all of us, and it is clearly a safety issue we cannot ignore." (Exhibit 9-E)

On 11-16-95, a preliminary report on the bogus BPF test was being written by the manufacturers for Dr. Brandt's signature. In an "Urgent" fax, Easton forwarded the report to Louisville and Worth. Easton wrote that Louisville and Worth should add their changes to the report and pass the report to Dr. Brandt, so he could publish it for the NCAA. Other notes on the fax advise that the manufacturers should hit the NCAA with the ball COR and the small differences in 1.14 and 1.15 BPF.

Additionally, notes state that this is the report the NCAA will go with for 1996. In the margin of several pages of the report are changes recommended by each manufacturer. At the end of the report is the note, "Good job Richard!! (Dr. Brandt) Thanks a Bunch", Dewey (Dewey Chavin at Easton). This was supposed to be an independent report recommending a test to reduce bat performance and the manufacturers fixed it so the test would allow bats that far exceeded the 1994 performance level requested by the NCAA and agreed to by the manufacturers. (Exhibit 9-F)

On 11-13-95, Bill Thurston prepared a position paper where he states that NCAA has had very little cooperation from bat manufacturers in controlling performance or designing a test to regulate bats, that there was no compliance by the manufacturers with the 1988 Black Magic Benchmark Agreement, that bats far exceed 1988 performance levels, that one manufacturer gave higher performance bats to college teams under contract, that many coaches believe high performance bats are unsafe for NCAA play, and that independent research needs to be truly performed. (Exhibit 9-G)

On 11-17-95, Bud Casgrove, Chairman of ASTM Committee F-8 on Sports Equipment, wrote Petitioner a letter and asked petitioner to be on the ASTM committee for "Bat Performance Task Group". Shortly after the letter was received by Petitioner, George Manning of Louisville who was already on the ASTM Committee wrote Petitioner and said Louisville did not want Petitioner on the committee because Petitioner was not a team player. Manning further stated that under Petitioner's contract with Louisville, they could make this decision. (Exhibit 9-G2) Manning's letter to Petitioner is sealed as part of the settlement agreement reached on November 2, 1998.

On 11-20-95, Thurston wrote Petitioner and thanked him for being more honest than anybody else had been and that he would continue to speak the truth. (Exhibit 9-H)

On 11-22-95, Thurston wrote NCAA and stated the following:

"Upon studying Brandt's field test procedures, results and conclusions, I personally have no confidence in or respect for this test or his testing procedures. He either has lied to me in numerous personal telephone conversations, or he's lying about test results and seeking subjective conclusions. This is the same guy who told me: "The 1996 production bats are certainly too lively and the bat manufacturers know this." Upon my suggesting that he ask each manufacturer to voluntarily remove the 1.15 BPF bats for the 1996 season, he said he thought that was a good idea and he thought they would accept."

"During a following call, he said: "All but one manufacturer agreed to do it."

On still a later call between Ted Breidenthal, myself and Brandt, he changed his statement to: "Well, he said, all but one manufacturer said they would consider voluntary withdrawal of the bats."

"I personally do not believe we can rely on this person's word or work. He has been paid by bat manufacturers to give results and conclusions which fit their interests and desires." (Exhibit 9-I)

On 11-22-95, Steve Baum wrote to the NCAA Baseball Rules Committee, after their verbal Bat Performance Ruling and stated:

"We strongly disagree with this decision for the following reasons!"

"This is a direct violation of the previous NCAA agreement/directive dated

September 8, 1995 which stated that the acceptable 1996 interim bat performance
level would not exceed the in line production (regular season) bat level of
performance for 1994 season."

"The information which apparently is being used as a basis for this decision clearly states the 1994 performance to be at an average of 1.10-1.11 depending upon the 1994 numbers averaged in the October "report" or in the most recent "field tests" the 1994 level would be 1.12 yet the committee is allowing bats to be legal which are at the 1.15 level. This report also reveals a significant increase in velocities between these two levels of 100.5 mph compared to 103.5 for 1995!"

"Due to the fact that this decision allows all C-405 alloy bats to be used and these bats can clearly be made to the legal limit of five ounces under length (thus increasing bat speed,) actual in use field performance will also be increased."

"It is unacceptable and totally contrary to all goals that have been previously stated by this committee to allow an increase in performance of any kind. What has been the purpose of all the time, money and effort we have all expended if in fact the stated goals to keep the balance of the game intact, control exit velocity speeds, and increase safety are not enacted?"

"As you know we take serious exception to the tests used as a basis for this decision and certainly will address this issue at the upcoming ASTM meeting on December 5, 1995. It is and has been our opinion that theses tests understate the performance increase and are procedurally incorrect; irrespective of our many times stated objections, the committee has by any reference allowed increased performance levels over 1994 and with it decreased safety of the players."

"This decision cannot be in any way construed as a control measure, it is clearly allowing the growth of performance, and with it many repercussions. If the committee so chooses to use any of this test information as any basis, the 1996 interim level should be set at 1.12 and no higher, while awaiting further tests and the further examination of test procedures; regardless there is not a possible way to justify and increase as per our agreement and the stated goals of this committee."

"It is our opinion that the bulk of all bats which will be used for the 1996 season exceed the 1.15 predicted velocity level and when properly tested with true exit velocities will reveal a serious danger to players. It is totally illogical for the NCAA to use premature information based upon theoretical, unproved, incomplete data and therefore possibly error, not to the side of safety, but to the side of higher-faster performance!" (Exhibit 9-I-2)

On 11-22-95, Petitioner wrote Bill Clark at Louisville and told him he had shipped the college product but had deleted two models that were illegal because the diameter was too large. Petitioner had been ordered to ship these illegal models to colleges by Marty Archer. (Exhibit 9-J)

On 12-4-95, Petitioner wrote to Jack Hillerich, CEO of Louisville, and among other things stated the following:

"NCAA will almost certainly get real serious after a year of C405 bats in Division

I play. I suggest that there will be more home runs hit this year than ever and
most probably a serious player injury along the way." (Exhibit 9-K)

Petitioner was correct on both predictions.

On 12-4-95, Thurston wrote Brandt requesting the return of two bats Petitioner had tested by Brandt previously, and then sent to Thurston to have tested. The test results were completely different although the bats were the same bat. Petitioner suggested this idea to prove to NCAA the BPF test was not predictable. All of the bats sent to Brandt were from four different sources. This was unknown to Brandt who obtained three different results on the same four bats. (Exhibit 9-L)

On December 21, 1995, Alcoa Aluminum's attorney writes NCAA twice, saber rattling about consequences of changing bat performance. (Exhibit 9-M)

On 2-21-96, Easton wrote NCAA and states all 1996 bats are built to 1994 performance standards and confirms that Easton provided high performance game bats to some teams, even though it violated all NCAA rules. (Exhibit 9-N)

On 5-29-96, Mark Johnson, coach at Texas A & M University, wrote Jack Hillerich, CEO of Louisville, and stated:

"Mr. Hillerich, while I have publicly shared my opinion about "sizing-down" the ever increasing performances of the aluminum bat, I have not blamed the bat manufacturers nor do I care to eliminate the aluminum bat. I do feel that the bat has become a safety factor and that we need to address that problem."

