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On Brass and Snow: An Athlete's History of the Sport of Biathlon

Brad William Ravenelle
Bates College, bravenel@bates.edu

On Brass and Snow: An Athlete's History of the Sport of Biathlon

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Brad Ravenelle

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Introduction

Part 1: Introduction

In 2011, a few hundred elite athletes, along with their coaches, support staff, sponsors, media, and thousands of fans descended on a small town in northern Maine, situated nearly on the border between the United States and Canada. Over four days of racing, they competed against one another on the ski trails and on the shooting range, and against the bitterly cold temperatures that are commonplace in that part of Maine during the winter. That small town was Fort Kent, Maine, and the event was a IBU biathlon World Cup.

From the summer of 2016 through the spring of 2017, I lived, trained, and raced on the very same trails and facility that only 6 years prior had played host to the best biathletes the world had to offer as a member of the Outdoor Sport Institute post-graduate racing team. While not a biathlete myself (I was a part of the cross-country team), all of those I lived and trained with on a daily basis were biathletes and so I became exposed to many of the intricacies of the sport. While I learned a great deal about the technical side of the modern sport, I had only a rudimentary understanding of where the sport came from and how it got to the point it did; therefore, when it came time to select a thesis topic, it seemed a natural fit between a subject with significant historical capital and my own personal interests.

In this thesis, I will argue that the sport of biathlon (particularly in the United States) has undergone what I refer to as a Post-Historical transition, moving from all but complete dependence on military patronage to a point at which the sport has almost fully separated itself from those roots. To do so, I observe changes at both the structural and perceptual levels. Structural transitions include those of management, governance, and competition design and typically are influenced by outside forces including technology, politics, economics, and culture.

Perceptual transitions involve how the athletes themselves view their place in the historical timeline and how they identify themselves. Crucially, perceptual transitions rely on a postmodernist understanding of the production of history, as it requires those actively involved in the sport to create a history rooted in their own understandings of the past and their place rather than an Olympian master narrative of that history. It is important to remember that I as the author can only write with the intention to understand these voices as best I can, not posit certainty in my interpretations, as is the case with any source. As these are living sources of perception and memory, it is even more important to be careful not to make assumptions that would harm, damage, or demean those who were willing to share a piece of themselves with me in the creation of this project; I do my best here to explain and interpret in good faith and without malice, but simply to try to understand these perceptions that I have been granted access to help to shape the development of biathlon along its continuum.

Part 2: Post-Historicism: A Review and Adaptation

One term I will employ with frequency in this paper is "Post-History," which I use in reference particularly to the nature of biathlon at a given point along its timeline. Essentially, Post-Historical biathlon is post-military biathlon; it is the point at which biathlon could continue to exist relatively unscathed if the institution of the national military were to vanish, completely and in an instant. Obviously, this is theoretical as the idea of the national military appears in no way close to complete and utter collapse, but it does demonstrate the historical motion of the sport and its repercussions. A Post-Historical context is created in two spaces: structurally (in the design and execution of the institution) and in individual perceptions of those involved and how they place themselves within the institution's present and past. This is of particular importance in understanding how a postmodernist conception of history has allowed for non-

academic individuals to create histories of their own, which in turn allow us to understand the greater development of biathlon as it applies to military athletics. This theory is based on the concept of Post-Historicism created by Francis Fukuyama so I provide a brief description of its origins below, but I utilize the term primarily for a different purpose and in a different context, using it as a framework rather than an exact model.

The theory of Post-Historicism was first raised by political scientist Francis Fukuyama in his book *The End of History and the Last Man*, published in 1992. Like postmodernists, Fukuyama is convinced that the past was experienced in the context of dramatic ideological confrontations in a way that the present is not; Fukuyama however believed the contest to have been "won," while traditional postmodernists believed that the contest had always been a matter of optics rather than practicalities.[1] He supported these claims by arguing that by the end of the twentieth century the liberal democratic system of social and political governance remained unchallenged by any other alternative world order. The inflection points of this conquest by liberal democracy were in 1945 and 1989, the defeat of Nazism by the Allies and the fall of the Soviet Union and with it, Communism.[2] This does not mean that Fukuyama makes the argument that all things are right in the world, or that the boons of liberal democracy have been recognized universally; what it means, is that political fascism or communism do not add up to an alternative world order that could supplant liberalism and democracy in providing a superior society. According to Fukuyama, humanity has ceased to look for what might come after democracy and capitalism, and any changes to the system are just adjustments and improvements to the existing order.[3] That said, the political particularities of Fukuyama's theory are relatively insignificant in the context of this paper; what

[1] Peter Fritzsche, "Reviewed Works: The End of History and the Last Man by Francis Fukuyama," *The American Historical Review,* Vol. 97, No. 3 (June 1992): 817.
[2] Fritzsche, "Reviewed Works: The End of History and the Last Man," 817.
[3] Fritzsche, "Reviewed Works: The End of History and the Last Man," 817.

matters more is the principle of a point at which the model of an institution reaches effective hegemony. This is the point where no alternative model exists to challenge it or present an alternative structure, with an emphasis on specific inflection points and only superficial present change. I will demonstrate that this has become the case with biathlon.

Part 3: The Development of Postmodernism

The discipline of history has long been present in a litany of forms: oral, written, drawn, enacted, or some combination of all of these and more. Though some strict postmodernists might disagree, there is largely a consensus that the past happened; however, "history" does not happen; it is a created thing, built from the foundations of what we can capture from the past. In her book *Thinking About History,* Sara Maza writes, "…the new cultural history started reading sources as patterns of words and stories as forms of 'fiction' in the broadest sense, rather than documentary evidence. (In its original sense, "fiction" does not mean 'something untrue' but 'something created and shaped,' and important distinction)."[4]

In the nineteenth century, the discipline of history was much more akin to that of the sciences; it was believed that there was a single, unconditional truth and it was the responsibility of the historian to uncover that truth, without distortion from personal bias or beliefs.[5] At the time, the ranks of academia were largely homogeneous. Almost all scholars in major American and European universities were white men of a western European heritage, in both their ancestry and ideas. While some Jewish individuals and some women earned doctoral degrees, most were either forced to remain loyal to the majority or sent to positions as specialized institutions; for example, most women who received their doctorates were sent to teach at all-female colleges.[6]

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[4] Sarah Maza, "Chapter 6: Facts or Fictions?" in *Thinking About History* (Chicago: University of Chicago Press, 2017), 211.

[5] Maza, "Facts or Fictions?" 201.

[6] Maza, "Facts or Fictions?" 202.

As such, the concepts of a "value-free and dispassionate" approach to history was able to remain largely unchallenged in the majority of major academic institutions.[7]

The first significant push back against the objective model of history came on the heels of major changes in the make-up of the academy itself. Following World War II, the education benefits provided by the G.I. Bill and the increase in young people due to the post-war baby boom increase both the number of individuals attaining higher education and the demand for qualified individuals to teach at that level. Accordingly, the number of doctorates issued rose significantly, from around 150 annually in the 1930s to over one thousand per year in the 1960s.[8] This increase also brought about an increase in scholars from various socioeconomic and cultural backgrounds that were more aware of the experiences of the non-elite and began to write what Maza refers to as "histories from below" or works that focused on class-based issues such as labor history, slavery, and working-class life.[9] However, despite their emphasis on a different set of topics, this new class of historical scholars did little to challenge the existing paradigm of empiricism within the discipline. The "truths" they focused on were different, but they were still viewed as being objective truth.[10]

This finally began to change in the 1970s through the work of pioneering female and Black scholars, who began to argue that the study of history should (and perhaps even could) not be separated from the identities and experiences of those authors who created it.[11] This movement continued to develop through the end of the 20th century, with some scholars arguing that the experience of marginalized groups was so different than that of the "master narrative"

[7] Maza, "Facts or Fictions?" 202.
[8] Maza, "Facts or Fictions?" 203.
[9] Maza, "Facts or Fictions?" 203.
[10] Maza, "Facts or Fictions?" 203.
[11] Maza, "Facts or Fictions?" 204.

that the two were wholly incompatible.[12] Coupled with other challenges to the western European model of history that staked primacy only on written sources, the concept of postmodernism slowly began to bleed into the historical discipline.

Maza defines postmodernism as "a catchall phrase frequently used to describe the intellectual tsunami that hit the humanistic end of the academy with full force in the 1980s, originating in the fields of linguistics, philosophy and literary studies… for our purposes, the most important aspect of postmodernism, as it came to affect historical work and nourish controversy, is its emphasis on language and 'text.'"[13] She continues by noting that for historical study, postmodernism therefore assumes that any source is not an exact representation of the past, but rather "expressions of the mental categories and cultural conventions of the world that produced them."[14] One of the first significant proponents of postmodern historical thinking was Hayden White, who published *Metahistory: The Historical Imagination in Nineteenth-Century Europe*, in 1973. White's argument returns to the definition of fiction provided at the beginning of this chapter, which defines fiction as being something created or shaped; he argues that all history is a form of "fiction," not because historians are inventing sources or making up evidence, but rather that in order to be able to understand historical facts, they must be organized around some kind of familiar plot.[15] White identifies these as romance, comedy, tragedy, and satire and insisted that the use of fiction was the most important tool for the historian in creating meaning out of scattered facts in a way that could not be achieved through simple chronology.

The peak of the postmodern movement in history occurred during the 1990s, and while many embraced the new concepts the theory raised, others, perhaps most famously Sir Geoffrey

[12] Maza, "Facts or Fictions?" 205.
[13] Maza, "Facts or Fictions?" 209.
[14] Maza, "Facts or Fictions?" 213.
[15] Maza, "Facts or Fictions?" 214.

Elton, who once referred to postmodern thought as "the intellectual equivalent of crack," saw it as a ridiculous departure from the empirical roots of the discipline. It is true that a strict postmodern position presents significant philosophical difficulties, namely that it implies that there is no way to tell whether the past actually ever happened and that there is very little way of proving that there is, in fact, anything "outside the text."[16] More problematically, postmodernism can also be leveraged for deplorable causes such as Holocaust denial or the argument that American slavery was a positive experience for Black slaves.[17] However, most historians do not subscribe to such a strict reading of postmodern philosophy that invites the certain nihilism of complete relativism and instead pursue what they refer to as "qualified objectivity." This particular interpretation of postmodernism "acknowledges both the subjectivity of those who study history and the existence of objective traces of the past that constrain what the historian can say… [it] amounts to an interactive relationship between an inevitably subjective historian and the materials that limit and shape her inquiry."[18] The "qualified objectivity" approach has allowed many historians to pursue a postmodernist framework, without embracing total relativity.

The discipline of sport history has developed along similar lines, as is described by Dave Day and Wray Vamplew in their article for *The International Journal for the History of Sport* entitled "Sports History Methodology: Old and New." As the name suggests, Day and Vamplew focus on methodology and how approaches to sports history have changed over time and what approaches can be used by sport historians. They divide the practice of sport history (in fact, all history) into two factions: those who seek quantitative information versus those who prefer to

[16] Maza, "Facts or Fictions?" 221-23.
[17] Maza, "Facts or Fictions?" 222.
[18] Maza, "Facts or Fictions?" 224.

interrogate the qualitative; those who focus on the aggregate and those who focus more on individual experience.[19] They note that history is an inherently empirical discipline that relies, to the best extent possible, on qualitative information derived from sources believed to be accurate to the events they describe, but also acknowledge that broadly based qualitative sources tend to obscure the more direct experiences of individuals who might be an exception to the qualitative rule; hence the need for more quantified, individual study.[20] Biases, the authors argue, are present in the sources of both methodologies and in every historian using said sources and needs to be addressed regardless of what kind of source is being interrogated; in other words, the authors support a kind of qualified relativism such as that mentioned in the above section.

Day and Vamplew continue by discussing the various types of sources available to historians, including textual (the authors include both documentary writing and fiction or literature among these sources) and non-textual sources including images, oral histories, videos, etc. They argue that while textual documents remain the standard for qualitative historical research, the nature of sports history often necessitates the blending of documentary and other source types to achieve as full an image as possible of the nature of past events and their implications.[21] Therefore, this piece will use both documentary sources concerned with the history of biathlon and militaristic sport as well as individual accounts of or modern perspectives on that history. Only be putting these various types of sources in conversation, and possibly at odds, with one another can we understand the nature of the sport's historical arc, which is one of the fundamental goals of this thesis.

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[19] Dave Day and Wray Vamplew, "Sports History Methodology: Old and New," *International Journal of History of Sport*, Vol. 32, No. 15 (Oct. 2015): 1716.
[20] Day and Vamplew, "Sports History Methodology: Old and New," 1716.
[21] Day and Vamplew, "Sports History Methodology: Old and New," 1719-20.

Part 4: Biathlon as the Timeline

The sport of biathlon is a curious combination of cross-country skiing and target shooting consolidated into a single, continuous event. It is a sport that was born out of military expedience and has since grown to be one of the most popular spectator sports in Europe, even though the American market remains much smaller. The evolution of the sport provides a unique window to observe how individual and institutional choices to frame events in a particular manner can have long term and lasting effects on the progress of future events. History is a creation, but it is not just created in an academy or by those who consider themselves historians. The process of creating history encompasses virtually all of us, whether or not we are aware of the histories that constrain our decisions and the histories we either intentionally or inadvertently create.

My work is not the first literature to focus on the sport of biathlon: *Unique and Unknown: The Story of Biathlon in the United States* by Arthur Stegan and *Everyone to Skis: Skiing in Russia and the Rise of Soviet Biathlon* by William D. Frank both provide excellent survey histories of the sport of biathlon, each with its own unique focus. Stegan focuses on development within the United States, though there is discussion of international development as well, since the majority of biathlon competitions, past and current, have been international affairs. Frank on the other hand, focuses on the development of Soviet and Russian biathlon and also provides a more thorough description of biathlon's development in Europe as a whole, since the Soviet programs were more closely connected to early European biathlon competition than the United States was. While these texts are valuable sources of information about the specifics of biathlon, further reading is required to create a more complete picture to understand the

sport's Post-Historical development and the potential broader repercussions of that transition. For that purpose I turn to other literature in the fields of military and sports history.

The first field, which is addressed in more depth in Chapter 3, is that of the widespread popularization of athletics in general and how athletics have been employed for military purposes. Benjamin Rader's text *American Sports: From the Age of Folk Games to the Age of Televised Sports* provides a broad history of the growth in popularity of organized (and eventually professional) athletics in the United States and the causes for that change. Additionally, Stephan Pope's article for the Journal of Sport History titled "An Army of Athletes: Playing Fields, Battlefields and the American Military Sporting Experience, 1890-1920" addresses the question of how the United States military used athletic competitions among its soldiers to prevent unwanted behaviors and to promote physical fitness and preparedness for combat and used the service academies as a means of developing an athletic regimen for soldiers. Pope also addresses how the military usage of athletics legitimized sporting competitions in a civilian setting, laying the groundwork for the high-profile sports industry we see today. While Pope's work does not address biathlon specifically, it demonstrates why and how the military made use of athletics competitions (or in the case of biathlon, essentially built a sport from the ground up) to meet its needs.

Part 5: Methodologies

In addition to the sources outlined above, I needed access to the understandings of current biathletes about the history of their sport and their place in it. In arguing that individual identities and perceptions of history are significant shapers of the way that history is created, I needed to have access to those who were a part of that community. To do this, I employed a two-part process. The first was a general survey designed to gain an understanding of who the

athletes were, where they placed their backgrounds and their sense of their place in the history of the sport. These questions included how they were introduced to the sport, how they would assess their knowledge of the sport's history, whether they believed that knowledge was important or not and why they believed a historical understanding of biathlon was necessary or not. This survey was distributed primarily via the United States Biathlon Association and by word of mouth among the biathlon community in the United States.

The survey also included the option to register for an interview, conducted remotely and lasting between twenty and forty minutes. These surveys were designed to garner details about the topics raised in the survey and offer the interviewees a chance to add their own ideas that may not have been brought up by any of the original survey questions. The questions for the interviews were drawn from a standardized list, but the process was left flexible enough for the conversation to move naturally down different paths if those were an option of particular interest to the interviewee. Overall, I received a total of fifteen survey responses and conducted six interviews.

