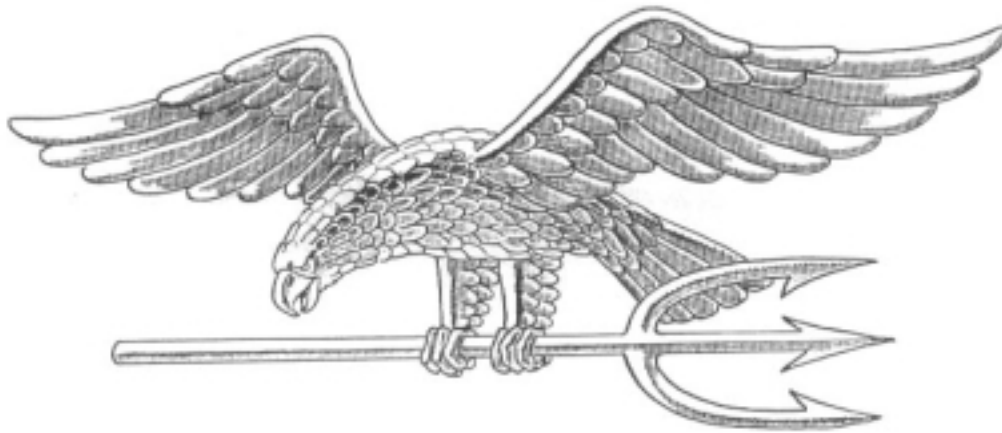


**Scientific Principles of
Improvised Warfare and
Home Defense**

**Volume 6D
The Organization and
Conduct of Biological
Warfare**



To paraphrase a great American freedom fighter
“I have not yet begun to write”!

- Timothy W. Tobiason

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This book is dedicated to Timothy McVeigh, a man who, like John Brown prior to the US civil war, acted and was executed for his willingness to fight for a cause. His willingness, and that of others, to stand up to tyranny will not be forgotten!

Authors Preface

I am asked from time to time why I write books of this type and have given this some thought given the nature and significance of these works. Over the last three years I have been personally subjected to hundreds of acts of harassment, threats, intimidation, property damage, provocation and even attempted murder by agents of the federal government, many of which I have described in detail in my book on “Identifying Undercover Activity and Agents”. This has been a strongly motivated personal issue for me.

Several other events have also strongly influenced this writing. One was the superficial investigation of WACO which failed to address various important issues. These include the undercover agents and fronts, selling machine gun conversion parts to private citizens and then reporting them to the federal government for the possible use of the parts in making machine guns. This is what the WACO search warrant centered around. The other was the investigators use of FBI documents in which they read the files, concluded they were all accurate and then presumed that the FBI’s version must be correct one and they were then right because their own documents said that they were. In my own experience, the FBI agents have deliberate memory lapses when they arrive in court that are of benefit to them, and I have already covered this in detail before in the above mentioned book. One other interesting note that was overlooked in the press was an interview an FBI agent gave to Mike Wallace on “The 20th Century”. In a repeat from years before, an FBI supervisor told Mr. Wallace that it was FBI policy to use incendiaries to burn resistors out after prolonged siege’s. This interview was taped over two years before WACO and was conducted after an FBI raid where they did use incendiaries against a tax protestor to burn him out. No one seems to have remembered this during the WACO investigation. I wonder when they conveniently changed their publicly stated policy regarding this. I also wonder why these grand pretend investigations by so called unbiased 3rd parties can’t seem to turn any of this up in their superficial reviews.

Related to Waco was the result of the jury trial of some of the participants who were found not guilty and then imprisoned anyway in modestly publicized proceedings. The judge set aside the verdict and locked them up in favor of the government. This seems to subvert the concept of citizens judging each other as juries which allows them to weight the truthfulness of evidence and protects citizens from unjust or fabricated claims of the federal government. We the people cannot protect ourselves from the government in courts of law any longer even though the constitution still pretends to provide us with these rights.

The government spent years trying to talk Randy Weaver into committing a crime, and then killed his wife and child while attempting to arrest him for that crime. Many more American citizens have suffered a similar fate because of their beliefs. Recently, another book dealer at the gun shows spent an evening trying to talk me into destroying the UN or Washington DC (He was evidently being pressured by his federal bosses to help them do something about me. I nearly told him that we should kill all the undercover agents working the gun shows that try to talk people into doing things like that, instead.)

Another matter I consider important seems almost trivial in comparison. This is the seat belt laws in force around the US today. In Nebraska, we the people voted down the seat belt laws twice. Our elected representatives were told in no uncertain terms that this law and its intrusion into our personal behavior was not wanted. The federal government (not the part that we elect-our congress) told every state that they had to pass these laws or the states will lose federal funding. This amounts to government dictatorship by extortion. Even most of the laws that the elected congress considers and passes are laws that the government itself brings before the congress. They tell them they have to pass these laws for a better run country and generally get their way. This is no longer representation being elected to pass laws for the people. It is largely, government by, for and of itself and its wealthy constituents and the desires and personal freedoms of the citizens no longer matter.

Compounding this, police officers have arrested (in a highly publicized case) citizens for not wearing their seat belts and in the case of a Texas mother, was taken to jail in handcuffs. Judges in court cannot sentence a person to jail for this offense under the law but any police officer anywhere can now haul citizens to jail for offenses they cannot go to jail for, and that our elected officials did not even voluntarily pass into law..

The supreme court ruled that this was OK, that her rights were not violated and that the police can do this. Personal rights and liberties do not exist when police officers can stop, handcuff and imprison citizens for offenses that the law does not allow them to be imprisoned for. When the courts favor the government in imprisoning its citizens at the whims of its law enforcement officers, we no longer live in a nation of liberty and rights. We live in a pretend democracy with pretend rights and pretend freedoms. With this supreme court ruling, even the illusion of those rights have been stripped away.

[This author also finds it ludicrous that he can draft procedures for producing weapons that can kill virtually every human being on the planet, but his government tells him he has to wear a seat belt so he doesn't hurt himself while he drives. If he does not wear it, they can haul him (or anyone) to jail even though the law says he can only be fined for it.]

I have written previously (Volume 1) about the government practices of weeding out its citizens of the opportunity to own patents and other property due to trouble and expense. The laws are written so that only the wealthy can own the wealth and material property of this nation and all other citizens will be artificially excluded and sentenced to life as employees (paid slaves) of the wealthy. Even when they save the money to try to buy and own these same properties, they are excluded under the law.

This same concept is being applied by the government in its firearms laws. The rights to keep and bear arms has become largely fictitious. Large cities, such as New York already exclude all its citizens from this right except those that its especially permits to carry guns. The federal government creates a cobweb of laws that artificially excludes many citizens from firearm ownership due to much trouble and expense. It would be difficult for governments to take away these rights from all the masses of people all at once so it does so gradually in increments, just as it has taken other rights away for its own benefit and convenience.

Now we come to the moment of truth. This book is written so that private citizens can never be disarmed. With the knowledge contained herein and in previous volumes, they can arm themselves and their children for all time irregardless of the governments wishes and regulations. They can form their own armies to oppose the governments armies and police forces here in America and anywhere else on earth that they wish to be free. This knowledge is not secret, but it is generally closely held by governments and can be used against its citizens. I write this with the philosophy that anything that this government knows how to do to its citizens, the citizens have the right to know about as well. I write also this with the full knowledge that firearms are obsolete and the time has come for the modernizing and updating of the concept of citizen armies.

As most historians know, rights are never recovered by citizens peacefully. They earn their rights with the blood of revolutions, or in some cases by their own governments arming them and compromising in the face of external threats. Historians also know in this context, that knowledge translates directly to power, and it is the citizens who wield power (and the right to all knowledge) in this country, not the government.

Tim Tobiason

Introduction

Prehistoric man first began to use pieces of wood and stone as hammers and clubs with which to kill game and each other in conflicts. He would use wooden boards to shield himself from these weapons. Over time, with the advance of metalworking, he began to make edged metal weapons called swords and conversely, the shields began to be made of metal as well to stop the more powerful swords. Soon, weapons were created that allowed for long distance attack (bows and arrows/slingshots) and these led to the wearing of partial and full body armor to afford protection. Warfare was made mobile and quicker with the invention of chariots and cavalry which were equipped with these weapons and enhancements such as razor blades on spokes of the wheels.

In a few hundred years, more powerful projectile weapons were created (the crossbow) to penetrate armor and overcome these defenses. At the same time, cities produced massive walls to protect against armed invaders. Attacking armies soon developed massive siege engines with which to batter down the walls such as catapults or to climb over them (protected ladders).

Around 1400, gunpowder was invented. Chemicals could now be used to propel metal objects down an aimed metal tube at incredible velocities. Men armed with these weapons could kill at hundreds of yards. Armies equipped with larger cannon could batter down the best built walls. The offense once again advanced ahead of the defense. Armies now began to build equivalent weapons instead of massive defense works to cope with enemies.

As the technology of firearms, artillery and their projectiles (bullets and shells) improved, defenses such as digging into the ground (trenches) and the building of large armored vehicles emerged to protect and move men around the battlefield. The trench and tank warfare of WW1 and WW2 are well known and understood. Field fortifications were also developed to cope with protecting soldiers in battle and immobilizing or limiting enemy movements.

Since 1400 to 1945, the same basic technology has been the primary means of arming and equipping armies. This has been the use of explosives to push projectiles out of a long metal tube. The forms of this basic technology has been the muskets-rifles-machine guns and cannon-howitzer-tank turret. Projectiles improved from metal balls to rifled bullets to jacketed bullets and specialized physical properties were added such as splintering metals, hollow point designs and armor piercing high velocity rounds. Larger weapons were able to fire more sophisticated and larger projectiles which would contain explosives, incendiaries, chemicals, biological products, and would also have armor piercing and penetrating properties to overcome armor and trench defenses.

In 1945, using advanced nuclear sciences, the atomic bomb was developed and was soon followed by the hydrogen bomb. These incredible explosives were capable of destroying entire cities and threatened the end of mankind if used on a massive scale by two warring nations. These weapons still needed to be physically projected into an enemy camp or country by the use of cannon, missiles or bombers.

By the mid 1980's, theoreticians using advances in computer science began to realize that technology could be used to stop all the high speed methods of projecting nuclear weapons and the science nicknamed "Star Wars" was born. Many generations of computer improvements would be necessary to enable smart missiles to track and intercept all enemy nuclear missiles, bombers and shells. The ability to detect, track and shoot down or destroy an enemies entire nuclear arsenal became theoretically possible by the year 2000 and the prospect of this type of defense is realistically catching up with the offense again. Variants of the theory of this type of warfare includes infiltration with backpack nukes, and MAD (Mutual Assured Destruction).

This generally and collectively covers most aspects of how armies have been equipped and how wars have been fought with these arms up to this point in human history. I will now take a walk down history lane to describe what might have been if a single intellectual had taken a slightly different road in the course of human existence.

In the late 1800's, Louis Pasteur and others began a medical revolution with the aid of the invention and subsequent development of the microscope. They found that they could grow tiny bacteria and other microorganisms that caused disease on various food mixtures as well as human and animal tissues and fluids. These would be mixtures of animal fats, Jell-O, fried egg white and other semi-solid materials that provide a solid surface to grow on and provide the right food to support the growth of different kinds of bacteria. These same microorganisms would also grow in a wide range of human dietary soups. These soups could be massively diluted with water, stirred, and then mixed into the egg white or Jell-O or any other solid mix and support the growing of tiny individual colonies containing billions of the individual bacteria. These colonies could be seen and distinguished by their differences with the naked eye depending on the food they were fed. They would grow in different colors and forms and be told apart and identified like different species of flowers or trees because they each look unique under the right conditions. (This has already been taught in the previous three volumes of this series)

Almost ten thousand years earlier, man had begun this revolution without the aid of a microscope. He had found he could ferment grain by using the part of one batch to act as a seed for the next batch and that they would have the same taste and physical properties as long as the same basic formula was used. By this method, he soon learned to make a huge range of alcoholic beverages without being able to see or understand the invisible bacteria and yeast at work. He had learned to save and pass along the invisible strains of yeast inside the grain that gave the alcohol its character.

The same would hold true for bread that they baked that would rise and have exceptional flavor. The action of microorganisms fell into everyday use by virtually every human society on earth thousands of years before they could see the causative organisms with the advance of science and the invention of the microscope. They had deduced the effects of the organisms and learned how to harvest and use these effects to feed hungry populations and add to the enjoyment of life.

At the same time, in some parts of the world, tribal witch doctors would learn to grow poisonous soups that hunters could dip their arrows or poison darts into, and kill large animals easily. This would allow them to feed the tribe for weeks. Some of them learned that they could mix small amounts of this soup into human foods. They would place the soup on one part of a knife and use this side of the knife to butter an enemies bread while using the other clean side to butter his own bread. They would break bread together at a peace conference and the hated enemy would die in minutes to days after eating the poisoned bread without the assassins having to have fought a battle with them.

This sharing of the same food by both parties with only one of them dying would mask the real act and leave only suspicion. This knowledge allowed people who possessed it to covertly kill their enemies under the pretenses of peace and without fighting costly battles.

Ancient cities have been saved from invading armies by a combination of city walls and the outbreak of plague. When the Assyrians attacked Jerusalem in 701 BC they contracted the plague and much of their army died before they could starve the city into submission. Those in the city survived and the walls protected them from the spread of the disease. Centuries later, the Romans had learned the medical knowledge that dying animals and people would carry and spread the disease. This time, when the Roman armies began to die of the plague during a siege, they catapulted dead animals over the city walls and infected the population. The attackers won and the city fell, although both sides suffered great losses from the disease.

During the early exploration of the Americas, Hernan Cortez fielded an army of only a few hundred men and yet conquered the Aztecs with the aid of smallpox. American Indians were decimated by the practice of the US and British army of giving blankets infected with smallpox scabs as presents to the susceptible tribes. This made the new, ripe and largely depopulated continent ready for occupation and development by the new and better educated European colonists. The loser of the United States of America was the uneducated tribes which were ignorant of and susceptible to the new sciences of human disease.

Lets pretend for a moment, that some three thousand years ago, a tribal chief, or perhaps some early inquiring minds in ancient Greece had accidentally mixed in some blood with egg white or gelatin before frying it. Perhaps a ritual would have taken place in which human and animal blood were deliberately (or accidentally as so many discoveries are made) mixed together and then fried in the mixture. Some uneaten portion may have been discarded or left on a shelf for a day or two. Then, some observant individual might see the tiny patches growing on the surfaces much like the tiny patches seen growing slowly on moldy bread. No one had ever found a use for moldy bread and it was always thrown away. Sometimes when hunger was great enough, the moldy bread was eaten and in about 20% of the cases, the consumer would become sick and possibly die. This also could have led to some wise men and witch doctors to discover how to grow the colored poisons on the bread and extract them with alcohol for the professional poisoner. The poison would never make others ill, only the consumer which made it ideal for murder, assassination and suicide, or perhaps as a hunting weapon enhancement.

In our new case of history taking another path, someone would now be able to see the patches of something that history would name “bacteria”. It would grow on the blood mix and it would also grow in blood soups. They found that the patches could be used to infect people when eaten in invisible amounts and that not only would the target become sick, he would also make others around him sick as well. They found that they had to keep lids on the mix to keep it from accidentally infecting themselves and had to carefully extract the portions with a needle through the lid.

The above science would have to wait over 2,500 years for the invention of the microscope to see, grow and identify these dangerous disease causing organisms. The revolution that came with it of describing them in writing, observing, cataloging, and preserving the different species of molds, bacteria and other tiny microbes would change our current history.

The ancient Greeks were experts in doing just that. They would observe, think and write about what they saw in the world around them. In our tiny turn of history, they would learn the basics of growing and studying these strange, tiny colonies that grew out of nothing and could give people disease. Some would make them ill and then they would recover. Some would maim or disfigure, and some would kill nearly every time. With the most dangerous of these, they would accidentally discover that when a person was scratched with this new disease that killed so many animals, he had about an 80% chance of living, but if he breathed a mix into his lungs, he would almost certainly die. The survivor who had the scratch and lived could now breath the disease and survive it while others who had not been exposed would die.

In our alternate path, we now come into the science of the new breed of super warriors and super armies. The local witch doctor, medicine man, or scientist would scratch the men in the army with the organism. Those that survived would now be immune and could carry with them the magic dust that kills all their enemies, even if they lose the battle that day. In a matter of years, new tactics would be developed where the batches are grown in large volume and enemy armies and cities are covertly infected in advance of their own armies. These armies and cities would die off and become easy prey. These new armies would find that they could retreat in the face of the enemy and stay ahead of them by a day or so while leaving the deadly magic powder along their trail. Soon, the pursuing army dies off without even a fight.

Now, for the first time in history, professional scientists on one side of a war could expertly grow and arm its soldiers with disease. This new revolution in medicine and warfare would help protect against disease, since most could now survive plague scratches and would not die from inhaling the bacteria. It would enable the army to coat their arrows, swords and even the slingers stones with the magic dust or gel. A single slinger striking one of the enemy and infecting him with the dust, could start an epidemic. This single trained soldier could decimate entire armies by himself from a distance. The battles and wars would be won before they were ever fought.

The secret gel or powder that was mixed into animal fat or eggs and grown and then carried on the weapons of war would heavily tilt the battle in favor of the side with the new knowledge and change the course of human history forever.

Alexander the Great, leading his troops into battle in Greece might well have mysteriously died from a single scratch had he even reached the battlefield. No one with his conquering appetite would have risen in his place. In this era of superstition, if the cause had been kept secret, it might have been seen as a message from the gods that they had caused his death from such a minor wound.

History might have gone the other direction as well. He had recruited and drafted all the learned men of the time and was the first to force the scientists of the time to teach himself and his generals so that they would be better leaders and thinkers. He might well have learned how to conduct this type of warfare and used it himself to far greater effect. In the time of Alexander the Great, history would have been ruled by the creators and users of these new weapons. The masters of this new art of growing and preserving these magic colonies inside of fats, soups and other foods would learn to survive, preserve, entomb and maintain them for ready use against invaders, and for arming the super soldiers of the times, the army killers.

Alexander the Great, Caesar, and even Genghis Khan could have also been stopped cold. The vast Mongol hordes would have been nearly decimated while taking the first city armed with this knowledge. The lightning cavalry charge might have taken the first city, but once they had been exposed en masse to the infective dust, the army would have disappeared from history with little more than a footnote, to be replaced by a fiercer and far deadlier conqueror, the master of disease warfare. Even their hardy horses that they so depended on for mobility and speed would have been wiped out (and could have been selectively wiped out leaving the Mongols on foot)

This new weapon could act like city walls, being placed in volume ahead of the approach of enemy forces. As the enemy horses passed, they would stir up the clouds of dust that would then be breathed in and within days the army would become too ill to fight or march. If they did not give up the advance, a far smaller army could meet and destroy them on the road or in camp while they were ill. When combination or enhanced biological weapons were grown, they would be used by a handful of soldiers to destroy entire armies without any battle. Survivors could be wiped out by tiny forces as they would likely be too weak to defend themselves.

Knowledge this vast would be hard to keep secret. Like the silkworms that were smuggled out of China to the west, this new military secret would spread. The recipes of the killing colonies and the dust weapons would be purchased or obtained by subterfuge or conquest. Eventually it would spread throughout the world. The new owners would have their own educated scientists who would enhance them over time, much like the improvements of the firearms from the 1400's to the 1900's. They could add itching powders to make the dust weapons self inoculating. An army marching through a forest and brushing against the leaves or even through tall grass would soon begin to itch uncontrollably. They would soon bleed and the wounds would become fatal. The wounded and dead would infect more of their comrades as their own bodies would become disease factories. Horses carrying the armies would have similarly died making the Mongol cavalry a foot soldier army, even if many of the soldiers survived.

Defending citizens would no longer be helpless in the face of massive and mobile armies. Even without a professional army to defend them, they could grow their own devastating weapons and destroy an enemy, even after they had been destroyed. Of course, kamikaze soldiers, or even the super warriors could covertly enter these cities well ahead of time and destroy them secretly with their own brand of custom grown disease.

Would cities still be sacked and entire populations destroyed or captured and sold as slaves. The answer is probably yes, but the victors and the nature of the outcomes would have been very different. Genghis Khan would not have sacked the cities and killed all the inhabitants of Nishapur (1.7 million) or Harat (1.6 million). His ancient armies would have died on the road if their tactics were left unchanged.

Had he obtained this knowledge, he might have adapted his soldiers to deliver the rough biological equivalent of a backpack nuke to every city well in advance. His own armies may have been made immune and the world would have experienced the ancient equivalent of a nuclear holocaust far worse than what they had known. The dark ages might well have been far darker.

We fret today over the consequences of Hiroshima and Nagasaki, and fear biological weapons. These are only the tools of war, like the firearms, cannon and nuclear bombs. The great tyrants and governments that possessed and controlled these tools could do whatever they wished to their own people and to other nations with them. In a world where all people have these types of weapons and know how to use them, the power of governments and tyrants will diminish in comparison to their citizens or subjects. Biological weapons are the great equalizers of human society today.

With all citizens armed with the invisible, self reproducing bullets that kill, they can never be disarmed. They can fight off invading armies, or even their own armies should they be used against their own citizens.

New, would be Napoleons and Caesars would have to learn to grow and spread pestilence that he could march and battle through. He would know he would be susceptible to the same types of weapons and this, I suspect would have retarded the growth of empires and tyranny (or perhaps given it a new face). In the face of a Hitler in Nazi Germany, the Jews could have met the SS at their doors with possessions that would infect and kill their Nazi masters. Their entire homes could have been made into destructive booby-traps that would wipe out the plunderers. Even in the death camps, some could sneak the secret, cultured paste with them, grow it in the meager soups, or even on their arms with their own blood, and soon kill all the guards. A few thousand Jews could have wiped out the entire German army. The Germans, aware of the danger, would have quickly adapted different tactics such as avoiding their own destruction at the hands of their well armed citizens.

The character of invisible and self reproducing weapons of this type is that it confers on their owners the ability to carry them anywhere, unseen. They can be plasticized and carried under the skin until death, and be retrieved in POW camps and prisons. Unlike swords and firearms, they can never be confiscated or stolen. As long as the owner knows where they are and how to make them from scratch and how to use them, he will never be disarmed.

This same private citizen can pass these same organisms and knowledge on to millions of others and thereby build their own armies to oppose those of oppressive governments. With the internet of today, entire nations can be armed overnight. Vast armies will be created almost out of nothing and this is what this book is about.

Now we return to the world as it is today. The biological warfare sciences have been researched by major nations but have not been used on a large scale. Citizens have not been armed with them yet. That will change soon.

In the 21st century, the new form of warfare will be biological. Millions will be armed on massive scales with organisms, toxin producers and toxins. Anyone who can let food set on a table and let it rot will be able to produce disease or toxins. The defense will need time to catch up. In a few decades, I believe that the fight against the disease causing organisms that now exist may be won with new technology and this will mitigate the danger of the organisms (but probably not the toxins which are chemical weapons in nature).

After a period of improvement in this type of defense, a new wave of offense will emerge in which bacteria, viruses, plants and perhaps even insects will be genetically altered and enhanced to avoid the effects of antibiotics and immunity afforded by vaccines. Private scientists will be able to produce new, unique and invisible weapons in any basement or garage and deliver them in large numbers, anywhere on earth overnight.

In fact, they will be able to produce thousands, if not millions of new strains each day which have never existed before on the planet. These can be quickly screened by release into a target public. Those that infect, will. Those that don't will pass away. (Which is why the government will eventually decide to conduct intrusive surveillance on every American in their home much as they record every E-mail message in the US today). They will also eliminate the right to knowledge and a free press as being obsolete and will control the knowledge for themselves. [And history repeats itself once again] What the future holds is unknown and hard to see. I suspect we will have to wait for a new generation to experience, contemplate and absorb it into their lives to find out.

This book will teach the science of organizing and conducting biological warfare of this nature. The path that history did not take will be taken now. The next, companion volume to this work will be V-6E, Biological Warfare Strategic Planning and Operations. This book will take a larger look at this type of warfare on a global scale and how it may evolve in today's society. Ideally it would review many of the ancient strategic concepts which may well govern and influence this type of warfare in the future.

It will not be written in the immediate future because this author does not possess the finances, energy, experience or education necessary to do it justice at this time. If I am not able to write further works, I am sure someone will eventually produce them. The advance of military science marches on.

Future volumes which could be produced and would provide a thorough coverage of the BW art theoretically includes these works –

- V-6E Biological Warfare Strategic Planning & Operations
- V-6F Modified Bacteria & Virus Weapons (including the planet killers)
- V-6G Insect, Parasite & Related Microorganism Weapons
- V-6H Crop and Food Based Biological Warfare

Chapter 1

Army Creation & Building

The concept of creating Bio-Equipped citizen armies was born in the late 1990's after this author found uniformed military personnel outside his house over the books he had written. It was a profound shock and led to the serious contemplation of how citizens armed with a few firearms could hope to stand up to any government that uses the army against its citizens. The answer required military scale capabilities and soon the idea was born. One citizen, familiar with identifying and growing biological cultures could arm the rest of the country from his own home, or on a beach in another country with nothing more than a handful of postcards. The science of arming citizens and building armies had begun.

The first serious contemplation of acting on this concept came on a trip to Portland, Oregon in which the federal agents would pull up near my van while I was making my "evil" CD's for sale at a gun show. They evidently found that by keying the mike of powerful communications equipment near my van, they could interrupt the data stream on my 3-stack CD Burner and thereby destroy the CD's I was producing. I moved from the parking lot and began making perfect CD's again. As soon as the agents in the van pulled up the CD's would all be ejected as bad. They would even do this at times at my home and even at the shows. [My solution was to obtain a CD burner with memory so that it would not matter if they used electronic interference or not]

After the incident was combined with other "undercover games" at the gun show, I drove to Fallon, Nevada which has around 100 square miles of anthrax in the soil at the surface in low quantities. I chose a low spot in a dried up creek bed to take a sample of the soil. I waved at the federal agents along the road who had followed me and were watching me and then stuck my hand spade into the ground where I had taken my sample so they would know what I had recovered. I then drove to Las Vegas for the gun show on the following weekend. I would sleep in the Wal Mart parking lot in my van between shows, and about 2 AM a van pulled up next to mine. I was asleep but had the windows cracked a couple of inches and was awakened by the sound. They had pulled to within 2-3 inches of my window and were taking air samples out of my window. All I could smell was culture media used to grow microorganisms. I looked out the window and the side of the van had a sign along it "Accu-Lab". The driver was an individual I had met at a gun show previously, and we were the only ones in the parking lot besides the security guard.

Two days later, at the gun show I recounted this experience to the agents at the show. I told them that if I were actually growing the Anthrax in my van, I would do it inside of plastic so that it could not hurt me, and could not be found and seized without grinding down every single item in my van to powder. Even then it would be hard to recover.

This concept had several advantages. The plastic would encase and entomb the anthrax making it safe to grow in tiny, food bearing pockets. It would not be released and be capable of doing harm until the plastic was removed from around it and could be carried around or delivered in sizes from microscopic and invisible to 55 gallon drum size without arousing suspicion or be identifiable as a dangerous weapon.

The plasticized anthrax would be storable for decades if not centuries in this form, and could be retrieved on demand in an incredible array of circumstances. These conditions form the basis of the army arming methods, and these ideas equip a core of armed citizens who would be free and be able to function and fight in this type of warfare.

Arming Methods

We will use anthrax as an example for the section because it lasts indefinitely and does not require special preservation to survive in almost any environment for years. The following basic concepts are each substantial categories in themselves and it will be obvious that there are thousands of possible variations to each one. The ability to arm millions is limited only by ones imagination.