"I stand strongly behind the Louisville Slugger folks, Jack MacKay has been a great ambassador for your products and has been extremely accessible to our needs. His service is beyond reproach." (Exhibit 9-O)

On 5-30-96, George Manning of Louisville wrote to Bill Clark, Sales Manager of Louisville, and stated:

"You have indicated that reports are circulating that our new baseball bats made from C405 Plus are being called "illegal bats". In order to keep the sheriff from coming and locking me up, let me state the facts on this project."

"Admittedly, this is at the limit, but it is acceptable by the standards established by the NCAA Rules Committee. How this can be construed as an "illegal" bat is beyond my understanding. We may be guilty of getting a competitive edge with a new model, but it meets all the standards known to us at the time it was offered."

Manning knew these bats far exceeded the 1994 performance limit and he knew the BPF test was bogus and that all bats would round off to BPF 1.15 in the formula. (Exhibit 9-O-2)

On June 4, 1996, the American Baseball Coaches Association issued a press release which stated in part:

"OMAHA, NE – at the American Baseball Coaches Association's Board of
Directors meeting held on June 1 and 2 at the Division I College World Series, the
Board unanimously passed a motion requesting that the NCAA Baseball Rules
Committee develop standards for non-wood bats so they become somewhat
comparable to wood bats in weight variance, hitting zone and rebound effect."

"Board members are concerned that the non-wood bats that are presently being used have changed the way college baseball is played and has a negative effect on the game. The Board also feels the players safety may be an issue for concern and should be looked at when developing standards for the bats." (Exhibit 9-Q)

On July 1, 1996, in an interoffice memo NCAA states:

"The NCAA Baseball Rules Committee is in the process of developing a permanent bat performance standard so that nonwood bats may somewhat compare to the wood bat used in professional baseball in terms of length-to-weight ratio and exit-ball speed."

There is no question the NCAA and NFHS wanted to go to wood bat performance. (Exhibit 9-R)

On 7-1-96, NCAA attorney wrote NCAA and states his concerns about changing the performance rule without proper independent testing. He had previously received a letter from Easton's attorney and the manufacturers were not about to submit to independent testing because they already knew it would show aluminum bats far out performed wood bats and were dangerous to the consumer. (Exhibit 9-S)

On 9-25-96, Jim Easton, president of Easton Sports, writes Cedric Dempsey, Executive Director of NCAA and states:

"I am sure you are aware of the action of the NCAA Baseball Rules Committee and the confirmation of that action by the NCAA Executive Committee. It is unfortunate the Executive Committee did not wish to hear the other side of the issue. The baseball bat manufacturers are partners in college baseball. Between H&B and Easton, we contribute nearly \$2,000,000.00 to the NCAA schools and coaches we support." (Exhibit 9-T)

On 1-15-97, Easton's General Counsel writes Cedric Dempsey complaining that Bill Thurston who is the Rules Editor for the NCAA, is on a crusade to change the bat used in colleges. This is an apparent effort to shut Thurston up because he is a well-respected coach and NCAA Baseball Rules Editor. (Exhibit 9-V)

On February 17, 1997, Petitioner in response to a phone call from Marty Archer concerning a quote Petitioner had made in a February 3, 1997, Sports Illustrated article, Petitioner wrote Archer, Hillerich and Clark at Louisville and stated:

'I'm amazed that everybody is so uptight about the "Sports Illustrated" article.

They called me at 10:00 P.M. one night and said Bill Thurston and Jim Morris said I'd tell them the truth about bat safety. I get these calls twice a week when the bat performance issue heats up and I refer these people to you and George.

Two days later they call back and George is out of town and you haven't returned their call. They feel the companies are stonewalling."

"I told this writer what everybody already knows and more specifically what Trey Crisco is telling the NCAA. Trey is telling them that C405 is dangerous and it is. I certainly don't know how dangerous but if it hits 7 to 12% faster than wood and pros are getting hit with wood bats then it presents a greater danger to less skilled players at the college level. This is just plain horse sense. There is no question that aluminum bats present more danger than wood and even early model aluminum bats. I think when we don't tell these people and especially NCAA the

truth when they already have the information it makes us look like we're covering up the problem."

"I got in trouble two years ago for telling the softball coaches that I personally felt Titanium was dangerous. Titanium hit 5 to 8% faster than aluminum and it was very apparent that it was dangerous. Bill really got mad that I had admitted we knew it presented a danger. I didn't know at the time that we were building Titanium for the market. Bill was afraid we'd get sued for knowing how fast it hit and still putting it on the market. Easton came out with it and we put ours out and it was outlawed. Rex and I were the only people in the company who begged you not to sell it but you guys couldn't let Easton get ahead of you."

"As you know, Dr. Brandt did reaction time studies here at Mt. Pleasant, and then would not give them to NCAA without payment. This study got lost in the shuffle. We had some of that data here and we had the test setup so we repeated the test ourselves using college players, Tripp, myself, Kaye and anybody we could get. It proved to me that a danger does exist with present bats and the less skilled or athletic people are certainly at a greater risk than highly skilled players."

"You keep saying we're building bats to NCAA's 1.15 standard, it's their responsibility. That is not exactly true. You and George and Jim Darby and the other manufacturers recommended the 1.15 BPF and NCAA set that standard based on the manufacturers recommendation."

"The BPF is not a reliable test in my mind since test speeds are 60 MPH and you don't excite the bat or ball until you get over 140 MPH, where the game is played."

"I think we should tell the truth and let NCAA set the standard using their experts.

We can guild a great bat with a long barrel that hits closer to wood and not miss a step."

"The ABCA, which are the coaches I work for and with have voted unanimously for the NCAA to adopt standards for aluminum that brings the performance back closer to wood. These are the guys who made us and they have been waiting for us to take the lead for two years. This won't hurt sales one bit. We can be the leader here, we have already developed the technology with our Japanese bats."

"We need to shut the performance down to an acceptable level and be the company that restored the integrity of the game and made it safer."

"We won't lose sales because everybody will need new bats. We don't need to continue this performance increase and danger increase to keep sales going up. It makes no sense and we're going to get somebody hurt. The three strikes last year and the four strikes year before last should be our final warning." (Exhibit 9-V-2)

In May 1997, Petitioner filed for a patent on a bat with an air bladder in the barrel and Louisville promptly named this bat "Air Attack". The original concept of this design was to put a bladder in the bat barrel and pressurize the bladder to 10 to 12 P. S. I. Petitioner's testing had shown that this pressure dampened the bat barrel and reduced the bat performance by 5 to 6 percent. Louisville's Jay Bhatt did testing and immediately pressurized the bladder to 30 P. S. I., which increased performance 3 to 4 percent. The 30 P. S. I. is clearly stamped on the handle of these bats. On May 7, 1997, the Louisville Sales Department announced this patent pending technology to all Athletic Goods Representatives, (Salesmen). (Exhibit 9-V-3)

On July 30, 1997, when Petitioner was agreeing to retire he asked Marty Archer in a phone call that was legally recorded, the following:

J.M.: What if somebody calls up here and says, "What's your personal feeling on safety of bats?" That's not non-compete competition. That's mine. I'm out and retired. I can say what I want to."