The data they represent is not perfect; the sample is small, even among a relatively small community in the United States and the responses only represent American biathletes. Additionally, the responses do not represent an ideal cross section of American biathletes as responses were based simply on interest and not an attempt to evenly distribute across demographics. Another potential flaw is that questions could have been leading. In asking about the history of biathlon and the connection to the present (particularly the military connection) I may have inadvertently primed interviewees to focus more intently on these topics than they otherwise would. However, some response trends are remarkably consistent, even for such a

small sample size, and the interviews yielded valuable qualitative information that would otherwise have been inaccessible.

Part 6: Outline

In this thesis I demonstrate what I consider to be a Post-Historical transition in the sport of biathlon occurring at both the structural and perceptual levels, which is in turn a directed by a larger shift in culture and politics. My first chapter provides a brief overview of the modern sport of biathlon to acquaint those who might be unfamiliar with the specifics of the sport, covering topics such as disciplines, physiological requirements, equipment, and governing bodies. The second chapter introduces a general description of the development of biathlon, with a specific emphasis on the United States, starting in the early twentieth century and progressing until 2020 to outline the specific inflection points that characterize the Post-Historical transition and the context that surrounds them. Chapter three explores the structural component of biathlon's Post-Historical development by looking at specific chronological inflection points and the factors that may have caused them. Chapter four looks at the second part of a Post-Historical construction: the athletes' perception of themselves within and in opposition to the past of the sport. This relies on a postmodernist framework that allows for the construction of history by those outside of its professional production, and an understanding that individual experiences can create varying histories that are not beholden to a singular master narrative. Together, these demonstrate the movement of the sport into a differentiated Post-Historical (post-military) era, with the potential for further research to demonstrate a more generalized transition of a similar nature across the athletic spectrum and possibly even a shift in how and to what degree the military is involved in civilian life more generally.

Chapter 1: What is Biathlon?

Part 1: What is Biathlon?

This chapter gives a very brief overview of the modern sport of biathlon, including the competition structure and disciplines, equipment, athletes and athlete training, and the modern governance of the sport at both the national and international levels. Without understanding what the sport looks like today, it would be meaningless to try to make comparisons to how the sport looked in the past. Therefore, this chapter is designed to give those readers unfamiliar with biathlon a knowledge base with which to better understand the intricacies of the rest of the paper.

One of the most popular winter sports in Europe and one of relative insignificance to many in the United States is the sport of biathlon, a unique combination between cross-country ski racing and target shooting. First employed as a military exercise among troops of northern European countries, it began to grain traction in the United States during preparation for mountain warfare during the lead-up to World War II. It was first included on the Winter Olympic program as the "Military Patrol" from 1924-1948, while the modern form of biathlon was introduced at the 1960 Olympic Games held in Squaw Valley, California. Since then, the sport has evolved to include men's and women's competitions in more than seven disciplines.

At its most basic, biathlon is a cross-country ski race that involves between two and four shooting bouts per athlete, with five targets per bout. Shooting takes place in one of two positions: prone, in which the athlete is lying on the ground on their stomach, or standing. Targets are positioned at a distance of fifty meters from the firing line and measure 4.5cm for a prone target (about the size of a golf ball) and 11.5cm (about the size of a softball) for standing targets.[22] Athletes are penalized for missed shots, with the severity of the penalty depending on

[22] "Competition Descriptions," United States Biathlon Association, accessed March 31, 2020, https://www.teamusa.org/US-Biathlon/About-Us/US-Biathlon

the competition; however, the race clock does not stop during shooting bouts and therefore athletes must be able to not just ski fast and shoot accurately, but be able to shoot quickly as well, or risk losing valuable time to their competitors.

All biathlon races take place in the freestyle or skating technique, which employs shorter skis used on wide groomed trails without tracks in a V-motion. These skis do not utilize kick wax, and the whole ski is optimized for gliding, making racing typically faster than if the classic technique were employed. Race distances range from six kilometers (each leg of the woman's relay) at the shortest to twenty kilometers (men's individual competition) at the longest.[23] Generally speaking, races can last anywhere from 20 minutes to almost an hour, depending on discipline and distance.

Part 2: Disciplines

The oldest form of modern biathlon competition (excluding the military patrol) is the individual competition. It takes place over fifteen kilometers for the women and twenty kilometers for the men with a total of four shooting bouts in a prone-standing-prone-standing sequence. A missed shot in the individual is penalized by a one-minute addition to the athlete's final race time, meaning that clean shooting (hitting all the targets in a race) is placed at a premium, and except in instances of extremely bad weather, it is uncommon to see athletes win the event with more than one penalty. As the name might imply, the race is conducted with the athletes racing individually against the clock; the start is conducted at thirty second intervals, with one athlete leaving the start at a time, thirty seconds apart.[24] Given that athletes start and finish at different times, it can be difficult to know who is actually leading the competition at any given time and crossing the finish line first does not mean an athlete has won; the competition is

[23] "Competition Descriptions."
[24] "Competition Descriptions."

only decided once all competitors are done, and their times and penalties have been noted. Despite the fact that the individual competition is the oldest discipline, there has been some talk recently of removing it from the program, as some feel it is not exciting enough compared to other head-to-head formats and is too difficult to follow since athletes are starting and finishing at different times.[25]

In 1976, a new format known as the sprint competition was introduced. It was shorter, faster and designed to be more spectator friendly than the individual. The title of "sprint" is something of a misnomer; the modern sprint race covers a distance of 7.5 kilometers for the women and 10 kilometers for the men but includes just two bouts of shooting, the first in prone and the second in standing. Like the individual, athletes start at thirty second intervals, but rather than facing a one-minute penalty for each missed shot, they instead must complete a lap around a 150 meter "penalty loop" for each target left standing, a task that typically takes between 20 and 30 seconds, depending on the athlete, snow conditions, etc.[26] As such, there is a higher premium placed on ski speed, as it is possible for the top athletes to miss one or sometimes even two shots and still be able to make up the time and compete for one of the top places. The sprint race also serves as the qualifier and seeding event for the pursuit competition that typically follows.

The pursuit race was first added to the World Championships competition program in 1997 and has become a fan favorite ever since for the excitement and drama of head-to-head racing it provides. The pursuit field is composed of the top sixty competitors from the previous day's sprint race. Each athlete starts the race at their previous effort's deficit to the leader. For example, if the difference between first and second was five seconds, and the difference between

[25] Carl Theriault, in discussion with the author, July 21, 2020.
[26] "Competition Descriptions."

second and third as 3 seconds, the first starter would go at 0 seconds, the second starter would go at 5 seconds, the thirds starter would go at 8 seconds and so forth until all sixty competitors were on course. The race then happens in real time, with the first athlete to cross the finish line declared the winner. The race covers a distance of 10 kilometers for the women and 12.5 kilometers for the men with four shooting bouts in a prone-prone-standing-standing sequence.[27] Like the sprint, each missed shot is penalized by one lap around at 150-meter penalty loop, which can have significant consequences in a field where all sixty athletes often start within five minutes of each other.[28] Given these pressures, it is relatively uncommon for the winner of the sprint to successfully defend their victory from the previous day; to do so not only requires exceptional physical talent to produce two successive maximum physical efforts on back-to-back days but also incredible mental focus and nerve to be able to handle the pressure of having the entire field chasing from the very beginning of the race.[29]

Another fan-favorite and equally high-pressure race is the mass start discipline. The field is limited to the top 30 athletes on the World Cup tour at the time and as the name suggests, all the athletes start simultaneously, with the first to cross the line the winner of the race. The race includes four shooting bouts, also in the prone-prone-standing-standing sequence (the field is limited to 30 as that is the number of points available on the shooting range and for the first shooting bout all the athletes arrive at about the same time), with a 150-meter penalty loop required for each missed shot. The men's race covers a distance of 15 kilometers while the women's competition totals 12.5 kilometers.[30]

[27] "Competition Descriptions."
[28] "Competition Descriptions."
[29] "Competition Descriptions."
[30] "Competition Descriptions."

An early addition to the competition program that remains popular today is the relay. The first relay was added to the World Championships program in 1966 and today has three variations: men's, women's, and mixed relays. Each race includes 4 legs, with men racing 7.5 kilometers and women covering 6 kilometers. In the mixed relay, the teams consist of two men and two women, who each race their own distances. Each leg consists of two shooting bouts in the prone-standing sequence, like the sprint, but the difference comes from the fact that each athlete gets eight rounds to clear the five targets at each bout. The first five are fired from the magazine and the other three, if needed, are hand loaded individually into the chamber.[31] If an athlete is still unable to clear all their targets, even with the spare rounds, they must perform a 150-meter penalty loop for each target left standing. Knowing that spare rounds are available often encourages athletes to take some risks and some of the fastest shooting occurs in the relay discipline.[32]

The most recent format added to the World Championships and World Cup program is the single mixed relay. In this format, one female and one male athlete combine to race a total of 6 kilometers (first racer) and 7.5 kilometers (second racer) over the course of four legs. Each leg consists of two shooting bouts, first prone, then standing, with the same penalty rules as the standard relay (3 spare rounds per bout).[33] Unlike in typical mixed relays, the distance is not dependent on gender, but by who starts where, with the athlete that scrambles (starts) racing 6 kilometers and the athlete that anchors (finishes) racing 7.5 kilometers, an extra 1.5-kilometer loop after their final shooting stage. In this discipline, male and female athletes alternate who scrambles and who anchors, meaning in any given competition it could be the men or women

[31] "Competition Descriptions."
[32] "Competition Descriptions."
[33] "Single Mixed Relay: An Exciting New Format," International Biathlon Union, December 19, 2017, https://www.biathlonworld.com/about-biathlon/disciplines/single-mixed-relay-an-exciting-novelty.

who race the longer distance. Given the short distances and rapid, head-to-head shooting, the single mixed relay has rapidly become a favorite among fans and athletes alike.[34]

Part 3: They Physical Requirements:

It is almost impossible to fully understand the challenges and development of the sport without understanding what is required of the athletes who compete at the highest level. The physiological requirements of biathlon are almost unique: the cardiovascular and muscular strength and technical prowess of an elite cross-country skier combined with the focus and mental fortitude to shoot accurately and rapidly at targets between 4.5cm (prone) and 11.5cm (standing) while under severe physiological stress.[35] Few other sports require such a diverse skill set to be utilized in conjunction, and as such, attracts a very specific group of persons, something attested to by the athletes themselves.[36]

World Cup biathlon races are frequently won or lost on the shooting range, with shooting accuracy comprising an estimated 35-50 percent of overall performance, depending on the discipline. With only 2-4 percent of performance being dictated by time spent on the shooting range, the remaining 45-60 percent of performance is dictated by the athlete's ability to ski fast while on course.[37] They must be able to utilize a variety of sub-techniques within the skating style over varying terrain at various distances ranging from 6-20 kilometers and comprising between 150-750 meters of vertical gain, depending on gender and discipline.[38] Like cross-country skiing, biathletes typically spend as much as 50 percent of their time on course on the uphill sections; as such, the physiological requirements for elite biathletes largely mirror those of

[34] "Single Mixed Relay: An Exciting New Format."
[35] "Competition Descriptions."
[36] Male Athlete 1 (Interview), in conversation with the author, August 11, 2020.
[37] Marko Laaksonen, Malin Jonsson and Hans-Christer Holmberg, "The Olympic Biathlon- Recent Advances and Perspectives Since Pyeongchang," *Frontiers in Physiology,* Vol. 9 (2018): 2.
[38] "Competition Descriptions."

elite cross-country skiers, to the point where multiple biathletes have been tapped for cross-country World Championship teams and other cross-country skiers have made the transition to biathlon while at the height of their careers.[39]

Cross-country skiing is widely considered to be one of the most demanding endurance sports, requiring almost equal utilization of the upper and lower body, in addition to significant cardiovascular demands; for this reason, elite cross-country skiers typically record very high VO_{2max} measurements.[40] Few male cross-country skiers have won major championships with VO_{2max} values lower than 80-90 mL/kg/min, while for female athletes the numbers are about 10 percent lower or approximately 75 mL/kg/min.[41] For reference, average VO_{2max} values for the general population range from 38-46 mL/kg/min. However, many endurance athletes demonstrate exceptionally high VO_{2max} measurements. Skiers are differentiated by the fact that they express larger areas of muscle fibers than other endurance athletes with about 70-75 percent of those fibers being of the Type 1 (slow twitch) variety.[42] Elite skiers are also demonstrated exceptionally high hemoglobin levels (as a surrogate for blood volume) and they extract O_2 to a remarkable extent, up to 93-95 percent in the legs and about 81-85 percent in the arms which gives them the ability to achieve very high cardiac output with relatively low afterload, extracting and utilizing the vast majority of the Oxygen they are able to uptake.[43]

In order to meet these intense physiological parameters, internationally competitive biathletes and cross-country skiers follow rigorous, year-round training plans designed to achieve

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[39] Laaksonen, Jonsson, and Holmberg, "The Olympic Biathlon," 2; Jason Albert, "The Switch: Stina Nilsson Switches To Biathlon, March 23, 2020, 1-2. https://fasterskier.com/2020/03/the-switch-stina-nilsson-switches-to-biathlon/.

[40] Hans-Christer Holmberg, "The Elite Cross-Country Skier Provides Unique Insights into Human Exercise Physiology," *Scandinavian Journal of Medicine and Science in Sports,* Vol. 25, No. 4 (2015): 100.

[41] Holmberg, "The Elite Cross-Country Skier," 102.

[42] Holmberg, "The Elite Cross-Country Skier," 103.

[43] Holmberg, "The Elite Cross-Country Skier," 103-04.

peak physical capacity during the winter competition season. These training plans typically involve between 700 and 900 hours of total training time per year about 60-70 percent of which is performed between May and November; the remainder takes place during the December-April competition season. A variety of different modes of training are employed between May and November, including roller skiing, cycling, running and strength training with occasional opportunities to train on snow. As much as 50-60 percent of this training time is sport specific (either roller skiing or skiing on snow; since biathlon competition uses exclusively the freestyle technique, classic skiing, both dryland and on snow, is typically reserved for long distance or recovery sessions.[44]

Training for elite biathletes and skiers is subdivided by intensity: low, medium, and high intensity sessions, as well as strength and speed training. Typically, about 80 percent of an athlete's total hours are spent training at low intensity, designed to improve overall aerobic capacity and efficiency as well as to improve the athlete's tolerance for higher training loads by improving recovery.[45] Skiing specific low intensity training can also be used to practice skiing technique and develop biomechanical habits that will improve the efficiency of the athlete at higher intensities.

Approximately 4-5 percent of the athlete's time is spent on medium intensity workouts (about 80-90 percent of the athlete's maximum heart rate or directly below the anaerobic threshold), which are meant to increase the length of time the athlete can function at their aerobic threshold before their body reverts to anaerobic processes.[46] Such workouts typically consist of long intervals of work at the threshold level (80-90% HR_{max}) followed by short periods of

[44] Laaksonen, Jonsson, and Holmberg, "The Olympic Biathlon," 4.
[45] Laaksonen, Jonsson, and Holmberg, "The Olympic Biathlon," 3-4.
[46] Laaksonen, Jonsson, and Holmberg, "The Olympic Biathlon," 3-4.

recovery over the course of 30-60 minutes, often on rolling or consistent terrain. High intensity workouts and racing (in which the athlete's heart rate is greater than 90 percent of their maximum) constitute about 5-6 percent of total training hours.[47]

The final 10 percent of training hours for biathletes and cross-country skiers consists of strength and speed training. The importance and consistency of strength training among cross-country skiers and biathletes has significantly increased over the past decades; skiers in the 1990s have demonstrated 15-25 percent greater muscle fiber areas, especially in the arms, compared to those in the 1970s while VO_{2max} values have remained largely unchanged.[48] Additionally, athletes conduct sessions of short sprints at maximal intensity with intervals of full recovery (typically 2-3 minutes) in between to improve power and neuromuscular responses to rapid movements. While the effects of strength training on biathlon performance have not been specifically studied, it is speculated that they could improve the ability to develop and maintain muscle mass and power and improve skate skiing technique while carrying a rifle.[49]

Part 4: The Equipment

While peak physical conditioning is clearly a prerequisite for world class biathletes, virtually every athlete on the World Cup tour is at that level of physical capacity and the margins of winning and losing are incredibly slim. Therefore, the selection and preparation of the athlete's equipment can play a significant role in giving them a winning edge over their competition or causing them to come up just short in their efforts. As mentioned before, the skiing portion of biathlon competitions is done in the freestyle or skating technique. This involves pushing the skis in a V-shaped motion on flat, groomed trails without tracks or the use

[47] Laaksonen, Jonsson, and Holmberg, "The Olympic Biathlon," 3-4.
[48] Holmberg, "The Elite Cross-Country Skier," 104.
[49] Laaksonen, Jonsson, and Holmberg, "The Olympic Biathlon," 4.

of kick wax, as is used in the classic technique for grip in the diagonal stride. Skate skis are typically shorter than classic skis and designed solely for the purpose of gliding; they are waxed the whole length of the ski with paraffins, or other substances, designed to make the ski glide and typically have a stiffer camber or "flex" than their classic counterparts, with the intention of yielding a greater percentage of energy return in the rebound of each push. Skis are composed of layered fiberglass and carbon fiber, often with a honeycomb style core and a base made out of polyethylene, more frequently referred to as P-Tex.[50] Skate poles are of identical construction to that of classic poles, but are longer, usually reaching up to some point between the athlete's mouth and nose when standing. Skate boots, on the other hand, are designed dramatically differently from their classic counterparts. They are built to have exceptional tortional rigidity and lateral stiffness to transfer as much energy from an athlete's push as possible into the ski and into the snow. World-class skate boots are often constructed on an almost entirely carbon chassis, with a carbon cuff to provide additional support and stiffness around the ankle, while also remaining as light as possible.

