**Bilateral Knee Claim Statement and Evidence Review**

The following statement and evidence review is offered to support my contention that my current knee problems are directly related to various service events; therefore, service connection is justified for both knees. Service connection is also justifiable on a secondary basis per service-connected bilateral gastrocnemius equinus contractures, bilateral ankle bursitis and osteoarthritis with instability, and severely pronated bilateral flatfeet with bunions. I also believe my weight gain during service and current weight caused by my service-connected conditions, including depression, contribute to my knee problems. My current weight is 178, BMI 29.2 (VA annual physical 09/09/2022).

**During service (1974-1995)**

During my time on active duty, I had the following bilateral knee problem symptoms; pain, instability, swelling, weakness, stiffness, clicking, and tenderness. Early in my army career I was taught to endure physical pain and to only complain to medical personnel when the pain reached a level indicative of a likely serious injury. As a career soldier I also taught my subordinates what I was taught: endure pain without complaint. I often told my soldiers “the army is no place for crybabies, so suck it up or get the hell out.” I rarely went to sick call of my own volition. Typically, I was ordered to report to medical personnel by my superiors; thus, my service medical records have but a few complaints documented.

Throughout my service I chose to self-treated my knee problem symptoms with over-the-counter pain medications, ice or heat, compression bandages, and limb elevation; however, I did seek treatment on 05/05/1976 with a complaint of right knee pain and on 08/08/1978 with a complaint of a swollen right knee. I was prescribed Ibuprofen on both occasions. On my retirement physical exam (December 1994) report of medical history form (SF-93) “swollen or painful joints” is checked with bilateral knee pain being noted. After my first several years or so of service, most of my bilateral knee pain and other knee problem symptoms occurred daily. My knees were always stiff in the morning. During the day, sitting with my knees bent for 30 minutes or so would bring on stiffness and pain on movement. Also, as I straighten my knee, I could often hear a clicking sound from my knee cap. Pain was worse when walking up or down stairs and when kneeling.

Morning physical fitness training (PT) exacerbated my symptoms. PT was a daily requirement and involved a 2-mile run and many exercises that place stress on the knees: the side-straddle hop, mule kick, bend and reach, high jumper, squat bender, lunger, and knee bender are typical exercises. 20-25 exercise repetitions were normal; however, often exercise reptations were excessive in the 40-50 range. Additionally, run lengths were often 3-5 miles. My knees were sore, swollen, and felt very weak on these occasions. The long runs and excessive number of knee exercise repetitions caused my bilateral knee pain and other knee problem symptoms to worsened significantly during my last few years of service; especially considering my weight gain during service. My weight at enlistment exam was 126 and on my retirement exam my weight was 174 for a 48-pound gain.

Daily marching (2 miles per day) and prolonged standing (8-10 hours daily with 4-5 hours continuously per day without rest) while performing my normal duties added to the severity level of my knee pain and other knee problem symptoms; especially, considering that most activities were conducted while standing, walking, or running on hard surfaces. PT runs and marching were conducted on the street. At times, PT runs were conducted while in combat boots and I did notice a higher level of knee discomfort during these runs. My typical work area floor was concrete or another hard type surface. All marching and work day activities require combat boots to be worn. Occasional during the work day one of my knees would buckle causing me to temporarily lose balance: I would have a slight limp for the rest of that day.

I was involved in tactical training or real-world deployments for approximately 3-4 months a year on average with some missions lasting as long 6 months. During these periods, I was required to be in full combat gear; including M16, helmet, flak vest, web gear, ammunition, full water canteen, and combat boots. This gear was required to be worn on average of 10-12 hours per day and often for up to 18 hours per day. A backpack weighing approximately 20-30 pounds was often also worn. This heavy load of equipment kept all my knee pain and other knee problem symptoms in a nearly constant state of flare.

**Current knee symptoms, functional limitations, and diagnoses**

My bilateral knee problem symptoms that began in-service including pain, instability, swelling, weakness, stiffness, clicking, and tenderness continued continuously after service to the present; these symptoms currently cause significant functional limitations. I have pain during flexion and extension motions. I have stopped running and all knee exercises as both endeavors cause an exacerbation of symptoms. Even a brisk walk will exacerbate my knee symptoms. My walking is limited to a slow pace due to pain and my knees tire quickly limiting my walks to a duration of 15-30 minutes. I try to supplement my walking limitations with bike riding; however, due to severe sciatica I am only able to tolerate bike riding occasionally (sciatica is service connected).