1. Plasticized Anthrax can be used with any plastic substance or even adhesives such as glue. Any liquid which dries to a solid and encases the anthrax (and food or enhancements), so it will not contact skin or become airborne will do the job. The physical properties of the plastic will give the weapon its character. The primary examples of the thousands of possibilities include -

*Using a plastic such as super glue which hardens and has adhesive properties. The spores are entombed inside until a solvent is used to dissolve the plastic, such as acetone. Once dissolved, the spores can be liberated with added alcohol which can be evaporated to form a powder of spores or with water to yield a water based aerosol. This method would be commonly used to place anthrax onto postcards and mail to the troops anywhere on earth without danger to anyone. It can be placed under the postage stamp or on the sealing glue of an envelope. It can be applied microscopically in the period of a sentence in a letter (to POW's or jailed prisoners). They can be sent to anyone anywhere, anytime with or without the recipients knowledge. They can be briefed on their arsenal under the conditions chosen by the supplier. In this manner, huge armies can be equipped well in advance of hostilities and in secret.

- A hardened polymer can be used such as injection mold plastics. The most obvious examples would be the music CD cases, plastic children's toys, TV glare screens and so on. The concept behind this would be to provide the anthrax to an entire nation of people who purchased the product covertly and without their knowledge. This would make a ready made army of pre-armed citizens who need only to be made aware of the existence of the anthrax and have instructions of how to liberate and use it. With the modern day internet, 200 million Americans could be armed overnight with the necessary knowledge. In the case of China, each of the music CD's could have the anthrax imbedded in the plastic during manufacture or added by using the small drop described above to the inside of the case. You could arm 100 million Chinese and via commerce and radio free China make them all aware on the same day that they are armed and how to fight back with the new weapons. This concept allows the covert arming of entire nations over time so that in periods of unrest, or of conflict, they can virtually implode or overthrow their own governments. As will be seen later in this book, the organisms can be modified so that they could not be used effectively against the provider. They can also be manufactured with special properties so that their use can be limited to time, place or circumstances.
- Another type of plastic could be the corn starch plastic that biodegrades over time and are used to produce degradable bags. This permits the user to cover or saturate very large areas with high concentrations without risking premature outbreaks. Then, as the anthrax is liberated due to decay in the target area, an entire area can become uninhabitable. This delay can be in years, months, or even based on temperature. Examples would be a low melting point plastic (or even Jello which melts at 78 F) that liberates its contents on a hot summer day. The entire summer can be spent attacking a target area at will without risk of infection or discovery. In winter, plastics could be used that crack and disintegrate in cold. Some plastics can be timed for release by the incorporation of decay organisms, be sensitive to sunlight for decay after several sunny days and so on. The type of plastic or related encasing substance can be anything with the desired properties. Modern plastic magazines and tech manuals in the libraries will provide a menu of possible options as well as the plastic industry suppliers.

* The plastic can be specific to a particular solvent such as water, or in the case of acrylic (floor or car wax), methylene chloride can be used. The procedures for liberation can be dissolving the sample in the solvent and then diluting so it can be poured off and then filtered or evaporated to yield the spore mass. It can also be a soft plastic that grinds easily and can be ground in a kitchen blender and then boiled for a minute to kill all non-anthrax organisms. It is then mixed into Jell-O, Blood or blood meal or other nutrients plus baking soda to ensure sporulation and then grown at 70 F or less. The knotted string appearance inside the Jell-O and the comma shape on top confirms that you have grown the correct anthrax organism.

2 Arming according to desired category

This method uses the above plasticized concept to provide the organism to large or small numbers of people as desired. Once again, it is only limited by your imagination and the following examples will provide insight into this concept.

- Mail delivered, under the postage stamp, inside a period or dotted-i of a letter, on the seal or anywhere else that the recipient can be informed to look and recover the spore package.
- Pre distributed along highways and roads. The type of plastic can be mass conveyed later with the instructions on how to dissolve it. Any vehicle driving on any road can act as a seed source. The plastic allows for safe mass saturation of a target. In this case it could be the entire interstate system of the US which can ensure years ahead of time that anyone can be armed by simply stopping and taking a small soil sample once they know it is there. This is the equivalent of Fallon, Nevada. multiplied everywhere. The target area can be the German autobahn, all state or county highways or roads in any country and so on. This is another method of pre-arming millions.
- Distributed in a city where millions work and live. The entire city can be saturated so that the plasticized dust settles everywhere. It can be specific to parks, windowsills, unwashed cars, etc. It can be made sticky using adhesive so that it will not be washed away and placed on mailboxes, street signs, under car bumpers, and so on. It can be incorporated into paint and be imbedded in the graffiti on walls around the city. A code word can be used to all those aware of it so they know where to retrieve it.

- Distributed in the suburbs. Where everyone has a lawn, trees, driveway and so on, the ground of entire suburbs can be saturated with the seed cultures so that entire communities can be armed by simply going out and taking any sample of soil and following the liberation and growing procedures described earlier.
- Library books can also be used. Every library in the country can have a piece of tape on the pages of selected books which contain the anthrax. The desired group simply checks the book out of the library and recovers the culture per instructions. This concept is useful in the formation of cell-less operations where individuals act independently in building their own contact or no-contact armies.
- Individuals can place double encased plasticized anthrax under their skin so they can recover and grow it in POW and prison situations. If they were pre-infected by the dermal route and survive, they are immune and can grow it at will, enabling them to fight back by digging the anthrax out of their skin, growing it by cutting themselves and growing it with their own blood. The blood can be grown on a T-shirt, on human skin, on a windowsill, or anywhere. The final blood can be placed under a fingernail where a scratch can be fatal. It can be dried and placed on the top sill of a door so that the dried dust falls into the air around those that enter the room. More will be said about this in later chapters.
- The targets can be armed according to the group of people to which they belong using any of the above techniques. The group can be all convicts or prisoners. They can be tax victims, or people who have lost their farms. They can be a group of angry environmental protestors. They can be militia or hate groups. I even once proposed arming every law enforcement officer in the country at the state and local level. This seemed to genuinely frighten some of the federal agents who were aware of it. Any common group of individuals, communities, or industries can be targeted as desired.

- I once proposed flying over Cuba or Iran and dropping millions of leaflets containing the plasticized anthrax with instructions on liberating, growing and using the contents as weapons. The response I received was that everyone would be dead. This is probably true since any despotic government would be so frightened of its citizens that it would probably have to lock up or kill everyone in order to feel safe. [I guess that is the price you pay for oppression]. Citizens in response would be forced to fight back before they came under suspicion just to survive.

Reverse conscription can be used to arm people without their knowledge and use them to attack targets or arm others in areas you do not have access to. The concept of reverse conscription is that governments can conscript their citizens (and other nation's citizens after invasion) whether they like it or not. The advantage of biological warfare of this type is that you can too. This is particularly useful for using their employees to carry the plastic (as dust) into prisons or CIA/KGB type headquarters without their knowledge. It is also useful to use this concept to attack army checkpoints. Unknowing citizens on their way to work can fight and kill the guards at the checkpoints without their knowledge. More on this later.

[During the writing of my Chemical Weapons book (V5) a man who I presumed was an army officer, told me that if, I or anyone else, tried to deliver a dust or chemical weapon, that they had helicopters with detection equipment and armed soldiers who could put a stop to that, right now. I informed him that I would simply attach the chemical agent in a plastic container to the muffler of a conscriptee's car. When they drive through the checkpoint and the plastic melts, the chemical drips on the hot muffler and they gas the target while driving through checkpoints or on their way to work. I told him "if you detect that happening and open fire, I suspect that the public would frown on you after you killed several sets of grandparents taking the kids to school, or mom's on their way to work". I told him that this concept works very well for biological weapons as well. The light-bulb finally went off in his head and he didn't say anything else.]

3 Preserving the arms and sub-army building

Once an individual is armed and understands how to grow and preserve the anthrax, they can create permanent stores that can never be seized, stolen or destroyed. He can deposit plasticized reserves under his skin, inside the plastic of music CD's or even under the labels. Drops of the plastic can be placed in crevices of fence-posts, tree bark, in notches of concrete blocks, inside videotapes, clocks, desks, clothes and so on. You get the picture.

He can arm his own secret sub-army using all the techniques above. Several permutations of this include making copies of this CD, putting a music label on it with an actual music track added so it plays in a CD player, placing plasticized anthrax under the label or in the case and then give the copies to every friend and relative you have. This creates an operating reserve of both the information and organism. It also provides a ready made friendly mini-army that may be willing to fight for you if the circumstances and motivations are correct.

Each armed individual who has been trained in these techniques can build his own army. These armies can be custom built and tailored to the circumstances such as rioters who can be covertly armed, strikers, strike breakers, protestors and so on. They can be on your side, against your side or indifferent. It does not matter as long as it suits your purpose (I learned this from the CIA). The independent army builder can covertly arm groups with minimal knowledge to use the weapon only, to grow it as well, or even to plasticize it and pass on the ability to others. The organism can be customized to have a limited life of infect-ability or can be tailored to fit circumstances. He can arm a foe and then covertly notify the authorities that they are being armed and are a threat. This works well in turning enemies into enemies of themselves. He can arm according to methods already listed or choose to do it randomly to avoid easy interdiction by the authorities.

The army builder needs to be able to do the following –

1. Recover the organism from nature or storage
2. Grow the organism safely
3. Plasticize it for safe transport, distribution, and covert storage
4. Incorporate it into ordnance
5. Scale-Up production for larger scale warfare
6. Deliver the ordnance or plasticized package and engage an enemy by target type, location, etc.
7. Sustain himself and his army in the field by use of these and other methods

All these techniques will be taught later in the book. The basic concepts listed in this chapter can be applied to many other bacteria, molds, plant extracts, and virus weapons. Organisms and toxins can be combined for best effects. Entire libraries of organisms can be obtained and supplied so that the army can effect many types of bio-warfare. In the case of organisms like plague that have a short shelf life outside of animal or human hosts, adding proteins for food and using techniques such as freeze drying can also be helpful. These methods will be described in detail later in the book.

Chapter 2

Organization, Command & Control

Organization

People organize themselves into groups for countless reasons and these groups have various influences and power based on the nature of their organization. The most important of these will be described briefly –

Government- All societies form bodies which rule themselves. Some of these involve processes like elections where the leadership is chosen from the public (US), or from a selected and privileged few (Communism), inherited (Monarchy), or held by force (Despotism, Dictatorship). These governments all employ people to work for them and include military, police and intelligence institutions which sometimes find themselves at odds with their own government and then power struggles and revolutions take place. If the revolutions are publicly supported, large masses of people can assist in changeover. Where these masses are suppressed with force (by imprisonment, torture, murder) the masses or public generally stays out of the struggle. The acts of revolutionary warfare are a science unto themselves and will be covered in detail in V-6E.

Governmental institutions also include the schools (where the masses are indoctrinated into the governments line of thinking), tax and property authorities (patent office, land records, etc) which control income, government revenues and opportunities for ownership of property, courts which judge conduct under the current body of law (depending on who's law is in control at the time), and the law making bodies.

Religious institutions are ingrained into virtually every society on earth. They are sometimes forcibly merged with the government to form greater controls over the beliefs and loyalties of their citizens as in India, Pakistan and with the Taliban in Afghanistan. In the United States, the bulk of the citizens belong to various Christian organizations and these are generally well protected as independent bodies which meet and worship without interference. Those that become political in nature and challenge the established laws generally become labeled as cults and are suppressed or destroyed (WACO, Montana Freeman, etc).

Many leaders choose Religion as their focal point because they can claim higher authority. If they tell someone they should do something or act a certain way, it often contains much more influence and power or authority if they can say “God say's so”, therefore you should act and think as I (his representative) tells you (in his name).

Other main religions such as Muslim, Buddhism, Hinduism, Taoism to name a few have a strong following and in some parts of the world form a military potential from their sheer mass of members and strong convictions. In parts of China which were obtained by conquest, religion provides an opposition that is sometimes difficult to suppress such as the Dalai Lama and his followers in Tibet.

Religious institutions have taken up arms repeatedly through history and have fought over both religious and political issues. The most notable include the Catholics and Protestants in Northern Ireland, the Shiites and Sunnis in Iraq and Iran, the Muslims and Hindus in India and Pakistan and over the course of history we have the crusades, reformation (Martin Luther), and so on.

Social institutions are formed based on friendships, family (blood), school associations, neighborhoods, and even gangs.

Political institutions are formed where the governments permit their citizens to meet and discuss the laws and other issues under which they are controlled. Where these exist, they will usually nominate a leader from their membership to represent their group in the political elections and at speaking forums to talk on their behalf. This is usually only allowed in states that are free. In some states, there is state sponsored political institutions and others are allowed no political organization or forum whatsoever.

Group institutions are formed involving common membership to another institution. These include the VFW and American Legion (former military personnel), labor unions who have common employers and sometimes exercise power in the form of strikes (refusing to work over pay and related issues), Boy Scouts, the NRA (gun ownership), and even oddball belief systems such as UFO fans who form their own organizations in nations where permitted. The Internet provides a new way of forming organizations around the world based on almost any common interest or belief and will likely become a political force of its own accord in free societies of the future.

Some groups are labeled as militias, cults, hate groups and anti-government and even in a semi-free state like the United States, the press is pressured to place them in a bad light because they tend to be seen as politically militant and dangerous in nature. The US government uses a variety of tactics to suppress, infiltrate and discredit these groups and their members. In most nations on earth these types of organizations are not permitted and exist only in secret.

Secret institutions have existed with varying degrees of membership and influence throughout history. The free masons functioned and flourished for some time with distinguished membership and great influence in America until several well publicized criminal acts were associated with them in the 1800's.

Thousands of other institutions exist in this society and others and will not be covered here as it would take an encyclopedia to list them all.

Institutions are generally cemented together by a set of common beliefs. How strong these beliefs are determine what the membership is willing to do for the organization. Some devote time, others money, sometimes in vast amounts. Some people will lay down their lives and take up arms in battle over their beliefs and will do so voluntarily without coercion or being conscripted into service.

Methods of reinforcing and strengthening beliefs are used to one degree or another by all institutions. These include group meetings where happy members welcome in new members who are made to feel at home and a part of the group. Some use financial, sexual and social rewards. Others use coercion, isolation, exhaustion and punishment to force conformity and acceptance. Military institutions generally use these latter methods combined with sleep deprivation and fear in boot camp and training. They add positive reinforcement later to retain membership and build “esprit de corps”. Members are often punished for opposing beliefs which range from loss of status, isolation, ridicule, and rejection to punishment and injury. All use regular educational and motivational meetings to reinforce why they exist and why you should support them. The educational method often vilifies opposing beliefs while not allowing opposing argument or ideas.

Many institutions use craftier methods to recruit and motivate members. They play on beliefs “and if you believe this then you should do something about it”. Intelligence agencies and undercover law enforcement agents use these techniques extensively to talk people into taking action and then using their agreement to act as evidence of criminal behavior requiring arrest. In the case of overseas intelligence agencies, they can foment discontent, and revolution. At home they can motivate terrorism (Tim McVeigh) or in most cases, after the person agrees to act and plans to do so with others, they arrest him. Governments covertly uses these methods while describing anyone else who may use them as a cult.

The next volume in the series V-6E Strategic Planning and Operations will delve much more deeply into organizations, belief systems, motivation and the revolutionary sciences. Organizing for biological warfare will be very different in many ways than military operations that have historically been conducted. It requires undertaking a military function that involves considerable responsibility and independence on the part of the members of this organization. It generally involves the seeking and sharing of immense power with others in opposition to the current government and its various institutional branches.

Generally, there two choices when deciding to undertake a program of this type. First, you may join another organization of similar beliefs and desires. This has the problem of exposing yourself to the governments various intelligence collecting and controlling institutions. In many nations, you would be killed outright for even the slightest thought in this regards.

In freer nations you are generally imprisoned for these thoughts and ideas. In the US, you are brought under immense pressure by the government using harassment, property damage, threats, etc. to coerce submission as I have previously described in the book on “Identifying Undercover Activity and Agents” which is on this same CD. You are also subjected to repeated efforts of entrapment so that you may be arrested and discredited. Imprisonment can take the form of punishment or when politics is involved “re-education”.

The militias and hate groups of America form a unique body of associations and some of these function underground and out of sight. These often operate as independent cells. The French used this concept during WW2 so that one member could not compromise more than a couple other members of the same cell. Groups were not affiliated directly with each other to make it impossible to give away an entire network under torture.

Some of these groups and cells are operated by the US government and are used as bait to attract anyone who might be in opposition to them. In other cases, the government infiltration is so great and interconnected that the law enforcement and intelligence institutions are completely integrated with these groups in both directions.

A second choice is to stay invisible and underground and form your own organization. Methods useful in operating this way will be described in the next section.

If you happen to be a running a government or are a military officer under a government, you would typically have your scientists build a library of useful organisms. Then you would contract with a private company to mass produce these organisms and produce the appropriate ordnance for each. Then the soldiers would be trained in the delivery, handling and use of these weapons. In some cases, special forces units would be trained to produce them in the field and deliver them as unconventional warfare packages.

In the creation of private or covert armies, the ideal method would be to have a network of private organism collectors who would retrieve the organisms, and culture and maintain them. These would be issued as required to the “troops” with the ordnance preparation and field delivery instructions.

Staffing and support functions would include ordnance preparation and training personnel as well as a modified weapons expert who takes the primary cultures and change their virulence, and make them antibiotic and immunologically resistant. You also need means of directing and controlling the actions of the army. A unique method will be described of producing Multiplier Effects Weapons which permits independent individuals of being able to conduct operations in the field without supervision, training or technical manuals and support. Even a random army can be built and fight using this concept.

Command

To operate and command any force, whether it be a platoon of military troops or an entire army, you must be able to communicate with it. This can take many forms and involve varying degrees of detail. Generally, communication takes the form of instructions or orders going out and reports or information as well as questions coming back. The physical means that are used to accomplish this are –

1. Written and verbal direct messages-in early times these were delivered back & forth by runners and horse back riders. As sophistication grew, signal corps developed using flags, and bugle calls via trumpets. With the advent of electricity, the modern telephone and telegraph permitted real time information on the battlefield. Radio and wireless cell phones as well as satellite communications permitted worldwide instant relaying of information back and forth.
2. Use of codes developed in conjunctions with message sending. Written messages could be intercepted giving away plans, ideas and information. An entire science of code writing and talking was developed from the enigma codes used by the Nazi's which changed daily to the incomprehensible and unbreakable talk of the Navajo Indians in WW2 in the Pacific. Modern methods of sending information on the internet include the use of encryption programs so that intercepted messages cannot be easily broken or understood by eavesdropping governments.
3. Limited information signals indicating an action should take place. In the case of the Hanson spy operation, the FBI agent signaled his KGB contacts with signs that a package was ready for them. During WW2, the girlfriend of one of the assassins of the SS chief Heydrich wore a hat as she drove in front of him signaling the ambush team that he was unescorted (wearing no hat meant that he had an armed escort). These signals can be very useful at providing a minimum of key information. In Hanson's case, it meant that even his KGB handlers had no idea who he was which was one of the reasons he could remain unknown for so long.

Enemy armies and governments have developed ways of monitoring their own citizens and other nations. These methods include –

1. Interception of all North American phone calls by the NSA which has computers that examine every call for key words related to terrorism, explosives, and spy activity.
2. Direct interception of all E-mail by the FBI using a system called carnivore, which examines the mail for possible criminal activity.
3. When flying P-3 and S-3 aircraft in the US Navy, the author participated in tracking of all Soviet submarines worldwide using electronic listening and tracking systems which are still classified Secret. The E-P3 that landed in China records enormous volumes of radio traffic from target foreign nations.
4. Radar imaging devices permit examination of individuals carrying guns and knives under their clothing. It also shows badges of undercover and plainclothes agents for those into using electronics against governments.
5. Ground penetrating radar has been used to examine the insides of homes and nearby grounds for caches of hidden and buried weapons.
6. In 1976 (25 years ago), the author was aware of the use of lasers which would bounce a beam of light off of the window of a building and be able to listen to all the conversations in that room (the window vibrates with the sounds and acts as a speaker)
7. Personal surveillance conducted against this author at guns shows includes swapping pens with bugs in them to listen to subsequent conversations, the placing of a GPS locator in my van to track it and even a video surveillance camera in the van. The evidence was obtained in an experiment where I wrote in a yellow notepad to obtain Velveeta cheese at the grocery store. Thirty minutes later, the undercover agents were standing in front of the cheese and had pushed it all back on the shelf so that they could initiate a conversation with me. I reached for another brand and they gave themselves away by saying that there was Velveeta in the back (without any other word being spoken) and one of them reached for it. These are only a couple of hundreds of similar instances.
8. The government also places its agents into interface areas which come into contact with potential problem citizens. In the US it is generally pawn brokers and gun dealers. Many of these employ agents and some are government shop operations which keep track of all citizens who obtain firearms and keep close watch on the movement of stolen and private properties.
9. The military makes use of ultraviolet and infra-red detection equipment to watch for suspicious clouds of dust coming from vehicles, aircraft and other sources around protected areas like Washington DC.

Cell operations in the United States are under continual surveillance as well as heavily infiltrated. In some instances, the cells are operated by the US government under various different agencies, Some are paid operating fronts that are not employees of the government but are financed by them and provide intelligence domestically. This is one reason that the supposedly illegal short-wave operations stay on the air. The function as bait and intelligence sources.

This government (and all others) carefully identify and monitors all its citizens and groups that they perceive as dissidents or problems. The greater the possible threat or problem they pose, the greater the resources applied to monitor and resolve the situation.

The author has concluded that it is physically impossible to operate a cell without being monitored thoroughly and that with the modern forms of surveillance and communications, the cell concept is obsolete. A new form of operations is needed and the Hanson case (as well as lone serial killers) provides some insight into what the structure and nature of a potentially successful covert operation might be.

Direct methods of operating against this type of government action is reverse integration in which non-cell affiliates become employed in the law enforcement and military institutions. This type of integration, if unnoticed provides a wealth of inside data on the governments practices and knowledge. Indirect methods include the use of obvious equivalent screening techniques such as the use of polygraph examinations which measures stress associated with lying and profiling which can provide clues to the real and true core beliefs of the group members.

The author has experimented with a published method of identifying these core beliefs when confronted by undercover agents. I described them in my undercover book more thoroughly but generally, I would bring up a new method of producing a terrible catastrophe for the government and its employees. The agent in front of me would try to remain calm and appear interested. In fact, his eyes would contract as his muscles tensed from sheer fright. His breath became shallow and these physical symptoms betrayed their true feelings. The genuinely interested individuals eyes would dilate indicating it appealed to them and they liked the idea. This method of using a new dangerous concept only works once. After the agents are briefed about it they are not surprised and show no reaction (This also gives them away).

Undercover agents and confidential informants can also be identified through the use of radar imaging and the use of fluorescent labeling and marking. The last chapter in V-6C Mold Based Weapons describe some of the methods that can be applied in this regards. Suspected infiltrators can be marked and then tracked by frequency and color from the inside. They can also be tracked from the source (police stations, FBI headquarters, Quantico, etc.). Some methods available to the author will not be disclosed at this time pending a future date in court and before the public. [There are ways for the truth to be known beyond scientific doubt]

A command function requires that a leader has an ability to direct his forces in the field and to do so secretly and effectively. In this type of warfare this means that communications and relationships must be at arms length instead of face to face as you would experience in a cell. Methods of doing this can generally involve downward and one way communication. In other words, a single leader anonymous, or not, could provide a group of individuals with the physical resources such as a library of organisms, technical manuals including this one, and a general sense of what direction to go and let the individuals function independently as individuals.

After a rancorous conversation with a BATF agent about two years ago, I asked him what would happen if every member of the NRA received a copy of my manuals along with the instructions on how to use them and the organisms were attached. He became livid. The answer to what would actually happen would depend on the circumstances. If they received this out of the blue without a lightning rod event, most would turn it in, be frightened and turn away from the gun cause. If it was accomplished immediately after strong anti-gun legislation took place, the symbolism and substance of the act would become far stronger and would motivate the recipients to take action. Many would take risks to oppose the government with firearms, many more may be willing to take risks when their actions are invisible.

This same effect is seen in labor strikes. Citizens who would normally never lift a finger to harm another human, can become killers when confronted with force. When strike breaking and similar actions are used, this is the time to covertly equip an mini army. When police are used to suppress a particular group, the members can be incited to action with the promise of invisible weapons and tactics that are useful to them. This generally would greatly increase the suppressive acts of the government and if done on a broad scale, could set in motion martial law and civil war (The CIA attempts repeatedly to master this art with often unforeseen consequences). The same would apply here. There are many things that could happen, most of them not in your favor.

If you are not aligned with either side of the cause and simply want to stir up trouble and distraction, why not arm everyone. You can supply non-lethal organisms and instructions to the parties anonymously and influence what may happen (or stand back and watch what happens and learn from it).

If you operate at arms length, you need to think through what you want to accomplish, what supplies and targeting information are necessary to do it, and what groups and individuals may be willing to do it for their own causes instead of yours. Arming thousands may only produce a few opportunistic individuals in calm moments, while producing thousands in heated moments. When weapons of this type are mass supplied, the effects are much more significant than simply arming soldiers with guns and mobs with clubs.

The theory and science behind this type of warfare is completely lacking in experience save for the Tokyo subway attacks and will be addressed with a greater historical context in the next volume. Revolutionary sciences have been well established however and human motivations and actions under fixed circumstances can be predicted and influenced profoundly. That is why some leaders rise to greatness and others fall.

Control

At a gun show in Wichita Kansas in late 1999, two young army soldiers came by my tables and saw the books I had written. In the course of our conversation, I asked them what they would do if 250,000 Michigan rural residents all received my books with a library of organisms including anthrax attached to it that they could hide away and never be disarmed with. The military likely would be sent in to inter the residents and search their homes to recover the information and organisms. There is no way that the government would or could permit that many people to be armed like that and they would round them up into internment camps like the Japanese in WW2 until they could sort things out. I asked them what they would do. The flabbergasted looks on their faces told me that they were not undercover since all the agents had already heard it and were unflustered by it when I would bring it up. The soldiers were silent. I pressed them and finally one of them said that if things got that bad, they would turn in the keys and lock the doors. I told them that I didn't think their generals would let them do that.

Several thought provoking concepts were aired in this conversation. The arming of hundreds of thousands of Americans with military scale weapons and the knowledge to use them does not frighten the government when they control them and can issue orders to them as in the case of the military services. The idea of simple firearm ownership beyond a hunting rifle or shotgun by ordinary citizens has become frightening to some Americans and is a lightning rod issue among political leaders. How would the government respond with mass arming of citizens with powerful, invisible weapons of this type. Would the soldiers and law enforcement agencies obey massively suppressive orders to in an attempt to contain the revolution. [Make no mistake, even if not a single act of harm was contemplated, this would still be a revolution]. The mere knowledge of this would spread around the world and the power of this single idea would drive peoples thoughts and actions in a new direction everywhere.

He who controls the guns, makes the rules. He who controls and mass arms with biological weapons changes the rules for everyone for all human history. Control becomes an overriding issue. Governments generally do not fear the power of our own military because they believe they can control it with the institutions and processes that they use. In many nations, those in political power do fear the military and do not control it.

Control by an operator or leader of this type is then effected by the following choices –

1. The people who shall be armed
4. When they shall be armed
3. What they will be armed with
4. What know how they will be given
5. What general guidance they will receive such as targets and strategy
6. What the overall strategy will be
7. Who may be armed and compromised

All decisions to fight require an achievable goal. You have to decide what it is you are going to fight for and then design the plan to achieve it. If you arm a group of allies, you need insight into what they will fight for, and what their politics are. You must supply them with organisms suitable to do the job. Anthrax for rendering areas uninhabitable, modified Plague, Tularemia and Brucellosis for army killing, and Aflatoxin for individual and delay effects targets may be one plausible strategy.