Equipment construction is important, but so is selection and preparation. Most World Cup biathletes carry a large fleet of skis with them, sometimes in the range of 30 or more separate pairs, each designed for different conditions. Once race skis are selected, they need to be properly prepared by a staff of dedicated wax technicians; the difference between a winning race and finishing outside the top 30 can be a matter of having skis that are better than the competition or worse. Therefore, technicians play a crucial role in an athlete's race performance. They spend hours before and on race day testing various different waxes and combinations to determine which one will be the fastest on that given day and then prepare the skis that were

[50] Michael P. Nordvall, *Two Skis and a Rifle: An Introduction to Biathlon* (2017), 1133.

chosen for that event (frequently the techs will also assist the athlete in choosing which pair of skis they will race on, as well). If one listens to almost any post-race press conference, one will almost certainly hear the winning athlete or athletes praising the quality of their skis and thanking their technicians for making their win possible. Biathlon may look like an individual sport on the surface, but underneath there is a huge team that makes any significant result possible.[51]

Another critical piece of equipment is the rifle. While some might use the terms interchangeably, a rifle is not technically a gun. Rifles, such as those used for biathlon, have spiral grooves or "rifling" inside the barrel that spins the bullet as it leaves the barrel with the goal of increasing accuracy. Guns, such as a shotgun, on the other hand, have smooth barrels and do not place any spin on the ammunition.[52] Biathletes typically use heavily modified .22 caliber long barreled rifles with 16-inch rifling and the sock made from wood or, more commonly now, carbon fiber, with a muzzle velocity of about 345 meters per second.[53]

The rifle is composed of the stock, barrel, front and rear sights, firing chamber, trigger, sling, and harness. The rear sight is equipped with vertical and horizontal knobs used to adjust the sight picture on windy days, a process performed before each race and training session called "zeroing." The firing chamber is the point into which the rounds are loaded before being fired, either from the magazine underneath the rifle or by hand from above. The trigger blade is adjusted to the athlete's specifications and usually two stage: it can be taken to the firing point with minimal resistance. Once at that point modulation of the trigger typically requires about

[51] Female Athlete 2 (Interview), in discussion with author, July 29, 2020.
[52] Arthur Stegen, *Unique and Unknown: The Story of Biathlon in the United States*, (New Paltz, New York: 2019), 260.
[53] Stegen, *Unique and Unknown*, 260.

one pound of force (or about 0.5 kilograms), at which point the bullet is fired.[54] The sling attaches to a cuff worn between the biceps and deltoid on the arm opposite the trigger hand and is used to stabilize the rifle during prone shooting. Finally, the harness is used for carrying the rifle on the athlete's back during competition. Proper functioning of the rifle and all other competition equipment is vital to an athlete's success; even the fittest athlete cannot win a competition on faulty equipment. Therefore, biathletes and technicians make sure that skis, boots, poles, rifles, and all other equipment is in excellent shape prior to any competition, and all is meticulously maintained.

Part 5: Governance

The sport of biathlon is governed by rules on multiple levels. At the international level, the sport as a whole is run by the International Biathlon Union or IBU. Based in Austria, the IBU regulates the sport of biathlon at the international level, from scheduling and managing competitions, vetting, and assisting national federations with developing biathlon in their respective countries, and "maintaining the integrity of Biathlon" though integrity codes and the BIU or Biathlon Integrity Unit.[55] The IBU first came into existence in 1993; prior to that biathlon was governed in conjunction with the sport of modern pentathlon by the Union Internationale de Pentathlon Moderne et Biathlon (UIPMB).[56] Meetings of the IBU congress, consisting of the Executive Board, Athlete representatives and national federation members are scheduled to be held every two years to vote on new measures, with each national federation member receiving one vote; a motion is passed by receiving a simple majority.[57]

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[54] Nordvall, *Two Skis and A Rifle,* 1329.
[55] "International Biathlon Union Constitution," International Biathlon Union, Effective October 2019, http://res.cloudinary.com/deltatre-spa-ibu/image/upload/snaeiqic57aelqjavhqo.pef
[56] Stegen, *Unique and Unknown*, 11.
[57] "International Biathlon Union Constitution."

An example of a national federation would be the United States Biathlon Association (USBA), which serves as the governing body for biathlon in the United States. The USBA was first officially recognized at the 1981 UIPMB congress meeting in Lahti, Finland, replacing the United States Modern Pentathlon and Biathlon Association (USMPBA) that had previously held jurisdiction over the sport.[58] The mission statement of the organization is "to support and encourage the development of biathlon in the United States and to prepare athletes for international competition, including the Olympic Winter Games."[59] Ultimately, the organization works to organize three basic elements: physical, financial, and human resources. While there are now many world-class training and competition sites across the United States and U.S. biathletes have achieved medals at the World Championship level, one of the primary aspects of biathlon development the USBA is still challenged by (as a relatively niche sport in the U.S.) is funding for athletes, both in elite competition and in grassroots development.[60] Such are the challenges of sport governance both historically and in the future.

Chapter 2: The History of Biathlon

Part 1: Introduction

This chapter outlines the development of the sport of biathlon from its roots in early ski culture to its place as an international elite sport with a large following worldwide. The history provided in this chapter is largely a survey history designed to familiarize those with little incoming knowledge of the sport with the basic outline of the events that created the sport we see today. Many of these events and processes will be revisited in later chapters as their role (and sometimes revision) is used to demonstrate how the sport has been adapted by a wide variety of

[58] Stegen, *Unique and Unknown*, 52.
[59] Stegen, *Unique and Unknown*, 81.
[60] Stegen, *Unique and Unknown*, 81.

forces, including the athletes themselves, in a particular direction. Here, however the goal is simply to familiarize the reader with names, dates and terms that will become applicable later in the piece: some events of particular note include the reframing of biathlon's origins by UIPMB president Sven Thofelt during the debate over including biathlon in the 1960 Olympic Games, the addition of competition disciplines (particularly the relay and sprint), the transition from military style large-bore rifles to small-bore .22 caliber rifles, changes in sponsorship rules and their impact on athlete support individually and by the USBA and the attacks of September 11, 2001.

Part 2: Early Biathlon History

The history of skiing dates back centuries, if not millennia; a pictograph located 1300 miles east of the Urals, called Sunduk IV, depicts two skiers armed with bows and dates somewhere between the third century B.C.E. and the fourth century C.E. Additionally, a partial ski, preserved in a bog north of Syktyvkar, Russia, was found that is believed to be over eight thousand years old.[61] While early skis certainly provided a means of transportation and even survival in northern latitudes, they also were adopted for military usage. The first written documentation of the usage of skis by a military force dates to the twelfth century, in the *Gesta Danorum*, written by Danish historian Saxo Grammaticus. He describes soldiers of the kingdom of Permland or Finnmark fighting on skis, as well as other tribes inhabiting lands above the Arctic Circle who were armed with bows and arrows and traveled on skis. Other sources indicate that during the Battle of Oslo in 1200, the Norwegian king Sverre Sigurdsson also employed troops on skis.[62]

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[61] William D. Frank, *Everyone to Skis!: Skiing in Russia and the Rise of Soviet Biathlon* (DeKalb, Illinois: Illinois University Press, 2013), 15.

[62] Frank, *Everyone to Skis,* 15.

The first official set of rules for the use of skis by military agencies was first written up in German in 1733 and later replaced by a new set written in Danish in 1774. Regular ski detachments were first introduced into the Norwegian army in 1742; soldiers were equipped with one set of skis, homespun gaiters, one calfskin knapsack and a canvas backpack. Skis were typically constructed from hardwoods, generally birch, elm and sometimes ash, although ash skis were considered to be so fast as to be dangerous and were not frequently used.[63] Russia also began employing ski troops during the 18th and 19th centuries, particularly during the Finnish War against Sweden from 1808-1809.[64] However, perhaps the most famous example of military use of ski technology was the Russo-Finnish Winter War of 1939-1940. While Finland did eventually lose the war, the invading Soviet army suffered massive casualties (to the order of an estimated 230,000 to 270,000 killed and another 200,000 to 300,000 wounded in just 105 days), many at the hands of Finnish ski troops who could move with a speed and stealth unmatched by the massive bureaucracy of the Soviet army at the time.[65] While this event did not lead to the start of biathlon competition (competitions had been happening since the mid-to-late 18th century) but it did have the effect of placing a significant emphasis on ski capability within the Soviet military, which would eventually translate to the growth of biathlon within the Soviet Union and leave a lasting impact on the picture of international biathlon in general.

The first ski race to be officially documented took place in 1767. It consisted of four classes: shooting at a target at full speed, a downhill race on a wooded slope, another downhill race, but with the additional challenge of not being allowed to fall or use one's "stick" (or pole)

[63] Stegen, *Unique and Unknown*, 4.
[64] Frank, *Everyone to Skis,* 17-18.
[65] William R. Trotter, *A Frozen Hell: The Russo-Finnish Winter War of 1939-1940* (Chapel Hill, North Carolina: Books Of Chapel Hill, 1991), 263.

as a break and finally a long-distance cross-country race.[66] These races became a regular occurrence by 1792, complete with monetary prizes to the top finishers. While the usage of military ski detachments declined in the 19th century, the competitions remained. In 1861, the Trysil Rifle and Ski Club was formed to promote cross-country skiing and rifle shooting, as a means of preparing for national defense. However, it was in 1912 that the first race to resemble the modern biathlon race was held. Hosted by the Norwegian military, the annual "Førvarsrennet" was a seventeen-kilometer race that featured two shooting bouts, with two minutes subtracted from the competitor's ski time for each target hit.[67] In 1918, the Norwegian King's Guard organized the first "Military Langrenn," a 30-kilometer ski race during which competitors fired ten shots at targets of random distance up to 200 meters.[68]

The first true international biathlon competitions emerged under the heading of the military patrol, though the sport looked very different than the modern version. The race covered a distance of 30 kilometers and was contested by teams of four: one officer, one sergeant and two soldiers. Each carried rifles and eight kilograms of equipment, except for the officer, who was armed only with a pistol. The officer did not fire at the shooting ranges, but directed the other three soldiers, who shot at targets as distant as 200 meters. Such an event often took up to four hours to complete.[69] The military patrol was first contested as an Olympic event in 1924 and was removed from the program after 1948 in light of significant anti-war sentiment in Europe following the conclusion of World War II.[70] However, evens such as the "Skidfeltskytting" competitions in Sweden (in which athletes skied a distance of 20 kilometers

[66] Stegen, *Unique and Unknown*, 4.
[67] Stegen, *Unique and Unknown*, 4-5.
[68] Stegen, *Unique and Unknown*, 5.
[69] Stegen, *Unique and Unknown*, 5.
[70] Stegen, *Unique and Unknown*, 6.

while stopping for five shooting bouts of six randomly distanced targets each) continued, with the first Scandinavian skifeltskytting championships being held in 1956.[71]

However, ski racing was not the only influence on the development of biathlon. The summer Olympic sport of Modern Pentathlon, a sport also derived from military roots, was an event that brought together the individual disciplines of pistol shooting, fencing, swimming, equestrian cross-country riding and running.[72] The idea for a winter Olympic biathlon competition was first introduced after the discontinuation of the military patrol in the form of a winter Pentathlon consisting of equestrian riding, fencing, pistol shooting, a 3-kilometer downhill ski race and a 12-kilometer cross-cross country ski race. Later, the idea was changed to exclusively events that occurred on ice or snow and included cross-country and downhill skiing, figure skating, tobogganing, and ski jumping. However, such an event proved to be too challenging to host and so the idea of combining skiing and shooting once again came to the forefront.[73]

The man leading the charge to put biathlon on the Olympic program, the president of the International Modern Pentathlon Union (UIPM), was named Sven Thofelt. Faced with IOC president Avery Brundage's arguments that biathlon was a military sport and therefore should remain exclusively under military jurisdiction, Thofelt adjusted his argument to change such a perception. Cave paintings in the Altai region of northern Russia were discovered that depicted two skiers armed with bows, dating between the third century B.C.E and the fourth century C.E. and other pictographs, and engravings have been discovered that show similar scenes.[74] While these paintings offered no clear evidence that such use of skis for hunting purposes had any

[71] Stegen, *Unique and Unknown*, 7.
[72] Stegen, *Unique and Unknown*, 7.
[73] Stegen, *Unique and Unknown*, 7-8.
[74] Frank, *Everyone to Skis,* 15.

direct trace to competitive biathlon, as the organization of early skiing and shooting competitions such as the 1912 "Førvarsrennet" were almost exclusively military affairs, Thofelt saw an advantage in reframing the origins of the sport for the purposes of getting it on the Olympic program.[75] He extolled Brundage with stories of ancient peoples using skis as a means of survival during the winter months, to travel deep into the woods on hunting expeditions for the sake of providing for their families.[76] Such tactics successfully swayed Brundage's thinking, and he helped to get biathlon on the 1960 Olympic program as a substitute for the bobsled competition that could not be held that year.[77] In 1957, the Union Internationale de Pentathlon Moderne (UIPM) declared itself responsible for biathlon and in 1960, the first individual biathlon competition was held at the Winter Olympic Games in Squaw Valley, California. In this format, the competition consisted of a 20-kilometer race with three shooting bouts at targets distanced at 250, 200, and 150 meters from the prone position and one bout at 100 meters from the standing position. Each missed shot was assessed a two-minute time penalty, added to the total ski time.[78]

Despite success at both the 1958 World Championships and the 1960 Olympics, the future of biathlon as an international sport was not assured. During an IOC meeting in 1960, a vote was taken to remove biathlon from the Olympic program after just one edition. At the next meeting, the UIPM attempted to reintroduce the sport and the IOC agreed on the condition that the UIPM made the event more interesting.[79] To do so, the UIPM adjusted the penalty for a missed shot from two minutes to one minute and also consolidated to a single range with targets

[75] Stegen, *Unique and Unknown*, 5.
[76] Stegen, *Unique and Unknown*, 8.
[77] Stegen, *Unique and Unknown*, 9.
[78] Stegen, *Unique and Unknown*, 9.
[79] Stegen, *Unique and Unknown*, 9.

at 150 meters, at which athletes would alternate between prone and standing bouts. Additionally, a new format was introduced, in the form of the 4x7.5-kilomter relay. Each athlete skied a distance of 7.5 kilometers with two shooting bouts, one in prone and the other standing. The relay also marked the introduction of breakable targets that let the athlete know immediately whether or not they had hit the target. In place of a time penalty distributed at the end of the race, competitors would complete an extra penalty loop of 200 meters immediately after each shooting bout for each target left standing. Additionally, each athlete would have three extra rounds per bout (for a total of eight) to hit all five targets.[80] Even at the 1972 Olympics, there was resistance, particularly by IOC president Avery Brundage, who still believed that biathlon was too much of a military sport to continue in the Olympics. Sven Thofelt, the president of the UIPMB, responded by introducing the sprint race, a 10-kilometer event with two shooting bouts using breakable targets and a 150-meter penalty loop. The penalty loop for the relay was also reduced to 150 meters and the shooting distance was reduced to 50 meters with .22 caliber rimfire rifles, which made the sport more accessible to the public. Coupled with the addition of a woman's World Championships in 1984, biathlon cemented its place in both the Winter Olympic Games and more broadly in the international sporting world.[81] Changes to the program would continue: the UIPMB allowed the usage of freestyle skating in all competitions in 1988, the first women's Olympic biathlon races were held in 1992 and the pursuit, mass start and mixed relay were added to the competition program in 1997,1999, and 2005, respectively. However, these changes were no longer about just survival, but rather the growth of an already popular sport.

