

## **A History of Powerlifting in the United States: 50 Years after York**

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### **Preface**

This article began as a simple history of powerlifting for a coaching manual. It has since morphed into what you see before you. I would like to state right at the start that I am not a sport historian. I am simply a powerlifter with an interest in the people and events that have shaped this great sport. The true historians in our sport are people like Drs. Jan and Terry Todd, Mike Lambert, Dr. Ken Leistner, and the late Peary Rader. Powerlifting is a game of numbers and credit should also be given to noted statisticians of the sport like Michael Soong and the late Herb Glossbrenner. All of these people have lived the history of powerlifting and have done an excellent job remembering it and recording it. In my search for information relating to the formation and evolution of powerlifting, I was surprised to find no truly comprehensive history as exists for many other sports (perhaps one is out there and I have missed it) so I set out in an attempt to put the pieces together. I have tried to use many different sources and they range from the gold standard (peer-reviewed publications) to the questionable (websites and personal blogs). The vast majority of my sources can be accessed online by you the reader for free (all links work as of 9-4-2015 but I cannot guarantee all will be functional indefinitely) so I hope you will look further into the topics that interest you. Many important names are missing as my intention was to focus more on the events (though some important events are likely missing too). It is my hope that this article will motivate the truly qualified sport historians to fill the void and assemble a thorough history of powerlifting complete with names, dates, performances, photos, record lifts, events, and political wrangling – the whole story (warts and all). This article is meant to be more than just a couple of paragraphs summarizing (without references) the history of powerlifting via one or two main themes but less than a full-length book which is required for a truly comprehensive, in-depth account of the people and events that shaped a sport. I have tried very hard to be objective in my research and my writing. To the best of my knowledge, everything in this article is accurate and true but I admit there may be a few mistakes that were made despite my best intentions to report the history correctly and completely. I hope you enjoy this article which was written to commemorate the 50th anniversary of the first official senior national powerlifting championship held in York, Pennsylvania, USA, on September 4, 1965.

### **Introduction**

Powerlifting is defined as the squat, bench press, and deadlift. The sport of powerlifting, as it is known today, is relatively young compared to the other main barbell sport: Olympic weightlifting. Olympic weightlifting (or simply “weightlifting”) involves the so-called overhead lifts; today the snatch and clean-and-jerk are the two competition lifts. There was a third competition lift, the clean-and-press, but it was dropped in 1972 owing, in part, to the difficulty (and inconsistency) in judging it (1). Olympic weightlifting has been around, in one form or another, since the late 1800s and has the distinction of currently being a sport in the Olympic Games, a status it has held since 1896 (though a few of the Olympiads of the early 20<sup>th</sup> century did not have Olympic weightlifting) (2). Powerlifting evolved from what were collectively known as the “odd lifts.” The odd lifts consisted of several dozen different dumbbell and barbell

lifts with at least 42 different odd lifts being standardized and contested (3,4) and included, among other things, the precursors to today's squat, bench press, and deadlift. Many of the odd lifts presumably find their origin with the creation of the modern barbell in the late 1800s and early 1900s (5). The first odd lift contests/exhibitions began appearing in the 1940s as part of Olympic weightlifting and/or physique contests sanctioned by the Amateur Athletic Union (AAU) (6). It was not until the late 1950s and early 1960s that powerlifting came into its own as an organized sport separate from Olympic weightlifting and physique contests. Since then, the sport has grown considerably. However, powerlifting has had its share of growing pains related to drug use, supportive equipment, and rules of performance. These issues are largely responsible for the fracturing of the sport which has gone from one American federation (and one international federation) in the beginning to more than two dozen American federations and several international and pseudo-international federations today. The extent of fragmentation in powerlifting may be unique in the world of amateur sport (6). The year 2015 marks the 50th anniversary of the first official U.S. senior national powerlifting championship held in York, Pennsylvania. The purpose of this article is to look back on the important events that led to the birth of the sport as well as chronicle the evolution, growth, and challenges powerlifting has experienced in the last 50 years.

### **Powerlifting's Prehistory**

Performance records for the squat, floor press (predecessor to the bench press), and deadlift date back to at least the 1890s (7). Historically, the deadlift (or "dead weight lift" as it was sometimes called (7)) is probably the oldest of the three powerlifts owing to the rather straightforward nature of the lift and the fact that one only needs a barbell to perform it (i.e., no racks or other apparatus are needed). Man has probably been performing movements similar to today's barbell deadlift since antiquity either out of necessity or to showcase one's physical strength. Julius Cochard (France) is reported to have performed a deadlift with 661 pounds around 1895 (7). With regard to the development of the modern deadlift in the late 1800s, it is unclear if the lifter was required to stand completely upright with the barbell or merely had to lift it just high enough to clear the ground (7). By 1920, Hermann Goerner (Germany) pulled the deadlift record up to 793 pounds (7). In the early days of the squat (or the "deep knee bend" as it was known (8)), the lifter was often required (out of necessity) to stand the barbell up on its end and dip the body underneath it (unassisted) to set the bar on the upper back before beginning the actual squat movement. The barbell was then unloaded in the reverse manner. This style of squatting has come to be known as the Steinborn lift - named after German-born Henry "Milo" Steinborn who often performed the squat in this manner (7). In 1899, a German by the name of H. Sell was reported to have squatted 440 pounds for seven repetitions (7). In addition to the Steinborn technique, the barbell could also be placed on the back via other people lifting it and placing it or by the lifter cleaning the bar to chest, pressing it overhead, and lowering it onto the upper back; it is unknown if either of these techniques were widely practiced. The eventual development of squat stands/racks eliminated the need for the complicated and energy intensive nature of the aforementioned techniques. The bench press is the youngest of the powerlifts as the "bench" portion of the lift did not come into wide use until the mid-1900s. The bench press finds its origin in a lift called the "supine press" or the "floor press" due to the fact that the lift was initially performed lying down on the ground, facing up (i.e., supine). One of the earliest supine/floor pressers was the "Russian Lion," strongman/wrestler George Hackenschmidt (whose lasting legacy may be more tied to the eponymous "hack" squat) who was credited with a