Modified and enhanced or weakened organisms that do not kill, but terrorize may be useful and allow the leader to limit the potential of his downstream army. Teaching delay release sciences of production can allow for longer time scales in operations.

Control can be one way through the mail or via leaflets or simply by signs and mysterious packages being discovered. It can become two way at arms length in conditions similar to that used by Hanson and the KGB. If it is one way, careful attention to the media for feedback can act as a two way substitute. You can see who is doing the fighting and with what, especially if they each receive different instructions and ordnance packages. Betrayal can be inconsequential and easily identified with a subsequent package delivering the real thing should it become necessary. In this type of warfare, the entire chain can be permanently severed, even posthumously, as will be described in the later chapters on tactics.

Secret operations like this can enable you to get others, whether they be individuals or small or large groups, to do the dirty work while you stay clean and continue army organizing and building. You can operate covert and dirty like the CIA, KGB, ATF and so on with a little imagination and preparation.

Internally arming a government institution like the FBI or ATF would immediately create an institution rivaling the power of the combined military branches of this government (or any other government in power) overnight. This is thought provoking to say the least but the technology is certainly there. If the wherewithal is there as well, we may well see a new age of would be Napoleons and Caesars vying for power in a new and very uncertain world.

Chapter 3

Basic Biological Warfare (BW) Training

The purpose of this chapter is to teach ordinary citizens the basic concepts of growing bacteria and molds and how to extract the toxins from these organisms and plants. This can be easily learned by anyone. This is the essential core of a BW army. Every soldier needs to be able to grow key organisms and understand toxin production and concentration. It is as basic to the BW warrior as knowing how to strip and clean a rifle is in a conventional army.

Volume 5 and all three of the Volumes #6 (A-C) will be used as training manuals and are on the same CD as this book. This training library is excellent and will enable the formation and arming of citizen forces. Each training session will be broken down into instruction sets and each following lesson will build on the previous ones.

Bacteria #1 Growing Your First Cultures

1. Go to your kitchen and prepare a batch of Jell-O according to the label instructions. Place it in the refrigerator after boiling and then let it cool and solidify. You now have a solid “gel” media on which to grow bacteria. You can accomplish the same thing by taking a raw egg, removing the egg yolk and frying the egg white. If you can do either of these two things you can grow and identify bacteria and mass produce biological weapons. [Jell-O is generally clear or colored and you can see the colony growth from underneath. Its main disadvantages are that it melts at 78F and some bacteria use it as food thereby disintegrating the gel.]

2. Go to the grocery store and buy baby milk formula (liquid or powdered), and a package of beef and/or chicken broth. Also buy several small glass or clear plastic dishes and a package of Q-Tip swabs..

3. Now, make a batch of Jell-O with 5% baby milk, and another batch with 5% broth powder. The act of boiling them should generally sterilize them for now. Pour the Jell-O mixes into two dishes, place a cover (clear saran wrap) over them and let them solidify in the refrigerator. You have just made a food mixture out of the Jell-O. You can do the same by frying eggs with the milk or broth mix in them. You may need to mix the solid powder ½ and ½ with water and increase the amounts to 10% with fried egg mixes. You can also add the food with a small amount of water as a coating on the surface of the semi solid egg or gel and the organisms will still grow on it.

4. Once the gel is solid, go out to a garden and get a soil sample (or several samples from different gardens) that is rich in the accumulated debris of plant and leaf tissue. Using a moist swab, roll the swab tip in the soil sample and then streak the swab across the surface of the each of the Jell-O food mixes. After you place a single streak across the plate, use a clean swab and make another streak from part of the original streak to form a T. This allows you to dilute the original swabs bacteria count. (See page 2-10 of Volume 6-A for this type of correct plating technique)

5. Let the Jell-O mixes stand at room temperature (at 70-75 F, Jell-O melts at 78F) for one to two days with a clear cover so that contaminating bacteria do not float onto the sample and contaminate it. Watch at 12, 18, 24, 36 and 48 hours to see what grows in the Jell-O. You should see a dense growth along the original streak. You will see individual colonies growing along the dilution streaks. Each of these colonies started out as a single bacteria and grew into visible colonies of billions of bacteria each. These colonies will take on different forms, colors and appearances depending on the type of bacteria, and this can change depending on what you feed them in the Jell-O mix.

If your computer has a printer, print out Chapter 2 of Volume 6-A, pages 1-11. Read these 11 pages and they will explain to you what you have done. You can take each of these individual colonies using a sterilized needle point, and transfer them to a new Jell-O – food batch and make pure samples of each organism. You will find that different species produce different shapes, sizes, colors, density, odors and so on. These will change slightly as you feed them differently, and as you change from Jell-O to Egg White to Agar.

Congratulations, this is how the great scientists in history first learned to grow bacteria and now you have done it too. The tiny microorganisms that could not be seen without a microscope can now be seen and identified simply by feeding them special food mixes.

The grown samples, when taken from sick animals or people, were then given back to healthy animals (and sometimes people) to see if they would contract the disease. This was a huge leap for medicine, and for biological warfare to be able to identify and purify the disease causing agent.

More than likely, the bacteria you grew were harmless. As long as you keep the dish covered, they cannot crawl out of the container to harm anyone. The samples can be thrown away into the garbage, although it would be a good idea to do this outside while wearing a dust mask just in case. You can then wash the dishes and boil them out to make them ready and sterile for another batch.

Bacteria #2 Growing Staphylococcus aureus (S. aureus)

One of the first disease causing bacteria to be discovered was *S. aureus*. They live on human skin, hair follicles, groin and upper respiratory tract. They only cause infections when conditions are right and they can invade injured and defenseless tissues. They can also invade when provided with a food source on the skin.

1. Before growing your first batch of *S. aureus*, print out the pages 2-92 to 2-106 of the Volume 6-A (Bacteria Based Weapons). Read through the pages and don't worry about the parts you do not understand. You will see the light shortly.
2. Prepare your Jell-O and Egg White mixtures (do both) with milk and broth as before, but this time, add 10% salt to each mix. *S. aureus* tolerates the salt well while most other bacteria cannot grow in it. Now, blow your nose into a Q-tip or cough up some sputum and mix it into the Q-tip, and streak it onto each plate. Repeat the growth that you observed in the first training session, watching the growth of the organisms. If the Jell-O dissolves, this indicates that you are growing a likely *S. aureus* strain since it breaks down gelatin quickly. [You can also melt vaseline and mix in food ingredients, using it for a solid medium with some organisms. Toothpaste and other methylcellulose gels can be bought at the store and used in the same way with practice.]
3. The colonies are usually large, entire, shiny, circular, convex, domed shaped, opaque, butyrous, with a creamy consistency when poked with a wire. They often have a creamy white to deep golden pigment. On the milk mixtures, they may produce a clearing zone around the colony due to lipase activity. They may also do this if the egg yolk is added to the mix.
4. Go to a drug store or Wal-Mart and buy a bottle of hydrogen peroxide and add a drop of it onto a piece of plastic or glass with a colony on it. If it forms bubbles, the colony is *S. aureus*. This is because the *S. aureus* produces a substance called catalase that is decomposed by the hydrogen peroxide which then gives off a gas. You may need a strong magnifying glass to see the effect. Do this with each colony until you find one that bubbles.

5. Obtain blood meal from a feed supply store, or if it is not available, animal blood of almost any type will do. You can poke your own finger to supply if necessary or donate it by extracting with a needle. A small amount of blood can be mixed into the *S. aureus* colonies in a tube or vial and allowed to set for 1-4 hours (as described on page 2-94). If the blood clots, you have a toxin producing strain of *S. aureus* that can be a potential weapon itself.
6. Mix 5% blood into an egg white, agar or other mix and prepare as usual. Grow your sample of *S. aureus* on the blood mix. Virulent strains will produce a substance that destroys the red cells around the colony (this is called hemolysis) and you can see samples of it in the pictures on page 2-96 and 2-97. You can get a darkening or a yellowing of the medium.

If you have a coagulase and catalase positive, hemolysis producing strain, Congratulations! You have just produced your first potential biological weapon. I bet you didn't know you could make a weapon just by blowing your nose.

The coagulase enzyme that causes blood to clot can be very useful in combination weapons. Various toxins are also produced and some of these are seen in action when you see the blood in the gel destroyed around the colony.

Bacteria #3 Growing a Toxin

You can now produce the *S. aureus* in large quantities by growing it in broth.

1. Mix a can of powdered broth from the grocery store, as directed on the label, adding 10% salt and bring it to a boil. It can be a beef or chicken broth. Keep it covered. When it cools, you can add the colony of *S. aureus* to the mix and let it sit for 24-48 hours at 95F. You can also add egg yolk to the mix to produce a thicker, opaque appearance. You may shake the pot occasionally to mix the ingredients and the bacteria while it is growing. You can increase toxin production considerably by using water which contains CO₂ (like seltzer water) or any other carbonated water. You can improve growth by adding killed yeast to the broth (kill by boiling for 20 minutes)

2. After 48 hours, filter the liquid using a coffee filter. The liquid contains all the water soluble components including the toxins described in the chapter. This liquid filtrate is then allowed to dry to a paste. You may use gentle heat or simply let it air dry. The mix is a weak concentrate of several toxins which can cause various injuries. Keep the mix covered as it dries to a powder so it is not inhaled, ingested or contaminates food.
3. To concentrate the toxins you can take the liquid mix (after filtering) in step 2 and add ammonium sulfate at 10% of the total weight (obtainable at any lawn store or grain elevator as a fertilizer). Over a period of several hours, a number of solids precipitate or "salt" out from the added ammonium sulfate. These can be filtered off. this time, save the solids on the paper filter. repeat this again by adding 10% more and repeat until 50% ammonium sulfate concentrate is achieved. Each of the filtrate solids on the filter paper contain a separate "fraction" of the water soluble components. One or two of these fractions contain most of the toxins and this forms a potent toxic concentrate. This process is called fractionation.

Congratulations! You have just achieved your first chemical fractionation, which is the most important step to producing and extracting almost all drugs, herbal remedies, toxins, vitamins, etc for almost every major organic chemical producer on the planet (and just think, a few days ago, you thought this would be hard).

Bacteria #4 Testing a Toxin

You have already seen what the toxins can do to blood in a culture growth. Now, you can test it in animals and see the effect. You need to buy pet rabbits or pet mice for the following tests.

1. Shave a small patch on the skin of the animal. Place a small sample (drop) of each of the solid filtrates onto a piece of clear scotch tape with a drop of water to mix it up and then attach the scotch tape (band aid) to the skin. The animal will try to get the tape off and may need to be immobilized for the test. The toxic fractions that cause skin damage will show up quickly. You should number each one of the fractions on the animal test site. You can use all five filtrates on the same animal on different locations for comparison.

In a few hours, one of the fractions should begin to cause reddening and swelling. Some of the toxins may produce an effect similar to that of mustard gas in which the skin peels. When you observe this, you will have found the toxin fraction that allows for production of a weapon of this type. This is a dermal test for chemical skin injuries that all herbicides and cosmetics must undergo, before they are approved with different warning labels for use by humans.

2. Feed a tiny amount to each animal, increasing or decreasing amounts of each by tenfold, until you find out how much of a single dose it takes to kill the animals. The dilution of the samples can be done by mixing a drop of the solid into 10 parts of water, the next in 100 parts of water and so on and then mixing this into the entire diet that you feed them. This will tell you how much of each fraction it takes to kill by ingestion.
3. You can also inject a tiny amount of toxin under the skin or into muscle tissue and blood vessels to see the effects of the toxin as it damages tissue. You can do the same thing while adding part of the original colony and watch the infection spread.

Congratulations! You have just emulated most of the important non-human testing that is done in bio-warfare experiments by the military and governments worldwide. Do not feel guilty about this. The same types of tests are done thousands of times daily all over the world in medical and consumer product research. Louis Pasteur and other ground breaking scientists (as well as the human race) learned about bacteria and disease just like this the first time around.

Bacteria #5 Growing Botulism

Many bacteria cannot breathe or tolerate oxygen in the air. They will only grow in the absence of air or oxygen. A group of these are known as Clostridium, and they produce many toxins and diseases, which include botulinum, the most toxic substance known to man, tetanus, gas gangrene and other diseases.

Go to page 2-27 in Volume 6-A and print out pages 2-27 to 2-82. Read the chart on page 2-82 and you will realize that you are about to produce some of the deadliest weapons the world has ever seen (Tetanus, Botulinum A, B, and D).

If you remember the first set of bacteria growth tests you made from the soil sample from the gardens, you will notice that they were grown on top of the Jell-O in the open air. This meant that these deadly bacteria could not grow on the food mix or produce the deadly toxins that could kill you. This time, you can go to the same garden and grow them as follows –

1. Take several small garden soil samples (see the top of page 2-32 for the best sources).
2. For each sample, soak it in ethanol or other pure alcohol at 37 C for one hour. Place the sample into a container of cooked meat broth and boil at 100 C for 5 minutes. This should kill all non-sporing bacteria and leave only a few spores alive. It also drives dissolved oxygen out of the liquid. Clostridium is a spore which survives and grows inside of debris and tissues where the air is gone.
3. Cover the meat broth mix so that the top has no free air to dissolve into the broth. Let the mix stand for 3-5 days at 20-40 C with 35 C the best.
4. After 2-3 days, the mixes will contain growths of surviving bacteria and the toxins they produce. Refrigerate the batches for a day to allow them to form spores. If the batches are a mix, that is alright. We can separate them on culture media now. A mixed toxin and bacteria batch like this can form a crude Multiplier Effect Weapon (MEW) which will be described in the next chapter.
5. Prepare a Jell-O batch and a fried egg batch with 5% meat broth and a separate set with 5% milk. The egg should be fried with the egg yolk mixed in this time. When ready, take a swab from the cooked broth containers and quickly streak onto the surface of the egg and Jell-O mixes. Quickly place these into another container which we will call a gas chamber. This should be a large see through plastic or glass container that can have a sealed top.
6. The gas chamber can be made in which a gas is simply pumped into it to replace the air and eliminate oxygen. See page 2-29 for the basic design. You can also add baking soda and hydrochloric acid, from the store into the gas chamber. When they react, they release CO₂ which will replace the air. The container should be vented to allow the air to escape. It may take some practice to get good results but the reward is a pure culture of various Clostridium species which form a solid basic arsenal as potent as any weapons cache of machine guns.

7. Let the cultures incubate in the gas chamber at 20-40 C for 2-3 days and observe the growth. Clostridium botulinum will liquify the Jell-O. On the egg yolk mix, it will produce a restricted opalescence and pearly layer as seen in the picture on page 2-34. On milk, you should see a zone of clearing around the colonies. The colony descriptions are listed under the pictures. If meat is added to parts of the mix, the colonies will turn the meat black as they digest it.
8. You can refrigerate the sample for 12-24 hours to cause spore formation and then you can separate out different colonies to obtain pure cultures.
9. Tests can then be made by growing each candidate colony in cooked meat broth. This broth is then injected into test animals (mice or rabbits) and symptoms of tetanus (from Clostridium tetani), botulism or food poisoning (from C. botulinum) or gas gangrene (from C. perfringens) will be observed. The symptoms will tell you what the organism is.

A multiplier effect weapons culture can be grown and tested by taking the candidate C. botulinum culture and growing it in cooked meat broth for 3-5 days. The liquid is filtered off using coffee filters and allowed to dry. A tiny amount of the dried extract is fed to the test animals and food poisoning confirms that you have grown C. botulinum and produced the most potent toxin known to man.

Bacteria #6 Concentrating Botulinum Toxin

Read the section “toxicity and harm” on pages 2-35 to 2-39. The formula on page 2-36 matches up closely with liquid baby milk formulas at the grocery store. Find one with 2% casein and use it with or without cooked meat broth to grow the botulinum organism and produce toxin.

1. After growing a batch of C. botulinum for 3-5 days, acidify the batch with a small amount of acid to a pH of 3 and then shake for a few minutes. The acid will destroy the cell walls which liberates more toxin into the medium. Add a small amount of sodium bicarbonate back to neutralize the acid and warm to 100 F to solubilize all the toxin. This mix is filtered off and then acid is added to bring the pH to 3.0-3.3. You can use pH paper from Wal-Mart or a pH meter to test the solution. This should precipitate the toxin after a few hours. This can be filtered off and the solids should contain a powerful concentrate of toxin.

2. To further concentrate the toxin, this solid paste can be re-dissolved into water and alcohol added at 50% or more to precipitate the toxin.
3. Each one of the above concentrates can be tested in the feed of animals to test for toxicity. The amounts should be diluted in increments of tenfold until you know the concentration and killing capacity. A single milligram of nearly pure toxin can kill 240 million mice so dilution is important. An invisible speck underneath a fingernail can kill thousands of people. A single scratch or puncture from a punji stick booby trap (such as those encountered in Vietnam which were dipped into ox manure) would be 100% fatal.

An interesting story about this toxin has been declassified from WW2. A British scientist (Dr Paul Fildes) grew botulinum and saturated grenade shrapnel with it for the OSS. On 27 May, 1942, a commando team delivered the toxic grenades in an attack on SS chief Reinhard Heydrich. Heydrich had minor splinters from the grenade attack, the most serious of which were removed by surgery. His condition worsened with the symptoms of food poisoning turning to coma, and at seven days he died. Blood transfusions could not save him.

Bacteria #7 Manure Weapons

One of the most deadly groups of organisms are those that inhabit animal and human solid wastes. They have historically made effective weapons even without mans help. The punji sticks mentioned above were dipped in ox manure and the manure carried the organisms into the tissues when the stick punctured a targets foot. They would begin to slowly grow and if not treated quickly, would cause major infections, usually gas gangrene, resulting in amputations and death.

In all areas of human habitation, annual disease outbreaks occur if the sewage and waste are not treated through waste disposal systems and water treatment plants. Human and animal solid waste contains billions of potentially dangerous organisms in every pound and it is their sheer numbers which cause disease outbreaks in most cases.

Most of these belong to the group of bacteria called “enterobacteriaceae”. Members of this group include E-coli, Salmonella, and Yersinia (Plague). E- coli has been in the news frequently. Particular strains have been found to be fatal and in the case of Hudson foods in Columbus, Nebraska, a billion dollar company ceased to exist within a few weeks due to the injury that the E-coli, found in its products had caused.

Print out pages 2-145 to 2-168 in volume 6-A. Read through them briefly so you can see how special media allows you to separate out colonies by color. If you cannot obtain or make these special culture mediums we will show you how to improvise in the field here. Our first test will be to grow E-coli.

1. Go to a feedlot with cattle, dairy cows, or other livestock. If this is not available locally, bird droppings or other manure can be substituted. You can even use your own solid waste. Obtain several Q-tip swab samples of the manure.
2. Streak the samples onto Jell-O mixed with 5% blood, or milk, as well as an egg white mixed with these. Allow to grow 24-48 hours.
3. E-coli produce large, moist, convex to domed, entire, opaque, butyrous colonies on the blood. On the Jell-O, they are translucent around the edge of the colony which makes them resemble maple leaves. If they damage the blood or milk in the area around the colony, they are the most likely weapons candidates. E-coli can be stored in egg saline for up to a year and can be transmitted in this mix via mail.

You may also pick up and grow Salmonella or other species during this type of culturing. These too can be effective bio-weapons. Most of these bacteria that attack the blood will cause septicemia and meningitis if they enter the bloodstream. They can also be used to produce toxins that cause diarrhea, paralysis, coma and death.

Plant Toxin #1 Making a store bought weapon

1. Buy a pack of cigarettes. The nicotine in a pack of cigarettes is more than sufficient to kill a human. Almost all of it is consumed by the burning of the lit cigarette so very little is actually inhaled. Mix the package contents into a kitchen blender with alcohol (ethanol, isopropyl, etc). This will liberate the nicotine from the plant cells and dissolve it in the alcohol. Nicotine is insoluble in water.
2. After 30 minutes, filter off the contents and allow the alcohol to evaporate from the filtrate. This solid residue contains a yellow liquid, nicotine which is water insoluble.
3. You can concentrate it further by mixing the solid paste and yellow liquid into water in the kitchen blender. The water soluble portions will now go into solution leaving behind solid and yellow oily liquid of concentrated nicotine.
4. Pour off the liquid leaving the yellow oil behind in the bottom.

5. Test the nicotine by feeding the concentrate, and dilutions of it to test mice. This will give you an idea of the toxicity of the poison.
6. Print out pages 3-1 to 3-3 in V6-B to read about nicotine toxicity.
7. Green potato peels may also be extracted this way and make a nerve gas type agent that kills when injected (see pages 3-5 to 3-6 of V6-B)

Plant #2 Making a Weapon from a Flower

Oleander is an ornamental shrub (page 3-12) which is easily purchased in garden supply stores.

1. Grind the entire plant in water in a kitchen blender.
2. Filter off the water, keeping the liquid fraction and discarding the solids.
3. A single leaf contains enough toxin to cause cardiac arrest (heart attack). The liquid can be evaporated to a concentrate and then the concentrate tested on mice.
4. To further concentrate the toxin, you can re-dissolve the toxin in water and add ammonium sulfate in fractions of 10% and filter. Keep and test all fractions for toxicity.

Congratulations!. You have now learned how to extract poisonous chemical weapons from common plants without having to grow anything. About 20% of all plants contain poisonous parts that can be extracted for use as weapons.

Molds #1 Aflatoxin

Print out page 124 of the Mold based weapons book (V-6C). This will give you an idea of what an Asperigillus mold will look like on culture media. The little white area of fuzz on the edges of the colony is where the strands of mold are growing. The darker area on the inside behind it is where spores are forming and dropping off onto the media.

Now print out pages 180-193. This will give you a general background of the science of this type of mold. Write the page numbers down on each page as it is printed since they are not listed on the original pages in the book.

1. Go out to a corn field at harvest time and break off the ends of the ears of corn that appear moldy or whitish. If it is not harvest time you can grow mold from shell corn bought at any grain elevator, but you may need a large amount to recover the correct molds.
2. Soak a paper towel in water and lay it on the bottom of a dish. Then grind the corn samples and place the powder on the wet towel spreading it out in a thin layer. You can also mix 15-20% water into the grain and leave it in a bowl without the paper towel. Incubate at 70-80 F.
3. Watch the growth daily for about a week. You will observe the fuzzy molds growing on the grain.
4. Buy a fluorescent light. After 4-5 days, you can turn off all the lights and look at the samples with the ultraviolet light only. When you see a blue glow, you have most likely produced aflatoxin B1 or B2 (for blue). If you see a green glow (for G1 or G2), you have grown aflatoxin G.
5. You can separate out the mold spores and grow them on sterilized corn (boiled in water) for pure cultivation and toxin production.
6. The fluorescing toxins can be extracted by mixing the growth into one of the mixes shown on page 187. You can accomplish this by experimenting. I recommend using 80% isopropyl and 20% water to extract the toxin. You can mix it in a blender and let the mash soak in this mixture for 1-6 hours. This mix is filtered off and the liquid contains the tiny, but incredibly deadly aflatoxin concentrate.

You can also use a mix of 1% calcium chloride with 99% water to extract the toxin and some other soluble components. You can use the duckling or chick embryo tests on pages 188-189 or you can also use the mice. This material has to be handled very carefully as invisible amounts of the dried product can cause cancer and kill humans if inhaled or swallowed.

Congratulations! You have just completed the basic training course and can now make an entire range of weapons from almost any living material or food source. You can never be disarmed as long as you know how to do these things. All other toxins, and organisms that you may use as a weapon follow these same basic ideas. We have not covered viruses or modified bacteria as that requires some advanced training and will have to wait for a future publication.

Chapter 4

Weapons and Warfare Concepts

This chapter will take you through a variety of bio-warfare concepts & ideas. Some have already been used in warfare while others are theoretical in nature.

Basic Warfare Ideas

Conventional warfare has used standard ordnance and military practices of building bombs, grenades, missiles, and even bullets as the carriers for organisms and toxins. These are generally dropped on enemy troops and other targets or on areas where they are likely to be. Military vehicles and personnel are used to deliver them via aircraft, fighting vehicles, artillery and so on.

The basic requirements for conducting bio-warfare are –

- Obtain cultures
- Grow the cultures and/or toxins
- Store & Preserve the materials
- Convert the materials to usable ordnance
- Deliver the ordnance to the Battlefield

In unconventional warfare, the imagination is the only limit to your ability to deliver bio-ordnance, and use it in an effective military context. The principle concepts center around four general goals or actions -

- Purpose**
1. Spread organisms to infect targets or target areas
 2. Spread toxins to poison the targets
 3. Spread to mark or conduct surveillance on targets
 4. Spread/deliver to arm soldiers and citizens

There are many means of accomplishing these four actions –

Baggie Weapons – in which the organisms are grown in a bag to avoid exposing the grower/soldier to the dangerous contents. The bag becomes the delivered weapon. Thin poly bags can contain the culture medium or food. The organism is introduced to the bag, mixed in and then the bag is allowed to incubate and grow until ready. There are several variations of this idea which extend to other concepts –

1. Deliver the bag as is onto a highway or other area where it will be destroyed by traffic and the contents dispersed into the air. This has the disadvantage of leaving a bag behind.

2. Releasing the contents of the bag from inside a moving vehicle through a hole in the floorboard. This allows the contents to flow out in small unnoticed amounts into the traffic area where it is massively diluted and spread by the motion and weight of traffic. Since it is not a dust, it is not easily detected by cloud detection equipment.
3. Using degradable bags that slowly disintegrate and release the contents over time. This is ideal in ventilation systems of target buildings where the spread of the material can be delayed for days, weeks, or months. This also works in tree branches and foliage of target areas. You can also do this in subways and other foot traffic areas with tiny bags that would go largely unnoticed. They can be taped to the top of cabinets, behind fire extinguishers and so on.
4. Adding a chemical to the outside of the bag to eat through and disseminate the contents at a selected time frame (within 48 hours for example) to coincide with other simultaneous attacks. This works well on the underside of airline seats. You could theoretically infect every airline on earth in a few days before any contents were released.

Material Handling

The baggies mentioned above allow for handling and growing the dangerous materials in a single container. Handling the original organism requires having it contained to start with and finding ways to transfer it from one package or location to another. Lab professionals do this daily. They ship dangerous organisms and toxins all over the world. Anyone can learn to do this.

The most common means of handling are growing the organisms in see through plastic bags or petri dishes. These can be sealed in two and even three bags to allow for extra safety. Transferring from one container to another can be accomplished by using transfer bags in which the “from” and “to” bags are placed inside a much larger bag that can be disposed of (buried or incinerated) afterwards. The contents are handled using tools through the plastic such as needles, spoons, etc. Needles can be poked through the bag to obtain seed culture if the handler is in protective clothing and in a site that can be contaminated (such as the target itself).

The soldier needs to protect himself from accidentally inhaling or ingesting the deadly contents. This means a dust mask, gas mask or other barrier such as scuba gear when handling major amounts of lethal materials. Full body space suits are worn in weapons laboratories when infectious diseases are handled. Plastic gloves are used to protect the skin from becoming infected where appropriate.

As long as the container is not opened, you are not exposed to organisms. The bacteria and toxins do not sprout legs and walk out like insects. They do become aerosols if the package they are in is opened and exposed to the air.

If the soldier has already contracted and survived the disease, then he is “bulletproof” and does not require the same level of protection. With many organisms he can freely grow and disseminate them without fear of further illness or injury.

Storage and maintenance requires some knowledge of the needs of each organism. Generally, storing them in the refrigerator or freezer will maintain them for a few days or weeks. Freeze drying can also increase storage stability. Most disease organisms can be refrigerated with the food they grow on and then transferred weekly to fresh media and maintained in this manner. Virulence is usually maintained using blood or infecting mice and recovery of the strain from the organs.

