

HOW DID A LUMBERJACK INVENT MILITEC-1?

The story of the invention of MILITEC-1 and the man who made it happen.

The Early Days

Twenty-six years ago, if you'd asked someone how to find Brad Giordani, the answer would have been, "Go climb a tree!" They wouldn't have been kidding, either. In the summer of 1976, Giordani was a lumberjack in the Pacific Northwest living at the base of Mount Rainer.

It may seem unlikely to find the man who was destined to invent a technologically sophisticated lubricant living the rugged outdoor life of a logger in the wilderness of Washington State's Cascade Range, but that's where Brad was, setting chokers and cutting timber with the best of them. For ten long years, he worked in the worst possible conditions - always outdoors in constant rain or snow, often with mud up to mid-calf. Those hard years taught Giordani many lessons. One of those lessons would change his life.

Logging is a dangerous profession. It's an environment where one wrong move can be fatal. A falling tree can kick back (called a "barber chair") and smack you - hard. Drop a tree wrong and it'll crush you like an ant. A broken leg or sprained ankle is never more than a step away. Of course, Giordani had all the usual close calls and narrow escapes, but even with the mastery that comes from ten years' experience, there was one extremely dangerous job that still troubled him - chain sawing a back cut on a leaning hardwood tree.

Most chain saws rely on a small reservoir of "bar" oil to lubricate the chain. The small size of the reservoir means it sometimes runs dry when you least expect it. If it happens during the back cut on a leaning hardwood tree, disaster strikes. Without oil, the chain sticks abruptly and the tree splits with a sound like a cannon shot. The flying wood can knock you to kingdom come. Loggers had been badly injured this way, and Brad had a few near misses himself. It didn't take long for him to realize he ought to learn as much about lubrication as he possibly could. Keeping his chain saw properly lubricated could be a matter of life and death - his own!

About this time, shortly after Mount Saint Helens erupted, a fellow lumberjack showed Giordani a new oil additive product. It promised to maintain adequate lubrication even if the bar oil reservoir ran dry, and to keep the chain sharp longer, which would help cut through all the volcanic ash. If the claims were true, the oil additive would boost production while saving lives. Giordani decided to try it.

Lo and behold, the stuff seemed to work! The chain saw had never run better and cut so well. Giordani was an immediate convert. He started using this "Late-Night 'Infomercial' Oil" in his logging equipment, his personal vehicles and anything else he could think of. He even joined a Multilevel Marketing Program and started selling the stuff to anybody who would listen.

Then the problems started. Feedback from other salespeople and Brad's own personal experience quickly showed the "snake oil" also had unfortunate and extremely serious faults. If you used too much of the additive, or used it too often, internal metal parts would corrode, rubber seals would blow, and a waxy residue would gum up the internal oil passageways. Though it seemed to work well initially, the oil additive could actually end up ruining the very parts it was meant to protect. This was a terrible dilemma. A short-term increase in performance at the price of destroying your machinery is a very poor trade off.

Since the shortcomings of the product seemed to outweigh its advantages, Giordani looked at other products to see if there was anything better. Much to his dismay, after an extensive search Brad just assumed that **all** existing oil-additive products had a variety of prominent and troublesome disadvantages.

Some just made the oil thicker, which didn't help at all. Others, though marginally acceptable at first, had EP oils that decomposed and thickened with use, to the point where they clogged the oil galleries and passageways. Some products contained fine particles of metal or other microscopic solids or powders. These particles were meant to aid lubricity and metal adsorption, but could become extremely abrasive and/or leave thick, gummy residues. Still other products contained unstable blends of waxy substances that needed heavy doses of solvent to dissolve in the carrier oil. When these products were heated to engine temperatures, the solvent would evaporate, leaving the wax free to coat the inside of the engine and oil filter.

Unfortunately, none of the existing lubricants solved Giordani's problem. Brad wanted the superior lubrication the additives promised, but simply couldn't justify using them because of their unacceptable consequences.

The Vision

This started Giordani thinking. What if a way could be found to eliminate all the deficiencies of these products, but retain the benefits? What if a product could be developed that would offer constant lubrication without destroying the equipment it was used on? Giordani realized that such a product would be a real world-beater if only some person would invent it.

Then, in a pivotal moment of crucial insight, Giordani realized that he could be that person! No need to wait for someone else to do it for him. He could create the formula and produce the lubricant himself. After Brad mulled it over for a while, he made a solemn commitment. Right there, deep in the woods of Washington State, Brad Giordani resolved his life's goal would be the quest for that life-saving lubricant.

The problems seemed insurmountable. Giordani's funds were extremely limited. He knew next to nothing about organic chemistry. He also realized that even if he managed to discover the elusive formula, the task would only be half over - he'd still have the daunting task of thoroughly testing his product and then convincing the public of its worth.

For most of us, Giordani's next step might not seem so intuitive. Obviously, the deep woods offered little hope of conducting intensive, real-world lubricant R&D. Brad needed to go someplace where he could find the necessary knowledge, resources and facilities that would allow him to develop, test and market a new lubricant. Furthermore, he needed to be able to do it on an exceptionally tight budget. Where could he go? Who could he turn to?

Brad's answer was the United States Government. His reasoning went like this: He knew the government provided funds for entrepreneurial development. He also knew the Government had easy access to research labs - if he worked it right, he might be able to gain access to those labs, too. Eventually, the government might even supply the necessary test bed for proving his product in real-world situations. So, in a leap of faith that only another true entrepreneur would understand, Giordani packed up all his worldly belongings and moved from Washington State to Washington, DC.