M.A.: I would say that you should not-personally. I don't think-

J.M.: Okay-

M.A.: --I don't think you should comment about the safety of bats, even as a private citizen. I don't believe you should do it. Again, I'm not the lawyer but I'm asking you as someone within the spirit of this agreement, you should not comment about the safety of bats. (Exhibit 9-X)

Petitioner refused to sign the retirement agreement as presented to him because it required Petitioner to never discuss safety issues after he retired. The retirement agreement signed by Marty Archer and Jack Hillerich offers Petitioner in excess of \$1,700,000.00, to keep all information confidential, but the 80 page agreement arising from the agreement signed July 14, 1997, states safety information must also be kept confidential. This was basically a hush money agreement for seven years and Petitioner refused to sign it and just resigned August 30, 1997.

It is interesting to note that the hand written draft of the July 14, 1997 agreement, on the second line of the draft, states, "Total Confidentiality of all Safety Test". Petitioner refused to agree to that clause in the retirement package and Archer scratched the word <u>safety</u> out. This shows the amount of fear Louisville had for the safety issue. (Exhibit 9-X) (Exhibit 10-C)

On July 22, 1997, Easton writes Bill Rowe, Chairman of the NCAA Baseball Rules Committee and again discusses Bill Thurston's newspaper quotes to the Los Angeles Times. (Exhibit 9-Y)

On July 2, 1997, SGMA memo to Members of the NCAA Baseball Rules Committee and states:

"As you recall, at the 1995 Rules Committee meeting at Lake Tahoe, but manufacturers agreed to produce buts with a BPF not to exceed 1.15 (relating to the top limit of 1994 buts). Also, the committee was going to make sure that the baseballs did not exceed the standard COR."

This is what the manufacturers agreed to but never did. The 1995, 1996, 1997, 1998 bats continually increased in exit velocity. (Exhibit 9-Z)

In October of 1997, the rules committee received a letter from Richard Brandt in which he admitted that his BPF was limited to softball, and impact speeds of 60 miles per hour. However, Brandt thought that the BPF methodology would be appropriate for baseball simply by increasing the impact speeds to 150-160 miles per hour. (Exhibit 10-B)

Dr. Joseph J. "Trey" Crisco, III was hired by the NCAA to conduct various tests, including a test to assess and verify Brandt's contentions. Dr. Crisco was unable to replicate Brandt's results at higher velocities. Another directive the committee gave Dr. Crisco was to evaluate existing testing methodologies used by any and all interested parties, namely bat manufacturers. The aluminum bat manufacturers, however, failed to share their testing methodologies and instead offered their support for the Brandt test. (Exhibit 10)

On September 18, 1997, Cedric Dempsey, NCAA, wrote Easton after being requested by Easton to overrule the Rules Committee and stated in part:

"I trust you understand that it is not appropriate for me to interfere in the workings of our Association committees. I know you feel strongly about this issue, but I simply have no authority to take the action you have suggested,"

In spite of this nice statement he took the authority and in a letter dated May 28, 1998, to the NCAA Baseball Committee, he stated:

"After consulting with NCAA general counsel Elsa Cole and John Black; Dennis Poppe, NCAA director of championships; and myself, Ced agreed that providing support of such an endeavor would benefit college baseball and the committee as it closes in on a permanent standard. While he was reluctant to side step the Baseball Rules Committee, he felt that this situation was bigger than the committee and required his involvement."

"Suffice it to say there is a lot to talk about and much more than I can't put in words. I plan to have Trey join us for the conference call to explain his thoughts and to plan for the July 14 Bat Summit Meeting. I think this Summit Meeting takes on a whole new importance with this latest development." (Exhibit 10-D)

In December, 1997, the NCAA agreed to delay the bat standards for more testing which is exactly what the manufacturers wanted. A December 19, 1997, memo from SGMA to the manufacturers stated:

"Attached is a copy of an article appearing in the recent NCAA news summarizing the studies conducted by Dr. Trey Crisco. I want to compliment our membership on conducting a very effective campaign with NCAA Baseball Rules Committee, which resulted in their contracting for independent research. I would conclude from this article that there is not justification for any bat or ball specification changes at this time, because of the issues left to be considered by Trey Crisco. Thanks especially to our bat manufacturer membership who pulled together and presented a strong industry voice which resulted in a much more professional approach to standards development."

The SGMA was applauding everyone's efforts to delay, delay, delay, while profits from illegal high performance bats rolled in. (Exhibit 10-E)

In January 1998, Dr. Jay Bhatt, H&B Director of Research and Development wrote an article for the "Rocketeer", an in-house publication of the China Lake Naval Station Weapons Laboratory, where H&B had run a series of performance test. Dr. Bhatt stated:

"Aluminum bats are used everywhere except in professional baseball," noted Dr. Jay Bhatt, H&B's Director of Research and Development. That includes Little League, Senior League, High School, and NCAA college sports. Aluminum bats perform about 20% better than wooden bats and they last longer." (Exhibit 11-A)

Sports Illustrated ran a story in the January 12, 1998 issue entitled, "Danger at the Plate". Petitioner and others were quoted as saying high-tech bats were dangerous. (Exhibit 11-B)

On February 3, 1998, Easton wrote the rules committee and complained about Thurston quotes, "We're going to kill a kid", in the Sports Illustrated Article.

(Exhibit 11-C)

On February 17, 1998, Worth complained about Bill Thurston's remarks to SGMA and NCAA. (Exhibit 11-D)

The final straw for the BPF came in June of 1998 when the Rules Committee received a copy of a letter written by SGMA executive Sebastian DiCasoli to Brad Rumble, assistant director at the National Federation of State High School Associations ("High School Federation"). Responding to a February 27 letter from Rumble, in which he stated the High School Federation's interest in using the Brandt BPF bat test to bring more "wood-like" performance to nonwood bats, DiCasoli wrote that "the Brandt test has not yet been validated for predicting baseball bat performance." The SGMA and the aluminum bat manufacturers made this statement after three years of support for the Brandt test! (Exhibit 11)

In June 1998, the Board of Directors of the American Baseball Coaches
Association unanimously passed a motion requesting that the Rules Committee develop standards for nonwood bats so they become somewhat comparable to wood bats in weight variance, hitting zone and rebound effect. The Board expressed concern that the nonwood bats have negatively affected the college game and that player safety may be an issue and should be looked at when developing bat performance standards. (Exhibit 12)

On July 14, 1998, the NCAA and the High School Federation hosted a joint Summit Meeting on Baseball Bat and Ball Performance Issues. Petitioner, a former Louisville Slugger Consultant, revealed a long-standing pattern of behavior by Louisville Slugger and Easton that was intended to deceive and confuse the Rules Committee. Petitioner spoke of how the two companies continued to develop higher performing bats even after the implementation of the 1.15 BPF in 1994, and talked about how they were able to cheat the test. Petitioner also discussed how the two companies worked together to fix the prices of aluminum bats on the market, thereby commanding higher and higher prices. In closing, petitioner turned over documents to the NCAA general counsel that supported these powerful statements. (Exhibit 13)

A transcript of the July 14, 1998 meeting is attached as (Exhibit 13-A).