Some diseases can be maintained in the decomposing bodies of dead animals. When *C. botulinum* kills a cat, the rotting corpse harbors trillions of spores and averages about 3,000 lethal doses per gram of meat tissue of toxin. The dead cat can be preserved in bags or by simply burying until ready for use. If ground up, its powder is a deadly weapon in itself.

Original cultures can be obtained in many ways, which have already been described in the previous volumes. Generally, soil samples, animal manure and tissues, sewage, sick people (hospitals) and public air samples during outbreaks are the chief sources for a basic arsenal.

Food sources for the organisms can be obtained at the grocery store or feed mills and animal health stores. A home garden and your own blood can even be used in a pinch.

Plasticizing

The concept of encasing the organism and toxins in plastic has been generally described already. The method of producing and solidifying the plastic will govern the design. The plastic may air dry, it may require the mixing and curing of two compounds, it may require melting and cooling. This last method would kill most organisms but spores will generally survive the process. [The author has suggested the use of plastics to encase the bio organisms and toxins in plastics in the US militaries conventional weapons. A solvent would be added prior to use to liberate the organisms and make the weapon viable. This would encase the dangerous organisms making the weapon safe for storage until needed for use. You would not have to worry about accidents or leaks.]

The advantages of the plastic are that the organisms can be maintained in a safe manner until they are ready for release or use. The general operating ideas are –

1. POW's/Prisoners that have samples of organisms encased in plastic under their skin. These can be dug out and grown on any solid that contains food such as soup, blood, solid waste, etc.
2. Hiding weapons sources from search and seizure. Once plasticized, they can be hidden in any other object. Library books, CD cases, jewelry, glasses, cracks in the wall and so on are just a few examples. Microscopic drops can be hidden anywhere. One of the interesting concepts I had proposed was the pre-arming, decades in advance, of all the citizens (subjects) in communist China. A tiny drop of anthrax laden plastic could be added to every music and entertainment CD and DVD being shipped to their country. At an opportune moment, via the internet, radio, or other means, the population can be made aware that they are all armed and can fight back. The instructions to liberate and use it can be given in a single paragraph.
3. Weapons can be transmitted to anyone, anywhere, anytime. You could saturate a prison with plasticized powder from upwind, or by aircraft release, and the prisoners could be informed covertly that they can simply grind the general dust and grow the organism mix with their own blood or food. You can obviously mail or package deliver the tiny dust in letters, with any contents, and even under or imbedded into the postage stamp. Toxins can be handled in a similar manner.
4. Saturation of entire cities, highways, public transportation, railroads and so on can be done to mass arm the public with access to the general location.
5. Delay release attack can be accomplished in any of the above scenarios by using degradable or decaying plastics. Additives can be included so that they disintegrate or melt at low or high temperatures for a weather or season related mass attack. They can be moisture sensitive and released during rain (and released on level grass which saves them from washing away and losing their effect). Flooding is one of the great spreaders of disease. This could be used to disguise the true nature of the outbreak. The pH of the soil could act as a decay mechanism as well.

6. Encapsulating or coating is effective when the target is a city water supply. Cities use chlorine to kill bacteria and toxins. If these are to be used successfully, they can be microscopically coated and released. The plastic can dissolve in stomach acid like standard pills releasing a full effect, undiluted dose on each individual. Encapsulating also hides the organism or toxin from being recovered and cultured in general air samples.
7. Long term and large scale wars can be fought without anyone even aware of the fighting by combining plastics with cancer causing agents like aflatoxin. The effect would be delayed well beyond the release of the agents. You could supersaturate and attack military bases months, or even years in advance without general knowledge. Then, in a few months, an entire army can be wiped out from an unknown source of cancer. Of interesting note is the use of prions (mad cow disease). It could be massively spread throughout any nation in all livestock and human foods without general awareness for years.
8. Contact release can be accomplished with pressure sensitive plastics like styrofoam. As an enemy army marches or drives over the tiny capsules, they liberate the contents and breathe them in on the way to the battlefield. This is the equivalent of an invisible booby trap. They are unaware the trap had been sprung simply by passing over the foam weapons.

Bullet-Proof Soldiers

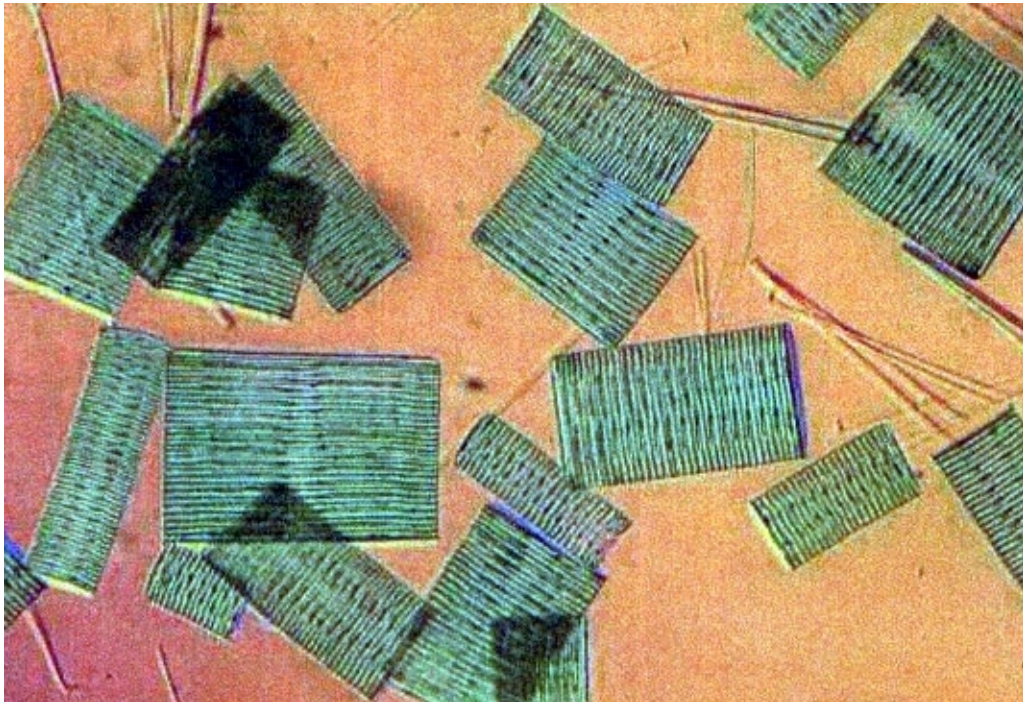
The super warriors of tomorrow will be vaccinated and then infected with the actual disease. They will survive with the best protective antibiotics and medical treatments and then be able to grow, handle and deliver the weapons on any battlefield or location with impunity. They will need no protective equipment. In a portent of things to come, the US Army, in 1968, infected a group of 7th day Adventists with Tularemia. The results were published in pharmacological review at the time and the tests were not even secret. All the soldiers survived and could then handle tularemia, a potent weapon without fear of death.

Enhancements

Biological organisms and toxins will be made far deadlier by a number of enhancements. The basic methods of enhancing biological agents include –

1. Combinations. Combining multiple organisms to produce deadly cocktails has been accomplished in the lab. Toxins and bacteria or molds have been combined in pairs generating synergistic effects that increase deadliness up to 100 times either of the materials by themselves. Where the author has encountered published results, he has already described them in previous volumes. In nature, the combination of a “cocktail” of Clostridium species are usually necessary to initiate a successful gas gangrene infection. It will be generally found that any combination of organisms and toxins will improve the weapons effect. This is because the body is less effective against protecting itself from multiple insults and injuries rather than just one.
2. Feeding organisms so that they will continue to grow during the attack and infection stage. The author had studied a navy test in which microorganisms were placed in a hotel shower and then proceeded to distribute through the entire hotel and onto all the guests from the aerosols created by showering. I repeated the test in 1999 adding a food source to initiate growth during the shower. Within a couple of days, my body was covered with tiny spots. They were so bad on my back that my shirt had to be peeled off because it stuck to every spot. The tiny boils were the most painful on my scalp. The most interesting aspect of this test is that the organism was grown from a cheek swab and was a harmless (?) staphylococci that was already living inside me. The lesson is that “if you feed them, they will grow”. This enhancement is particularly interesting with anthrax. It takes about 5,000 individual spores, all less than 5 microns in diameter on the carrier dust, to reach the sensitive lung tissues and initiate infection. If the spores have already been germinated and are growing, does it require only one spore to infect the host. If the spores are growing on the specks of dust (food), they will be caught in the nose hairs, mouth and throat linings and so on. As the target breathes, the new cells peel off and are inhaled in enormous volumes. They can also become mechanically communicable by being coughed out and spread like many other infectious diseases (at least for a generation or two).
3. Chemical or toxin additions make more infective and deadly weapons. A combination of poison ivy and anthrax can cause a target to itch and self inoculate the spores (or other agents). This concept allows for the mailing of millions of infective envelopes overnight to every target in a particular government. If the contents are well disguised, the ordnance can reach all the secretaries, intermediates and bosses by various saturation, and communicable processes. An entire government can theoretically be wiped out in a mail order battle of the future. Perhaps we will one day, see mail order wars fought on massive scales from inside each others countries (This will likely give E-mail a considerable boost).

4. Special carriers can be used to provide a safe harbor for the organism. Like a house, these provide protective walls, a place to eat and grow inside, and can be made out of a mineral that is immune to biological processes.. A good example is diatomaceous earth, or diatoms (also known as Fullers earth). These one celled creatures died millions of years ago and were deposited in vast amounts on the ocean floors. They are dug up and commercially sold for filter aids in city water filtering systems, and for carriers of other materials. The inside is a hollow (as pictured)



Many more enhancements will be described in detail in a later chapter. This should be enough to give you the general idea.

Scale Up

All infections require a minimum exposure and conditions to cause infection. To be effective in war, military researchers have identified the amounts of organisms required to infect a target, and how many of these need to be supplied to saturate a target area to insure infection. To wipe out cities, or render them uninhabitable requires massive amounts of ordnance. The military generally considers tons and truckload amounts to be the minimum necessary to accomplish these tasks. They will usually attack with missiles or bombs to remotely deliver the packages.

The concept of scale up for citizen armies is handled differently. One person might be able to produce a million pounds of deliverable ordnance. Delivering this large quantity would be difficult all at once, although spread out over time, or as a cancer causing delay agent, and inside of plastic is an option. One person could also kill a cat with botulism and use it as a weapon, although killing and delivering 10 million cats by one person is impossible. Ten million armed citizen soldiers can easily produce and deliver 10# each of ordnance covertly. They could also kill 10 cats each and deliver the 10 million as weapons. (This would also deplete the local cat populations quickly)

This scale up quickly becomes militarily significant. Huge numbers of targets can be attacked simultaneously, each party has only to supply a small effort and about \$5 worth of supplies. Scale up is accomplished by the size of the covert army. Repeated over days, and an entire country can be destroyed, rendered uninhabitable, or be substantially depopulated.

In the case of infectious disease, the army required to accomplish the same effect could be much smaller. The author estimates about 20 trained soldiers would be necessary to destroy an army the size of the US army. Using modified or delayed effect weapons, this might be accomplished by a single individual.

One other interesting note from history which sheds light on this concept was the US army experiments in 1950 in which US navy minesweepers released *Serratia marcescens* in San Francisco bay. These bacteria are normally harmless, but the large scale release increased the exposure levels and over 300 people were hospitalized with infection from this bacteria while one died. This test was kept secret for over 30 years. They had contaminated 117 square miles and the entire population of San Francisco (800,000) had each received a dose of 5,000 particles. In 1951, the test was repeated with infectious bacteria on boxes delivered to Norfolk, Va. Naval base, one bacteria of which was intended to deliberately infect black people (*Aspergillus fumigatis*). The test data from this is unpublished and secret.

Surveillance

The author has already described the use of spores and fluorescent dyes to identify and track people in the last chapter of the mold weapons book (V-6C on this CD). The concepts and ideas for this should be studied and understood. The same idea can be used with radio-labeled organisms that can be tracked using radio detection equipment for specific frequencies or Geiger counters for broad detection. Saturated groups can be tracked, and the footprints they leave can be followed using this method. Clothes, shoes, and skin can be saturated so that they leave trails, transfer to other clothing, and contaminate cars, homes and offices. Other organisms leave tiny, almost invisible evidence of their presence in skin damage, or physical appearance, that is track-able and identifiable. Anyone can be biologically marked with 100% certainty by many routes. This is an infant science that I am sure will grow.

Multiplier Effects Weapons (MEW)

The general concept behind this category of weapons is to have a biological weapon that can be made by anyone, anywhere, anytime, with a 4th grade education, and 10 minutes training. It would not require having a core, pure agent to culture from, although that makes the weapons far more efficient. It would grow on its own and disseminate into the environment by itself, thereby being safe for the producer and the delivery men.

The specific idea is to grow the organism and toxin producing foods together inside a mix of the plasticizing agent or other physical containment. While the plastic hardens around the tiny nodules of media and culture, the organism multiplies enormously and produces the desired toxin from the food it receives. The better and more thorough the mixing is before the plastic hardens, the smaller and much more numerous the tiny pockets or nodules.

Testing for various designs would include how much food and organism to plasticizer in the batch, how thoroughly it is mixed (to maintain at least tiny nodules-a single speck of diatoms would be sufficient). Each test batch could then be scratched and streaked on a culture plate to see how well it grew. The batches with the best growth from this testing are obviously the best designs.

The temperature would also be a factor. Warm temperatures to grow and harden or dry the plastic, followed by near freezing to allow for spore formation.

Plasticized weapons are only one dimension of this concept. Alternatives such as Jell-O can be used. It can be distributed into the target area while still growing like a tube of toothpaste. If distributed on a cold summer night, the gel would grow and in the heat of the next day, when the temperature reaches 78 F, the Jell-O would melt, and the contents would begin to desiccate and disseminate into the surroundings.

Any self distributing food could be used to contain and feed the organism. Various store bought cake formulas could be used. Distributed as crumbs and then dried in the heat of summer, or freeze dried in the cold of winter, the contents would disperse and infect or injure.

The styrofoam mentioned earlier is also a good choice. The only limit is your imagination. The key element is to feed the organism so it will grow and multiply enormously after release. It should also produce a desired toxin. If a physical or mechanical addition is included, such as the diatoms, they can be custom designed for maximum effect. The diatoms could first be mixed with the desired organisms which would coat the inside of the interior of each cell. Then a food source would be added to fill the interior of the cells to provide for interior and protected growth. The exterior of the diatom could be coated with a dessicant to allow for quick drying and swift dispersal as a dust. It could contain toxins or chemicals that cause injury or attack human tissues to provide more food and a suitable infection site. It could contain enhancements that suppress phagocytes and protect the contents from the human immune response. It could contain a clotting agent to cause clots to form around the cell providing more food and shutting off the oxygen supply for Clostridium cocktails.

The idea of using plastics, styrofoam, cakes and so on is for the material to self dry and turn into a powder to form aerosols.

Another character of the MEW is that it can be produced using random sources of bacteria and molds. You can use animal or human blood as food. You can use meat meal from feed mills or store bought foods to grow the deadly brew. You can buy hamburger, boil it, filter off and dry the solids and use this as food.

The source of the bacteria or molds could be as crude as swabs of manure, a handkerchief used to collect dust throughout a hospital, or an air filter from the same hospital. You can even poke soil or any other samples into mice and those with deadly injuries can be swabbed at the injury sites and the swabs used to produce the weapons.

In the earlier example of the dead cat that was fed *C. botulinum*, the ground up cat would provide, in a couple of pounds, over a million lethal doses that could be included in the mix.

Dead animals and dead humans are usually buried or incinerated because they decompose and the bacteria that consume the tissues and blood are usually able to infect other people because of their massive numbers. As humans and animals decompose, their bodies slowly release these bacteria into the wind and cause epidemics. In this context you are artificially creating the same environment as the dead humans or animals. In desperate situations you can even use dead animals and humans as disease sources. By grinding up the bodies, you can disseminate remains that are tiny and un-recognizable as a danger. Insects would aid in the spread of disease and because the entire remains are distributed and exposed in the environment at one time, the concentrations of organisms are far greater than that caused by slowly decomposing human and animal bodies. The dispersed contents of one human infected with appropriate organisms, and spread as a dust on a battlefield can have the effect of 1,000+ unburied dead bodies for a few days.

The use of multiple organisms usually occurs when random batches are grown. Inside of a Jell-O batch from a soil sample, many will grow on the blood added to it. Some will produce deadly toxins, and others will simply be benign. You get the entire mix and it is likely that the cocktails will be very deadly in many cases. The combination of unusual toxin and organism mixes that do not repeat themselves as the hospitals fill, will confuse the defenders and frustrate their protective measures.

Scale up becomes important in this type of warfare. Dead bodies need to be used as supplies. Animals, even entire livestock herds can be infected to provide source material and spread disease. Dead horses were catapulted over city walls to cause epidemics to occur and cities to fall. Powdered dead horses will increase the magnitude of spread thousands of times. If the organisms are contagious, people, insects, rodents and confusion will add to the spread of the disease. (Disease has caused far more troop losses in the history of warfare than swords, bullets and bombs combined).

The author has grown a prototype of this weapon from a soil sample using 5% blood meal, 5% baking soda, and egg white. The mix was grown on a towel over about 2 weeks. The towel was highly infective.

Lets take a serious look at Anthrax in the context of an MEW. When anthrax outbreaks occur in an area, spores are released by the dying animals into the surroundings. They are accumulated in the soil and washed into the low spots by wind and rain. If these low spots contain alkali in the soil (pH over 7) and organic material from dead vegetation, the anthrax will live its life cycle in the soil and never be eradicated.

These soil samples can be obtained and grown. The above towel formula contains baking soda that causes spores to be produced by anthrax. Its sodium content and high pH inhibits most other organisms from growing. The blood and egg white provides all the nutrients necessary for spores to be grown, along with a few other organisms in the overall sample.

The low spots around Fallon, Nevada contain millions of anthrax spores within the first few inches of topsoil. Much of the state of Kansas and portions of many other states also contain huge reserves. Without knowing biology, it is possible to take soil samples directly, grow them as MEW's and deliver them into target areas. Testing can be accomplished by attacking livestock and watching news reports for outbreaks. Once confirmed, the soil site is considered positive. The animals where the outbreak occurred may also spread spores in the vicinity. Any outbreak, human or animal is a source of feedstock for bio-weapons programs.

The general advantages of this type of weapon and warfare is that citizen armies can quickly produce these weapons with little training and education. They can randomly grow them from feedlot manure, soil samples, hospital dust, dead and dying animals and so on. They can be incorporated into all types of ordnance designs, disguised or hidden easily, and disseminated into the wind as it dries so that no easily detectable unnatural clouds are observed. The weapons can have combinations the world has never seen with likely consequences the world has never seen before. The last three pages of the mold weapons book also talks about these designs.

Vectors and 3rd Parties

Insects can be fed infective samples and mailed or package delivered into target areas. They can be fed en-route, grown and released by the unsuspecting receiver at the other end. This is called a vector, when an insect or parasite are used to disseminate a disease. Mosquito's are ideal because they inject part of their food contents into the next target which is how they spread yellow fever and malaria. Lice, ticks and others have also been used in warfare, although with limited effects to date.

Human vectors can also be used. Anyone working in a target area can be deliberately infected without their knowledge. Their personal effects, automobile and homes can also be used as physical 2nd generation vectors. (House to person to target office). One of the interesting offshoots of this idea is attacking the schoolchildren of the target. An example would be the case of the CIA and KGB headquarters. To attack them indirectly, you only need to infect all the schoolchildren within 30-50 miles of each headquarters. The organism would be communicable. Within a few days, the children would infect their parents while the disease was being discovered and in a couple of weeks an entire agencies trained staff can be wiped out. You would not even need to go anywhere near the HQ.

This also works with indirect attacks on military installations. This idea is not new.. The author learned it from the US government. The permutations of this concept are limitless. They could be attacked at malls, in school, on the walks to and from school, at fast food restaurants, sporting events and so on. The list is endless.

Third party conscripts (reverse conscription-honest or loyal government employees) can also be used to attack targets like bases, checkpoints and office buildings. Their vehicles can carry packages attached to the tailpipe or muffler that dries from the heat and slowly disseminates into the air. The parking garages can be saturated, checkpoints can be aerosolized and bases can become epidemic sites. The slowly released plastic coated particles disseminate around the exhaust blending in with the gases and dust. Those that breathe the dust become carriers as well.

Vectors can include free toys, clothes, candy, playground seats, etc. In the case of humans, an interesting way of getting a virus into a nation is to infect the airplane with it before it takes off. By knowing some of the passengers, the virus can be recovered from them as they arrive home, fall ill and cannot be found. Ebola could be transferred and maintained this way. (This makes for an interesting science fiction scenario as well)

Target Types

The selection of targets is determined by the overall plan or strategy selected by the attacker (or defender). It can be chosen as part of a terror campaign to frighten the citizens and force government repression. It can be used to conduct economic warfare, destroy military forces, disable institutions and so on. Generally targets are selected according to their usefulness in the overall strategy. The following is a general listing –

Public gatherings- Movies
Union Meetings
Sporting Events
Malls
Highways
City sections or grids
Industrial sites
Entire Industries
Selected homes (wealth, politics, etc)
Businesses (by type/location-fast food as vector)
Parks
Offices
Bases, Headquarters
Communications Centers
News organizations
Swimming Pools
Water Supplies
Public Transportation
Agriculture elevators, livestock and grain producers
(food chain)
Government Institutions (Law Enforcement,
Military, Judicial, etc)

Selection processes can also include phone book and yellow page choices to produce a random character to small scale resistance operations. This causes the defensive effort to be diluted across a broad area.

Assassination of enemy political leadership is usually a priority in non-democratic governments. It has a number of shortcomings in elected governments. Military leadership can be another matter entirely.

Delivery

In 1999, this author began to write a fictional novel entitled unconventional revolt. In the first chapter, I described a van pulling up to the White House fence. Its sides contained lexan armor. Two militants inside pushed a rod and hose through a hole in the side of the van, through the White House fence and in a few seconds it reached the edge of the White House building. As the secret service agents rush toward the van, they turn a valve on that is attached to the hose and rod. Also attached to the valve on the inside of the van is a propane and oxygen tank. As the valve is opened, the mixed gases surge down the hose and flow out the adjacent to the President's home.

After about 30 seconds, most of the tanks contents have flowed out and form a massive gas cloud. Also attached to the hose end is a spark plug and a wire running back to the van. The wire is plugged into the cigarette lighter. A coil is used to boost the spark and when the wire is plugged in, the white house instantly becomes ground zero. Of course, gunfire from secret service rifles and revolvers could also set off the incendiary mix. In the story, the white house is leveled by about two tons of explosive gases.

I had personal experience in using sewer hose and rods to deliver herbicides into sewer lines. In fact, several of these methods were the authors own patents. Using this technique you can remotely deliver any type of gas, dust or liquid ordnance down a hose and turn any area you can reach with a hose and rod into ground zero. This author brought this up at a gun show to an FBI agent when news reporters were talking about the attacks on US embassies and plans to move them further back and out of harms way. I told him that would not work because of the story above. The FBI agent duly reported me and my story to the US Secret Service for threatening the President. I was subsequently interviewed regarding this. They concluded that my book contents were not a serious threat to their Commander in Chief.

Imagine if Tim McVeigh had delivered two tons of Anthrax or delay release weapon in Oklahoma City instead of explosive. He might have never been found. Oklahoma City may have been rendered uninhabitable for decades with tens or hundreds of thousands of casualties. Had he accomplished this, and armed thousands of other simultaneously, the civil war he wished to spark may well have taken place. In the absence of a sensible strategic plan and clearly defined goals, it would likely have failed causing only a general disintegration of, or repression of society as we know it. The difference in effects and outcome would have been striking however.

In 1942, off the northwest coast of Scotland, large scale anthrax attacks were conducted on an island of about 1 ½ square miles in size. About 1,000# of anthrax experimental bombs were released there. They caused outbreaks in Scotland over 20 miles away and the island is still uninhabitable today.

Imagine twenty Tim McVeigh's, attacking every military base from the edge or outside of every base on day one. On day two attacking every large city. On day three to five, every moderate size city. In a week, over 100 million people would be out of work, their homes and job sites uninhabitable, their cities economically worthless. The economy of any nation can be destroyed covertly in about a week by roughly twenty well trained commando's. This 100 million homeless could make the remaining 100 million unemployed as well. If this principle is understood, it should illuminate the readers thinking.

In the authors opinion, Anthrax, as deadly as it is, is still a toy compared to many weapons the world has yet to experience. One scientist working in a home laboratory, anywhere on earth will be able to decide the fate of nations and mankind. It will be the scientist warriors of the future and not the generals who will win and lose wars and change governments. I suspect that this makes many military authorities uneasy. Anxiety about the future has a way of doing that to people.

Delivery Mcehanisms

There is no limit to the number of possible delivery mechanisms that can be used in biological warfare. The following list will describe a few of the main branches of delivery science. Each branch can be adapted to whatever mechanical and technological innovations and ideas that may come along.

1. Mail and Delivery service. Everyone receives mail and packages. These are delivered to the target by service institutions. All you need is an address. The package can carry the weapon on the inside so it is released only to the opener and/or reader. It can be customized to release only on handling by the individual target when it is in the form of a prospective gift or free sample of whatever may interest the target. If the target has an unknown address, or is difficult to reach, only the zip code need be known. You can supersaturate the postal service with mail to the same zip code. Each letter would carry a small dose of slow release dust on the outside so that all other mail to the same zip code in the same sorting boxes becomes saturated as well. This idea is useful in attacking entire offices and institutional headquarters without actually sending anything to their address.
2. Vehicles can carry the material on them or in them into the target area. The same concept as above can be applied to vehicles. If most the vehicles arriving at a particular office parking lot are known, they can each be saturated on the underside with slow drying mixtures that release their contents over time. While sitting for 8 hours of each day in the lot, each vehicle releases a small amount of agent into the surroundings. If the vehicles cannot be reached or cannot be identified and affected, then the path they use to reach the target area can be saturated with cling-to agents that are carried into the area and then dry and disseminate.

3. Trains can be used to saturate areas along which they run or load/unload. If they use bottom hopper unloading, they can be contaminated on the inside with the contents released during unloading. The outside can always be coated for an area delivery.
4. Public transportation such as subways, trains, buses, etc can be targeted to deliver bio-materials into the desired areas and may use their passengers as vectors if the weapon is communicable. Airplanes are included in this category.
5. Remote delivery using a hose and rod system as described earlier is effective if you can get within ½ mile of your target. The hose can be used to reach the target area. This can be accomplished by passing through a fence, going into a sewer and using balloons to seal off the space ahead and behind. When the targets sewer line is sealed off you can use air pressure to blow the material past the P traps into the targets home. Any material such as chemicals, explosive gases, and biological agents may be used in this technique. Small hoses can even be passed under the doors of homes and hotel rooms. This system is illustrated in Volume 1 of this series.
6. Drilling holes into the side of vehicles, ventilation systems, buildings and so on are effective in creating openings in which to pass a hose and deliver pneumatic aerosols into the target area of which you do not have access.
7. Air compressors or tanks of air can be used with a valve to send the toxic dusts into the target areas. This can be done with the above hose and rod, and through drilled holes. It can also be used to release dust from moving vehicles while passing through a target area. Suitcases, shipped packages, and any other conceivable container can be used to deliver materials to any location as long as the valve to the compressor can be opened. A rotary valve is typically used to recharge the hose with more material. Any manual load system can, of course, be used as well.

8. An interesting concept, useful in conjunction with this method is the use of paint. Various paints can be saturated with organisms and used to seal them in and store them for recovery later. An entire house could be painted with a huge reserve of anthrax particles, sealed inside of the dried pigment and latex mix. The paint formula could also be modified to dry, crack and disintegrate over time releasing its deadly contents into the surroundings.