361-pound effort in 1899 (7,9). Interestingly, there were a variety of techniques used with early floor pressing including a heaving motion combined with a thrusting of the hips (i.e., belly toss) as well as several different body orientations, some of which incorporated the sort of bridging often associated with wrestling (9). One source indicates lifters started using wooden boxes or benches to lay on in the mid-1930s and that the AAU standardized the lift (in a form today's lifters would recognize) in 1939 (9). Terry Todd reports that "It was actually not until during and after World War II that the lift [bench press] came well and truly into its own" (8).

The odd lifts consisted of many lifts (in addition to the three powerlifts) which collectively did not lend itself to standardization or time efficiency related to competitive barbell lifting. In the middle part of the 20<sup>th</sup> century, many of the so-called odd lifts faded from competitive lifting and what remained was streamlined and evolved into the earliest recognizable form of powerlifting, though the order in which the three lifts were performed was different from today (4). Many lifters today are surprised to learn that the barbell curl was a part of some of the earliest formal powerlifting contests and, in some cases, it took the place of the deadlift, particularly in the U.K. where the three lifts were called the "strength set" (4) or "power set" (7). In 1964 and 1966, the curl was officially dropped from competition in the U.S. (10) and U.K. (4), respectively, and the lifts that define powerlifting today became solidified as the bench press, squat, and deadlift (performed in that order) (10). The order that the lifts are performed today (squat, bench press, deadlift) was first standardized at the 1973 World Championship, the first year world championships were sanctioned by the newly formed International Powerlifting Federation (IPF) (4). An interesting paradox is the name given to this new barbell sport: "power"lifting. By the truest definition of power, the name powerlifting is a great misnomer as the power produced during these lifts pales in comparison to that of the Olympic lifts which are, by definition, very fast movements requiring great force development over short periods of time (power is defined as the rate of doing work). By comparison, the powerlifts are performed very slowly with much lower power production despite the greater loads lifted on average. In elite lifters, average peak power outputs (at maximal effort) during the clean-and-jerk and snatch are four to five times greater than during the squat and deadlift (11,12). The term "powerlifting" likely originated due to the fact that the word "power" was associated with strength in those days (10). While today's exercise and sport scientists make clear distinctions about the meaning of the term power (13), the name powerlifting stuck and the misleading name for this barbell sport is unlikely to change. The term "powerlifts" began replacing "odd lifts" around 1958-59 and the sport soon became known as "powerlifting" (10). National meets were planned for 1959 (using the continental & jerk, bench press, squat) and 1960 (using the bench press, deep knee bend, and deadlift) but both were cancelled due to a low number of entries (10). The sport would have to wait until 1964 for its first "unofficial" national championship.

### **Powerlifting is Born**

The United States and United Kingdom fostered the growth of powerlifting in the sport's infancy. By the 1960s, interest in Olympic weightlifting was waning and there was a growing enthusiasm for this new barbell sport called powerlifting. This interest was probably driven by several factors including: 1) the decline of the United States on the world Olympic weightlifting stage (the U.S. was dominant in the 1930s and 40s but their monopoly was broken up in the 1950s and 60s by emerging weightlifting powerhouses like the Soviet Union and Eastern Bloc nations) (14,10), 2) the relative ease and shorter time period required to learn how to perform the

powerlifts compared to the more technically difficult Olympic lifts (10,6), 3) the bodybuilding boom and an increased interest in building more muscular physiques (particularly the upper body) which seemed more attainable via the training/exercises required to be successful in powerlifting (6), 4) the popularity with lifting audiences who could more readily see and understand what was happening in the powerlifts compared to the faster and more complicated Olympic lifts (6), 5) the greater weights lifted compared to Olympic weightlifting which was likely appealing to lifters and spectators alike in addition to the fact that new records were regularly being set in this new sport (6), and 6) the perceived carryover to improved on-field performance in certain sports (e.g., football) that was thought to accompany these “strength” lifts as the first generation of strength coaches (15) began to formulate training programs for athletes who competed in sports other than the two barbell lifting sports.