[80] Stegen, *Unique and Unknown*, 9.
[81] Stegen, *Unique and Unknown*, 10.

Part 3: The Birth of the IBU

In 1968, the UIPM was officially renamed the Union Internationale de Pentathlon Moderne et Biathlon (UIPMB), but by the 1980s there was debate as to whether or not biathlon should be governed by its own organization. The primary reasons for this included a dissatisfaction by biathlon representatives in the UIPMB with the development of the sport and with the work of UIPMB administration with biathlon, and a general under-representation of biathlon on the UIPMB executive board. Additionally, biathlon was experiencing rapid growth in broadcasting rights, at the time, which had greatly improved the financial state of the sport.[82] While those arguing for disbanding the UIPMB knew that it was necessary to maintain the financial health of both sports in the separation (as well as keep both on the Olympic program and in step in International Olympic Committee regulations), they also believed that having an independent federation dedicated to each individual sport would better serve the interests of those sports and actually improve the development of both.[83] One given example was the United States Biathlon Association (USBA), which separated from the United States Modern Pentathlon and Biathlon Association (USMPBA) in 1978 following the U.S. Amateur Sports Act that effectively prohibited multisport governing bodies such as the USMPBA and was officially accepted as the National Governing Body for U.S. Biathlon in 1981.[84]

In 1992, an extraordinary UIPMB biathlon congress was held to vote on the decision to separate; ten member nations (Austria, Canada, Czechoslovakia, Finland, Germany, Italy, Norway, Sweden, the United States and Yugoslavia) submitted a motion to separate biathlon from the UIPMB. After significant discussion, voting was held, with 26 of 32 votes in favor of

[82] Stegen, *Unique and Unknown*, 11.
[83] Stegen, *Unique and Unknown*, 11-12.
[84] Stegen, *Unique and Unknown*, 51.

leaving the UIPMB.[85] In 1993, this was formalized at the UIPMB annual general meeting, where reorganization passed by a vote of 77 out of 85 and the next day a founding congress was held, at which the new organization was officially named the International Biathlon Union (IBU).[86] The IBU formally withdrew from the UIPMB in 1998 and shortly thereafter, the withdrawal was also approved by the IOC; the IBU was then certified by the IOC as an official Olympic winter sports federation and the separation from the UIPMB was completed.

Part 4: Development of Biathlon in the United States

The introduction of skis to the United States came via European immigrants, particularly those from Scandinavia, but just as in Europe, the development of biathlon remained wedded to military application. The Russo-Finnish Winter War in 1939 not only led to reorganization of the Soviet military; others, such as the United States began to see the value in having dedicated and well-trained ski troops capable of fighting in harsh winter environments. In 1943 the U.S. Army established the 10th Mountain Division at Camp Hale, Colorado to train approximately 20,000 U.S. troops to become "Mountain" soldiers.[87] Following the conclusion of World War II, the 10th Mountain Division was disbanded, and in 1952 the Mountain and Cold Weather Training Command (MCWTC) took over at Camp Hale. It was through the MCWTC that the first biathlon competition in the United States was organized, in 1956 at Camp Hale. The 20-kilometer race was won by Jim Mahaffey with a ski time of one hour, 38 minutes and 29 seconds, plus seven penalties, for a total time of one hour, 52 minutes and 29 seconds. A second race was held in 1957, also at Camp Hale, and was restricted to exclusively soldiers in the

[85] Stegen, *Unique and Unknown*, 12.
[86] Stegen, *Unique and Unknown*, 13.
[87] Stegen, *Unique and Unknown*, 15.

MCWTC, which was used to name the first "U.S. Biathlon Team" that would participate in the 1957 International Military Ski Championships (CISM) in Andermatt, Switzerland.[88]

Shortly thereafter, the U.S. Army once again made plans to increase the recruitment and development of a military ski and biathlon program. The MCWTC was relocated from Camp Hale to Fort Greely in Alaska and rebranded as the U.S. Army Modern Winter Biathlon Training Center (USMWBTC) in 1958.[89] Candidates for the program were required to be "expert riflemen who are capable of covering a 13.5-mile cross-country ski course in approximately 90 minutes."[90] An initial 23 candidates were recruited and eventually transferred to Fort Richardson (also in Alaska) rather than Fort Greely as originally planned. In 1958, the United States once again sent a team to the CISM games in Bardonecchia, Italy and also to the inaugural World Championships held in Austria.[91]

Following the 1960 Winter Olympics and the inaugural Olympic biathlon race, the USMWBTC, or the "Unit" as it was nicknamed, continued to develop and the commander there, Colonel Ken Floto, specifically recruited college skiers to become a part of the "Unit" after they passed through basic training, as one of the only ways to continue to seriously train for ski racing outside of college. Training was full-time and well supported, including glacier trips for training on snow in the summer and marksmanship training at Fort Benning, Georgia with the Army's shooting team.[92] Over the next ten years, the USMWBTC provided the best possible means of competing at a high level in biathlon for U.S. skiers; even during the beginning of the Vietnam War, the "Unit" remained largely sheltered from deployment and even benefited from increased

[88] Stegen, *Unique and Unknown*, 17-18
[89] Stegen, *Unique and Unknown*, 18.
[90] Stegen, *Unique and Unknown*, 18.
[91] Stegen, *Unique and Unknown*, 18-19.
[92] Stegen, *Unique and Unknown*, 21.

recruitment due to the draft. However, as the war dragged on, regular soldiers started to push back against the special status of the USMWBTC and even the upper levels of military leadership began to lose interest. The final blow was the discontinuation of the military draft in 1972, which left the Army with limited access to their previous talent pool of experienced collegiate skiers.[93] As members of the "Unit" were discharged, the talent of the replacements slowly fell and in 1973, the entire senior U.S. World Championships team were former, not current members of the USMWBTC. The "Unit" was discontinued in the fall of 1973.[94]

However, the end of the USMWBTC was not the end of military involvement in U.S. biathlon. After hearing of the Army's plans to discontinue the USMWBTC, Vermont legislator Art Gibbs contacted the Adjunct General of the Vermont National Guard, Major General Reginal Cram, to suggest that the Vermont National Guard support a biathlon training program at the Ethan Allen Firing Range in Jericho, Vermont.[95] After a slow start, the National Guard biathlon program began to gain notice, particularly due to the 1980 Olympics hosted in Lake Placid, New York. Colonel Howard Buxton of the Vermont National Guard and the New York National Guard provided range and medical support for all biathlon events in the 1980 Olympics and in the process dramatically raised the profile of National Guard biathlon.[96] Perhaps the most important year in the transition of biathlon stewardship from the USMWBTC to the National Guard was 1986, the first time the National Guard program sent a team to the CISM games. This finally provided legitimacy and justification for the funding of the program and allowed it to

[93] Stegen, *Unique and Unknown*, 25-26.
[94] Stegen, *Unique and Unknown*, 28.
[95] Stegen, *Unique and Unknown*, 29.
[96] Stegen, *Unique and Unknown*, 31.

grow into a proper replacement for the "Unit." The trip also encouraged recruitment of talented athletes and development of facilities to promote growth to the program.[97]

The transition of jurisdiction of biathlon from the U.S. Army to the National Guard became official in 1988, when updated Army Regulations 215-2, Army Sports Program and 350-10 Training/Competitive Biathlon, gave the National Guard regulation of biathlon in the military.[98] The National Guard was now able to provide funding for athletes, equipment supplies and facilities, and develop and maintain state-level teams.[99] It became one of the first environments where athletes could be fully funded for being biathletes, with full-time training and housing provided. The Guard program also included full-time coaches and some of the best facilities in the country, including the Ethan Allen Firing Range which became the first facility in the country to have a dedicated roller ski loop connected to a shooting range, allowing athletes to perform skiing and shooting drills simultaneously during the summer months.[100]

The National Guard program was of particular importance during the late 20th century, as the newly developed U.S. Biathlon Association (USBA) struggled to find its place. Until 1981, biathlon in the United States had been officially governed by the United States Modern Pentathlon and Biathlon Association (USMPBA) although most of the practical work was done by the military. However, in 1978, the Amateur Sports Act was drafted by Ed Williams, Gary Johansson, and Mike Scott, which amended the corporate charter for the United States Olympic committee; in that amendment was the requirement that the USOC could charter only one National Governing Body per sport. Therefore, the USMPBA would have to be split into separate governing bodies for Modern Pentathlon and biathlon in order to remain in step with the

[97] Stegen, *Unique and Unknown*, 31.
[98] Stegen, *Unique and Unknown*, 32.
[99] Stegen, *Unique and Unknown*, 32-33.
[100] Stegen, *Unique and Unknown*, 33.

USOC.[101] The USBA was officially recognized as the new National Governing Body of U.S. biathlon by the UIPMB in 1981, with the aforementioned Howard Buxton as its head.[102] However, from its conception, the USBA had issues establishing effective funds to support athletes and during this time, the National Guard program provided an institution to fill the gap in funding for athlete development.[103] During this time, the National Guard Championships, which were held at either the Ethan Allen Firing Range in Vermont or at Camp Ripley in Minnesota, were the largest biathlon events in the country with over 125 competitors from 33 states.[104]

This began to change following the wars in Iraq and Afghanistan, beginning in 2001. The soldiers in the National Guard became a part of the largest activation of reserve troops for frontline combat operations since the Vietnam War, including those who were a part of the biathlon program.[105] The war cut back on the National Guard's commitment to funding and supporting the biathlon program and also made recruiting more of a challenge; athletes who might otherwise have considered joining the guard were now more wary of the possibility of being deployed to active duty.[106] Since athletes with the talent and physical capabilities to succeed at the international level in biathlon were rare in the typical soldier pool, the National Guard began to experience many of the same difficulties experienced by the USMWBTC after the end of the military draft in 1972.[107] Simultaneously, the USBA was developing funding resources to support athletes more completely, by signing title sponsorships with major

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[101] Stegen, *Unique and Unknown*, 44.
[102] Stegen, *Unique and Unknown*, 52.
[103] Stegen, *Unique and Unknown*, 33.
[104] Stegen, *Unique and Unknown*, 33.
[105] Matt Crawford, "Calm in Chaos After 9/11: U.S. Biathlon Forever Changed," *Cross-Country Skier,* Vol. 36, No. 2 (Jan-Feb 2017), 60.
[106] Crawford, "Calm in Chaos," 61.
[107] Stegen, *Unique and Unknown*, 35.

corporations including L.L. Bean from 1992-2002 and with TD BankNorth starting in 2005.[108] These changes not only led to a decrease in National Guard involvement in U.S. biathlon, but also a radical shift in understanding, especially among U.S. biathletes, as to the role of the military in biathlon in general and their place within the past of the sport, which will be addressed in the following chapters.

Chapter 3: Structural Post-Historicism and Biathlon

Part 1: Structural Post-Historicism

As has been noted, Post-Historical movement of biathlon occurs on two planes, structural and perceptual, and both are required for the sport to fully make the shift. This chapter will focus on the structural aspects that define Post-Historical movement in relation to the sport of biathlon. The structural aspects include tangible changes to the way the sport is managed, participated in, and organized, among other things. In the case of biathlon, this will be discussed by looking at a timeline of inflection points, rooted primarily in political, cultural, economic, and technological influences that have pushed the sport in a Post-Historical direction. In all cases, what we see is a transition away from a dependence on the military for both organizing and providing resources to make the sport possible and towards a model that is about elite or professional athleticism. As mentioned earlier, this does not mean that there is no trace of the military left in biathlon, but rather that the sport is not significantly dependent on the military to function successfully. While there are still pockets of military involvement in athlete development at the international level, as noted in Chapter 2, the sport is no longer a handmade military event, as Avery Brundage worried prior to the 1960 Olympic Games.[109] Even in Europe, where the military model has continued to hold more influence, more biathletes,

[108] Stegen, *Unique and Unknown*, 70, 78.
[109] Stegen, *Unique and Unknown*, 8.

particularly in the Scandinavian countries, are pursuing the sport as full-time athletes; in fact, no notable biathletes from Norway, Finland or Sweden have military professions listed.[110]

This chapter focuses on understanding the transition of the sport by looking at specific inflection points and what may have forces may have caused those to occur, be they political, cultural, economic, or technological. Significant inflection points occurred in 1960s-70s with the inclusion of the sport in the Olympic Games, and the additional developments that soon followed, changes in rifle technology that opened the door to non-military athletes, again in 1981-2006 with the development of the United States Biathlon Association and additionally in 2001 following the September 11 attacks on the World Trade Center in New York City. Since then, further changes to the competition program have occurred that continue the development of biathlon as an institution governed by the spectators and TV funding rather than military necessity.

Part 2: American Culture and Sporting Development

Today, large scale athletics may seem like a given part of American culture, politics, and economics. However, just 150 years ago the world of professional athletics had yet to emerge; in fact, participation in sports was largely an "oppositional culture" to the prevailing Victorian social norms of the time.[111] Almost exclusively the purview of bachelor men, engagement with athletics, either as a participant, spectator, or bettor, was a sector fundamentally apart from the propriety of middle-class society.[112] Only in very specific sporting communities or athletic clubs would the upper classes engage with the development of physical culture.[113]

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[110] "Athlete Profiles."
[111] Benjamin G. Rader, *American Sports: From the Age of Folk Games to the Age of Televised Sports, Sixth Edition,* (New Jersey: Pearson Education Inc., 2009), 27.
[112] Rader, *American Sports*, 28-29.
[113] Rader, *American Sports*, 67-68.

Between 1890 and 1950, this began to change due to a variety of reasons, one of which was the cultural retreat from the Victorian-era concern of the middle class with self-control and a search for greater excitement and self-fulfillment.[114] This was in part driven by burgeoning economic changes stimulated by a newly industrialized economy and the technological advances that came with it including electricity, the automobile, and, in general, a greater focus on consumer products. Wages (adjusted for inflation) and leisure time also increased, giving workers greater freedom to pursue personal interests that were previously constrained by both economic necessity and by traditional Victorian values.[115] Cultural and legal restrictions on amusement activities, including sports, began to fade which allowed athletics to become a part of daily cultural life in the United States, especially for the rapidly growing middle class.[116]

Around the same time sports such as football began to be introduced into the collegiate sphere, primarily in prestigious institutions such as Harvard, Yale, and Princeton.[117] These games eventually became frequented not only by students and alumni of the schools; they began to attract the attention of the upper classes, not as participants, but as highly engaged spectators. As class divisions continued to accentuate themselves during the late nineteenth and early twentieth centuries, connections to colleges became of increasing importance to those seeking to join the elite ranks.[118] Sporting events, particularly football became a means of establishing a connection between oneself and a prestigious institution, even if one had not attended the school; a notable example was that of Cornelius Vanderbilt, who religiously supported Yale during their annual clash with Princeton, despite never having attended any college himself.[119]

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[114] Rader, *American Sports*, 123.
[115] Rader, *American Sports*, 124-125.
[116] Rader, *American Sports*, 125.
[117] Rader, *American Sports*, 89-91.
[118] Rader, *American Sports*, 98.
[119] Rader, *American Sports*, 98.

Another development that began in the mid twentieth century was the increase in the number of athletic competitions that were televised. Fans at home became an even more important demographic than the fans at the events in person, and many sports saw changes, such as the imposition of arbitrary timeouts for television commercials, that were designed to improve the television revenue potential of the competition.[120] It also increased the nationalization and even globalization of sports: in order to succeed, sports and leagues needed to be able to appeal to a broad audience to attract television revenues and the sports themselves were adapted to better suit this model.[121] The increased visibility of sports also led to greater corporate sponsorship of events (such as the Gillette Safety Razor Co. prizefights at Madison Square Garden in the 1940s) which would eventually become the norm and usher significantly more money into professional athletics than had been seen before.[122]

While these forces made biathlon possible, the sport did not really emerge in the U.S. until the 1940s. While the rise of televised sports and corporate sponsorship has played a significant role in its growth and transition, most of the sport's early development came from within the military. In fact, without the U.S. Army biathlon program, first at Camp Hale, then at Camp Richardson, and finally through the National Guard, there likely would not be a U.S. biathlon program today. However, biathlon was not the only sport that has roots in the military. Many other sports, including those such as football, baseball and boxing all were accepted and employed by the military, and that process continued to bring those sports to the forefront of American consciousness.

