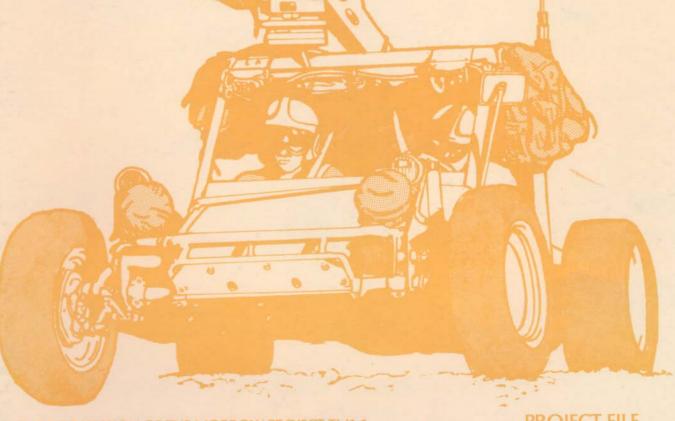
THE MORROW **PROJECT**



DESERT SEARCH

edetto, Jr. and H.N. Voss

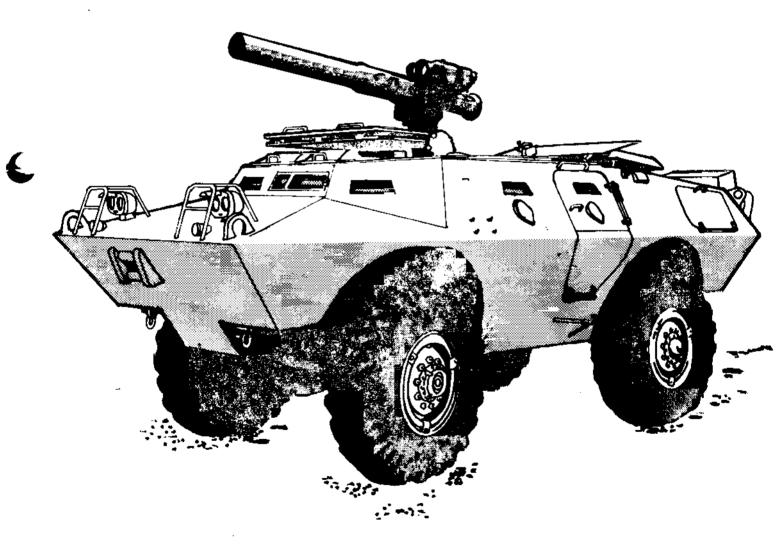


PRIOR POSSESSION OF THE MORROW PROJECT TM1-1 IS NECESSARY TO THE USE OF THIS MODULE.

THE MORROW PROJECT

Project File 007

DESERT SEARCH



By Joseph Benedetto, Jr. and H.N. VOSS

This document was composed and typeset on a Varityper EPICS System using a Comp-Edit 6400 Digital Typesetter with the kind permission and help of both the Deucalion Resources Group and Varityper.

INTRODUCTION

This module may be used as a one-time firefight, but has the potential to become the start of a campaign played over an extended period of time. The length of such a campaign is in the hands of the PD; it might involve taking the team for a ride and exposing them to the many wonders and dangers of the 22nd century before they even come close to finishing their mission. For them, a new world awaits. At stake: the lives of several Project personnel and the first hint of Prime Base.

L SITUATION: Pre-War

Spencer was a very small town, so insignificant that it was often overlooked on maps. Situated near government testing ranges, the town had a population of almost 500 people, living in a tiny community built alongside the highway.

The region, a part of the Southwestern Desert, was extremely poor in agricultural resources, but had a fairly good mining industry; Spencer supported a few small mines, all of them located in the hills southwest of town. The town had no other means of economic support.

N. SITUATION: The War

Being located in such an unpopulated area, away from any targets, Spencer survived The War untouched. However, to the souteast, Nellis AFB was hit and even though Las Vegas survived relatively unscathed, Hoover Dam didn't. With hundreds killed outright, electrical power gone, the flood of water from Lake Mead and lack of local governmental control, the area was shortly in chaos.

Rioters soon damaged large portions of Las Vegas. They destroyed the airport and went on a rampage through the city that left it wrecked and burning. Survivors fled the doomed city; they left in panic, streaming out onto the roads and highways, looking for "someplace else" to go.

A few passed through Spencer. Most stayed on the interstate highways, many died on them. Nevada lacked any major agricultural areas and most of the people left for more promising land.

Spencer became a ghost town within two months of The War. Within two years, the only people left in Southern Nevada were Amerinds and a few small, scattered pockets of anglos trying to survive.

III. SITUATION: Post-War

Spencer is a decaying ruin, a ghost town. A number of relics remain: a lot of valuable scrap metal, and enough used bricks and stone to construct some fine houses. But nobody lives in (or even anywhere near) Spencer. The Amerinds have a rough idea of its location and have even passed through it a few times, but no one actually goes there. Spencer has ceased to exist even as a name in the language.

COMBINED GROUP 'N'

Combined Group 'N' was created to serve as a force capable of protecting and assisting in the operation of Morrow Project Power Station TN-7. It was subdivided into four smaller teams: N-1 MARS, the command team, has 6 men and a V-150 with a 20mm cannon. N-2 Recon has a V-150 with TOW and 2 FAVs (the player's team). N-3 Science/Service and Support has 8 men and 2 Ranger MPVs. N-4 MARS has 8 men with 4 FAVs.

These four teams are to support the base; although the teams themselves have no knowledge of the actual layout or workings of the station itself (it hadn't even been built at the time the teams werre frozen), they are aware of its (planned) existence and have been briefed on their mission to protect it.

Recon Team N-2

Recon Team N-2 was frozen on 24 April 1985. The members of this team have trained together for at least one year, and know that they are part of a larger force assigned to a Morrow Project Power Station. They do not know the station's location but they

do know that there are three other teams of their group nearby and they are familiar with the makeup of those teams (vehicles issued, group identification codes, team leaders, etc.) and that each team has six resupply caches spread across the surrounding

Recon Team N-2, containing the group XO, is equipped with a Commando V-150 TOW Missile Vehicle. Any of the standard weapons issue loads may be used in this module. Team members can always operate the equipment issued to other team members though how well they can operate this equipment may vary.

