

THE COMPLETE GUIDE TO AD&D TECHNOLOGY

FOR FANTASY ROLE PLAYING GAMES

by

Desmond

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INITIAL REACTIONS TO THE GUIDE

"An excellent job, Reid. It's thorough, interesting, and definitely useful."
-- A.R.

PREFACE

This informative guide is to give a DM some rules for introducing technology in an AD&D game. The consequences of doing so is not discussed in this guide because it is discussed thoroughly in the articles that are listed in the "Suggested Readings" section.

Since players shouldn't automatically know how a highly technical item works immediately, "Figuring Out Techno-Items" gives a few systems to allow characters to analyze any technical item.

This guide will take you through various new weapons starting with a modified hand crossbow to a laser gun.

"Cimarron Six-Shooter" gives you the gun feel without having to introduce gunpowder or worse things. Now a character can be a cowboy.

The 2nd edition introduced the arquebus into AD&D, unfortunately it has many flaws that "A Story of Fyre and Smoak" will correct and make realistic. This information can be used as a replacement of the arquebus or in an adventure to Earth when firearms were introduced to the medieval era.

Some DMs may want characters to enter Earth's old west. If the DM has the Boot Hill RPG, he can convert Boot Hill characters to AD&D characters using "Sixguns & Sorcery".

"Weaponry - Past & Present" provides information for guns from the old west to modern day Earth. Jumping into the future, a DM can sling characters into a high tech adventure using the information in "High Technology Items".

"Non-Weapon Proficiencies" offers some things that may be of use to gun-slingers and their ilk.

"Rogue Kit: Technologist" gives a kit for players of a character who hates magic. This definitely goes against the grain of AD&D, so it should be very fun to play.

No guide would be complete without a few "Magic-Items". And for fun, "Albus Ater Ante Magicus Metallum" provides something interesting for DMs.

For the most part, the information enclosed will have been play-tested and in a workable form. In others, you may have to make further adjustments to fit the ideas into your campaign. All rules are optional and whatever is needed by the DM should be used. It is suggested that you at least try to use everything and see how it goes. If it works well then use it, if not get rid of it. In any case, I would be interested in knowing the results and any changes you've made.

This material is the fruit of my labor with special assistance from a few people who are acknowledged in the "Special Thanks" section.

For those that do receive this guide, I ask that the material is unchanged. If you have any ideas, suggestions, comments, criticisms, additions, recommendations, or complaints; I would be very interested in hearing them. The only way the guide can get better is for everybody to contribute in one form or another. At the very least I

would be like to be informed of the usefulness of the guide. All help would be appreciated. Because I plan to make continuous updates, I would appreciate that people do not make the guide available via FTP sites because they tend to accumulate old out-of-date versions.

I would appreciate that my name as well as those in the Special Thanks section are not removed, changed, or altered since we are the ones who deserve credit our names should remain with the guide. Of course I can't really stop anybody from doing what they want. I just ask that you respect those who made this guide possible because I'm sure that they will continue to make great material for AD&D.

Desmond

FIGURING OUT TECHNO-ITEMS

Dragon Technique

In the absence of someone to instruct the character in a techno-item's use, a character may attempt to puzzle out it out on their own. To do so, a player rolls on the appropriate Investigation Tables given herein. Then he rolls a 1d10 for each round the character spends puzzling out the item. Following the directions in the Table and starting at Start. The following modifiers apply to each roll (all modifiers are cumulative):

Intelligence less than 10.....	+1
Intelligence greater than 14.....	-1
Similar object seen in use.....	-1
Object has been explained by someone familiar with it.....	-2
Operated similar object previously.....	-2

INVESTIGATION TABLE: Weapons

Start

1-6 go to B
7-8 go to C
9-0 go to A

A

1-4 go to B
5-7 go to Start
8-0 DISCHARGE!

B

1-5 Finish
6 go to Start
7-8 go to A
9-0 DISCHARGE!

C

1-5 go to B
6-0 go to Start

Discharge - weapon goes off, injuring the user or some nearby person. (If both results are possible, then 50% chance of each.)

INVESTIGATION TABLE: Simple Non-Deadly Items

Start

1-5 go to C
6-8 go to A
9-0 go to E

A

1-4 go to B
5-0 go to Start

B

1-5 go to C
6-0 go to A

C

1-4 go to D
5 go to A
6 go to Start
7-8 go to B
9-0 go to F

D

1-3 Finish
4-5 go to B
6-7 go to F
8 go to C
9-0 Item Destroyed

E

1-4 go to Start
5-8 go to C
9-0 go to F

F

1-4 go to C
5-8 go to E
9-0 Item Destroyed

INVESTIGATION TABLE: Complex Non-Deadly Items

Start

1-6 go to C
7-8 go to A
9-0 go to F

A

1-3 go to C
4-6 go to B
7-0 go to Start

B

1-4 go to D
5 go to C
6-0 go to A

C
1-5 go to D
6-7 go to B
8-9 go to A
0 go to Start

D
1-4 go to E
5-6 go to C
7 go to B
8-0 go to I

E
1-3 Finish
4-5 go to D
6-8 go to J
9-0 Item Broken or Destroyed

F
1-3 go to C
4-6 go to Start
7-8 go to G
9-0 go to H

G
1-4 go to D
5-6 go to C
7 go to F
8-0 go to I

H
1-4 go to G
5-8 go to F
9-0 go to I

I
1-4 go to D
5-6 go to G
7 go to H
8-0 go to J

J
1-5 go to E
6-7 go to I
8-0 Item Broken or Destroyed

Weapons consist of all death-dealing devices. Simple non-deadly items consist of motorcycles, radios, televisions, flashlights, etc.. Complex non-deadly items consists of automobiles, computers, audio/visual systems, electronic equipment, etc..

Gamma Technique

Unless a character acquires a techno-item from someone willing and able to explain how it works, or the character has previously used or seen in use a techno-item just like it, the character won't know how to use a newly-acquired techno-item... let alone its purpose. The character may try to figure out what the techno-item is and

how it works by using the following procedure. Each attempt at figuring out a techno-item takes 1d4 turn. There is no limit to the number of tries a character can make, but only one character at a time can try to figure out a techno-item. One character's progress (or lack of) in this regard, doesn't affect another character's chances figuring out the techno-item.

The DM should follow these steps when a character is figuring out an item;

- 1) Get the techno-item's complexity (given as a letter).
- 2) Using the item's complexity, find the Start Number, Die Roll, and Damage on the Techno-Item Complexity Table. Do not give players any of this information.
- 3) The DM rolls one die for the item and one for the character trying to figure it out. The DM uses the type of die listed in the Die Roll column for the item's die. The character's die is 1d12 for humans and demi-human characters, and 1d10 for humanoid characters. For every intelligence point above 15, modify the die roll by +1. For every intelligence point below 6, modify the die roll by -1.
- 4) The die roll result for the item's die is added to the number listed in the Start Number column. The die roll result for the character's die is subtracted from this number. This total result will be a new Start Number for use in future attempts (if any and if possible) for this character to figure out the item.
- 5) If the total result is less than or equal to 0, the character has figured out what the item does and how to operate it. If the total result is equal to or greater than the start number plus the first number in the Damage column, then the item breaks (unless it discharges). If the total result is equal to or greater than the start number plus the second number in the Damage column, then the item discharges if possible, doing an amount of damage equal to the second number in the Damage column (doesn't break however). A character can keep trying to figure out an item until he succeeds or it breaks.

TABLE: Techno-Item Complexity

Complexity	Start Number	Die Roll	Damage
A	5	1d4	3/*
B	10	1d6	3/*
C	15	1d8	3/7
D	10	1d8	2/3
E	20	1d10	3/9
F	5	1d6	1/2
G	25	1d12	4/9
H	30	1d20	6/*

* An item of this complexity cannot do any damage to the characters

CIMARRON SIX-SHOOTER

The information presented here is taken from DRAGON #176 The Voyage of the Princess Ark. The story is an excellent example of a western setting in a D&D world, but

without the intervention of technology. Note that the information presented here has been modified for AD&D; see the article for D&D information.