9. Paint can also be used in conjunction with aerosols in conventional warfare. Enemy troops with tanks can be a real problem for unarmed citizens. Cans of spray paint combined with the hose delivery system described above can be used to spray paint oncoming vehicles with a fine mist. This mist of paint would foul the windows, air intakes and optical equipment forcing them to stop, open hatches and get out to clean them. This makes them susceptible to sniper fire and of course, biological contamination. [This would have been an interesting countermeasure had it been used on the government tanks at WACO.]

10. Paint can also be used against soldiers in combat in buildings. The paint can be sprayed onto soldiers by remote delivery into rooms or hallways on which they are passing. If they are wearing gas masks and other protective gear, they will not be able to clean them to see and will have to remove masks and visors to see and breathe. They will be breathing the air and can then be attacked with gas or dust. The paint mist can be combined with aerosols for combination attacks.

11. Vacuum cleaners and dryers are good sources for the fine, invisible deadly dusts that cannot be seen. To see this dust, close all the drapes in your house and turn out the lights so it is dark. Now watch a sliver of sunlight as it shines through a shade at the edge of a window. The invisible dust is now illuminated and fills the air in the sliver. This is the invisible dust that can be collected by vacuum or dryer and delivered invisibly into a target without being noticed. The author has tested this concept in front of thousands of people, and despite all kinds of things going wrong during the first test, no one even noticed.

12. Magnets can be used to hold delivery equipment on the tops of trucks, bottoms of cars, and attached to any useful metal in any delivery concept. Salt shakers held up by magnets can be used to deliver the agents. They can be attached next to hot tailpipes and as the heat dries the contents, it salts out under the vehicle and into the countryside. Adhesive cake formulas do not leave behind evidence and may be a better choice.
13. CD labels, fake labels, and even the cases can be used to arm or attack targets. A free piece of software or music can be a powerful enticement.
14. Flyers with instructions and organisms can be air dropped into the target area to arm citizens (or attack them). This idea was possible in Cuba where pilots would fly from Miami to deliver leaflets into Cuba. Bio based leaflets would be of a great deal more use and I believe Castro would not last a week in a Cuba armed with these weapons in every household.
15. Money can be used as a vector. Normally, cash does not preserve and carry infectious disease very well, but special formulas can be used. The money can be saturated in broth and dried for mass delivery to any target under almost any condition. (One hundred one dollar bills mailed to target vectors will quickly distribute through any target area. To quote a famous wall street executive “greed works”)
16. Booby traps can become any pocket of material that holds dust and releases it when disturbed. Furniture linings that are torn during police searches can release the invisible dust and kill the individuals that are exposed in the next few days. Road dust can be saturated and when an enemy army passes over it and disturbs it, they become infected and die. Tree branches can be sprayed and become lethal as soldiers brush against them. The concept here is that these booby traps are not mechanical and are invisible. They can be contained or free. They can be used to defend positions, land, homes, roads strong-points and so on.

17. Objects in buildings can be used as vectors. The showers mentioned earlier in the Navy test can be used to saturate buildings. Lawn watering systems can be adapted to disseminate aerosols when turned on. Air conditioners, fans, heaters and anything else that moves air can be filled with self drying and self disseminating ordnance.
18. All surfaces can be painted or coated with various formulas that self dry and disseminate. Truck roofs moving into a target city or military base can be coated without being noticed. As they drive down the road, the high speeds and the sun quickly dries the paste or coating and releases it according to the nature of the formula.
19. All of these methods require covert delivery to prevent discovery and nature provides those conditions. Almost any of these materials can be delivered without discovery in dense fogs, snowstorms, heavy rain (where appropriate) and at night. In heavy winds, you can be many miles upwind and deliver a saturation attack that covers many square miles. All you need is an air compressor and a rod that sends the dust or spray upward and releases the agent 30-40 feet into the air as a fine mist or dust. Fifty MPH winds in a winter snowstorm could disguise the delivery of truckloads of material.
20. Methods described in other books are also suitable for use as delivery systems. Humidifiers, and misters like those described in a recent Tom Clancy novel are ideal for disseminating diluted broth's of bacteria and toxins.

A couple of years ago, some workers were installing an overhead door at a dairy farm near Columbus, Nebraska. Their ladders were covered in manure from the dairy cow stables by the time they were finished. The ladders were placed back on the trucks and as they drove back to town, the manure quickly dried, losing its offensive odor and appearing like common dirt. Two weeks later, this same crew was called out to work on a door at Hudson Foods in Columbus. The dried manure was never washed off and now the ladders were brought into the inside of the packaging and handling areas. In a week contaminated meat was killing and making ill the customers of this food processor. In two weeks, over 100 rail cars of meat were recalled and had to be destroyed. By four weeks the billion dollar company was out of business. Never underestimate the power of biological organisms to cause powerful effects, even without being used deliberately.

You never broadcast the presence of a weapon in your delivery. When someone sends a letter claiming it contains anthrax, it will not contain it. If you actually have anthrax, you do not wish to leave behind anything that can connect you to its use. If it is successful, the source of the attack can remain unknown and the enemy cannot adapt protective strategies to stop your continued attacks from succeeding. If it is a failure, no one knows and you have time to improve the design, cultures, delivery, etc. without pressure or embarrassment.

Strategy

The concepts of strategy, especially in the use of biological weapons in this context is largely theoretical and untried. The principles and ideas are in their infancy and will change with each new scientific advance, especially when modified weapons enter the battlefield.

Strategy requires clearly a clearly defined set of goals. In the case of Genghis Khan, his strategy was to conquer, and kill all those who resisted. As long as he had an army capable of doing this, he was successful. Given the political systems at work today, this strategy may quickly lead to MAD (if I can't have it neither will you-Mutual Assured Destruction). Unless a strategist plans on killing almost everyone, he will have to adapt limited political strategies with limited destructiveness. In all nations decisions are largely made by the leaders, elected or not, and not by the masses. These leaders will often sacrifice almost all their resources and people to remain in power and be able to decide their future and fate.

An entire book can be written on the possible strategies and how different kinds of tactics are applied to each. That will have to wait for another day. This section will acquaint the reader with some basic ideas that would be important in planning this type of warfare. Strategies and goals are political in nature (What do you want). The military strategies are designed to achieve the political goals through force, terror, etc.

Happy people will not fight if given a choice, angry people will

You want the angry people on your side, not theirs

Anger is a function of timing, (Union strikes, bad economy, injustice, etc)

Inciting people to anger is a science (see the CIA, FBI, BATF)

One angry man delivering 10# of bio agents per day is easy to deal with

1,000 angry people doing this every day is not

Angry people can be made angrier by government repression

Patience is a virtue in invisible warfare. The war can last for hundreds of years. Just look at parts of the south (in the US). Some are still fighting the Civil War in the hearts and minds of their families and neighbors. Imagine this war re-fought with invisible weapons.

Sustaining forces can be accomplished by random mailings.

Each of the recipients can build his own independent army

Scale up is a function of numbers

You can choose the weapons to arm people with, the knowledge, and the instructions for use and targets. By these means you can nudge the participants in the direction you wish them to go. You can compromise them without compromising yourself if things get out of hand. You can use them to expand operations if initial actions are successful.

You generally target those institutions in an enemy government first, that are armed, have authority over others and can use force, electronics, and surveillance against you on a large scale. This means the military forces, political leadership, and the law enforcement and judicial institutions.

Bad Weather is Good Weather in Bio Warfare

Wounding and making ill is better than killing if it can be sustained. This swamps the enemies resources in caring for the infirm and demoralizes the affected populations

If economic or total warfare is undertaken, it is better to accumulate materials for massive attack and shock effect instead of a daily small attack strategy (unless you are using delay release ordnance)

You do not need to kill to destroy or defeat. By rendering all the suburbs in the target nation uninhabitable with saturation of deadly weapons, the property values diminish, homes are lost, jobs as well as some lives will be lost and the economy rapidly disintegrates. Stock markets collapse, all savings that were invested in now worthless real estate is gone, banks collapse, and government revenues shrink to almost nothing overnight. That means no more money for electronics, tanks, aircraft, undercover agents and so on.

In the late 1950's the US Army adopted bio warfare strategies with the following concepts in mind –

The agents should be disease against which there is no natural immunity, be highly infectious, be impossible to produce effective vaccines against, and immune to antibiotic treatment and other therapy. It should be easy to produce and deliver in the field using conventional ordnance and survive and reproduce in the enemy targets.

The four main organisms they determined which best met this criteria were –

Anthrax which can render an area uninhabitable for a century when used in sufficient volume

Brucellosis which is considered humane since it makes everyone ill for up to a year without producing massive death tolls

Tularemia which disables an enemy and in some cases is fatal

Psittacosis also known as “parrot fever” which incapacitates like typhoid fever, is similar to pneumonia and causes about 20% casualties.

The basic ideas of attack involved achieving a maximum anti-personnel effect with the least amount of physical destruction. It should be carried out on a massive scale to swamp the enemies medical facilities and defenses. The element of surprise and breaking the enemies morale and will to fight were considered the most important elements. The longer the attack was not detected (the longer the incubation period) the more effective and insidious the attack.

Many more diseases have been developed since then. If you are dropping bombs and missiles on the target, these strategies are easy to use and would normally be quite effective. It is in the close warfare and home warfare that these strategies are subject to change and adaptation.

In an interesting historical footnote, during the Korean war, the US was accused of conducting biological warfare against the North Koreans and Chinese army troops. The Chinese published photographs of the US built bio bombs and POW pilots admitted to dropping them. An international commission of scientists set up by China to investigate the claims included scientists from Britain, France, Sweden, Brazil, Italy, and the Soviet Union.

In a 700 page report, the scientists concluded that the US had indeed attack the communists with biological weapons ranging from fountain pens with infected ink, anthrax laden feathers, and fleas, lice and mosquitoes carrying plague, and yellow fever. The US obviously denied the allegations and the report concluded that the US had not used the weapons on a massive scale but as individual experiments. All the scientists on the commission were unanimous in their conclusions and all signed the report.

In these matters, the lessons are obvious. In important matters of public trust the US government lies. (you just realized this?)

Later, strategic campaigns were developed on massive scales to enable the US to saturate all of China and destroy her in the event of a major war. [From a higher Form of Killing, 1982, pages 161-166]

The following is a hypothetical strategy that could be undertaken in a future insurrection.

The government has just passed new laws to confiscate all its citizens firearms as governments recently have done in Britain and Australia. Even though there is much political opposition to it, he who has the most votes has power over all others and wins, irregardless of the fiction of rights of American citizens.

A small group of individuals begin the covert arming of America by seeding the entire US interstate system with Anthrax. After a couple of weeks, they announce their seeding and the instructions to obtain and self arm yourselves with the anthrax to all citizens via the internet and random mailings. The random mailings also contain another small item, a specially modified version of the Anthrax. Covert arming of anti-government groups begin all over the country. The government begins to suppress the internet, the news media and begins to use its military to control its citizens.

At the outbreak of hostilities, the entire rural population of the state of Michigan receives and is now armed through the mail with an entire library of deadly organisms. The government begins to round up all the rural residents who do not surrender the package immediately. The anger begins to boil over. Citizens that ordinarily might have cooperated with the government now prepare to fight against them.

Unknown to almost everyone, Washington DC had been heavily seeded with delay release weapons of unusual combination and the city begins to die.. As more and more people are affected, they begin to build their own mini armies by various means. Every cause is now armed and begins to fight for its own political position and they do so with anonymous invisible attacks. Within a few months, the governments ability to maintain its particular order over its citizens begins to break down.

Cities are rendered uninhabitable. Billions of dollars of accumulated family wealth disappears overnight. Banks collapse. Disease swamps all medical services and millions flee the toxic towns for the “safe” countryside. This has all been written about before in “Brave New World”, only with organized governments wreaking the havoc instead of independently armed citizens.

Finally a compromise is reached in which all parties, sick of the loss and suffering agree to honor the original rights and laws that were established. This would be unlikely since this kind of power is intoxicating but it is interesting to imagine when compromise would be reached (if ever). More than likely, the US would break down into small tribes, each armed with massive biological capabilities, and each probably behaving like a modernized version of the US Indians during the early colonizing of America. The only way it would be reunited would probably be with the extermination of all those that did not submit to a dominant tribe. (Such as the Europeans in the first mass extermination of races on this continent)

This is only guesswork but history has actually gone down this path many times, and is still affecting the world like this in Bosnia, Africa, and elsewhere. It may go that way many times again.

Chapter 5 Weapons Procurement

This chapter will provide information on recovering and basic culturing of all the important disease and toxin producing organisms. This is all extracted from the previous three volumes but is more quickly absorbed in the following charts. A good home library of organisms is essential for arming citizen armies and this information will show you how easy it is to produce that library. One other important point. If you can recover these organisms you can use any of these in combination as multiplier effects weapons without understanding the toxins they produce, or how to identify them. By following the recovery charts you can almost always recover some of these and grow them at random and in combination with others on Jell-O and in broth.

Bacteria	Where recovered
Anthrax	Soils that have been the site of previous outbreaks, or concentration and have a high pH or soda ash/limestone base. Low spots rich in organic material will contain the spores. Meadows areas of Fallon, Nevada, Craig County, Oklahoma, Pryor, Oklahoma, Mount valley, Kansas, Sedalia cattle drive from Texas & Louisiana, Baxter Springs Kansas, (Most of Kansas that meets the above definition). Wayne County, Illinois, below New Orleans, East of the Ouchita River in Louisiana, on high ground northwest of Pearl River along the Natchez Trace in Mississippi. Most alkaline deposits along rivers in Texas and Louisiana. The dendritic drainage of the Niobrara and White rivers and the playa areas and valleys of small streams near the Missouri river in Nebraska and South Dakota. All concentration areas of the big cattle drives of the 1800's. The east and west Charlie Creek in eastern Montana, the Green River drift near Pinedale, Wyoming (abandoned beaver ponds). The anthrax will be found in the low spots of these areas within the first 12 inches of topsoil.

Growth was first achieved on the liquid mass of an ox eye in 1877. A mix of 1-5% baking soda, 5-10% blood meal or any blood, and egg white, gelatin or agar will support growth of anthrax and inhibit most organisms. It will also grow in a blood and soda broth. Boiling the soil sample at 100 C for 10 minutes kills almost all other organisms. The baking soda supports spore formation.

Clostridium Botulinum

In or on vegetables, fruits, leaves, moldy hay, silage and livestock manure. Alkaline soils from gardens about 2-3 inches deep and cut off from the air. Animals that have died of food poisoning. Canned foods that have expanded from gas production, the intestines of fish, dead ducks, and in the soil of vegetation underwater (several inches deep).

Recovery is accomplished by soaking the sample in a small amount of alcohol (100%) for one hour at 37 C and then heating the sample in water at 80 C for 20 minutes. This kills almost all non-sporing bacteria. The sample is incubated in meat broth at 30 C for 3-5 days for best toxin production and growth. Animals fed this mix which die from botulism will have an infected carcass that is a huge source of organisms and toxin.

Clostridium Tetani

Puncture wounds producing tetanus symptoms in humans or animals. These can be artificial or accidental from other sources. Livestock manure, especially from grazing horses, soils where human solid wastes are deposited, all soils fertilized with animal manure in volume. It is found in 20% of all soil samples and this rises to 90%+ in the above examples..

Grown best from horse manure samples in boiled water and 5% phenol for 10 minutes. The mix is added to meat broth with added chopped meat and/or brain tissue. The broth is boiled to expel oxygen and sealed at the top away from air. On blood agar or Jell-O it can be streaked on one side of the plate and incubated in a CO₂ atmosphere (no oxygen). The *C. tetani* will swarm across the plate ahead of other bacteria. Neosporin antibiotic inhibits other bacteria. Will liquefy Jell-O in about 48 hours and can be grown using a stab to the inside of the Jell-O. It will grow on the inside but not the surface with a white growth on blood Jell-O. Produces tetanus when injected in test animals.

Clostridium Perfringens

From gas gangrene wounds (natural or artificially made), all the solid waste of man and animals (in low concentrations), 100% of large intestine samples, most soils samples where it rapidly invades the tissues of dead animals and people producing gas cavities. In pig intestines the cell count is usually 250 per gram of solid material. If enterotoxemia occurs it rises to more than 1 million per gram.

Recovered by growing a swab specimen of feces and stirring it into cooked meat broth at 50 C for one hour. Most non-spore bacteria are killed. On Jell-O with blood and a tiny amount of metallic iron, it will discolor the Jell-O around the *C. perfringens* colonies. It will clot milk in liquid cultures. It produces a precipitate around colonies on egg yolk (opalescence) and damages blood cells in two zones (from two toxins) on blood. Adding .5% calcium chloride (winter de-icing salt) enhances the double zone effect. It grows only in the absence of oxygen and can be grown at 45 C in chopped meat broth while most organisms will not grow at this temperature. Streaks from cultures grown at 45C for 4-6 hours will be mostly *C. perfringens*.

Clostridium Novyi

Widespread in soils, and found in the livers of many healthy animals.

Grows on cooked meat, fresh blood and/or brain only. Will grow deep inside of Jell-O at 45 C. Egg yolk produces opalescence and an iridescent layer. Jell-O is made twice as thick to inhibit growth spreading.

Clostridium Septicum

Found in gas gangrene wounds, intestinal tract of man and many animals, spreading to other tissues on the death of the animals. Blackleg of cattle and sheep, and in the manure of humans and animals. It produced localized necrosis under skin cancers.

Grows only without oxygen and best on deep brain and meat tissue broths or gels. Grows radially and damages blood around colonies. Agar or gel stabs produce short radial growths. Heat samples at 100 C for 30 minutes and add neosporin to kill or to inhibit other bacteria.

Clostridium Histolyticum

Sparsely found in the intestinal tract and manure of humans and animals and in the soils where the manure is deposited. Found in 3-6% of gas gangrene cases.

Can grow with or without oxygen. Grow first like other Clostridium in samples and then grow the streaks from the broths in air. If blood is heated before growth a large zone of clearing around the colonies is seen. It attacks milk as well, but does not affect egg yolk. It grows well on cooked meat broth which its toxins disintegrate.

Clostridium Sordelli

Widely distributed in soils and in the intestines of humans. Occurs in about 4% of gas gangrene cases.

Grows well in cooked meat broth and meat particles are partially digested. It breaks down gelatin.

Corynebacterium Diphtheria

Contagious bacteria recovered from humans, especially children with diphtheria or skin ulcers. Common in the tropics, rare in the US. Healthy carriers spread it from their intestinal tracts. Tropical skin infections are a common source. Requires a virus (bacteriophage) to be infective which is found in the skin infections in the tropics regularly.

Grows in blood broth as small white masses which precipitate as sediment or sticks to the side of the container. It also grows on the surface of broth as a film. Drying, freezing and sunlight kills most other bacteria.

Staphylococci

In nasal secretions and sputum, especially in virulent forms and in large concentrations in hospital workers. Skin lesions and burns. Found on almost all contact materials in hospitals, in the air and on room surfaces of infected individuals. (Vacuum cleaner dust from hospitals!).

Grows on most nutrients in air. They are resistant to heat and treating the sample at 50 C for 30 minutes kills most other aerobic bacteria. Grows in 5-10% salt and 5% milk broth. It is very salt tolerant. Blood agar produces larger colonies than salt-milk or other nutrients. It liquefies gelatin rapidly. Milk produces intense gold and yellow pigment pigments which are indicators of virulence. Will produce a zone of clearing around the milk on egg white and milk mixes. With both egg yolk and glucose in broth, an intense opacity occurs. Colonies will clot blood when mixed into liquid drops of blood (see page 2-97, V-6A)

Streptococcus

Human coughing and sneezing, especially in children in outbreaks. Found on books and other toys and surfaces in outbreak areas (hospitals). Survives for weeks in most bodily fluids and exudates. Group B recovered from most 3rd trimester pregnant women via vaginal cultures. Stool and sewage samples, mouth and upper respiratory tract. Found in many rodents, domestic and lower animals, and un-pasteurized cattle milk with mastitis.

Growing on blood with 10% carbonated water enhances growth. Grows with or without oxygen and damages blood with a zone around the colonies having a greenish tinge. Will grow on neomycin (neosporin) while many other bacteria do not. Grows on surface and subsurface of stabs in agar or gelatin. Will tolerate up to 6% salt in the media.

Pneumococci Found as part of the normal flora of the upper respiratory tract of some humans and animals. Present in most pneumonia, found in 33% of all preschool children in throat and sputum swabs and this declines to about 10% of all adults at age 55. Sickle cell anemia patients are especially susceptible.

Grows best on heated blood mixtures. Bile salts dissolve colonies of pneumococci. They produce a greenish halo around colonies on blood that has been heated and do not on unheated blood. Adding 5% carbonated water to the mix increases growth and isolation from other organisms.

E-Coli Found in all human and animal solid waste and intestinal tracts. Only certain ones are virulent. Found in all soils, especially where manure is used as fertilizer. Found in water of ponds, lakes and sewage.

Does not liquefy gelatin. Requires professional media to identify as a species (see V-6A) but can be grown as an MEW and tested as separate colonies until a positive effect is observed.

Salmonella From typhoid fever patients, present in about 3% of women who have had the disease (higher in the tropics). Enteric types from sewage, manure of animals, and especially infected humans. In epidemic areas of the world, they are commonly found in the vegetation of flood prone areas and in many of the animals there. Very widespread in the intestines of waterfowl, domestic chickens, fish, hogs, and clams.

Grows on most mediums and requires special media or direct testing to identify. Can be fed to mice and then recovered as more virulent.

Shigella From dysentery in human outbreaks. It is common in 3rd world countries and are shed in the feces for weeks. The cells are spread by flies, fingers and food. Most US outbreaks occur in mental hospitals, Indian reservations, day care centers and in contaminated water supplies.

They grow at 10-40 C on most media, especially milk and tolerate and grow in low temperatures better than other bacteria. Require special media or broth for lab identification of testing to confirm symptoms.

Klebsiella Pneumonia

Found in the upper respiratory tract of infected individuals and is widely distributed in soils, contaminated water and manure. About 30% of healthy humans will excrete small amounts of them in their urine.

Produces mucoid colonies on blood mixes. Most strains have a yeasty odor.

Proteus Found in soil, sewage, decaying animal matter-especially in water (which can be artificially caused to recover a source). On garden vegetables and in human and animal intestinal tracts. Often recovered after bowel infections.

Produces swarms which grow in concentric waves or rings on media and this effect is reduced by increasing the gelatin by 5%.

Yersinia (Plague)

Endemic among rodents and squirrels west of the Mississippi in the US. Area south of San Francisco in the rodent populations and in recovered fleas. Fifty Seven species are permanent reservoirs of plague in California. Most outbreaks occur from rats to fleas to man. Human outbreaks occur when about 10% of the rodent population is infected. Trapping of sick rodents is the easiest means of recovery. Ground and tree squirrels and prairie dogs are also carriers. The burrows soil, matting, fleas and dead animals serve as sources. Flooding a burrow and recovering and culturing the filtered discharge is an easy way to rapidly screen a large population. Rodent populations in New Mexico have acquired resistance to plague and it is prevalent in that state.

They grow well on blood and various bile mixtures. They grow better at 25-30 C than at 35-37 C which makes them more effective in winter. They do not affect milk or gelatin. Early colonies appear smooth, gray-yellow and may become rough with serrated margins with prolonged incubation. They grow slowly at 0 C and at a fair rate at 14 C which aids in separation and isolation. In broth cultures, if you add a film of oil on top, the Yersinia will produce a stalactite type of growth from the top. Most will be seen as a granular deposit on the side or bottom of the tube or container, like streptococcus. On gelatin, they have a drop-like, delicate appearance with a granular, round uneven margin. If blood is added, they have a darker brown color because the colonies absorb hemin from the blood.

Francisella Tularensis (Tularemia-90% fatal by inhalation)

A plague like disease found in California ground squirrels. It is also found in about 1% of all rabbits in the US. Found in rodents all over the world. Found in the mud and waters of many northwestern streams. Adult wood ticks, nymphs, larva and eggs are also carriers and are infectious.

Grows very slowly on pure egg yolk and rabbit spleen is added to enhance growth. (Rubbing the spleen across the surface of the media adds the growth factors). Adding .1% cysteine and .1% dextrose also enhances growth. Adding 5% carbonated water also enhances isolation. It will not grow on ordinary media. It is highly infective at levels of only a few cells and is highly fatal in the respiratory infection form.

Vibrio Cholerae (Cholera)

Endemic in India and Bangladesh, and found in massive numbers in seawater in the drainage areas of the major rivers (up to 1 million per ml.). Has been found in Chesapeake Bay and the lower Mississippi valley. Saltwater crabs have harbored the organism in the gulf off Louisiana and has been found in canal water near White Lake.

It grows on most media, including those containing bile salts. Alkali media (at a pH of 8-9) will allow it to grow and inhibit most other bacteria. At this pH, it grows faster than most other organisms and can be recovered from the tops of broth in 6-8 hours as a membrane like pellicle. These are transferred to fresh media for production of pure cultures. They grow best in water with 1% peptone and .5% salt. On meat extract Jell-O, fresh colonies develop a translucent growth with an iridescent green to red bronze color. Colonies become yellow if citrate is added. It hydrolyzes gelatin producing a cloudy area (opalescence) around the colonies. Gelatin stabs produce a funnel shape as it grows.

Mycobacterium (Tuberculosis and Leprosy)

Recovered from infected patients in TB hospitals and leper colonies or homes. It is infectious and present in large amounts in the air around infected individuals. Cows with TB pass on the cells in non-pasteurized milk. It is endemic in undeveloped countries and can be easily recovered from the milk and meat samples of infected animals. The incidence is believed to be 70-100% in herds with animals kept in stalls and the oldest animals have the highest rates of infection (as in human populations). Leprosy has recently become widespread in armadillo's in the southern US and is recovered from nodular regions and tissues.

They grow on almost all media but grow very slowly. Coagulated fresh eggs, potato flour, and glycerol alone will grow the organisms. Carbonated water will increase the growth and colony size. Some strains take weeks to grow but *M. tuberculosis* can be cultivated in 24-48 hours. (See pages 2-224 to 2-227 of V6-A)

Haemophilus A highly contagious and common form of venereal disease sometimes confused with syphilis. The sores are very painful which distinguishes them from syphilis. Also isolated from pinkeye and cases of influenza. Often precedes meningitis and is recovered from respiratory excretions.

Will grow on clear gelatin with blood, soy, or brain media. Water should be carbonated to enhance growth.

Listeria It is part of the normal microflora of healthy ferrets, chinchillas, ruminants, foxes, poultry and gerbils. It is also found in decaying plant vegetation, sewage and organic fertilizers. It causes conjunctivitis, pharyngitis, as well as pneumonic and cutaneous infections. Poultry are the primary source of Listeria and the mortality of blood based infections exceeds 40%.

In broth cultures, they grow as sluggish, mildly moving colonies, at 36 C but at 25 C they display a characteristic tumbling or "head over heels" motility. On gelatin, they spread like an umbrella in this same manner as they swarm across the surface. At 25 C they outgrow almost all other organisms which helps in isolating them. They also grow at a pH of 9.6 and in up to 10% salt which excludes most other bacteria. They produce a small zone of damage around the colonies when grown on blood.

Brucella Endemic in goats, sheep, herding dogs and other animals on Mediterranean islands and surrounding shores. *B. canis* is found in about 9% of stray dogs in the US. Found in reindeer in Alaska as well as smaller mammals. It is recovered from the bone marrow and affected tissues of animals. Causes abortions in cattle, hogs, and goats, affecting almost all tissues.