Let's be sure we've set the stage correctly. A lumberjack (now ex-lumberjack) decides to move from the forests of the Pacific Northwest to Washington, D.C. to develop a new lubricant. He has no specialized knowledge of organic chemistry or lubrication technology. He has very limited contacts in D.C. - not even a place to stay. All he has is an idea, a thousand dollars, and a strong desire to succeed.

How would you rate this man's potential for success? Pretty dismal, right?

But Giordani is not the kind of person to shy away from a challenge. For example, during the Vietnam War in 1972, when Brad was only sixteen, he joined the U. S. Army and ended up becoming the Military Karate Champion of South Korea in the spring of 1974. No task is too large for a person with this kind of drive. As far as Brad was concerned, the biggest problem was not how to create the lubricant, but rather how long it would take to finish the job.

Hard Work

After settling in Washington D.C., Brad went through a series of insider manoeuvres that bordered on the miraculous. Finally, Giordani was befriended by William Patrick Collins, at the time the youngest-ever Undersecretary of Energy for the Reagan Administration. Collins provided Giordani with several key contacts, including government engineers and chemists based in Washington, D.C. Working with these specialists; Giordani quickly acquired an intimate knowledge of certain very specific aspects of synthetic chemistry. After mastering this, he continued his education by teaming up with a chemical company, where he learned the details necessary to begin product development, including the specifics involved in the chemical reactor process that is now used to produce MILITEC-1.

After years of hard work, Giordani finally achieved his technical breakthrough in 1988. The new lubricant was ready. Brad Giordani had invented **MILITEC-1 Synthetic Metal Conditioner**. Just as he had envisioned all those years before deep in the forest, MILITEC-1 was an exceptional new synthetic lubricant that provided constant lubrication and corrosion protection even in the absence of an oil film. By physically and chemically impregnating itself into the metal, MILITEC-1 formed a completely new chemical compound on the metal surface. Furthermore, MILITEC-1 achieved these objectives without the use of solvents, waxes, carrier oils or solid particles. In short, MILITEC-1 had all the advantages of its predecessors, but none of the negative aspects that plagued them.

This made MILITEC-1 unique in all the world of lubrication.

There were two separate key elements in Giordani's breakthrough.

First, Giordani developed an exclusive and unique formula; combining a unique synthetic-based starting material with natural anti-corrosion ingredients, extremely stable chlorate esters, anti-oxidant compounds and synthetic ester base stocks.

Second, Giordani used a proprietary chemical reactor process that transformed the blend of separate ingredients into one single chemical compound: MILITEC-1.

Neither of these two key elements would have done the job alone. The genius of Giordani's invention lay in the combination of the two.

Of course, Brad is the first to say that he could not have done it alone. His accomplishment owes a great debt to input from a variety of sources, but in the end, Giordani is the one who put it all together.

The Tests

Just as Brad predicted, developing the formula was actually the easy part. Now he had to prove to the world that the product worked. In the case of MILITEC-1, winning public belief and support has involved many long years of testing.

Initially, all Brad knew was that MILITEC-1 was a lot better than anything he had seen tested before. However, he still did not know exactly how much better, or if there would be any unanticipated downside with long-term use.

To get the ball rolling, Giordani once again called on his DC connections. The US Marines gave MILITEC-1 its first official test, then the US Secret Service. They loved it. The results surpassed everyone's expectations - except Giordani's. As far as he was concerned, MILITEC-1 merely performed as he had anticipated.

In 1988, The Drug Enforcement Administration became the first Federal Agency formally to adopt MILITEC-1 after witnessing a test conducted by two Marine Corps majors at the FBI's rifle deck at Quantico. The two test firearms, suppressor-equipped MP-5's, showed frequent jams on full auto and other malfunctions using MilSpec

CLP weapons lubricant. When MILITEC-1 was applied, the malfunctions ceased and the weapons performed better than normal.

The US Navy tried fiendish destruction tests, but MILITEC-1 passed with ease. When the Navy finished testing, their Medical Command gave MILITEC-1 environmental approval for use aboard nuclear-powered submarines. MILITEC-1 is the only product of its kind ever to receive this important approval.

People were impressed, so word of the new lubricant spread rapidly. But everyone is a sceptic. Each new group designed fresh tests to challenge the findings of the previous group. Not surprisingly, public and private sector testing of MILITEC-1 continues to this day. In fact, no other product of its kind has ever been tested so rigorously and by so many technically equipped groups. Yet, in all those years, MILITEC-1 has never failed, and has never suffered one single product liability claim. MILITEC-1 has proven its worth in the most scientific and technically oriented communities on the planet.

The Formula

It is important to note that the formula for MILITEC-1 has never changed. Brad's invention has stood the test of time. MILITEC-1 is still exactly as Giordani originally made it in 1988. There have never been any modifications, changes or "enhancements" to the formula. He got it right the first time.

MILITEC-1 and Brad Giordani

So, here we are, twenty-six years later. The former lumberjack is the head of his own corporation. The superior lubricant he developed is used and respected around the world. Through unflinching devotion to an ideal, Bradley Paul Giordani's hard work has paid off. The dream of a raw kid from the wilderness has become a reality.