The six-shooter is a weapon. This little wonder was originally created by Smithy, a clever watchmaker, and Westron, a crossbow expert. They came up with the idea of a very light crossbow that could shoot darts. The true innovation lay, however, in the use of a spring mechanism that rearmed the weapon after each shot. A S&W hand crossbow can hold up to six small darts. Recocking the crossbow required only a quick motion of the hand, which could be done in the same round the weapon is fired. It takes a full turn to load another six darts into the weapon's handle.

Unfortunately, the six-shooter has always been a fragile weapon that easily jams. A to-hit roll of 1 or lower, after modifiers are applied, causes the dart to jam inside the weapon, requiring one round to clear and rearm the device.

Nowadays, a six-shooter costs 800 silver pieces (including a leather holster, the hand-crossbow itself, and 18 darts). The hand crossbow has encumbrance of 25 cn. An extra supply of 18 darts cost 50 silver pieces. Some notorious sharpshooters use depleted cinnabryl darts, which add a flat 10' to all ranges and cause an extra hit point of damage. These special darts cost 200 silver pieces each.

The proficiency and specialization rules in the Player's Handbook do not apply to the six-shooter so disregard them. If a character isn't proficient in the six-shooter, he suffers a -5 to hit penalty. If the player devotes a weapon proficiency to this weapon the character earns a basic mastery of the weapon. For each additional slot, the player moves up to the next mastery. Note mastering a six-shooter isn't limited to the fighter class and any class can continue to devote proficiency slots to the six-shooter. The following table shows the advantages to mastering the six-shooter:

TABLE: Cimarron Six-Shooter Table

Mastery	Ranges	To Hit Bonus	Damage
Basic	50/100/150	+0	1d4
Skilled	60/100/150	+1	1d6
Expert	70/110/150	+2	2d4
Master	80/110/150	+3	2d6
Grand Master	80/110/150	+4	3d6

Two six-shooters can be fired at the same time, one in each hand, provided they are both armed at the end of the previous round. Apply a -2 penalty to hit on both sides.

At the Skilled mastery or better, the user may acquire non-weapon proficiencies related to the six-shooter's use. Each proficiency requires 1 non-weapon proficiency slot. They are as followed:

REID COMMENT: The six-shooter weapon is a great way to give a campaign a western feel without worrying about the dangers of putting gunpowder or firearms in AD&D. A character could be influenced by a western book from another dimension and thus become obsessed with molding a life around it. It isn't as far fetched as it seems. A Star Trek episode dealt with a world that was based on a gangster book. Most of our own civilized world is based on the bible as other civilizations have their own key books. So a character if not a civilization with an obsession to mimic the old west would be great. The "The Voyage of the Princess Ark" story is great for combining AD&D with the Old West and if you're hesitant to consider doing this then I suggest you read this wonderful article. Just look how this statement flows: The fighter finds in the strongbox a dusty collection... Time Life Books: The Old West. Possibly better would be a magic cube that displays old western shows and movies. A character that thinks he's John Wayne, a character who lives the life of Bonanza, or worse he's the last ranger the Lone Ranger... give it a chance it might be fun.

SCHNELL & WILKES PRODUCTS

S&W REPEATER

The availability of the S&W Repeater is relevant to where the characters are located. Most organized countries have "outlawed" the use of Schnell & Wilkes products except for their military usefulness. In the unclaimed territories and such, they are common place.

The ability a character has with a S&W Repeater is relevant to the number of weapon proficiency slots allocated towards it. Table 1 gives range, damage, to hit, and the skill slots based on proficiency slots.

TABLE 1: Proficiency Slots

Prof. Slots	Ranges	Damage	To hit	Skill slots*
0	8"/16"/24	1d6	-1	0
1	9"/16"/24	2d4	0	1
2	10"/17"/24	2d6	+1	1
3	11"/17"/24	3d4	+2	1
4	12"/18"/24	4d4	+3	2

* All special skills offered for the "six-shooter" are available at the same cost for the Repeater (except Fast Draw).

Other pertinent stats for the S&W Repeater are:

ROF: 1/round with max of 6/round

Reload Time: 10 rounds

Capacity: 5 in 'box', 1 on rail

Considered a heavy x-bow.

S&W SPAS SCATTERGUN

As time went by, many store and bar owners were complaining about the holes in walls and materials being busted by the many shoot outs which occurred in or near their establishments. As often as not, the shots fired were done by the owner themselves, trying to "keep the place servicable".

With this in mind, Schnell and Wilkes went back to the drawing board, and designed a weapon which had the capability to kill a man at close range, but wouldn't throw its projectiles as far or with as much potential for damage to walls, windows, etc.. Their new weapon was dubbed the SPAS Scattergun (Short Power Area Spraying). It is available in side-by-side double barrel, or auto-loading. The "shells" consist of 25 needle thin shards wrapped in a paper casing to hold them together.

A firm leather strap runs around the back and this is what the string of the x-bow pushes against as it propells the pack of shards down its "tubular" barrel. As the "shell" reaches the end of the tube, the shards are "shot" out and spread apart. Due to each shards small mass, they only carry enough inertia to be damage effective at 9" max. However, they are very potent at close range, and with their "scattering" pattern, accuracy is less important. Some pioneers have reportedly used this weapon to kill waterfowl and upland game.

TABLE 2: Proficiency Slots

Prof. Slots	Ranges	Damage	To hit
0	1"/4"/9"	3d4/2d4/1d4	+1/ 0 /-1
1	3"/6"/9"	3d6/2d6/1d6	+3/+1/ 0

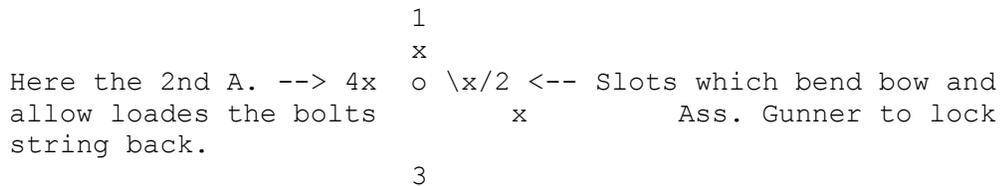
Other pertinent stats are:

ROF: 1/round upto 3/round auto-loader
 2/round double barrel
 Reload Time: 10 rounds auto-loader
 4 rounds double barrel
 Capacity: 3 "shells" auto-loader
 2 "shells" double barrel

The only special skills availble are Fast (Fan) Shooting and Repair. These require the shooter to spend 1 Weapon proficiency per to aquire.

S&W RATTLIN GUN

Sooner or later a government was bound to get their hands on this new technology and put it to work for military purposes. Hence the invention of the S&W Rattlin Gun. So named from the nose its gears make when it is fired. The Rattlin Gun consists of 4 heavy x-bows mounted on a rotating cylinder. The cylinder rotates when the Gunner turns a crank attached to a gear box mechanism. This whole system is mounted on an overturned wagon wheel axle which gives it 360 degree radius of fire. As the bows rotate, two metal rails bend the bow portion and an Assistant gunner cocks x-bow #2, at the same time the 2nd Assistant gunner is loading a bolt into x-bow #4, and simultaneously, x-bow #1 is firing. The Gunner sights by looking down the central cylinder and controls the rate of fire by the speed at which he runs the crank. View from gunners Position:



Due to all the moving parts, the weapons accuracy is considered terrible, unless a skilled Gunner is behind the crank. Then with its incredible rate of fire, it can be very deadly weapon. It is most commonly used on battlements for defensive purposes. Some trade caravans have purchased licenses from "ruling powers" which allows them the utilize "wagon" mounted Rattlin Guns in protecting their goods on the way to market.

Pertinent stats are:

Range: 8"/16"/24"
 Damage: 1d6/shot
 ROF: 8 shots per round sustained
 16 shots per round cyclic (max of 4 rounds before tiring)

For each proficiency the gunner has, he adds +1 to hit. To hit adjustments are 1 or 2 mansized (-5), Group of mansized or 1-2 giant sized (-3), and Group of giant sized (-1).

A STORY OF FYRE AND SMOAK:

NOTES TOWARDS ACCEPTABLE FIREARMS FOR AD&D

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Introduction

By now, everybody is aware that the 2nd edition AD&D game has taken a nod towards the possibility of firearms by including the "Arquebus" in the Players' Handbook and by setting firearms in their Forgotten Realms package. Unfortunately, TSR's attempt at introducing firearms has only further demonstrated their general level of incompetence regarding military history and military technology to a wider audience. They made a substantial error in adding firearms to AD&D, which could have been easily prevented had they done historical research adequate for a high-school term paper.

