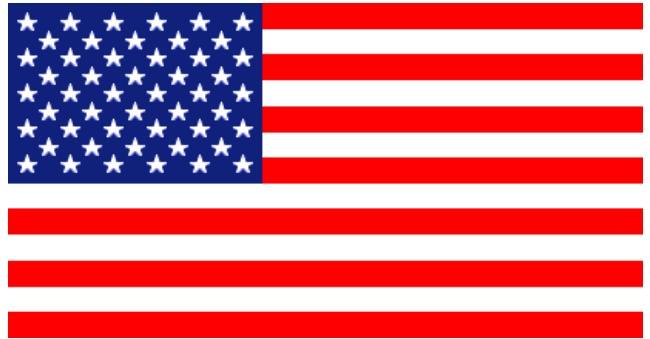
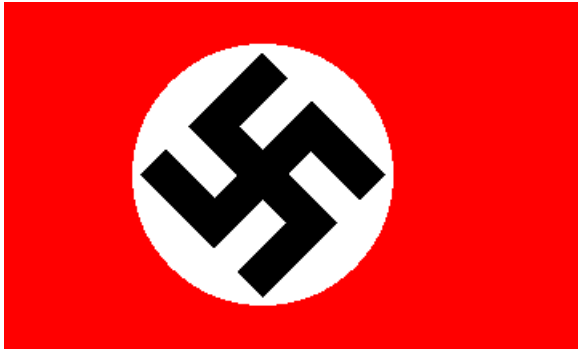


Enemies

Foreign & Domestic

The Trilogy



By CHRIS LAWRENCE

Enemies

Foreign and Domestic

The Trilogy

By - Chris Lawrence

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Enemies Foreign and Domestic – *The Trilogy*

Enemies Foreign - Nazi Germany

June 20th, 1942, 0400 Hours. Somewhere off the Iceland Coast – I noted in my personal log that the early morning was bitter cold and dismal gray with rough seas all around us. I finished that notation, rose, exited the radio shack and stepped onto the bridge. As I did the Skipper turned toward me and shouted “Hold on, Sparks!” I lunged for the nearest hand hold. Then, suddenly, the ship collided hard with an enormous wave. A mountain of salt water consumed her, exploding over her bow, cascading across her decks like Niagara Falls. She rose abruptly, and then fell sharply on those heavy seas.

According to the official maritime weather forecast for the North Atlantic, the angry seas surrounding us had been stirred by a ferocious late-season Arctic storm. Deafening gale-force winds tore relentlessly at the ship and hurled stinging chunks of frozen spray everywhere. On impact, they struck hard against the steel, like lead shots catapulted against the superstructure.

Our ship was the USMS *John Witherspoon*. She was a brand new American Liberty ship, fully loaded for her first voyage across the Atlantic. The powerful engines thrust her ever forward into the on coming waves. And as she plunged head long into those monstrous seas, she shook from bow to stern. The steel plates of her hull seemed to cry out, creaking and moaning from the recurring abuse. The ship would make little measurable progress against the waves, wind and tides that morning. Yet, there we were warm and dry, coddled in her protective womb, sheltered from the Arctic’s fury and the killing elements.

We had taken on cargo stateside in Boston harbor. From there the ship had slowly traced a great circle route with our compass bearings set more or less on northern Scotland. We had traveled northeast past New England and the Canadian Maritimes. Continuing nor-easterly through that storm we crossed the blue-gray North Atlantic well north of the Grand Banks, passing far off the frigid Greenland shoreline. In my personal log I recorded how we had slogged on through that late-spring storm until that particularly dreary day. The crew had literally willed the ship forward as we drove through those heavy seas. In that tossed North Atlantic, we slowly approached our next rendezvous point near 64N 22W. It was the early watch on that dark morning. At day break there was no sun rise, only the storm and that infernal steel-gray sky. And as we approached the Arctic Circle the dark stormy days grew longer and the nights shorter.

The Skipper pulled out the charts to show me our planned route. That day he had carefully plotted our course through those perilous waters off the Iceland Coast. The convoy would next anchor in Hvalfjordur fiord just north of Reykjavík, Iceland. We would linger at that temporary birth for the next several days. Our ship would then be joined by 33 other ships which would leave that anchorage and steam nor-nor-east across the remaining North Atlantic. We would then slow briefly well north of Glasgow, Scotland to reform and take on several additional British escorts, before steaming even farther north into the frigid Arctic Ocean. If all went according to plan, we would then turn due east far off the Norwegian coastline voyaging well off the northern most reaches of Norway, Sweden and Finland, high above the Arctic Circle, and then finally descend

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past those frozen lands ceded to the Soviet Union by Finland after their 1939 Winter War. At 72N 27E we would pass the harbor port of Murmansk, Russia, head southeast, re-crossing the Arctic Circle, then traverse the Barents Sea and enter the White Sea. And, while our home port was Boston, Massachusetts, our hoped for - even prayed for - final destination was Molotovsk in northern Russia. It was a major harbor port near Archangel (Arkhangel'sk) at 69N 33E, well east and north of our current position. It was also the northern most trans-shipment point on the Obozerskaya-Arkhangel'sk (O-A) rail line for war materials flowing to the Russian Army in their desperate fight against Hitler's invading Nazi forces. American convoys had been delivering critical supplies to three ports during the war, including Murmansk, Archangel and Molotovsk. The trip had come to be known by the name of the first of those three ports: The Murmansk Run. Molotovsk, our destination, was the most distant of the three from Boston harbor.

From what we had seen, what the Skipper would tell us, and what we could gather from scuttlebutt, the ship was carrying a heavy load, including steam locomotives lashed to the deck, guns, tanks, munitions, various anti-ship mines, lumber and structural steel, high explosives and other supplies vital to the war against Hitler. Overloaded, she sat well down in the water. When you could see it, the water line fell several inches *above* the normal high water markings. Under those conditions the convoy could steam no faster than 8 knots, making us a perfect target for enemy torpedoes. We couldn't outrun anything afloat in this condition, and the ship couldn't even turn very well given the heavy seas. So, we plodded straight on through the night and the day, and through those bitter cold North Atlantic waters. Each 24 hour period faded one into another. The unchanging days blended each week into the next. It was to be a year without summer for us on the Murmansk Run.

But, from my perspective, the harsh weather, while bone chilling tiresome, was in a perverse way almost welcome. For, despite the lengthening daylight, we blended into those tossed seas. And the stormy darkness hid us from a far more menacing threat, the Nazi submarine Wolf Packs. These Merchant ships were notoriously slow and, when heavily laden as she was on this trip, made easy targets for those dreaded German U-Boats.

I was nearing the end of my watch and we were still under strict radio silence. So there were no outgoing radio messages. I had spent most of my watch listening to those monotonous North Atlantic weather reports, writing in my personal log, and straining to hear any faint radio signals I could dial in on that primitive short wave radio. However, if the ship were to be torpedoed, it was my job, as "Sparks," the radio officer on duty, to send out the merchant convoy distress call - "S.S.S." or "save our sinking souls" as we sometimes called it. In any event, we would have had far less chance for survival in those storm tossed waters than the poor souls who dove off the Titanic into far calmer waters somewhere south of there years before. Our fate probably would have been similar to that of the poor unfortunates aboard the steam ship Lucitania. She had been sunk by a German U-Boat east of us off the Ireland coast during the last war. Almost 1,200 had perished, with less than 200 surviving that terrible ordeal.

A small solace, I would be the first to know if help could arrive before we sank, or if it was our time to beg forgiveness from a hopefully merciful God. We all knew the terrible risks, yet none of us knew the odds. We were all young then. I was a radio officer, yet still only 21 at the time. And

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we all knew of ships and fellow seaman who had never returned from the Murmansk Run.⁻¹ But, being young and perhaps a bit foolish, we believed ourselves immortal, or at least a bit luckier than the next fellow. In any case, we didn't dwell on it openly. Only later would we learn that a scant one-in-three would ever return from that perilous journey.

Later, that cold morning as I was coming off duty, I gave my watch report and was relieved by the senior radio officer, but lingered topside for some reason. I stepped out of the radio shack and onto the bridge for one last look before going below. From the spot where I stood I pondered how I had come to this point in my life. Ironically, I was a recently minted *aeronautical* engineer serving as a Merchant Marine radio officer. I had attended college at Rensselaer Polytechnic Institute, graduating on an accelerated wartime program in April 1942 with a Bachelors degree in Aeronautical Engineering. While studying at Rensselaer, I had pursued two hobbies with great passion: amateur short-wave radio and flying. I had received both a First Class Radio Operator's license and a private pilot's license before graduation. So, aerial reconnaissance seemed an equally likely fate to Merchant Marine radio operator.

Yes, short wave radio had been a passionate hobby of mine before the war. I had been Club President and run the Rensselaer short-wave radio station during college. So, I knew the Morse code very well indeed. And, in a strange twist of irony it was this one talent that seemed to dictate my fate; the one life skill which had brought me to that place and time. That one skill, and the fact that the U.S. Merchant Marine was desperately short of radio operators for the Murmansk Run, seemed to be my ticket to this scenic voyage, rather than a trip to sunny North Africa, the warm Pacific or the wild blue yonder.

Yes, in the end it was that urgent shortage of trained radio operators that dictated my own personal fate in the war. Our normal complement of radio operator's on board was three. However, with the war raging the Merchant Marine was only able to fill two of those positions and I occupied one of them. They had rushed me through much abbreviated training, waived most of the usual requirements and immediately assigned me to this particular merchant ship as its junior radio officer just as they were assembling the crew for that delightful Arctic cruise. We weren't a full complement of officers and men, but we were enough to get the job done. The trouble was it meant 12 hour watches seven days a week and worse if either one of us got sick, injured or dead.

June 20th, 1942, 0630 Hours. The storm seemed to have abated. As I took one last look out over that steel gray sea, I noticed that the forward most destroyer escorts seemed to be just coming out of the leading edge of the storm. I could barely see them under clearing skies well ahead of us. One of them was flashing an urgent message. But, I was officially off duty, and that was someone else's problem. My more immediate thoughts were focused on getting a hot cup of tea and some warm breakfast. I had never really acquired a taste for coffee. In any case, my shipmates had told

¹ Merchant ships faced danger from submarines, mines, armed raiders and destroyers, aircraft and the elements. During the course of the war Allied Merchant shipping lost over 5,000 ships, nearly 7,300 mariners were killed at sea, 12,000 wounded of whom at least 1,100 died from their wounds, and 663 men and women were taken prisoner. (Total killed estimated 8,380.) Some were blown to death, some incinerated, some drowned, some froze, and some starved. 31 ships vanished without a trace to a watery grave. Ref. <http://www.usmm.org/ww2.html>

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me that our merchant chef, “Cookie,” couldn’t make a good cup of coffee to save his life. And even some of them were actually considering the switch to English breakfast tea!

As my thoughts drifted to that minor, but greatly anticipated sailor’s pleasure, breakfast, I was jarred back to that wartime reality by the blare of the ships claxon, “Auooga! Auooga!” This was quickly followed by the Skipper’s rapid intercom broadcasts, “All hands to ready stations. This is not a drill. Enemy U-Boat sighted.” He quickly repeated, “I say again. All hands to ready stations. This is not a drill. Enemy U-Boat sighted.” Click, click. “Naval gun crews man your weapons fore and aft. Prepare for surface battle.” Click, click. “I repeat. Prepare for surface battle.” And then he continued “Attention Damage Control parties. Form immediately at your ready stations and prepare to suppress fires.” Repeating, “I say again. Attention Damage Control parties. Form immediately at your ready stations and prepare to suppress fires.” He clicked the microphone on one final time looking straight at me and said, “Radio officers to station. I repeat, radio officers to main and *portable* radio stations.”

Damn. All hell was about to break loose, and I had not yet had a proper breakfast! Now, what was my ready station again? “Oh, yes, the *portable* radio!” I said, speaking nervously aloud to no one in particular. Skipper nodded his stern, irritated agreement. And in addition to manning the portable radio, as needed I would back up the on duty radio officer at the main console. Whenever he was present there, or if we received the abandon ship order, I was to go to the life boats with the portable radio. The senior radio officer now on duty appeared to have the main radio communications well in hand. So, I figured I had better put on my helmet, throw on my overcoat and gloves and don that useless life jacket. That done I grabbed the portable radio and hustle my butt down to the life boat station. And, much to my surprise, it was icy, cold and still quite windy out there on deck! There was an inch thick layer of snow and ice frozen to everything. This was just one of the many joys of Arctic Circle duty on the Murmansk Run, even in June.

I switched on the portable radio to monitor all the excitement and to be prepared for whatever was about to transpire. If it weren’t so cold I probably would have soiled myself from pure fright. This was after all my first time in an armed conflict. I wasn’t used to being a sitting duck. Only a few months before, my only battles had been with text books and lab equipment. But that was an eternity ago. Now, we merely existed from moment to moment, in the here and now, the present was all. We were just trying to survive the cold and the enemy. As I peered far off the bow, I saw our destroyer escorts punch up their engines, pushing them to maximum revolutions, as billows of black smoke tumbled from their funnels into the wind. I heard the radio traffic coordinating their attack run.

The sky had cleared and the seas calmed somewhat at this point. Apparently, the lead escort had sighted a lone U-Boat patrolling across the convoys path. It just might have been gathering intelligence on the convoys entering and leaving the harbor at Reykjavík. But, one couldn’t assume that. We had to presume that their intentions were hostile in the moment, and they were after all the enemy. The first attacking destroyer fired several rounds into the water near the diving U-Boat. Meanwhile, the second destroyer prepared to drop depth charges. We zigzagged around them as the second destroyer laid down a pattern of depth charges in the ocean. I don’t know whatever became of that U-Boat.

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The ship then moved toward Reykjavík at flank speed doing its limited best to get out of harms way. Once there we rendezvoused with a goodly number of other cargo vessels anchored in the Hvalfjordur fiord. Still other vessels joined us later that week.

June 27th, 1942. Hvalfjordur fiord, just north of Reykjavík, Iceland - Finally, at 1600 hours on June 27th, 1942 the fully assembled convoy departed Reykjavík heading first south, then east and finally nor-nor-east toward the Arctic Circle. This newly assembled convoy was named PQ-17. Convoys headed for Russia were known as "PQ" convoys and those heading back from Russia were designated as "QP" convoys. The officer in charge of planning had been Commander P.Q. Edwards and they were soon nicknamed after his initials, or the reverse. Our returning designation would presumably be QP-17.

According to the Skipper, our convoy of 34 merchant ships carried nearly 300 aircraft, 600 tanks, over 4,000 trucks and gun carriers, and over 150,000 tons of cargo, enough to equip an army of 50,000 and valued at some \$700 million at that time (i.e., in 1942 dollars). He noted for my sake that the convoy appeared to be heavily escorted, protected by 4 cruisers, 3 destroyers and two British submarines, and there were also two tanker-oilers that would refuel ships as needed during the long voyage.⁻²

As we departed Iceland we found the seas to be relatively calmed, the ferocious Arctic storm of the prior week now only a memory. The weather had moderated, warming somewhat to about 3 degrees Celsius. But, as we traveled nor-nor-east, crossing the Arctic Circle, the temperature dropped once again and the convoy came upon heavy ice flows and severe icing conditions. On June 29th the lead escorts the *SS Richard Bland* and the *SS Exford* were so badly damaged by impacts with sea ice and small bergs that they were permitted to return to port. Then on June 30th our ship the *John Witherspoon* and four other merchant ships suffered varying degrees of ice-related damage, with the former somewhat the worse for wear on account of all that ice. But, all ships continued on with the convoy none the less.

We slogged on through the ice, passing well north of Glasgow, Scotland heading nor-nor-east far off the Norwegian coastline. Then on July 1st we turned eastward. This brought us closer to land, that is far northern occupied Norway. There we sighted a German reconnaissance plane, and perhaps more critical to our fate he had sighted us. It wasn't until the next day that we would begin to know how the Germans would respond to this sighting. On July 2nd we were hit with two waves of German aircraft. Somehow we were able to shoot down one of the attacking plans and fortunately suffered no casualties. On July 3rd several planes flew over us and one dropped a bomb near another ship close to us, but without effect. So far we had been very lucky and sustained minimal damage. But, our luck was about to run out.

July 4th, Independence Day, should have been a holiday for celebration. But, the Nazi's were not known for their respect of this American holiday, and that day witnessed the heaviest attacks seen yet. Although it was hard to keep track of all the incoming action, at least eight enemy planes were shot down by the convoy's Navy Armed Guards. Unfortunately, two American ships, the *Christopher Newport* and the *William Hooper* were sunk by torpedoes. One Armed Guard aboard the *Daniel Morgan* was able to save the *Carlton* that day by firing his .30 caliber machine gun at a

² Ref: <http://uboaat.net/ops/convoys/pq-17.htm>

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passing torpedo and exploding it at about twenty yards from the intended target. After this success others tried as well, but to far less fortunate effect. And to our incredible bad luck that time of year was the 24 hours of daylight for those enemy U-Boat and air attacks above the Arctic Circle. In winter the Arctic Sea would have been dark nearly all day long, but impossibly cold and ice clogged.

To make matters worse Intelligence had speculated about the presence of the *Tirpitz*, sister ship of the *Bismarck*, in these northern Norwegian waters. The *Tirpitz* was the second and last of the *Bismarck* class of warships built by Nazi Germany. She had the same extraordinary long-range guns that had made the *Bismarck* such a threat to British shipping and naval units. Many recalled how the *Bismarck* had sunk the *Hood* with perhaps a single shell from those long-range guns. A shell had penetrated right through her armored decks.³ That single shot had ignited the *Hood*, producing a conflagration that sank her in a matter of minutes. Out of her brave crew of 1,418 men, only three had survived. Yes, that's right. Only three survivors were rescued from her company of 94 officers and 1,324 men. Guns of that same design gave the *Tirpitz* this same theoretical "first shot" advantage that the (now sunk) *Bismarck* had possessed. She could simply out gun anything either the American or British navies could muster. I would always remember the horror of that news; the sinking of the *Hood*. It had burned into my brain the *absolute* necessity of gaining the "first shot" advantage - and the imperative for a decisive "one shot" edge over the enemy - to ensure your personal survival and perhaps even victory in battle.