Most iron game historians agree that the first true (though unofficial) national powerlifting championship in the U.S. was held in York, Pennsylvania on September 5, 1964; this meet was organized under the name “The Powerlifting Tournament of America” (3,4,6,14,16). The promoter of this national meet, Bob Hoffman, was not known for his interest in powerlifting (he was actually against it initially) (14, 10), but rather for his barbell and equipment company (York Barbell), his health/strength publications (*Muscular Development* and *Strength & Health*), his mail order company (which included Hi-Proteen [*sic*] protein powder and strength programs among other things), his promotion of functional isometrics, and the fact that he was the coach for the U.S. Olympic weightlifting team and had been since the 1930s (14). Hoffman will always hold a special place in the history of the iron game, but in the annals of powerlifting he will be most remembered as an unlikely yet significant promoter of the sport in its earliest days. While Hoffman was not a supporter of powerlifting initially, perhaps seeing a conflict with (or threat to) Olympic weightlifting, the consummate businessman in him probably saw the proverbial writing on the wall and decided to endorse this new and increasingly popular barbell sport called powerlifting, a sport that could provide a new source of revenue via the sale of barbells and equipment (4), among other things. Prior to the first “national” championship in 1964, organized powerlifting had already been occurring at the local/state/regional level for several years in the U.S. (with more activity in certain cities/regions of the country) though it may be impossible to pinpoint the first-ever powerlifting contest. These early powerlifting meets featured a variety of lifts (e.g., bench press, squat, deadlift, curl, Olympic press, upright row, etc.) and there was little consistency from one contest to the next (10). Powerlifting was also popular in prisons which served as another vehicle by which this fledging sport spread across the U.S. (10,17). Interestingly, there was another “national” powerlifting tournament (promoted by Bill Clark) held in Columbia, Missouri a month before (July 31 - August 2, 1964) Bob Hoffman’s meet in York (10) but, for one reason or another, the York event has always held the distinction of being the first “national” powerlifting championship. The words “national” and “championship” were specifically not used in either of the two aforementioned events so as not to infringe on the authority of the AAU (the body that governed powerlifting at the time via the AAU Weightlifting Committee) (10). Prior to the first [unofficial] national powerlifting meet in September, 1964, the U.S. national powerlifting records (in pounds) were: curl - 235 (Luther Rogers), bench press - 530 (Pat Casey), squat - 700 (Lee Phillips), deadlift - 700 (Wilbur Miller), and total - 1700 (Terry Todd). These records were published in the December, 1963 and April, 1964 issues of Peary Rader’s *Lifting News* (10). However, there were other performances prior to 1964 that eclipsed these records but were not recognized for a variety of reasons (e.g., the lift

was performed under unofficial conditions, the lift was done in an exhibition, or the lift was performed by a non-American lifter so it did not qualify as a U.S. national record). Some examples include a 763 squat by Paul Anderson (U.S.) in 1953, a 550 bench press by Doug Hepburn (Canada) in 1957, and a 752 deadlift by Benoit Coté (Canada) in 1961 (7). The early national and world championships were only open to men. The first official U.S. national women's championship and world women's championship were held in 1978 (74 women competed in Nashua, New Hampshire) (6) and 1980 (49 women competed in Lowell, Massachusetts) (6,18), respectively, despite the fact that women were competing in local meets at least as early as 1943 in Michigan (6) and 1955 at a contest held in Oakland, CA (10 women lifted in this meet) (10). John Askem directed the first official AAU sanctioned all-women powerlifting meet in 1975 in Glendale, CA where 8 women competed (19). Though the first official women's nationals occurred in 1978, it should be noted that there was an AAU sanctioned meet in 1977 (called the All-American Women's Open) (6) that was likely, for all intents and purposes, the first women's nationals. Jan Todd notes that there were all-women powerlifting contests (and women's records) prior to the first official women's national championship but that "the 'birth' of women's powerlifting is generally dated to the mid-1970s" (6). Early trailblazers of women's powerlifting include Bev Francis (Australia) and Jan Todd (U.S.) whose performances were awe-inspiring by the standards of any generation (20,21).

### **Emergence of Supportive Equipment**

Today's powerlifting landscape has changed quite a bit since the sport's birth. However, by most accounts, the lifts today are, for the most part, the same as they were back then. People will always debate how deep the squats were (or were not) in the "old days" compared to today or whether or not bench presses were paused and deadlifts locked out. Complaints of loose judging are not unique to the present day as John Fair notes that lax judging (particularly in squats) contributed to the 68 national records set at the 1970 National Championship (14). The issue of supportive gear then and now seems to be a never-ending argument which is sure to evoke an emotional response in many people. However, knee wraps, tight-fitting garments and even elbow wraps for the bench press were present in competition to varying degrees at least as early as 1968 (22) and 1970 (14). An excerpt from John Fair's book *Muscletown USA* reads: "Also disconcerting was excessive wrap use [at the 1970 nationals]. Since flexibility and free movement were not required to perform the squat, bench press, and deadlift, powerlifters had adopted extensive knee and elbow bandages, oversized belts, stiff work boots, and body wraps. Some lifters even used bedsheets for added tensile strength" (14). At the first world championship in 1971, a British lifter was reported to have worn knee wraps that were 18 feet long (which was allowed by British rules at the time) which upset the American lifters because their rules only allowed for 6-foot-long knee wraps (4). Interestingly, an inspection of several dozen photos taken at the first official senior national powerlifting championship in 1965 (published in the November 1965 edition of *Iron Man Lifting News*) reveals an almost complete absence of any supportive equipment with the exception of lifting belts and a handful of knee wraps which appeared to be on par with loose Ace bandages (23). The fact that equipment use was apparently extreme and widespread by 1970 indicates the quickness with which supportive gear took hold in organized powerlifting. Lifters today may be surprised to learn that elbow wraps were allowed for a period of time (late 1960s-early 1970s) in the early days of powerlifting (7). The biggest bench presser of the day was Jim Williams who benched 675 pounds in 1972 using elbow wraps (7). This mark would not be exceeded until the advent of the bench shirt

when Ted Arcidi broke the 700-lb barrier with a 705-lb lift wearing a loose bench shirt at the 1985 Budweiser World Record Breaker meet in Honolulu, Hawaii (24). The first use of tight elastic shirts for the bench press is dated to the late 1960s but it was not until about 1978 (per Ernie Frantz as cited by Dale Harder) that true supportive bench shirts (progenitor of today's bench shirts) started appearing (7). Ernie Frantz and Mike MacDonald (and likely others) sold bench shirts in the late 1970s and 1980s but the bench shirt did not really catch on until John Inzer released his version in 1983 (25,26,27). The key to Inzer's shirt (which differentiated it from its predecessors) was the sleeves which were tilted forward (26). This was similar to a patented space suit which John Inzer came across; he subsequently leased this patent and was able to have the monopoly on bench shirts for many years (26). Boris Sheiko (noted Russian powerlifting coach) describes the first appearance of the Inzer bench shirt at the 1983 World Championship which was followed with an almost immediate IPF ban on such equipment the following year with an ultimate lifting of the ban by the IPF in 1992 (27). The Marathon Supersuit was the first commercially available squat/deadlift suit and it first appeared in 1975 (7,26). Rickey Dale Crain described the first suits as wrestling singlets made from very tight material (26). Dr. Ken Leistner does a good job summarizing the earliest attempts (as early as 1966) at enhancing powerlifting performances through special equipment/apparel (28). Today's bench shirts and squat/deadlifts have evolved significantly from the original designs.