History

The arquebus proper was NOT, by any stretch of the imagination a "primitive" firearm. It actually requires a great deal of technological sophistication and centuries of experience with gunpowder-ish weaponry to come up with such a device. Real-world history, without magic to impede the progress of gunpowder weaponry, took nearly 200 years from the introduction of gunpowder in Europe to the production of something that could be called an "arquebus".

Furthermore, TSR decided that they had no need to actually look into realistic ranges, rates of fire, etc.. Instead, the "arquebus" they present was obviously invented out of whole cloth, with no rational relationship to any other weapons, etc.. Therefore, presented here is some compiled data on firearms more appropriate for most AD&D campaigns.

What is an appropriate "first generation" firearm? The earliest European use of gunpowder historically was not for personal weaponry. Instead, gunpowder was used to power siege devices known as "bombards". They took a full day to place and could only be fired two or three times a day safely. However, they could hurl stones which were borders of magnitude larger than most mechanical siege engines. Plus, they made a terrifying noise. These bombards were also called (in English) "gonnes" (pronounced "gon-ess"; the singular was spelled "gonne" and was pronounced "gon-eh"). Eventually, someone came up with the idea of miniaturizing things, thus producing the "hand-gonne". This was the primary form of personal gunpowder weaponry for at least the first generation of widespread gunpowder use in Europe.

The hand-gonne was nothing more than a miniature cannon, with a rod on the rear to hold it. Larger versions had a sort of "mounting" stick, which one stuck into the ground and used as a swivel to steady. They were unreliable, inaccurate, and dangerous, but they produced a terrifying noise, and were MUCH easier to learn to use than either bows or crossbows. Furthermore, they scared horses, which meant that a non-noble army could really wipe up the field with knights.

Kings liked them because gonne-men were cheaper to train and supply than were either long-bowmen or cross-bowmen. They could then outfit an army with pike and gonne-men and let their damned knights go whistle.

Anyway, the hand-gonne was the personal firearm of earth's Middle Ages. If one is to introduce firearms into a pseudo-medieval setting, it is far more appropriate than later, more advanced forms.

Before we get into the descriptions of the gones, I should point out that the gone was a MILITARY weapon paramount. It was most effective in a massed volley. It was not until the invention of the wheel-lock or the flintlock centuries later that firearms even began to challenge sharp steel for one-on-one fights. This doesn't mean that it would be useless, just that a gone is not the all-powerful weapon that a modern firearm is today.

Game Conversion

The first thing to consider when dealing with firearms is just how to classify them as weapon proficiencies. They are easier to use than any other missile weapon (except thrown), but they are rather nasty to deal with, smelly, dirty, etc.. The DM is advised to make them available to Warriors and Rogues (but not to any sort of nobly, knightly or extremely "honorable" package/character class because gones are a COMMONER'S weapon) as standard weapon proficiencies. The proficiency includes knowledge of loading, cleaning, unjamming, care, etc..

After this the DM needs to consider the ammunition. At the time of hand-gone use, it was more common for a shooter to cast his own bullets from ingot lead as to purchase them. One would buy loose powder, but it would be stored separately, since each shot would have to be loaded separately. Furthermore, it is easier to partition metals by weight than by any other means, so primitive firearms were usually built around calibers which corresponded to X balls per pound of lead. This is how these gones were designed.

This will also make ammunition costs and other information easier to handle, since one merely needs to set a price per pound of lead and price per ounce of powder, then allow the players to keep track of usage.

Anyway, the calibers of ammunition, their weights, and loads are as followed:

Caliber	Lead Balls	Powder Loads
	Per Pound	Per Ounce
.39	80	42
.42	64	33
.46	50	26
.49	40	21
.53	32	16
.59	24	12
.62	20	10
.67	16	8
.74	12	6
.78	10	5
.84	8	4
.93	6	3
1.06	4	2

The hand-gone is quite a weapon. It will misfire at least 15% of the time. On a "to hit" roll of 2 or less means that it just went fizzle. On a natural 1, the gone blows up -- the weapon's damage is inflicted on the wielder.

A gone has to be held with one hand, preferably steadied on something, while the other hand applies a slow match to the open touchhole. If it rains, forget it. If it is foggy, forget it. If a handgone is not steadied upon something, the character should have a -2 "to hit" for a light handgone and a -5 for a heavy handgone.

Handgone range characteristics are pretty even, and are summarized below:

Type	Point				
	Blank	Short	Med	Long	Very Long
Light handgones	0-10	11-30	31-40	41-70	71-100

Heavy handgonnes 0-20 21-60 61-110 111-160 161-220

Ranges are in yards. Point Blank range gives a +5 bonus "to hit". Short Range has a 0 modifier. Medium range is -2, long is -5, and the Very Long range is -10. Beyond Very Long, the modifier "to hit" is -20. (The half-damage and maximum damage ranges of a gonne depend more on its ammunition than on its general size, so they are listed with the individual weapons.)

The first list is of light handgonnes, which correspond to modern pistols. They are designed for one-handed use, and might have a higher rate of fire. In any case, they are lighter and smaller than heavy handgonnes.

Rate of fire presents a particular problem for AD&D, since a completely unskilled person can clean, load, and VERY CAREFULLY aim one of these things every two minutes. Heavy hand-gonnes can be fired every three minutes WITH EXCRUCIATINGLY CAREFUL AIMING TAKEN INTO ACCOUNT.

Light Handgonnes

Caliber	Damage	1/2D	Max	Wt.	Cost
.39	1d6/1d8	220	1600	1	300
.39	1d6/2d4	220	1600	3	320
.39	1d8/1d10	220	1600	3	340
.42	1d8/1d12	220	1600	4	350
.46	1d8/1d12	220	1600	3	350
.46	1d8/2d6	220	1600	4	370
.49	2d4/3d4	220	1600	5	380
.53	2d4/2d8	220	1600	5	400
.59	1d10/4d4	220	1600	6	430
.62	1d10/3d6	220	1600	7	450
.67	1d10/2d10	220	1600	8	480
.74	1d10/3d8-1	440	3800	9	520

Heavy Handgonnes

Caliber	Damage	1/2D	Max	Wt.	Cost
.53	1d10/4d4	220	1600	7	300
.53	1d10/3d6	220	1600	10	310
.59	1d10/2d10	220	1600	9	330
.62	1d12/2d12	220	1600	13	380
.67	1d12/4d6	220	1600	15	410
.74	1d12/3d8	440	3800	12	390
.74	1d12/3d10-1	440	3800	17	450
.78	1d12/4d6+1	440	3800	13	430
.78	1d12/3d10	440	3800	19	490
.84	2d6/4d8	440	3800	21	530
.93	1d12/4d8	440	3800	18	510
.93	2d6/3d12	440	3800	25	600
.93	2d6/3d12+1	440	3800	32	620
1.06	2d6/4d10+1	880	7000	31	700
1.06	2d6/5d6	880	7000	40	750

Caliber is in inches. Damage is for small & medium creatures and then for large creatures. 1/2D and Max are ranges in yards. Note that the half damage ranges are longer than the effective accuracy of the weapons. This is common with large-bore firearms. The ball can keep velocity, but the weapon is hard to aim properly. Weight is in pounds, cost is in silver pieces.

(Acknowledgment goes to Greg Porter and his work 3G3, which helped immeasurably in converting mundane measurements to gameable terms.)

REID COMMENT: If you allow gunpowder and primitive firearms in your campaign then this is the way to go. Presently, a character has a wide selection of swords, pole arms, and bows but can only take the arquebus as a firearm AND it isn't to spectacular. If your going to let a campaign go in this direction, then use the rules presented here. They are much clearer and historically accurate and allow more freedom for the players.