Naval Intelligence had provided us a dossier on the *Tirpitz*. According to that information, she had been commissioned in February, 1941 and afterwards went to the Baltic for sea trials. At the beginning of 1942, she was sent to and stationed in Norway in order to repel a possible Allied invasion. According to the latest information, and much to our dismay, she was now stationed on patrol out of Trondheim harbor in far northern Norway for the sole purpose of attacking Russia-bound merchant convoys. Her mere presence in this area, in the Arctic Ocean and Barents Sea, had

³ *Bismarck and Hood* - Launched on 14 February 1939, *Bismarck* was the first of the new breed of ships that German leader Adolph Hitler and Grand Admiral Raeder hoped would herald the rebirth of the German surface battle fleet in the tradition of the Kaisers High Seas Fleet. She was of comparable size and main armament to the largest British warship of that time, *H.M.S. Hood*. Despite the basic similarities, there were nonetheless serious differences between the two ships: *Bismarck* was a modern battleship in the truest sense. Her critical spaces were well protected by excellent internal compartmentalization and high quality heavy armor. She also boasted state of the art electronics plus highly accurate and rapid firing gunnery systems. She and her sister *Tirpitz* were among the best ships at that time. In comparison, *Hood* was a well-built for her day (1920), but by 1941 was nonetheless an aged battle cruiser. She had adequate protection in some key areas, but not all. Simply put, in a one-on-one fight, *Bismarck* could absorb more damage while firing faster and more accurately than *Hood*. *Bismarck* could take and give more in battle. Each ship had the theoretical ability to sink or severely damage the other, but the advantage clearly was with *Bismarck*. Although there was naturally some variation in the reports that witnesses gave, most agree that a tall, slim geyser of flame, similar in appearance to a welding torch, shot up from the area around the main mast (possibly venting flame/gas shooting up from the engine room vents). At the same time, a gigantic explosion or conflagration wracked the entire aft end of the ship. Large pieces of debris were observed to fly into the air. As the flames turned into a mushroom cloud, the entire ship became wreathed in heavy smoke. She slowed to a stop and heeled heavily to starboard. The ship momentarily righted itself and then began an alarming roll to port - a roll from which she never recovered. As she rolled to port, she began to go down by the stern. The bow began to swing sharply upwards - *Hood* was going down and doing so quickly. Ref: <http://www.hmshood.com/ship/history/bmhood/BMHood.html>

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required the Allies maintain a considerable naval escort force with these convoys to try and deter such attacks.

However, at about 22:15 hours on July 4th we received a coded communiqué that the *Tirpitz*, accompanied by the heavy cruiser *Admiral Hipper*, several destroyers and two torpedo boats, had been observed departing Trondheim. Upon arrival at Altafjord harbor, she had been joined by the heavy cruiser *Admiral Scheer* and a number of German “Z” Class destroyers, all with the undoubted objective of attacking and sinking the 34 merchant ships in convoy PQ-17.⁴ We were then advised that our naval escorts would immediately turn south in a perhaps futile attempt to intercept and interdict, or at least draw off and delay, these heavily armed German naval forces, and that our best hope for survival was for the convoy to disperse, to scatter!

There we were north-east of Bear Island, above the Arctic Circle, pressed up against the impenetrable barrier formed by the polar ice pack, sitting ducks, unprotected in the frigid Barents Sea. We were 34 slow moving, heavily laden unescorted merchant ships, illuminated by 24 hours of daylight, making us perfect targets for the *Tirpitz*, the dreaded Nazi U-Boats and those *Luftwaffe* bombers. “Oh God, please be merciful.” I prayed.

When I had finished decoding the communiqué, I presented that stark translation to the Skipper. I’d never seen his eyes open so widely. His salty expletives I will, for the sake of any ladies, delete from my commentary. He then rushed over to the bridge storage bins and pulled out the same detailed charts of the Arctic Ocean and specifically the Barents Sea we had surveyed a week ago off of the Iceland coast. They now appeared even less inviting than they had at that point. The problems we faced were many, including the harsh weather conditions, the impending attack by the *Tirpitz* naval task force, the range of the *Luftwaffe*’s planes stationed in Norway, the location of the ice pack hemming us in on the north and the fact that German U-Boats were all around us. The Skipper noted that the charts showed the bleak northern Russian island of Novaya Zemlya lay two days to the east. I observed that the Matochkin Straight lay between the upper and lower peninsulas. If we could make it that far to the east we would presumably be out of the range of the

⁴ Given the disparity in strength between the German Navy (*Kriegsmarine*) and the Royal Navy, German strategy at sea during World War II was to avoid a traditional naval battle and attack allied merchant shipping with surface raiders and submarines (U-boats). These attacks on maritime trade served multiple purposes. The threat alone forced Britain and America to put merchant ships into inefficient convoys, while the difficulties of spotting and tracking U-boats required the dispersal of large numbers of planes and escorts for trade defense. In addition, the cumulative total of cargo ship losses would reduce overall transport capacity and reduce the amount of cargo shipped overseas. The role of surface raiders in this campaign was to evade enemy patrols in European waters and then sink as many merchant ships as possible in a sudden descent on the Atlantic trade routes. A side benefit of these operations would be the disruption of the merchant ship convoy cycle, which had secondary and tertiary effects on Allied resource mobilization, war production, and troop deployments. The main tools used by the *Kriegsmarine* in this campaign were the three *Panzerschiffe* (pocket, or small battleships) *Lutzow*, *Admiral Graf Spee*, *Admiral Scheer*, two heavy cruisers (*Admiral Hipper* and *Prinz Eugen*), two battle cruisers, (*Scharnhorst* and *Gneisenau*), and the fast battleships (*Bismarck* and *Tirpitz*). All of these warships were relatively new, the oldest being *Lutzow* and she was launched in 1931. They had good range, were faster than most Allied battleships, and were well-armed compared to most British and American anti-commerce raiding forces. In the summer of 1940, however, the collapse of Norway, the Low Countries, and France dramatically improved Germany’s strategic position. No longer could the Royal Navy easily “bottle up” Axis forces in restricted waters. To make matters worse for Britain, attacks from newly-established bases in France and Norway outflanked British defenses and stretched British patrol aircraft and escorts to the breaking point. Ref: <http://www.history.navy.mil/faqs/faq118-1.htm>

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Luftwaffe and perhaps under cover of the Russian Navy and Air Force. Steaming east also maximized the distance and time between us and the *Tirpitz*. But, with our ship traveling at a mere 8 knots, and the *Tirpitz* steaming toward us at 28 knots, they would quickly close that distance. Our only hope was to avoid being one of the first ships found and fired upon. Our fellow seamen would buy us time with their lives, or perhaps we would buy time for them with ours!

July 5th was a day of great sorrow as the carnage began. The *Carlton*, saved only the day before, and the *Honomu* were both sunk by U-Boat torpedoes.⁻⁵ The *Daniel Morgan*, the *Carlton's* savior was herself sunk by a combination of the *Luftwaffe's* bombs and torpedoes. The *Fairfield City*, *Pan Kraft*, *Peter Kerr* and *Washington* were sunk by bombs.⁻⁶ The *Heffron*, *Hybert*, *John Randolph* and the *Massamar* were, in their desperate flight, sunk by German mines. As luck would have it, the *Exterminator* and *Richard Henry Lee* were damaged, but not sunk in those same minefields, only to be sunk later by *Luftwaffe* bombs. July 6th was another grim day for the Allies as the remnants of what had once been convoy PQ-17 scattered, most steaming farther north or farther east towards Arctic Russia.

⁵ The survivors from the crews of the *Carlton* and *Honomu* were captured by the Germans, held as prisoners of war (P.O.W.'s) and were not liberated from their internment until 1945.

⁶ The men of the *Washington* would spend 10 freezing days in life boats and then be forced to travel overland in Arctic Russia before being rescued. One-third had frozen feet. Ref: <http://www.history.navy.mil/faqs/faq104-2.htm>

Allies Foreign - Russia

50 Years Later. June 20th, 1992. Hayes Hotel Lafayette Park, Washington, D.C. - And, what became of us? There was no need for me to speak a single word of it to that brave crew. But for the benefit of the news reporters and others present I recounted our fate. The *John Witherspoon* had survived the heavy ice and the *Luftwaffe's* planes only to be sunk by a torpedo that very day, July 6th, 1942. Our surviving Navy Armed Guardsmen and merchant crew had escaped to the life boats and spent 53 freezing hours on the open ocean before being rescued by the *El Capitan*, a Panamanian registry freighter from the convoy. However, it was then our further misfortune that she, too, and the *Hoosier* were bombed and were both sunk on July 10th while steaming towards Arkhangel'sk (Archangel). So, we were again relegated to the ocean in life boats, spending about 12 more hours on the Barents Sea before being rescued again, this time by the *Benjamin Harrison*. The resourceful crew of that ship had improvised using tank machine guns and ammunition from their cargo to successfully defend their merchant ship from the *Luftwaffe's* planes. We later learned that of the original 34 ships only seven - the *Benjamin Harrison*, the *Ironclad*, the *Silver Sword*, the *Troubador*, the *Winston Salem*, the *Samuel Chase* and the *Bellingham* - were able to make it safely through to either Molotovsk or Arkhangel'sk.

Not a single ship had been sunk by the *Tirpitz* naval task force. Apparently, at 2130 hours on July 5th, 1942 the Germans had cancelled that naval operation due to severe icing conditions, and their ships had returned to port – all without firing a single shot. However, their mere presence had drawn off the PQ-17 convoy escorts, allowing the *Luftwaffe's* planes and the German Navy's U-Boats to sink the balance of our ships. Those ships had carried 430 tanks, 210 airplanes and 3,350 support vehicles, valued at over \$500 million in 1942. But, most tragic of all were the hundreds of Navy Armed Guardsmen and merchant seamen injured, captured, lost at sea or killed in action. Tragically, many had perished in those icy waters; blown to death, incinerated, drowned and frozen. Only a scant one-in-three had managed to survive!

And as I came to the end of those ancient memories, I closed my personal log, stepped down from the podium and returned to my seat. And as I did, I observed that my story had left not a single dry eye in that audience. Each silently wept for our dead comrades, and our long lost youth. For we all knew that despite the terrible risks, that each of us had somehow survived. Perhaps it was survival by raw chance. But, each had beaten the long odds, and cheated death out of 50 years and perhaps a few more.

Briefly, as I had spoken they all had relived every sacred moment of that dark past. Thoughts drawn from deep within the recesses of their collective memories re-emerged. Feelings long hidden rushed to the surface. Names and faces long forgotten were remembered. Youth long past was recaptured, if only briefly. And, as I gazed around the room, the moment was made ever more poignant for me by the stark realization that there were so few of us left. We few were all that remained of those who had survived the long odds on that Murmansk Run.

So many had perished in those icy waters; blown to death, incinerated, drowned, and frozen. And in the 50 years since those dark days, so many more had succumbed to the passage of time; whether in a final confrontation with the grim reaper, or to the lingering infirmities of the body and

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mind. For after 50 years, I was the only officer remaining from that brave crew. All the others had passed on before me. Those of us who remained each wept silently for the sea of empty chairs around us. Each of us once again acknowledged the frailty and mere chance of our personal survival and the approaching limits of our own human existence.

Finally, the house lights fully dimmed and after a brief moment the stage lights came up as bright as day. Only then did my thoughts fully return from the fog of that ancient past, as the original purpose for that gathering flooded my consciousness. For our brief moment on the world stage, for this tiny bit of history, we were being presented the **Russian** Medal of Honor for war time heroism. It seemed so very odd that former Cold War adversaries, once wartime allies, were again polite, if somewhat awkward, friends. And in the warm glow of that renewed friendship, and given their desire for American tourist dollars, the Russian Government had called us together. We were there to celebrate the 50th anniversary of the Murmansk Run. And Moscow had taken this opportunity to graciously, if quite belatedly, recognize the men who endured that time, living and not. We were there to honor those heroic souls who helped Mother Russia persevere against the Nazi tide so many long years ago.

Our host and his subordinates on stage rose as one of their protocol functionaries motioned for us to begin the procession. So, I in my turn and at the appointed time dutifully rose and climbed the five steps onto that stage at the head of my crew. As I did, the Russian Ambassador crossed over to me wearing the same disingenuous smile he had reserved for all of us, those few out of so many more lost souls. He put his left hand on my shoulder and vigorously shook my right hand with his other. His assistant awkwardly pinned the medal onto my lapel. After the official State photographer captured the moment on acetate with a blinding flash, we turned to face the audience. They would belatedly clap their approval for each heroic crew, and now applauded for us in our turn. Finally, and quite mechanically, I returned to my seat weighed down by a silver-gray star, suspended from a crimson red ribbon. For me they symbolized the frigid cold of that accursed Arctic and the blood so freely spilled by our fallen comrades so many long years ago.

That particular evening was replete with irony. But, it was far more ironic for me than for my crew. My personal irony flowed from the extended intervening legal battle I had waged against the U.S. Government, or more precisely the United States Army. Ironically, the Russian's had now freely, evenly lavishly, recognized our heroic wartime contributions. And yet my own country had treated me as if I were a foreigner, as if an enemy, as a person undeserving of respect or legal protection, without the Constitutional rights of citizenship and without Fifth Amendment protection for my personal property. Yes, that night was truly ironic, ironic indeed.

Enemies Foreign - Communism

So, as I sat in my chair, the remainder of that group of creaking older men, one by one, crew by crew, rose to be recognized. Those medals acknowledged our individual and collective contributions from that distant past. And this incongruous scene was made even the more absurd for me by thoughts of the intervening years. I found myself reflecting not so much on those many Cold War battles between the United States and its arch enemy Communism: not on Korea, the Bay of Pigs, the Cuban Missile crisis or even Vietnam. No, my thoughts wandered to a battle far more personal and ironic in my present context. My thoughts drifted to my personal 30 year legal battle with the United States Army. A battle between the Army and one of the very citizens it had sworn to protect from all aggressors, all enemies foreign and domestic.

I was startled back to the present by a hand laid upon my shoulder. I turned as the gentleman sat down next to me and introduced himself. "Mr. Lawrence, my name is George Barrett. I'm a Senior Reporter for the Washington Post and I'm planning a series of articles for the Sunday Edition. I am interested in interviewing some of the veterans here and reporting on the life and times of a World War II veteran during the last 50 years. I noticed your name on the list of attendees, just heard your fascinating personal log remembrances, and thought I would approach you. I also seem to recall an article in the Washington Post Sunday Business Section several months ago concerning you. Is that correct?" I nodded my agreement commenting, "Yes, that was concerning my patent litigation." He responded, "Well, I'm also interested in a possible follow up to that article, and perhaps we could 'kill two birds with one stone' if you would grant me an interview in the next day or two?" I noted that we were returning home to Glen Head, Long Island, NY following the ceremony. But, as I was now retired, I could probably spare him some time the next morning, if he was willing to travel to Long Island. So, we then agreed to meet at 10AM the next morning for that interview.

June 21st, 1992, 10AM. Glen Head, LI. The Interview – I had returned home to Glen Head for a good night's sleep. My son had driven us to Washington, D.C. and back. So, he decided to spend the night. That next morning he volunteered to mount that my Russian medal of honor display on the wall in the living room. We selected a place and he pounded the nail home. Just then the door bell rang and as I opened the door there was reporter George Barrett. He had taken the New York shuttle up from Washington that morning and rented a car to drive from LaGuardia airport to Glen Head. He came in and plopped himself down in the living room onto my worn out, but comfortable, red gingham wingback chair. That morning he looked for all the world like someone who was very much the worse for wear. My son and wife were already in the living room. So, I introduced them to Mr. Barrett. Joanne then offered him a cup of tea and he gratefully accepted, noting that he had arisen quite early that morning in order to make this trip.

We exchanged a few pleasantries while waiting for the tea. Upon its arrival he genuinely thanked Joanne, took two sips and placed the cup down on the coffee table. He pulled a black notebook and tape recorder from his sport jacket pockets and began his interview. As a preliminary he asked, "You don't mind if I record the interview? My short hand isn't what it should be for a senior reporter." I said that I didn't mind. He explained briefly that he was planning a series of articles for the Sunday Washington Post on our World War II heroes and their life since the war ended. "I

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have plenty of notes on your merchant marine experience and the PQ-17 story, given your personal log report at the ceremonies yesterday. That will probably be the lead-in piece for the series. However, I'm also interested in writing several follow-on pieces tracing your life and the life of several others since then. And in your particular case, I would like to develop a possible tie-in to that Washington Post Business Section article on your patent litigation." I was a little surprised by the direction that he was taking, but agreed to proceed none the less. He queried, "Can you help me fill in some blanks left by that article?" I responded that, "Before I travel down that long and winding pathway, I should first provide you with some additional background on the years before that stoic legal battle commenced." And, thusly the interview continued. [Fade out 1992 and return to 1945.]

September 2nd, 1945. VJ-Day and our lives were off hold. – The war had finally ended with the surrender of Japan in the Pacific. Peacetime at last! Or so we initially thought. Following my discharge from the Merchant Marine, I returned to teach and study at Rensselaer Polytechnic Institute in Troy, NY. I taught courses in mechanics and aeronautics, while I studied electrical engineering. Electronics was a relatively new field at that time. The transistor had only just been invented in late 1947 at Bell Labs in Murray Hill, NJ. So, pretty much everything we had built until then glowed brightly from heated filaments held in evacuated glass tubes. Yet, now that one invention held the promise of portable, compact size and so much more.