P.D. NOTE: Teams may be issued M16A2 Assault Rifles instead of Stoner M22 Rifles in Basic Load #1. This is due to the fact that the original stocks of Stoner weapons, obtained by the Project in the 66's were depleted, and the M16A2s had become available on the open market. Such a substitution is at the P.D.'s discretion.

III. TEAM EQUIPMENT

The team's personal gear is in perfect condition. The team's vehicle is also in perfect shape, along with all of it's internal stores. The Bolt Hole

This is the standard storage and freezing facility mentioned so often in the gamebook and the modules. Refer to Project File 001 for layout and description.

Team Vehicles and Equipment

The primary MPV for this module is the V-150 in its TOW platform configuration. The operational characteristics of this unit are identical to those of all other V-150s. Being a TOW vehicle, interior space is at a premium. The crew should consist of four people: a gunner, a loader, a driver and an RTO. The loader can be dispensed with, but this will slow up the firing of the TOW. Details on the operation of the weapon system will follow.

If more than four players are present, or if the P.D. does not want to use the V-150, the team may be mounted on Fast Attack Vehicles (FAVs).

The FAV is a lightweight, two-man, all terrain vehicle, designed for use in this type of terrain. It is not pretty, being a "bare bones" workhorse. It can be described as a framework of tubing with four wheels and an engine strapped on, to which its riders cling!

The FAV is fast and light but it is unarmored. It may carry only two personnel, with a minimum of equipment; personal weapons and packs is about all, and these must be strapped to the frame. Note that the FAV has a much abbreviated vehicular basic load.

This MPV is little more than a glorified go-cart, a stripped down dune buggy. It does not even have a windscreen. Yet for its size and weight it can carry a variety of heavy weapons. The FAVs issued in this module all have a ring mount for weapons above the passenger's seat. To use a heavy weapon the passenger, or gunner, stands on his seat, waist high in the ring. Each FAV is equipped with a M174E3 Grenade Launcher (pgs. 16 and 17 of the MPGB), or as it is now known in the U.S. Army: the Mark 19 Mod. 3.

The FAV can carry either a TOW launcher or a GPMG (General Purpose Machine Gun) in place of the grenade launcher. The TOW woud have to come from the V-150, but the change is up to the players.

P.D. NOTE: The FAV gumner can fire while the vehicle is on the move, but in no case is a hit likely. Read the specific sections for the TOW and M174E3 for details. If an M60 or MAG 58 is mounted, there is some chance of a hit, but the faster the FAV is moving, the more unlikely the chances.

Reduce the firer's chances to hit his target by 10% for every 10mph the FAV is travelling. This is for MGs or other personal weapons and not for heavier ones. We recommend that you do not tell players about the reduction: they should be able to figure it out for themselves.

The TOW Missile Launcher

The TOW is described on page 18 of the MPGB but more detailed information on its characteristics and use are presented here. None of the following information has been published by TimeLine in the past.

The TOW is quite a weapon. The launcher group weighs in at around 200 lbs, while each missiles weighs about 40 lbs. The system is designed to be operated by two men but can be run by one. This package, two men and a few hundred pounds of gear, can kill any tank in the world, or any other ground vehicle and in the hands of an expert, or even a lucky amateur, is equally effective against aircraft. It can achieve these results out to the limits of its range: 3 3/4 kilometers against moving or stationary targets. It's worth having a few around.

TOW can be fired either from a vehicle or a ground tripod. In the V-150 the TOW is mounted on a collapsing pedestal. The launcher rises through the very large hatch in the roof, where it can be rotated and fired through 360° of arc. To fire a TOW the V-150 must be halted, the hatch open and the launcher raised. The weapon is then loaded, sighted and fired. With a two-man crew this process takes no more than 3 minutes. One man requires about 9 minutes; he has more moving around to do.

The launcher can be fired from the ground too, and all necessary equipment for this is provided in the V-150. Set up in ground confiuration takes 10 minutes or so, if the crew is any good.

Loading the weapon requires that a missile be removed from its protective container and placed in the tube, which takes about two minutes. The gunner sights his target and fires, and the missile is on its way. This however is not the end of things.

The TOW is not a "fire and forget" weapon. The gunner must remain at his sights, keeping the sight's crosshairs on the target, moving or not. If the gunner continues to track it and some other conditions are met, then the missile will hit the target.

The 65 meter figure for minimum effective range reflects the fact that the missile does not arm until this distance is reached. Short of 65 meters, the round will not explode.

TOW moves at about 10 seconds to the kilometer so fire on a target 2.5km away will require the gunner to remain at his controls for 25 seconds... and a lot can happen in 25 seconds. The gunner's sights/controls are mounted on the left side of the tube. He must remain exposed, with the launcher, for the duration of the missiles flight time. TOW cannot be fired and guided remotely or from under armor in an MPV or ground mount.

The launcher cannot be moved, reloaded or anything else while the missile is in the air. If the launcher is vehicle mounted and the vehicle moves, the round will automatically miss. The missile can be fired from a vehicle already underway but such fire will miss automatically.

TOW fire is conspicuous. Upon launch there is a really impressive bang, a bright flash, and a cloud of smoke. This tends to pinpoint the firing position to anyone who cares. The missile can be seen in flight too, but it is hardest to see if it is coming right at you.

TOW is a recoiless weapon (which is why it can be fired from the FAV while an M2HB .50 cannot), and as such it has a back blast area. When the weapon fires, anyone in the 20 meters behind it will be fried. Anyone within 30 meters stands a chance of real trouble. Figure the distance and effect in a cone shape from the rear of the launcher.

The missile is wire guided, which means that it trails two exceedingly fine wires all the way to the target. If these wires become fouled or broken, the round will miss. HE detonations along the flight path will break the wires, so will firing into or over heavy brush. (So will firing over a large body of water, but this is hardly likely in this module.)

TOW detonates on the first thing it hits, therefore targets behind brush and trees or behind a chain link fence, cannot be hit. Nor does TOW swerve around corners or over hills. If a target manages to get behind something, the missile cannot hit it. The gunner must be able to see the target in order to guide the missile to it.

The U.S. Army has special equipment which allows TOW to be effectively used at night, but the Morrow Project does not. Yet the system can still be used on a bright moonlit night without difficulty.

P.D. NOTE: The capabilities of TOW as described above should be known to the team, but perhaps not all of its limitations. The sights and controls are delicate; hits on them will destroy the system.