They grow at 20-40 C and are slow and difficult to recover. They may take 2-3 weeks to create visible colonies. They are also highly infective. Special agars work best to isolate and identify. Whole rabbits blood and adding serum extracts, liver extracts, and yeast hydrolysates aid in producing cultures.

Plant and Mold Weapons are described in Volumes 6-B and V-C and you have been introduced to the basic methods of producing and extracting them. Considerable attention has just been given to the bacteria listed above because all can be grown in various mixtures and released directly as weapons while growing and even without identification (as multiplier effect weapons). Plants do not grow fast enough for this type of warfare although selected toxins may be extracted and added as enhancements to these types of weapons.

Most molds and related toxins cannot be cultured and released as part of a combination weapon with bacteria in this concept although the author made a few attempts in this regard. It may be possible one day to do this but will have to be left to another talented thinker in to make this leap. The molds and toxins can be grown separately and the spores and toxins added to MEWS during the starting stages. These can significantly enhance the weapons effectiveness. The methods of growth have already been described and the combinations will be considered in the following chapters.

In most grow and use designs, the organisms are seen as growing in a container of media inside a plastic bag (or two or even three). This allows for the transfer of growths between bags so that cultures can be retained. If the package is unknown and turns out to be highly effective in use, it has been retained so it can be duplicated.

An entire library of organisms can be recovered, grown and preserved in baggies, covertly frozen in ice cubes, or even in dead and buried (or frozen) test animals.

In 2000, the author was producing and selling these books on CD at gun shows which was highly unpopular with the US government. Before a show at Portland, Oregon, the undercover agents would pull alongside my van while I was copying (burning) CD's and interrupt the data flow (presumably with high powered communications equipment). This destroyed the CD. I would move away from them and the CD's would copy perfectly, and as they pulled near in their vehicles, they would be damaged again. This upset me and on my way to the next show at Las Vegas, I detoured to Fallon, Nevada. The entire meadows area has a light dusting of white soda on it which is the material needed to support the growth and spore formation of anthrax. The Anthrax live just underground as isolated spores all over the area. In the low spots, it will be found in any soil sample in the first foot or so.

The author took a soil sample with the agents watching from the road. Two days later while sleeping in the parking lot at Wal-Mart in Las Vegas at 2 AM, a van pulled up next to mine. It had the name "acculab" on the side and was taking air samples from my van to see if they could recover growing anthrax. Although I have already mentioned this event, there is more to the story that can be learned and used by anyone.

If the author intended to make an anthrax weapon (MEW), he could have simply mixed it into a store bought poultry or meat broth with baking soda. Blood would be optional. It could be boiled or simply grown directly. Anthrax spores would certainly be produced without any biology background or culturing. These could be delivered as an aerosol from a humidifier or simply dumped into general area of the target. Massive amounts of spores would spread into the area. It would only have infected a few people at the most and be in-effective as a military weapon. Its ability to frighten would be quite impressive however. An entire army can be armed and built from such a soil sample.

By using the soil sample and growing it in a selective and preferential mix, anthrax becomes the primary growth and the mix can be delivered as the weapon without waiting around to expose yourself to it.

This is the concept behind the MEWS. The soldier only needs to know where to find and grow the dangerous organisms and how to grow and deliver them as food mixes. He doesn't need biology training or pure cultures (although this drastically increases his effectiveness). He simply needs to understand how to find good sources of organisms, how to feed them, and how to deliver the food mix as a weapon.

[Had the US government left this author alone, to write and sell books, without harassing, threatening him, and damaging his property, he would have never bothered to think of this strategy and commit this knowledge to all the free peoples of the United States. I did not attack anyone with the soil sample. The mere threat of it though was enough to temper the governments harassment for a time. It is amazing how one idea will lead to others and the contents of this book are derived from those accumulated ideas. These ideas should be enough to permit the citizens of this nation to arm themselves in a meaningful fashion and use this knowledge to protect themselves from this governments law enforcement and military institutions should that day ever come. That is the purpose of this book. To arm free men everywhere so that they may always be free and able to protect themselves and fight back against the tyranny of their governments (especially the US government).]

The anthrax can easily be separated by growing the soil sample inside of Jell-O, in the blood mixes. The mixes would be boiled in 5% phenol or alcohol for 10 minutes to kill other microorganisms. Baking soda or carbonated water can be used in the mix. The Anthrax that grows inside of the Jell-O will appear as a knotted string. The colonies on the Jell-O have a comma shape. Under a strong magnifying glass, they have a medusa head of hair appearance. Once you have this, you have the basic organism as a pure culture.

The organism can be tested in animals for the anthrax disease symptoms. If the test is positive, you are now armed with an ability to build armies of similarly equipped soldiers.

An entire library of weapons can be procured in this fashion.

The best sources for procurement are

1. Infected soil
2. Soil with manure, decaying vegetation or dead animal matter.
3. Sick animals or humans (Tissue or sputum)
4. Dead animals or humans

5. Hospitals (air and dust samples from tabletops, lights, trash cans, filters, waste disposals, bedposts, any part of intensive care units, etc) Super-bug heaven due to antibiotic resistance.
6. Sewage, animal manure piles, runoff, etc.
7. Outbreak sites (anthrax attack)
8. Rodents and burrow sites
9. Insects
10. Governments (ATCC, Universities)
11. Animal wounds (already injured or deliberately injured for culturing)

Chapter 6

Weapons Design and Production

Weapons design and production are ordinarily separate steps. In the case of multiplier effects weapons, these steps are combined.

In conventional army ordnance, the weapons take the form of –

1. An infective organism which includes bacteria, molds, and viruses
2. A deadly toxin (such as botulinum toxin)
3. A marking biological agent that can be seen or tracked such as radio-labeled spores or fluorescent dyes.

In most military operations, the scientists are put to work developing procedures to purify and mass produce a single substance or organism. The pure “packages” are then loaded and sealed into ordnance designs in a stabilized form so that they can be stored over years and then delivered as needed in the form of bombs, grenades, warheads, etc. The warhead design is usually a sealed casing that prevents the package from leaking its contents. It contains a releasing mechanism such as an explosive which cracks the case and aerosolizes the contents. It may also have a mechanical release like an aerosol can in which pressure, or a pump forces the contents out an atomizer (tiny hole for small droplets).

Any of these concepts can be seen in current military and popular literature in their basic design. For home based soldiers and improvised warfare, a variety of household devices are suitable. Containers to grow the ordnance, and equipment to deliver it include –

Containers

- Plastic jars and bags (That degrade over time, in pH ranges or in temperature extremes and release contents this way)
- Glass Jars (That break on Impact)
- Spray paint cans
- Organic materials that the organism eats its way out of (and grows in)
- Plastics that have desired physical properties for storage and release
- Biodegradable substances and coatings
- Paint (when dry)
- Aerosol cans
- Spray bottles
- Humidifiers and aerosol generators (that use sound to form tiny droplets)
- Any storage tank or container that can be tapped and pumped out
- Cake (Yes, like the store bought cakes)

Seed Materials This can be any material mentioned in the previous chapter

- Dead animals
- Pure Seed cultures
- Manure
- Cloth samples (handkerchief from hospital wipes, blowing nose, etc)
- Rodent burrow flooding or drag samples
- Sewage
- Soil
- Decaying vegetation
- Animal or fish intestines or lungs
- Ill human exudates
- Hospital bedding

The seed materials are usually prepared by grinding to a powder, mixing into an inhibitor such as alcohol, solvent or pH adjuster to kill or inhibit undesirables and then boiling, irradiating (sunlight) or freezing to kill the undesired range of organisms.

The prepared material is usually diluted in a liquid such as water or blood mixes to spread it out for seeding into the main isolation or production container.

If pure colonies are to be identified and produced, they are done so at this stage according to the already mentioned procedures.

The colony materials are then grown to produce toxin, and/or more of their own organism biomass. This is done as part of the weapon in the MEWS designs.

Growth

This is accomplished using food for the organisms to get them to grow. Each type of organism is described with the ideal food sources for each. In MEWS, this can be different, depending on the delivery, target area, and combinations desired. Typical weapons foods include –

- | | |
|---------------------------------|-------------|
| • Water | |
| • Carbonated Water (Seltzer) | Grocers |
| • Blood or blood meal | Feed stores |
| • Meat meal (or bone meal) | Feed Stores |
| • Poultry and meat broths | Grocers |
| • Baby powdered and liquid milk | Grocers |

- Sugar Grocers
- Casein Grocers
- Digestive enzymes (for peptone-brewers) Health food stores
- Egg white and Egg Yolk Grocers
- Hamburger (Boiled and filtrate dried-Meat extract) Grocers
- Soy flour Grocers
- Gelatin Grocers
- Agar Medical supply
- Ground and boiled animal tissues [Heart, liver, brain, meat, blood, etc]
- Filtered and dried extracts from the above tissues
- Dead human tissues
- Canned foods
- Ground or powdered Grains (for molds)
- Bread
- Poisonous plant tissues

Processing

The organisms can be preserved long term by drying, freeze drying, burying, covert storage in ice cubes, maintaining with proteins or foods, moistened, stored with preserving materials and so on.

As long as food is available, the organisms can be grown on anything as long as they are fed. This can be a towel, shirt, leaves, human skin, paper, car door handles, hood latches etc. Brewing equipment is ideal for large scale production of pure cultures and toxins.

Delivery

The delivery depends on the route of the desired attack. The main routes of attack are

1. On human skin
2. Puncture though human skin to lower tissues
3. Breathed into airway, lungs
4. Eaten (consumed) and enters the digestive tract
5. Eye attack

1. On Human Skin

This method involves placing the “package” in contact with human skin. If this route is effective, it becomes a powerful military scale weapon. Partial protective measures like gas masks do not work against these weapons. Like the mustard gas of WW1, a defense requires full body protection which reduces an enemy soldiers ability to function by up to 80%.

Human skin attacks require the biological weapon to be able to invade or destroy the skin. Some organisms can invade the skin as single cells such as Tularemia and Brucellosis bacteria. Others can be enhanced so that they can pierce the skin protection. Enhancements include poison ivy to cause itching and self inoculation, samburs and related piercing objects that produce tiny puncture wounds and carry the organisms inside, toxins that dissolve skin tissue connective complexes (such as staph toxins, mustard agents), chemicals that cause pores to open wide (DMSO), piercing insects that are fed the organism and then released into the target areas.

2. Puncture through Human Skin

Examples of useful attack enhancements include commercial itching powders added to blends of organisms that germinate and grow when inoculated into the skin. Mixing DMSO to toxins that are carried rapidly into the bloodstream through pores. Using plant burrs in mixes under car door and hood handles which cause a puncture and infection (for specific target assassination).

Trichothecenes and other mold toxins cause necrosis like mustard agents destroying the outer skin layers allowing infective microorganisms and their toxins to penetrate underneath in combination weapons. These can be tested on animals prior to use. A tiny drop of concentrated mixed weapon is all that is required for mass effect.

The use of bullets, grenade shrapnel, knives, pens, umbrella points, darts, arrows, explosives, chemical weapons and so on have been described in the military literature as having been used at one time or another to assist delivery of biological agents.

Target areas that are especially vulnerable to this type of attack are those that expose human skin to the attack conditions. The bottoms of lakes, beaches and swimming pools for footpads, saunas, hot weather days in congested cities, inside of shoes (shoe stores), sunglasses, public showers, rest rooms (toilet seats), air dryers, etc. Protected military forces are vulnerable on hot days in areas or under conditions where they have to remove their protective gear. (Such as when they have been soaked in and blinded by paint).

3. Breathed into Airways or Lungs

Many weapons are automatically infective or injury causing if they enter the inhalation tract. Anthrax infects in almost 100% of cases when 5,000 spores are breathed in separately and are 5 microns in size or less so they can germinate in the lower lung tissues. Tularemia bacteria will infect in the same conditions with as few as 14 cells as will plague. Many other organisms will infect if the dosage is large enough to insure adequate germination locations. All will infect if they are designed to feed and grow while they are in the inhalation tract. These will produce toxins, detach many cells to new sites and be breathed in and out and thereby be communicable.

If the cells are protected by tiny shells that house them, they will continue to grow and live on tissues until expelled. They may be coughed up. If they are attached to particles that accumulate in the lungs such as asbestos, that clings to the lung tissues like velcro and cannot be digested by enzymes and phagocytes, the infection will never disappear. The use of asbestos and/or diatoms as tiny powders can greatly enhance organism cocktails. They might ordinarily never cause infection, but now can be lethal because of their protective house. The toxins they produce dissolve surrounding tissues making more food at each tiny dust speck site. The infection slowly grows, is beaten back, and grows again, never going away. These enhancements will be described in more detail later.

Delivery of organisms into the inhalation tract requires some knowledge of how air behaves and how dust and microorganisms are inhaled as well. This science has been well articulated in a book called "airborne microbes, 1967 by Cambridge University Press" and is recommended reading.

Air flow which carries microorganisms and the dust and oxygen we breathe is divided into 4 areas –

1. The skin of air in contact with a leaf, human skin, and other objects. This is about 1mm thick, is free of turbulence and motion of organisms through it are governed by rates of molecular diffusion.
2. The layer of turbulent air in contact with the surface of the earth which is about 30' thick. The upward and downward motions of very small particles (those used in weapons) is linear with height.
3. A frictional mixing boundary layer of air from 30' to almost 1 mile deep.

4. Above the 3rd layer, turbulence generally decreases with height and parcels of warm buoyant air lifts tiny particles aloft.

What this basically means is that storms and fronts moving through provide lift and carry fine particles aloft into these layers. The flow air distributes them based on velocity and turbulence as well as rising currents that provide lift. Barriers such as hills and mountains also provide lift for a portion of particles. When a flow of air is driven over a hillside, some of the particles flow downward on the backside of the hill. Most of the remaining particles are lifted into another layer much higher than the hill and are deposited over vast areas. If seeded from the air into the layers over one mile high, 5 micron size particles may drift across continents depending on the available wind.

People moving through a building provide enough turbulence at the 5 micron level to propel these particles throughout the interior of a building. In a test in the 1960's, the US military radio-labeled 5-micron and smaller spores and released them inside of a building on the first floor. Within 10 minutes they had spread throughout the building and were found in concentrations exceeding 1,000 spores per cubic foot on the fourth floor. Particles of 5-50 microns will settle at a speed of several cm per second in generally still air. Above 50 microns in diameter, the particles fall quickly and are only marginally effective to useless in this size as weapons unless there is considerable turbulence in the air or they break into smaller divisions later.

Particles of 1 –10 microns are small enough to become the nuclei of cloud droplets and are cleansed from the air during rainstorms. Of the smaller particles, up to 10% (one cell in size) of these may remain free in the atmosphere and settle over time.

The effect of 2mm/hr of rainfall on atmospheric particles in % airborne

<u>Time</u>	<u>4 micron diameter</u>	<u>30 micron diameter</u>
15 minutes	96%	60%
30 minutes	92%	36%
60 minutes	85%	12%
120 minutes	72%	1%

Another important factor in the distribution of particles which may serve as weapons is the number of them. Scale up is important because the number of particles which fall to earth over a given space in time is measurable based on a deposition coefficient and the wind velocity.

If the velocity is increased, the distance the particles travel and their ultimate height will be increased. The author used to apply dust herbicides into sewer lines and propel them into the sewers using a powerful 100 psi air compressor and hose. We also used a fine powder or 10-50 microns and larger. When we would spray at full strength in the sewer, we could produce plumes from the house trap exhausts on the roofs almost a mile away (for the finest dust particles).. The force of the compressor would also help break up the particles as they flowed through the line and collided with each other.

A compressed air tank or compressor can be used with different size particles of dust and hose length by the reader to experiment with this. Use wire mesh screens (sieves) to separate the dust sizes. Then practice blowing these out of an air hose at different pressures and different heights. You will see a visible cone of dust deposit downwind from the hose outlet. The size will change the wind velocity and force of the compressed air used. You will also notice that the dust thins out as you get farther away. If you can see the dust, you have millions of particles per square inch. When the dust becomes invisible, you still have thousands of particles per square inch. You only need a few particles per square inch with most weapons to produce a 100% kill zone. As long as it does not rain, the particles will be lifted by turbulence and breathed in along all areas of deposition.

A study in 1913 examined silica dust in lungs of miners. More than 70% of the dust was smaller than 1 micron and none of the particles were larger than 10.5 microns. The average life of a white miner at the rock face was 8 years, with most deaths resulting from silicosis.

The dosage received by a target is the total amount of organisms inhaled by the targets in the area. If the targets remain in the area breathing the same air, the dose increases continuously.

Other important factors regarding air dispersion of biological agents include –

- Bacteria and viruses (not spores) die over time, reducing dosage
- Most infections and related injuries and effects are dose related
- As particles dry, they break down into finer components and individual cells are released and float freely.
- As particles become damp, they collect together in masses, increasing particle sizes.
- When breathed in, particles that stay lodged in the respiratory tract become moistened and are accumulated on larger masses which are coughed up, blown out into kleenex or are retained.

- Particles are discharged when sneezing coughing and talking and this is how infections spread when the organisms are growing and increasing their cell numbers. A single sneeze usually generates about a million droplets of 100 microns and smaller.
- Fine dust alone causes illness and death (coal mines, stone quarry's)
- High humidity increases dust retention in targets
- Dust is the most effective and reliable carrier for airborne infective particles and toxins.
- 10-20% of dust that is deposited in the lungs reaches the lymphatic system
- The more hygroscopic the particle, the greater the retention in the lungs
- Sunlight (irradiation) kills bacteria and viruses
- Adding inositol to dust protects bacteria from radiation damage
- Red dyes of the alizarin type also protects against radiation damage
- The most effective means of avoiding dilution of dusts and maintain dosage is to disperse them indoors or in enclosures rather than the open air.
- Any organism can infect if the dose is large enough and there is any food to support its germination and growth

Dust that can be ground to fine size (or purchased) and used as carriers include –

Salt (also dispersed as part of vaporizer or humidifier droplet nuclei)

Limestone powder

Lime (Calcium Hydroxide)

Coal dust

Asbestos dust

Diatoms (diatomaceous earth, fullers earth)

Talcum powder

Clay

Baking soda

Sodium sulphate

Iron oxide

Fireplace ash

Dryer dust

Vacuum cleaner dust

Sugar

Flour

Aerosol liquids used in experimental work include

Water
Corn Oil
Soy Oil
Surfactants (Tween 80)
Mucus

Some of the oils and surfactants increased retention in the lungs and improved infection dosage by inhibiting the clearing mechanisms of the throat and lungs.

Aerosol generators include –

Vaporizers
Ultrasonic Misters
Humidifiers
Showers
Air compressors
Water Pumps and hose with atomizer heads
Lawn sprinklers
Paint guns
Car exhaust
Commercial grinders
Air jets (pellet erosion)
Aircraft (aerosol tanks-cropdusters)

Unconventional aerosol delivery includes

Gravel delivery trucks
Rail coal cars
Industry exhaust towers (especially air polluters)
Dust storms
Road traffic (tires)
Cigarettes (Tobacco smoke)
Poisoned pens

An inhalation infection using anthrax begins with the spores delivered as single cells so that their size permits all of them to reach the lung alveoli and germinate there. The anthrax cells are taken up into the lymphatic system in the lungs and conveyed to the lymph glands. Here they multiply and produce a haemorrhagic mediastinitis.

Workers in wool factories after epidemics were found to inhale 600-2,150 anthrax spores per 8 hour shift. 25-30% of these were 5 microns or smaller. In some plants, anthrax spores were found in the nose hairs of 15% of the male workers. None of these workers became ill. When monkeys were used in testing of the air, it was found that six of thirty seven monkeys were infected when their dosage reached a minimum of 5,000-6,000 spores all of which were 5 microns or smaller.

Plague infections occur and initiate broncho-pneumonia at 1 micron size. Inhalation of 10-12 micron particle sizes would lead to septicemia through invasion of the upper respiratory tract. It infects more readily in cold weather (winter). This may be in part due to the suppression of lung clearing mechanisms caused by extremely cold weather. The plague airborne droplets also survive longer in cold weather.

[A theoretical and interesting unconventional delivery vehicle is the poisoned pen. An ordinary pen that has a dried and encrusted microscopic pellet of dust in the end of every pen point. These can be handed out at airports in the target nations as free samples. Once the pen is clicked, the invisible infective dust cloud is released in the airport or on the plane and all current and future passengers and employees become infected in the closed environment. The source would be difficult to discover.]

4. Ingested (consumed) and enters the digestive tract

When organisms and toxins are consumed with food and drink, they are often destroyed by the stomach acids and bile salts. Many organisms make it through in numbers too small to infect. As the exposure grows, these organisms are able to infect by sheer weight of numbers.

Some organisms like anthrax, and toxins like botulinum generally survive the acids and salts and initiate fatal infection or intoxication. The oral route is secondary when dust is coughed up and swallowed that has been distributed as a weapon.

Attacking water supplies with large numbers of organisms (scale up) and providing survival and resistance mechanisms for chlorine will enhance the effort. Chlorine is the main means of water supply protection employed by cities. Using alkali to neutralize it and coatings to protect the bacteria and toxins are the most direct methods of enhancing the weapons. The delivery is accomplished by directly introducing the package into any part of the water supply from the river entrance or well to the filtering system to the towers (see Volume 2-bio weapons). Ingestion can also occur at swimming pools and lakes and these are generally easy to deliver biological agents into.

Delivery into food supplies is accomplished at any part of the food chain. The grains, the processing plants, the grocers and the food service centers can all be targeted as part of the plan.

Conventional delivery includes aerosol delivery onto the crops, and insides of plants, stores and restaurants. The aerosols spread through the location onto all the handling personnel, packaging, and equipment in the facility. Contaminated meat and other food products is the result. The larger the degree of saturation, the more effective the attack. Weapons design must allow for the delivery to the insides of these locations and for the spread of the organisms.

5. Eye injury

The eyes are sensitive to many toxins and a few organisms. Blind soldiers become a burden to the defender and this type of attack, if successful, will be more effective than killing the targets. Any place that the organism or toxin can be delivered effectively is a suitable target for delivery. This includes showers, swimming pools, lakes, and even light showers which would disguise an attack.

The toxin should cause permanent injury and blindness to be of maximum effect. It should be easily distributed on dust or as an aerosol.

Chapter 7

Weapons Testing, Delivery and Field Effects

(or 1,001 ways to torture and kill lawyers – The author still has a sense of humor)

The first chapters of volumes 5 and 6A describe in detail, the animal testing methods used for EPA and Biological Warfare scientific testing. In the field, these tests are impractical for ordinary soldiers. This will serve as a guide for effective field testing of the weapons in a variety of settings.

In the early days of working gun shows, some of the agents liked to throw out that “they” the police can follow you around, stop you for anything, search your car, frame you, etc. They evidently figured that if they had several hundred of their agents continuously tell you this over the course of several weeks or months they could induce above normal paranoia. In my case, my off the cuff answer to some of them were that if this did happen, when I got out, all I would have to do is travel in front of the targeted police vehicle (the framer or dirty cop), release mustard agent as he followed me and then leave. In a few hours he would show up at a hospital and his dirty days would be over.

[In my Volume 5 I described the textbook way of producing mustard but the Wal-Mart method will also produce low yields. You mix pure alcohol with ammonia. This takes time if the ammonia is a liquid and eventually the liquid changes color and forms an alcohol amine. If the ammonia is a gas, it can be bubbled in and reacted much faster. This mix is then reacted with chlorine (3 parts to one part). This is done 3 times with each successive mix producing a more damaging form of the mustard agent. All three can be mixed simultaneously to form a noxious mixture that contains traces of nitrogen mustard and chloramines.]

It would qualify as a series of field experiments to test the relative mixes on animals (or lawyers) to see how effective each method was. Testing on humans can be done using 3rd party conscripts to deliver the package. The tests can be evaluated by listening to the news reports and gossip. The military simply orders a selected group into test areas when conducting research, but this is impractical unless you are in charge of your own governmental institution.

Typically, a test for biological weapons in unconventional warfare (especially MEWS) requires the delivery into a sample target population. A sample testing program could be set up as follows –

1. Take soil samples and grow to recover X toxins or organisms
2. These organisms are then grown in a variety of packages and each is delivered into closed environments to test their effects. The most effective formulas are adopted and the less effective ones are weeded out.
3. Combinations can then be tried in trial and error experiments.

4. Effective combinations will be reported in the news media and ineffective ones will remain unknown.
5. A library of effective organisms and toxins is eventually built with the most effective delivery and growth formulas.

Another method is to simply grow the soil sample randomly without preparing pure cultures. Experimenting on different soils, food formulas and delivery methods will eventually yield useful combinations. These combinations may be harder to defend against once they are identified as effective because they have random mixed components.

Important effects that need to be known are –

1. How large was the weapon
2. How large an area did it effect
3. How many people did it effect
4. What were the nature of the injuries and deaths.
5. Was the environment made uninhabitable
6. What countermeasures is the defending government or army recommending or taking
7. How was it delivered
8. Did the attack produce fear, anger, terror, and repression

Large scale tests can be conducted at random against livestock under varying conditions and the effects observed through the media. This is a low risk way of learning how to do this type of delivery covertly without massive defensive measures being undertaken while still in the development stages.

Weapons Delivery

Weapons delivery ideas have already been described. The methods will be covered again here in the live delivery aspect.

MEWS are self growing and delivering weapons. The main features are a food source that allows the seed organisms to grow from the inside out. The food self dries and can be part of a desiccating mix that dries into a fine dust or powder and self distributes. The form can be Jell-O which melts at 78 F, or a cake which sticks together and then crumbles and breaks up as it dries out. A ziploc baggie containing the food and which breaks from damage such as cars driving over it and releasing its contents can be used. Conversely, the food contents could be squeezed out like a tube of toothpaste from a hole in the bottom of a vehicle. Traffic would disseminate, dilute and disperse it.

The MEWS can be microscopic in their release size so that they are effectively invisible. As they dry, the powder is released gradually from the outer layer so that it blends in with background dust. They can be attached near or on vehicle engines and exhausts where the heat helps dry them quickly. They usually require massive amounts to be effective if deployed in an open air environment. When deployed inside, they are usually deposited in ventilation systems which help dry and distribute them.

Booby Traps can take the form of any contaminated object or location that a target may come into contact with. As with mechanical booby traps, anyone may be injured or killed, only these are invisible and the source of the lethal attack may remain secret. The trap self dilutes and becomes ineffective making it a mystery, or it continues to kill until it is discovered and is cleaned up. The object or location is supersaturated with the organism or toxins. Sometimes, the agents are sealed in an environment such as a storage cabinet, or in a cushion, and are released when disturbed (as during a search of the premises). The resulting injuries may not even be associated with the search for some time, especially if the effects are delayed and you are incarcerated.

Property traps are designed to render the target area uninhabitable. It will infect and injure or kill any unprotected individual who enters the area. It is effective when placed in the path of an enemy or used to render factories and businesses or military bases uninhabitable. This usually requires significant scale up and organisms or toxins with long life spans (like anthrax).

Booby Traps function as land mines when used in this context. In WW1, mustard agent was poured into small holes lined with paraffin wax and covered. When enemy troops would pass over the holes, the crust would break and the mustard would be released into the air. Dust weapons function much the same way and create well disguised plumes when disturbed and released from depressions and pot-holes on roadways and footpaths. Mechanical devices could be used such as footpad pumps which spray the aerosol from a nozzle into the path when depressed by a foot or vehicle tire.

Large scale use of these weapons can create no-mans lands where many or most travelers become ill or die. It can contaminate vehicles making them hazards to work around or wash off (shower effect aerosols). They are generally used in paths of the enemy and in weak or undefended approaches. They can also be used in scorched earth policies to prevent the enemies use of areas he is over-running (at great cost).