SIXGUNS & SORCERY

Introduction

In the 1st edition Dungeon Masters Guide (p. 112-113), there are rules for converting Boot Hill to Advanced Dungeons & Dragons and visa verse. Unfortunately, a D&D character transported to Boot Hill must follow the Boot Hill rules, which could be very deadly (and difficult for the players to understand). Therefore, these rules allow easy conversion of Boot Hill NPCs without converting the D&D player characters. Also, the rules use D&D combat rules for ease of use. This allows a DM to expand adventures to locales other than Boot Hill. One excellent example of this would be THE CITY BEYOND THE GATE adventure in DRAGON #100.

These rules are a modification of rules found in the 1st Edition Dungeon Masters Guide, Dragon #100, the Boot Hill Game Book.

Boot Hill Shooters

Converting a Boot Hill character is handled as follows:

Strength - as shown, except 19 = 18/50 and 20 = 18/75
Intelligence - use 3d6 to determine
Wisdom - use 3d4 to determine
Dexterity - 6 base +1 per 10% speed rating (max. 16)
Constitution - use 3d6 to determine
Charisma - use d8+4 to determine

Each Boot Hill character is a fighter. His level is equal to his gun fight experience. hit dice, hit points, saving throws, THAC0, and such are determined by his level like normal D&D characters. Thus, Jesse James would be a 12th level fighter and benefit as one.

Armor Class for the American Man

Armor class is 10 for Boot Hill characters before dexterity bonus, etc.. However in modern times, D&D characters could come in contact with S.W.A.T. teams or terrorists who wear modern day body armor which could yield a low armor class.

There was/is a multitude of weapons in the past and present. Table 1 lists a nice span of weaponry without getting out of control. DMs should make changes or additions as he feels will best suit his campaign.

Fire Rate is how many shots the weapon can fire per round. Numbers in parentheses represents double barrels. Supply is how many bullets can be fired from the gun before it needs reloaded. Reload Time is the time needed to load the weapon before the weapon can be fired. Weapon Speed Modifier is the number that is added to initiative.

Table 2 shows range and the range modifiers to THAC0. Table 3 lists a description of Weapon speed.

TABLE 1

Weapon	Damage		Fire Rate	Supply	Reload Time	W.S.M.
	S-M /	L				
.38 revolver	1d8 /	1d6	4	6	1 rd.	+2
9mm pistol	1d8 /	1d6	4	8	5 seg.	+2
Derringer	1d4 /	1d4	1(2)	6	1 rd.	+4
Fast draw revolver	1d8 /	1d6	3	8	1 rd.	+2
Rifle	2d6 /	1d10	2	2	7 seg.	+4
Sawed-off shotgun	1d12 /	1d6	1(2)	1(2)	2 rd.	+6
Scatter gun	1d8 /	1d6	1(2)	1(2)	2 rd.	+5
Shotgun	1d10 /	1d8	1(2)	1(2)	2 rd.	+6
Submachine gun	2d4 /	2d4	20	20-50	5 seg.	+1
Other hand guns	1d8 /	1d6	3	6-8	1 rd.	+4
Other shoulder arms	2d4 /	1d6	3	2-4	1 rd.	+4

TABLE 2

Weapon	Range			Range Modifier		
	S	M	L	S	M	L
.38 revolver	6	12	18	+3	+1	0
9mm pistol	6	12	18	+3	+1	0
Derringer	1	3	6	+2	+1	0
Fast draw revolver	3	7	15	+3	+1	0
Rifle	11	20	35	+3	+2	0
Sawed-off shotgun	2	6	9	+5	0	-2
Scatter gun	2	4	8	+1	0	-1
Shotgun	4	8	13	+2	0	-3
Submachine gun	7	15	20	+5	+1	-1 *
Other hand guns	5	10	15	+3	+1	0
Other shoulder arms	10	20	35	+2	+1	0

* Increase range modifiers to +8 (S), +4 (M), and 0 (L) if fire is traversed across target.

TABLE 3: Weapon Speed Modifiers

- 1 - Whoosh!
- 2 - very fast
- 3 - fast
- 4 - average
- 5 - below average

- 6 - slow
- 7 - very slow

OTHER WEAPONS

Flame Thrower - Range: A line 10'-60' long. Does 8d8 points of damage (save for half). Jellied gasoline burns for 1d6 rounds.

GRENADES, ETC.

Dynamite	4d10 pts. damage
Vial of Nitro.	6d10 pts. damage
(Civil War) Percussion Grenade	6d10 pts. damage (+1d10 Fragmentation)
WWII Hand Grenade	8d10 pts. damage (+1d20 Fragmentation)
Modern Hand Grenade	6d6 pts. damage

MINES

Land Mine - Range: 0. Does 1d10+10 points of damage upon contact. Anybody within 3 feet suffer 1d6 fragmentation damage.

REID COMMENT: Letting these more elaborate weapons in a campaign can be dangerous. I suggest that a DM put the players in another dimension or time where he experience these things. This way the AD&D campaign world doesn't get greatly effected. Of course, these weapons wouldn't kill a world because most will run out of ammunition thus the weapons become useless and lose their novelty. The DM just has to make sure that characters don't get access to a great supply of ammunition or allow the characters to manufacture their own.

I suggest you read the articles listed in the "Suggested Readings" section for much input on the advantages, disadvantages, dangers, whys, and hows of technology in a campaign.

HIGH TECHNOLOGY ITEMS

SECTIONS: Energy Sources
 Weapons
 Phaser
 Medical Supplies and Equipment
 Miscellaneous Items
 Control Transmitters

Energy Sources

Techno-items usually require an energy cell to function as in the case of hi-tech weapons. Below is a list of the various energy cells.

Atomic Energy Cells (A) - These are bulky, heavily-shield nuclear batteries weighing 12 kilograms. they will hold a charge for 1000 years if unused. Once dead, they may be recharged by replacing their Fuel Cylinder. Replacement cylinders may be found in military supply depots or a few nuclear power plants and factories.

Chemical Energy Cells (C) - These rechargeable batteries come in many shapes and sizes. They lose their charge after 1 to 6 years of disuse.

Hydrogen Energy Cells (H) - Similar to Chemical Energy Cells, but are less common. They don't lose their charge from disuse.

Solar Energy Cells (S) - These are Chemical Energy Cells fixed to a Solar Panel so they recharge in sunlight.

Energy Cell Charger - When connected to a power source (line or broadcast), this will recharge and Chemical or Hydrogen Energy Cell.

Weapons

Type	Range	Damage	Value	Supply	Power	Code
Laser Pistol	3/ 6/ 9	5d6	30000	10	H	D
Laser Rifle	10/20/30	6d6	36000	6	H	D
Mark I Blaster	5/10/15	1d6	6000	8	H	D
Mark II Blaster	5/10/15	2d6	12000	8	H	D
Mark III Blaster	7/14/21	3d6	18000	8	H	D
Mark IV Blaster	5/10/15	4d6	24000	8	H	D
Mark V Blaster	7/14/21	5d6	30000	6	2H	D
Mark VI Blaster	7/14/21	6d6	36000	6	2H	D
Mark VII Blaster	7/14/21	7d6	42000	6	2H	D
Mark VIII Blaster	7/14/21	8d6	48000	6	2H	D
MKI Disruptor	5/10/15	1d20	20000	20	H	D
MKI Disrup. Rifle	10/20/30	2d20	45000	30	H	D
MKII Disruptor	10/20/30	2d20	40000	30	H	D
MKII Disr. Rifle	20/40/60	4d20	85000	40	H	D
MKIII Disruptor	20/40/60	4d20	80000	40	H	D
MKIII Disr. Rifle	40/80/120	6d20	125000	50	H	D
MKIV Disruptor	40/80/120	6d20	120000	50	H	D
MKIV Disr. Rifle	80/120/240	8d20	165000	60	H	D
Needler	2/ 4/ 6	*	4000	10	C	D
Stun Ray Pistol	1/ 2/ 3	*	5000	10	S	D
Stun Ray Rifle	3/ 6/ 9	*	7500	6	S	D
Electroflail	-	2d6	12000	-	S	D
Energy Mace	-	10d6	60000	-	C	B
Paralysis Rod	-	*	3500	-	CSH	D
Stun Whip	-	*	4000	-	C	D
Light Saber	-	8d6	48000	-	H	C
Vibro Dagger	-	3d6	18000	-	H	C
Chemex Grenade	-	10d6	4000	-	-	F
Energy Grenade	-	12d6	4500	-	-	F
Fragment Grenade	-	5d6	2500	-	-	F
Poison Gas Grenade	-	*	2500	-	-	F
Stun Grenade	-	*	3000	-	-	F
Tear Gas Grenade	-	*	2000	-	-	F
CDP A	-	10d6	6000	-	-	F
CDP B	-	12d6	7000	-	-	F
Concussion Bomb	-	*	7500	-	-	F
Fission Bomb (C)	-	40d10	17000	-	-	F
Fission Bomb (D)	-	60d10	17000	-	-	F
Fusion Bomb	-	15d10	10000	-	-	F
Matter Bomb (Alpha)	-	15d6	8000	-	-	F