Gunners who are fired on while flying a missile can be distracted and the gunner must concentrate in order to achieve a hit. You might have a gunner roll his Luck or less on a D20 to see if he flinches. For closer or more intense fire, roll Luck on a D100. If the gunner flinches, or is hit, the missile goes wild and misses.





Morrow Project Desert Terrain Equipment

Since this team was intended to operate in Nevada's desert, special hot-weather gear was provided. The following equipment is Morrow Project issue for teams that are likely to encounter desert terrain.

Personal Equipment

The following are issued on an individual basis.

(1) Green, wide-brim, "boonie" hat

- (1) Pair of "photo-sensitive" sunglasses/goggles
- (6) Pairs, thick wool socks
- (1) 6 oz. can of sunburn cream
- (1) 6 oz. can of sunblock
- (1) 2 oz. bottle of weapons lubricant for desert terrain
- (1) 6 oz. bottle of insect repellant
- (1) "Katadyn" type water filtration unit
- (2) Bottles of iodine water purifying tablets (50 tablets each)
- (1) "Solar Still" water condensing kit
- (1) 1-liter canteen (extra)
- (1) Pair, tan coveralls, "desert pattern" camouflage
- (1) Personal entrenching tool, oak handle, tempered steel blade
- (1) Signal mirror, stainless steel
- (1) Desert survival manual (Morrow Project Issue)
- (1) Sweater, tan
- (1) Field jacket, tan "desert camouflage" pattern
- (1) 10 oz. bottle of rubbing alcohol
- (1) Bandanna, tan "desert camouflage" pattern (1) Collapsible 5 gal. water conainter

None of the above items has any armor value. It is intended that these items be worn either over or under the normal resistweave coveralls.

The following items are issued to the team as a whole and are intended for group use.

- (1) Four-man, green, free-standing dome tent. More of these tents are isssued if there are more then four members in the team.
- (1) Camp stove with 24 hours of continuous burn worth of fuel
- (1) Desert terrain weapons maintenance kit. One per MPV.
- (1) Air conditioner, vehicle mounted, to cool inside of the MPV; one per enclosed vehicle (not issued to FAVs)
- (1) "Thermos" type, 75-liter water container
- (1) 20'x20'camouflage net with poles, stakes and guys per MPV.
- (1) Desert fly open "tent", tan "desert camouflage" pattern

Team Caches

Recon Team N-2 has six supply caches. These are typical Morrow resupply facilities and are located through the use of the Autonav computer aboard the MPV.

Only one cache is shown on the player's map; this is normal, for the caches of the team have been spread out over a large area, three states to be exact. Three caches are in Nevada, two are in Arizona and one is in Utah. One of the Nevada caches is very close to the bolthole since the main mission of Group 'N' required it to support and protect the power station. Each of the four teams has one cache nearby and the rest spread out over the surrounding countryside.

Not all of the caches in this module are buried beneath USGS benchmarks; a few are, most aren't. These are hidden beneath markers, road signs and plaques, disguised in such a way that only someone who knew what to look for would find them. For example, the spot marked on the autonav map, when driven to, is the location of an old, chipped granite obelisk. On the obelisk, a worn but still legible plaque reads as follows:

IN MEMORY OF THE MEN OF "C" COMPANY, 2nd BATTALION, 5th CAVALRY WHO, UNDER THE COM-MAND OF CAPT, WILLIAM P. MORROW, WERE, ON JUNE 10th 1878, AMBUSHED AND MASSACRED NEAR HERE BY INDIANS WHILE ON THEIR WAY TO RELIEVE THE GARRISON OF FORT MACINTYRE. Placed 1978 by the Nevada Historical Society

The obelisk is the only thing in sight and it obviously hasn't been tended to in quite some time. If the team is even semiintelligent, they will catch the reference to "Morrow" on the plaque and, in examining the monument, try to dig under it. Three feet down, there is a stainless steel data plate indicating the location of the team's cache. It is NOT buried beneath the monument (surprise!) but is actually located about 500 meters northeast of the obelisk, hidden near an abandoned mining facility several meters up the side of a hill.

The mine was a short distance up the hillside, but is a little difficult to find, since all of the original buildings have disintegrated from age. The mine consists of a shaft entrance, long-since brickedup to keep out the foolhardy, and the remaining foundations of the mine buildings.

The cache itself is easily visible because a landslide many years back uprooted it and years of erosion have left it half-buried at the foot of the hill. It appears intact at first glance, but closer inspection shows signs on the concrete walls and steel hatch that, indicating that at some time in the past, someone made an effort to open the cache.

Despite the team's obvious fears, the cache is still intact and has remained unopened for the past 150 years. It is a standard cache, of the type described in the MPGB and other modules; it's contents are as follows:

AMMUNITION

4-12.7x99 L. AP

1-9x19 ball

1-5.56x45

1-7.62x51 1-12 ga.

1-5.56×45 L

40mm

1-M433 HEDP

1-M576E2

1-M583

1-M663

1-Stunbug 4-TOW Missiles

WEAPONS

3-Armbrusts

1-Stinger

1-M79

EXPLOSIVES

1-M26A1

1-M6 CN-DM

1-M183

1-Primercord

1-M700

1-M7

1-M60

1-M18A1

1-M19

EQUIPMENT

2-AN/PRC-68

3-Medkit (pers.) 1-Medkit (lg.)

9-Medkit reloads

8-Packs, std. w/desert kit

2-Packs, Trade

4-Packs, ration

1-Mountain kit w/M79 3-Coveralls, MP 3-Pr. Underwear 3-Pr. Boots 3-Canteens (sm.) 4-KCB-70 2-M17-A1

2-M1 CBR kits

ADDITIONAL CACHE EQUIPMENT

4-Tires for V-150 or FAV Assorted vehicle parts **General Toolkit** Assorted nuts and bolts (75 kg.) 1-Drum of drinking water 200-liters (200 kg.)

Also in the cache if FAVs are used:

4 tires for FAVs 1 cáse, 40mm ammo links (1000 pcs.) 1 helmet, vehicle crew

THE AREA: TERRAIN AND ENVIRONMENT

Team N-2 receives its wake-up signal in mid-summer. Weather in the desert is somewhat different then it is in other parts of the country. The entire region is extremely dry, with very little rainfall throughout the year.