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[120] Rader, *American Sports*, 245.
[121] Rader, *American Sports*, 246.
[122] Rader, *American Sports*, 256-247.

Part 3: The Development of Military Athletics

While all of the above are important parts of the development of athletics in the United States, the military also played a significant role in the development of professional athletics, especially in the case of biathlon, as the sport was all but built by military institutions. The military and athletics have long been tied together and some, including historian Stephan Pope, argue that it was sponsorship by a legitimate, governmental organization such as the military that truly brought organized athletics to the forefront of American consciousness and society.[123] This transformation began during the late 19th and early 20th centuries, during the Spanish-American War and World War I. Initially, athletics were used by the military to combat the lures of alcohol, prostitution and desertion and later were further encouraged as a means of promoting "soldierly values" such as national vitality, citizenship, and martial spirit.[124] Prior to 1890, sports were not integrated into either civilian or military life; in fact, some sports that would become immensely popular, such as boxing, were illegal at the time as mentioned earlier. Usage by the military helped to reshape perceptions of such activities from crass, lower class amusement to patriotic virtue, bringing them into the public view in a positive light.

Another significant part of the growth of military sport was the introduction of athletics into the U.S. service academies during the 1890s, around the same time that other prestigious higher education institutions were seeing an increased interest in sports. Unlike in higher education more generally, these institutions have become less important as developers of elite athletes over the course of the last seventy-five years, and even more rapidly in the last two to three decades. However, it was in the military academies where a link between the physical

[123] Steven W. Pope, "An Army of Athletes: Playing Fields, Battlefields and the American Military Sporting Experience, 1890-1920," *The Journal of American Military History,* Vol. 59, No. 3 (July 1995): 436.
[124] Pope, "An Army of Athletes," 436.

fitness acquired through athletic training and the physical capacity of soldiers was first fully realized. West Point graduate Edmund L. Butts of the Class of 1888 stated in multiple articles that athletics could produce "hardened veterans, on whom the safety of the nation could depend."[125] The football and baseball teams from these academies rapidly became competitive and well regarded; in 1895, Caspar Whitney wrote, "No other institution in the United States more thoroughly demonstrates the *mens sana in corpore sano* in college sport than these two [West Point and Annapolis football programs]."[126] Just ten years after the introduction of athletics to the service academies, 50 percent of the cadets participated in at least one sport and the other half were avid spectators and fans.[127]

As these cadets graduated and began to chafe at the dullness of military life, the Army and Navy began to employ athletics both as a means of developing physical fitness and preventing desertion and vice among their ranks. The Army tapped into the expertise of the YMCA to develop the activities of troops, 75 percent of which were stationed at camps managed by the "Y" prior to the war.[128] Directors blended physical activity with nationalism, patriotism and Christian values designed to prepare an effective and obedient fighting force. Gymnastic skills, throwing a baseball, boxing and wrestling all held combat equivalents that needed to be developed in enlisted men and sports proved to be an effective means of doing so. Even outside of the military ranks themselves, the need for physical prowess was expanding due to the war effort. Washington and Jefferson football coach Sol Metzger wrote, "I regard participating in

[125] Pope, "An Army of Athletes," 440.
[126] Pope, "An Army of Athletes," 439.
[127] Pope, "An Army of Athletes," 440.
[128] Pope, "An Army of Athletes," 442.

athletics now the patriotic duty of the student, in that training and preparation make him of far greater value to the country than if he did not have them."[129]

Following the conclusion of World War I, the efforts of the military to adopt and expand athletic participation proved to have radically changed the American sporting landscape. Having once been associated with "lower-class immorality and crass professionalism," physical prowess and the competitive spirit were rebranded as not only acceptable but morally beneficial for encouraging proper civic behavior and patriotic. As Pope writes, "These civics lessons were not lost on the majority of Americans, who overwhelmingly acknowledge the legitimacy of military institutions. For them, military enthusiasm for organized sport was cause enough for popular acceptance and appreciation."[130]

While biathlon emerged onto the sporting scene in the United States somewhat later than many of the sports mentioned above, it may well hold the claim to being one of the most hand-built sports for military purposes; its transition to civilian inclusion also occurred much later than most others, which had largely been created in civilian circles and later popularized and legitimized by their usage by the U.S. military, among other factors. For essentially the duration of its existence, biathlon has been closely linked to the military; Matt Crawford, writing for the Cross-Country Skier Magazine, even stated, "It's not a stretch to say that without the support of the U.S. military throughout the years, there would not be much of a U.S. biathlon story."[131] That relationship has continued, even after the U.S. Army formally gave up control of the U.S. biathlon program in 1973, primarily through the Vermont National Guard based in Jericho, Vermont. Former U.S. Biathlete Marc Sheppard, who competed from 1992-2006 noted, "When

[129] Pope, "An Army of Athletes," 444-445.
[130] Pope, "An Army of Athletes," 456.
[131] Crawford, "Calm in Chaos," 58.

I started in 1992 and was just getting out of high school, if you wanted to be trained and compete in biathlon, the best way to do it was [through] the Guard."[132]

Besides intensive training, travel, and high-performance expectations, elite biathletes face another significant challenge: funding. Unlike some more notable professional sports in the United States, the prospect of signing a guaranteed contract is virtually nonexistent for U.S. biathletes and athletes frequently depend on sponsorships and even part-time jobs to pay their way, especially in the early days of their careers. The National Guard provided and continues to provide as solution to these challenges by providing athletes with funding, coaching, and training facilities. Max Cobb, the CEO and President of the U.S. Biathlon Association has noted that "The Guard program at its peak was big for the sport… There was really robust support for the athletes. The Guard provided an almost-livable wage for athletes, the facilities they needed to train, and it provided the manpower for hosting events."[133]

While aspiring biathletes have more options today when it comes to finding sources of support, the Guard program is still available and some still choose to take that route. One current National Guard biathlete noted that he no longer has to work multiple jobs or ask for funding in order to continue competing and emphasized that the opportunities granted to him by the Guard changed the course of his biathlon career entirely.[134] Another described how the Guard gave him "support, structure, confidence and a path for after [biathlon]…" and kept him in the sport longer.[135] One non-National Guard athlete stated that she was glad to have had the option to compete for either a military or civilian program (she has never been a member of the U.S. military and currently competes for an elite biathlon club), but that if she were a young athlete

[132] Crawford, "Calm in Chaos," 59.
[133] Crawford, "Calm in Chaos," 59.
[134] Male Athlete 2 (Survey), in survey conducted by author, June 2020.
[135] Male Athlete 3 (Survey), in survey conducted by author, June 2020.

today in the early stages of her career, that she would be more open-minded about the military option and the advantages offered by the Guard. It would appear that she is not alone in that assessment as multiple athletes already at the National Team level have chosen to join the National Guard in recent years.[136]

Internationally, the shadow of the military also remains very much across the support and development of biathletes. Teams such as Germany, France, Italy, and Austria start athletes whose listed professions include soldier, customs or border officer and police.[137] From the outside, it is unclear as to how many of these athletes are required to perform military duties beyond their athletic training and to what degree their military affiliation is a priority, though internationally experienced U.S. biathletes have indicated that they believe the military responsibilities of elite biathletes in these countries are largely superficial.[138] Nonetheless, it is clear that national militaries and security forces maintain a presence at the international level in biathlon, largely by filling a funding void and paying the salaries of athletes.[139] One athlete even noted that she feels as though she, as a civilian athlete, is to some degree in the minority at international competitions, while U.S. domestic races tend to feel as though there less of a military presence.[140]

However, while the military might lay a claim to the foundations of elite athletics, the grip that they exerted on sport has slowly but consistently dwindled, and nowhere is that clearer than in biathlon, a sport not just co-opted by the military but actually developed for the purposes of military exercise. This shift has occurred so thoroughly that it might even be broadly defined

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[136] Female Athlete 2 (Interview), in discussion with author, July 29, 2020.
[137] "Athlete Profiles," International Biathlon Union, 1999-2021, https://www.biathlonworld.com/athletes.
[138] Female Athlete 1 (Interview), Female Athlete 2 (Interview), in discussion with author, July 13, 2020 and July 29, 2020.
[139] Female Athlete 2 (Interview), in discussion with author, July 29, 2020.
[140] Female Athlete 2 (Interview), in discussion with author, July 29, 2020.

as “Post-Historical:” the idea that the military model of the sport has become so divorced from the present that it will never challenge the elite civilian model for primacy in the competitive sphere. Essentially, biathlon, and perhaps other sports with it, have taken on a life beyond the bounds of the military and become a sport in itself, without regard for its past.

Part 4: Political Changes Via the Olympic movement

One of the most notable places the Post-Historical transition can be seen is in the modern international competition model and the goals behind the competitions and organizations that run them. First developed as a military exercise, the early iterations of the sport, including the Military Patrol and early versions of the individual competition, reflected these goals. As the sport evolved, changes were made to the competition program with the intention of making it more friendly to spectators and eventually television audiences. These changes happened first with the introduction of biathlon into the Olympics in 1960 and continued with the introduction of the relay and sprint competitions in 1966 and 1976 respectively and eventually the inclusion of the pursuit and mass start competitions in 1997 and 1999. More recently, new formats have been tested, including the mass start 60, super sprint and single-mixed relay, that are designed to make racing more exciting for spectators. At the same time, there has been discussion about removing the individual competition, which has seen a reduced number of events in recent years, completely from the program. These adaptations reflect the changing goals of the sport and its transition away from a military product to an elite sport designed for spectator consumption.

While biathlon was first introduced under its modern name at the 1958 World Championships and 1960 Winter Olympic Games, international competitions had been held previously, both under the “Military Patrol” title at the 1924-1948 Olympic Games, which was developed primarily as a military exercise for mountain and cold weather troops to test

themselves. The sport itself certainly looks vastly different than its original counterpart from the 1958 World Championships or the 1960 Winter Olympic Games and even more different than its estranged sibling, the Military Patrol. Military Patrol teams for the event consisted of four soldiers and one officer; each of the soldiers carried a backpack, military rifle and eight kilograms of equipment, while the officer was outfitted with a pistol. The total race was 30 kilometers in length and while the officer did not shoot on the range, he directed the soldiers in shooting at targets up to 200 meters away. The event was contested at only four Olympic Games: 1924, 1928, 1936 and 1948, with the Games being suspended in 1940 and 1944 due to World War II. After 1948, the event was dropped from the Olympic program due to the fact that only military personal could participate and a general anti-war sentiment at the time.[141] However, the patrol competition is still a part of both the CISM games and U.S. National Guard Championships.[142]

The first biathlon races to be held under that name consisted of an individual start, 20-kilometer race in the classical style (the only technique available at the time) on a single 20k loop, with four ranges interspersed throughout at roughly equivalent intervals. At each range, the racers would have five shots to try to hit an equal number of targets; at three of the ranges, with target distances measuring 250, 200, and 150 meters, the athletes would shoot from the prone position, while the fourth range, with a target distance of 100 meters, would be contested from the standing position.[143] Large bore, centerfire rifles were used for the shooting and a missed shot resulted in a time penalty of two minutes being added to the athlete's total race time.[144] This competition model has changed substantially since its introduction in the mid-20th

[141] Stegen, *Unique and Unknown,* 5.
[142] Female Athlete 1 (Interview), in discussion with author, July 13, 2020.
[143] Stegen, *Unique and Unknown,* 9.
[144] Stegen, *Unique and Unknown,* 9.

century. The individual no longer employs a single loop with multiple ranges, but a lap-based course with a single range, at which the athletes alternate between prone and standing shooting bouts, at targets 50 meters away and the time penalty for missed shots was reduced to one minute rather than two.[145]

The development of biathlon in this form owes a significant amount to both the political climate of Europe at the time and the willingness of UIPMB president Sven Thofelt to adjust to those political realities. Following World War II, the political climate across Europe was distinctly anti-military; the military patrol competition was removed from the Olympic Games primarily on grounds that it too explicitly condoned military sentiments and any event of a similar nature, including biathlon, that sought inclusion in the games faced an uphill struggle. These feelings were particularly expressed by then-IOC president Avery Brundage, who believed (not incorrectly) that an event such as biathlon would be almost exclusively practiced by members of national militaries and that Olympic events should be open to all qualified participants. He also argued that due to the creation of the CISM games in 1953, biathlon already had its own form of international competition under military jurisdiction and did not need to be a part of the Olympics.[146] Thofelt then shifted his argument by describing to Brundage how skis were an important survival tool for many northern people and how the sport could carry on those legacies; apparently swayed by these ideas, Brundage acquiesced to the idea of including biathlon.[147] It would not be unreasonable to state that this debate was the birth of biathlon's Post-Historical transition, driven by the political climate of the time, and Thofelt's willingness and ability to adapt to those political and cultural directives.

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[145] "Competition Descriptions."
[146] Stegen, *Unique and Unknown,* 8.
[147] Stegen, *Unique and Unknown,* 8.

This was not, however, the end of biathlon's challenges due to cultural and political expectations surrounding the Olympic Games. Despite a successful Olympic debut in 1960, the same political climate that had led to the demise of the military patrol and almost inhibited the introduction of biathlon again resurfaced. At the 1960 IOC session in Rome, the question of whether biathlon should remain on the Olympic program was raised once again. At the 1964 IOC session in Innsbrück, a vote was taken to include biathlon on the next Olympic program but only on the condition that the UIPMB made the sport "more interesting" and a better spectacle for viewers and organizers.[148] As a result, the relay competition was introduced in 1966 and comprised four legs; each athlete completed a total of 7.5 kilometers with two bouts of shooting, one prone, one standing. The targets were immediate response (usually balloons or glass) and for each missed shot the athlete had to complete a penalty lap of 200 meters (later reduced to 150, as it currently stands). However, athletes carried an extra three rounds of ammunition per shooting bout that could be individually loaded to try to hit targets missed by the first five shots. If those rounds were expended and targets remained standing, the athlete would have to complete a penalty lap(s).[149]

In 1974, another race format, called the sprint, was added to the competition program. The sprint was modeled after the relay, but as an individual competition in which athletes started 1 minute apart. They would ski a total of 10 kilometers with two rounds of shooting, one prone, one standing, with immediate response targets, just as in the relay, but without the spare rounds. For each missed shot, the athletes would have to complete a 150-meter penalty lap.[150] The elimination of the Military Patrol in virtually all international competitions, the reconfiguration

[148] Stegen, *Unique and Unknown,* 9.
[149] Frank, *Everyone to Skis,* 132.
[150] Frank, *Everyone to Skis,* 132.

of the individual race and the addition of the relay and sprint races signaled the beginning of a profound shift in the purpose of biathlon; all of the changes turned the focus of biathlon racing from a military exercise designed to keep soldiers in shape or demonstrate military prowess, to an exciting sport designed make the races more interesting to watch and to capture the attention of the public. These trends would continue and expand, especially during the late 20th and the early 21st centuries as biathlon began to cement itself solidly as a Post-Historical sporting activity.