Matter Bomb (Beta)	-	30d6	20000	-	-	F
Matter Bomb (Delta)	-	60d6	50000	-	-	F
Micro-Missile	10/30/50	7d6	30000	-	-	F
Mini-Missile	30/60/90	20d10	40000	-	-	F
Neutron Bomb	-	20d10	15000	-	-	F
SDP	-	6d6	3000	-	-	F
Surface Missile	1000/2000/4000	*	70000	-	-	F

Notes:

Range is in tens of yards. Each range category (Short, Medium, or Long) includes attacks from distances equal to or less than the given range. The modifiers for range are -2 for medium range and -5 for long range. * means that the item has special effects that are outlined in the equipment descriptions. Value is in gold pieces. Supply is the number of shots the power cell is good for before becoming useless. Power is the number and type of power cell the weapon is powered by. Code is the complexity used in the Gamma Technique.

Missile Weapons

These include a variety of weapons. All are designed to project a beam, missile, or ray of some sort at a target in range. All need power and ammunition to function. Hi-Tech missile weapons can be fired twice per round and a normal attack roll is made.

Laser Weapons - Each shot sends a laser beam at the target.

Mark Blaster Weapons - Each shot sends a sonic blast at the target. Mark I-IV are pistols and Mark V-VIII are rifles. The wielder of sonic missile weapon doesn't make a normal "to hit" roll. Instead, the target makes a saving throw vs. paralyzation to avoid being hit. This saving throw is made at a bonus of +2 if the weapon is used at medium range, or +5 if the target is at long range.

Disruptors - Each shot sends a disruption beam at its target. A disruption beam disrupts cells in living matter causing damage to creatures eternally. All disruptors have two settings: Standard, High Power. Standard is as in the table. High Power allows a rate of fire of 2 shots per round, a +1d10 damage, and drains double the amount of power (i.e. two charges).

Needler - A clip for a needler contains 10 small needles coated with a paralysis drug (save vs. poison or become paralyzed for 5d4 rounds). The energy cell will be used up after 30 shots. This weapon is completely soundless.

Stun Ray Weapons - A successful shot does no damage, but knocks the victim out for 1d20 rounds.

Energy Weapons

Some weapons combine elements of melee and missile weapons. All are close combat weapons that can't be thrown and need power.

Electroflail - A flail made of mithril and charged with electricity. The slightest touch cause a severe shock. The Solar Energy Cell is good for 40 minutes.

Energy Mace - This energized club is powered by a Chemical Energy Cell good for 20 minutes.

Paralysis Rod - This 1 yard long rod may be powered by a Chemical Energy Cell (good for 4 hours), a Solar Energy Cell (good for 8 hours), or a Hydrogen Energy Cell (good for 12 hours). When brought into contact with exposed flesh (not protected by clothing, armor, etc.), it overloads the victim's synapses, causing unconsciousness and paralysis lasting 4d4 hours. The victim can't be awakened prematurely.

Stun Whip - The Chemical Energy Cell in this item is good for 30 minutes. A target hit by one of these 3 yard wire whips becomes unconscious for 5d4 minutes.

Light Saber (Vibro Blade) - The handle of this device houses a the energy cell good for 20 minutes. When in use, a blue-etched force field forms a 1 foot blade that will cut through almost anything (DMs discretion).

Vibro Dagger - Similar to the vibro blade, but with a blade of only 6 inches long, the vibro dagger's cell is good for 30 minutes.

Grenades

These are exploding devices usually delivered by hand. A character should use the standard grenade-like missile combat rules. Before throwing the grenade, the character activates it by "pulling the pin" on it. Once the pin is pulled, the grenade automatically explodes the next round. All characters within 9 yards of an exploding grenade are suffer the effects of the grenade. Damage is halved if save vs. paralyzation is made by victims.

Chemex Grenade - Creates a chemical explosion (complete with lung- searing flame) within the area.

Energy Grenade - Releases blast of energy within the area.

Fragment Grenade - Covers the area with jagged metal chards.

Poison Gas Grenade - Spews poison gas throughout the area that hangs in the air for 1d6 rounds (-2 if area is windy). Characters must save vs. poison or suffer 3d6 points of damage for each round exposed to the gas.

Stun Grenade - Spews paralysis gas that acts like poison gas, but hangs in the air for only 1d4 rounds. also, characters are knocked unconscious by the gas for 5d4 rounds taking no damage if a save vs poison is failed.

Tear Gas Grenade - Spews tear gas that hangs in the air for 1d6 rounds (-2 if area is windy). Characters make a save vs poison. Failure indicates that the character suffers a -2 "to hit" and suffers a -1 penalty to armor class. The effects last for 3 rounds.

Bombs & Missiles

This category includes demolition charges, small warheads, and sophisticated missiles. These items have any type of fusing device the DM wishes (proximity, impact, heat, time delay, etc.). Most lack delivery and guidance systems and have to be carried to the desired spot and detonated. All characters within area of effect suffer damage. Damage is halved if save vs. paralyzation is made by victims.

CDP A (Concentrated Damage Pack Type A) & CDP B (Concentrated Damage Pack Type B) - A canvas backpack full of plastic explosives designed to be placed by the bearer against a structure to be destroyed. Blast radius is 30 yards for type A and 60 yards for type B.

Concussion bomb - A canister 10 inches long and 3 in diameter with small "hooks" that fit various delivery systems. Has the effect of a stun grenade, but has a 60-yard blast radius and a cloud duration of 2d6 minutes.

Fission Bomb - A black steel sphere 15 inches in diameter. Has a 1-mile blast radius. Come in 2 versions: Clean and Dirty. The dirty bomb causes radiation (DM decides the effects of radiation).

Fusion Bomb - A 50-inch diameter black steel disc. The blast radius is 60 feet.

Matter Bomb - A disc similar in appearance to a fusion bomb. Comes in alpha, beta, and delta types. The alpha has a blast radius of 9 yards; the beta has a blast radius of 30 yards; and the delta has a blast radius of 60 yards.

Micro-Missile - A 3-inch long missile that comes complete with its own plastic handgrip/launcher. It does a blast radius of 15 yards.

Mini-Missile - A 15-inch long missile in its own disposable, shoulder-held launcher. It has a blast radius of 30 yards.

Neutron Bomb - A 18-inch in diameter duralloy sphere. This bomb has a blast radius of 300 yards. The bomb only damages living beings; it doesn't harm equipment, vehicles, or buildings.

SDP (Small Damage Pack) - A canvas bag of plastic explosives. The blast radius is 12 yards.

Surface Missile - A slender 3 yards long cylinder, usually fixed to a military installation, or vehicle, and directed by computers and radar at the launch site. There are 3 types of surface missiles: neutron, fission, and concussion. The first two are simple bombs of the appropriate type attached to a surface missile. The latter type will do 30d10 points of damage to anyone in a 100-yard blast radius.

Phaser

There are two types of phasers: Phaser I and Phaser II. Phaser I does not have a handle and can fit easily in the palm of the hand. The hydrogen energy cell in a Phaser I holds 50 charges. Phaser II is larger and has a handle. The two hydrogen energy cells in a Phaser II hold a total of 100 charges.

Type	Range	Charges	
Phaser I	5/10/15	50	Range is given in tens of yards.
Phaser II	10/20/30	100	

A phaser is different than other weapons in that it has a setting controls that allows various forms of damage.

SPREAD:

Normal - The wielder makes a normal "to hit" roll.

Wide - The wielder doesn't make a normal "to hit" roll. Instead, the target makes a saving throw vs. paralyzation to avoid being hit. This saving throw is made at a bonus of +2 if the weapon is used at medium range, or +5 if the target is at long range.