But, most notably for me, I met, fell in love with, wooed and married a beautiful young woman named Joanne Laskey. Her mother, Marie Elizabeth Cunningham Laskey had obviously passed on to Joanne both her lovely flowing auburn hair and a bit of the blarney that I have found in certain red-heads of Scotch-Irish descent. We wed on June 18th, 1949 and moved to a small upstairs apartment on Tibbits Avenue, in Troy, NY, just off the Rensselaer campus. And we shared our youthful love and enthusiasm for life in that small apartment. Oh, how I miss those bitter-sweet days, the spent, yet savored moments of our young lives.

Our first real sorrow was my father's unfortunate passing. With his death, I, along with my brothers Tom, Tony and John and my sister Penny, each inherited our respective portions of my father's sizable estate. It included proceeds from the sale of our childhood family home in Bayside, Queens and from my father's investments, antiques and other personal holdings. My mother had passed away when I was born, something almost unheard of today, and I had been raised by my paternal Grandmother. My father had remarried when I was seven, but my unfortunate step-mother had been killed in an automobile accident several years before my father's passing. So, at that point, I was entirely without parents. But, as a bit of good fortune, I was able to "adopt" Joanne's parents, George and Marie, as if they were my own and we became very close over the ensuing years.

With my inheritance in hand, I set my mind upon forming a small corporation. It would specialize in aeronautical and electrical engineering and consulting. My partner was my old college friend Bill Folsom. We named our new business Flight Command Associates, Inc., and we set up shop in Schenectady, NY. Our offices and laboratory were not far from the huge General Electric complex there, and were equally close to the Army Arsenal and Weapons Laboratory on the Hudson River in Watervliet, NY, just across the river from Rensselaer and Troy. Aside, I will note that the

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Watervliet Arsenal would figure prominently in my extended legal battle with the Army some years later.

But, then again, it was a hopeful time with our marriage, the start-up of my first business and then the birth our son, Christopher, our first daughter Deborah, and several years later, our daughter Amanda. By then, we had moved from that tiny upstairs apartment in Troy and were living in a small Levittown-style home at 1123 Cushing Lane in suburban Schenectady, NY. We loved. We struggled. We endured. We made a family together and a modest, but honorable life for ourselves and our children.

August 13th, 1961. NATO Headquarters, Brussels, Belgium – Through my contacts at Rensselaer, I was able to land a modest consulting assignment with NATO in Brussels, Belgium. The Cold War was nearing its apex following the failed Bay-of-Pigs invasion in April, 1961, and especially so now in the summer of 1961. I recall reading a Time Magazine article on how that Sunday, August 13th had been a “dark day for democracy.” The Communists had just divided Berlin with barbed wire and would soon start construction of that infamous Berlin Wall.⁷ The Cuban Missile Crisis would soon follow. I happened to be in Brussels as one of a group of consultants hired to advise NATO on alternative strategies, evolving weapons systems and the application of emerging electronics technology to the battlefield.

The Soviets and their Warsaw Pact allies clearly out numbered the NATO allies in Europe. In absolute number of heavy weapons, including tanks, long-range and anti-aircraft guns, howitzers and mortars, they held a considerable tactical advantage over NATO. So, a counter-force imbalance clearly existed. But, I had suggested that if the U.S. could develop a technological edge, as the Germans had tried during World War II, NATO could narrow that numerical advantage in the event of an all out conventional battle on the plains of Central Europe. Thusly was conceived NATO’s “technology over numbers” strategy. And this strategy was to become a key part of America’s Battlefield Europe planning during the ensuing years.

In theory, it could also reduce the probabilities associated with exercise of the nuclear option. For the planners knew full well that should NATO find itself in retreat -- following the loss of a Theater Europe conventional battle -- then their last, most desperate option was to engage the enemy with tactical nuclear weapons to “even up the score.” They also suspected that the Soviets might not take a tactical nuclear counter-punch sitting down, and events could spiral out of control. So, the prospect for developing an effective technology-based non-nuclear counterforce strategy could materially diminish the risk of a limited-theater conventional war mushrooming into an all out strategic nuclear exchange.

Many of the heavy weapons systems employed by the U.S. Armed Forces incorporated massive gun barrels. Army tanks and artillery guns used 75, 105, 120, 155 and even 175 mm diameter

⁷ At 2 a.m. on Aug. 13, 1961, a low, barbed-wire barrier was strung between East and West Berlin. It effectively divided the city in half. Within days, workers cemented concrete blocks into a low wall through the city. Moscow called the wall a barrier to Western imperialism. "It pleases me tremendously," Soviet Premier Nikita Khrushchev said. "The working class of Germany has erected a wall so that no wolf can break into the German Democratic Republic again."

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munitions, while naval guns had requirements up to 8 inches in diameter. And, of course, the centers of all those gun barrels had to be bored out straight and true, to the exacting specifications required by the ammunition used. Otherwise the guns wouldn't shoot straight and hit their intended targets. The harsh reality of survival in war was "kill or be killed." So, it was imperative that those guns hit their intended targets and hit them first, because you didn't get a second chance.

I had learned that there was a major unsolved problem associated with the manufacture of these massive gun barrels. More specifically there was a problem with achieving the desired, even essential level accuracy required. These guns were heavy, hard to manipulate and difficult to manufacturer to the exacting level of precision required. Rejection rates were often high, and good tolerances were achieved only through the most hit-and-miss of methods. In many cases, the armed services were simply forced to live with the available precision that the primitive manufacturing technology could offer. And as a result, the troops had to do the best they could with less than perfect weapons. Fortunately, our enemy's weapons suffered from the same limitations.

By 1961, all the major manufacturing challenges, with the exception of the gun precision problem, had been largely resolved. The Watervliet Arsenal had built heavy duty cranes and massive lathes for cutting out the center of these heavy cannons. These "boring lathes," as they were called in the business, could cut out long cylindrical pathways down the centers of these weapons, through which high explosive artillery shells traveled in these powerful guns. The accuracies were generally acceptable for short-barreled, short distance bombardment weapons, such as mortars and howitzers. But, acceptable tolerances were simply not achievable for longer barrels, such as tank cannons and long-distance artillery barrels. The term coined by the industry to describe this lack of precision was "run-out." It was defined as the distance from the desired absolutely precise centerline of the gun barrel to the centerline of the less-than-precise and often serpentine or banana-shaped cylindrical hole actually bored by the lathe. Too much run-out and the gun barrel couldn't shoot straight. Then it would have to be scrapped at great cost to the Army.

September 24th, 1961. Schenectady, NY. Two Key Inventions – Eureka! We definitely could build a better mouse trap, or rather gun barrel, in this case. I entered the critical notations into my lab notebook. Our independent research into this key heavy weapon manufacturing problem, and my innovative approach, led to the application for and eventual issuance of two breakthrough patents. The first patent was for a run-out indicator or "ROI." The second patent issued was for a run-out controller or "ROC." Briefly, the ROI measured any gun barrel manufacturing error or "run-out" deviation very precisely. And, building upon this precise signal, the ROC could provide a feedback loop and electro-mechanical means for reducing the "run-out" error to levels previously unheard of in weapons manufacturing -- to within a few thousandths of an inch over the entire length of these massive gun barrels.

The run-out controller patent in part read:

United State Patent Office

Patent No. 3,217,568
Patented Nov. 16th, 1965

1

3,217,568

DEVICE FOR CONTROLLING DEEP BORING OPERATIONS IN A ROTATING GUN BARREL OR CANNON

Albert Lawrence, Schenectady, NY
Filed November 2nd, 1961, Ser. No. 197,049
22 Claims. (Cl. 77-3)

The present invention relates to a lathe cutting tool adapted for deep cuts within a rotating gun barrel, wherein means are provided for maintaining the track of such cutting tool within very close limits.

BACKGROUND

There has been described in Patent No. 3,020,786 by Albert Lawrence and William A. Folsom, a device for measuring run-out during a deep boring operation.

In many instances, after the cutting tool has

2

proceeded approximately one quarter of the distance down the gun barrel, it begins to gradually drift away from the center line of rotation of the barrel. This tendency to drift is apparently random and is as yet not well understood. In many cases the run-out becomes excessive reducing the accuracy of the gun. A significant fraction of the time it can even ruin the work piece entirely.

BENEFITS OF THIS INVENTION

It is therefore a primary objective of the present invention to provide a means for improving the accuracy of the cutting operation in large gun barrel manufacturer such as a 90, 105 or 120 mm tank gun barrel or the like.

The resulting improvement in gun barrel accuracy and the associated savings in manufacturing costs are expected to be significant. The critical "first shot" advantage in battle may be achieved by these more accurate guns. So, application of the present invention to weapon systems manufactured by or for the U. S. Armed Services could potentially save both American lives and taxpayer dollars.

And I knew from my own war time experience and independent research that capturing the "first shot" advantage on any battlefield would surely be one of the pillars of NATO's new "technology over numbers" counterforce strategy. But to achieve this objective NATO forces would need to be able to see, fire on and destroy the enemy before that enemy could do the same to them. To gain the full benefit of that "first shot" advantage, they would need a "one shot" to kill weapon system: the ultimate main battle tank. That would require the development of special optics and sighting equipment, precision aiming electronics, hyper-accurate guns and high-penetration ammunition. None of that technology was yet available in 1961. But, within the next 15 years that far reaching vision of the ultimate main battle tank would become a reality.

The ultimate answer to NATO's counterforce strategy was the Abrams M1 main battle tank. When outfitted with special all weather, day/night optics, computer-guided fire control, the hyper-precision 120 millimeter smoothbore M256 cannon, and when firing depleted uranium or HEAT (High Explosive Antitank) penetrating rounds, it was one awesome and unstoppable tank. The later Persian Gulf War would demonstrate that weapons systems benefiting from the hyper-accuracy imparted by my run-controller invention would indeed give the U.S. and its Allies a major tactical advantage. Advanced technology would be one key to the Gulf War success. That one invention would give the United States and its Allies, but most importantly our son, a key advantage and a critical edge for success and *survival* on the desert battlefields of Iraq: the "first shot" advantage and the "one shot" edge.

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January 20th, 1962. Benet Weapons Labs, Watervliet, NY - So, in early 1962 I developed and presented an unsolicited research & development proposal for the run-out indicator to Stephen Von Dieb who was assigned to the Army Materials Command (AMC), Benet Weapons Laboratory, at the Army's Watervliet Arsenal. He was immediately intrigued by the potential of the run-out indicator invention. Previously they had used large calipers to measure run-out only very imprecisely. On the strength of this proposal, Flight Command Associates was awarded a sole source R&D contract to develop one prototype run-out indicator. I labored many long nights and weekends to develop the first working model in our Schenectady labs, delivering it to the Watervliet Arsenal about four months following the contract award. It was mounted on a gun boring lathe and the first precise measurements of run-out were taken in May 1962.

June 21st, 1962. Benet Weapons Labs, Watervliet, NY - Following this prior success, I presented Mr. Von Dieb with a second unsolicited proposal for a run-out controller. This time I suggested that we could use the run-out signal produced by the indicator to guide the cutting tool on the boring lathe and achieve ultra high precision in the manufacture of gun barrels. However, his reaction to that second proposal was considerably different. There would apparently be no sole source award. The Arsenal instead chose to issue a request for proposals (RFP) for someone to build a prototype of my second invention. I had hoped for a second sole source award. But, that was not to be.

So, the Watervliet Arsenal issued Invitation for Bids RFP No. AMC-30-144-63-44 for the procurement of a deep boring axis control system (i.e., a bore guidance or run-out controller device). I dutifully submitted a response to the RFP suggesting that Flight Command Associates build the first working prototype of this run-controller. But, inexplicably, our bid was rejected without any further explanation or comment. And on numerous subsequent occasions, I sought to contact Mr. Von Dieb and learn of the final outcome of the bidding process. But, I was continually put off. We heard nothing more until nearly five years later.

March 3rd, 1967. Schenectady, NY. The Army's First Security Leak. - One day, while working at different job and quite out of the blue, Bill Folsom sat drinking coffee with a technician from another contractor. This guy's story raised Bill's eye brows a full inch. It seemed this technician, Walter M. Henry, had worked on a job for the Watervliet Arsenal installing a run-out controlling contraption on a large lathe in their manufacturing shop. Bill immediately relayed this conversation to me and we then contacted our local patent attorney, Leonard H. King, Esq. He arranged a meeting with Mr. Henry to learn more about the Arsenal's controller. At the close of that meeting we extracted a promise that he would be willing to testify as to what he saw and the likelihood that this run-out controller infringed patent '568. Then on May 2nd, 1967 Attorney King filed a formal administrative claim with the Army for compensation in which he asserted that the Arsenal's run-out controller infringed the '568 patent. In the claim, Mr. King stated that Mr. Lawrence had for years been denied direct knowledge of the RFP outcome. And he sought a plant tour and access to perform an examination of the suspect lathe and controller. Mr. King's administrative filing and inspection tour request were unceremoniously denied on March 25th, 1968.

1968, Schenectady, NY. FCA closes up shop. - With the loss of the run-out controller contract, Flight Command Associates (FCA) had lost its largest customer. Without a major contractor FCA slowly bled to death. Eventually, I found it necessary to abandon all hope of building my company, and sought employment as an electrical engineer working for the defense industry on Long Island, NY. I needed money to pay for my growing family. And, after a year and one-half of making the

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long weekly commute from Schenectady to my Long Island job, I finally moved my family to a rented home in Roslyn, NY. It was a converted carriage house on the estate of a New York City tenement owner name Lang. With whatever FCA electronic equipment that was left over, I set up shop in a small converted coal bin in the basement of that brick colonial-style home. And I was to spend the next ten years moving from job to job on Long Island following the flow of defense work amongst the various businesses found there, including Grumman, Avian, Photocircuits, Kollmorgan and EDO. I even worked a brief stint at the U.S. Department of Energy Labs in Brookhaven, NY doing instrumentation work at their nuclear accelerator.

Yet hope springs eternal. So, on March 16th, 1970 I sent Mr. Von Dieb a second unsolicited proposal to the Arsenal regarding the run-out controller. In that letter, I suggested that the Arsenal procure a second run-out controller from FCA and offered to license the '568 patent to the Army -- if it purchased that run-out controller from me. Although I did not know for certain, the letter asserted as a "shot in the dark" that the Arsenal's run-out controller was "a direct and unquestionable infringement of our '568 patent." I also suggested that this would be "an excellent way for your office to recover its position and avoid direct legal action in a civil court."

But, these fish just weren't biting. This second offer was rejected on April 8th, 1970, and I did not contact the Arsenal again until 1977. In 1970, we had just moved to our own home – with its then new 25 year mortgage. And, given that new mortgage, and our growing family needs, we simply lacked the funds necessary to bring a major law suit. There was essentially no activity on this nascent litigation until after the publication of an article in the Albany Time-Union newspaper on March 26th, 1977.

Enemies Domestic – The U.S. Army

March 30th, 1977. Behind the Vail of Secrecy – Following a long and difficult commute 65 miles out Long Island to Brookhaven and back again, I returned home very late. Upon entering the front door I picked up the mail, sat down in my favorite chair and then spied an envelope from my former patent attorney Leonard King. In that plain white envelope was a short note saying, “Thought you might find this interesting?” and an attached article from the Albany Times-Union newspaper.

Albany Times-Union***R		Thursday, May 26 th , 1977	2
Engineer wins award Reporter: <i>Richard J. Davis, Jr.</i> A Watervliet Arsenal engineer has been awarded a national honor for what military experts have termed a “breakthrough” in a vital process of heavy weapons manufacture. A nearly \$30 million savings on one weapon is attributed to the development of a system by Stephen Von Dieb of Clifton Park, a mechanical engineer with the Benet Weapons Laboratory, who has been granted the Secretary of the Army’s annual award for outstanding	achievement in weapon materials procurement. The Award is for the development of a “guidance boring system,” which permits the arsenal to produce higher quality gun barrels at a much lower cost. The Von Dieb system involves an electronically controlled system which guides a cutting head through a gun barrel with an accuracy of a few thousands of an inch or less. An Army expert said that Von Dieb’s new development “advanced the state-of-the-art in this area of artillery weapons manufacture by perhaps twenty years.” His pioneering innovation solved a problem that had been “a source of	considerable cost and difficulty for the Army.” So far, arsenal officials said, the new system has saved \$28 million on the 175 mm M113 gun, the Army’s largest, and has application also to the 155 mm M185 howitzer, the 105 mm M68 tank gun and the new 120 mm M256 tank cannon. Von Dieb was presented with a medal and citation in recognition of his achievement by Lt. General George Sammett, Jr., commanding general of DARCOM, the Army weapons acquisition organization. Von Dieb is a 27-year employee of the arsenal. He received his award during ceremonies held at the Picatinny Arsenal, Dover, N.J.	
		Early Edition	

“What the H---!” A national medal for the millions of dollars *he* had saved! I jumped up in shock and utter disgust. “Son of a B---” I muttered to myself. We had never known with any certainty what really happened following release of the Army run-out controller request for proposals (RFP) so many years before. Was this somehow an inadvertent leak, a breach of the long silence, a lowering of the veil of secrecy? And, could those millions of dollars in savings have possibly resulted from using my run-out controller concept?