### **Anabolic Steroids**

The class of potent performance-enhancing drugs (PEDs) known as anabolic steroids has been in sport since at least the 1950s. Some accounts indicate that "various forms of testosterone were being used by a few bodybuilders in the United States in the late 1940s and early 1950s (29). By most historical accounts, the Pandora's box of PEDs was opened at the 1954 World Weightlifting Championship in Vienna when the team physician for the U.S. weightlifting team (Dr. John Ziegler) discovered that members of the Soviet weightlifting team were using testosterone (14,29,30). The admission was supposedly made by the one of the Soviet coaches after a few drinks (14,30). Following that revelation, anabolic steroids quickly spread to the U.S. and, via Dr. Ziegler's collaboration with CIBA Pharmaceuticals (a company he worked for part-time doing chemistry research), the first widely available anabolic steroid was developed and released in 1958; it was given the name Dianabol (methandrostenolone) (29). The pharmaceutical company was primarily interested in a drug that could treat burn victims and strengthen bones but Ziegler had other ideas (31). Dr. Ziegler had actually been researching similar topics prior to 1954 with much of his information coming from the results of research conducted in Nazi Germany (14,30,31). The hormone testosterone was first isolated and chemically synthesized (from cholesterol) in the laboratory in 1935 (32,33) with significant contributions coming from three large European pharmaceutical companies: Schering (Berlin, Germany), Organon (Oss, Netherlands) and Ciba (Basel, Switzerland) (34). The 1939 Nobel Prize in Chemistry was awarded to Adolf Butenandt (Germany) and Leopold Ruzicka (Austria-Hungary) for their work with sex hormones (33,35) (including the synthesis of testosterone). As has often been the case throughout the history of medical research, initially well-intentioned motives led to discoveries that were exploited for non-medical use. The originally intended use of anabolic androgenic steroids (AAS) as a medical therapy was to treat "hypogonadal dysfunction and commencement of delayed puberty in men and for growth promotion" (33) but "By the 1930s, Nazi doctors had created anabolic steroids – testosterone that could be administered through a syringe – developed with the goal of increasing aggression in their

troops” (36). Yesalis et al. (29) note that the claims involving German soldiers’ use of “some type of androgen to increase aggressiveness in combat” is based on rumors and has not been officially documented. Anabolic steroids like Dianabol, Anavar, Deca-Durabolin, and Winstrol (31) were most likely part of powerlifting since its earliest days and remain a significant presence in the sport today. A young aspiring athlete training at York Barbell (one of Ziegler’s main “laboratories”) in the early 1960s remarked (in a 2006 interview) that “We didn’t think it [steroid usage] was any woo-hoo-hoo. You’re in sports, you use substances of one kind or another. There was none of this Puritanism, bad-bad, shushing going on. This was another thing you used, like a belt” (31). It is worth noting that the effectiveness of the first anabolic steroids (known as the “little pink pills”) was questioned by many, probably owing to the small doses (compared to the standards of today’s worst abusers) given to the first “guinea pigs” that produced variable and inconsistent results (30). Typical dosages were between 5-15 milligrams per day (31) (the average adult man produces 6-7 milligrams of testosterone per day (37)). Interestingly, Bob Hoffman unveiled his system of functional isometrics in 1961 (14,30) which he touted as “the greatest system of strength and muscle building the world has ever seen” (30) (though he was not the originator of this concept (14)). The problem was that many of the early adopters of isometric training at York were also using steroids so it made it difficult to determine the effectiveness of isometric training independent of the steroids (14,30). In powerlifting, rules banning steroid use (and testing to identify users) were not introduced until the late 1970s and early 1980s (6) so it seems logical to assume that steroid use was not uncommon in the 1960s and 1970s. The degree to which steroids have penetrated sport is illustrated by the revelations that entire national governments have conducted extensive long-term secret drug programs in the interest of athletic success (38). The allure of athletic success can be a powerful stimulus not just to nations but to individuals as illustrated by the research involving the so-called “Goldman dilemma” which “presents a [hypothetical] Faustian bargain to athletes, asking if they would trade longevity for Olympic success by taking a drug that not only guaranteed a Gold Medal but also their death in 5 years’ time” (39).

### **Powerlifting on the International Stage**

One of the biggest distinctions between powerlifting today compared to the early days is the number of powerlifting organizations, particularly in the U.S. Today, there are literally dozens of powerlifting organizations in the United States alone (40) - this was not always the case. In the beginning, there was only one sanctioning body for powerlifting and that was the AAU. The AAU (founded in 1888) was not specifically a powerlifting organization, but rather an organization that oversaw dozens of amateur sports. Though the term “world championship” has a range of meanings in powerlifting today, arguably the first world powerlifting championship was held in York, PA on November 6, 1971 under the auspices of the AAU (with significant support from Bob Hoffman) (6,14). This contest was run in conjunction with the Mr. World bodybuilding contest (6,14). The specific date was selected in order to coincide with “Bob Hoffman’s Birthday Party,” an annual strength extravaganza held in York (4,14). This first world championship was made up mostly of American lifters with four British competitors, one from the West Indies, and an all-American officiating staff (4); the lifters included such legendary names as Williams, Pacifico, Kuc, Anello, and Cassidy (4,41). It should be noted that there were several international “friendly” contests (or “friendlies”) prior to the 1971 world championship, the first of which may have been a contest in Bristol, England between the U.K. and France in 1968 (42). Additionally, an unofficial world championship was held in 1970 in York, PA and