SETTING:

The number following the setting is the number of charges that will be drained from the battery per hit. Wide-spread attacks will drain twice the number of charges per person affected. The setting are as followed:

Stun (1) - Target must make a successful saving throw vs. wands or be rendered rigidly immobile for 5d4 rounds. A save indicates that the stun didn't affect the character this time. The ray from this setting is blue.

1 (2) - Target suffer 1d10 points of damage, save vs. wands for half damage. The ray color from settings 1 through 10 are various shades of red (1 being light red, and 10 being dark red).

2 (3) - Target suffer 2d10 points of damage, save vs. wands for half damage.

3 (4) - Target suffer 3d10 points of damage, save vs. wands for half damage.

4 (5) - Target suffer 4d10 points of damage, save vs. wands for half damage.

5 (6) - Target suffer 5d10 points of damage, save vs. wands for half damage.

6 (7) - Target suffer 6d10 points of damage, save vs. wands for half damage.

7 (8) - Target suffer 7d10 points of damage, save vs. wands for half damage.

8 (9) - Target suffer 8d10 points of damage, save vs. wands for half damage.

9 (10) - Target suffer 9d10 points of damage, save vs. wands for half damage.

10 (12) - Target must save vs. death magic or die.

Maximum (14) - This setting causes matter to vanish. It affects even matter (or energy) of a magical nature. Disintegration is instantaneous, and its effects are permanent. Anything within the 10' X 10' X 10' cube is obliterated. A thin, green ray (no wide-spread attack) causes physical material affected to glow and vanish leaving no trace.

Overload (all) - This setting causes the phaser to build up energy that surpasses safety parameters until it explodes destroying the phaser. Phaser I has a blast radius of 25 yards and does 5d10 points of damage to living things in the blast radius. Phaser II has a blast radius of 50 yards and does 5d20 points of damage to living things in the blast radius.

Powered Armor

Type	AC	Value	Power	Code
Energized Armor	2	75000	A	E
Inertia Armor	2	110000	2A	E
Powered Alloyed Plate	2	120000	A	E
Powered Plate Armor	3	100000	A	E
Powered Assault Armor	1	150000	3A	E
Powered Attack Armor	1	150000	2A	E
Powered Battle Armor	2	150000	2A	E
Powered Scout Armor	2	150000	2A	E

All powered armor consists of a sealed suit with a power source that makes it function like a "second skin" when worn. Energized Armor and Inertia Armor may function without a power source (but it will be impossible to make jet-assisted jumps). Other types won't function properly without a power source. They will still protect the wearer in most cases, but their force fields (if any) won't work and the character won't be able to move while in them. Gas doesn't penetrate functioning powered armor since there is a 72-hour oxygen supply inside that works independently of the armor's power system. All suits have a 2-way radio, a Medi-kit, ultraviolet and infrared sensors, and an audio system that automatically dampens loud noises and amplifies soft noises (wearer can make out individual sounds at 4 times the normal distance).

Energized Armor - The suit's jet-pack lets the wearer make jumps of 180 yards. It is powered by a single Atomic Energy Cell good for 40 hours.

Inertia Armor - Suit has a partial force field that can absorb up to half of the damage (25 points of damage per round) inflicted on the wearer. It also has a jet-pack for use in making jumps of up to 180 yards. It is powered by two Atomic Energy Cells good for 60 hours.

Powered Alloyed Plate - The single Atomic Energy Cell (good for 44 hours) gives this armor the ability to move under its own power while worn. The wearer moves as if unburdened while carrying an additional 30 pounds and as if burdened when carrying 60 pounds over his normal amount. Powered Plate Armor is an improved version using a single Atomic Energy Cell good for 52 hours.

Powered Assault Armor - The three Atomic Energy Cells in this suit are good for 48 hours. While in operation, the suit provides a force field that absorbs all damage inflicted on the wearer (50 points per round maximum). In addition, the wearer moves as if unburdened while carrying an additional 90 pounds and as if burdened when carrying 180 pounds over his normal amount. The wearer moves at quadruple speed and can make 30 yard jumps. Built in the finger of each hand is an independently-powered laser pistol and built into the helmet is a micro-missile launcher with a 20-missile clip. Built in the back of the suit is a grenade launcher (90 meter range) with a 15 grenade clip containing assorted grenades. The suit's powered fists do 9d6 damage.

Powered Attack Armor - The two Atomic Energy Cells in this suit are good for 40 hours. This type is the same as the Powered Assault Armor, but its force field absorbs 40 hit points maximum per round and the wearer moves at triple normal speed.

Powered Battle Armor - The two Atomic Energy Cells in this suit are good for 48 hours. This type of armor contains a force field that absorbs all damage inflicted on the wearer (maximum of 30 hit points). The wearer moves as if unburdened while carrying an additional 60 pounds and as if burdened when carrying 120 pounds over his normal amount. He may move at double his normal speed and make 15 yard jumps.

Powered Scout Armor - The single Atomic Energy Cell (good for 56 hours) gives this armor the ability to move under its own power while worn. The wearer moves as if unburdened while carrying an additional 30 pounds and as if burdened when carrying 60 pounds over his normal amount. This type of armor contains a force field that absorbs all damage inflicted on the wearer (maximum of 20 hit points). The wearer moves at quadruple speed and can make 30 yard jumps.

Medical Supplies and Equipment

These items are labelled with a universal symbol and include instructions for use (that will be indecipherable to most characters). The labelling system will let characters easily recognize all types of medical equipment and supplies once they encounter any example of that of equipment or material.

Accelera Dose - A 6-inch long disposable jet spray tube of a compound developed to accelerate healing. Characters who spray the compound under their skin immediately heal 1d10 points of damage.

Cur-In Dose - A 6-inch long disposable jet spray tube of a substance that breaks down most chemicals not normally found in the human body. If taken within 30 seconds of exposure to a drug or poison, the user experiences no effect from the drug or poison.

Interra Shot - A 6-inch long disposable jet spray tube containing a sort of "truth serum" that opens the subconscious to direct interrogation. If affected, the character answers all questions truthfully for 10 minutes and then forgets the interrogation.

Medi-Kit - A 3X6X12-inch metal and plastic box that can be hung on a belt for transportation. A micro-computer in the unit controls sensors that analyze medical problems in any subject it scans. The unit is held next to the skin when a scan is desired. If a character wants the kit to heal a wound, he holds it over the trauma area. The kit automatically sutures wounds, injects anti-toxins and antibiotics (where needed) and even gives simple instructions on how to perform operations. It will also spray antiseptic dressings on treated wounds. Kits are powered by a Chemical Energy Cell and keep functioning as long as their drug banks are full. There are about 4 treatments per drug bank for each type of problem the kit is designed to handle. Replacement banks (with built-in power cells) will be found in military depots and chemical plants. Medi-kits will never inject anyone with a substance (Accelera Dose, for example) poisonous to the patient. They heal 1d10+20 points of damage. The average Medi-kit heals 2d20+200 points of damage before exhausting its drugs banks.

Mind Booster - A 6-inch long disposable jet spray tube containing a compound that enhances mental functioning. The user's intelligence is increased by 3 for one hour after taking the compound. However, he must rest for four hours immediately after the drug wears off or he will permanently lose 3 points from his intelligence.

Poison Antidote - A 6-inch long disposable jet spray tube containing an antidote for each type of poison. If used on someone within 30 seconds of exposure to poison, the antidote may save him from damage or death. Each type of antidote always work for each type of poison. If an antidote is for another type of poison, it has a 50% chance of working on the poison the user was exposed to. The chance is modified by +10% for each level the antidote is above the poison and -10% for each level below it is below the poison.

Stim Dose - A 6-inch long disposable jet spray tube containing a special stimulant that doubles the user's speed, increases his dexterity by 1 and increases strength by 3 for a period of one hour. The user must rest for eight hours immediately after the dose wears off.

Suggestion Change Drug - A 6-inch long disposable jet spray tube containing a hypnotic drug that puts the user in a trance for 10 minutes. While hypnotized, the user may be given instructions that he will follow literally for the next four hours, including instructions to take orders from another character. Once out of the drug's trance, the user will only subconsciously remember his instructions.