Part 5: Technology and Rifle Availability

In the 1970s, the technology of the sport also changed and consequently influenced biathlon in a Post-Historical direction. A crucial adjustment was the transition from large-bore .243 caliber rifles to .223 caliber high-velocity rifles to the current standard, .22 caliber small-bore, rimfire rifles. When the individual race was changed from a single loop with four ranges to a five-loop race with a single range, the distances of the targets also became shorter and therefore, many teams switched to the .223 rifles rather than the old .243, as they were lighter and had less recoil while also maintaining a high exit velocity of the bullet.[151] When the UIPMB changed the target distance yet again in 1978, this time decreasing it from 150 meters to just 50 meters, the majority of athletes transitioned to using .22 caliber rimfire rifles, which were lighter and faster to load, but also had a much slower exit velocity.[152] This transition was both a cause and an effect of biathlon's Post-Historical journey; it was an effect of the transition towards a spectator sport but also helped to expand the sport to more of the general public. The early large-bore rifles were primarily military stock and very heavy, with significant recoil and discharge noise that required hearing protection. Additionally, it was difficult to get licenses for

[151] Stegen, *Unique and Unknown*, 261.
[152] Stegen, *Unique and Unknown*, 262.

such rifles outside of the military, and there were virtually no training facilities or ability to procure such ammunition for civilian athletes, which largely precluded them from training and competing.[153] The change to more popular small-bore rifles by the UIPMB helped to broaden the participant base of the sport and develop beyond just a niche military activity.[154]

Part 6: Economics and Athlete Support

The transition of biathlon also was impacted by a force that exerts influence in almost every sphere imaginable: money. Both at the institutional level and the individual level economic support and funding has been a challenge for many biathletes and biathlon organizations in the United States, and for a great part of the history of the sport in the U.S., it was the military that provided those resources. This began to change as amateurism rules were lifted for international competition and both organizations and individual athletes were able to sign sponsorship deals that allowed them to cover costs of training, racing, travel, equipment, and daily life without relying on military funding or resources.

Until 1973, development of U.S. biathletes was almost exclusively the role of the United States Army through the USMWBTC program in Alaska. When the military draft was discontinued, the incoming talent base for the USMWBTC dried up and the program was eventually shut down and in 1974, the transition was made to the Vermont National Guard as the primary biathlon program in the country. While the United States Biathlon Association was officially created in 1981 (having been a part of the United States Modern Pentathlon and Biathlon Association since 1966), the USBA struggled with funding and supporting athletes during much of its early existence and the National Guard program was employed to fill in the

[153] Stegen, *Unique and Unknown*, 132.
[154] Stegen, *Unique and Unknown*, 144.

void.[155] By 1989, some 80 percent of the USBA's budget was provided by the U.S. Olympic Committee, money that was largely allocated based on performance at Olympic Games.[156] Given the small size of the U.S. program and aggressive European development of the sport, top results and medals were scarce at the Olympic level (to this date the United States has yet to win an Olympic medal in biathlon, though Susan Dunklee, Tim Burke and Lowell Bailey have all medaled at World Championships), which created a vicious cycle in which poor results led to limited funding, which in turn limited the support needed to garner better results.[157] Most of this funding went to already established elite athletes, which left little in the way of long-term development available for younger, up-and-coming athletes and development programs, aside from the self-funded National Guard.[158]

Slowly, the USBA began to correct these funding shortfalls, mostly through the signing of corporate sponsorship deals, first with L.L. Bean from 1992-2002, and then new deals made with the Libra Foundation and T.D. BankNorth as a title sponsor in 2005.[159] Coupled with internal changes to the leadership structure of USBA to better serve the needs of those competing, athletes began to have both more confidence in the United States Biathlon Association and receive enough funding from the organization to allow them to train and compete as full-time athletes, making 2006 one of the critical turning points in the development of U.S. biathlon.[160] A military career was no longer a requirement for a biathlon career, something that was only achieved with the stability of a national governing organization such as USBA capable of properly funding its athletes.

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[155] Stegen, *Unique and Unknown*, 33.
[156] Stegen, *Unique and Unknown*, 59.
[157] Stegen, *Unique and Unknown*, 45.
[158] Stegen, *Unique and Unknown*, 63.
[159] Stegen, *Unique and Unknown*, 78.
[160] Stegen, *Unique and Unknown*, 80.

Additionally, the rules for individual athlete sponsorship also changed in 1974 when the word "amateur" was removed from the Olympic charter. This followed the departure of the aforementioned IOC president Avery Brundage, who was a fierce opponent of allowing professionalism to creep into the Olympic games.[161] However, his departure coupled with the growing cultural popularity of sports and a growing consumer goods market (both of which incentivized corporate advertising through athletics), individual sponsorships became possible for athletes and led to a growing number of professional civilian athletes capable of supporting themselves while training full time. Athletes representing the United States at the international level wear sponsor patches on their uniforms that depict the title sponsors of the United States Biathlon Association; when competing for an elite team, in the team uniform, the patches would represent the elite program's sponsors, etc.

In addition, there are three main other forms of sponsors an individual athlete can carry: hard goods, headgear, and non-marking.[162] Hard goods typically consist of equipment: skis, boots, poles, eyewear, and in the case of biathletes, a rifle. Sometimes teams have affiliations with particular brands, but generally it is left to the athletes to decide which brand is the best fit for them and to sign an individual sponsor deal with that brand.[163] Equipment is an essential part of the sport and having a good relationship with a hard goods sponsor is critical for high level success. Some athletes also will have financial sponsorship from their hard good sponsors, by appearing in advertisements and at sponsor events, beyond just using the sponsor's equipment on the racecourse. The second type of critical sponsorship is the headgear sponsor. This is a sponsorship patch worn on whatever type of headgear the athlete is wearing and occupies a

[161] Leigh Augustine-Schlossinger, "Legal Considerations for Sponsorship Contracts of Olympic Athletes," *Villanova Sports & Entertainment Law Journal*, Vol. 10, No. 2 (2003): 283.
[162] Augustine-Schlossinger, "Legal Considerations for Sponsorship," 287-288.
[163] Augustine-Schlossinger, "Legal Considerations for Sponsorship," 287.

prime area of advertising real estate for television, as it will be visible virtually any time the athlete is on camera.[164] Additionally, that sponsor does not need to be a title sponsor of their governing organization, meaning the athlete is free to sell the space to the highest bidder. Finally, there is a non-marking sponsorship in which the athlete partners with the organization but does not wear a sponsor patch during competition. Instead they may appear in advertisements or promote sponsor goods through social media or other sources in exchange for the company's support.[165]

The decline of amateurism and the freedom of athletes and governing bodies to sign sponsorship contracts with corporate and commercial entities provided a means for biathletes to pursue careers in the sport as professionals. While many receive support from the USBA and their elite teams, it is the ability to sign independent contracts with sponsors that allow them to cover the costs of not only training and racing but also their general costs of living. With additional funding opportunities opened up, the necessity of military biathlon programs decreased and with it, the number of athletes choosing to take the military route to pursue elite or international-level biathlon competition.

Part 7: The Effects of September 11, 2001

While military organizations continue to sponsor biathletes internationally and the National Guard maintains a presence in U.S. biathlon, it does not do so to the same extent as it did prior to the events of September 11, 2001. Until 1973, biathlon in the United States was virtually exclusively under the auspices of the U.S. Army, with athletes trained at Fort Richardson in Alaska. After the Vermont National Guard took over responsibility for the

[164] Augustine-Schlossinger, "Legal Considerations for Sponsorship," 288.
[165] Augustine-Schlossinger, "Legal Considerations for Sponsorship," 288.

military biathlon program in 1973, it rapidly became the most popular route for U.S. biathletes to pursue their careers into the 1990s.[166]

The attacks of September 11, 2001 proved to be a major turning point in the Post-Historical development of biathlon and the National Guard biathlon program, like many American institutions, was upended by the attacks on the World Trade Center in New York City. The stage had already been set for a transition away from National Guard patronage in the late 1990s, as the United States Olympic Committee earmarked funding for biathlon and the United States Biathlon Association gained influence and financial stability. However, it was 9/11 that accelerated the transition of U.S. biathlon towards a civilian based model. In the wake of the attacks, soldiers in the National Guard, including those in the biathlon program, were part of the largest activation of National Guard troops to active-duty, frontline combat operations since the Vietnam War. "There's an understanding if you join the National Guard that you're a soldier… the biathlon program is a special program, but it has always been part of the contract that if you were coming into the National Guard, you were coming in not just to be an athlete, but to be a soldier" says Staff Sargent Sarah Lehto, a former National Guard athlete who also served as the head biathlon trainer for the Guard.[167] Nonetheless, many athletes were surprised by the activations, something that many who had joined for the athletic benefits of the program may not have seriously considered, given the history of the Guard after Vietnam. USBA CEO Max Cobb noted that it was during the post-9/11 years that the focus of the National Guard was directed away from its biathlon program and other programs were needed to step in to fill the void. He also admits that "It probably diminished recruiting a little bit, too."[168] This became apparent

[166] Crawford, "Calm in Chaos," 59-60.
[167] Crawford, "Calm in Chaos," 60-61.
[168] Crawford, "Calm in Chaos," 61.

only five years later at the 2006 Turin Olympics where, out of ten biathletes on the U.S. Olympic roster, only Spc. Jeremy Teela was still a member of the National Guard (Teela would go on to finish 9th in the 10-kilometer sprint in those Olympics, which remains the best Olympic finish by an American biathlete to date.)[169]

This is not to say that the National Guard no longer plays a role in biathlon in the United States. Spc. Jordan McElroy, of the Vermont National Guard states, "The Guard is never going to get entirely out of biathlon… it started in Scandinavia to enhance the military experience and, for the Guard, I think those type[s] of soldiers bring an added benefit. The caliber of soldier that has the commitment to a demanding sport like biathlon is pretty high."[170] Cobb agrees. He notes that some of the best biathlon facilities in the country are located at National Guard sites, namely the Ethan Allen Firing Range in Vermont and Camp Ripley in Minnesota and that having the Guard as a development program is a good thing for the overall improvement of U.S. Biathlon, even if it is not the same dominant force that it used to be. "We continue to have a close working relationship with the National Guard," says Cobb. "How could we not? In so many ways the sport has this debt of gratitude for the Vermont National Guard in particular, and the entire National Guard in general, for really being the guiding light on this sport for so many years."[171] Nonetheless, the events of 9/11 marked a significant shift in U.S. biathlon policy and athlete development as the sport moved away from utilizing the National Guard as a pipeline for elite caliber biathletes, a trend that has continued through the present day. While the Guard has not been fully disconnected from the sport in the United States, it is far from the critical resource it was prior to 2001.

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[169] Crawford, "Calm in Chaos," 61.
[170] Crawford, "Calm in Chaos," 61.
[171] Crawford, "Calm in Chaos," 63.

In the nearly two decades following the activations, more athletes are pursuing the option to compete for elite biathlon teams rather than for the National Guard Program. This trend can be clearly observed by looking at the trajectory of the percentage of Olympic biathlon teams composed of National Guard athletes. At the Nagano games of 1998, 62.5 percent of the team was composed of national guard members. By 2010, nine years after the events of 9/11, that number had dropped to just 10 percent, and by the Sochi games of 2014 there were no National Guard athletes on the U.S. Olympic biathlon roster.[172] Further, only one athlete who represented the United States at the most recent World Military Ski Championships hosted by CISM in Austria in 2018, has had any experience on the IBU World Cup or World Championships, indicating that there are fewer National Guard Athletes competing at the top levels of the sport than there were prior to the post-9/11 activations.[173] While there have been some notable additions to the National Guard roster in recent years, including Sean Dohoroty, Leif Nordgren and Deedra Irwin, most joined the guard while already established on the USBA roster rather than moving through the National Guard development process. Why these increases have occurred is unclear; there are many reasons, including natural fluctuations in numbers or possibly given that it has been almost two decades since the post-9/11 activations that they are no longer as significant an influence as they were during the 2000's.

This decrease in National Guard athletes participating at high levels in U.S. biathlon is coupled with an increase in available professional elite-team programs, with the Craftsbury Green Racing Project, New York Ski Education Foundation, Auburn Ski Club and others expanding their teams and the emergence of new programs such as the Crosscut Elite Team,

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[172] Stegen, *Unique and Unknown*, 33-36.

[173] "54th WMC Skiing 2018- Hochfilzen/Feiberbrunn (AUT)- Update- Competition Day 1," International Military Sports Council Media Department, April 6, 2018, https://www.milsport.one/news/skiiing/54th-wmc-skiing-2018-hochfilzen-fieberbrunn-aut-update-competition-day-1.

which is based out of Bozeman, Montana and emerged in 2018, among others. This trend was prevalent in survey responses as well. Slightly more than 10 percent of returned surveys were from individuals who were either currently or formally associated with the National Guard biathlon program and those who were associated with the Guard tended to emphasize the financial and resource benefits from joining the Guard over any sort of historical precedent or feelings of legacy. They also indicated that while the history could be interesting and a good thing to be able to share with others, it had little to no impact on the success of a modern athlete and forward progress was more important than looking back as an athlete.[174]

Part 8: Modern Competition Discipline Changes

While the format of individual, sprint and relay competitions dominated the sport for a significant period, more changes have been introduced that have further pushed the sport into a Post-Historical state driven largely by the needs of spectators and lucrative television contracts for the International Biathlon Union. Unlike the first format developments that were intended to keep the sport relevant in an anti-military Olympic climate, the more recent changes have stemmed largely from economic considerations of the IBU. The IBU holds the exclusive authority to sell broadcast rights to other networks and therefore has a strong incentive to make their contests as popular and highly watched as possible. One of the most effective means of doing this is to increase the uncertainty of the outcome during the event, a tactic that typically employs shorter races and competitions where the first person across the finish line wins.[175]

The inclusion of events such as the pursuit and mass start, which were first added to the World Championships program in 1997 and 1999 respectively, were designed to make the sport

[174] Male Athlete 2 (Survey) and Male Athlete 3 (Survey), in survey conducted by author, June 2020.

[175] Harry Arne Solberg, Dag Viter Hanstad, Kari Steen-Johnsen, "The Challenges of Producing Popular Sporting Contests: A Comparative Study of Biathlon and Cross-Country Skiing," *International Journal of Sports Marketing and Sponsorship* (2009): 184.

more attractive to viewers; as former Norwegian cross-country skier Vegard Ulveng notes, "A mass start is easier to watch in a superficial way, while individual start requires more concentration."[176] Both the mass start and pursuit are real-time races, meaning the leader at any given point is the leader of the race, which is not the case in interval start competitions such as the individual or the sprint and are significantly easier for a casual observer to follow. Other spectator-friendly formats have been added recently, including the mixed relay in 2005 and the single mixed relay in 2015 and other formats such as the super sprint and mass start 60 (typical mass start competitions only involve 30 athletes, the same as the number of firing points on a standard range) have also been tested on the IBU Cup during the 2019/2020 season.[177] All of these events are designed to improve viewership of IBU competitions, demonstrating a change directed by the financial considerations of the IBU and spectator interest rather than historical precedent.

Additionally, the CISM games have become virtually obsolete, even to the most passionate biathlon enthusiasts. The decrease in active military participation in biathlon can be seen as part of the reason for the decreased importance of the CISM games. While they still exist, there is virtually no media coverage, and few athletes seem to consider them to be an important part of international competition anymore; some even go as far as to describe them as performative or archaic. "…Biathlon is, true biathlon is the World Cup, right?" says one current athlete. "I think it used to be these military games… they're trying to hold onto something that maybe was where the identity of biathlon was before and it has really shifted to this world stage;

[176] Solberg, Hanstad, and Steen-Johnsen, "The Challenges of Producing Popular Sporting Contests": A Comparative Study of Cross-Country Skiing and Biathlon," 184.

[177] "Calendar 2019-20," International Biathlon Union, 2019-2020, https://www.biathlonworld.com/calendar/season/1920/

it's a sport in and of itself [now]…"[178] The First U.S. biathlon team to engage in international competition was at the CISM games in 1957.[179] While it is difficult to pin down the exact point at which the importance of military competitions such as CISM decreased, the change is clear; as was mentioned above, only one athlete who competed for the United States in the CISM games in 2018 had significant international racing experience. This shift is indicative of the transition to Post-Historical biathlon, in which the sport is divorced from its roots, mostly in the form of political, cultural, economic, and even some technological changes. The competitions have shifted away from a military model as seen in the CISM games and towards an international competitive model that is run by civilian organizations (the IBU and IOC) for the sole purpose of athletic competition (and revenue), with an increasing number of competitors in civilian occupations, for a primarily civilian audience.