Standing in place for more than two or three minutes is intolerable, such as standing in a checkout line after shopping. I can kneel down with tolerable pain for a second or two, but the pain becomes intolerable after just a few seconds. Sitting with my knees bent for more than ten minutes causes knee stiffness that makes it difficult to walk for a few minutes once I get up. My knees are very stiff in the morning and it takes around 30 minutes or so to work out the stiffness. My knee often gives way while walking on uneven surfaces or when I am on my feet, without a break, for longer than 30 minutes. Typically, my knees are under stress from walking, standing, and kneeling for 2-3 hours per day; during this time, I must have frequent rest periods due to fatigue, weakness, pain, and at times swelling. By the end each day, often my range of motion (ROM) for extension is reduced by 10-20% and at other times flexion is reduced by approximately one third.

After service I continued to self-treat my knee symptoms with over-the-counter pain medications, ice or heat, compression bandages, and limb elevation. Most symptoms, including swelling, are mitigated to tolerable levels within a few hours of selfcare. My selfcare negates the need to seek professional medical care for my knee problems; thus, I have never sought treatment specifically for my knee pain or other problem symptoms. I do attend my annual VA physicals and through that process I have reported my knee problems. Currently my knees are diagnosed by the VA with bilateral patellofemoral pain syndrome (12/12/2012), bilateral patellar tendinitis (05/05/2015), and bilateral osteoarthritis (02/02/2002).

**Flare ups**

Currently 1-2 days per week every week I experience bilateral knee symptom flare-ups to varying degrees. Typically, my ROM for flexion is reduced by half or more and often reduced completely; in other words, often I cannot bend my knee at all. On these occasions, I am forced to keep my knee completely straight due to the extreme pain caused by attempting to bend my knee. At times, my ROM for extension is reduced by one third. On these occasions, I am forced to my recliner with it partially reclined to keep my knee in a partially extended position as it is too painful to fully extend my knee. Both knees suffer from these flare-ups although not at the same time.

Flare-ups are brought on by activity: I try to go for a 15–30-minute walk as often as my joint pain allows, typically 3-5 times a week. During a typical flare-up I cannot kneel at all, standing in place is not possible, and walking is limited to movements within my home (approximately 20 feet) such as going to the bathroom or answering the doorbell. On extreme flare-ups (typically bi-weekly), I am reclined with my knee kept completely straight (flexion flares) or partially extended (extension flares) with no possibility of weight bearing activities; during these times, I must use crutches to move around the house.

**Diagnostics and assistive devices**

The following MRIs, X-rays, and prescribed assistive devices are relevant to my knee claim; hence, I ask they be given due consideration:

1. Left and right knee MRI results dated September 5, 2021.
2. Left and right knee X-ray results dated August 25, 2021.
3. Cane and knee brace prescribed August 25, 2021.

**Published Considerations**

I believe the following manuals, studies, journal articles, and other treatise are relevant to my knee claims; hence, I ask they be given due consideration:

1. **FM 21-20 physical fitness training manual (September 1992)**

Knee exercises are listed in chapter 7; side-straddle hop, mule kick, bend and reach, high jumper, squat bender, lunger, and knee bender. The manual states that “The work load of each exercise session must exceed the normal demands placed on the body in order to bring about a training effect” (page 1-4). The individuals leading PT have **no training** in physical fitness science and the PT program is **not monitored** by medical personnel. I personally led PT hundreds of times and I did not receive any training whatsoever. I did try to keep calisthenic repetitions reasonable per my judgement; however, other individuals leading PT sessions thought that repetitions needed to induce **muscle failure**.

It is my experience that the “each exercise session must exceed the normal demands” policy very often resulted in unreasonable run lengths (5-6 miles) and a dangerously high number of knee exercise repetitions (40-50); and in my case, led to daily bilateral knee pain, swelling, and other symptoms. Keep in mind that runs are conducted directly after calisthenics are completed. The manual also states (page 13-2) that “Since injuries can also be caused by running on **hard surfaces**, soldiers should, if possible, avoid running on concrete;” and “Soldiers should train in running shoes;” and with “adequate footwear running on roads and other hard surfaces should pose no problem.” Daily runs were **always** conducted on the roadways and occasionally while in **combat boots**.