That single newspaper article reinvigorated our inquiries into the Arsenal’s activities in this area. I tried to approach the Arsenal directly, but was repeatedly rebuffed. I approached the Department of the Army in Washington, D.C. and in true bureaucratic style was referred back to the Arsenal. Then, after months of stonewalling by the Army, I decided to try a different tactic. After all, the Department of the Army was supposed to be a servant of the people, and the peoples’ representatives were in Washington, D.C. in Congress. Further, some of them were not without influence in these matters. We would have to see if there was a political “end-around” to the Army’s stall tactics. Their continuing reluctance to admit their guilt -- or even show us the controlled gun boring lathes in their Watervliet facility -- had to be overcome somehow.

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So, I decided to try an inquiry through my elected representatives. At that time one of the Congressmen representing New York State was Chairman of the Armed Services Investigations Subcommittee, with important contacts in the Army, and with access to certain key inside information. So, it seemed the most logical approach was to submit an appeal to my local Congressman, Jerome A. Ambro, 3rd District, along with a special request for investigation to the Chairman of the Armed Services Investigations Subcommittee, Congressman Samuel S. Stratton.

And Congressman Stratton's response to our inquiry was swift and direct. But, it was not the resolution we had sought. Yes, he had investigated. Yes, we had certain Constitutional rights. But, no, in his view, this was a matter for the Courts, not for Congress. I rose to retrieve a folder from my business files and handed Mr. Barrett the one page document.

**U.S. House of Representatives
COMMITTEE ON ARMED SERVICES
ARMED SERVICES INVESTIGATIONS SUBCOMMITTEE**

2339 RAYBURN HOUSE OFFICE BUILDING
WASHINGTON, D.C. 20515
229-4221, GOVERNMENT CODE 180, EXT. 4221

April 6th, 1978

Dear Mr. Lawrence:

Your inquiry concerning the Runout Controller purchased by the Watervliet Arsenal was referred to the Investigations Subcommittee of the Committee on Armed Services for a staff examination. The Subcommittee staff inquiry reveals that your company, Flight Command Associates, Inc. (FCA) was awarded a contract by the Watervliet Arsenal for a runout indicator. Shortly thereafter FCA submitted an unsolicited proposal for a runout controller. In 1962 the Watervliet Arsenal conducted a two-step, formally advertised procurement for a runout controller. During the first step the technical proposals of Bergen Company and FCA were found technically acceptable. In the second step, Bergen Company submitted a bid of \$38,000 while the FCA bid was for \$45,000. As a result, the contract was awarded to Bergen, the low bidder.

Your local representative, Leonard H. King, Esq. filed a claim against the Army for infringement of your patent No. 3,217,568. The Army, in a letter dated March 25, 1968, denied the claim. The Army still contends that no infringement occurred, but suggests that you have the right to file another administrative claim and have an updated review.

The rights of a patent holder when a patent is used in the performance of a Government contract are described in 29 USC § 1498. The patent holder cannot prevent the use of his patent, but has the remedy of filing a claim against the Government for damages. The Court of Claims is the proper forum to determine recovery of reasonable and entire compensation for use and manufacture when a patent has been infringed. The staff study has concluded that your claim should properly be presented to the Court of Claims, which was established to adjudicate disputes such as you have with the Army. Since that remedy exists, I believe that your claim should be pursued in that forum.

I trust this satisfactorily explains your rights and clarifies why you should pursue this matter through the court system.

Sincerely,

Samual S. Stratton
Chairman

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Little did we realize at the time, but Congressman Stratton had said and done everything, including the obvious, to point us in the right direction. His position was somewhat awkward. He sat on the Subcommittee as a representative of New York. He had many friends at the Department of the Army, and yet it was his duty to investigate them. He really believed in truth and the Constitution, but recognized the Cold War realities of a national security problem. So, his letter, while beyond our initial comprehension, was in the long-run right on target, but without violating his oath and the obligations of his position.

Lacking a full comprehension of his response and the financial where with all to pursue patent litigation in the Courts, we plodded on with our administrative appeals within the Department of the Army. The months dragged on. The Watervliet Arsenal Counsel did eventually review my claim, and not surprisingly responded with their standard non-denial denial. So, I appealed to the Army Material Development and Readiness Command in Washington, D.C. Six months passed. Again, the response was that same standard non-denial denial.

So, as a last resort, I employed the services of the law firm Nims, Howes, Collison & Isner located at 60 East 42nd Street, New York, NY in the Lincoln Building, just across the street from Grand Central Station. They were renowned for their patent law practice, and their tireless efforts defending the rights of inventors like myself. There I was assigned and befriended a young patent attorney Richard C. Conover, Esq. He carried the enthusiasm and “never say die” attitude that we all have when we are young, before our first major career defeat. He believed himself unstoppable, and convinced us of the same. And, indeed he would prove over the years to be both unstoppable, in his own methodical, quiet and retiring way, and a good friend throughout our mutual travails. The third partner on the team was my son, Christopher. The prospective cost of filing a patent infringement suit in the Federal Courts against the U.S. Army was indeed daunting. That cost would have been prohibitive for any one of us. But, as a team, we felt we could accomplish anything. Richard was the legal brains, while my son became our chief researcher and most importantly our financier.

We began anew the series of inquiries that I had commenced years earlier. But, now to each inquiry Richard required a written response in preparation for litigation. We wanted the Army to “go on record” that either they had or had not adopted my patented run-out controller technology for the manufacturer of gun barrels. The responses were typical non-response, non-denial denials. Requests for a tour of the manufacturing facilities were denied. Access to personnel was denied. Access to data was denied. Each and every time the Army cited national security or some other seemingly plausible reason for denying us access and information. Yet, clearly by their actions the Army was hiding something and they didn’t want us to find out about it.

June 12th, 1979 to October 6th, 1980. The Gathering Storm – On June 12th, 1979, we filed a final administrative claim with the Army, again alleging that the run-out controller used by the Arsenal infringed the ‘568 patent. The story was again the same non-denial denial by the Army. “Yes, we are using a controlled boring device to cut extremely accurate gun barrels. But, no we do not believe the device infringes your patent.” October 1st, 1980, the Army denied that final administrative claim. So, on October 6th, 1980, we filed suit in the United States Court of Claims.

Before we knew it three years had passed since the publication of that Albany Times-Union article. And we were still getting nowhere fast. So, again I appealed to my Congressional representative,

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Jerome A. Ambro, notifying him of the infringement filing and requesting a General Accounting Office audit of the Army. Perhaps GAO could find out how many gun barrels the Army had manufactured with my patented idea. While he did not submit the GAO request, he did act affirmatively. And at least he was able to get us that desperately needed data from the Army.

The Army finally agreed to release production data to Representative Ambro. And that production data showed that the Army had indeed been busy. The Army's reply follows:



**DEPARTMENT OF THE ARMY
OFFICE OF THE SECRETARY OF THE ARMY
WASHINGTON, D.C. 20310**

OFFICE, CHIEF LEGISLATIVE LIAISON

17 NOV 1980

Honorable Jerome A. Ambro
Representative in Congress
7600 Jericho Turnpike
Woodbury, NY 11797

Dear Mr. Ambro:

This is in response to your inquiry on behalf of Mr. Albert Lawrence concerning an allegation of patent infringement at the Watervliet Arsenal.

Watervliet Arsenal records indicate that from August 1969 until 3 October 1980, a total of 19,585 gun barrels were produced by six guided bore lathes developed by, and now in use, at the Watervliet Arsenal. It is estimated that an average of 213 gun barrels per month have been produced since that date. This information was provided by representatives of the Patent Division of the Army Material Development and Readiness Command on 20 October 1980.

The question of whether this gun barrel production is a use of Mr. Lawrence's patent is in litigation before the United States Court of Claims, No.541-80C, filed on 6 October 1980. Questions regarding this litigation should be referred to Mr. Thomas J. Scott, Jr., Commercial Litigation, Civil Division, Department of Justice, Washington, D.C., 20530; telephone AC 202/724-7416.

Sincerely,

Johnnie H. Corns

Johnnie H. Corns
Colonel, GS
Chief of Planning
Operations Division

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The six lathes operating at the Watervliet Arsenal had apparently produced every major gun barrel used by the U.S. and its Allies worldwide on all major weapons systems since 1969: the 105 mm gun on the M68 Patton main battle tank, and later the 120 mm cannon for its replacement the Abrams M1 tank, on all 175 mm cannons and on every 155 mm howitzer. I was giddy as a kid at Christmas. All the Army's guns shared one thing in common. All were manufactured with the same type of run-out controller device, all probably based on my patented invention!

The Army's reluctant response opened the eyes of even Counsel's normally staid partners. This information lit up our hopes. If these 19,585 plus barrels were valued at somewhere in the neighborhood of just over \$100 million, as their weapons procurement expert guessed, even a modest 5% patent use royalty could amount to \$5 million, plus interest. This was starting to get into the realm of really serious money. Even a large patent law firm like Nims, Howes Collison & Isner could ill afford to pass up the chance for a multi-million dollar legal fee. The big headlines such an award might engender wouldn't hurt either. With such a plum award to their credit, they would attract the largest personal and corporate infringement cases, and the highest legal fees. With this fame would come real wealth and with all that money, more social and political power for their partners influence and egos. However, before we could spend that money, we would have to win the case. We were confident in that. Perhaps, we were too confident. And, before we could fully prosecute this litigation, we would need a financial arrangement between the client and the law firm outlining the specific details of any award sharing. As our chief financier, Chris set about negotiating the terms of that agreement. The partners at Nims, Howes Collison & Isner were now more readily induced to or should I say desirous of representing their newest client, one Albert Lawrence, on a contingency fee basis. I gave Reporter Barrett a copy of their letter from files:

NIMS, HOWES, COLLISON & ISNER

LINCOLN BUILDING
60 EAST 42ND STREET, NEW YORK, N.Y. 10165
(212) 682-4590

February 2, 1981

Mr. Christopher Lawrence
101 Beechwood Avenue
Edison, N.J. 08837

Re: Albert Lawrence vs. United States 541-80 C

Dear Chris:

I have discussed the Terms and Conditions of Payment Proposal set forth in your letter of November 18, 1980 with the partners of the firm. In general, the Proposal appears to be acceptable. It is our practice to take a *prospective* fee reduction, in this case 2/3rds, in return for a contingency arrangement. The two constituents, that is, the \$30/hr. legal fee and the 1/3rd contingency fee, would be payable separately. I would be happy to discuss this with you further. Other than this change, I believe the proposal is acceptable.

Very truly yours,

Richard C. Conover

Richard C. Conover, Esq.
Patent Attorney

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I had little in the way of cash reserves for the impending multi-year legal battle. So, we entered into this arrangement whereby the partners of Nims, Howes Collison & Isner would in part bankroll this endeavor and my son would fund the balance. They would provide full legal representation, but accept a reduced fee, in return for one-third of the eventual award or settlement.

With this deal, we were finally ready to proceed with our case before the United States Court of Claims, as recommended by Representative Stratton almost three years before. The “on target” advice we had received from Congressman Stratton was that I seek redress in the Federal Courts. At the time I found this to be a most unspecific and unsatisfactory reply. However, much later we would discover that it was the only course of action possible, given the unique circumstances of this invention.

After another appeal to Congressman Ambro, the Army finally granted a single escorted tour of the gun manufacturing facilities at the Watervliet Arsenal. Mr. Von Dieb was conveniently “out of town” and unavailable to us. His stand-in, Harold Mason, the Chief Engineer, Manufacturing was entirely open and gracious. We toured the facilities and were provided access to the manufacturing drawings of what were obviously run-out controllers mounted on all six large lathes at that facility. He even went so far as to admit that their run-out controller looked an awful lot like the one described in my patent so many years before. Wow, was that a breakthrough. But, the Army lawyer accompanying us continued to repeat the party line, what was to become the Army’s mantra throughout that lengthy litigation, “This device is not infringing.” [Return to 1992]

I then suggested that Joanne might refresh reporter Barrett’s cup of tea. “Can we get you some more tea, Mr. Barrett?” His reply was, “No, thank you. But, could you please direct me to the Men’s Room? I’d like to take a short break and then return to this Court litigation story.”

So, after a few minutes, reporter Barrett returned with a fresh cup of tea in hand commenting, “I guess you just don’t say ‘no’ to that lovely wife of yours? Do you?” I chuckled and responded, “You will never know!”

He sat down and we were then ready to proceed with the Court litigation portion of the interview.

Enemies Domestic – The Litigation Begins

October 6th, 1980. U.S. Court of Claims, Washington, D.C. – After more than three years year of seeking access, we had filed a final administrative appeal seeking ‘just compensation’ for the Army’s use of the invention.⁸ But it too got nowhere. At that point, we were left with only one remaining option: to file a patent infringement suit against the Army in the U.S. Court of Claims. It was filed on October 6th, 1980. It stated that the Army, a department of the Executive Branch had infringed - a polite legal word for stolen – a patented manufacturing concept, the intellectual property of one Albert Lawrence.

The U.S. Court of Claims has a long tradition within the three branches of the Federal Government: executive, legislative and judicial. It, of course, occupies a special place on the judicial branch of Government. It is separate and distinct from the U.S. District Courts, which handle non-patent matters. The jurisdiction of the Court of Claims is intellectual property. This includes patents, copyrights and trademarks. So, the run-out controller patent infringement suit was clearly a matter for the Court of Claims. Generally, the Court desires that all administrative appeals be exercised and exhausted before approaching the Court with such a matter. And, indeed the Army had exercised all its administrative processes with great aplomb and to the same monotonous result time after time: “no infringement.” So, at least that requirement of the Court had been satisfied in the three preceding years.

The U.S. Court of Claims is housed in an angular red brick complex located on Madison Place, N.W., across from Lafayette Park in downtown Washington, D.C. Ironically, it is surrounded by the offices of the Executive Branch of Government. The adjacent sides of Lafayette Park face the White House and H Street, N.W. Across the park, along Jackson Place, N.W., is the site of the New Executive Office Building. The Old Executive Office and the Treasury buildings flank the White House. The Court of Claims building is not small, but often goes unnoticed given its surroundings. It is located in a famous part of that infamous city, and its existence is not widely publicized or generally known. Yet, its importance in the area of patent infringement is paramount.

During this protracted litigation, the Army would be represented by attorneys from the Counsel General’s Office and lawyers from the U.S. Department of Justice. The Navy also sent legal counsel as observers. Our first meeting with these representatives of the U.S. Government was quite intimidating. The three of us – my self, my attorney and my son - sat on one side of a long conference table. Literally dozens of lawyers, military functionaries, Army technical staff, DARPA (Defense Advanced Research Projects Agency) technocrats, and Army procurement bureaucrats lined up on the other side. It was a scene reminiscent of that Man of La Mancha story about Don Quixote, Sancho Panza and his mule tilting at windmills. And, I thought to myself, “Which one of us was the mule? Perhaps all three?” Only time would tell. After all, what normal,

⁸ U.S. Constitution, Amendment V – “No person shall be ... deprived of life, liberty, or property, without due process of law; nor shall private property be taken for public use, without just compensation.”

Ref: <http://www.law.cornell.edu/constitution/constitution.billofrights.html>

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rational, sane person, or anyone in their right mind, would take on the entire United States Government!

But, this was not about sanity. This was about correcting an injustice, about righting a wrong. And, so much in the style of Don Quixote and his companions, we set upon a long journey, a quest. Little did we know that this quest would take 14 years to complete and at its end would have to survive an unprecedented Petition for Writ of Certiorari review - as the lawyers referred to that ultimate appeal - before the United States Supreme Court.

Enemies Domestic – The Case Unfolds

At the onset we had little clue as to the full depth and breadth of this case. As discovery ground on through the thousands of interrogatory questions and dozens of witnesses, the sordid details of whole story began to unfold. Only years later would we realize the broad scope and national security facets of this Cold War conspiracy and cover up.

Much was revealed in that myriad of interrogatories. In 1961, the Army had been painfully aware of the fact that the Soviets and their Warsaw Pact allies out numbered the NATO allies in Europe – a counterforce imbalance. But, the Army believed that the U.S. could develop a technological edge and perfect its “technology over numbers” strategy. And in doing so the Army hoped it could narrow that numerical advantage in the event of an all out conventional battle in Europe.

Back in 1962 the Army had indeed been enamored of my run-out controller concept. Mr. Von Dieb had correctly perceived the invention’s potential for realizing a dramatic advantage for the U.S. and its allies. But, he had convinced the Army Brass and the Intelligence Community that the invention would have to be developed in secret, under wraps, in order to effectively hide this invention from the other side. So, in 1962 there had indeed been a winner of the Army’s run-out controller RFP. It had been decided that because of the sensitive nature of the technology, and in the interest of national security, the run-out controller would be developed “in-house.” The RFP had apparently just been an elaborate ruse designed to get me to submit a detailed run-out controller proposal for others to use as a blue print for building the initial prototype.

However, for reasons of secrecy, the Army did not want that research and development (R&D) performed at their Watervliet Benet Weapons Lab, as it was essentially a minimum security manufacturing facility. Instead, it was decided that the award would go to a shadowy, special purpose front company, whose sole purpose was to facilitate this R&D effort. This “paper” company would develop the run-out controller technology, turn it over to the Watervliet Arsenal and then disappear. So, a “dummy” corporation Bergen Research & Engineering (BRE) was set up by the Washington bureaucrats to submit a “low ball” bid response to the run-out controller RFP.

As the arrangements had all been made in advance with Von Dieb, the front company was indeed awarded the run-out controller R&D contract. First, Von Dieb became the new R&D project director. Then several PhD’s and a couple of local techno-wizards in electro-mechanical devices were “hired” by, or perhaps more accurately “made available on-loan” to BRE from the Army Weapons Labs, and from wherever else the Army bureaucrats deemed necessary, to work on this Cold War “black-ops” R&D project.