Chapter 4: Perceptual Post-Historicism and Biathlon

Part 1: Perceptual Post-Historicism

Chapter 4 discussed the ways in which the modern sport of biathlon has entered a Post-Historical era, largely focusing on the structural concepts of athlete development and competition structure. However, Post-Historical movement requires more than just structural change to be present; it also requires that the participants understand that they are somehow differentiated from their predecessors. In the case of biathlon, there has also been a recent conceptual consensus that the sport they are participating in, and by extension themselves as athletes, are somehow different and separate from the historical notion of biathlon. I chose to refer to this thesis as "An Athlete's History of the Sport of Biathlon" as a means of foregrounding the voices of a very unique set of individuals in any historical setting: those who

[178] Female Athlete 1 (Interview), in discussion with author, July 13, 2020.
[179] Stegen, *Unique and Unknown*, 98.

are active participants in the continuation of that history. These voices do not always align with some of the other sources I use in this thesis- that is fine. I instead try to look at how their understanding of the past shapes their identity and vice versa, and whether it is an acceptance of or just as frequently, as we will see, a rejection of that past. Within biathlon, these understandings and separations from the sport's past seem to fall into one of three categories: the experience of female-identifying athletes, notions of militarism and gun culture and a broader sense that history in general is not relevant to the improvement of an athlete in the present. The history (and Post-History) has been established, but there is, generally, a self-separation of modern biathletes from the past of their sport, in addition to the Post-Historical trends at the structural level. Additionally, I will attempt to find some thread that connects these athletes to each other, along with how the distinguish themselves from those of the past.

Another important note is that the perceptual component of Post-History is dependent to a great extent on postmodernist thought that allows for the creation of histories on multiple levels. The notion of a "universal truth" of history places the creation of history solely into the hands of professionals and denies an individual understanding of past events and one's place in them; it is necessary, therefore, to allow for "histories from below" as Maza puts it, in order to fully see a Post-Historical transition occur.[180]

Part 2: Athlete Perceptions of Modern Biathlon

Understandings and interpretations of the past by those currently involved in the sport are important to the shaping of what these athletes refer to as "modern biathlon" and what I refer to as Post-Historical biathlon. Sports can change on a variety of levels; in the previous chapter, the structural level of systems including competition design, governance, funding, and organization

[180] Maza, *Thinking About History,* 203.

were discussed. Here, we narrow the picture down to the understandings of the athletes themselves, who find themselves in the unique position of participating in a relatively unbroken chain of events, from past through the present. In an interview, one athlete stated that she thought that "This generation is very much like modern biathlon… not futuristic but compared to what they were doing in the 90s even, it's very different."[181] Others mentioned that the World Cup and World Championships were "real biathlon" and that remnants from the military model of competition such as the CISM games were merely "archaic and performative."[182] Current athletes and other members of today's biathlon community have corroborated this idea of a shift to what might be called modern biathlon. "I do think we're kind of in more modern ski racing that is definitely a lot different than when biathlon started, and I do think it will continue to improve, but I'm not sure it can improve as much of a difference as it was in the '90s, if that makes sense." Says one athlete. "Not as big a jump, but it will still improve year to year…"[183] Carl Theriault, the president of the Fort Kent Outdoor Center, which hosted biathlon World Cups in both 2004 and 2011, agrees. "I looked at some of the footage we have… of the '04 World Cup." Says Theriault. "…I would have to say that the techniques used by athletes have really been an evolution rather than a revolution… it's just refine, refine, refine…"[184] Five-time Olympic gold medalist Ole Einer Bjørndalen stated in 2009, "…biathlon has gone through a rapid development during the last 10-15 years. As for the competition program, I believe we have found a lasting design. There should not be change for the sake of change."[185] The consensus among these athletes seems to be that the sport has experienced radical change, and

[181] Female Athlete 4 (Interview), in discussion with author, July 7, 2020.
[182] Female Athlete 1 (Interview), in discussion with author, July 13, 2020.
[183] Female Athlete 4 (Interview), in discussion with author, July 7, 2020.
[184] Carl Theriault, in discussion with author, July 21, 2020.
[185] Solberg, Hanstad and Steen-Johnsen, "The Challenges of Producing Popular Sports Contests," 185.

though it continues to change over time, these do not represent the same fundamental, systematic changes that biathlon's separation from its original military model did and that such extensive change is no longer needed. The question then becomes, how and why do the athletes of today seem separate themselves from those of yesterday?

Put simply, it appears that many modern biathletes hold little belief that the history of the sport has much of any bearing on the sport as it currently exists. When asked to rate the importance of knowing the history of the sport on a 1-5 scale (with 5 being "very important" and 1 being "not important at all") none gave a rating above a 3, or "moderately important." Of the responses, six gave a rating of 2 ("slightly important") and one gave a rating of 1 ("not important at all"). This was true even of those individuals who rated their knowledge of the history of the sport as being "high" or "very high." While this survey was far from comprehensive, it encompassed athletes and coaches of a wide variety of genders, ages, programs, roles, and geographic locations and all showed the same belief that the past was, at best, moderately influential in their roles as athletes today. Common themes included, "The history is interesting, but…" and "The focus should be on the future, not the past."

Notably, this consensus crossed the line between military and civilian biathletes. While much of the previous chapter's discussion on the progression of modern or "Post-Historical" biathlon focused on its shift away from a military model, those biathletes with military experience did not seem any more likely to believe that the history of the sport was important to their individual careers or the improvement and progress of the sport as a whole.[186] They noted that the National Guard Program allowed them to continue with their careers and provided

[186] Male Athlete 2 (Survey) and Male Athlete 3 (Survey), in survey distributed by author, June 2020.

significant resources that they might not otherwise have had, but their focus remained how that effected the present and the future, not the past.

This is not to say that athletes today do not see a common identity among those involved in biathlon. In fact, many respondents emphasized the close-knit nature of the U.S. biathlon community in their surveys and interviews. In particular, those who had also raced at a high level in cross-country skiing noted a marked increase in how friendly and welcoming the community was; they especially seemed to emphasize that there was a greater freedom of information between teams about waxing and training.[187] Others noted that with fewer athletes and teams, there was a great deal of support among athletes and coaches, and that as a lesser-known sport, there was no so-called "coolness factor" to have to navigate in trying to join the community.[188] Indeed, it seems like there is a very strong common identity among U.S. biathletes today, largely because there are so few of them in number and their pursuits are so unknown in this country. It is also the case, however, that such a common identity does not extend to those who came before them in the sport, for reasons that shall be discussed below.

Part 3: Potential Causes of Dissonance Among Female U.S. Biathletes

Female-identifying athletes may have specific reasons for drawing distinctions between themselves and the past of the sport. One of the significant reasons for this might be the relatively limited past of women's biathlon. The first women's World Championships were held in 1984 and women's races were not added to the Olympic Games until 1992. When asked about the dissonance between past and present biathlon, one athlete noted that they did not really know any past biathletes personally, "even just the previous generation."[189] They went on to add

[187] Female Athlete 5 (Survey) and Male Athlete 1 (Interview) in survey distributed by and in discussion with author, August 11, 2020.
[188] Female Athlete 2 (Survey), in survey distributed by author, June 2020.
[189] Female Athlete 1 (Interview), in discussion with author, July 13, 2020.

that their experience with former biathletes was almost exclusively with "older, white men that…were in the military for biathlon…" and were not a demographic they felt they could identify with.[190] Others had expressed frustration with the way the U.S. National Team had previously run its women's team; one stated that it felt as though the women were being trained "as smaller men" and that "it was very obvious…this is the men's team and we're just here." [191] Additionally, there remain very few female coaches at the elite levels of international biathlon, indicating that these issues of gender disparity, particularly at the leadership levels are not simply a historical phenomenon.

As such, the concept of a differentiated "modern biathlon" might be an appealing prospect, not only as a means of separating oneself from a sport that excluded female individuals for a significant time, but also as a means of stressing the need for change in the present. While the brilliant performances of international biathlon stars such as Dorothea Wierer, Laura Dahlmeier and Tiril Eckhoff are frequently the talk of biathlon these days, not so very long ago these women would not have had a sport to compete in. Sometimes lost in the discussion of the long history of biathlon and its military roots is the fact that women's biathlon is actually a very recent introduction, both domestically and internationally, a fact that even surprises some of the athletes themselves.[192] The first international biathlon competitions for women were held in 1982-1983, with the first women's World Championships happening the subsequent year in Chamonix, France (the men did not contest a World Championships that year due to competing in the Olympic Winter Games in Sarajevo, Yugoslavia).[193] Not until 1992, at the Olympic Games hosted in Albertville, France, was woman's biathlon included on an Olympic program.

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[190] Female Athlete 1 (Interview), in discussion with author, July 13, 2020.
[191] Female Athlete 4 (Interview), in discussion with author, July 7, 2020.
[192] Female Athlete 2 (Interview), in discussion with author, July 29, 2020.
[193] Stegen, *Unique and Unknown*, 314.

In the United States, women began to come into the fold of biathlon prior to the introduction of international competitions; the first U.S. National Biathlon Championships for women were held in 1980, four years prior to the Albertville World Championships. This followed from the attempts of several women during the late 1970s to get involved in biathlon, two of the most significant being Holly Beattie and Pam Weiss.[194] Beattie first became involved in biathlon during the fall of 1978, after observing a training camp at the Olympic Training Center in Squaw Valley, California. She competed for the first time in a men's competition in Jackson, Wyoming at the start of the 1978-79 season and the following year regularly trained with the team, in spite of the fact that she was not officially affiliated with the team. When U.S. Olympic trials that year were relocated to Valcartier, Quebec, Beattie attended the races and competed with Canadian Karina Englebrecht. While there was no Olympic team available for either woman and the race was not officially recognized, it demonstrated the potential for the eventual inclusion of officially sanctioned women's biathlon competition.[195]

Pam Weiss, an alpine skier for the University of Vermont, moved to Jackson, Wyoming after graduation where she became fully involved in cross-country ski racing. During this time, she observed Beattie training for biathlon at the temporary range on the trails and developed an interest in becoming involved in the sport herself. In the spring of 1980, regional coaches quietly extended an invitation for the women to participate in a spring training camp in Squaw Valley. Beattie and Weiss both attended as well as Pam Nordheim, Patrice Jankowski, Rae Hoisve and Karina Englebrecht. In October of the same year, the first U.S. National Women's Biathlon

[194] Stegen, *Unique and Unknown*, 142.
[195] Stegen, *Unique and Unknown*, 142-143.

team was named and included Beattie, Weiss, Jankowski, Hoisve, Betty Stroock, Julie Newnam, Diana Tiahrt, Kari Swenson, Kelly McDonell, and Becky Fuller.[196]

These advancements did not mean that the transition to women's biathlon came easily. "Chauvinism was a whole different ballgame then," Wiess says. "I was very involved in trying to open doors for the women's team. I was an athlete's representative to the Board of Directors for a few years and probably created many future closed doors for myself for being an activist. Most of the board members were either former or still active military that were not quite prepared for women to be involved in this male-dominated sport."[197] When she turned 33, some insinuated that Weiss should retire to focus on things like raising a family, in spite of the fact that she was still improving athletically.[198] Despite such pushback on the advancement of women's place in the sport, the U.S. women's team proved to be very successful from the start, highlighted by a bronze medal in the relay at the first ever Women's World Championships in 1984 by the team composed of Julie Newnam, Kari Swenson and Holly Beattie. Swenson also captured fifth place in the individual race that year, a result that would not be bettered until Susan Dunklee's silver medal performance in the Mass Start at the 2017 World Championships in Hochfilzen, Austria (Dunklee also matched Swenson's fifth place in the Individual at the 2012 World Championships held in Ruhpolding, Germany).[199]

Significant progress has been made in the development of women's biathlon at both the U.S. domestic and international levels. This is not to say there are no issues; there are many and they will be addressed later in this section. However, relative to many international sports and

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[196] Stegen, *Unique and Unknown*, 143.
[197] Chelsea Little, "Where are They Now: Pam Weiss and Art Stegen," January 28, 2014, https://fasterskier.com/2014/01/where-are-they-now-pam-weiss-and-art-stegen/#:~:text=So%2C%20Where%20Are%20They%20Now,School%20with%20her%20husband%2C%20Mick.
[198] Little, "Where are They Now: Pam Weiss and Art Stegen."
[199] Stegen, *Unique and Unknown*, Appendix A.

governing bodies, biathlon and the IBU have taken a relatively egalitarian approach to the development of the IBU Cup and World Cup circuits. Today, the payouts for the top male and female finishers on both the IBU Cup and World Cup are the same (a fact that is corroborated by multiple athletes); this is especially notable given the kind of challenges organizations like FIFA are facing from female players demanding that their payouts from international tournaments be equal to those given to their male counterparts.[200] The numbers on the World Cup circuit is also very similar (of the eight sprint races contested on the World Cup circuit, including World Championships, the average number of male starters was 106.25, while the average number of female starters was 100.63) and IBU coverage of male and female races remains equitable, with significant followings for athletes of both genders.[201] Even as far back as the 1980s, Pam Weiss reported being treated as a celebrity while racing in Europe: "I think it was in 1987, when I was the first seed, that I was mobbed after the race for autographs! Over there I was considered a hero…"[202] As an institution, the IBU has been comparatively more attuned to issues of gender equality in its sport than many other international governing bodies and has largely succeeded in implementing policies of equity at an institutional level.

This is not to imply that the sport of biathlon is free from gender-based challenges or discrimination. The truth is quite the opposite; while institutional policies can be changed relatively easily (and many have been), entrenched attitudes and cultures are much more difficult to alter, and the male-dominated, military past has significantly permeated the fabric of the sport, even to this day. At a broad level, this can be seen by the attentive biathlon fan watching televised broadcasts. While commentators tend to focus on the current results or technical

[200] Female Athlete 1 (Interview), Female Athlete 2 (Interview), Female Athlete 3 (Interview), in discussion with author, July 13, 2020, July 29, 2020 and July 9, 2020.
[201] "Calendar;" Female Athlete 2 (Interview), in discussion with author, July 29, 2020.
[202] Little, "Where are They Now: Pam Weiss and Art Stegen."

prowess (or failures) of male biathletes during their races, comments on female biathletes tend to stray away from the athletes' actions on the racecourse and into such topics as the athlete's appearance, personal life, or other such superficies.[203]

At a level that might be less visible to a general audience, the issues of gender disparity continue. Probably the most significant problem is the lack of female coaches, wax technicians, and support staff, both in the U.S. and internationally. As stated by one athlete with World Cup experience, "…traveling around in the winter, you realize, 'I have my three teammates here and them I'm surrounded by a bunch of dudes for, like, four and a half months,' which is tough."[204] One female athlete notes that while she has never personally had a problem with any of the staff, other U.S. biathletes, particularly on the World Cup, have had complaints about not being treated with the same importance as the men on the team, or with a certain disregard and lack of respect.[205] She also went on to describe how she felt that the culture of the U.S. support staff on the IBU Cup during the 2019/2020 season was excellent, and that such a culture was definitely a contributing factor to the success the team experienced.[206]

The lack of female wax technicians is a significant and even glaring issue (one female athlete noted that she has only encountered one female wax tech on the World Cup circuit).[207] Wax technicians play not only a critical role in preparing skis for athletes (a critical part of racing success in itself), but also selecting which pair of skis the athlete will race on, managing testing to determine which waxes to use and is frequently one of the last members of the support staff an athlete will be in contact with prior to the start of their race. Therefore, a sound

[203] Female Athlete 1 (Interview), in discussion with author, July 13, 2020.
[204] Female Athlete 2 (Interview), in discussion with author, July 29, 2020.
[205] Female Athlete 1 (Interview), in discussion with author, July 13, 2020.
[206] Female Athlete 1 (Interview), in discussion with author, July 13, 2020.
[207] Female Athlete 2 (Interview), in discussion with author, July 29, 2020.

relationship between techs and athletes is critical to the success of the athlete. While it is entirely possible, and even common, for female athletes and male techs to work together very well, the additional representation of female techs would only serve to improve the experience and success of female biathletes, some of whom describe something feeling "off" about not being able to work with people who have shared some of their experiences.[208]

USBA's first female staff member, Danika Frisbie was hired in 2018, and while that is certainly a step in the right direction, it can only do so much to change the culture of the organization, without other significant changes in representation. One athlete describes how without gender representation, "…all that you're seeing is, sort of, the male way, the masculine way to do a sport [and] it seems like that's the only path [in the sport]…"[209] In addition to culture and approaches, an almost exclusively male coaching staff influences the training and training plans of the athletes under their influence. A current athlete described how during an earlier tenure with the USBA program, she struggled with a training plan that seemed to not be built for the female athletes on the team. "…that whole coaching staff's philosophy seemed a lot like, we were doing basically the exact same workouts as the men, we would just do a little bit less." She said. "… now that I'm out of that system, I'm like, 'Oh, they were basically training the women as smaller men,' which is not how you should train female athletes…"[210] She also noted that during those years, it still felt as though the women's team was a tacked-on addition to the men's program and that the training plans reflected those sentiments.[211]

Another issue with U.S. biathlon is women's participation, particularly at the introductory levels of the sport; while numbers on the World Cup remain relatively similar, at the more

[208] Female Athlete 1 (Interview), in discussion with author, July 13, 2020.
[209] Female Athlete 1 (Interview), in discussion with author, July 13, 2020.
[210] Female Athlete 4 (Interview), in discussion with author, July 7, 2020.
[211] Female Athlete 4 (Interview), in discussion with author, July 7, 2020.

grassroots level, women's biathlon faces significant challenges. The number of youth and junior women to compete at U.S. Youth/Junior World Championship trials in 2019-2020 was 19 compared with a total of 35 youth and junior men.[212] To a certain degree this may be due to the perception of the sport as being military or "masculine" According one athlete:

> I think it's- personally I think it's harder for biathlon… obviously we have tons of women in skiing, especially after Jessie Diggins and Kikkan Randel being such great, like, the whole U.S. Women's Ski Team being such a huge role model image for young women… so I think we could translate a percentage of that into biathlon but I do think it's hard because its's definitely a unique and weird sport and B) I don't know why, but the gun situation just seems so much more masculine so yeah, I think in general biathlon specifically seems to be harder to get women involved as opposed to all sports in general… [213]

She also mentions that even she had misgivings about joining the sport, especially during her elementary and middle school years, because it was, in her words, "what the boys who hunt like to do because it's guns."[214] These challenges present a kind of catch-22: without widespread participation across multiple competitive levels (not just that of elite or professional biathletes) it is difficult to establish significant representation of women in the sport. However, without gender representation, it is equally difficult to encourage widespread participation and persuade more women, especially young women, to take part in the sport.