With daily highs in the 90°-100° F. (30°-40° C.) range, and an annual rainfall of about .5 inches a year, this area is two things: extremely hot and extremely dry. A general lack of rainfall over the last eight years has caused several of the local streams and waterholes to dry up, forcing both man and beast to forage far afield for their survival.

This area is in the Great Basin, a rocky plateau region broken by mountains running north to south. The terrain immediately around Spencer is relatively flat; very gently unudulating desert plains with low rises and dips. Surrounding this area are mountains, canyons and (usually) dry water courses. To the west and a little north of Spencer, the Reville mountains rise to a height of 8,910 feet at Reville Peak, about 13 straight line miles away. Southwest lies the Belted Range. The summit of Belted Peak (8,208 ft.) is about 12 miles away. The Worthington mountains march along to the east, 25 miles or so to to Worthington Peak (8.850 ft.).

Spencer, if it really existed, would lie along Nevada route 375 between Warm Springs and Hiko. It is situated on the road at the intersection of a dirt road with 375, not far from the nearest corner of Nellis Air Force Range. The average elevation of this very wide bowl in the mountains is 3,000 feet above sea level, though it is only 10 miles or so south along 375 to the pass at Queen City Summit at an elevation of 5,960 feet.

There is little in the way of plantlife here: mostly sagebrush and scrub. Virtually no cover exists for great distances, although the Amerinds who live in the desert can become nearly invisible in such terrain when they want to.

This terrain is not very hard for the MPVs to cross, except in such cases as the team trying to climb or descend very steep slopes, such as the ones above Eden, or perhaps driving across a deep dry wash at top speed. The declation of this area makes the chance of meeting human life almost nil, but animal life is present, sometimes in large numbers. The flat areas around Spencer, as shown on the map, are rolling, very gentle slopes that are almost plains. This land is true desert: infertile, hot parched and inately hostile.

Weather In Southern Nevada

Although the charts on page 46 of the MPGB may be used, the following chart should be substituted for Table 1, to reflect the unusually dry climate of Southern Nevada.

Roll	
1D100	Weather
1-40	Clear
41-60	Clear, with occasional scattered clouds
61-70	Partly cloudy
71-80	Mostly cloudy
81-90	Overcast
91-95	Duststorm (Duration: several hours to 3 days)
96-99	Desert cloudburst
00	Special weather

Duststorm: a duststorm is a sudden windstorm that carries local ground cover into the air and propels it along at high speeds. Visibility drops to a few hundred feet and exposed personnel will find it very uncomfortable. Exposed machinery, such as a machine gun, may become clogged with grit and require extensive cleaning to make it serviceable

Desert Cloudburst: this is a sudden, very heavy rain that arrives, often with no warning, dropping a relatively large amount of water within the space of a few minutes. Although such rain poses little direct problem, the side effects of such a storm are quite dangerous. These include lightning strikes, rain-induced rockslides and flashfloods in flat or low-lying areas.

The returning ice age has had an effect on the local climate. though this will not be immediately noticed by the team. Vegetation is becoming more verdant at the higher elevations and there are some trees on the surrounding hills. But by in large, this change is limited and present only at points above 5,000 feet. A man could starve out here and some have. Many more have died of thirst.

P.D. NOTE: People require water to sustain life. Normally this is about 2 liters per day, but in the desert a person requires at least 6 liters per day, more if he is working hard. While those inside the air-conditioned MPV will need only 2 liters a day, those who dismount the vehicle and do work in the desert heat will use more water. The PD should keep track of the amount of water consumed and of just who has an empty canteen. A team that squanders its water supply may find itself in trouble very fast.

One other thing to remember is that at night, the temperature in the desert drops to very low temperatures. People working at night will naturally use less water than those who work during the day.



THE PEOPLE OF THE LAND

Although they will not be directly involved in this adventure, the people of Southern Nevada may be encountered later on. They are, for the most part, Amerinds from the old reservations (these people are identical to those described on page 52 of the MPGB under New American Indians). For the most part, they are concentrated around the old reservations, but have made some large expansions into "white man's" land as well. Good people to have on your side, but some of the worst enemies you could find. The team would do well to make friends of them.

A number of anglos do live in and near the desert, but their numbers are (and always have been) small. Made up mostly of small communities rarely numbering more than 150-200 in size, they exist in and near old ruins, particularly those near water. Although Las Vegas is abandoned, several small towns along the Colorado River are still inhabited, though it is doubtful that anyone would actually recognize them from their pre-War days.

Technology here has taken a great slip backwards and these people are surviving each year only by being tough and ruthless: if the desert doesn't get you, the guys in the next town might. They occasionally make expeditions into Las Vegas, to explore and rummage through the ruins of this once great city, looking for anything that might be of value: scrap metal, books, wood, repair parts for the last few operational machines they have, weapons and/or ammunition. The great ghost town, with its fallen towers, rubble heaps and ever-present dangers, is definitely dead; there is no Freezone, Freelanes or "city-machine" here. This town is in bad shape. The people don't live in it like they do in Chicago, it simply isn't possible as there is no water in Las Vegas.

THE SYEN

Descendants of pre-war genetic scientists working at a secret experimental laboratory, these people call themselves Syen (a corruption of "Scientist"). Their main base is near Austin, Nevada in the Toiyabe Range and they are similar to the 'Breeders' described on page 50 of the MPGB. They are generally Tech Level B, but have lost almost all of the knowledge their ancestors had about genetics. Now they do "experiments" that are nothing more than rituals (or, as the team would put it, atrocities) that symbolize their idea of a super-race emerging from chaos.

They are in no way scientists of any sort. They are more like religious fanatics, with some semi-scientific overtones. They roam the central Nevadan wastes looking for "pure genetic stock" for their experiment-rituals. What they do no longer resembles the original experiments carried out by their ancestors.

A group of Syen, part of a much larger group to the north, is currently collecting in the area around Spencer. They are working with a small band of Slavers and have been following the old roads and trails into the desert looking for remote, untouched havens of "unpolluted" humans for their rituals. Any people that they find, but deem unsuitable, they turn over to the Slavers. The Slavers in turn are acting as scouts and guides for the Syen, helping them as much as they can (or desire to anyway).

The Syen are not native to this region. They have come a long way from their base up near Austin in an attempt to explore the Southern desert, a region unknown to them. In their progress south they have left a trail of death behind them. They have absolutely no honor or compassion outside of their own people and the average H&M rating of the Syen is about 4. They do not ask, they simply take. They want to take people alive, but will kill if they think a captive would be too troublesome to handle. So far, they have run across four settlements in their journey southward and have killed a good number of people. Many more have been taken captive. A few of the captives have been sent north, under guard, to the base. The majority are hauled around with the collecting party in wheeled cages.