And, unfortunately for us, it appeared that the whole Machiavellian scheme had worked exactly as planned. That is, at least until the article announcing Von Dieb’s national medal award appeared in the Albany Times-Union newspaper over ten years later. The front company employees had apparently labored long and hard to build and deliver the first working prototype of the run-out controller. They had a considerable advantage at that point. They had access to my comprehensive run-out controller R&D proposal and the run-out controller patent, both describing how the device should work in great detail. And, of course, when someone else provides you the brilliant new idea, all else is mere application. So, in a matter of a few years the Army’s Watervliet Arsenal had

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six massive gun boring lathes secretly outfitted with new run-out controllers operating around the clock pushing out high precision gun tubes for all new U.S. and Allied long-range weapons systems. Discovery further revealed that through the 17-year life of the patent, the Army had produced well over 20,000 high precision tank and artillery gun barrels, saving hundreds of millions of dollars.

Given the mounting legal case against them, the Army began a series of “stall and deflect” maneuvers. At one court appearance, their star technology and patent witness suffered an apparent, but likely staged, nervous breakdown. The Army then immediately appealed for more time -- to locate another expert witness and to prepare him for the case. That effort dragged on for over a year, until the Army was finally compelled to proceed.

After six years, the original judge on the case, Justice Seco, was nearing his retirement date. So, he regularly acquiesced to Army requests for a delay or continuance. He apparently wished to avoid this prickly case at all costs, and apparently his reluctance succeeded. Eventually, his retirement date rolled around, and Justice Seco simply left the case as unfinished business for his younger successor.

Enemies Domestic - The Litigation Continues

1983 through mid-1990. U.S. Court of Claims. Washington, D.C. – Later during the trial, discovery responses from the Army arrived at the absolute last minute by overnight mail. They were nearly always incomplete and were sometimes inaccurate or misleading. We speculated that those with something to hide, like the Army, often chose delay at such times. They sometimes obfuscate in an attempt to cloud the issues. That was certainly the situation we faced. The case had in fact lasted so long, blocking that court's agenda, that Congress had passed legislation changing the name of the court from the Court of Claims to the Claims Court. And it had established a separate Court of Federal Claims to handle the mounting backlog of other law suits pending against the Federal Government.

Eventually, the case had dragged on for so long without a date for final oral arguments that our frustrated Counsel, Richard Conover, finally wrote a letter appealing directly to the new Judge. In it he detailed the history of delays and pleaded with the Judge to “please try and make progress with this languishing case, a case left far too long without perceptible movement.”

September 16th, 1990. U.S. Court of Claims. Washington, D.C. - So, after a dozen years, towering stacks of discovery, numerous expert witnesses and two judicial careers, counsels for the plaintiff and the defendant finally concluded their oral arguments. This new Judge then wasted no time in rendering his decision. The undeniable conclusion was that the Army had indeed infringed the run-out controller patent for its full duration. However, Judge Andwalter also ruled that the Government had a *right* to “take” personal property, including patents, provided it gave “just compensation,” as required by under the Fifth Amendment to the Constitution. This second part of his ruling effectively precluded any request for treble damages that can sometimes be awarded in a commercial patent infringement case of this type. The Judge simply agreed that the Government had stolen the idea, but that it had done so legally within its Constitutional right to “take” personal property. The Army had, however, failed to provide the patent holder his “just compensation,” as guaranteed to all property owners under the Constitution.

The liability phase of the case now concluded next began the damages phase, to be followed by an interest award phase. In the damages phase, Judge Andwalter awarded us the paltry damages award sum of \$80,000. This supposedly represented the Judge's vision of the valuation reached in a hypothetical, arms length patent royalty negotiation between the plaintiff and defendant. The legal theory was that it covered all six run-controllers “had such a negotiation occurred back in 1962 for the Government's ‘taking’ of the run-out controller patent.”

Then, in addition, he awarded the plaintiff interest compounded from the date of first “taking” on the patent issue date through the ultimate payment date. As it turned out this interest award represented a sizeable sum after those many years, and especially given the high interest rates prevalent during the early 1980's. In fact, the compound interest accrued in nearly 30 years had grown to be an amount many times larger than the meager principal award from the damages phase of the case. We speculated that the Judge had begun with a total award in mind, and then “backed into” the damages phase award - after subtracting the much larger interest award.

Enemies Domestic - The Army Appeals

December 7th, 1990. U.S. Court of Appeals. Washington, D.C. - The Army was not entirely satisfied with the direction and eventual outcome at the Claims Court. Upon issue, it immediately filed an appeal with the U.S. Court of Appeals. This time the Army brought in the big legal guns. Anticipating a loss at the lower Claims Court, the Army had hired special outside counsel to prepare for the appeal. That appeal was ready the moment Judge Andwalter's signature dried on his final opinion.

February 4th, 1991. U.S. Court of Appeals. Washington, D.C. – The Army's new emphasis shifted the case focus from patent law and technology to national security and policy. This "patriotic" line of argument seemed to resonate with that Court. The Court of Appeals agreed that the Federal Government had the right to "take" and operate -- in its secure manufacturing facilities -- six "prototype" manufacturing devices. In their defense, the Army reasoned that it had never offered the devices for sale - which might have represented an infringement of the patent-holder's Constitutional rights. The Army further noted that the inventor had in fact never reduced his patent to ultimate practice or sold a single run-out controller. So, he had not proven that the electro-mechanical approach envisioned in that patent would indeed function properly. And, thusly, they asserted that there was no infringement. Ultimately, in this court's view, Federal privilege, exercised in the name of national security, superseded the patent-owner's intellectual property rights. With that national policy view, and unfortunate turn of events, by a two-to-one split decision the Court of Appeals reversed the Claims Court ruling, citing the Army's national security rationale as its policy finding and the basis for its majority ruling.

We were astonished. On appeal the Army had snatched victory from the jaws of defeat. We were tired to the bone, literally exhausted, and our finances were being stretched nearly to the breaking point. I was nearing retirement, and my son, our chief financier, was now carrying four mortgages on our two homes! The Army was trying to wear us down, bankrupt us and ultimately break us. And, it was starting to look like their earlier delaying tactics and later change of emphasis were going to succeed.

There was only one final appeal left open to us. We would have to file a Petition for Writ of Certiorari review with the United States Supreme Court.⁹ It would be a desperate attempt to salvage our violated Constitutional rights. In that petition we would need to request that the Supreme Court review and overturn the findings and verdict of the Court of Appeals.

This would be a very long shot indeed. The odds were clearly not in our favor. The Supreme Court was very busy with many pressing matters of national importance. Historically, nearly 99% of all Petitions for Writ of Certiorari review were denied by the High Court. Perhaps, we wondered, the long struggle was over, or nearly so we thought. The taste of rejection and impending doom, and the prospect of utter failure was indeed a bitter pill for us to contemplate swallowing.

⁹ Review on a writ of certiorari is not a matter of right, but of judicial discretion. A petition for a writ of certiorari is granted only for compelling reasons. Ref: <http://www.law.cornell.edu/rules/supct/10.html>

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June 21st, 1992. Glen Head, LI, NY. The Interview Continues – “This must have been a difficult time for you.” Reporter Barrett noted. “Turning to another matter for a moment, I note that according to my research your son was also a First Lieutenant in the Army, serving as a tank commander during the Persian Gulf War in this same time frame. Wasn’t that somewhat awkward, perhaps even ironic or at least incongruous, given your extended litigation against the Army?”

I nodded in agreement. “Yes, I guess it would appear to be, if you were unfamiliar with his background relating to these circumstances.”

Barrett then asked, “Could you tell me something about his Persian Gulf War experiences?” I replied, “I can do better than that. You can get that story straight from the horse’s mouth. Chris is just in the other room with Joanne, and I can see if he would be willing to talk with you about those experiences, if you like?” Reporter Barrett jumped on that opportunity saying, “Yes, of course. I am interested in anything he might have to say about the Persian Gulf War or the patent litigation.”

I called to Chris and his head appeared, poking out around the door frame of the passageway to the kitchen. He responded, “Mom says that there’ll be tomato soup and sandwiches for lunch in about 20 minutes, if that’s your question.”

I smiled and replied, “Thanks, but no that wasn’t it. Mr. Barrett is interested in the Persian Gulf War, and I told him you’re really the one to talk with about that matter. So, if you’re available, why don’t you come on in and spend a few minutes with us.”

He nodded, excused himself from kitchen duty and sat down across from Mr. Barrett. I then suggested, “I can get things started, and then Chris can take it from there.”

We all agreed on that approach and the interview continued.

Enemies Foreign – Saddam Hussein

My son had graduated high school at the age of 16 and then dutifully attended my Alma Mater, Rensselaer, to pursue a degree in engineering. He received his Bachelor and Masters degrees in mechanical engineering in just four years graduating in June, 1977. And, at 20 years of age, he had graduated as one of the youngest in his class. His high school advanced placement credits applied against his freshman year had helped, but he had really financed the bulk of his education with a 4-year Army Reserve Officers Training Corps or ROTC scholarship, specializing in armored tactics. (That had been before we had known the details of the Army's long time subterfuge.) This scholarship, of course, entitled him to a four-year tour of active duty with the Army. And, thusly, he was stationed with VII Corps in West Germany defending NATO from the Soviets and their Warsaw Pact Allies.⁻¹⁰ He had participated in literally dozens of war games both in Europe and back in the States at Armor training school, including numerous "live fire" exercises. He had become quite a fine leader and an expert in armored tactics. He had even come to the attention of and briefly served in several war games under the now Lt. General Fredrick M. Frankenheimer, Jr., the VII Corps Commander in Saudi Arabia during the Persian Gulf War. At the time they had met, Frankenheimer was in command of the 1st Squadron, 3rd Armored Cavalry Regiment stationed at Fort Bliss, Texas.

During his brief tenure in the Army Chris had risen to the rank of First Lieutenant and tank commander. But, he wasn't a "West Pointer," and had never really intended to make the Army his career. So, when his four year tour of duty ended - with distinction and pretty much without incident - he left the Army for private life, accepting a position at a New York electric utility not far from us in June 1981. However, his continuing service obligation in the Army Reserves meant that he was still in theory available "on call" in case of a national emergency. He didn't mind serving his annual duty requirements one weekend a month and two weeks during the summer. We had always loved camping with the Boy Scouts when he was a teenager and the extra money didn't hurt either. He had used that time in the Reserves to hone his Intel (Intelligence) skills. Some said he could put his finger on the pulse of everything that happened on the battlefield during those war games. And his favorite saying was "Good Intel wins battles and minimizing casualties."

"But, as I said, he's really the one you should talk about the Persian Gulf War." I turned to Chris and said, "Why don't you take it from here, son?" So, he agreed and began telling his story.

February 4th, 1991. Saudi Arabia from afar and looking back. - "All Reservists are subject to Presidential Call-Up under section 12304, 10 USC. In this case, Executive Order 12727 (Aug. 22, 1990; President Bush, Re: "operational missions in and around the Arabian Peninsula") ultimately called up some 265,000 Reservists for duty in the Persian Gulf War, including those with Armored

¹⁰ ARMY ROTC Service Obligation for 4-Year and 3-Year Scholarships: 4-Year and 3-Year scholarship recipients must agree to pursue and accept a commission as an officer in the U.S. Army. Guaranteed Reserve Forces Duty scholarship awardees incur an eight year service obligation in the Army Reserve or Army National Guard. All other scholarship awardees incur a service obligation of eight years, the first four of which must be served on Active Duty. All commissioned officers may be called (or recalled) to Active Duty at any time, subject to the needs of the Army. Ref: <http://www.princeton.edu/~armyrotc/service.htm>

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experience and Army Intel officer status. My brief stint with Lt. General Frankenheimer had given me the contacts and the opportunity to be posted into Intelligence at CENTCOM (Central Command) in Saudi Arabia. So, when I arrived in theater I made immediate contact with my old buddy Fred, I mean 'Lt. General Frankenheimer, Sir!' "

February 20th, 1991. Saudi Arabia. G-Day Minus 4 - Owing to an unfortunate last minute accident, and because of my background in Armored tactics and Intelligence, I was presented with an unexpected and perhaps unique opportunity. The critical duty vacancy posted with Lt. General Frankenheimer by the 2nd Armored Cavalry Regiment's (ACR) commanding officer, Colonel Holden, was for "a tank platoon officer familiar with modern armored tactics and Intel, to be made *immediately* available for recon and tank combat duty on or before G-Day with 2nd ACR, Eagle Troop."

Seeing that urgent posting, Lt. General Frankenheimer walked down to Intel and called me aside to make a very special, personal request. He made his brief and deliberate comments with a very care worn expression. "I have a special assignment for you 'old Buddy.' I need someone who knows both Intel and tank tactics well. I also need to have a knowledgeable pair of eyes and ears out there on the front lines. I want someone who can tell it to me straight, not sugar coat it and 'Sir' me to death with what they think I want to hear. And, I want you to volunteer to be those eyes and ears for me." "What's the deal, Sir?" I responded my interest already peaked. "Confidentially, as updated in my staff meeting with General Swartzkopf at 0630 hours this morning, VII Corps has been tasked with taking on the Republican Guard Tawakalna Division, some 200-plus Soviet T-72 tanks strong." He continued, "And based on latest Intel, which you're familiar with, I'm afraid that the air campaign hasn't yet - and is unlikely to achieve any time soon - the minimum 50% enemy force attrition rate that we had sought for our sector of responsibility in South-Central Iraq. General Swartzkopf is well aware of this fact, but he simply cannot wait any longer for better luck in the air. We have got to go on G-day in four."

Frankenheimer sounded a bit annoyed and somewhat frustrated by that predicament. He noted that, "The waiting was a killer. But, the prospect of starting the ground war under prepared was worse." And in spite of all that men, money, equipment, training and technology America had invested in air power, we still hadn't been able to knock out any way near one-half of those Iraqi tanks using air power alone. Apparently, the enemy had learned to shut off their engines and to partially bury the tanks as a means of effectively hiding their thermal and visual signatures from our airborne weapons systems. He lamented, "The problem is that if you can't see 'em from the air, you can't hit 'em from the air. So, I'm afraid that more of that tough job has been left to us on the ground than I had originally hoped. And, of course, you know that the Armored Cavalry Regiments are near and dear to my heart."

He continued, "I need someone smart who knows this Intel, knows Armored tactics, can ride with the 2nd ACR, and who can keep me informed from the front line Intel perspective. You have the brains and the over lapping qualifications. And you have the maturity that some of my excellent, but younger tank Commanders lack. Hell, you know, I'd do it myself, if they'd let me." I nodded and half smiled in partial appreciation at his buttering me up for the punch line. I responded, "I understand, Sir. Tell me what you want me to do."

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Lt. General Frankenheimer's urgent duty call was for me to assume the roll of tank Commander, Troop Intel liaison officer, and the number two man under Captain H. R. Masters, commander of Eagle Troop in the 2nd ACR. I would have to leave the relative comfort and safety of my CENTCOM Intel job and exchange it for a far more dangerous field position – in fact a front line combat position, albeit as the number two man in Eagle Troop. Of course, I'd be riding in an upgraded, all-computer electronics, Abrams M1A1 main battle tank, outfitted with the hyper-accurate 120 mm smoothbore M256 weapon system, and the new highly reactive armored plating for extra protection. "The air-conditioned, computer controlled, luxury armored vehicle of choice for the discerning Gentleman warrior" Frankenheimer had quipped. So, two hours later I found myself assigned as a temporary replacement for an injured regular Army officer in the 2nd ACR, an Abrams M1A1 tank regiment. The 2nd ACR had been attached to VII Corps to perform screening and recon missions in Saudi Arabia. And my job was ultimately to serve that role and as the informal eyes and ears of Lt. General Frankenheimer in 2nd ACR during the Operation Dessert Saber phase of the Persian Gulf War. And G-day, the start of the ground war, was only four days away.

February 23rd, 1991, 0130 Hours. The Saudi-Iraqi Border. - Just prior to the start of the ground campaign, Operation Dessert Saber, on "G" Day minus 1, the 2nd ACR moved through a narrow passage cut in the 8 foot high "anti-smugglers" berm to the Iraqi side of the border near the Wadi Al-Batin. I directed the Sergeant to maneuver the tank through that narrow opening just behind Eagle Troop commander Captain H. R. Masters. We were there to assume a temporary screening position out in front of the 1st Infantry Division on the Iraqi side of the border. It was our first time entering onto enemy soil, but we encountered no resistance. They didn't seem to know we were there yet.

February 24th, 1991. South-Central Iraq and the Envelopment – At about 1200 hours on the 24th (G Day), 1st Infantry had just finished clearing some 43 lanes through the berm and border mine field beyond, providing the whole of VII Corps a direct passageway into South-Central Iraq. So, with our screening task completed, 2nd ACR was detached from that 1st Infantry and re-assigned to VII Corps to perform advance reconnaissance ("recon"). I recall how early that afternoon - at about 1330 hours - the 2nd ACR had been tasked by Lt. General Frankenheimer to move out toward Objective Collins, scouting several "clicks" (kilometers) out ahead of the main thrust of VII Corps. Objective Collins was a map reference some 120 kilometers deep within South-Central Iraq in our primary battle sector. We were to make a wide flanking maneuver first moving north and then, on direct orders from Lt. General Frankenheimer, turn east battling our way into the Republican Guard's flank. We had apparently won the prized poll position in CENTCOM's ground assault on Iraq's elite Republican Guard. According to CENTCOM's plan, the 2nd ACR was to blitz their way through the Republican Guard's flanking defenses and push just northeast of Phase Line Smash to await the follow on VII Corps envelopment assault on the Republican Guard's main force.