Peumatic delivery is accomplished by sending the package into a desired area using air to propel it. When high velocity air is used to propel it, aerosols of many particle sizes are generated. Powerful air systems can blow the material hundreds of feet into the air and this can be carried to very long ranges downwind. Aerosol generators such as ultrasonic misters and heating humidifiers will generate aerosols from broths and liquid suspensions. These can be gradually released via hose assemblies from moving vehicles. The target can be a following vehicle headed to enemy headquarters. If the aerosol contains an sticky quality a large part of the material may be carried into the enemy location on the vehicle where it slowly diffuses into the air as it dries.

Package & Postal Delivery This is achieved by using the contents or package exterior to deliver small amounts of the weapon. The package can be supersaturated with a layer of sticky or dried agent which effects all who handle it, or only the ones who handle the contents. An entire area or zip code can be supersaturated with dust which jumps from one envelope to the other, theoretically reaching all offices of a particular target or institution.

Location vectors can be used. Public restrooms can be saturated with toilet paper, towels, dryers, toilet seats and even the sinks being saturated with the weapon. Parking lots can be saturated with the users carrying the agents into work with them as they walk through the biological forest. This is particularly interesting. How much parking lot saturation is required to effect the meat output of a food processing plant and injure its customers. How much is required to affect many customers. How much is required to effect all meat processors in a target country. (this becomes an interesting exercise in the upcoming chapter on tactics).

Sewer & Rod delivery is effective for overcoming physical barriers and remotely delivering chemicals, explosives and biologicals. Large areas could be attacked through the sewer system with the material pumped into the homes via the underground pipes. By using drills almost any building can be penetrated and saturated without awareness until the outbreak occurs. Adjacent rooms can be attacked in hotels, offices and so on using tiny drill bits and microscopic size hoses and aerosols. Plugs or glue can be placed back inside to hide the point of entry. Rod and hose delivery is effective in releasing the material high in the air, over walls and fences and into upper story windows. It also permits a wide range of area attack when released at height.

Disguised delivery is used in covert operations in which the delivery mechanisms appear as something ordinary. The ball point pen that expels a tiny dust plume when “clicked” is an example. An ultrasonic mister disguised as a water jug is another. Broths disguised in soup cans or jars, as well as spray bottles also can be disguised as themselves. Tiny spray bottles used to clean glasses can be used to spray a target area and be completely innocuous.

Paint equipment (even paintball) can be used to disguise the true nature of the attack. The attack can be delivered to any particular object such as clothing in a store, sunglasses at a filling station, toys, cups and anything else that is handled and carried.

Military ordnance is usually delivered using small explosions to release the contents and create the necessary aerosols. Military bases and armies are generally the primary targets although many governments engaged in war consider the destruction of enemy cities, populations centers, and economic and industrial potential to be fair targets. The modern military can use missiles to deliver warheads and aircraft to seed vast areas of upwind jet streams with aerosols sprayed from huge tanks. In the future, battles may even include delivering agents by the ton using superconductor artillery (cannon that use superconductors to levitate one ton shells and fire them at accelerations necessary for travel of up to 50 miles or more).

Drive By delivery is accomplished by using the vehicle exhaust as a mixer and propellant for aerosols. Sprays can be emitted underneath, on the side or above the vehicle as long as it does not attract attention. Semi solids and solids can be dropped through the bottom of the floorboard (via holes) to scatter onto the road surfaces and be dispersed from there.

Firearms using hollow bullets can be used to fire into or near a solid target at a long distance and have its contents discharged into the surrounding area.

3rd Party objects such as lampposts (when the lights come on), vehicles when they are started (out the tailpipe), bikes as they are pedaled, and electrical outlets when someone plugs into them can all be used to hide and initiate covert attacks. A self drying and distributing paste on the exhaust of an enemy vehicle can be used to release the agents into enemy camps, parking garages, checkpoints, etc.

Public restaraunts can be attacked via the restroom towels, dryer, toilet paper, toilet seat, sprays released on the plastic covers over foods, on the foods, in the salt shakers and ketchup bottles, on the seats, in the parking lots or on the vehicles in the lots. (In other words-everything is a target)

Viruses have not been covered thoroughly yet but an interesting method of transporting and delivering a virus from outside the target country to inside, is to infect passengers boarding a plane to that country. You then recover the specimens from one of them after they arrive and before they become known to the host government.

Chapter 8

Weapon Enhancements

The Multiplier Effect Weapons (MEWS) are enhancements in themselves. When organisms are fed during their release, they are in the act of growing. Spores have already germinated and are growing. In the case of anthrax spores, around 5,000 are required to initiate infection in humans or primates. If the spores are already germinated and growing inside the target, the infection has already begun. It then becomes a matter of the growth and toxin to turn surrounding tissues into food.

This is where the concept of combination cocktails comes in. Anthrax prefers the alveoli tissues and will generally not grow in the upper lungs and respiratory tract. Other organisms can grow there if fed and can produce toxins turning the tissues into food for many bacteria. In gas gangrene infections, it usually requires a series of Clostridium species to each produce toxins which manufacture enzymes that dissolve and breaks down the surrounding tissues. This new mass of food supports growth of most or all the remaining bacteria, with each one producing more toxins in turn. Some produce substances which will interfere with phagocytes so that the body cannot fight back. Others penetrate into the bloodstream and cause septicemia. The multiple assaults on the infection site and the body eventually overwhelm it and cause serious injuries and death where only one of the organisms by themselves may have easily been defeated by the bodies defenses.

Pungi sticks in Vietnam were dipped into ox manure and then used in booby traps. When a soldier stepped into the trap, the stick would cut into the foot and deposit tiny amounts of manure and bacteria all along the stab line. The blood flow is cut off, clots form in the area, and the bacteria can now start to grow. This is nature's design and an effective one. (At one time, the author considered writing a book titled "1,000 ways to achieve 100% mortality rates using pungi sticks and other piercing weapons". This book would have focused on the enhancements described in this chapter. Professionally prepared designs would have caused huge increases in serious injuries and deaths in the jungles of Vietnam.)

The best enhancements are the feeding of the organisms during the attack phase and then the use of effective combinations of toxins and organisms that work well together in initiating and expanding infections.

Offshoots of these two large branches of weapons enhancements includes –

1. The use of partial food sources. Adding certain proteins to Anthrax will increase germination rates in the presence of other tissues. They do not feed on the proteins alone but begin to when other food requirements are met. The addition of specific vitamins, minerals, and energy or proteins will not initiate growth but will help meet food requirements that are lacking in certain tissues. Human skin does not provide food for most bacteria.

When certain types of food are added, bacteria can make enzymes that break down skin and provide the rest of the food needed for growth and infection. The test described in an earlier chapter in which the author fed a bacteria that he grew from a cheek swab is a good illustration. The bacteria lived on his skin (inside his cheek) and did not grow because food was lacking and skin would not provide nutrients. Once growth began anyway, the bacteria quickly grew and penetrated the outer skin tissues causing multiple infections.

2. The addition of toxins will of course cause the mix to dissolve the surrounding tissues and provide immediate food. In all infections, the bacteria produce toxins (many function as enzymes) which break the surrounding tissues into small pockets of food that the bacteria consume. If you have already grown the bacteria on food and the toxin has been produced, it will permeate into the tissues as it comes in contact with them. During an attack, as the dust lands on skin, or is breathed in and contacts moist lung and throat tissues, the toxin diffuses into the surrounding tissue and turns it into food immediately which helps initiate numerous infections simultaneously. Toxin can also be pre-grown and concentrated for use with the dust and aerosol weapons.

MEWS use a shotgun approach of whatever bacteria are present in the sample. There can be thousands of species present in tiny amounts. Only one is required to be successful and begin the entire process. All the rest can start growing when the conditions are right and create new problems for the bodies defenses. That is why random weapons may work quite well when properly designed.

Those organisms that produce disease and toxins are the best ones to use in the field. The following chart describes the toxins produced by bacteria, plants and molds that are useful in producing enhanced biological agents.

Bacteria

Anthrax A single toxin produces three factors which work together to allow the toxin to enter the surrounding cells, make food from them and then effect the central nervous system resulting in flu-like symptoms which soon progress to death

Clostridium Botulinum
Botulinum toxin is the most potent toxin known and is protected from stomach acid by its proteins. It is a neuro-toxin which absorbs into the bloodstream and causes paralysis like nerve gas, which leads to suffocation

Clostridium tetani

Tetanus toxin is a neurotoxin which destroys red blood cells and acts on the nervous system producing a strychnine like paralysis which ends in death by suffocation, even in tiny doses

Clostridium perfringens

Alpha toxin is an enzyme (called lecithinase) that breaks apart protein complexes and other components (in the presence of calcium chloride). This destroys surrounding living tissues (causing necrosis) turning them into food. It is similar to some deadly snake venoms and is 100% fatal if the infection is not treated with antibiotics or amputated

Beta toxin is a hyaluronidase enzyme which is also lethal and necrotizing. It changes blood pressure and may cause heart failure, and it damages intestinal villi causing necrosis of the gut wall thereby aiding further infection there

Epsilon toxin is activated by proteolytic enzymes and is necrotizing and lethal. It systematically destroys the kidneys and increases vascular permeability, especially of the intestinal wall allowing more toxin and bacteria absorption in ingestion weapons. It accumulates in many tissues, especially brain tissues and necrotizes these tissues.

Iota toxin increases capillary permeability drastically and is activated by proteolytic enzymes. It also has a lethal necrotizing effect

Theta toxin attacks red blood cells, is inactivated by oxygen and reactivated by reducing agents like thioacetic acid and cysteine. It causes extraordinary lung edema when injected into rats

Gamma, Delta and Eta Toxins are also produced by *C. perfringens* and considered minor but lethal

Kappa toxin is a collagenase enzyme that attacks hide powder, gelatin and collagen which softens muscle connective tissues in gas gangrene. It also disintegrates muscle cells and mammal tendons to discreet cell masses by dissolving the collagen.

Lambda toxin is a proteinase and gelatinase that decomposes hide powder but not collagen. It destroys alpha toxin if stored together

Mu toxin is a hyaluronidase which dissolves connective tissues, vitreous bodies, and umbilical cords of humans and the byproduct sugars are fermented by *C. perfringens*. It drastically increases the diffusion of all toxins into the surrounding tissues which aids and accelerates infection spread

Nu toxin is a deoxyribonuclease which is activated by trypsin. It increases small blood vessel permeability in skin tissues and larger doses produce necrosis. It destroys connective tissues and nuclei of muscle cells.

Clostridium Novyi

Alpha toxin is necrotizing and lethal. It increases capillary permeability and causes a gelatinous edema in muscle tissue and is 100% fatal without treatment even in the smallest of infections

Gamma toxin is a lecithinase enzyme that destroys blood cells

Beta toxin is also a lecithinase enzyme that is necrotizing and lethal and attacks erythrocytes. It is produced in large volume

Epsilon toxin acts as a lipase enzyme

Theta toxin is also an enzyme

Clostridium difficile

Alpha toxin which is lethal and necrotizing

Beta toxin which attacks azocall and casein and is also a collagenase that disrupts tissues in gas gangrene

Delta toxin is a proeolytic enzyme called an elastase which attacks azocall and gelatin

Epsilon toxin is oxygen sensitive and attacks blood cells

Gamma toxin is a proteinase activated by reducing agents and attacks azocall, gelatin and casein.

Other soluble toxic effects from these include a peptidase, a gelatinases and 9 separate proteinases!

Clostridium sordellii

Produces a lecithinase toxin that causes lysis of red blood cells

Corynebacterium diphtheria

Diphtheria toxin rapidly diffuses into surrounding tissues, mucus membranes and bloodstream causing necrosis and is absorbed into the heart muscles, nerve cells, kidneys, liver and adrenal glands. Very tiny amounts destroys these tissues. Part of the toxin acts on the receptors of cell walls causing them to open up and allow the rest of the toxin in. The toxin is considered hemorrhagic, necrotic, and lethal. It must have a tiny amount of free iron to act in tissues which is why it does not produce toxin in most human tissues (mainly in the throat).. Trypsin activates the toxin. Causes permanent paralysis and/or death in untreated cases. It is unstable in air and light. It converts spontaneously to toxoid over several weeks.

Staphylococci

Produces a coagulase enzyme that causes blood to clot in its vicinity, thereby cutting off blood flow and preventing antibodies and white blood cells from reaching the infection site. It also tends to localize infections into abscesses which prevent further invasion (unless other organisms are present and continue the infection)

Leucocidin destroys all human leucocytes (white blood cells) and is dermonecrotic. It also attacks macrophages

Hemolysins are a group of soluble toxins that are also produced that attack red blood cells, platelets, fibroblasts and leukocytes. They also are neurotoxic, and lethal in quantity causing cell membrane damage that damages the circulatory and nervous systems. The *alpha hemolysin* of this group is the most wide ranging, versatile and destructive to the most tissues, toxin that is known. Metal ions enhance the toxins activity and vitamins and CO₂ (as air or selzer) aid in its production

Enterotoxins are also produced which cause projectile vomiting and diarrhea when ingested

Exfoliants cause “scalded skin syndrome” which begins as an intense, tender erythema and spreads. The skin is loosened and separates or peels away exposing sensitive tissues underneath. It acts on the connective substances between the skin cell layers and is stopped in a few days by the bodies immune response

Pyogenic toxins attack lymphocytes and enhances the effects of some endotoxins resulting in lethal shock and myocardial and liver damage

Hyaluronidase is also produced and destroys most human connective tissues

Several other enzymes are produced and aid staph in colonizing our skin and causing surface boils

Streptococcus Produce hemolysins that attack and destroy red blood cells in many ways that enable strep to infect every organ and tissue of the body
Streptolysin O is inactivated by oxygen which can be reversed by cysteine or similar reducing agents. It is very toxic to red and white blood cells and myocardial cells as well as most other tissues and organs when combined with other toxins in a strep infection. 1 mg will yield about 3,000 lethal doses by cardiac arrest in the bloodstream. On skin, it produces a yellow necrosis and destroys skeletal muscle
Streptolysin S is an oxygen stable, highly soluble toxin that is extracted from strep cells with egg albumin. It destroys red and white blood cells and bacterial protoplasts. Numerous other toxins are produced with a wide range of effects, including destroying blood clots (good on piercing injuries), DNA and RNA attackers, and increasing blood-brain barrier permeability.

Pneumococci *Capsular* material which aids in invasion of the organism and appears to neutralize antibodies to pneumococci.
Pneumolysin O, similar to streptolysin O (above) is oxygen sensitive, lethal, dermonecrotic and dermatotoxic, cholesterol sensitive and water soluble.
Neuraminidase is a glycoside enzyme that breaks down mucus into food for bacteria
Leucocidin is also produced and is necrotizing

E Coli	<p><i>Neurotoxins from most E-coli that produce paralysis, apathy, anorexia, hypothermia, early and severe diarrhea, pronounced weakness, and sometimes coma and death. Small amounts produce a wide range of neurological effects</i></p> <p><i>Endotoxins produced by some species, which cause distress progressing from mild diarrhea to ataxia and death depending on the amount and route of administration. In humans, they produce fever, necrosis, inhibit food uptake in the intestine, inhibit the migration of macrophages, decrease the number of circulating platelets which induces damaging host reactions. The endotoxins are formed on the cell walls of the bacteria producing them making their cell mass toxic. There are thousands of different kinds of endotoxins produced in different serotypes of the bacteria that produce them and each one is antigenically unique. Exposure to it creates resistance to subsequent infections</i></p>
Salmonella	<p><i>Endotoxins like the E-coli (above) which causes fever and shock</i></p> <p><i>Enterotoxins like that of cholera which induces fluid accumulation</i></p> <p><i>Neurotoxin like that of E-coli</i></p>
Shigella	<p><i>Endotoxins like E-coli that causes dysentary</i></p> <p><i>Exotoxin that is neurotoxic and induces paralysis and death</i></p>
Klebsiella	<i>Endotoxins that require free iron and cause necrosis of lung parenchyma and disintegration of the alveolar walls</i>
Proteus	<i>Endotoxins like those listed above, especially in infants</i>
Yersinia (Plague)	<p><i>Endotoxin similar to that of the species above which are released after cell death and account for the toxicity to humans</i></p> <p><i>Murine toxins which act on the peripheral vascular system producing edema, necrosis and liver with irreversible toxic and lethal effects (These are antagonistic with cholera toxin)</i></p>
Tularemia	<p><i>Endotoxin causing headache, fever and pain</i></p> <p><i>Heat sensitive toxin – this organism is an intracellular parasite in which it invades and grows on or in various cells</i></p>

Vibrio Cholerae	<p><i>Endotoxins</i> which are released when the cholera cells die and lyse (break apart), like the other above</p> <p><i>Exotoxin</i> which binds to receptors of eucaryotic cells and carries toxin inside the cell.</p> <p><i>Hemolysins</i> which are cytotoxic, cardiotoxic and lethal</p> <p><i>Other toxins</i> which irritate the intestinal wall and damage the mucosa causing diarrhea</p>
Listeria	<p>Produces substances which are mortality enhancing, toxic/cardiotoxic materials, and a hemolysin which aids in invasiveness.</p>

Plants

Plant extracts can be used directly as weapons themselves (as in the case of Ricin), or as potent enhancements to infective type ordnance. About 20% of all plants produce some poisonous parts and can be used when these are known and extracted. For professional weapons, the best plants must be identified and extracted. The toxin groups useful in ordnance (from V-6B) are –

Alkaloids which account for most of the toxins in all plant species. These are mostly water insoluble and can be extracted using alcohol or other organic solvents. This extract is filtered or poured off with the liquid containing the toxin. This is dried and then mixed in water to solubilize and remove the water soluble fraction leaving behind a solid containing the toxic concentrate. Caffeine and nicotine are some common alkaloids and the yellow nicotine liquid is what you extracted in the training program from cigarettes.

Ragwort and groundsel species produce alkaloids that cause liver damage and cancer when ingested.

Hemlock contains a toxin which acts like nerve agents and has caused toxic symptoms when inhaled accidentally on dust particles. It is absorbed from the digestive tract and is more lethal when injected into tissues or the bloodstream.

Green potatoes, tomatoes and nightshade also contain nerve acting agents which are slowly absorbed from the intestinal tract but are deadly in tiny amounts when injected. The toxin is concentrated in the green sprouts and green skins of the plants and can be mass produced from these plant parts.

Glycosides and glucosides include cyanide compounds produced by chokecherries, apple seeds, apricot seeds and bitter almonds. Cyanide can be absorbed through the skin and by inhalation as well as ingestion.

Oxalates are extracted from rhubarb leaves and diffenbachia. When mixed into a dust with a source of moisture it burns and injures skin tissue, especially those in the throat and mouth. These sites are vulnerable to infection.

Castor Beans (Ricin) and Rosary Peas (Abrin) are among the deadliest toxins known and kill in invisible amounts on specks of dust.

Extracts of sneezeweed, rubberweed and bitterweeds cause extreme irritation, vomiting and subsequent injuries when used alone. In combination, these extracts can induce inhalation pneumonia with stomach contents being inhaled during vomiting (aspirating). This creates multiple infection sites from the solid and liquid masses reaching the lung tissues.

Poison Oak, Ivy and Sumac all produce dermatitis causing substances which cause pronounce itching in tiny amounts.. These are self inoculation aids for dermal weapons and can be used as part of dust weapons, in aerosols or as part of a liquid paste attached to mail delivered ordnance. [Example-sending a dollar saturated with the ordnance to the target for answering a fake questionnaire. No one throws money away and soon the compound that is handled from the dollar is itched into the skin of the target and all others who contact it. He may even spend it long before he is hospitalized thereby eliminating the direct evidence. Others may be infected but dilution from handling quickly mitigates this effect.] The sap of the plants contains the compounds in concentration.

Molds

Aflatoxin is produced by Asperigillus species growing on grain (widespread in almost all corn). It can be mass produced by simply growing boiled ground corn on wet paper towels with a sample of the spores mixed in. The toxin can be seen with a fluorescent light and is concentrated (extracted) by mixing into water with 1% calcium chloride (winter de-icer), 1% Sodium bicarbonate or 80% isopropanol and water.

The aflatoxin is electrostatic and attaches to dust particles easily. It is highly toxic by ingestion and moderately toxic by inhalation and causes cancer in very tiny doses. It also has strong immunosuppressive properties which suppress phagocytosis. This property alone enhances virtually every type of bacterial attack formula, and has been tested with considerable effect in animals in combination with a variety of diseases..

Yellow Rain (T-2, trichothecene toxins) are found primarily in Canadian wheat and barley in this hemisphere, as well as the rice fields of California. The toxins are produced at cold temperatures on the grains (see V-6C) and fluoresce blue.

They are extracted with alcohol and absorb onto charcoal or silica dust or gel when the alcohol is mixed into these. All of the T-2 related toxins cause skin injury like mustard gas within 12-24 hours. Outer skin shows necrosis while lung and throat linings may hemorrhage. If ingested, they cause vomiting, angina, emesis and many other symptoms and also cause loss of white blood cells and depletion of lymphoid tissues. These toxins also have an accumulative debilitating effect on test animals. This alone makes it a potent enhancement in combination weapons.

When both Aflatoxin and T-2 type toxins were tested together, they were four times as potent as either administered by themselves.

Mold damaged sweet potatoes produce a toxin that is highly fatal in lungs of animals exposed to it. It damages the alveolar tissues causing cell multiplication which cuts off gas exchange and would promote growth of Clostridium species.

Other Enhancements

1. Animal and insect venoms such as rattlesnake and tarantula poisons. These can cause damage to tissues as well as effects on the nervous system.
2. Encapsulation, which can include professionally produced plastics, or homemade cakes which are consumed from the outside by other organisms and released on exposure to air or drying and crumbling. It can include toothpaste type gels, and gelatin, agar or other semi-solids. These can be liberated on contact with stomach acid, food, saliva, etc. They can also protect the package from the sun's rays, rain, pH etc.
3. Clotting factors which clot blood in the vicinity providing food and stopping immune responses from reaching the infection site.
4. Carriers which will disperse as tiny lifeboats (or as the equivalent of tanks or APC's for the military minded) for the mix. These include silica dust, grain dust, diatoms, limestone powder, etc.
5. Irritants. The best are those that induce inflammation or other reactions such as itching powders.

6. Injurants which directly damage or dissolve protective tissues exposing underlying tissues and/or turning the contacted tissues into food. These include acids and alkali's. Calcium chloride (de-icer salt) is used in injections to cause 100% fatal gas gangrene in lab tests in mice. Using it as a powder or dissolved in a liquid mix and then dried into the carrier will allow its use as part of a weapon on every speck of dust.
7. Germinating and toxin forming aids. These include specific or concentrated proteins, iron dextran, trypsin and any others listed with the organism of choice.
8. CO₂. This is an important category by itself. Adding CO₂ by using carbonated water (and a small amount of baking soda to balance the pH will greatly enhance almost any weapon) by elevating the level of carbon in the atmosphere or surroundings. There are thousands of organisms that do not produce toxins or harm human beings in the oxygen atmosphere we breathe. Just a slight rise in CO₂ concentrations such as those experienced in high smog areas will cause bacteria to begin producing toxins and growing in human lungs where they would not otherwise. This is why so many people become ill in high smog areas and near fossil fuel burning plants. This can artificially be created by adding concentrations of CO₂ to the dust and aerosol weapons which acts as a starter culture for bacteria and toxin production. By itself, as a breathed in aerosol, it would cause increases in lung disease. As part of designed weapons, it can increase infection and casualty rates considerably.
9. Diffusion aids such as DMSO and various toxins already listed. These help aid toxins and bacteria in penetrating tissues to areas that they can harm and infect.
10. Incendiaries (napalm) or explosives have already been used to inject shrapnel with toxins and biological agents and to cause dermal injuries for infection sites. They obviously cause large scale injuries and can enhance the infection rates. [Imagine the Oklahoma city bombing with a massive cloud of infective agents dispersed with it. All the agents and government personnel drawn in to aid in the disaster would become secondary targets-more on this in the next chapter].
11. Surfactants which help spread out the organisms and particles as single entities (for Anthrax infections) or can cluster them together for concentrated effects (direct toxins).

12. Adhesives or molecular paste which helps bind particles to moist tissues such as the lung instead of dry skin or clothes. Conversely, they can be used to attach to skin over other solids where they can use continuous contact to irritate and cannot be easily washed away or coughed up.

13. Nerve agents such as those produced by the military. [Anyone can produce poor-mans nerve agents by taking pesticides (with the term “organophosphate” in the label ingredients and modify it. Making it into a much deadlier form can be done by –
 - a. mixing organophosphates together and exposing them to ultraviolet light (or sunlight) for two weeks or more.
 - b. Heating the materials or boiling them in a pressure cooker at 100 C for 5 hours
 - c. Mixing hydrofluoric acid or ammonium bi-sulfate to the organophosphate for several days or weeks (letting it stand.) The toxic compounds separate into layers.
 - d. Mixing in concentrated nitric acid

Any of these will produce much deadlier forms of the compound.

Several weapons designs considerations include –

Mixing the combinations together as a single homogenous mix

Mixing mini mixes of different dusts and then mixing each package together so that different kinds of dust combinations may germinate and grow independently with each having a different type of effect. One may work where another may not.

Mixing a shotgun batch as a cascade, or in layers, so that each infection may progress differently. This helps disguise the nature of the attack and makes it harder to treat because a different bacteria may be encountered at each site.

Overall design considerations include –

<u>Dermal</u>	Physical damage such as insect bites, scratches, thorns, shrapnel, poison ivy and other irritants, and mechanical (pungi sticks)
	Chemical damage including contact toxins, chemical injurants, and other substances that destroy or injure tissues

Opens pores and permits direct absorption or diffusion into the tissues

Ingestion

Survives the stomach acids, grows in the intestinal tract, is absorbed from the intestinal tract or otherwise affects it, and can be eaten, drank, or inhaled and coughed up and swallowed.

Inhalation

Acts like velcro and stays in respiratory tract in sufficient numbers
Is immune to phagocytosis

Is a toxin or toxin producer

Is fed or can use the lung tissues it contacts directly as food

It spreads to surrounding tissues and organs of the body

Combination which are incorporated into weapons should

1. Provide food for the organisms directly or indirectly
2. Be able to digest local tissues
3. Be able to infect surrounding tissues and organs and spread through the body

Consider a military attack on a beach. Your first troops in are the recon who penetrate and gain a foothold without setting off alarms and causing a defensive reaction. These are the general packages that reach a potential infection site. Next comes the marines for the major beach assault. These would be the toxins, enzymes, chemicals and organisms that turn the surroundings into food and start the main infectious organisms multiplying. By now, the defenses are alerted and begin to counterattack. Your beachhead is holding and now comes the main army troops, a mix of specialized bacteria that each attack in an opportune order. This is much like the use of tanks, artillery, infantry, sappers and so on. Each one doing what it does best in the attack.

Examples

Anthrax

A potent complex combination anthrax weapon can be theorized as follows –

1. Anthrax spores ready to mix in the cake, Jell-O, aerosol, etc
2. Dermal irritant is added (poison ivy sap, itching powder) to irritate surrounding tissues
3. Seltzer water and a small amount of baking soda is used as the liquid to provide CO2 for spore formation and aid in toxin production

4. Calcium chloride is added to injure surrounding tissues
5. The anthrax is made antibiotic resistant by growing it on plates nearer and nearer to the defense antibiotics on each new plate [The FDA has approved “Cipro” or ciprofloxacin for use in anthrax attacks. The spores should be resistant to this popular drug manufactured by Bayer corp, or other drugs used in the target nations.]
6. Diatoms or silica dust is added to the mix to provide a miniature armored personnel carrier for the spores. Ground alfalfa or limestone may also be used
7. Staph, Strep, and a mix of Clostridium is added to provide combination 1-2 punches against the bodies defenses
8. A small amount of moldy grain extract is added (that fluoresces blue) to aid in immunosuppression on the site
9. A food is added to soak up liquid (if the weapon is to be a powder) to provide –

Germinating proteins

Growth

Toxin production

10. Surfactant added to disperse the mix as single particles or spores

Many other enhancements and combinations are possible. With anthrax alone, the possibilities probably number in the thousands if not millions with some imagination. The above mix could be plasticized for use as a delay release weapon, a stored weapon, a transmitted to arm weapon, or a direct attack weapon. It could be designed as a cluster particle in which clusters would be breathed in, and as they are captured in nose hairs, they would release single cells while growing which infect the deeper lung tissues and be breathed out to infect others close to the carrier. This would make it mechanically communicable.