included only British and American lifters (42). The second world championship was again sanctioned by the AAU and held November 10-11, 1972 in Harrisburg, PA and saw a small increase in international participation compared to the inaugural event a year earlier (4). Out of the 67 lifters, 47 were American and the remaining 20 international lifters were from Great Britain (8), Canada (6), Zambia (3), Puerto Rico (2), and the West Indies (1) (4). The AAU was actually involved with powerlifting long before these first two world championships. The AAU first started to get involved with powerlifting in the early to mid-1950s via the AAU's National Weightlifting Committee; it began recognizing odd lift records in 1958 and started sanctioning U.S. national championships in 1965 with the first official senior national powerlifting championship on September 4 in York, PA, thus taking control of the sport and becoming the sole recognized powerlifting organization, at least in the U.S (43). For the purpose of historical accuracy, the first official national powerlifting championship was actually the 1965 AAU Junior National Championship held on August 21 in West Paterson, New Jersey; this event preceded the senior national event by two weeks (23). It should be noted that, as early as 1948, there were efforts on the part of Peary Rader (iron game icon and longtime publisher of *Iron Man* and *Lifting News*) and others to establish a professional association (called the Professional/International Strongman Association) that catered to those interested in physique/bodybuilding contests and other iron game pursuits (including powerlifting's progenitor) (10). The organization eventually folded; one of its founders (Peary Rader) reflected on the situation in a 1983 article: "The motivation we had was very high, however, we failed to take into consideration that we were dealing with human beings and when money is involved and prestige, as it is in professional athletics, it is next to impossible, no matter what branch of athletics it is, to maintain a very effective organization" (10). This sentiment seemed to forebode the organizational wrangling and division that ravaged the sport beginning in the 1980s and continues to the present day.

A significant event happened immediately following the 1972 Worlds as a result of a collective international feeling that a worldwide powerlifting organization was needed to oversee and grow this relatively young new sport. There was perhaps also an international sentiment that powerlifting up until that point was overwhelmingly "American" and there needed to be greater international representation and participation (44). The IPF was founded by seven people on November 11, 1972 (in the Zembo Mosque in Harrisburg, Pennsylvania) and American Bob Crist was elected the first president (the six others became the first five vice-presidents and the first secretary general) (44). Prior to being the inaugural president of the IPF, Crist was the AAU weightlifting official who was put in charge of powerlifting (6) so his election to the IPF presidency was logical. Not only did York Barbell's Bob Hoffman play a prominent role in the development of powerlifting in the U.S., but, according to Crist, Hoffman "bankrolled the IPF and really got powerlifting moving" in the 1970s (14). From 1973 on, the IPF sanctioned annual world championships, the majority of which have been hosted outside of the United States (45). At the first IPF Worlds in 1973, 9 weight classes were used (123, 132, 148, 165, 181, 198, 220, 242, 242+) and there were 48 lifters from 7 countries (32 were American) (46). One of the important achievements of the IPF during its formative years was the development of a technical rulebook (first published in 1975) that sought to define and standardize the rules and the training of qualified referees so as to provide objective assessment and rule enforcement in order to create consistency and a fair and level playing field. A historical footnote that is rarely mentioned involves another international governing body that technically was the first to control

international powerlifting: the International Weightlifting Federation (IWF). At the Mexico City Olympics in 1968, the IWF voted to take control of powerlifting; these efforts were primarily led by the General Secretary of the IWF (Oscar State of Britain) (47). One year later at the World Weightlifting Championship in Lima, Peru, the IWF congress voted to remove powerlifting (undoing what it did one year prior), an action that likely occurred because the General Secretary was unable to attend due to illness (47). Once again, powerlifting was without an international governing body but it was short-lived as the IPF formed just three years later. Many believe that throughout its history, the IPF has been, and continues to be, the most legitimate and recognized international powerlifting organization as evidenced by its 100+ member nations on six continents (with 102 member nations as of August 24, 2015 with 2-3 more expected by the end of the year (48)). In the 1970s, powerlifting grew from what began as largely an American sport to one with a true international identity highlighted by the involvement of numerous countries in Europe, Asia, and Oceania (44). On May 14, 1977, a meeting was held (in Turku, Finland) between several European countries (with delegates from Great Britain, Sweden, Finland, and Norway) and the result was the founding of the European Powerlifting Federation (EPF) (49). Today, the IPF annually holds the following world powerlifting championships for men and women: open, junior and sub-junior (14-23 years old), masters (40 years old and older), and raw/classic (50). The IPF also holds annual men's and women's world bench press championships for the open, junior and sub-junior, and masters divisions (50). While powerlifting has not yet achieved the goal of being included in the Olympic Games, the IPF does participate in the quadrennial World Games (held the year following the Summer Olympics) (51). The International World Games Association (IWGA) is made up of over three dozen different international sporting organizations (52) and "aspires to equal and exceed the importance of world championships organized by each federation individually" (53). The IPF was a founding member of the IWGA and powerlifting was contested at the first World Games in 1981 in Santa Clara, California (44). Though not overseen by the IPF or any other traditional powerlifting "organization," powerlifting has been a sport in the Paralympics (only the bench press is contested) since 1984 (54), the Special Olympics (various combinations of the three powerlifts are used) since 1983 (55), and has been a part of the International Blind Sports Association (IBSA) since the early 1980s (56). Many powerlifting organizations today are open to amputees, paraplegic athletes, Special Olympians, and blind and visually impaired athletes.