Following the Summit Meeting, both the NCAA and the High School Federation committees expressed a desire to implement a maximum batted-ball exit velocity standard to control performance, to make the game safer, and to bring some integrity back to the game. A consensus was reached by nearly all of the attendees that the Baum Hitting Machine was the best available machine to test batted-ball exit velocity in a lab setting. The Baum Hitting Machine is a dynamic apparatus that measures the exit velocity of a pitched ball that is impacted with a swinging bat at predetermined bat speed and ball speed.

Subsequently, the Rules Committee voted to propose the following wood-like standards for all nonwood bats beginning January 1, 1999: a maximum 2 5/8-inch barrel

diameter; a length-to-weight unit differential not to exceed three without the grip (for example, a 33-inch-long bat can weigh no less than 30 ounces); and a maximum batted-ball exit velocity that does not exceed 93 miles per hour, plus one mile per hour variance for test deviation.

After the committee agreed to this wood-like performance standard, Major League Baseball agreed to split the costs of the new hitting machine (approximately \$375,000) with Rawlings Sporting Goods, at Petitioners request. The NCAA then agreed to a five-year commitment to have James Sherwood, engineering professor at the University of Massachusetts at Lowell, operate the new machine and test bats for the NCAA in an independent environment at Petitioner's suggestion.

In June of 1998, Bill Thurston had prepared a study of pitchers hit by batted balls. Only 72 institutions reported so additional institutions were called by the NCAA. NCAA estimated that over 375 pitchers had been hit by batted balls in Division I schools alone, (273 schools). (Exhibit 11-E)

In August 1998, NCAA President Cedric Dempsey issued a memorandum regarding baseball bat safety to all NCAA member institutions. In this memorandum, he explained that the Executive Committee had approved the new wood-like bat performance standards as proposed by the Rules Committee, but chose to delay implementation until August 1, 1999. Therefore, since the new bat performance standards were not to go into effect until after the 1999 season, Dempsey urged member institutions to take all necessary steps to enhance the safety of players in 1999. In the memorandum, Dempsey shared information related to insufficient pitcher reaction time, frequency and severity of injury, and anecdotal injury reports. The new wood like bat performance standards had been agreed upon and recommended by all committees. Why did NCAA delay for over two years? (Exhibit 14) (Exhibit 11-F)

Dempsey further stated in his letter:

"The NCAA Executive Committee has asked me to share with you some important information about baseball bat safety and to ask you to take all necessary steps to enhance the safety of your collegiate baseball players during the 1998-99 season."

"The Executive Committee changed the bat specifications to enhance player safety, to restore the competitive balance in the game between offense and defense, and to preserve the integrity of the game."

"Recent data collected over the past season in Division I, however, shows that the frequency of pitchers impacted with a batted ball is greater than might be expected from the ISS data. Surveys were distributed to athletic trainers at each Division I institutions sponsoring baseball (273 schools) in January 1998 in an attempt to quantify the frequency of pitchers impacted by a batted ball."

"Following analysis of the data from 88 schools that initially reported and from a follow-up sample of 30 schools that did not initially report, it was projected that 374 incidents of pitchers impacted with a batted ball occurred this past season in Division I baseball games alone."

"Ball-exit velocities from metal bats currently in use in collegiate play have been measured from 103 to 113 miles per hour, translating to a reaction time of 0.357 to 0.315 seconds at a distance of 54 feet. Therefore, there is a window of time during which a collegiate baseball pitcher could be vulnerable to being struck by a batted ball."

"It will, of course, be some time before this current phase of the research is completed and can be analyzed to evaluate bat safety. In the meantime, the NCAA believes that the data that have been shared with you in this letter—insufficient pitcher reaction time, frequency and severity of injury, anecdotal

injury reports, the banning of titanium bats in softball, and the modification of umpire positioning—describe a situation that warrants your careful attention."

Given this information, the NCAA Committee on Competitive Safeguards and Medical Aspects of Sports made the following statement:

"The NCAA Committee on Competitive Safeguards and Medical Aspects of
Sports is very concerned about the potential of serious injury from batted balls in
the sport of baseball and supports research in this area." (Exhibit 11-F)

Attached are news releases from NCAA (Exhibit 14-A), and news releases from NFHS, showing the off again-on again nature of the performance standard decision. This off again-on again approach was due mainly to pressure from the bat manufacturers put squarely on the NCAA and NFHS. (Exhibit 14-A) (Exhibit 14-B)

Shortly after the Executive Committee's decision to implement a new wood-like bat performance standard, Easton filed a \$267 million antitrust lawsuit against the NCAA. Easton also mounted a full-scale campaign of misinformation and propaganda targeted at the NCAA member schools, coaches and the public to put further pressure on the NCAA. (Exhibit 15)

In September of 1998, Easton Sports became very concerned that the CPSC would become involved in the new bat standard. Eastons' lawyers contacted Dr. Edward J. Heiden, who stated he was formerly with the CPSC to conduct an evaluation of whether CPSC would become involved in the bat safety issue. Dr. Heiden, armed with 1995-1996 data supplied by Easton lawyers, stated that aluminum bats are not a product that either should or would be likely to draw the regulatory attention of CPSC as a potentially hazardous product. Easton could have called CPSC directly instead of quietly hiding the problem from CPSC, by hiring a costly consultant' for their opinion. Easton lawyers used the Heiden letter in discussions with the West Coast Conference Commissioner to prevent the conference from going to wood bats. (Exhibit 15-A)

(Exhibit 11-J)

In response, the Rules Committee issued a memorandum on December 4 to all member schools and conferences that outlined several points of misinformation in Easton's letter-writing and public relations campaigns. The memorandum cited, among many things, that the information provided by the bat manufacturers was less than trustworthy; that the committee was convinced that bat performance had steadily increased to a point where there was indeed a safety risk to pitchers and infielders; and that the available evidence was more than sufficient to justify a change in the rule as soon as possible. (Exhibit 16)

On September 16, 1998, Petitioner was asked to prepare a test protocol for NCAA. Petitioner complied and stated the test needed to be without loopholes, that manufacturers had made illegal bats for years and would continue to do so, and Petitioner stressed the importance of a specified balance point by saying it was the single most important specification.

In December 1998, Easton threatened lawsuits against its contract schools that were afraid to use Easton bats for safety reasons. In answer to Easton threats the NCAA wrote all NCAA institutions and stated in part:

"Many of you have received a form communication from Easton Sports asserting Easton's positions regarding implementation of the amendments to the NCAA Baseball Rules regarding high performance aluminum baseball bats. Many of you have also received a letter from Easton's lawyers on the same subject threatening legal action if a member institution or athletics conference decides to implement the new bat rule for the spring 1999 season."