1. **Review Article: Musculoskeletal Lower Limb Injury Risk in Army Populations**

The article states “Collective evidence suggests that training and equipment contribute to a large proportion of the injuries sustained. In particular, the **large loads** borne by soldiers, the **high intensity** training programs and the influence of **footwear** have been identified as significant **causative factors** of lower limb injury in military populations” (page 1). During my service I often bore large loads, PT is definitely high intensity, and combat boots were worn during all duty activities.

1. **Journal Article: Incidence of Physician-Diagnosed Osteoarthritis Among Active-Duty United States Military Service Members**

The article concludes “Rates of osteoarthritis were **significantly higher** in military populations than in comparable age groups in the general population” and states “Studies also suggest that physical activity involving **repetitive joint** loading may be associated with the occurrence of osteoarthritis” (page 2974). PT, workday duties, and tactical environment duties placed extreme repetitive stress on my knee joints.

1. **Journal Article: The relationship between foot and ankle symptoms and risk of developing knee osteoarthritis: data from the osteoarthritis initiative**

The article concludes “our study showed that people with **foot/ankle symptoms** were at an increased **risk** of developing knee **OA** symptoms and symptomatic radiographic knee OA compared to those without foot/ankle symptoms” (page 9). I am service connected for both foot and ankle conditions.

1. **Journal Article: Patellar Tendinopathy Advice and Management**

Article states that people who are **overweight** are more likely to **develop** patellar tendinopathy (page 2). My weight at service separation was 174, current 178: both weights are considered overweight.

1. **Hospital Informational Article: Patellofemoral Pain Syndrome** **(PFPS)**

The article notes **overuse** of the knee joint and hard playing **surfaces** as PFPS risk factors (page 2) and recommends maintaining a healthy **weight** as a preventive measure (page 4). My knees were under constant overuse through excessive and normal knee exercise repetitions during PT, normal duties, and heavy load bearing in tactical environments during service: all performed while on hard surfaces. My weight was 174 at service separation, overweight by current medical standards; however, I was within acceptable army height and weight standards.

1. **CDC Article: Physical Activity for a Healthy Weight**

The article states “To maintain your weight: Work your way up to 150 minutes of **moderate**-intensity aerobic activity, 75 minutes of **vigorous**-intensity aerobic activity, or an equivalent mix of the two each week. Strong scientific evidence shows that physical activity can help you maintain your weight over time.” In my case, vigorous-intensity aerobic activities are completely out of the question: even routine moderate-intensity aerobic activity like brisk walking and bike riding would cause my feet, ankle, calf, and knee conditions to flare resulting in unnecessary pain and functional limitations.

I always exercise within my known limitations; however, I cannot exercise enough to maintain my weight at recommended levels. Due to my limited exercise capacity, I do my best to control my diet. I limit my calorie intake to 1800 per day. This pretty much maintains my current weight; however, continuously limiting my calories does have an adverse impact on my mental health. I have tried reducing my calorie intake to 1500 per day to lose weight; however, I eventually become extremely depressed. Limiting my calorie intake to 1800 per day is a balance between my physical and mental health that for the most part works for me.

1. **Diagnostic and Statistical Manual of Mental Disorders (DSM–5)**

I am service connected for Major Depressive Disorder (MDD). DSM-5 notes weight gain as part of the diagnostic criteria: “Significant weight loss when not dieting or **weight** **gain** (e.g., a change of more than 5% of bodyweight in a month), or decrease or **increase in** **appetite** nearly every day.” Weight gain due to increased appetite is absolutely one of the defining characteristics of my MDD. It is a constant battle to control my food cravings especially considering that eating absolutely lessens my depressive symptoms at least momentarily.

Not being able to eat the things I like most due to high calorie content is a factor that always weighs heavily on my mind; however, as noted above I have found a balance between my physical and mental health in relation to weight. I want to make it clear that maintaining this balance is a constant struggle resulting in weight fluctuations. Also, there are times where my depressive symptoms are so severe that I am unable to exercise; during these times, I find it difficult to accomplish anything and I am often suicidal. My weight fluctuations are directly related to the severity level fluctuations of my depression.

**I CERTIFY THAT the statements on this document are true and correct to the best of my knowledge and belief.**

**Sign: Date:**