### **Powerlifting Delivered to the Masses**

On the media/publicity side, 1977 was a year of important firsts. Mike Lambert started *PowerliftingUSA* in June 1977 as a Xeroxed newsletter (6); this magazine was devoted exclusively to the coverage and promotion of powerlifting both nationally and internationally. Prior to *Powerlifting USA*, the sport was covered in print to varying degrees by the bodybuilding/weightlifting/health/fitness centered publications of Bob Hoffman (*Muscular Development* and *Strength and Health*), Joe Weider (*Your Physique/Muscle Builder/Muscle & Fitness*), and Peary Rader (*Iron Man* and *Iron Man Lifting News*). It can be argued that no single print media source has been more influential to the sport of powerlifting than *Powerlifting USA*. However, the internet era has managed to make many print publications obsolete and financially unsustainable. Unfortunately, *Powerlifting USA* was not immune to the effects of the information age and published its final issue in May, 2012 after 35 years of being the go-to source for news and information about powerlifting (Mike Lambert ran the magazine all 35 years) (57). It is also noteworthy to mention that the golden age of televised powerlifting probably started in 1977 in

Perth, Australia, when NBC covered the Men's World Championship (6,58). While it is a goal of many within the sport to achieve greater mainstream television exposure, it has not come to fruition as yet and coverage by major networks like CBS and NBC declined in the 1980s. However, the internet has played a valuable role in recent years by bringing many powerlifting events to anyone with an internet connection via live streaming. Internet forums allow for an almost immediate dissemination of meet results as well as afford the opportunity for discussion to anyone who wants to participate while video download sites (e.g., YouTube, Facebook, Instagram) let anyone with a digital camera make meet/training videos available to the world.

### **The Great Schism**

The AAU remained the IPF affiliate organization in the U.S. by default throughout the 1970s. Of note in this time period was the AAU's development of lifter classifications (perhaps the first ever) in 1973 (59). Two factors led to the initial creation of the first few national powerlifting federations in the U.S. in the early 1980s. The first was the U.S Amateur Sports Act of 1978 which required every Olympic sport (or potential Olympic sport) to have its own national governing body by November, 1980 (4,6). From this arose the first true American powerlifting organization with the founding of the United States Powerlifting Federation (USPF) in 1978 (3,60), though it is unclear when the USPF gained complete independence from the AAU (60). Joe Zarella was the first president of the USPF (60). The USPF became the American IPF affiliate and enjoyed that status until 1997 (61). The second factor was related to the use of anabolic steroids in powerlifting or, more specifically, the issue of testing for anabolic steroids in powerlifting (62). Up until 1981, the IPF had no drug testing procedures in place and therefore did not test for drugs prior to 1981 (6). The first drug testing within the IPF was instituted in 1981, though it only included amphetamines and the testing/procedures/results were so controversial that the 16 positive results (i.e., failures) at the 1981 Men's Worlds in Calcutta, India were thrown out (6). The 1982 Men's Worlds in Munich, Germany represent the first time that anabolic steroids were tested for in powerlifting (6). Interestingly, the IPF first called for drug testing as early as 1979 (6,62) but was still behind the International Olympic Committee (IOC) which began its anti-doping efforts (including steroid testing) at the 1976 Montreal Games (62). The newly formed USPF went back and forth on the drug testing issue and struggled with the mandates from the IPF to institute drug testing at national meets due to a membership (and leadership) that ran the spectrum from anti-drugs to pro-testing to anti-testing to pro-drugs (6,62). A group of USPF members took a strong anti-drug approach, supported strict testing policies, and broke away from the USPF and formed the American Drug Free Powerlifting Association (ADFPA) in Arlington, VA in November, 1981 (6,62). This group was led by Brother Bennett (Edmund Martin Bishop), a USPF official from Mississippi and lay brother in the Catholic Order of the Sacred Heart, who was elected the first ADFPA president and remained at the helm of the organization until 1991 (6). In 1997, the ADFPA changed its name to USA Powerlifting (USAPL) and, in November of that same year, it displaced the USPF as the U.S. affiliate for the IPF (61), a status it retains to the present day (63). There was another group of lifters within the USPF whose views ran counter to that of Brother Bennett and the newly formed ADFPA, namely that drug testing should not be instituted which sent the strong message that they supported drug use in powerlifting or, at the very least, that they did not object to drug use (6,62). This group also broke away from the USPF and, in 1983, the American Powerlifting Federation (APF) was founded (the first organizational meeting was held on January 28, 1983) by notable powerlifters Ernie Frantz and Larry Pacifico (6). This group was very clear in its

message as highlighted by the full page ad run in the January 1983 issue of *Powerlifting USA* which served to announce the formation of the APF to the powerlifting world; a portion of the ad read: “Don’t want testing? We won’t have any” (6). In promotional materials meant to generate interest in the January, 1983 meeting, Frantz said: “I don’t believe in any testing whatsoever at any time” (6). By 1983 (less than 5 years after the AAU was forced to give up its control of powerlifting), there were three American powerlifting organizations that were primarily distinguished by their stance on drug use and drug testing. The ADFPA was anti-drug and pro-testing, the APF was anti-testing, and the USPF was somewhere in-between. As a side note, an organization called the National Powerlifting Federation (NPF) was created in 1980 by Larry Pacifico (in response to his not getting chosen to attend worlds to attempt a 10<sup>th</sup> straight world title) and was briefly accepted as an IPF provisional member due to an oversight on the part of an international official (6). Pacifico and his team were allowed to lift as guest lifters (but not able to contend for medals) at the 1980 World Championship and the NPF folded shortly thereafter (6) making it perhaps the shortest lived powerlifting federation in history.