"Several conferences have elected to adopt the new bat standard or to use only wood bats for the spring 1999 season, while others have elected to implement the new rule as of August 1, 1999, as required by the NCAA."

"The NCAA adopted the new bat rule after a lengthy, careful and fair deliberative process. The baseball rules committee, composed of knowledgeable baseball coaches and administrators with many years of experience has been concerned about runaway bat performance for many years. In 1988, 1993, 1994, 1995, 1996, 1997 and 1998, the committee studied the issue and took steps that it believed would reasonably curtail ever-increasing aluminum bat performance. The committee's efforts in this regard were not successful, with the result that the performance level of aluminum bats continued to escalate. The committee has continuously monitored available statistics, participated in various studies supported by the manufacturers, and, until recently, trusted the information provided by the bat manufacturers. In some cases, the information has been less than trustworthy."

"The committee convened a meeting in Kansas City, Missouri, In July 1998. All interested manufacturers, experts, and other knowledgeable persons were invited to make presentations to the committee in open session. The proceedings were stenographically recorded and the results are available should you wish to examine them. The committee was unanimously convinced that bat performance was indeed a safety risk to pitchers and infielders, that there has indeed been a change in the way the college game of baseball is played, and that the available evidence was more than sufficient to justify a change in the rule as soon as practically possible. There is simply no question that aluminum bats substantially outperform traditional wood bats, that the risk of injury to pitchers and infielders is real, and that a performance limit on the aluminum bats was required to bring the game of baseball closer to its traditional form."

"We believe that a few of Easton's more glaring distortions of information should be corrected. Easton claims that safety is not a legitimate concern. The rules committee, based on its own experience and that of the many coaches, players, parents, umpires and administrators with whom it communicated, is convinced

that safety is a legitimate concern. Not only are players being seriously injured, but reports of injuries and near injuries are frequent."

"When Easton says that "the difference between wood and aluminum is very small and some wood bats outperform aluminum bats," it is attempting to mislead you. Likewise, when it says that "most wood" bats fail to meet the NCAA proposed standard of 93 mph, it is misleading you. Traditional wood bats when tested under NCAA standards by independent experts consistently produce exit velocities below 93 mph."

"The high-powered aluminum bats have larger sweet spots as well as greater power. They also can be swung faster, allowing the batter to make more frequent good contact with the ball. Consequently, hitting, slugging, pitching and other statistics relating to the game reflect the increased power of hitters to hit farther, harder, and more frequently. Studies by Bill Thurston, secretary-rules editor of the rules committee, have shown that the same batters show a drop in batting averages of approximately 100 points when switching from aluminum to wood bats during the summer Cape Cod League while facing essentially the same pitching. Other statistics abundantly support the same conclusion."

"In short, the committee remains convinced it made the right decision based on abundant evidence and a fair process. We hope that this information will assist you in discharging your responsibilities independently and with care."

(Exhibit 11-K)

On December 10, 1998, NCAA wrote Jim Sherwood and stated:

"Attached is the NCAA protocol for testing baseball bats. The test procedures outlined in the protocol must be followed when evaluating the performance of a bat for NCAA certification. The test procedures should also be followed for any bats being used to create a database for NCAA bat studies."

Attached to this letter was the agreed upon protocol. This protocol was part of a licensing agreement with Baum, the hitting machine inventor. This is the protocol that was changed by NCAA and Sherwood in September 1999. (Exhibit 11-L)

In January 1999, James Sherwood, the independent researcher at the University of Massachusetts at Lowell who was selected to conduct the independent research and testing on a Baum Hitting Machine, released the wood bat exit speed database to the NCAA. Among his findings were that, when compared under equal conditions ball-exit-speeds from aluminum bats are significantly greater than wood; that aluminum bats already have an advantage over wood in that they have a "sweet spot" that is four times larger than wood; and that a reduced diameter and increased bat weight are insignificant in controlling performance. Sherwood concluded that a ball-exit-speed standard is necessary to ensure that performance of nonwood bats is adequately controlled.

Sherwood's testing revealed the following average exit speeds for Major League quality wood bats:

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32 inch, 29 ounce – 93.712 miles per hour (70 mph bat speed; 70 mph pitch speed) 33 inch, 30 ounce – 92.328 miles per hour (68 mph bat speed; 70 mph pitch speed) 34 inch, 31 ounce – 90.531 miles per hour (66 mph bat speed; 70 mph pitch speed)
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He concluded his report by stating the following: "If wood bats are considered the safe level for play, then it is difficult to defend, from a safety point of view, any level of performance above that of comparable wood." (Exhibit 17)

Because the "three-prong" rule (which includes exit velocity) adopted by the Executive Committee was not to go into effect until August 1999, and due to the concern for player safety, the NCAA Executive Committee adopted in January 1999 a "two-prong" bat-performance standard for the 1999 championships in all three divisions. This "two-prong" rule mandated that the maximum barrel diameter shall not exceed 2 5/8-inches, and the difference between length of the bat and weight (not including the grip)

does not exceed three units (e.g., a 33-inch bat cannot weigh less than 30 ounces). Jim Sherwood, University of Massachusetts at Lowell, had just one month earlier advised the NCAA that reduced diameter and increased weight are insignificant in controlling performance of non wood bats.

The Executive Committee also announced in January the formation of a blueribbon panel of experts ("Research Panel") to study player safety and game integrity
issues in college baseball. The Research Panel was charged with reviewing all of the
available data on baseball bat performance, and issuing a report of its findings no later
than July 1, 1999. The NCAA also announced that Easton had agreed to provide
indemnification for schools with which it had contracts to provide bats. Louisville
Slugger provided indemnification agreements to the schools under contract to them.
There are presently at least three lawsuits against Louisville Slugger arising out of these
indemnification agreements. (Exhibit 18) (Exhibit 18-A) (Exhibit 11-M)

On January 14, 1999, the NCAA wrote all member institutions and stated:

"The Executive Committee has adopted a "two-prong" standard for the 1999 championships. Acceptable nonwood bats shall not exceed 2 5/8-inch optimum diameter and a difference between weight (not including grip) and length of not more than three units. Specifications for wood bats have not been changed.

Although a specific list of bats that conform to the new nonwood standard is not readily available, information regarding diameter and weight differentials should be readily available from bat manufacturers and generally is printed on the bat."

"It is important to address how this decision relates to the health and safety of our student-athletes. The original August 1998 Executive Committee decision to implement a "three-prong" standard was made in part in response to concerns that current bat standards did not adequately address the health and safety of participants. The delayed effective date of that standard, however (August 1, 1999), also reflected the need for more definitive scientific data regarding the

<u>legitimacy of the 94 miles-per-hour "exit-speed" standard and related health and</u> safety concerns." (Exhibit 11-M)

In June of 1999, the Research Panel announced recommendations that would make wood bats the standard by which nonwood baseball bat performance would be measured. Effective January 1, 2000, the panel recommended that the maximum exit velocity of nonwood bats be set at a level that equates to the highest average exit speed using Major League quality, 34-inch, 31-ounce wood bats. The exit-speed standard would be attained via testing using input speeds for both the baseball and bat speed of 80 miles per hour.