Captain Masters speculated for his tank Commanders over the secure com-link that the CENTCOM planners knew well that one key element for this "Hail Mary!" maneuver to work was achieving total surprise. He noted that the Iraqis had long expected both a direct frontal assault - from the south across the Kuwaiti border - and a seaward landing - from the east by the Marine Expeditionary force stationed shipboard in the Persian Gulf. With this flanking assault north and then east from Saudi Arabia, VII Corps would catch the Iraqis with their pants down. 2nd ACR's

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three ground combat Troops G, E and I (or "Ghost," "Eagle," and "Iron," as their radio call signs identified them) immediately took up the lead recon position for the assault. VII Corps, the main thrust, advanced several "clicks" behind 2nd ACR with the job of finishing off the enemy.

As Eagle Troop advanced north into the Iraqi desert, the 2nd ACR recon force and the entire following VII Corps became engulfed by a gigantic Shalam – one horrific dust and sandstorm. And it lasted for the better part of the next several days as we advanced northward. Yet, despite those highly unfavorable conditions, by 0830 hours on February 26th I calculated that the 2nd ACR was approaching Objective Collins, moving toward our limit line of farthest northern advance some 120 kilometers deep inside South-Central Iraq. Minutes later, Captain Masters communicated to all tank commanders that Lt. General Frankenheimer had just made the call. We would be wheeling right on those orders.

Turning east, the 2nd ACR received initial enemy fire from a dual-23 mm anti-aircraft emplacement in a three story building located on "69 Easting" - a north to south line map reference about 20 "clicks" east of Objective Collins. Our tank was ordered to return fire. The building GPS (Global Positioning System) location had already been downloaded into the automated firing system computer and a HEAT projectile into the cannon by that top notch crew. "Ready to fire, Sir" was their response. This team was really primed and ready. "3 HEAT rounds, rapid fire, 10 foot dispersion pattern, when ready" was the command. So, after rapid firing those HEAT rounds in a mere 7 seconds, the entire three story building collapsed, neutralizing that enemy position. Eagle Troop then continued its movement eastward, coming under enemy small arms fire, but nothing heavier.

Colonel Holden, 2nd ACR's commander, had expected to encounter Republican Guard defensive positions in another 10 clicks or so just north and east of Phase Line Smash at about 1600 hours. Almost simultaneously, initial sightings were reported by 2nd ACR Troops G, E and I at the north-south map reference line called "70 Easting." Eight enemy tanks were in the Eagle Troop count, their GPS locations automatically locked into the firing computers. G and I Troops had similar target counts. So, it was pretty clear that they had come upon the first line defensive positions of the Republican Guard. Colonel Holden commented through the secure com-link that this was probably the western flank of Iraqi Tawakalna Division, with some 220 or so Soviet-built T-72 tanks, plus reserves, and other attached units and support brigades.

Colonel Holden then passed the word on that the regiment had been ordered to first recon or scout out the enemy defensive positions, which they had already accomplished. But, they were then to fire upon and defeat any forward covering positions, determine their remaining defensive positions and strength, identify the location and extent of the enemy's main force, and finally to fix the entire Tawakalna Division in position – some 220 tanks strong - by engaging them in an "all out, butt kickin' full fledged tank battle." I remember noting to myself that Eagle Troop had only 9 M1A1's, and Ghost and Iron Troops were similarly configured. "Weren't we a might bit overmatched today, Sir?" I had thought to myself. "So this was the 'technology over numbers' strategy? Well, I guess we'd see if the theory really worked in practice today!" And then I quietly prayed, crossed myself and recited by rote "Father, Son and Holy Ghost. Amen."

This opening engagement by 2nd ACR was to hold the Iraqi Division in place just long enough for the larger and overwhelming follow-on assault by the heavier VII Corps forces advancing just ten

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“clicks” behind them. We just hoped we’d still be around to see that battle. And find the Iraqis we had indeed. Eagle Troop was the regiment’s lead recon troop at that point. So, without hesitation, Eagle Troop Commander Captain Masters launched his pre-planned all out armored assault with a one word command: “*Charge!*” The 2nd ACR literally attacked “on the fly” charging the Iraqi positions in a synchronized trust at near 30 miles per hour. Eagle troop’s nine M1A1 Abrams tanks, twelve M2A2 “Brad” Scout vehicles and four M113 troop carriers attacked simultaneously in “box” formation. We were assigned the center lead position, with Ghost Troop on the north and Iron Troop on the south. Captain Masters, in true Cavalry fashion, took his own M1, nick-named “Crazy Horse,” out in front of the attack line of Eagle Troop. My Abrams advanced just to the right and rear of our fearless leader. Given that unhesitating command, 2nd ACR had immediately captured the first shot advantage, firing on the Iraqi tank emplacements directly ahead of them. As soon as Eagle Troop began firing on those Iraqi defensive positions, most of the remaining enemy troops dove for cover while some began frantically pulling those hundreds of half buried tanks and artillery pieces out of their fixed southward-facing emplacements and hastily turning them westward toward 2nd ACR’s rapidly advancing forces.

The 2nd ACR had begun their attack at 1622 hours by engaging the initial enemy defensive positions from over 2,600 meters (about 1 ½ miles) distant. Three enemy tanks were destroyed in the first 10 seconds as the Troop initiated rapid fire mode on the pre-targeted GPS locations. Within 4 minutes we had blasted our way through the initial defensive positions. Then we continued our charge, engaging the Iraqi Division’s main body at extreme range, over 3,000 meters distant. We found that we could accurately fire on and destroy the enemy, while the return fire, given the more limited range and accuracy of the enemy T-72 tanks, fell into the sand short of our position. 2nd ACR’s ability to wage a “one shot” hyper-accurate attack at extreme range probably saved our butts then as much as the reactive armor would later. And by 1633 hours Eagle Troop had engaged and destroyed an additional two dozen targets far into the main Iraqi Brigade Assembly Area. After a mere 23 minutes we had battled our way into and through the main enemy body and well into the Iraqi Reserve Assembly Area, all with devastating effectiveness. By the time it was all over we were “toe to toe” with the few remaining Iraqi T-72 tanks in our sector, firing some volleys at 800-1,200 meters or so distant, and even a few at near point blank range, all well within the operational killing range of the T-72 tank. And that’s where the reactive armor really saved our butts. The Iraqi shells just seemed to bounce off the M1A1 tanks without any effect. Captain Masters commented over the secure com-link that it was “One hell of a brawl and turkey shoot.”

The U.S. forces had the clear technological advantage. The thermal imaging equipment allowed us to peer through the sandstorm and gave our gunners a long-range view of the enemy defensive positions. Combined with the incredible accuracy of the 120 mm M256 smoothbore gun used on the M1A1 Abrams tank, this technology gave Eagle Troop the first-shot advantage and 2nd ACR the all important initiative in that ensuing battle. Through 2000 hours 2nd ACR Troops G, E and I fired almost continuously during their attacks dispatching each round within 3 to 5 seconds, targeting tank after tank and vehicle after vehicle, from beyond the Iraqi horizon all the way in to close combat at near point blank range in that target rich environment. The 2nd ACR had fired every kind of ordnance in their arsenal and to especially deadly effect as far as the Republican Guard was concerned.

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Mr. Barrett broke into my recounting and said, “Can you go through the rapid fire procedure for me?” And Chris agreed.

To maintain the initiative and carry out the attack so effectively they had followed a prescribed firing sequence. The Troop commander would send a contact position report over the Inter-Vehicular Information System (IVIS) to the rest of the troop and up the chain of command. Each report stated the composition and position of the target fed automatically from the laser range finder and POS/NAV (position/navigation) system. As the previous round exited the gun tube, the breech of the M256 main gun opened ejecting the spent round base cap. Relying on the target composition report, the gunner would call out either “HEAT” or “sabot”, depending on whether the next target required a thermal or depleted-uranium penetrating round. The loader swiveled right throwing his knee against the safety switch that opens the armored blast door leading to the ammo storage. Next he loaded the correct round, slamming it into the gun breach. As he did so his knee came off the safety and the armored door slammed shut on the ammo storage bin. Then he hollered “up” as a signal to the gunner that the next round was read to fire. By this point the gunner had already uploaded the composition and position information from the laser range finder into the firing control computer, confirming the availability of the ordnance type required by the report. After using his own laser range finder to verify range to target, the gunner yelled “away” and pulled the trigger. The fire control system took input from the cross wind sensors and other onboard systems and made any last second corrections, improving the ultimate accuracy of the weapon. (These guns were manufactured to tolerances of less than one-one thousandth of an inch, but you had to aim them exquisitely to take advantage of that incredible manufacturing precision.) Then, in a fraction of a second, the digital fire control system ignited the round sending it dead on target. When the round fired there was a deafening blast as the round ignited and the expanding gases propelled the ordnance down and out of the M256 gun on its way toward the target. The gun then recoiled violently, in the opposite direction given the tremendous speed and momentum imparted to the ordnance by the sending explosion.

Mr. Barrett thanked Chris and then said, “O.k. Would you please now continue with your original story.” And Chris did.

During that brief battle, Eagle Troop had neutralized an enemy village, blasted through the Iraqi defensive positions at 70 Easting, moved past 2nd ACR’s original limit line of eastward advance, through the main Iraqi tank emplacements at 73 Easting, and into the Rear Assembly Area - set aside for the Republican Guard’s reserves - finally ending the assault at 74 Easting. In all, Eagle Troop had destroyed 30 enemy tanks, 16 armored infantry fighting vehicles, 28 artillery emplacements and 39 enemy command and support vehicles. Miraculously, they had suffered no casualties.

Although the men of 2nd ACR had not realized it at that time, they had just fought the main armored engagement of the Persian Gulf War in what was to become one of the most studied battles of modern warfare, the **Battle of 73 Easting**. And these enemy troops were not the “cannon fodder” the Iraqi’s had placed at the front lines, not just conscripts with outdated equipment and little training who had been purposely stationed at the Kuwaiti border to slow us down. No, these were Saddam Hussein’s elite, hand picked Republican Guard units, with the best armor and guns that Iraqi petrodollars could buy from the Soviet Army’s Cold War arsenal and experienced through 8 bloody years of war with Iran. The 2nd ACR had hit a (theoretically) very capable enemy

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hard and fast during a 23 minute blitz from which the Republican Guard units had never recovered.

The ground war lasted almost exactly 100 hours. So, some four days and four hours after it began, at just past midnight on February 28th it was almost all over. (It would be another 48 hours before Allied forces would fully enforce the cease fire by destroying two errant Republican Guard Divisions.)

Next we had to file dozens of “after action” reports electronically uploaded to CENTCOM. I was also ordered to make my own personal “close to the action” report directly to Lt. General Frankenheimer. The sum of those reports showed how - in spite of the dust storms and darkness – that American technology had given U.S. forces a decisive victory. U.S. troops and equipment, including tanks, artillery and infantry fighting vehicles, had all worked extremely well. They had proven that the M1A1’s advanced targeting system could spot an enemy target and the 120 mm M256 smoothbore gun could hit and destroy it under rapid fire mode at ranges up to and in some cases exceeding 3,000 meters. This was long before the Iraqis could see them or shoot back, thusly ensuring that critical first shot advantage. And the projectiles, both the depleted uranium momentum and high temperature HEAT-type penetration rounds, had done their job, boring through the thickest of Iraqi armor. This combination of overwhelmingly superior planning, clear surprise, excellent combat tactics, repeated training and advanced technology had driven the Iraqi troops out of their tanks, bunkers and support vehicles to surrender by the thousands.

Chris stopped for a moment and suggested, “Why don’t we get some soup and sandwiches, and then Dad can give his perspective on the war. This is after all his interview.” So, Barrett agreed, “Yes, Mr. Lawrence, I would like something to eat, as I had breakfast quite early this morning. And I’d also like to hear your views on having a son stationed in the Persian Gulf during the war.”

Joanne brought us steaming cups of tomato soup and a plate of sandwiches she had been preparing in the kitchen. Mr. Barrett thanked her and noted that “There’s nothing like eating home prepared food. It beats out airport fast food any day of the week.” Al then continued with his perspectives. [Fade to 1991]

February 28th, 1991, 6:10 AM EST. Glen Head, Long Island, NY – Yesterday had been the 70th anniversary of my birth. And yet the date had passed without any word from my son. I had again awakened from a fitful, tossed attempt at a night of broken sleep. “Albert Lawrence!” I scolded myself, as my Grandmother had once done long ago, “You should be asleep!” But, all I could think about, yes even pray about, was my son’s well being. I pressed the “TV” button on the remote and the television came instantly alive. Every channel carried stories about the Persian Gulf War. But, they were reporter’s stories. So and so reporting *live* for CNN from somewhere in the Iraqi desert. That was the operative word, wasn’t it, “*live*.” So much detailed news 24 hours a day, but nowhere was the critical information I desperately needed. How was my son? Had he survived the battle? I had heard that his new unit might be engaged in the assault, perhaps on the leading edge. My fearful mind leaped to the darker possibilities. Was he lying in agony torn apart in some ditch or in the burning remains of his bombed out tank. Or worse was his body cold as ice zipped up neatly in one of those black body bags, just another number awaiting shipment back home. I muttered, “To hell with the goddamn Army!” and, “Damn its honor guard for returning dead heroes.” If you were dead you were dead, and he was my only son.

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Suddenly the phone rang. Momentarily, I wondered, as I reached for the receiver, “Who would be calling us at this hour?” Haunting fears continued to plague me, washing over my consciousness. “Didn’t the Army send a full dress officer to give the bad news?” At least they had in my day. Surely, that hadn’t changed? As I slowly raised the receiver to my ear, I heard the sharp crackle of static and a distant far off voice - as if at the end of a long tunnel – saying, “Hello. Hello. Is that you Dad? It’s Chris calling from the Iraqi desert. Happy Birthday ‘old man!’ ”

“Thank God!” I thought. “He’s alive!” I gasped. In that very instant I had received the greatest birthday present that I could have ever hoped for or imagined. I responded in trembling tones, “Chris! Are you o.k., son?” grabbing Joanne’s hand as she lay half awake on the bed beside me. His reply, through the one second satellite delay, was an almost incredulous “Yes, of course, I’m A-o.k., I guess,” He continued, “I’m just dog tired. We’ve been at this Operation Dessert Saber for four days with fairly limited sleep. I’ve been up the entire night again, there’s no shade and it’s damn hot over here in the mid-day sun.”

And then he began telling me the “news story” that I really wanted to hear, and so much more. He *was* fine. In fact, he had come through the ground war with nary a scratch. He, Eagle Troop and his entire regiment were in fact real live heroes, having just taken part in the largest tank battle since World War II. He said that I would probably hear all about it on the news that night. He had been unable to call sooner, as he had spent most of the last twelve hours filing after action reports, overseeing the interrogation of prisoners and in his own three hour debriefing. His good fortune had been to run across a news crew that was allowing a few of the “Gulf War heroes” to phone home free of charge on their satellite network link – in return for an exclusive interview, of course. He had been cleared by Lt. General Frankenheimer, so he continued with his personal war story to my absolute and total amazement.

February 28th, 1991. 1430 hours in the Iraqi Desert. – And having heard he was alright, I expressed an interest in anything relating to the 120 millimeter M256 smoothbore gun used on the Abrams M1 tank. Chris had dozens of war stories. And all of his stories, like any good fishing story should, had a grain of truth in them. Yet some were so unbelievable, so far fetched at their hearing so as to leave the listener with no choice but to assume that they must be absolutely true. And he certainly had his share of those incredible and unbelievable stories.

“So, why don’t you jump in again, Chris? I’d like to hear those stories” commented reporter Barrett. And Chris gladly did, recounting three of his most outrageous war stories.

The first story was only just incredible. Lt. George White, who was on Chris’ left flank receive a laser range finder location from the Troop Commander. It identified a Soviet-made Iraqi T-72 tank leading a column of T-72’s moving towards their position at about 1,200 meters distant. So, George loaded and fired a depleted-uranium tipped penetrating sabot round. Damned if the round didn’t hit the lead T-72, pass right through it and then travel on to penetrate the *following* T-72, destroying *both* tanks with one incredible shot! Such was the accuracy, high velocity and tremendous momentum associated with those fin-stabilized depleted-uranium rounds fired by the M256 gun.

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The second story was a case of incredible good luck and “out-of-the box” thinking on the part of Lt. Bernie Salvatore from “I” Troop. His own tank was disabled with one tread mired in a hole filled with soft “quick” sand. They were alone, as his Troop had already moved forward. They were out numbered and under heavy attack by three surviving enemy T-72’s. Yet Ernie and his crew destroyed two of the attacking T-72’s while receiving numerous hits that just bounced off the M1’s amazing highly reactive depleted-uranium armor. Seeing this effect, or lack thereof, the third T-72 decided to bug out. In doing so they unwisely chose to hide behind a sand dune. Stuck, but not to be deterred, Lt. Salvatore just scoped his TIS (Thermal Imaging System) onto the T-72’s engine thermal exhaust plume rising above the dune, and aiming just a bit lower, fired a third sabot straight through the sand dune and into the hiding T-72, blasting it to kingdom come. ⁻¹¹

The most outrageous story he had heard of gunnery precision was a one shot “dead-on” kill by a British tank commander from over 3,500 meters (2 miles) distant. Now that’s long distance shooting! Even on a clear day and with their best gunners, the Iraqi T-72’s had a firing range disadvantage of over 1,000 meters. As it turned out, the Brits had calibrated their laser sights and guns so closely that they had improved on the normal long-distance accuracy. This increased that Iraqi disadvantage to about 2,000 meters or over a mile based on that one incredible shot.

Chris’ own M1A1 Abrams tank was credited with destroying eight Soviet-built Iraqi T-72 tanks, four armored fighting vehicles, seven artillery pieces and fifteen command and support vehicles, as well as with the destruction of one enemy building, along with one dual-23 mm anti-aircraft gun.