The headquarters of the Syen is a small settlement of about tech level B. There are nearly 200 Syen altogether spread out in farms and small craft centers around the camp where the stock is kept. The Syen have been trying to expand their holdings and

they have found slave labor a valuable tool. Roughly a thousand slaves now work on or near the base. More slaves are needed to fuel their expansionist dreams, as well as those required for their "laboratories".

The leader of the base, Dr. Richards, usually leads the raids to capture new stock. He is leading this collecting party.

The Syen and the Slavers, although they work together, do not think too highly of each other. The Syen see the Slavers as trash, taking people at random, without any knowledge of the "right kind". The Slavers in turn see the Syen as religious fanatics who waste perfectly good merchandise if they are deemed "genetically polluted". It is a marriage of convenience: the Slavers know more about the outside world, but don't have the resources needed to explore unknown regions. They need each other and although they occasionally argue, under normal circumstances they will not fight.

Syen Vehicles

The Syen have the following alcohol burning vehicles:

- 1 Jeep with a pintle mounted M60 LMG (see pg. 15 MPGB) and about 500 rounds
- 2 VW dune buggies, formerly "beetles"
- 4 Pick-up trucks. One hauls a semi trailer, flat bed type which has been modified as a "stock cage". Another pulls a water trailer holding 400 gallons. A third pulls an old house trailer, gutted and used for cargo. The fourth mounts a homemade, aft firing, smoothbore cannon.

These vehicles are amazingly ugly, heavily modified, extensively repaired, but quite serviceable. Without trailers they can all make 30mph on roads, or 20mph over flat ground. The trailers have metal bound wooden wheels, limiting road speed to no more than 10mph. Steep grades, common in the mountains, reduce the convoy speed to 5mph or less. Foraging for fuel and serviceable parts takes up nearly as much Syen time as collecting specimens.

The Sven Leaders

The six "leaders" of the Syen and Dr. Richards make up a High Council who control the Syen. Richards acts as Chairman (or Dictator if you prefer) and makes most of the decisions. He is the leader, both here on this expedition and back at the Syen base.

Doctor Richards

A thin, silent man, Richards is very cold and does not see life as anything but cheap. He has been head of the Syen for nearly 20 years and in that time he has done much to "elevate" the Syen cause at the expense of untold lives. He does not think twice about ordering someone put to death. He simply doesn't care; only his "holy work" matters to him. Ruthless and cunning, he is being manipulated by Schoen who is planning to take over the top slot in the Syen."

Asst. Leon Schoen

"Asst" or Assistant Leon Schoen is a vicious, ruthless man who will stop at nothing to gain what he wants: power. As second-in-command of the Syen, he has slowly but surely been wresting power from Richards who is not even aware of it yet. Schoen already has most of the power in the Syen: he directs this party, makes the deals with the Slavers and has been in actual command of the last three raids. His control is going to become absolute one of these days and he knows it.

He has received his "masters" in the arcane and disgusting rituals of the Syen and when he has complete power, he will prepare his Ph.D. ritual, probably using Dr. Richards as his subject.

Asst. Mari Ann Raymond

Raymond is deeply in love with Schoen, an affection he does not return although he makes some show to the contrary. The result is that Schoen has a high-ranking pawn who will rubber-stamp anything he suggests, simply because it was his idea. She cannot be swayed from this blind obedience. Schoen knows this



and makes the most of it.

Raymond has a "B.S." in their rituals and has "assisted" both Schoen and Richards in preparing subjects.

Asst. Edward Beyma

Beyma is something of an enigma. He is quite aware of Schoen's plans, but maintains a neutral stance. He is holding a middleof-the-road position because he knows of the feud between DeMura and Schoen and he plans to be on the winning side. He also believes (according to their ritual) in "survival of the fittest" and believes that the winner will be determined by genetics.

Beyma has a "M.Sc." in their ritual and can assist or actually perform some of the lesser rituals.

Doctor Janet Demura

DeMura, a hard, dedicated woman, has worked for twelve years to better the position of the Syen. She has done much and has spent the better part of two years trying to break Schoen's growing hold on the leadership of the Syen. She has spent the past six months attempting to thwart every one of Schoen's plans, with little success. When it comes to the Sven cause, she is as fanatical as Richards. She is a very determined woman.

DeMura is the only other "ordained" Ph.D. and has performed all of the rituals. She will try to use this fact to keep Schoen from taking over and will support Richards (or anyone else) against

Schoen.

Asst. Monica Jehnke

A pretty woman, Jehnke is in charge of checking out all new "stock" before it's seperation into Acceptable and Unacceptable groups. In other words, she decides who is turned over to the Slavers, who is simply killed and who is fit to be "collected". She enjoys her work and her power very much.

She cares little for the rituals anymore, she merely wants to continue her own hobby. She has her "masters" but has not participated in the rituals in over two years. A cruel, harsh and sadistic woman, anyone who angers her usually ends up with a very slow, very painful death. She has a small group of followers

among the Syen.

THE SLAVERS

These people are identical to those mentioned on pages 52-53 of the MPGB. They are mean, selfish people who deal in human lives. However, they are not fanatical and place a high value on their own hides (they will not fight to the last man for anything). They do not kill people indiscriminately since this would be a gross waste of income and these people do not waste anything when it can be sold. The murderous aspect of the Syen bothers them deeply. Slavers simply do not kill people without good reason.

Slaving is an economic activity. Whoever takes slaves must either have a use for them or a market for their sale. This band of Slavers is small. They have teamed up with the Syen because of the Syen's greater numbers and considerable resources. The Slavers act as guides and "hunting experts" by locating stock, then allowing the Syen to handle the rough part. Afterwards they pick up the

"leavings" for free.
When the raid is complete the Slavers will depart the Syen base, along with their catch for the Lake Tahoe area. There is an expanding community there with a desire for cheap labor. This area is the source of the Slaver's gear and supplies.

Slaver Vehicles

The Slavers do not have as much as the Syen but what they have is better.