Miscellaneous Items

Auto-analyzer/Tricorder - This hand computer/scanner/data transfer mechanism is most often used to analyze life forms and natural phenomenon. The character using it must make an intelligence check for each use to obtain the information he desires, although the DM may determine that the intelligence check is only needed when seeking

a particularly complex piece of information. If the check is successful, the player may ask the DM 1-6 simple or yes/no questions.

The analyzer can also be set up to act as an alarm, with 100 yard range. The analyzer can work via a computer link-up or with a variety of data chips that can be inserted.

The analyzer runs on a Hydrogen Energy Cell that will allow it to function continuously for 18 hours.

Universal Translator - This small computer translates a multitude of languages. It comes in a variety of forms, sometimes as an item of jewelry, a small rod, an ear plug, an ear implant transmitting to a computer elsewhere, etc.. When in use, the device is generally undetectable (with the exception that the speaker's lips move like he was in a Japanese martial-arts movie).

The device works best when languages are preprogramed into it. In order to use a language not programed into it, the translator must "derive the language matrix". To derive a basic matrix, the translator needs to be exposed to the language for several minutes, then as time progresses the language base will improve.

Communications Sender - This is a short range communications device. It resembles a 20 by 10 by 5 inch black box with a small tv screen in one side. The Chemical Energy Cell powering the device is good for 40 hours. Messages can be sent or received at a 100-mile range.

Communicators - These palm-sized plastic boxes fold out to display a dial used to direct a signal in any direction. They allow users to communicate over a 4-mile range. In some cases, communicators will only respond to signals from other units tied into a particular network. Each has a Chemical Energy Cell good for 200 hours.

Control Transmitters

A control transmitter appears to be a small speaker, with a jack that connects it to a sonic generator. The device allows commands to be given to a specific type of creature of animal or less intelligence. Each time a command is given to a particular type of creature, a 6- sided die is rolled. If a 6 isn't rolled, the creature obeys its command. If a 6 is rolled, the creature goes mad and will attack the users of the device if possible. After the device has backfired, it cannot be used with the same species again, but functions normally with other species. Below is a listing of the various transmitters:

Type	Color
Mammal	red
Fish	blue
Insect	yellow
Reptile	white
Plant	green
Robot/Android	black

REID COMMENT: See the comment in "Weaponry - Past & Present".

16 ARCANE ANSWERS TO GUNPOWDER

1) Shield (1st Wiz): provides x armor class to all projectiles and/or +n to ac/save.

- 2) Affect Normal Fires (1st Wiz): would either make the powder fizzle and smoke or flash and explode the weapon (as well as give quite an extra oomph to the projectile).
- 3) Fire Trap (4th Wiz, 2nd Pr): arcane equivalent to black powder (you can't say a charge of black powder in any muzzle loading infantry personal/squad weapon actually causes more of a blast than 1d4+7 with a 5' radius (minimum damage for a mage of level enough to cast the spell).
- 4) Web (2nd Wiz): no missile attacks at individuals completely caught in web and no missile attacks through web.
- 5) Produce Flame (2nd Pr): throw a palm full of fire, flammable objects, powder kegs, primers, loaded guns, unmixed sulfur, saltpeter, charcoal, powder horns, body, clothes, hair of gunners, etc..
- 6) Fireball (3rd Wiz): PHOOOOOOOOOOOM!
- 7) Wall Of Fire (4th Wiz): see Fireball.
- 8) Lightening Bolt (3rd Wiz): see Fireball.
- 9) Dancing Lights (1st Wiz): cast it at the powder store house and see them run (it can look like a group with torches).
- 10) Mirror Image (2nd Wiz): go ahead... hit me (doesn't work to well against shotgun or especially chain or volley fire for that matter).
- 11) Grease (1st Wiz): flammable coating all over those peasants (low save) with firearms.
- 12) Wall Of Fog (1st Wiz): go ahead-shoot your mud!
- 13) Flaming Sphere (2nd Wiz): see Fireball.
- 14) Melf's Acid Arrow (2nd Wiz): for spiking a canon.
- 15) Gust Of Wind (3rd Wiz): bad for long distance targeting.
- 16) Protection From Normal Missiles (3rd Wiz): protects from siege weapons.

NON-WEAPON PROFICIENCIES

Proficiency	# of Slots Required	Relevant Ability	Check Modifier
Cowboy Cool	1	Charisma	0
Fan Shooting	1	Dexterity	0
Fast Draw	1	Dexterity	0
Hip Shooting	1	Dexterity	0
Repair Cimarron Six-Shooter	1	Intelligence	0
Speed Loading	1	Dexterity	0
Sharpshooting	1	Dexterity	0

Cowboy Cool - This allows the user to stare down an opponent in a duel and gain a psychological advantage. On a successful Charisma check by the user, the opponent

suffers a -2 penalty to his next to-hit roll (and to his next Dexterity check if using the Fast Draw proficiency below). This proficiency requires two rounds of concentration to take effect. Cowboy Cool can also be used to negate someone else's attempt to use Cowboy Cool or to spin one or two six-shooters on one's fingers without dropping them.

Fan Shooting - The user attempts to shoot as many missiles (i.e. darts, bullets, beams, etc.) as possible within one round. The extent of success on the user's Dexterity check indicates the number of darts that can be fired at a given combat round. A successful Dexterity check allows at least two shots during the same round; if the Dexterity score was beaten by 3-5 points, at least three shots in a round; 6-8, up to four shots; 9-11, five shots; and 12 or more, all six shots. Each successive shot suffers a cumulative -1 penalty to hit (-1 for the first shot, -2 for the second, etc.). Of course, this assumes that the weapon holds six missiles.

The first shot occurs when the user should normally be allowed to fire during the combat round (i.e. initiative). Each successive shot will then happen in each successive segment. Fast Draw and Fan shooting proficiencies can be used simultaneously.

Fast Draw - Upon making a successful Dexterity check, a user can shoot before anyone else during a combat round, regardless of the original Initiative result. If two opponents fight a duel and both use the Fast Draw proficiency, the one who beats his Dexterity score by the highest amount gains the initiative.

Hip Shooting - The user has the ability to shoot from the hip. The proficiency allows the user to shoot faster, adding a +2 bonus to Dexterity checks made for Fast Draw or Fan Shooting attempts. Unfortunately, it is less accurate and causes a -2 penalty to hit in both cases.

Repair Cimarron Six-Shooter - On a successful Intelligence check, the user can repair a jammed Cimarron Six-Shooter. Each attempt takes a full hour. He may try as many times as needed to repair the weapon. An unmodified score of 20 causes the weapon to break permanently.

Speed Loading - For a specific missile weapon, character cuts reloading time of weapon in half with no penalties.

Sharpshooting - On any to-hit roll of 20 or better after modifications, the user may make an extra Dexterity check. If successful, the user designates a particular spot on a target to be hit by the dart. This can be used to automatically disarm an opponent or inflict maximum damage. Sharpshooting cannot be used with the Hip Shooting or Fan Shooting proficiencies.

ROGUE KIT: TECHNOLOGIST

Description: The technologist is either the fore-runner of a new technological age or a researcher into a technology long forgotten (dependant on the DM's campaign world). In any case, he loathes magic and wants to rid the world of it and bring the world into a technological age. For this reason, he is considered a rogue in society, going against the norm (magic).

He is basically an scientist/engineer with great knowledge in a specific field (i.e. architecture, mechanical design, smithing, etc.), but will dabble in anything to help the advancement of technology.

Technologists must have an intelligence above 15, a wisdom above 13, strength above 12, and dexterity above 12. Although not required, high dexterity and strength

are also useful. They do not get any experience point bonuses due to high ability scores.

Role: A technologist has a great knowledge on numerous, practical topics that tend to be more valuable than the arcane knowledge of mages and clerics. He will always insist that technology is the solution to all problems and will use technology to solve problems.

A technologist will, of course, try to do a service to everyone by attempting to get them to use his devices more often thus making progress towards technological advancement. However, most people will be distrustful of this technology, and won't use it. The DM should not allow the technologist to totally reshape the world! Only in extreme circumstances should his devices be accepted and used for any length of time (even the scientist gets to save the day!). An example would be where he saves a starving village by inventing a steel-bottom plow and new irrigation procedures, that when combined with his new pumping system, saves the people from slow, painful death.