The history of women's biathlon, along with the challenges it still faces today in terms of parity, provide a compelling case for athletes to perceive themselves in a Post-Historical context. It indicates that change has happened, if not to a full extent, lending the idea that change is in fact possible (since it has already happened) and that the changes that have not yet occurred are something that can be altered by collective effort. While there is still significant work that needs

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[212] "USBA Junior Trials- Ethan Allen Jericho, Vermont- Dec. 28-31," United States Biathlon Association, 2019, https://www.teamusa.org/US-Biathlon/Results/Links-to-Race-Results.

[213] Female Athlete 4 (Interview), in discussion with author, July 7, 2020.

[214] Female Athlete 4 (Interview), in discussion with author, July 7, 2020.

to be done in that field before true gender parity can be realized in the sport, breaking with the past and articulating a perception of being a part of something new is a potential part of both recognizing what has been done and the desire to continue to push for even more significant change.

Part 4: Other Explanations for Perceptual Dissonance

Of course, it would be unreasonable to limit what appears to be a fairly universal understanding among current United States biathletes to the single explanation outlined above. It seems much more likely that it is an interplay between multiple explanations that drives athletes' understandings of their place in the historical context of biathlon. A second cause for athlete's preference for attempting to separate themselves from the past could be conflicts on militarism and even gun culture more broadly, much like Thofelt attempted to do in 1958. While some biathletes come from backgrounds where shooting was a part of their lives outside the sport, many do not, especially those who also competed at an elite level as cross-country skiers prior to being introduced to the sport. As mentioned in the previous section, one interviewed athlete noted that prior to getting involved in the sport, they were under the impression that it was just an activity for "boys who hunt" in their area.[215] She also mentioned that the connection between gun culture and masculinity can make it difficult to recruit more girls and women into the sport.[216] Others noted an even broader anti-gun and anti-military sentiment in many of the places where biathlon is prevalent in the United States, and that the separation stems from a need to make the sport plateable to those who might have a history with skiing but not with the military or with shooting.[217] Multiple current athletes expressed a sense of gratitude that they have the

[215] Female Athlete 4 (Interview), in discussion with author, July 7, 2020.
[216] Female Athlete 4 (Interview), in discussion with author, July 7, 2020.
[217] Female Athlete 3 (Interview), in discussion with author, July 9, 2020.

opportunity to pursue biathlon without having to take the route through the military, as that lifestyle and institution were not something they wanted to be a part of.[218]

A final consideration is that many athletes simply may have seen no reason to look back or dwell on the past, rather than making a conscious rejection of the events that preceded them in their sport. As noted earlier, when surveyed about the importance of the history of biathlon, no respondent gave a response higher than "moderately important." Many also made a point to state that their focus should be on the future of the sport and themselves in the sport; that they might look back every once in a while, but not dwell on what had been, which, of course, raises the question of who might be able to go about their daily life as a biathlete without feeling the need to be confronted by the effects of the past and who might not be able to avoid such confrontations. However, given the number of possible reasons for this dissociation, it seems likely that no one theory can explain individual understandings of the intersection of the past and present and the interaction of all is equally important as any individual theory on its own.

Conclusion

The sport of biathlon certainly looks little like its earliest forms: athletes in wool knickers on classic skis dragging military issue large-bore rifles around a single loop to shoot at targets of various distances have been replaced by lycra clad skate skiers carrying precision made .22 caliber rifles, often crafted from materials such as carbon fiber to decrease weight, and racing multiple lap, spectator friendly courses in front of thousands of screaming fans. Even the races themselves have evolved, from the earliest incarnation in the form of the military patrol, to the development of the 20-kilometer individual race introduced at the 1960 Olympics, to today's spectator friendly formats, including the mass start, relay, and single mixed relay. These changes

[218] Female Athlete 1 (Interview), Female Athlete 2 (Interview) and Female Athlete 3 (Interview), in discussion with author, July 13, 2020, July 29, 2020 and July 9, 2020.

are part of a Post-Historical transition in the sport, as it shifted from being an extension of military preparedness and display to an elite athletic talent that no longer relies on military intervention to succeed or even to simply exist.

Based loosely on the theory of the same name developed by political scientist Francis Fukuyama, the idea of Post-Historical development occurs on two planes: structural and perceptual. In the case of biathlon, the structural points of influence were primarily based on changes in governance, competition structure, athlete participation and monetary flows; some of the most important inflection points that outlined these transitions included the debate between UIPMB president Sven Thofelt and IOC president Avery Brundage over the inclusion of biathlon in the 1960 Winter Olympic Games, the introduction of new competition disciplines (specifically the relay and pursuit), the change from large-bore military rifles to small-bore .22 caliber rimfire rifles, the loosening of amateurism rules that permitted athletes and organizations to sign sponsorship contracts (especially the stabilization of USBA funding to support professional biathletes) and the attacks of September 11, 2001. Generally speaking, these inflection points have been driven by larger shifts in macro-influencers including culture, politics, economics, and technological developments, and have drawn biathlon with them in a Post-Historical direction.

Perceptual Post-Historical transition occurs when athletes themselves begin to view themselves as separated from past iterations of the sport as fully differentiated "modern biathletes." The data used to determine this was drawn from a series of surveys and interviews conducted with current U.S. biathletes, coaches, and significant members of the U.S. biathlon community. While answers were not absolute, there was a significant trend that revealed an apathy towards or even an outright distancing from the past of the sport by many current athletes

across demographics, corroborating the idea that athletes today may see well see themselves as part of a modern version of the sport in a Post-Historical context. These views are most commonly seen in the experiences of female-identifying biathletes, the context of military or gun culture and prospects for personal athletic development. A prerequisite for perceptual transition in the Post-Historical context is a postmodernist understanding of the construction of history who has the power to create it. Such a framework allows for those "from below" (in this case, the athletes themselves) to express their notion of the history of the sport as it relates to their place in it in the present moment. The notion of an indisputable master narrative is not compatible with such a personal act of historical creation and as a consequence, postmodernism is a necessary requirement of this version of Post-Historicism.

This thesis covers the topic of biathlon and the Post-Historical transition that it has undergone. The implications of understanding biathlon having reached a point of Post-Historicism are significant. First, it marks a significant moment in the relationship between athletics and military forces. Biathlon was a sport purpose built by and for the military, but has today become an elite sport, with yearly World Cup and World Championships being the pinnacle of international competition, in addition to its inclusion at the Winter Olympic Games every four years. The military, by extension, has been reduced to some pockets of athlete sponsorship and development and the hosting of CISM championships that attract little international media attention and have been described by current athletes as "performative" and "archaic."[219] If a sport with military roots as deep as biathlon's can see such a transition then it is certainly a possibility that other sports that once relied on military support could be following, and indeed, the transition of athletics away from military jurisdiction has occurred in other

[219] Female Athlete 1 (Interview), in discussion with author, July 13, 2020.

places, such as in professional American Football, as evidenced by the decreasing numbers of service academy members drafted by NFL teams in recent decades.

In the last 30 years, from 1990-2020, a total of fourteen athletes were drafted by National Football League teams out of the three major service academies (Army, Navy, and Air Force). However, during a five-year window from 1945-1950, the same number of player were drafted by NFL teams, an average of almost three per draft as compared to the numbers from 1990-2020 which show an average of less than one athlete drafted every two years. Even more tellingly, from 2000-2020 only four athletes total were drafted from the service academies, averaging just one athlete drafted every five years.[220] In contrast, perennial FBS powerhouse LSU had fourteen athletes drafted in 2020 alone, five of them in the first round. While draft numbers are not a perfect metric, college programs are typically judged as potential developers of NFL players based off of the number of drafted athletes they produce, so declining draft numbers would be indicative of the declining importance of the Service Academies as part of the development of NFL players and an increased focus on traditional colleges and universities as a development pipeline. These numbers may point to an overall shift away from the connection between athlete development (and athletics more generally), and the military and militarism, that is not limited to just biathlon or NFL football. While I cannot prove in this paper that there is significant movement in a similarly post-military direction by any sport other than biathlon, I believe that there is a good chance that such movement could be far more widespread than the just biathlon. Additionally, I believe that this shift among athletics could also be part of a larger shift of an increasingly expanding divide between military and civilian life in general. While I do not have

[220] "NFL and AFL Draft History," Sports Reference LLC, April 13, 2021, https://www.pro-football-reference.com/draft/

the time or space here to attempt to prove such a claim, I leave the possibility open to whomever might find themselves interested in pursuing the project further.

Appendix A: Survey Methodology

To develop my theory and analysis of perceptual Post-Historicism, I needed direct contact with current coaches, athletes, and other members of the biathlon community. To do this, I employed a two-part system: widespread surveys and more narrow interviews with interested parties. The survey was created through Qualtrics with the assistance from members of the Bates Psychology department and distributed starting in June 2020 and was available through the end of August of 2020. It consisted of a total of 18 questions that primarily focused on the individual's background in biathlon, their perceptions of the history of the sport (how much they knew, whether they believed it was important, etc.) and, if applicable, how military service had shaped or affected their biathlon experience. Each survey also included the option to register for an interview if the respondent was interested in contributing further to the project. Interviews were designed to give depth to the questions asked in the survey as well as consider any points the respondent had not been able to articulate through the survey. Therefore, they employed a standardized form of questions as a base but could be deviated from in the event that there were specific topics the interviewee wished to discuss at greater or lesser length.

The survey was distributed primarily by word of mouth among athletes I was already familiar with, social media, and outreach by the United States Biathlon Association. In total, I received fifteen survey responses, nine of which were returned by male-identifying participants and six which were returned by female-identifying participants. Two of the survey responses were returned by individuals who were either formally or currently a part of the National Guard biathlon program. In addition, six interviews were conducted. Four of these interviews involved female-identifying participants, two involved male-identifying participants and none of the interviewees were a part of the National Guard program.

This survey could have benefited from a longer timeframe and wider or more segmented distribution. As it was, the respondents were not drawn from a specific cross section of the population of the biathlon community in the United States and therefore, certain views may be over or under-represented. Additionally, the sample size is relatively small, even given the small size of the U.S. biathlon community and a greater sample size could have given more authority to the conclusions that have been drawn from the results. While every effort was made to ask questions in a neutral way, it is possible that the answers of respondents could have been influenced by the topics that were raised in the questions. Names and other identifying markers have been removed from the majority of the respondents used in the thesis; any names and identifiers that are used in the text are done so with the express understanding and permission of the individual(s) involved.

Appendix B: Survey and Interview Documents

Document 1: Survey Outline

Survey Intro: This survey is a part of a research project that will eventually provide the foundation for my senior honors thesis in history at Bates College. The goal of the project is to produce what might be called an athlete's history of the sport of biathlon; I will be studying the history of the sport and speaking with current athletes, coaches and other members of the biathlon community to try to understand how that history manifests itself in the minds of those involved in the sport today. My hope is that I will be able to create a study that traces how history has shaped this unique community and how current athletes and coaches understand themselves in relation to this history, in order to show a more personal and complete picture the biathlon community, past and present, in the United States.

About Me: My name is Brad Ravenelle, and I am a rising senior at Bates College majoring in History. I was a competitive Nordic ski racer for 10 years and spent two seasons with the team at Bates. I also spent a PG year with the Outdoor Sport Institute in Fort Kent, Maine where I lived and trained primarily with members of the OSI biathlon program and gained a greater appreciation for the sport of biathlon. This research will serve as the foundation for a senior honors thesis in history.

Demographic Questions:
1. Name-
2. Age-
3. Gender-
4. Club/Team-
5. Years Involved in Biathlon-

6. How would you briefly describe biathlon to someone unfamiliar with the sport?
7. How would you describe your experience as a member of the biathlon community?
8. How were you introduced to the sport of biathlon?
9. Have you competed at a high level (college, elite, etc.) in cross-country skiing as well as biathlon?
10. If yes, do you see differences in how the biathlon and cross-country communities engage with their respective sports?
11. Are you currently/were you formally a member of the U.S. Military?
12. If yes, do you believe that this history has changed/influenced your perception of or participation in the sport and how/why?
12. How would you consider your knowledge of the history of biathlon? (1-5, low to high?)
13. How important is that history to you? (1-5, low to high?)
14. Why do you believe it is important/not important?
15. What larger impact do you believe you can make as a biathlete/biathlon coach?
16. Are you interested in helping further this research by conducting a brief (approximately 30-40 minute) interview via phone or video conference?
17. If yes, please leave an email address at which I may contact you with more information or to schedule an interview.

18. Anything else you would like to add?

Survey distribution link:
https://bates.co1.qualtrics.com/jfe/form/SV_5AoeuwmL78uFvDv

Document 2: Interview Outline

Form Questions

1. General Personal Information- (Name, Age, Gender, Club/Team, Years in Biathlon, etc.)

2. How were you introduced to the sport?
    -College Background
    -Junior Background
    -Military Background
    -What drew you to biathlon rather than, for example, cross country skiing?

3. When did you begin to consider yourself a "biathlete?"
    -if you came from a cross country background, what differences do you see in the interactions between the athletes and their respective sports? Similarities?

4. Where do you believe you can make an impact within the biathlon community?
    -Beyond biathlon?

5. What is your general understanding of the history behind the sport?

6. Do you believe that biathletes should have a working understanding of their sport's history?
    -What parts, if you want to be more specific?
    -Is that history relevant to the modern sport?
    -Why/Why not?
    -Should all athletes have an understanding of their sport's origins and history?

Document 3: Interview Recording and Consent Form

Additional Consent Form for Recordings of Interviews

Title of the Study: From War to Games: The Intersection of American Military and Athletic Histories in the Sport of Biathlon

In addition to agreeing to participate, I consent to having the interview [audio or video] recorded. I understand that the recording of my interview will be transcribed by the researcher(s) and erased once the transcriptions are checked for accuracy. Transcripts of my interview may be reproduced in whole or in part for use in presentations or written products that result from this study, but will not be linked to my name, unless I give explicit permission. Neither my name nor any other identifying information (such as my voice or picture) will be used in presentations or in written products resulting from the study unless I give my explicit permission.

A. I consent to having the interview [audio or video] recorded.

Name (printed): _____

Signature _____ Date _____

B. I consent to having my name associated with my responses. (If I do not sign, my name will not be used.)

Signature _____ Date _____

C. Lastly, I consent to use of my [voice/picture] in presentations or in written products resulting from the study. (If I do not sign, my [voice/picture] will not be used.)

Signature _____ Date _____

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