2 Dune buggies, faster and in better shape than the Syen's.

1 Pick-up truck, which mounts a mortar.

1 Honest-to-god Mack Tractor and semi trailer, similar in all ways to the Syen trailer for stock.

1 Jeep, CJ-5 type, pulling a 400 gallon fuel trailer.

In practice, the Slaver dune buggies range far ahead while all other vehicles remain with the Syen convoy. Note that the Syens are hauling the water while the Slavers are pulling the fuel. This is a source of some friction.

Mark Corriston

A rather good looking black man with a beard, he always wears black clothing (even here, in the desert) and favors decorating his personal gear with a skull emblem. The attire says much about the person. He has been leader of this band of Slavers for over a year now and he is very good at his job. He is often at odds with members of the Syen Council but is smart enough to know that he cannot afford to provoke the Syen too much: It's a very long walk out of the desert.

Vernon Hetcher

Fletcher, a small, wizened man with gray hair, is in charge of determining the value of any prisoners that the Slavers get their hands on. He has a very keen eye for "horseflesh" and can determine the market value of any man, woman or child just by looking at them. He enjoys his work and is good at what he does. To him, slavery is simply a business. All of the Slavers respect this man's judgement and will listen to him.

Janice Lash

This thin, dark-haired woman is an expert at tracking and capture. She has mastered many means of entrapment, capture and restraint, often leads scouting parties and is always on the lookout for signs of human habitation. A woman with a touch of class and a wicked smile, she enjoys her work, particularly if she gets a chance to best a man at something. Most of the Slavers are aware of this trait and steer clear of annoying her too much. The last one who bothered her did live to regret it.

Small Arms of the Raiders

All of the raiders, Slavers and Syen alike, are armed with guns. The Syen are variously equipped with 150+ year old weapons of every conceivable type, though most are civilian type rifles and shotguns. Hand guns are not common but there are a few in the group.

These weapons are old, misunderstood and poorly maintained. During sustained fire (which for these purposes means anything over one round per minute), there is a 50% chance of a misfire. This is due both to the condition of the weapons and to the abysmal quality of the homemade ammo.

There are a few old M16A1s in the group and these are prized possessions. Why this is true is a mystery, since these weapons

fail 75% of the time!

For the others, assign weapons as you see fit. Odd calibers are recommended, and unusual or wildly diverse types of arms. This is not a military organization: it is an armed gang.

No Syen can be expected to have more than 50 rounds of ammo and most will have only 10 to 20. They do not have stock piles or reserves.

The Slavers are another matter! They are armed with automatic, 12 ga. shotguns (which are described in the New Equipment section). These weapons are relatively new, being a product of the Tahoe local technology. The Slavers have modified them by cutting the barrels short and adding open sights.

These sawed off, auto shotguns are hard to control, but the Slavers are all experienced and have no difficulty. They provide horrendous short range fire power. Such weapons ideally suit the needs of the Slavers, who rely on them primarily for emergency

self-defense: their biggest occupational hazard.

They are fed from 10 round box magazines, and the Slavers have 2 magazines each, but only two. The Slavers only carry more if they think they'll need more. (In which case, if they have a choice, they won't go to where they think so much trouble isl) Their vehicles carry a total of 50 rounds per Slaver, but that's all.

The 12 gauge ammo is all good, and is of recent manufacture. The casing is of paper, as was common in this country until fairly recently, and not like the team's plastic casings. Project and Slaver shotgurs can both use either type of ammo. But the Slaver ammo is all O buckshot (though they don't call it that).

While not properly a small arm at all, the Slavers have one more "weapon". Each Slaver has a weighted net, the purpose of which ought to be obvious, given their occupation. Each net is 10 feet square, and light but for the weights at the corners.

Raider Crew Served Weapons

Between them the raiders have an M60 GPMG, a mortar and a smoothbore cannon. The M60 is always handled by one man and will not be described here. The mortar belongs to the Slavers and the cannon to the Syen.

The Slavers' mortar is a crude but effective weapon. It is mounted on a turntable in the back of a pick-up truck and so can be rotated and fired in any direction. It has no sights and so relies on the skill of its crew for accuracy. This is not too great a drawback as its two man crew is experienced and skilled. Their mean accuracy in desert daylight is:

Target	Range	% Chance To Hit
Vehicle, stationary	750m. or less	70 %
Vehicle, moving	500m. or less	40%
Men, stationary	500m. or less	50%
Men, moving	300m. or less	25%

At night the effective ranges are: 1200, 1000, 1000 and 600 meters respectively. (This the mirage effect does not apply.)

In order to fire effectively, the gunner has to be able to see his target. The minimum range for the Slavers' mortar is 50 meters. One man can handle the mortar alone, but the rate of fire is then halved.

The Slavers can be counted upon not to waste ammo.

The smoothbore cannon of the Syen is not much of a weapon but it has one great advantage over the Slavers' mortar: it can, with bagged shot, be used for widespread close defense. It is mounted on the back of a truck, facing the rear, and cannot be moved or rotated. There are no sights, which is just as well, since the whole truck has to be moved to aim the weapon. Not that the weapon is very accurate anyway, and its crew is not much help. The chances of this weapon hitting its target are:

Target	Range	% Chance To Hit
Vehicle, stationary	500m. or less	50 %
Vehicle, moving	200m. or less	20%
Men, stationary	300m. or less	30%
Men, moving	100m. or less	20%

These figures reflect solid shot, i.e. cannon balls. Chances of hitting target within 150 meters with bagged shot (shrapnel) are 50% but every target within range will be hit unless the roll is a miss or the target is behind cover. (Roll for each possible target to determine hits.)

A four man crew is required to man the cannon. For each man missing from the crew, add thirty seconds to the time required to fire a single round.

The crews for both the mortar and the cannon, are specialists in their fields. If these men are not present or are dead, the weapons cannot be used.

Raider Weapon's Skills

How well the various "troops" of the raiders can use their weapons varies from individual to individual, but on the whole:

Syen can be expected to have no more than a 10-15% skill with their firearms and only 5% with any which is not their own. Leaders may be 5% to 10% better, but no more.

The Slavers can all handle their shotguns at 30%, before any modifiers for close range! The nets are usually thrown at 50% for a moving target, 80% for a still one. (Janice Lash throws at 75% and 95% respectively!)

To throw a net, a Slaver must stand up. The net must be swung in a circle above the thrower's head for at least 2 seconds. The effective range of the net is only 15 meters. The net, if it hits, will knock down a running man or entangle a stationary one. The net can be dodged but only if the target sees it at the moment of release and takes appropriate action. Targets caught in the net are helpless for one combat round.