In the report, Milton A. Gordon, chair of the Research Panel and president of California State University, Fullerton, said,

"In terms of both risk and integrity, the panel concluded that wood should be the standard. Given the fact that baseball has been played with wooden bats since the inception of the game, the group determined that the level of risk associated with wooden bats is generally accepted by all associated with the game. Therefore, the panel recommends that a standard tied to the performance of wooden bats will result in risk levels acceptable to the sport." (Exhibit 19)

In July 1999, Dr. Crisco released "Baseball Bat Performance: A Batting Cage Study." He surmised that aluminum bats clearly outperformed wood bats. His findings suggest that maximum batted-ball speed was generated from two primary components: bat swing speed and barrel efficiency, or "trampoline effect." He also verified the claim that a pitcher needs .40 seconds to react and defend his position at 52-53 feet from batball impact point. This claim was made public by Petitioner after the Brandt Reaction Study at Mt. Pleasant, Texas, in 1995. (Exhibit 20)

Also in July 1999, the High School Federation announced its first recommendation of a <u>wood-like bat performance standard</u>, which would be phased in through the 2001 season. The High School Federation Rules Committee recommended that its Board of Directors approve a rule for nonwood bats that replicates wood in size,

weight and moment of inertia, (balance point). Specifically, nonwood bats would be required to have a 2 5/8-inch maximum barrel diameter, a minus-3 maximum unit differential (measured without the grip) and a minimum moment of inertia (MOI) that would cause the effort required to swing a nonwood bat to replicate closely the effort required to swing a wood bat. The committee also announced its intention to adopt a maximum exit-ball-speed standard, to go into effect January 2002, but believed the timing was premature. (Exhibit 21)

In September of 1999, the new Baum Hitting Machine was delivered to James Sherwood at the University of Massachusetts at Lowell. Shortly thereafter, attorneys from Easton and the NCAA met with Sherwood to observe testing on Easton aluminum bats. As a compromise with Easton, the NCAA and Sherwood used a 34-inch, 32-ounce wood bat (one ounce heavier than other wood bats tested) in order to increase the exit speed of wood bats so that Easton's aluminum bats would pass the new standard. The result of using this heavier wood bat was an exit velocity of 96 mph, versus the average exit velocity of 90.5-mph using a 31-ounce wood bat. The bat swing speed was also reduced from 70 mph to 66 mph. (Exhibit 17)

On September 28, the NCAA announced that the Executive Committee had approved a batted-ball exit-speed standard of 97 mph instead of the 94 mph standard recommended by the Research Panel, and approved an implementation date of January 1, 2000, with a three year moratorium on any changes to the rule. (Exhibit 23) This standard was based upon the heavier wood bat used as a compromise with Easton. In the same announcement, the NCAA also stated that Easton would drop its lawsuit. Ironically, two of Easton's aluminum bats met this new performance standard, while no other manufacturers' bats did. In a sense, Easton agreed to drop its lawsuit for almost three months of market monopolization, and the NCAA knowingly agreed to expose players to a greater level of danger than what has generally been accepted as reasonable for the game. (Exhibit 23-B)

By changing the testing protocol, its clear the NCAA chose to compromise the safety of the student-athlete, and then attempted to cover-up the truth, in order to settle Easton's seemingly frivolous lawsuit. (Exhibit 24)

On 10-27-99, Thurston wrote Petitioner a letter and enclosed a copy of the 1999 bats as compared to previous bats. Thurston states, "there is no difference". The weight and diameter change for 1999 was of no benefit in reduction of performance. Jim Sherwood publicly stated this also. (Exhibit 11-O)

On 11-8-99, Thurston's memo to NCAA again states the two-prong bat specifications had no significant effect on decreasing exit velocity. (Exhibit 11-P)

On 11-1-99, NCAA wrote its member institutions and stated:

"As you can see, some bats that were legal last season have passed certification and will be allowed for use this season. The NCAA is in the process of finding the best way to denote that these bats are legal. Look for a mailing in the near future regarding that topic."

How could this possibly happen if bats were to be detuned? Everybody has already agreed that the reduction to 2 5/8" and the -3 differential did nothing to reduce exit speed. Here we have the two-prong 1999 interim standard bat passing the 2000 (three-prong) protocol. The protocol was changed and allowed handle-loaded bats to beat the testing procedure. This is the exact bat Dr. Sherwood said somebody would get seriously hurt or killed with. (Exhibit 11-S)

In July of 1999, Louisville Slugger provided space in their Louisville Museum for the American Baseball Coach Hall of Fame. This agreement was negotiated with Dave Keilitz, Executive Director of ABCA. Mr. Keilitz is a member of the NCAA Blue Ribbon Panel on Baseball, (Research Panel). As usual, the manufacturers are always looking for ways to get friendly with the so-called independent decision-makers. (Exhibit 11-T)

The High School Federation's Baseball Rules Committee announced in December that it had revised the proposed bat-performance standard it had adopted at its annual meeting in July. In addition to the barrel diameter and length/weight specifications, the committee recommended a 95 miles per hour maximum batted-ball exit velocity and a different moment of inertia for each length bat that would replicate wood bat balance points. If approved by the High School Federation's Board of Directors, this new rule would go into effect January 1, 2001. (Exhibit 25)

In January 2000, the High School Federation Board of Directors approved a new bat rule for the 2001 season that included only the size and weight restrictions. The Board chose to defer action on the recommendations for a maximum exit-ball-speed standard and a wood-like moment-of-inertia requirement. While it expressed interest in both proposals, it decided to return them to the High School Federation Rules Committee for further assessment. This was due largely to threats of lawsuits by the bat manufacturers. (Exhibit 26)

We have already discussed the fact that all researchers and engineers agree that the two-prong specification does not reduce performance or exit speed. This is a fact well known to NFHS. Easton made a statement in a news article that if NFHS changed the performance specifications, the NCAA \$267,000,000.00 would be small compared to what the NFHS would get sued for.

In January 2000, Jim Sherwood had a phone conversation with Jay Bhatt, Director of Research for Louisville and told Jay he felt the testing protocol must be changed because the batted ball speeds they were seeing were higher than in the past. Jay Bhatt called Dan Petsenberger, Vice President Research Design and Development for Worth and told to Petsenberger what Jim Sherwood had said. Petsenberger then sent Jim Sherwood an e-mail and asked what changes Jim Sherwood had in mind, dated 2-3-00.