The 1980s was a tumultuous time in powerlifting; the origin of the fracturing that defines the sport today can be traced to events that occurred in the 1980s. The issue of drug use and drug testing may have been behind the initial fragmentation of powerlifting but it was not to be the last contentious issue to divide the sport and result in the creation of even more powerlifting federations. Though a detailed account is beyond the scope of this discussion, it is worth noting that a lawsuit was filed by Ernie Frantz against the USPF and IPF in 1985 in an attempt to break up what he and others perceived as monopolistic practices on the part of IPF (62). This legal course of action was set in motion by suspensions/sanctions that were imposed/threatened by the IPF in an attempt to restrict its members from competing in other organizations (i.e., the APF). The issue of television broadcasting rights was also part of the complaint. Frantz and others accused the IPF of being dictatorial and argued its practices were illegal in the U.S. based on anti-trust laws. The IPF did not recognize the jurisdiction of the U.S. judicial system in these matters and therefore chose not to appear in court. As a result, the court issued a default judgment in favor of the plaintiffs. This legal victory served to invigorate the multiple/parallel federation movement and effectively banned the IPF from holding contests in the U.S. (62). A deal was eventually made in 2001 involving Ernie Frantz, John Inzer (founder of the powerlifting gear company bearing his name), and the president of the IPF (Norbert Wallauch) that resulted in the dropping of the lawsuit (48). The IPF returned to the U.S. in April, 2002 with the World Masters Bench Press Championship in Killeen, Texas (64) and has held numerous championships in the U.S. since then. Though the events of 1980s set the stage for some of the issues that continue to plague the sport, one change occurred that most powerlifters today would probably agree was a good move. The IPF introduced the “round” system in 1985 for its world and European championships (65) and this system (i.e., all lifters in a group/flight do their first attempt, followed by everyone doing their second attempt, followed by everyone doing their third attempt of a particular lift) was eventually universally implemented across the sport. Only today’s powerlifting veterans remember the days of the so-called “rising bar” system. The rising bar idea came from Olympic weightlifting and sounds nice and simple until one considers that lifters often had to follow themselves which resulted in short rest periods (often only three minutes between attempts), difficulty in properly timing warmups, and very long contests with a lot of down time making it difficult for lifters and spectators alike. As an example, the first senior national championship in 1965 had 47 lifters from 17 states (competing in seven pound-

based weight classes: 123, 132, 148, 165, 181, 198, 198+), started at a little after 11 a.m., and did not get finished until 2:30 a.m. the next morning (23). However, it should be noted that the Mr. United States physique contest was held in conjunction with the powerlifting event and extended the overall time by about an hour-and-a-half. Also, another mainstay of powerlifting contests in that era was the actual weighing of the barbell and plates after records were set (hence the scale in the background in many photos of early contests) which certainly added time to the overall program. Iron game veteran David Shaw has a different perspective on the adoption of the round system and laments that an element of fitness was lost with the elimination of the rising bar system and that “When the Round System was incorporated into powerlifting competition, I thought that it took something away from the athletic aspect of powerlifting competition” (66). He went on to say “Seeing if competitors were in shape enough to follow themselves with minimal rest brought drama and excitement to many meets that I was in, and attended as a spectator” (66).

### **Fracturing and Division Continue**

In addition to drugs, supportive equipment is another major issue that has divided the sport. While supportive equipment/gear has been a part of powerlifting since the mid- to late-1960s (28), it likely was not as controversial an issue in the early days as the equipment did not provide nearly the same advantage as it does today. While lifters were taking advantage of tight-fitting suits, shirts, wraps, and even tennis balls in the 1960s and 1970s (14,22,28), it was not until the late 1970s and 1980s that commercially available manufactured suits and shirts first became widely available to the powerlifting masses via companies like Titan Support Systems, Inzer Advance Designs, and Crain’s Muscle World. The first generation supportive equipment did allow lifters to move more weight, especially in the squat and bench press, but the carryover paled in comparison to what supportive equipment adds today. The early bench press shirts may have only added a paltry 10 pounds to what a person could lift (maybe enough to make up for what was lost going from a gym touch-and-go bench press to a paused lift in competition) (67) whereas there are several lifters today who can bench press over 1000 pounds in a bench shirt but cannot lift 700 pounds in a T-shirt. The same can be said about squat suits and knee wraps, though there are other variables involved including the depth to which lifters are required to squat and the use of monolifts which do not require the lifter to “walk” the weight out. The combination of loose lifting standards/rules, ever-evolving supportive gear, specialty equipment (e.g., monolifts, deadlift bars, etc.), and performance enhancing drugs has led to 1000-plus pound deadlifts, 1100-plus pound bench presses and 1200-plus pound squats. The 3000-pound total, once considered unreachable, was eclipsed by Donnie Thompson in 2011 via a 1265 squat, 950 bench press, and 785 deadlift at a bodyweight of 384 pounds (68). Nearly 48 years after the first-ever official U.S. senior national powerlifting championship (where the heaviest total was a national record breaking 1890 achieved by 335-pound Terry Todd), Dave Hoff totaled 3005 pounds at a bodyweight of 271 pounds at a meet held, ironically, in York, Pennsylvania (68). At the time of this writing, Hoff’s 3005-pound mark (performed on August 17, 2013) ranks as the highest all-time powerlifting total ever achieved (the meet was sanctioned by the International Powerlifting Association [IPA] which is not to be confused with the International Powerlifting Federation [IPF]) (68). Interestingly, the trajectory of deadlift performances and records has not mirrored that of the other two lifts which highlights the relatively small carryover that deadlift suits provide. The fact that several top lifters are now benching more than they deadlift shows how much bench shirts add compared to deadlift suits.