I commented “Sounds like some darn good shootin’ to me.” In return, Chris praised the M256 gun, which we both knew had been manufactured at the Watervliet Arsenal using my patented run-out controller. It had worked great! He credited the gun’s extreme range and accuracy with securing their first shot advantage, and more importantly keeping him alive. Many of the opposing Iraqi tanks were turned into burning, smoking hulks long before they could get off a shot at the rapidly advancing U.S. forces. I then continued by recounting the end of that birthday telephone call.

Chris had noted with the hostilities winding down, rumor had it that - following enforcement of the official cease fire over the next 48 hours – 2nd ACR might move into Kuwait along the Kuwait-Iraq border, or perhaps into some forward defensive position in southern Iraq. I hoped that wherever they sent him that he would be safe. So, as we came to the end of that extended long-distant phone conversation I relayed, “Your mother wants to know when you’re coming home?” His heartfelt reply was, “Ugh. Well, not nearly soon enough. Tell Mom that I love her and *really* miss her cooking, especially after months of the Army’s MRE ready-to-eat meals! Also, please call Kathie and tell her I’m o.k., that I love her and that I miss her, too. O.k., Dad?” And he concluded with, “Happy Birthday, Dad. I’ve really got to go. God bless you and Mom and good bye.” With those words and except for the lingering static, the connection grew silent. [Return to 1992.]

Reporter Barrett noted that there was a nice inter-generational connection between World War II and the Persian Gulf War for a third article. And then he commented, “But, my original objective for the interview was to explore a tie-in with my first article. That is between the Russian Medal of Honor ceremony and my follow-on article on the life of a World War II veteran over the last 50 years. He changed the direction of the interview by suggesting, “Let’s get back to the specifics of

¹¹ - Ref: Tom Clancy’s Armored Cav, A Guide of an Armored Cavalry Regiment, pp. 57-58.

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your life, Al, and in particular that long patent litigation case. I really need for you to fill in several gaping holes left by the Washington Post Sunday Business article I mentioned previously.”

I agreed and asked, “When is your return shuttle flight?” He noted, “They’re available on the hour, so you can just let me worry about that. Can we move on to the appeal now? I’m interested in how your patent litigation case could work its way all the way up to the U.S. Supreme Court.” And, so we continued the interview following that line of thought. [Fade to 1991]

Enemies Domestic - The Final Appeal

October 4th, 1991. United States Supreme Court, Washington, D.C. – We had won our case “hands down” at the Court of Claims. But, somehow the Army’s lawyers had convinced the Court of Appeals to over turn that lower court ruling on policy and legal technicalities. So, all we had accomplished and everything we had fought for now hung in the balance. And the day for opening arguments on that ultimate appeal to the U.S. Supreme Court had finally arrived.

This was an extremely rare, almost unprecedented opportunity to engage in oral arguments before the High Court. But, in this case, Congressman Stratton had personally intervened with his old golf buddy Chief Justice Warren Burger in requesting this unique hearing. These proceedings were handled largely in writing through pre-filed submissions: petitions, cross-petitions, pre-filed briefs, reply briefs and briefs on exception. Yet today was the day for final oral arguments.

We all rose as the Chief Justice and the remaining seven Justices filed into the courtroom.¹² Following the opening formalities, the Clerk of the Court received instructions to read aloud the initial statement of High Court policy on Petitions for a Writ of Certiorari review. He stood and read:

“A Petition for a Writ of Certiorari review is a request for a hearing before this High Court. In it you are asking the Court to hear your appeal of the lower court rulings, and such requests are granted or not at the sole discretion of the High Court. As a matter of historical significance we note that only about 1% of all such requests are granted. The purpose of a Petition is to convince the highest court in the land that your appeal should be heard. The Petition is not the appeal itself. Today we begin the final part of that appeal, summary oral arguments.

In plain, layman’s terms, you are trying to get the High Court's attention. This is sometimes referred to as having issues that are "Cert-Worthy" before this High Court.” To be “Cert-Worthy” your Petition must fall into at least one of the following three categories:

- (a) a US court of appeals has entered a decision in conflict with another US court of appeals on the same important matter; requiring this High Court to exercise its supervisory powers,
- (b) a state court of last resort has decided an important federal question in a way that conflicts with a decision of another such state court or of a US court of appeals, and/or

¹² - The sitting Justices in 1991 were:

[Warren E. Burger](#) (Chief: 1969 - 1986)

[Thurgood Marshall](#) (Associate: 1967 – October 1st, 1991) had just retired during the prior week.

[Harry A. Blackmun](#) (Associate: 1970 - 1992)

[William H. Rehnquist](#) (Associate: 1972 - 1986, Chief: 1986 -)

[John Paul Stevens](#) (Associate: 1975 -)

[Sandra Day O'Connor](#) (Associate: 1981 -)

[Antonin Scalia](#) (Associate: 1986 -)

[Anthony Kennedy](#) (Associate: 1988 -)

[David H. Souter](#) (Associate: 1990 -)

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- (c) a state court or US court of appeals has decided an important question of federal law that has not been, but should be, settled by the High Court, or has decided in a way that conflicts with relevant decisions of this High Court.

This case falls into that latter category. And you are here today, so obviously your Petition was granted. Counsels shall now indicate whether they are ready to proceed with oral summaries.” And in response both Counsels nodded and indicated their readiness to commence their oral arguments. The preliminary statement completed, the Clerk sat down.

Chief Justice Burger then thanked the Clerk, commented that the High Court had a very busy schedule that season, and then began his own opening comments.

“The initial statement you have just heard represents the core policy, as well as the legal and intellectual guide, followed by this High Court in ‘Cert’ reviews. It clearly applies to the issues at hand in the Writ before us today. In brief, for the applicant to prevail in its Petition for Writ of Certiorari review, he must successfully carry forward the weighty burden of policy direction, legal proof and intellectual argument. Counsel for the appellant must clearly and unambiguously convince us of the indisputable merits of their case before this High Court, the jurisdiction of ultimate appeal.”

“In this instance, I would like to frame the key federal question for the High Court as follows:

‘Whether and to what extent the legitimate national security interests of the Federal Government may suspend or supersede the Fifth Amendment guarantees provided individuals under the United States Constitution.’ ”

“It is appropriate that this significant Constitutional question of national importance be decided by this High Court. And, thus, your appeal was found to be ‘Cert-Worthy’ and your request for a ‘Cert-review’ was granted.”

“In the very few ‘Cert-review’ cases granted, the High Court’s focus is one of policy -- That is, we make policy on broad legal issues that apply in a variety of situations, and that are generally of national scope and impact. In brief, you must make your arguments under this case convincing!”

He continued, “In presenting the oral arguments you should limit your discussion to no more than three critical issues. Your arguments should convey one or more of the following key points to this High Court:

[1] That the case law surrounding this matter is unsettled -- That is, this is a question of first impression -- one the Court has not heard before -- and that there is a great likelihood that the issue will arise again.

[2] That the opinion from which you are appealing is a reported opinion. An opinion is "reported" if it is published. An opinion that is published becomes precedent, and if it is not the correct law, the Court will be more likely to overturn the lower court's decision to set the interpretation straight.

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[3] That the issue and arguments are intellectually and legally interesting! Your arguments should be heavy on policy, but they must also have specific, relevant legal references. Legal references include statutes, key precedents and other relevant case law.”

Smiling he diverted his gaze momentarily to the Plaintiff’s table and continued, “Now, as an excursion into brief informality, I note that this High Court has had the great privilege of reading several eloquent letters from New York Representatives Ambro and Stratton supporting the appellant’s Petition.” Then turning to defense Counsels he continued, “And we have seen similar letters written by several distinguished Senators from the Select Committee on Intelligence, in support of the Army’s position concerning America’s national security interests, prerogatives and military requirements.” He dropped the smile and opined, “I must state unequivocally that, as a matter of legal course, this High Court can give these letters no material weight. If they are to be considered at all, it is only as a policy side bar. And I note on side bar that they would appear to support the Petitioner’s assertion that this case is of national scope and importance, and is, therefore, “Cert-Worthy” for review by this High Court.”

Returning to his prepared outline he stated, “It is now my intent to provide the Counsel’s for petitioner or appellant in this case, and the defense, an opportunity for *brief* oral arguments lasting no longer than 30 minutes. This time is to be used to supplement and for summation of your respective Petition, Cross-Petition response and pre-filed briefs. That 30 minute period will be followed by an open session where the Justices may ask and should receive accurate and concise responses to any questions they may wish to pose in this matter. Following that open session, the High Court will recess to consider the merits of this ‘Cert-review,’ and, within 30 days thereafter, render its considered opinions. Now, let us proceed with the matter at hand. Clerk please read the guidelines for Oral arguments.”

The Clerk rose and began, “A reading from Rule 28 concerning Oral Argument and commentary:

- “1. Oral argument should emphasize and clarify the written arguments in the briefs on the merits. Counsel should assume that all Justices have read the briefs before oral argument. Oral argument read from a prepared text is not favored.”
- “2. The petitioner or appellant shall open *and* may conclude the argument. A cross writ of certiorari or cross-appeal will be argued with the initial writ of certiorari or appeal as one case and in the time allowed for that one case.”
- “3. Unless the Court directs otherwise, each side is allowed *one-half hour* for argument. Counsel is not required to use all the allotted time. Any request for additional time to argue shall be presented by motion under [Rule 21](#) no more than 15 days after the petitioner's or appellant's brief on the merits is filed, and shall set out specifically and concisely why the case cannot be presented within the half hour limitation.” Aside he noted, “Additional time is rarely accorded. And as there has been no such request filed in this case, the one-half hour time limit on both parties will be strictly observed.”
- “4. Only one attorney will be heard for each side, except by leave of the Court on motion filed no more than 15 days after the respondent's or appellee's brief on the merits is filed. Any request for divided argument shall be presented by motion under [Rule 21](#) and shall set out specifically and concisely why more than one attorney should be allowed to argue. Divided argument is generally not favored.” Again he noted aside, “In this case, the Army has requested that their response to the appellant’s arguments be divided between

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Technical Counsel Joseph A. Caroline, and Policy Counsel Arthur B. Campoure. And that request was granted by this High Court under Rule 21.”

- “5. Regardless of the number of counsel participating in oral argument, counsel making the opening argument shall present the case fairly and completely and not reserve points of substance for rebuttal.”

The Chief Justice again thanked the Clerk and motioned to Counsel for the appellant to begin his oral arguments. “Mr. Conover, as Counsel for the appellant, one Albert Lawrence, would you please now proceed with your oral arguments.”

I don’t know how anyone else felt, but that had to have been the most intense time period of my life, except perhaps for those few moments at the Church alter just before saying, “I do.” Everything rested on the summation presented in that ever so brief one-half hour. The moments flew by faster than a New York minute. I wondered if Richard would really be able to conclude the case summary in that short a period of time.

He sternly began, “Honored Justices, we bring before you today the appeal of hero-inventor Albert Lawrence. Mr. Lawrence is a patriot in the total sense of the word. His life has been dedicated to the protection of this Union from the beginning of World War II, throughout the Cold War and to this very day. He has committed his considerable intellect, his family fortune, his now spent youth, middle years and even his retirement to defending this Nation. For you see before you an inventor of incredible insight and talent; a patriot without end; an engineer who gave his Country the ultimate gift; the gift of *victory* in battle. And the means for that victory – his run-out controller invention - has saved countless American lives and many millions in American tax dollars.”

He turned briefly toward Counsels for the Army and continued, “And yet this patriot, this son of the Republic, has been treated as if he were a stranger in his own land. The very Army he sought to serve with his genius, the Armed Forces which had sworn to protect the Constitution that guarantees his rights, have sought to defraud him; to steal the very thoughts from his inventive mind. His undeniable rights as a patent holder have been down trodden, presumably in the name of National Security. And yet we do not question this National Security need - or the decisions of those who chose to exercise that rational - to ‘take’ Mr. Lawrence’s valuable patent. For, regardless of the reasons, the Government has the conditional Constitutional right to ‘take’ personal property. Undeniably, a patent holder may not prevent the use of his invention by the Government. These matters are not at issue or in dispute here today. Rather at the heart of the matter is the obligation created by that *conditional* right granted to the Government by the U. S. Constitution. It is that the Fifth Amendment requires the Government - in taking such property – to provide the owner ‘just compensation’ for his property. Of that there can be no doubt. The Courts have spoken at great length, long and loudly, to this matter. The Government *must* give ‘just compensation.’ ”

“And yet the Counsel for the Defendant and the erring Court of Appeals would have us believe that somehow the requirements of National Security, Executive Privilege, Army expediency and Military Priority, would trump the Fifth Amendment and allow the Army to ‘take’ without providing ‘just compensation,’ or at the very best delay that compensation thirty years!” Hanging his head in mock shame he continued, “You Honors, if we know anything in our hearts and minds, then we know this one thing, it is that the Appeals Court ruling cannot, no I say *must* not stand. For

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the sake of my client, for the future of all inventors, and yes the sake of the Nation you must return the only fair, the only just verdict in this case. Restore to my client his Constitutional rights to ‘life, liberty and property.’ ”

“For if we allow the Fifth Amendment to be undermined in this way, which of our liberties will fall next? Freedom of Speech? Freedom of the Press? The right to vote? And who will be safe as the Constitution crumbles?” (pause) “No one would be safe!”

“Our views in this matter are quite straight forward. My client was the undisputed patent owner. His patent was valid. The patent was infringed and, therefore, the patent was in fact ‘taken.’ Without doubt, ‘just compensation’ is due. No ‘ifs, ands or buts.’ Just compensation is in fact *long overdue*. In a civil case of this kind the actions of the Government might be viewed by some as bordering upon the criminal. Yet because of the Government’s Constitutional right to ‘take’ personal property, including intellectual property such as this patent, no legal crime exists. Yet to those of us who believe in a higher authority, surely there is moral outrage at the way my client has been mistreated. For the delay in recognition of our personal rights is, certainly after 30 years, nearly equivalent to their complete loss.” Then speaking slowly and more deliberately for emphasis, he continued, “I say again for clarity that suspension of your Constitutional rights, in this case for 30 years, is tantamount to their utter and complete revocation, as if the Constitution had never existed in the first place.” Returning to his original intensity and pace, he continued, “If my client had passed away from old age waiting for his rights to be enforced ‘some day’ than for all practical purposes his earthly rights would have been completely lost. At the Pearly Gates St. Peter would surely recognize that he had ‘de facto’ been defrauded of his constitutionally guaranteed birthright as an American citizen. Surely that is no better than living under the most left or right wing of dictatorships, with no guaranty of personal rights. The absence in both cases is identical. Absence is still absence. The actual absence of justice, even though theoretically guaranteed on paper, is still the absence of justice.”

Richard then turned to the technical legal aspects of the case, dissecting one by one the multifarious and fallacious arguments present by the Defense with such legal aplomb on appeal. He made numerous legal references many of which were well beyond my understanding of the intricacies of Constitutional law and precedent. Now, he truly was our unstoppable legal brains. If anyone had the intellect to pull this off, than he was the man. What a team! How could we fail?

He concluded, “I appeal to you. Restore the very faith of this Nation in its Constitution. Restore to my client his Fifth Amendment rights. Please, let us not be swayed by the tortured policy perspectives and legal technicalities that so convinced a majority on the Court of Appeals to become an unwitting accomplice to this tragedy. The bottom line is that there simply is no Constitutional support for their National Security-based arguments. There is nothing in the Constitution, the Amendments, the Declaration of Independence, Constitutional history and precedent or in any of the valid laws enacted by Congress that would support their position. It is a position without merit and without foundation! It cannot stand. For the sake of my client, for the sake of our future, for the sake of our children and for the sake of our Nation it *must* not stand.” A moment, a long pregnant pause finally passed, and then he finished with “Mr. Chief Justice and your Honors, we now place our fate in your capable hands. I thank you.”

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Wow! Richard could represent me any time, any where. Well, in fact that was exactly what he was doing! He was hot, on a roll, fully prepped, really sizzling. I wondered silently if Richard had ever contemplated running for public office. He was honest, forth right, direct and believable. He had a winning smile and probably looked pretty good on TV for the ladies. Hum. I wondered? With the proceeds of this litigation he might go far. But, now back to the appeal. Any such plans would have to wait, since we had to win this appeal first.

Then it was time for the Army to restate its case. The Army's Policy Counsel began first. "Your Honors, America does not live in a vacuum. We are surrounded by enemies. Between the Russia and China we are faced with the world's largest nuclear arsenal and the world's largest army. The Founding Fathers also lived in a dangerous world. Their very struggle was the ultimate of National Security concerns. The Constitution and its Amendment, the Declaration of Independence and the Bill of Rights, are all documents establishing the security of this Nation so as to ensure our personal rights through the survival of the Nation as a whole. Yes, regrettably, from time to time it may be necessary for the occasional individual to be called upon to sacrifice for the good of the whole. Sometimes we are forced to make decisions that involve sacrifice, even the death of certain individuals, as in war - declared or Cold War - in order to protect the national interest. It is a harsh reality, but a reality none the less. And if we were to ignore that reality we would be doing this nation a disservice. The Armed Forces of the United States must have the necessary latitude to protect our military advantage from the prying eyes of our enemies. They must have the practical, well exercised latitude to maintain those American advantages for as long as they are able. For to do otherwise is to court disaster in the form of lost American lives on the battlefield and millions in wasted tax dollars repurchasing our technological advantage with yet more advanced systems to counter our own lost secrets. The clear policy choice in this case favors a pre-emptive allowance under these circumstances. The security of the Nation as a whole must pre-empt the temporal rights of the occasional individual. For what good is it to save the one only to lose the whole? For only in the security of the whole Nation are anyone's rights protected, is even the one truly safe."