It is clear that a huge range of possible bacteria and mold weapons could exist. Moist grain could be used to initiate mold infections in lungs that would be enhanced by bacteria. Design combinations for each type of organism runs into thousands and there are thousands of useful organisms. When modified organisms are eventually included into the mix, the potential weapons will number in the billions.

Basic, homemade weapons can be produced from –

Manure, soil, sewage, hospital dust and other samples
Specially purified cultures

Toxins (Prepared in advance or grown in the weapon)
Enhancements
Chemicals
Foods
Coatings and carriers

Organisms can also be ordered from the ATCC as long as are not considered dangerous. Many of these produce useful enzymes that can turn body tissues into food but will not infect themselves

Organisms can be modified by many techniques including mutation and genetic engineering to create vast new libraries of potent weapons.

This chapter is intended to acquaint the reader with what is possible. It will be up to the scientists of the future (or trial and error warfare) to describe and catalogue the most promising of these possible combinations for use in the wars of the future.

Chapter 9

Tactics

“In warfare, tactics are any methods of fighting that you use against an enemy.”

The author has separated the science of tactics from strategy. Strategy requires combining the political goals with a plan to achieving these goals through the use of force. An enemy on which you use force may be expected to respond with the use of force and war is the result. To produce achievable goals in war, many other factors come into play. These include the side that citizens take, what direction do neutral by-standers take in supporting or opposing your enemies, what is their morale, what will opposing leaders do, and so on. The list is quite long and political in nature and requires the application of political and revolutionary sciences as well as military sciences to be successful (unless you plan on killing everyone else)

The science of tactics has to do with the choice of attacking or defending a specific target or targets. The means of conducting these types of operations are military in nature and many parts of the science have already been described. There are additional concepts that can be scientifically devised and described which include -

The Goal

Every operation has a military goal. In terms of the use of biological weapons most of these goals would fall into one of the following categories –

1. Deprive the enemy the use of land, equipment, resources, buildings, roads and any other fixed possession.
2. Terrorize an enemy. Frighten him into confusion, paralysis, division of effort and spirit. Destroy his confidence in his ability to control, govern and protect his nation. Uncertainty wears an enemy down politically and militarily.
3. Destroy institutions. Governments control and run their nations through their institutions. Control is lost, at least temporarily, through the loss or reduction of these institutions. If you lose an army, you become vulnerable to invasion.. This happens frequently in history. When Germany overran France at the start of WW2. When the allies destroyed the Iraqi armies in Kuwait. Until the army is rebuilt, it cannot protect its undefended populations and properties. If law enforcement institutions are reduced or destroyed, martial law is declared and the military takes on the task of enforcing civil law under much greater restrictions of movement, passage, trade, etc.

4. When political institutions are destroyed, another group often seizes power. If the military is unaffected they usually are the ones who take control, or support those who they allow to govern since they fill the power vacuum.
5. Incapacitate forces and populations and interdict movement. If people are sick and unable to work or fight, the effect is one of temporary death. They are not helpful to their governments and quickly become a burden to care for.
6. Depopulate. If people are dead, they cannot work or fight for an opposing force or government.
7. Starve by destroying food supplies and means of supplying.
8. Kill individuals important to an enemy. This means leaders and experts. Those in the public eye who are lost can have a demoralizing, shock and /or intensifying effect. Pearl Harbor united the US in fighting a long and difficult war. Had the war been less successful, the commitment to unconditional victory may have been changed (along with history).
9. Mass arming of civilians. If civilians are armed with invisible self reproducing weapons that cannot be confiscated, they have greater confidence in their ability to effect their own lives. Many will look sympathetically on those who help arm the masses so they can be free and many useful allies can be gained in this manner. When people can fight invisibly without the risk of being successfully searched or caught in the act, they are much more willing to take risks and fight for causes that are dangerous to be identified with.

The weapons mix chosen for use in these tactics include –

Conventional explosives, incendiaries, booby traps and bullets

Chemical weapons

Biological weapons – Pure cultures as dust, aerosols, or cakes

Multiplier effects weapons

Combination Weapons

Mass effect weapons (scale up)

Minor and more limited tactics would include such things as arming selected sympathetic populations with carefully chosen bio-weapons and methods, arming soldiers with plasticized agents under their skin so they can fight as POW's, etc.

Tactics usually involve a limited war plan of attack or defense with a specific area or group in mind. It requires planning, supplies, directed actions, and trained personnel. I have chosen to break down the tactical operations into the following broad categories of means of achieving the tactical goals –

1. Target type & Location
2. End purpose (surveillance, delay attack, kill, etc.)
3. Season & weather
4. Weapons mix

1. Physical Target Type and 2. End Purpose

Public gatherings and concentrations

- Malls
- Theatres
- Sporting events
- Downtown areas
- High traffic areas
- Office buildings
- Parks, playgrounds, schools
- Events (military shows, political gatherings, technical or association meetings, etc)

Individuals

- House or home
- Block, grid or zip code
- Work
- En-route
- Restaurant
- Friends (Human vectors-Reverse conscripts)
- Bodyguards, lawyers, associates, co-workers
- Lawn, walk
- Automobile

Target group

- City or urban area
- Institution (military base or bases)
- Transportation network (air, rail, bus or subway)
- Agriculture segment
- Industry
- Business
- Checkpoints/strongpoints
- Forces and Equipment

The ability to attack a physical location is implicit in any military strategy or tactics. Military forces carry out bombing campaigns, artillery strikes, seek and destroy and so on. Biological warfare operations do much the same thing invisibly without the use of large mechanical devices and machinery of war. Its bullets and explosives act covertly and over time and change the nature of the warfare.

Attacking public locations can be accomplished by the following delivery methods and ideas –

Direct dusting or spraying. If access to the property is available, you can simply move across the premises and release the biological package. This can be done from a vehicle or on foot. It can be done in small or large increments depending on the circumstances. A blinding snowstorm or fog will obscure observation and spread of the particles. Distraction will divert attention away from the delivery. Spraying or dusting can be done at levels that are unnoticed. Use of fine mists or dusts will be almost invisible by even passers-by.

Disguised delivery such as paint, lawn fertilizer, cleaning activities, and so on will permit application of delay release packages. Access to the building will allow for entry into many confined spaces. Dusts can be left on tops of doors, shelves, behind large objects, in overhead light assemblies and so forth. Saturating the inside of buildings from the inside requires the attacker be using MEWS or is immune to the weapons effects.

Another interesting disguised delivery mentioned in an earlier chapter involved the dust laden pen. The inside point of a pen could have a tiny invisible coating placed in it. When the pen is clicked, the dust contents are released. This tiny, invisible plume would contaminate the entire interior of a bus, aircraft, or train car. Imagine every plane of every airline saturated onboard, all on the same day with a tiny plume of communicable bacteria. It would spread to every city in the target country in days. The same can be done with every zip code (or its equivalent in other countries) to saturate every area of a nation overnight. Here the method would be the coating of dust on mail addressed to each zip code and having it jump from letter to letter via charged particles. The effect would be widespread, diluted and hard to find at its source.

Ventilation systems which move and filter the air are the best sources for release locations. Days of work can be accomplished in minutes using the heating and air conditioning systems to dry and disseminate a package.

Release from the exhaust or onto the tire (spray and motion spread) of a moving vehicle (or overhead on large trucks). As the vehicle passes through the area, it releases the agent. Multiple passes allows for larger scale delivery and greater effect (scale up).

Indirect delivery can be accomplished by attaching the package to the roof of a third party truck travelling through the area. As it dries, it deposits the contents. Salt shaker devices can be attached with magnets to the bottoms of vehicles. Self drying, slow release cakes can be produced and attached to the exhausts or on top the mufflers of authorized vehicles.

Upwind delivery is accomplished through the use of air compressors and/or air tanks which can blow powerful streams of air through a hose into the area. This can be done through the sewer system, by direct spray towards the premises, or by upwind release high into the air during a high wind (at night or in bad visibility). The deposition pattern downwind is usually a teardrop shape. If enough material is used (For example a full ton of anthrax spores), you could be 5-10 miles upwind of the target and saturate the area under attack in an hour or two with a 20 mph wind and a height of 100 feet, and a particle size of 10 microns or less. You would spray the material into the air and it would be carried towards the target in dilution over a distance of many miles with dilution increasing every mile.

Depending on the overall strategy adopted, the military base, industry, business, road or other target will be made uninhabitable and suffer high casualties depending on the dose received. Dose will also increase as exposure increases. If you attack an area, and casualties mount, they will continue to increase due to daily exposure until rain washes away and dilutes the dose, or the defender realizes where the attack is centered and makes the area off limits. In either case, you have inflicted casualties and made the property temporarily unusable. They have also become aware that they have been attacked.

In the case of Oklahoma City, we have already mentioned that an attack of that type could have been combined with biologicals. The explosion would have spread a ton of MEW anthrax over several square miles and probably would have wiped out the entire rescue operation in a few days. The bulk of the city would have been uninhabitable and the government would have lost a significant number of its law enforcement institutions trained response personnel. The psychological effect would have been stunning. In the event of another attack, do you evacuate everyone, do you dare send in what's left of your trained people? Will they voluntarily go into uncertain death? By this method, you can magnify the effects of minor conventional attacks to staggering proportions with biologicals. Offshoots of this could include the use of the hose and rod system to release and detonate fuel air explosives which further spread the biological package.

Targets can be roadways as well. Most traffic travels through an area at high speed with the windows rolled up and the air conditioner or heater running. If a series of tunnels or bridges are blocked, a saturated zone of highway can become stalled and the windows rolled down. All the occupants may become infected in stalled traffic. If this traffic is mostly headed towards the targeted institution at the start of the work day, they will become infected and carry small amounts of the material into the parking lots and garages of the targeted institutions.

By saturating the vehicles of those moving into and out of the targeted buildings, you can eventually saturate the target itself to some level. Especially if this is done on an accumulated level day in and day out. Until the enemy discovers that his workers are dying, they will not even attempt a defense. In the case of delay release and cancer causing weapons, the target could be destroyed and everyone killed six months before anyone knew a battle or attack had even taken place.

The employees of the hard target can be attacked in their homes, vehicles, on their way to work, and through friends or acquaintance's by the methods already described. If you know the general area where most of the workers live, you can attack the schools of their children with communicable disease which they carry home and infect their families with. These in turn, carry the epidemic to work and thereby entire institutions can be destroyed without going near the target or attacking it with anything. [For those bothered by morality-he who wins decides what is legal and moral, also attacking and killing the parents with disease which they bring home and infect the kids with anyway is only reversing the order of the casualties, not the end result.]

Another indirect method of attacking a particular target is through saturation mail techniques. You can mass deliver mail directly to the target (it can be junk mail) with each letter coated with a tiny amount of the agent. It must be in small enough amounts to go unnoticed or be beneath the detection threshold of protective detectors (or coated). If this is impossible, you can saturate the entire zip code with very large doses which insures that every piece of mail carries part of the dose inside. This will only work once because the postal service will soon disappear if the weapons are effective (unless you are using delay release or cancer causing agents).

Attacks against water supplies and food supplies have been described in previous volumes. The above techniques can be applied to any food service establishment that feeds the employees of the target. If all in the area are affected, then the targets are just as affected as if they had been attacked directly.

The parking lots of food establishments are particularly vulnerable because they are undefended and tiny amounts carried into the building will contaminate all the food utensils, foods, tables, preparation areas, etc.

In conventional warfare, when you are facing an army in motion, you would want to dust or saturate the path that they are expected to travel. Since they cannot live in masks and vehicles forever, there will always be opportune times to create temporary (or long term) no mans lands for them to pass through. A scorched earth policy has often been practiced in warfare in which the land to be lost is burned to the ground to leave nothing of use to an enemy that captures it. This policy helped the Russians destroy Napoleon and Hitler's forces in major wars. Temporary or long term un-inhabitability can be mass produced overnight and can make the passage through an infected area a death sentence for enemy armies.

When engaged in large scale warfare, an enemies economy can be destroyed overnight by rendering large tracts of valuable homes, businesses and industry uninhabitable. If the bulk of the wealthy population loses the use of their homes and businesses overnight, all over a country, there will be a domino effect in which loans cannot be repaid, banks collapse, the countryside becomes a competition for housing and food and the financial system generally breaks down. Currency is valueless, the government revenues drop drastically and so on. A few hundred tons of well placed MEWS can accomplish this overnight turning first world countries into third world countries. [Europe is more vulnerable to this type of warfare since its populations and resources are concentrated and segmented into national identities. The US would survive insofar as parts of the country remain unaffected and able to help]

Individual attack (assassination) can be accomplished by the above means if bystander casualties are not an issue. If they are, then several surgical methods are available for a narrower attack. The easiest way is direct poisoning of food or water. If you can gain access to the target, you can easily place enough toxin under a fingernail to kill a hundred targets. By simply scraping the fingernail while it passes over a coffee cup, you can assure that the target will drink massive doses and die according to the mortality rates established for the toxin by dose and time.

Other means of surgical delivery include drilling into the target area and releasing the agents into the home, bedroom, bathroom or other contact area. This can also be done by drilling into the floorboard of a car from underneath and using a small compressed air tank to dust the interior with a tiny invisible dose. The toxin can be one of limited life so that the target will die and bystanders will likely be affected to a limited extent.

In total warfare, the reduction of industries, the economy and the general living conditions of an enemy are all considered to be fair targets (as practiced by the US in WW2 and from a continent in which the US could not be attacked at home – Its funny how countries with advantages always want to write the laws, rules and morals of warfare to fit their own advantages and benefits).

Public utilities which are destroyed en-masse or rendered uninhabitable with a loss of trained personnel can become a real political problem for governments. The loss of a little electricity for brief periods in California caused a considerable amount of pain. Imagine most of it lost, long term for most of America. This is less effective in countries where most of the population is used to living without public utilities. The loss of clean water, sewage processing, phone systems and so on can have compounding effects during bio-warfare in which epidemics rely on tainted water and ignorance to achieve spread.

Military institutions form the backbone of a nation might.. The tactics may be adopted to directly reduce the military forces by large scale attacks on its personnel at all bases, or selected saturation attacks could be conducted on certain specialized and trained parts of the military. This could include key nerve centers such as NORAD, the Pentagon, and various satellite and related surveillance operations headquarters in the US if the plan called for blinding the forces at the outset. If the plan called for interdicting the armies ability to move and fight, all the key bases with transport and fighting equipment could be saturated and contaminated. This would result in the loss of key personnel and the temporary loss of the ability to use and move equipment.

The larger the goal, the more time, resources and scale up that is required. This is where the delay release and cancer causing weapons come in. An attack could be sustained for 6 months with constant delivery of aflatoxins into the target. After about 6 months, the main effect would be a notice in the incidence of liver cancer. An entire base of 100,000 men could be wiped out in a few months and no one would notice until most of the soldiers were diagnosed with terminal cancer. At that point, uncertainty principles begin to take effect. They do not know if it was an attack. If the attackers have been gone for months, how do they find them. What if it was not an attack but the result of a radioactive materials accident that the government kept secret. You can fight a secret war and achieve massive results without a general awareness that battles are being fought and even who might be involved.

That is the nature of invisible warfare. Any institution can now build its own invisible armies. It can wage invisible warfare. It can have scientist weapons builders who provide libraries of new and more effective weapons. It can supply these to selected members and even to the key enemy personnel who are then mysteriously caught with the goods (this is the CIA/FBI type of operation). You can also invisibly arm the entire enemy camp and watch the interesting consequences of the enemy leaders trying to disarm, accuse and execute their own innocent soldiers. There are many ways of reducing an enemies fighting strength.

Law enforcement institutions typically wear uniforms and have headquarters making these individuals and locations visible and easy to attack. All nations have undercover police integrated into their societies to watch all their suspect citizens (the US included-NSA, FBI, BATF, CIA, DEA). In the US, the bulk of these are placed at gun shows to observe anti-government rhetoric (and add to it), and are set up in well financed pawn shops and gun dealerships so that they are integrated into society that comes into contact with stolen properties and weapons. They also integrate themselves into all institutions suspected of being a problem for the government. This includes animal rights groups, Islamic religious sects, environmental organizations and so on. It is possible to invisibly mark those individuals by the use of specific fluorescent dyes. The visible portion of the law enforcement agencies can be saturated. Anyone passing into and out of the agency headquarters and meeting places slowly accumulate a mix of colors and frequencies allowing them to be identified to time and place and institution. (See V-6C the last chapter). In other nations, the government penetrates society through competing and “setup” institutions.

The use of specific cancer causing and delay release weapons will also begin to show up in the headquarters and among the undercover personnel in a few months revealing who they are by the incidence of their illnesses.

Non-combat government institutions are often not well protected and may not be considered important targets. The loss of key areas can have potent effects however. The elimination of tax collection and social service capabilities quickly produces a cascade effect in society.. This is often seen after floods and hurricanes in developed countries. When it occurs on a national scale everywhere, the system tends to break down with all the associated problems of civil disorder, chaos and military control is often required to maintain order.

Industry can be a useful target, especially when it is essential to the nation under attack. If the primary source of a nation's revenue is oil, as in Saudi Arabia, the loss of the ability to pump, drill and process oil would economically devastate the nation. This can be accomplished by targeting all the personnel, equipment and installations of the industry in the target country. The importance of a good strategic plan cannot be overemphasized. If this tactic were adopted in the US, it would fail and would cause minor inconvenience at most. This is because most of the refining capacity of the US is small, it imports most of its oil anyway, and any losses could be quickly made up by processors overseas.

The choice of industry also can bring unique opportunities and effects. In the US, the ag industries could have much of their grain saturated with anthrax spores which would go largely unnoticed until harvest. Once fed to the animals, large scale outbreaks would occur infecting other animals and decimating entire concentrated herds from within. The delay to harvest buys the time for scale up. The effect becomes much larger before the defender is aware he has been attacked and can take countermeasures. An interesting example would have been the artificial introduction of hoof and mouth disease from Europe which could have been easily accomplished. If cultures were mailed to a small force, it would only take a few weeks to infect almost all the herds of susceptible species in the entire country. The first response would be to kill the animals, but once the scale was known, the strategy would shift to vaccination to preserve the food supply in the US. The ability to export would be abandoned for the time being.

Textiles, food processors and service companies, electronics industries and so on can all be similarly targeted. Hudson Foods of Columbus Nebraska lost an entire trainload of meat products (10,000 tons worth over \$10 million) over the contamination of some of their products. They were out of business in three weeks. Multiply this using parking lot saturation techniques (or drive by many times daily upwind) using massive cultures on every food processor in America and in a few weeks you have affected the entire nation's food supply.

Grain supplies used in human foods are generally unprotected and vulnerable. Contaminating segments with spores that survive heat and sterilization processes is effective. With limited resources, the effect can be occasional and widespread, or highly concentrated, depending on the strategy chosen.

The homes and neighborhoods of public officials, wealthy segments of society, and suburbs with concentrations of employees of a targeted institution can also be saturated and depopulated or rendered uninhabitable. This reduces wealth, trained manpower and public confidence. The attackers can be long gone months before the effects are noticed.

3. Season and Weather

Military operations are usually planned and conducted with weather, season and climate in mind. It does little good to design and deliver ordnance in winter that does not grow in cold temperatures. Likewise, if the bacteria are destroyed by summer heat and sunlight, their effect is mitigated.

Campaigns using invisible weapons are conducted in conditions of low visibility to limit their chance of being discovered. Nighttime, fog, rain, snow, dust and wind can all obscure visibility and hide the release of dust and aerosol clouds. This is very important in areas that are under surveillance with infra red and ultraviolet detection equipment designed to “see” such clouds that are unnatural and concentrated. Washington DC, NSA and CIA headquarters and other high priority, secure locations are examples. The tactics in these areas include the use of such things as snowstorms in high wind, long range release on windy days well upwind, and the use of 3rd party delivery.

Most of the attack methods require days of dry weather for the package to desiccate and self distribute. Some involving saturation can accommodate rain, but must be disseminated onto grass and level areas that do not drain. The particle size of long term weapons can be larger so that they remain in place and are not washed or blown away or otherwise rapidly diluted.

Weapons that grow well in combination with cold weather would be plague and pneumonia type bacteria. These will infect and are easily spread in the cold winter weather. Sunlight is limited and has less effect on killing the bacteria in the exposed environment. Cold weather also combines with a heavier incidence of colds and flu, thereby increasing their effectiveness on the overall population.

Hot and dry weather is ideal for spores which quickly desiccate and turn to find dust and blow around in the wind. They tend to be less affected by sunlight and heat.

This author has had many interesting conversations with undercover agents and military personnel at the gun shows. One of the comments from a man I presumed was a military officer, took place in 1999, while I was still learning about all of this. When I recited the story of the army being at my house and how the agents would euphemistically tell me that “they can get rid of you whenever they want”, this officer pointed out to me that it was of course true. The US has over 600,000 military troops and federal agents. It has combined operating budgets exceeding \$300 billion. If all these resources were not capable of “getting rid of you” there is something probably wrong with the system.

My response has been well known and recited. I told them that they could get rid of me whenever “they” wish. After I am buried, someone could send a big box of envelopes with the library of organisms and the instructions of how to use them to every hate group in America and you can look for homes for 100 million people a few weeks later too. With the publication of this book, it should now be possible for anyone to do this.

The author did the math and theorizes that about 20 people could eliminate the bulk of the US military forces in about 2 weeks with the proper training and library. It could possibly be more effective by rendering most of the valuable properties of the US uninhabitable by mass dissemination of organisms. A nation with a collapsed economy cannot spend \$300 billion a year on tanks, aircraft, undercover agents and supporting equipment and trained personnel. In some cases, it would probably be more effective to destroy the economy and wealth of a nation than to destroy its armies.

One final comment that this author wishes to make is that all the other elements of conventional military tactics can also apply. Some of the historical examples include-

Element of Surprise	(Pearl Harbor)
Speed	(Blitzkrieg)
Scale Up of Attack	(D-Day, Barbarossa, Nuclear Weapons)
Decapitation	
Trojan Horse	
Use of defensive positions to attrit an enemy	
Arming the public for sustainable invisible warfare	(Vietnam, Afghanistan)

There is much more that I wish I could have added, but this author has exhausted himself in an effort to make a living and publish books with the government biting at my heels daily. It will have to fall on future brave souls to add to and improve on this work and stand up to governments that lie to their citizens and institutionalize “dirty tricks and psychological operations”. Then they that do the “who, little ol us” routine when documents and testimony are requested in court (and most of what is requested simply disappears) will have to account for it.

Science can tell you the truth. If undercover agents are not doing certain things in areas of our society, it would be interesting to see what mysterious diseases they might contract while “not doing these things”. Like the radar imaging that could see their badges and show how many would stand in line outside of the gun shows as undercover operatives, it is hard for governments to deny the cold, hard facts once everyone can see them.

A government can lie to its people and fool them only so long before the truth is finally known. That is what freedom of the press is all about. This freedom can be used to tell people how to use science to know the truth and how to use science to fight back against those in power and who use these sciences against them.

Chapter 10

Defense and Protection

This chapter will be short. Most of what I would have to say has already been said at the start of the earlier volumes of chemical and biological weapons. The STIP CD on weapons systems and NBC defense also has excellent material on protection against this type of warfare.

When dealing with biological or chemical weapons, the most important things to have on an individual basis is

1. Physical protection
2. Biological resistance
3. Area rehabilitation abilities

1.. Physical protection

For an individual, this includes baking soda or ammonium bicarbonate which is used to counter a huge range of harmful chemicals. They neutralize acids and nerve agents, and when mixed in water can soak into hair and body surfaces. Biological agents often have an affinity for these powders and many do not grow well in high concentrations of them.

Kleenex was originally developed for protection against biological and chemical agents. It would be used as a replacement in gas mask filters. Anything that can be used to cover the mouth and nose and filter out dust and droplets will help. Most biological agents depend on dose to be effective and anything that reduces the dose will help. This includes handkerchiefs, store bought dust masks and so on.

Homes and vehicles can be equipped with air filtering systems that suck in filtered air and force it inside so that all other unfiltered air is forced out via cracks. This provides a temporary safe harbor and protection while escaping a contaminated zone.

All this relies on some knowledge of the area possibly being contaminated. You cannot protect yourself against an unknown attack. If you are attacked, a good supply of antibiotics from the animal health store may be of great use, especially if the medical care facilities are swamped.

2. Biological Resistance

Most disease organisms produce some resistance in the host, even before the deadliest forms overwhelm and kill them. Vaccines are produced commercially for protecting society against disease. In the case of new attacks based on plague, or anthrax, you can infect yourself by a dermal route (by injecting just under the skin or in a scratch or cut) with the disease and then go onto large antibiotic doses. As the infection grows in the wound site, it produces toxin which permeates into the surrounding tissues. The body recognizes the toxin and begins to fight it. If the bacteria infection is stopped, and the toxin has not reached lethal limits, then the patient survives. If the bacteria infection continues to grow, more and more toxin is produced and this kills the host.

You deliberately infect a skin site, and then after 24-48 hours, you carefully cut out the black area of infection (without opening the boil) to remove it. The tissue which is saturated with organisms is then discarded and incinerated or buried. If the tissue is accidentally opened, it releases huge numbers of bacteria into the surroundings which can continue to infect and attack the host as well as others providing care. If the tissue is disposed of safely, and no other bacteria have spread to other tissues (or have been suppressed by the antibiotics), there is a high probability of survival. Once you have survived exposure to the infection and toxin, you now have some resistance to it and can even conceivably grow it and use it as a weapon yourself. Some enhancements, or sheer weight of massive exposure may overcome this resistance so care needs to be taken when weapons are enhanced or mass produced and spread.

3. Area rehabilitation abilities

After an area has been attacked and rendered deadly, there are some things that can be done to suppress the spread of the organisms. The most important is the use of water, such as watering the lawn to create large scale dust suppression. This is followed by the use of oils that are used in feed mills to professionally suppress dust and do not dry out. This reduces exposure and dose by 99% and more. Turning over the land by plowing under the surface will further dilute the dose but all these methods can create small temporary aerosols. Dust collectors such as the vacuums used in Wal-Mart parking lots can also scoop up all the fine dust particles in a given area.

Certain enzymes can be added to the soil to attack the organisms. Enzymes, antibiotics, and chemicals that change the soil pH can also be helpful in killing and preventing growth of biological agents. As an example, Anthrax grows only in alkaline soil and will not grow or usually dies off in acid pH.

In the 1980's and 90's, the Russians deposited huge amounts of Anthrax on an island and added chlorine to help dispose of the spores. Years later, in a much publicized disclosure, they found that the Anthrax had survived the acid and chlorine. This author theorized that the spores are killed in acid soils by competing bacteria that live in that soil and that may produce enzymes that work only in low pH, or manufactures other substances harmful to anthrax spores.

This leads to a concept of attacking the spores by spraying germinating proteins to cause the spores to germinate in the contaminated area. A bactericidal substance is added to kill the now vulnerable bacteria cells upon germination (like chlorine). The outer shell of the spore is nearly invulnerable to most soil conditions and acts like a protective armor. Instead of trying to attack the armor, you trick the cell in coming outside of its shell.