Bringing a weapon to bear from within a net will take 1-20 combat rounds (roll a die), and is impossible to do with anything larger than a SMG. Throwing a grenade, running away, etc., are impossible from within the net. Getting out of a net will take 1-20 combat rounds (roll a die again), if that is all that the target is doing. It is not possible to get out of a net if one is trying to do anything else.

The raiders do not know what "heat haze" and the "mirage effect" are, but they know about them (see Play of the Game for full details). They will not waste ammo on targets too far away.

Raider Tactics

The Syen are a mob. They fight as individuals and not as a team. They have two basic tactics, the charge and defense.

The charge is executed in the "column of droves" method: everybody running, yelling and shooting at the same time! Fine points like covering fire are unknown. The charge can be stopped: when all of the participants are dead or wounded! Individuals will advance as long as they are able! Remember: these are fanatics!

Defense is conducted from behind cover, if available. It works like the charge: it is based on individuals. It will not break, but may be ordered into withdrawal by a leader.

The Slavers are more skilled, but also more limited. Slavers do work as a team, but they are hunters more than soldiers. They understand the ambush and the raid but stand-up battles will always be avoided. They are masters of the slow stalk, recon, and sudden, sharp attacks. They will always attempt to break off from a long action of attrition. They fight only for profit or in self-defense and running from an unprofitable fight is always their policy!

P.D. NOTE: The team may fight against the raiders throughout the game and never figure out that they are fighting two seperate outfits. The differences in weapons, skills, methods and tactics may drive them crazy! Oh well...





Towns and Villages

Very few new towns or villages have been contructed since The War. What few there are have been built by the Amerinds. For the most part, the majority of existing towns have been unihabited since the first months after The War. Most of them are gaunt, abandoned ghost towns, streets clogged with abandoned automobiles and the debris of fallen buildings. The dry clime of the desert has helped to preserve much of these cities but age is taking its toll.

Due to the emptiness of the desert, much of the debris has remained where it fell, untouched by scavengers. In the past decade, however, several different groups have travelled into the desert looking for different materials. Not all have returned alive.

Towns these days are quite isolated from one another. Traders and mailmen are very rare. The Amerinds maintain contact between their villages, but even this is not much more then an occasional visit on special days of celebration. People know little about the area beyond the next hill, let alone about the next village, however far away that is.

People and Places

There is not much travelling to be done in this adventure although the fact that it is open-ended leaves the PD with a chance to take the team for a ride. The adventure itself is based in the area around Spencer, Nevada. Spencer is a place of convenience, a mythical small Western town, so small it doesn't even show up on the map.

Las Vegas

Las Vegas survived The War but not the months that followed it. The destruction of nearby Nellis AFB and Hoover Dam hurt the city. Its lack of water doomed it. Now, 150 years later, it is a crumbling ruin of rubble-clogged streets and decaying, unsafe high-rise buildings and towers that occasionally collapse under their own weight, falling with a roar like thunder. Project File 004 The Ruins of Chicago has an excellent description of what a ruined 22nd century city looks like.

No one lives in Las Vegas anymore. People still travel to "Vegas"; not for fun, for relics. A team trying to scout the city would find it a most depressing and somewhat dangerous place to stay.

Carson Wells

When the team was frozen, Carson Wells was an aging "ghost town", rarely visited and slowly crumbling into ruin. At that time, the only way to get to the town was by going overland in a 4-wheel drive vehicle. The only people who ever went to the town were antique seekers, out to explore a place off of the beaten track.

At that time, the general condition of the town was Class C/D: ranging from partially intact to partially collapsed (see MPGB, page 48 for details). Now, some one-and-a-half centuries later, the entire town is Class Z: gone. Slight mounds indicate the remains of most of the buildings. The bank, a reinforced frame structure is Class X: destroyed. Nothing remains of it but a pile of rubble which is not even good cover.

The only way to get to Carson Wells is by going cross-country. In any event, the team will not see the "town" until they are almost directly on top of the site itself. Absolutely nothing remains of Carson Wells that could be of any use to the team, but it might take a search of the area before the team realizes this; even the well in the center of "town" is bone-dry. Carson Wells would best be forgotten.

P.D. NOTE: The rubble of the bank might harbor some scorpions or very small animals. The only real danger to be found would be falling into a hole, or cutting one's hand on a rusty nail.

Spencer

Spencer is a 22nd century ghost town. The general condition of the buildings is Class D: partially collapsed. Once a tiny mining

community, Spencer has been slowly decaying ever since The War. The ruins have an eerie feeling about them, almost as if the team were being watched. Thw town's only inhabitants however, are the local flora and fauna.

Nevada 375

Originally a two-lane highway, this road is a concrete slab construction that has survived remarkably well despite its age. Lack of use and the great lack of water/snow/ice has kept it from breaking up. It is still in good enough shape to be driven on, although it is not in perfect condition.

The PD should roll 1D100 once per kilometer to see if there is something unusual present. There is a 10% chance (non-cumulative) that there is something present, such as a rusted wreck, on or near the road. Use your imagination; everything from VWs to semis, military and civilian vehicles, even an airplane that made an emergency landing on the highway might be found. Also, debris, such as fallen power lines and towers; rocks; an ancient, makeshift roadblock; encroaching desert sand that has swallowed up part of the road; and even broken-up road, such as a large pothole, a small bridge washed out (or about to collapse), a section of the road badly undermined; may be encountered. Any number of things, mostly objects of curiosity or minor nuisances, can be present.

The road is still usable however, even with these minor problems. This could prove very valuable to the team.

The Restricted Area

The restricted area on the player's map is a part of a large government installation (in campaign play, it can be assumed to be a part of the Nevada Test Site).

The entire area is encircled with a 10-foot high chainlink fence topped by several strands of rusty barbed wire and which extends two feet underground to discourage tunnelling attempts. Despite being 150 years old, the fence is still standing and is actually in good shape; the dry desert climate has preserved it well. There are signs on the fence warning of mines. These occur every 10 meters but some of them are rusted beyond recognition and can no longer be read.

Two meters beyond the fence, a 60 meter deep minefield starts. This minefield is made up of a very generous mix of M19 antitank and M16A1 and M25 antipersonnel mines; despite its age, the mines are in very good shape, again due to the dry desert climate. A few do occasionally explode because of their age.