He then referenced cases citing policy precedents and several Administration sponsored Think Tank studies in support of his policy conclusions. While I found National Security to be a valid concern, I failed to see why it justified the Army's repeated denials and years of stalling. I had been cleared for Top Secret work in my other defense-related jobs. So, why couldn't the Army clear me in this area and negotiate a 'just compensation' royalty agreement for my invention?

Having concluded his policy arguments the Army's Policy Counsel sat down. The Army's Technical Counsel then rose to address the Justices. "You Honors, you have heard compelling policy rational in defense of the Army's position. I will provide both patent and legal support for our second assertion. That assertion relates to the very nature of the invention itself. The run-out controller at issue in this case lacks many of the critical elements required to be considered a valid, patented infringed invention. First, we will show its extremely narrow application. Its proposed application is only for large gun barrels and cannons. There are no other applications cited in the patent or that have become obvious since the filing. Second, we will show that the appellant has sold not a single copy of his patented design for any use whatsoever. Third, we note that the appellant has in fact not turned his patented design into practice. And we will make obvious that lacking the demonstration of actual practice appellant has failed to exhibit the concepts validity. The Army maintains that this patent is invalid, having never been reduced to practice. And, because the patent is in fact invalid, no infringement could have occurred. The Appeals Court

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sided with the Army in this argument citing the lack of demonstrated practice and very limited use as strong indications favoring the Army's position that no infringement existed. And if no infringement existed there was no 'taking' and there was no compensation due."

He then cited his primary supporting cases as precedent for the Army's position. A stream of support Counsel and staff stood ready to supply him with whatever document or legal reference he might need to make his case. They were the legal army behind the Army. But, I suppose I shouldn't have let that bother me at that late date. We knew that we were likely to be "out gunned" or at least out-resourced from the very beginning. But, we had one very critical, key advantage on our side, we were right. The Constitution and the Fifth Amendment left little room for doubt. So, if the patent's validity was to be sustained by the High Court, it might well be down hill from there.

He continued his summation for another 20 minutes, clearly going beyond the allotted one-half hour. The Clerk gave him a stern glance and then deflected his eyes toward the clock. Counsel took the cue and began winding up his oral presentation. "Our defense is founded on nothing less than the sanctity of the national interest and the fact that there simply was no infringement. We are certain that this High Court will see the wisdom of that perspective. The Court of Appeals in its considered judgment found for the Army and we trust that this High Court will do the same. I thank your Honors for your time." He then sat down with a self-satisfied expression on his face. Counsel for the defense undoubtedly thought that he had made his point and made it well.

The High Court then began the open question and answer period. Perhaps we could gain some inkling of the Justice's disposition in this case by their questioning? We would see in a few moments.

The Chief Justice Burger looked over to the Clerk and asked, "How are we doing on time?" The Clerk nodded in response. He then proceeded, "We will now allow the Justices an opportunity to ask their pointed questions in this case. And I expect that Counsels for the appellant and defense will provide accurate and concise answers responding directly to the point of the question asked. If you find the question unclear, seek clarification. If you are uncertain of an answer, you may confer briefly with support Counsel and your staff. Then we expect you to respond as best as you are able with the facts, precedents and opinions available to you in this court room."

"We will begin the questioning with Justice Blackmun. Justice Blackmun is perhaps most famous for his liberal positions including support of a woman's Constitutional right to seek an abortion."

Justice Blackmun began, "Thank you Chief Justice Burger. I will note for the record that I was appointed to the Bench by Dwight D. Eisenhower a former Army General. So, you might say my perspective is lightly balanced for this case. Counsel's, I was raised in Minnesota, not Missouri the 'show me' State, but you'll need to 'show me' none the less. In my questions I will be looking for incontrovertible legal evidence and support for the assertion that the national interest clearly trumps the Fifth Amendment rights guaranteed by the Constitution. I will be looking for answers to the broad policy questions 'why, when and for how long.' I will first direct my questions to Mr. Campoure and then to Counselor Conover."

Speaking to Mr. Campoure he stated, "Your policy argument is one that supports the national interest over the property rights of the individual. Is my understanding of the essence of your

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argument correct? Specifically that you argue without the definitive protection of the national interest, the rights of the individual go unprotected anyway?” Mr. Campoure nodded and stated, “That is correct.” Justice Blackmun continued, “If so, as you indicate, then am I to believe that the suspension or delay of the appellants Fifth Amendment rights, for this one individual or for any such individual, makes the entire difference between the maintenance and fall of the Nation?” His response was, “Of course not your Honor.” Justice Blackmun continued, “Then, Mr. Campoure, tell us how and where we may draw the ‘bright line’ between overly infringing upon the individuals rights in the name of the Nation’s legitimate, but far less than mortal, security interests, and clearly enforcing those rights? Is it a matter of black and white, or are there shades of gray? Stated differently, how are we to sustain the Army’s position on national interest without a measure of the degree of National Security need and the impact of the absence of that privilege? And how are we to balance this against the harm done by suspending the Constitutional rights of the individual? And then finally, who in the Executive Branch of Government is qualified and designated to make those decisions?”

After a brief moment of consultation with his Co-counsel and staff, Mr. Campoure replied, “Justice Blackmun, the determinations behind the drawing of such a ‘bright line’ are never easy. Yet the world and our national interests demand that the Executive Branch draw them day in and day out. These are not decisions taken lightly by either the Army or anyone else in the Executive Branch of Government. Further, I must reply that the one individual who is most qualified and responsible for making such decisions is our Commander and Chief, the President of the United States. As the duly elected representative of the people this duty falls upon his shoulders, to day in and day out weigh in the balance the legal and moral factors that dictate our behavior as a nation, including how we treat our enemies and our citizens, in the context of the ever present enemy. Your Honors, our view is that you must grant the President sufficient latitude to run the country and manage this external threat in order to assure its survival. Yes, even to the point of suspending or trumping the personal rights of a few individuals in the name of the national interest. I have presented precedent in Exhibit A-4 that supports our contention in this area, and it is in our view conclusive to this point.”

Justice Blackmun then directed to the appellant’s Counsel, “Mr. Conover, can you provide any further illumination concerning this ‘bright line’ question?” To which he replied, “Your Honor, we see this not so much in shades of gray, but in the plain absolutes of my client’s unequivocal Fifth Amendment rights. To allow the establishment of a ‘bright line’ process is to invite risk. The unacceptable risk that we may all find ourselves in darkness as those seeking their own objectives move that ‘bright line’ farther and farther from the Constitution, the firm base upon which this Nation was built. Where there is subjectivity there is no narrow ‘bright line’ only a broad swath cut through the very inalienable rights we all hold so dear. The very rights for which we all, including the Army have fought for the 200 and some years of this Republic. I recommend against it, just as I object to the erosion of a retirees savings by run-away inflation. Whether that erosion is great or small, it is tantamount to theft and nationwide it robs millions of their life’s savings, yes, bit by bit, but no less certainly than if they had been robbed on the street.”

Chief Justice Burger than inquired of Justice Blackmun, “Would you wish to follow up on that line of questioning at this time?” To which he replied, “No. I’m satisfied with those answers for the moment. I have no further questions at this time.” Chief Justice Burger commented that they

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would then proceed to Justice Rehnquist. “Justice Rehnquist you may begin with your questioning.”

“Thank you Chief Justice Burger. And since Justice Blackmun has set the initial precedent for full disclosure with his opening comments, I note for the record that I served as a Sergeant in the Army Air Force from 1943 to 1946 during World War II. However, it is unlikely that this brief military service will in any way guide my thinking in this case. I also will note that I was born in Wisconsin. And some think we rarely pay heed to the likes of those from Minnesota. But in this case, Justice Blackmun and I may actually agree. I am a highly practical man. I have found inspiration in Charles Evans Hughes' practice of compromise to secure the broadest majority. In many ways, I desire to maintain the high credibility of this Court and the law, and the resulting general perception of judicial unity. And my conservative vision and influence will no doubt be noted here at some point by the more liberal Justices.”

He then began his questioning, “Mr. Conover, some view the failure of the appellant to reduce his invention to practice as a failure to support its patent validity. What specific evidence in policy, fact and law do present as most supporting the viability of this invention and which might be used to repel the Army’s claim of non-infringement?” Counselor Conover replied, “While it is true, your Honor, that reduction to practice is a stronger argument for patent validity than mere filing, precedent have held that mere failure to reduce to practice does not in and of itself disprove validity. I refer you to Appellant’s Exhibit 12 for that precedent. In addition, it is our view that the benefit of the doubt should be granted to the U.S. Patent Office. It was that office which first reviewed this “break through” invention and found it sufficiently worthy to issue the ‘568 patent in the first place. Consistent with that precedent, our position is that the burden of proof remains with the defendant. They must show that the invention was not workable in practice as described in the patent to support the claim of invalidity and non-infringement. In fact, we would point the Justices to the notes of Bergen Research & Engineering and their first attempt at implementing a bore control device. Their initial design - using a taught wire, rather than appellant’s run-out indicator accelerometer - led to utter failure, and they were then forced to adopt the design presented by my client in his patent. In fact, by their own admission, the engineers at BRE agreed that they were unable to ‘design around’ my client’s invention and patent. There was simply no other way to accomplish the desired end – high precision cutting in gun barrels. You might say that while my client did not reduce his invention to practice, the Army did clearly demonstrating the practicability of his invention and the validity of his patent.”

Justice Rehnquist replied, “Thank you, Mr. Conover.” And turning he noted, “I have no further questions at this time Chief Justice Burger.” The Chief Justice then continued, “Having heard from the senior liberal and conservative members of the bench, now are there any additional questions from the Justices?”

That questioning by the Supreme Court Justices and the responding by Counsels continued for what seemed to be an eternity. But, finally, they had asked all their questions and heard all the answers and arguments they would need to decide the case, so the Chief Justice retired the Bench to their considered deliberations. Next the waiting and prayer phase commenced. Had we done the best job possible? Did they hear what we were trying to say? Only time would tell.

Enemies Domestic – The Majority Opinion

November 4th, 1991. U.S. Supreme Court, Washington, D.C. – Was it almost over? Well, not quite. We had just one final court judgment to survive, to endure. The Justices would decide and then issue their thoroughly considered majority and minority views. Our fate was in their hands. I realized for the first time that perhaps the fate of the Nation rested there as well.

Lt. General Frankenheimer had commented just prior to commencement of “G-day” in Iraq that, “The waiting was a killer, but proceeding under prepared was even worse.” We had been prepared. We had been as prepared as we would ever be. But, was it enough? The Supreme Court Justices would give us our final exam grades. The question was, “Would we pass or fail?”

According to Rule 41 of the U.S. Supreme Court, opinions of the High Court are released by the Clerk immediately upon their announcement from the bench, or as the Court otherwise directs. Thereafter, the Clerk causes the opinions to be issued in slip form, and the Reporter of Decisions prepares them for publication in the preliminary prints and bound volumes of the United States Reports.

November 4th was a date for many noteworthy and unusual historical occurrences, including the discovery of King Tutankhamen's Tomb in 1922, for patenting of the Artificial Leg and the Slicing Machine, the occurrence of the 1st Sadie Hawkins Day in the “Lil' Abner” comics in 1939 (my favorite), and for publication of Freud's *Interpretation of Dreams* in 1899.⁻¹³ (I wonder what Freud had on his mind?) And now, hopefully, we were adding yet another first to that list, the final and ultimate acknowledgement of my run-out controller invention and patent by the United States Supreme Court.

We were not disappointed. By a 5-to-3 majority the Justices had seen it our way. The majority opinion in favor was unabashedly clear in their view that the Army and the majority on the Appellate Court had erred. The patent was valid, infringed and there simply was no trumping of the Fifth Amendment by national security interests. The minority opinion seemed to call out to Congress for help in resolving this modern Constitutional dilemma. Their comments echoed those to Counsels “How do we as a Nation balance the issues of personal liberty and our National Security interests?”

I suspect this is one of those perpetual questions, always under review, always in debate, always in litigation. There are no easy answers for some of life's questions. The answers are sometimes known only to the Almighty himself and not to mere mortals such as we here on earth below. Our only choice, our only hope, is to continually struggle and strive to discover those answers.

¹³ Ref: <http://dailyglobe.com/nov.html#D>

Enemies Domestic – Justice is Never Assured

April 1st, 1992. U.S. Claims Court. Washington, D.C. - The parties then returned to the Court of Claims for a determination and for award of reasonable legal expenses. It had been our expectation that Judge Andwalter would now award us an amount sufficient to cover my considerable legal bill. Our win had been complete.

Yet, inexplicably, without testimony or oral argument Judge Andwalter denied payment or reimbursement for *any* legal fees. We were shocked. To us this appeared a completely arbitrary decision, given the immense cost of the litigation, the ultimate infringement finding of that same court, and especially so given the views of the U. S. Supreme Court Justices.

To this decision there was apparently no appeal. Once again we speculated that the Judge had begun with a total award in mind, and then backed into it. He simply would award no more.

With that unfortunate final decision it was indeed all over. As Yogi Berra had been known to say “It ain’t over, ‘til its over.” Well, now 14 years later, that extended legal battle was indeed finally over. After 30 years, the saga had run its course. The case of ‘Albert Lawrence vs. The United State Army’ was concluded.

Peace in Our Times

June 21st, 1992, Glen Head, LI – Reporter Barrett then asked, “So, what’s next for you, Albert Lawrence?” I thought for a few seconds and then said, “Well, with that long litigation now behind us - and my ***Russian*** medal of honor nailed to the living room wall - I plan to return to a more normal life as an average retired American, I guess.”

The proceeds from the run-out controller litigation had paid off my lawyer, my financier son and my wonderfully devoted wife, Joanne, for her many years of unswerving love, loyalty and incredible patience. And I, with the help of my son, had established a defined benefit annuity pension plan for my retirement with the remaining proceeds.

“And I plan to return to private inventing in my retirement. My next patent is an invention to improve the airplane wing. It is called a ‘boundary-layer’ control or BLC device. It is intended to dramatically increase airfoil efficiency by lowering the drag of commercial airliner wings in subsonic flight. The airlines should save millions of dollars on fuel and it should increase airplane safety as well by eliminating wing ‘stall’ - a primary cause of some major air crashes.”

Mr. Barrett continued, “Do you have any lasting laments, any life learnings?”

I thought for a few seconds more, and then speculated, “Well, I can only wonder what marvelous inventions I might have created, if only I had not been forced to spend so *many* long years defending my rights as an inventor from the very Government set up to protect them. Only God knows the damage done. Perhaps some day a more enlightened society will render to its patriot-inventors the respect and honor that they truly deserve. But, I suspect that I may never live to see that day.”

“And now as to the subject of my ‘life learnings’ ” I mused for a second. “Well, yes, I guess I do have three ‘life learnings’ flowing from that lengthy litigation:

Victory! Were we victorious? Yes, but at what cost?

Justice? Was justice served? Perhaps, but when long overdue, is it *truly* just?

National Security, Military Priority, Executive Privilege, Patriotism! Like beauty, these are concepts best judged in the eye of the beholder.”

“Yes, after so many long years, I have my questions, my doubts and perhaps a few answers.”

I wondered aloud, “Does good always triumph over evil? Perhaps, and perhaps not, as the outcome depends on us.” And then I queried, “What is good, and what is evil? Sometimes it was hard to tell them apart.” Finally, I lamented that, “In my experience, men sometimes do the greatest evil in the name of good.

Reporter Barrett then inquired, “Do you have anything that you would like to use to summarize your life during the last 50 years?”

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I thought for a second, and then remember a quote by John Gray. Recalling, I felt it probably best described my life's credo - that, 'Success lies not in doing what others consider to be great, but in what *you* consider to be right.' "

And finally concluding the interview, I noted that, "Like Don Quixote - after a life of conflict with enemies, both foreign and domestic - I too was exhausted, but satisfied in a life well lived."

Like Francis Albert Sinatra, my favorite crooner, I could at least say, "I did it my way."

[Fade to black.]

-The End-

Enemies Foreign & Domestic

Chris Lawrence leads his reader on a remarkable journey through three 20th Century American wars with this gripping historical novel. It encompasses World War II heroism, Cold War intrigue, the 1991 Persian Gulf War victory and a personal battle which for our hero becomes the ultimately legal battle before the United State Supreme Court Justices.

This historical novel is based on the true life experiences of Albert Lawrence. He was a patriot and a talented inventor whose dramatic contributions to the defense of his country were recognized only by its former adversary, Russia!

The U. S. Army – which has sworn to protect its citizens from all enemies, foreign and domestic - engages in an elaborate Cold War theft of our heroes greatest invention, and devises a 30 year cover up to hide that invention from America's enemies and the theft from our hero and his Attorney.



Albert Lawrence's youth is forged in the fire of World War II battle. His service as a radio operator in the U.S. Merchant Marine at the age of 21 - as part of Convoy PQ17 - leads him above the Arctic Circle to frigid northernmost Russia in its desperate fight against Nazi Germany. Tragically his ship is one of 27 sunk on that perilous Murmansk Run. By sheer luck our hero survives to return home.

Later, during the Cold War era, he advises NATO on military tactics, and ultimately invents a way to manufacture ultra-high precision gun barrels for the U. S. Army. His brilliant concept is covertly employed by the U. S. Army to make all new Abrams M1 Tank cannons. This incredible invention ultimately contributes to America's decisive victory over Saddam Hussein's elite Republican Guard forces during the 1991 Persian Gulf War.

But the true challenge is for our hero to reclaim his lost Constitutional rights, and to receive the honor and recognition he so rightly deserved for his inventive genius from the very Government it served.



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