Weapon Proficiencies: Technologists are allowed any weapon used by thief (except under specific circumstances, see below) and prefer those that have some degree of complexity in their use or manufacture such as an arquebus, bow (any), crossbow (any), mancatcher, etc..

Nonweapon Proficiencies: Bonus: Engineering, Appraising, Alchemy, Architecture, Reading/Writing. Recommended: Artistic Ability, Blacksmithing, Brewing, Carpentry, Gem Cutting, Leather-Working, Mining, Stonemasonry, Weaponsmithing.

Skill Progression: A technologist doesn't have the thieving skills of Move Silently, Hide in Shadows, Detect Noise, Climb Walls, and Read Languages. Pick Pockets, Open Locks, and Find/Remove Traps are usually distributed evenly.

Equipment: A technologist is limited to weapons and armor of the thief class unless they make some technical wonder of their own that is out of these bounds. For example, they can use any armor of a type that they have proficiently made (in the time of the campaign, things made before don't count) because they've spent enough time with that type to know it fairly well.

Starting funds are 10d10 x 10 gold pieces.

Special Benefits: A technologist has the abilities of a sage. His knowledge is in a field of study (DMG, page 107, Table 61: Fields of Study); preferably something pertaining to science. Note, that the technologist must maintain the resources that normal sages have.

A technologist can detect the following information when within 10 feet of the particular phenomenon.

Detect secret/concealed doors	1-2 on 1d8
Detect grade or slope in passage	1-5 on 1d6
Detect new tunnel/passageway construction	1-5 on 1d6
Detect unsafe walls, ceiling, and floors	1-7 on 1d10
Detect sliding/shifting walls or rooms	1-4 on 1d6
Detect stonework traps, pits, and deadfalls	1-3 on 1d6

Note that the technologist must deliberately try to make these determinations; the information doesn't not simply spring to mind unbidden.

A technologist gains an immunity to illusions as he progresses in levels. As well as a saving throw, a technologist gets a 5% chance for each level (no greater than 95%) minus the level of the illusionist to resist the illusion. Racial adjustments are as followed: Dwarf +10, Halfling +7, Elf +5, Half-elf 0, Human -5, Gnome -10.

The greatest and most important ability of a technologist is to build items of the next time period (i.e. Ancient, Dark Ages, Middle Ages, Renaissance, etc.). The DM must be aware of what time period the current campaign is in and what the next one will be. To build an item, the character must have the proper plans and resources to do it. The player must submit the idea for approval to the DM. Mainly, the DM must be sure that the technical item will not influence the campaign world enough to throw it out of balance. If the DM rejects it, then his decision is final and the item can't be made. If the DM accepts the proposal, the character has the knowledge to make the item. Now, the player must gather all pertinent information on the item (for copyright purposes of course), if tinker gnomes have to do it then so do technologists. Then given the proper campaign time and resources, the item is created by the technologist.

Special Hindrances: Obviously, technologists despise magic of any kind and will never willingly use or partake in anything magical. In fact, they will attempt to destroy everything magical that they find.

Races: Dwarves, with their affinity for the mechanical and lack for the magical can be technologists. Gnomes also prone to be technologists, although most gnomes are less capable of rising above being tinker gnomes. Elves can be technologists, but few are interested. Of course, humans (half-elves) were born to be technologists (some sages claim that they will master technology and eventually rule the world after the demise of all magic).

MAGIC-ITEMS

Leyden Jar

Leyden Jar - A nice technological weapon that is easy to make is a Leyden jar charged full of static electricity. The character throws it and it breaks (it's glass) on contact, doing 1d4+level damage to everyone within 5 feet.

ALBUS ATER ANTE MAGICUS METALLUM

A portal to the Positive Material Plane and a portal to the Negative Material Plane come in contact with one another on The Prime Material Plane for an a minute instant. This confrontation causes a massive explosion which will harm every living thing within 100 feet (100 - 1d20 for every 10 feet away from the center of the explosion Hit Points of Damage). Furthermore, anybody within 200 feet of the explosion and not properly shielded will be permanently blinded by the strange mixture of intense light and intense darkness.

The residue from this strange occurrence is a bizarre metal. The sages and scholarly mages refer to this metal as Albus Ater Ante Magicus Metallum. Common folk prefer the terms A.M. or Threatom. The metal has only been found deep within the earth. The portal collisions may take place elsewhere but all evidence (i.e. residue) so far shows that it is limited to the earth (possibly some strange link to the Elemental Plane of Earth, but there is no evidence of this). The amount of the metal found is usually around one ton.

The metal is unique in that it is the only metal known to change colors naturally (if it is accepted that the metal is created naturally). At completely

random intervals it will change from pure white to pure black immediately. Note that each separate piece of the metal will act independently on its color transformation.

The best (or worst) quality of the metal is its uncanny ability of anti-magic; in essence it totally neutralizes and negates magic it comes in contact with. First, it removes spells and spell-like effects (including device effects, innate abilities, and mages' memorized spells) from creatures or objects comes in direct contact with the metal (i.e. not through clothing, armor, etc.). Second, it disrupts the casting or use of these magical abilities if in direct contact with the person attempting to use the abilities (i.e. mages' and clerics' spells that are being cast would fail). Third, it destroys all magical items that don't make a saving throw vs. disintegration for each round it is in contact with the ability. When an item is destroyed, everybody within a 50 feet radius must make a saving throw vs. paralyzation or become blind for 1d6 turns. As anybody could see, this could be a very dangerous substance indeed.

The metal can be forged into items by an extremely good blacksmith or weaponsmith (must have a minimum of 2 slots in the proper non-weapon proficiency). The metal's melting point is at 2000 degrees Fahrenheit, but in other aspects it is very similar to iron. The time to forge items from this metal is quadruple the amount for normal metals.

(DMs should be careful in introducing such a substance in his/her campaign. Some players may take advantage of such an item and overlook the dangers of using it.)

SUGGESTED READING

Modern Monsters - DRAGON #57, BEST OF DRAGON VOL. V - The legendary Ed Greenwood takes a look at technology in AD&D.

The City Beyond The Gate - DRAGON #100 - An adventure set in modern day London where characters experience current technology.

High-Tech Hijinks - DRAGON #114 - Advice on using technology in your campaign.

The Voyage of the Princess Ark Part 23 Shootout at South Gulch - DRAGON #176 - A story that is an excellent example of a western setting in a D&D world, but without the intervention of technology.

Sturmgeschutz and Sorcery - BEST OF THE DRAGON VOL. 1 - Gary Gygax takes a look at AD&D and WWII.

Expedition To The Barrier Peaks - AD&D Module S3 - An adventure that incorporates hi-tech weaponry to make adventurers' lives miserable.

SPECIAL THANKS

Scott Brogley (BITNET ADDRESS: SBROGII%TYMNET.COM@JHUVH.HCF.JHU.EDU) for his 16 Arcane Answers To Gunpowder section.

Marc Carlson (BITNET ADDRESS: IMC@VAX2.UTULSA.EDU) who sent high points of his rules he uses for gun (and non-gun combat), which were used to make the disruptors and

other various weapons. Finally, he sent a multitude of high-tech items that were used in the guide.

Bryan J. Maloney (BITNET ADDRESS: JACOBUS@SONATA.CC.PURDUE.EDU) for his great article "A Story of Fyre and Smoak: Notes towards acceptable firearms for AD&D" which was located on the network.

Darkheart Soulreaver aka Steven R. Hamby (BITNET ADDRESS: ZA9ZA03@SYSA.COMPUTING-SERVICES.MANCHESTER-POLY.AC.UK) for his artificier kit that was transformed into the Technologist Rogue Kit. Also, an unknown person made a technologist kit that was also used in developing the one that is presented here and the Leyden Jar item with it.

TRAIN, DM Sol Sukut (sds7966@silver.sdsmt.edu) for all the information in the "Schnell & Wilkes Products". The "six-shooter" is pretty much adapted straight from DRAGON's Chronicles of the Voyages of the Princess Arc, however, the Repeater, SPAS Scatter Gun, and ESPECIALLY the Rattlin Gun are products of his imagination. He changed the inventors' names and the description some.