Sherwood e-mailed Petsenberger back discussing the balance point issue and other changes he thought must be made. Sherwood sent a copy of this e-mail to NCAA on 2-6-00. Ty Halpin at NCAA immediately e-mailed Sherwood the following message on 2-7-00:

"Jim, I think we should keep this sort of correspondence to a minimum. There is no reason to get people riled up when there is a very good possibility that we won't make any changes to the protocol. I've talked with Todd and Elsa about this...we really don't have a compelling reason for a change at this point, at least not until we see a pretty big change on the field. That's not to say it's not a possibility, just not probable. Let's try and keep these discussions internal (Todd, Elsa, Scott B., etc.) Let me know if you have any questions." Ty (Exhibit 11-U)

Sherwood immediately sent a memo to NCAA, (Ty, Todd, Elsa), via e-mail on 2-7-00, that stated in part:

"In September, I thought the NCAA had a reasonable bat rule and a acceptable backup clause should change be warranted. The clause where this rule can change as of 01 Aug 2000 is the only reason I agreed to a compromised protocol for the first year. I understood the urgency to end the Easton case and cooperated in resolving that matter. However, the resolution of the Easton case may have been traded for a far worse scenario."

"Now that I have tested (and certified) the NCAA 2000-season bats, I am genuinely concerned that someone is going to get seriously hurt and potentially killed—and most likely with an H&B bat. The H&B bats have a relatively low (balance point) MOI compared to the competitions' bats. The players are going to be able to swing these H&B bats faster than bats in the past."

"length/weight/model combinations in the protocol was OK, until these guys saw the loophole. The loophole was to move the balance point in so far that the bat would pass the BHM test, but still be lethal in the field. The lethal part comes from the fact that the bat can be swung faster in the field than what we swing it on the BHM in the lab. I can assure you that the H&B 34-in bat will significantly outhit its 34-in wood counterpart in the field."

"Furthermore, the H&B bats barely made it through the certification process. I recommend pulling some from the field and/or shelves for immediate compliance testing."

"The NFHS is moving toward a standard similar to the NCAA with two additions:

(1) specifying a minimum MOI and (2) a sliding scale for swing speed based on length. The bat companies do not like it. And why don't they like it? Because it will force the nonwood bats to hit like wood and swing like wood."

"I would appreciate receiving a letter from the NCAA saying that the NCAA will protect my lab and me from any responsibility of what harm may come from these bats. I was simply a certification center for processing NCAA protocol bats.

There is a strong potential for a lawsuit arising from these bats, and it scares me."

"I also suggest that this letter be shared with the members of the Blue Ribbon Panel and that a meeting of the panel be called soon after they receive this correspondence."

Sherwood didn't hear anything from NCAA and he asked Petitioner what he should do? Petitioner recommended writing NCAA again so Sherwood did on February 25, 2000. He stated in part:

"In my e-mail of 07 February 2000, I informed you of my concern that the lack of a criterion for a minimum MOI (could also be referred to as a balance-point range) has left a hole in the NCAA bat certification protocol, which is being

exploited by some of the bat manufacturers to make bats that will outperform their wood counterparts in the field."

"In September 1999, I thought the NCAA had a reasonable bat rule and an acceptable backup clause should change be warranted. I think it is time to exercise the clause to change the protocol as of 01 August 2000. Furthermore, I think that it is unfair to let the bat companies operate under the impression that nothing is going to change in the protocol when conditions warrant that there should be a change in it for future seasons."

"The best thing the NCAA can do is to address the issue head-on and now. The bat companies claim that they need much more lead-time to design, test and make bats for the upcoming season than they were given for 2000. The final year-2000 protocol was not developed until the end of September 1999. We have data from the certification testing of the NCAA 2000-season bats to substantiate a change in protocol now."

"At least one company is making bats that have a balance point, which is markedly different from wood. The players are going to be able to swing these bats faster than bats in the past."

The NCAA never responded to either letter but instead initiated a field testing protocol to go pull bats from the colleges and test these bats to see if they passed the test. This makes no sense as the bats in the field are already compromised by the change in the testing protocol. This new testing of field bats will only prove that the compromised bats are still compromised. This is just another delay and smoke and mirrors test. The NCAA announced a three-year moratorium on changes in the Easton lawsuit settlement so they are between a rock and a hard place. (Exhibit 11-V) (Exhibit 11-N) (Exhibit 23-B)

In February 2000, Jim Sherwood posted his conclusions to studying the existing compromised protocol test and posted his conclusion on his web site:

## **CONCLUSIONS**

- -NCAA rule based on "safety"-not wood-like performance.
- -Present rule can be "circumvented".
- -Data is now in place to support a rule that follows the spirit of the bat regulation.
- -NCAA needs to take action and close the loop. (Exhibit 11-X)

On April 2, 2000, <u>FOX Sports</u>, "Goin Deep" program aired a report on this series of events. (Exhibit 27)

Sports Illustrated ran an article titled "Killer Bats" in its February issue that quoted Bill Thurston as saying:

"The injuries started popping up when the C405 aluminum alloy came out as the bat standard in 1996-brain damage, broken jaws, teeth knocked out," says Bill Thurston, rules editor of the NCAA baseball rules committee for the last 15 years. "We really became concerned that pitchers couldn't defend themselves against the rockets being hit off these bats." "Our original concern was to get the game back in balance and make the game safer for the pitcher," Thurston says. "With the change in protocol, neither goal has been accomplished."

Steve Baum of Baum Research was quoted as saying:

"The protocol was specifically altered to cover up the metal bats trampoline and center-of-gravity effects, because the 1999 metal bats would not have passed," says Baum, a maker of wood-composite bats who's suing the NCAA and three aluminum-bat makers. He cites 19 alterations, ranging from setting the benchmark exit speed at 97 mph to lowering the pitch and bat speeds enough to

dampen the trampoline effects. Baum insists that these changes were made so that Easton bats would pass muster." (Exhibit 11-X)

ESPN magazine wrote a related article and quoted Bill Thurston as saying:

"The testing protocol was changed to standards we meant to be illegal." The thing that is shocking to me is the NCAA took the Rules Committee completely out of it."

George Manning of Louisville Slugger was quoted as saying in this same article:

"We became aware of how they were going to test, and our goal was to satisfy what players wanted and still pass the test." (Exhibit 11-X)

On April 10, 2000 the NCAA published two articles in their News and Features Section. The first article entitled, "Baseball bat standards return to the examination table." This article has NCAA denying that the protocol was changed to accommodate the settlement of the Easton lawsuit and explanation of NCAA actions. NCAA Director Of Research, Todd A. Petr, is quoted as saying:

"The standard is and has always been wood," Petr said. "Any changes in the protocol were run past the scientists on the panel. If we felt a compromise wasn't appropriate, we didn't do it."

The whole purpose of all the testing was to get back to wood like performance. It simply has not been done. Anything higher performing than wood presents unreasonable danger to the consumer.