### **Powerlifting in the New Millennium**

The rapid evolution of supportive equipment in the first decade of the new millennium has caused some to call for limits and others to reject all forms of supportive equipment. For example, the IPF limits the equipment it allows by mandating that only certain materials (i.e., polyester) and designs are used and that all equipment is only one layer thick (i.e., single-ply) (69). Conversely, some powerlifting federations have few, if any, restrictions on equipment/gear and essentially allow its unlimited use (70). As a result of the steep increases in performance afforded by the new generation “super” gear, the end of the first decade of the 21<sup>st</sup> century saw a paradigm shift by a segment of the powerlifting community that involved a move away from supportive equipment entirely. Powerlifting organizations began offering “raw” or “unequipped” divisions and started to maintain records that were set without the use of any supportive equipment like squat/deadlift suits, bench shirts, and knee wraps. Perhaps the most revealing evidence of the international popularity of raw lifting can be seen in the sanctioning of international raw championships by the IPF beginning in 2012 (the IPF refers to this style of lifting as “classic”) (45). In the U.S., numerous powerlifting organizations started sanctioning raw meets (or meets with a raw division) beginning around 2007-2008. There was never a rule against raw lifting, and some lifters have always chosen to lift this way, but, without a recognized division, most lifters were at an extreme disadvantage having to compete against people using supportive gear. As might be expected, there was (and continues to be) a highly emotional debate surrounding the issue of supportive equipment. Some question whether or not the advances in equipment will ever stop (or if they should stop) while others quarrel over what is truly raw and what is not. For example, some believe using a belt is not raw because most lifters can squat and deadlift more with a belt than without while others debate whether knee wraps should be considered raw or equipped. One thing that cannot be argued is the popularity of raw lifting in the year 2015. The phenomenon that is CrossFit has likely played a role in the dramatic number of raw powerlifters (and the total number of people active in the sport). However, it is difficult to tell to what degree the increase in raw lifting can be attributed to CrossFit and how much can be accounted for by changes in attitude or philosophy on the part of non-CrossFit powerlifters. Equally difficult to determine is whether or not the current raw movement will last or if the proverbial pendulum will eventually swing back in the opposite direction. Interestingly, some have anecdotally reported that certain knee sleeves today add more than a negligible amount to squats and that “non-supportive” singlets are beginning to take on characteristics of the early supersuits (that were nothing more than wrestling singlets made from tight/thick material) so perhaps the cycle is already beginning anew. Supportive equipment has been a part of powerlifting since the early days of the sport and it is likely to remain a part of the sport. There are precedents in other sports that allow for significantly different variations to exist under the single umbrella of a given sport so it seems that equipped and raw lifting may be able to coexist within the larger sport that is powerlifting.

### **Current State of Powerlifting**

After 50 or so years of existence as an established and recognized sport, powerlifting is arguably as popular as ever if the barometer is absolute number of participants. However, sheer numbers do not necessarily mean the sport is healthy and without problems. The USPF, APF, and ADFPA-USAPL are all still around and the AAU still sanctions powerlifting events. However, these organizations have now been joined by dozens of others in the U.S. which has led to confusion, a lack of rule standardization and enforcement, and a laughable number of so-called

national and world champions and record-holders. Add to that the number of divisions available in various organizations (e.g., raw, classic raw, single-ply, multi-ply, drug tested, nontested, etc.) and it is difficult to determine who truly is the best or how one lifter's performance compares to the larger powerlifting population or how lifters of different eras stack up against one another. There are exceptions to this; for example, few would argue about Ed Coan being one of the best powerlifters ever or Mike MacDonald's bench pressing prowess or Paul Anderson being far ahead of his time in terms of all-around strength (regardless of whether or not he actually squatted 1200 pounds raw back in the 1950s). However, such universal agreement on the truly elite of the sport (past and present) is hard to come by. Disagreement about supportive equipment, rules of performance (or enforcement of rules), and drug use are a part of powerlifting today; the fact that widespread agreement on any or all of these issues is unlikely essentially guarantees that numerous organizations will continue to exist. It seems that powerlifting has joined the ranks of religion and politics as subjects "not to be discussed at the dinner table." The goals of Olympic recognition, monetary awards (i.e., professional sport status), and television coverage continue to be sought after by segments of the powerlifting community with variable degrees of progress in those directions. The IPF continues to seek IOC recognition but has yet to break into the ranks of other IOC recognized sports (71). And even if IOC recognition is achieved, that is only the first step of the two-step process to become a sport "in the Olympics" (72). This first step is important, however, because it opens up opportunities for government funding and positions a sport for possible future inclusion in the Olympic program. The World Powerlifting Organization (WPO) was formed in the early 2000s by Kieran Kidder in an attempt to professionalize the sport (i.e., provide monetary awards for competitors) but the organization folded after a few years; today, monetary awards are available at some events, but the sport is far from "professional" as it would be virtually impossible for any athlete to make a living exclusively from powerlifting. Television coverage has been achieved by some, but it is largely regional cable channels that do not have national exposure; most would consider a 60-second story on the local evening news to be a success. The problems and obstacles in the sport of powerlifting do not have simple solutions. Perhaps if powerlifting was a professional sport (i.e., significant monetary compensation for competitors) or a sport in the Olympics or had wide media exposure, there might be more motivation and incentive for the sport to unite under one banner (or two or three at most). However, unification seems unlikely in the near future so it is difficult to predict which direction the sport will go, organizationally speaking, over the next several decades. However, the development and display of physical strength has been a hallmark of humanity from the very beginning so it is likely that there will always be a demand for a competitive barbell sport like powerlifting.

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