The second NCAA article of April 10, 2000, is titled: "NCAA Baseball Research Panel sought wood-like standard to start". NCAA Director of Research, Petr is again quoted as saying:

"Our goal here was to make an aluminum bat hit like a wood bat under the same conditions." (Exhibit 11-Z)

There is not question that all associations, bat manufacturers and scientist understood there is a safety issue involved with high performance aluminum bats. The manufacturers have been able to quiet the associations who make the rules because Little League, Dixie Youth Baseball, Pony League, Babe Ruth League, Colt League, American Softball Association and many others are paid royalties so the association name is put on the bat used in that particular league. This amounts to substantial sums of money the associations don't want to lose. The NCAA has 200 coaches being paid by the manufacturers and ABCA receives over \$100,000.00, annually for ABCA National Trophy, etc., and its association. Manufacturers sponsor clinics, trade shows, and many other activities, which the associations don't want to lose. The manufacturers get advertising and tremendous sales are generated from these endeavors so its very easy to see why associations have the off again-on again approach to regulations. CPSC is the only entity that is independent and can set the performance standards so they will be followed. Any performance over wood bats exposes the consumers to unnecessary risks of injury.

## **Description of Risk**

## Nature and Severity of the Risk of Injury

The game of baseball has been played professionally for over 125 years with wood bats. Only in the past 27 years have amateur players used nonwood bats in Little League, High School and College Competition. In 1974, the first year that aluminum bats were allowed in intercollegiate competition, the aluminum bat was a cost-effective alternative to wood bats. However, in the past 15 years, innovative design principles have fueled a performance race by bat manufacturers in an attempt to gain more and

more market share. In 1974, non-wood bats cost the consumer approximately \$40.00 each. The 2000 price for non-wood bats to the consumer is \$250.00 to \$300.00.

The aluminum bat manufacturers have developed close business relationships with the world's leading aluminum companies, which in turn have developed stronger, lighter, space-age alloys. With the advent of the C405 aluminum alloy that exploded onto the scene in 1995, safety and injury concerns came into focus and the frequency of injuries escalated. There are other new alloys that just came out in 1999.

As technological advancements in aluminum alloys have infiltrated amateur baseball fields, severe injuries to players have become more and more common. (Exhibit 1) The player most vulnerable to injury from a batted ball is the pitcher, who ends up approximately 52-53 feet from the bat-ball collision point after he follows through on his pitching delivery. Most experts agree that a pitcher needs .40 seconds to defend his position at that distance, which equates to a maximum batted-ball exit speed of 93-94 mph. (Exhibit 14) This is the high-end average speed at which a ball is hit off of a wood bat. Most experts also agree that a high-performance aluminum bat, which is used at the intercollegiate and interscholastic levels, will propel a ball at speeds of anywhere from 97-123 mph. (Exhibit 14)

The high-profile injuries to Arizona State pitcher Ryan Mills and Houston pitcher Danny Crawford, who were hit in the face by line drives off aluminum bats, revealed quite vividly how defenseless pitchers are if a line drive is hit up the middle, and were the centerpiece of broadcast reports by FOX Sports and ESPN looking into the issue of bat performance and safety. (Exhibit 27) Both news organizations expressed wonderment that meaningful bat performance standards had not been established by governing bodies, and that manufacturers had been given free reign to manufacture aluminum bats designed for the highest performance rather than wood-like performance and safety.

The fact that a baseball is hit harder, and hit harder more often with highperformance aluminum bats as opposed to wood bats, leaves defensive players, namely pitchers, in a compromising and dangerous position. In a study by Dr. Joseph J. "Trey" Crisco III, entitled "Baseball Bat Performance: A Batting Cage Study," he agrees that aluminum bats clearly out-perform wood bats. (Exhibit 20) The report, in which batted-ball exit velocities were recorded using 19 players of various skill level, stated that 50 percent of the wood bat hits exceeded 87 miles per hour while only 5 percent exceeded 97 miles per hour. Conversely, 50 percent of the hits from one of the aluminum bats tested exceeded 96 miles per hour and 5 percent were greater than 106 miles per hour.

As stated in Cedric Dempsey's August 28, 1998, memo to the NCAA membership:

"The average time to react to a ball hit from [a distance of 54 feet] is approximately 4 seconds. The ball-exit velocity that matches this reaction time is 93 miles per hour. Ball-exit velocities from aluminum bats currently in use in collegiate play have been measured from 103-113 miles per hour, translating to a reaction time of .357 to .315 seconds at a distance of 54 feet. Therefore, there is a window of time during which a collegiate baseball pitcher could be vulnerable to being struck by a batted ball." (Exhibit 14)

In the Rules Committee's memo to the NCAA membership on December 4, 1998, it stated:

"The Committee was unanimously convinced that bat performance was indeed a safety risk to pitchers and infielders, that there has indeed been a change in the way the college game of baseball is played, and that the available evidence was more than sufficient to justify a change in the rule as soon as practically possible. There is simply no question that aluminum bats substantially outperform traditional wood bats, that the risk of injury to pitchers and infielders is real, and that a performance limit on the aluminum bats was required to bring the game of baseball closer to its traditional form." (Exhibit 16)

In addition to the NCAA's Injury Surveillance System, the NCAA collected injury data in 1998 pertaining to pitchers being struck by a batted ball. Athletic trainers at all 273 Division I schools that sponsor baseball were contacted to help quantify the frequency of pitchers impacted by a batted ball. In his August 28, 1998, memo, Mr.

Dempsey discussed this data by saying that "the frequency of pitchers impacted with a batted ball is greater than might be expected from the ISS data." In fact, he stated that "[ilt was projected that approximately 375 incidents of pitchers impacted with a batted ball occurred this past season in Division I baseball games alone." (Exhibits 14 and 28) In addition, 11% of the injuries required a physician's medical attention. (41 pitchers)

In 1995, Bud Cosgrove, chair of the American Society for Testing and Materials (ASTM) Committee F-8 on Sports Equipment and Facilities, wrote a memorandum in which he stated he was "convinced that the 'reaction-time problem' associated with the current bat and ball standards development in softball has caught the attention of all of us. and it is clearly a safety issue we cannot ignore". (Exhibit 29)

In their effort to avoid the implementation of the NCAA's ruling, two major aluminum bat manufacturers agreed to indemnify NCAA member institutions as to the liability risk these schools faced regarding the high-performance aluminum bats used during the 1999 season. However, this attempt to appease the NCAA failed to address the safety and welfare of the student-athlete. In essence, these companies put a price on the health and safety of the athlete. There are presently two lawsuits against Louisville Slugger as a result of these indemnifications. (Exhibit 19A) (Exhibit 20A)

## Possible reasons for the existence of the risk of injury

One reason this unreasonable risk of injury has been allowed to continue is due to the continual effort on the part of the aluminum bat manufacturers to deceive the NCAA and NHSF, its member institutions, its coaches, and the public. The aluminum bat manufacturers have fraudulently represented to the public, and various rulemaking and governing bodies, that the aluminum bats they produce perform like wood bats (Exhibit 13). They purposely have withheld critical testing information regarding bat performance from the NCAA because they do not want to reveal the truth about the performance of aluminum bats. And, without basis, they have attempted to divert attention by blaming the liveliness of the baseball, the designated hitter, small strike zones and poor pitching.