To determine if a mine is tripped, (and the results thereof), see the chart below.

Minefield Encounter and Results Table

The following tables are to be used when a character or vehicle runs into a minefield. Note that the type of mine tripped depends on whether a person on foot or in a vehicle is involved.

For each ten meter interval travelled, roll 1D10 to determine if a mine is tripped. If it is, roll 1D4 (personnel on foot) or 1D6 (vehicles). Personnel on foot cannot, under normal circumstances, trip the M19 antitank mines.

Die Rolf Encounter

1-5 No mines are tripped.

6-10 Mine tripped; explodes on a roll of 80 or less on a D100.

Die Roll Type and Effect

01-02 M25 Antipersonnel mine: burst radius .156m, E-factor 6, DPW 20

03-04 M16A1 Antipersonnel mine: burst radius 30m, E-factor 4, DPW 888 (Fires steel balls for 30m)

05-06 M19 Antitank mine: burst radius 48m, DPW 20, 355

Mine Effects Against Vehicles

M25 AP mine: designed to puncture a tire; useless against the V-150's bulletproof tires. However, it will blow a wheel right off of a FAV.

M16A1 AP: Class G anti-armor weapon (see MPGB, page 45 for details).

M19 AT mine: Class D anti-armor weapon (see MPGB, page 45 for details).

For vehicles, use the following chart to determine the exact location of mine detonation and effects.

Location Of Detonation

Roll 1D4

01 Front Left Wheel 02 Front Right Wheel 03 Rear Left Wheel 04 Rear Right Wheel

Effects of Explosion

Using the Vehicle Penetration Table from page 45 of the MPGB, determine if that particular class of weapon will penetrate the vehicle's armor. If a penetration is successful, see below for the effects on vehicle and crew.

Roll for damage to "Wheels and Axles" as per an HE penetration (use the HE column for chance of damage).

If a front wheel tripped the mine, roll for damages on the Left or Right Bow table (use HE column).

If a rear wheel tripped the mine, roll for damages on Left or Right Rear table (use HE column).

Roll as per a normal HE hit and check for the results as usual.

P.D. NOTE: The above tables are for use with the new detailed Combat Damage System introduced in Project File 001 and used in all of the TimeLine modules. If the P.D. is not using this system, he should use the Vehicular Damage tables on page 45 of the Morrow Project Game Book.

Crossing The Minefield

A favorite tactic of many players, apparently taken from comic books, is to spray a minefield with gunfire in an effort to trigger the mines without endangering the personnel involved.

This method is very difficult to do successfully, since all of the mines have burst radii, something not often taken into account. While the minimal blast from an M25 is not a danger, the 30m radius of an exploding M16A1 is something else, both in the effect of the steel balls and the DPW. Most dangerous of all is the M19. A person sitting in the cupola of a V-150 APC, 45 meters from an exploding M19 would be exposed to a force of DPW 15,855. Assuming that the character takes only half-damage for being just half-exposed, he is still hit by over 7,000 points of whole body damage; enough to kill anyone several times over.

Having said this, it is worth noting that this technique can work if 40mm grenades are used. For example, from about a kilometer away, 20 rounds of 40mm HE will clear a 3 meter wide path through the minefield. If anyone thinks of doing this! This is also very wasteful of ammo and will tear up the ground so that a FAV cannot cross it! A V-150 can, but only if it is moving slower than 5mph.

The Morrow Project Power Stations: TN-7

Every high-tech industry needs power: electricity, the lifeblood of civilization. Our lives are intertwined with it, much more than most people believe. Without power, lights go out, hospitals stop functioning, cities grind to a halt, and people panic as systems break down and fail.

The chances of any major power source surviving The War were slim. For this reason, The Morrow Project designed its own, protected power sources: the MP Power Stations.

Each was carefully sited, placed away from all likely targets, but usually within one hour's journey by car from a major population center. This distance was necessary to keep the stations safe from rioters, blast and radiation effects and from the damage expected from the near-misses of MIRV warheads.

These stations, powerful enough to easily power a city, were to become the nuclei of small, newly built communities. These communities would assemble hospitals, sawmills, radio communications centers and other vital industries that would need electricity to operate. The power stations could not replace the lost electrical facilities, but could act as emergency sources of power, greatly easing the job of rebuilding.

The Project concentrated on two styles of plant: hydroelectric and fusion. Hydroelectric plants were the more common type and in accordance with the preceeding description, usually sited near population centers. The hydroelectric plants were rarely finished systems, rather they were a collection of parts and materials designed and situated so that a plant could be thrown together quickly after The War.

Fusion plants were less common and more remote. They were necessarily completed prior to The War, as they were too complex to assemble afterwards. They were also more flexible in where they could be located. These power stations were considered vital to the Morrow Project plan.

Due to many requirements of size, capacity and disguise, no two are identical, particularly in the way they are hidden. The power station in this adventure, TN-7, is a very late model designed in 1985, revamped during construction in 1987 and completed in early 1989. It is a good example of late MP-type technology.

Most of this base can operate automatically. The Ops team is merely present to keep an eye on things and to monitor the power output. Two of the other fusion stations that were completed before. The War are totally automatic and could be operated without any human assistance. The Project could not make every base totally automatic, nor did they want to.

Being so vital, it was realized that these stations would have to be protected. Each station was given varying degrees of defenses. TN-7, being located so close to a major government installation, had to appear very ordinary. It had to be disguised as something that would not be likely to invite investigation.

Construction of TN-7 began in early 1987. Its cover was an automated Desert Water Monitoring Facility, designed, owned and operated by Deltronics Ltd., a dummy company run by Morrow Industries. The facility was to monitor the desert water tables and the annual rainfall as part of a study of radioactive fallout coming from the region of the Nevada Test Site. Fully automated, the facility required no human operators, though full facilities for human operation were included. A research team from Deltronics returned every six months to check and remove water samples for analysis at a Deltronics lab. This team also checked on buried sensor gear in the area around the facility, to ensure they were working properly. This cover held, unbroken, right up to and beyond The War.

The water monitoring station was real; it actually did what the deigners claimed. But its real purpose was two-fold: The station itself concealed a water pumping capability and its construction covered the larger construction of the power station going on nearby.





TN-6: The Water Station

A. Surrounding Area

The area around the station for a distance of over 1.5 kilometers is relatively flat, and contains little cover. Anyone approaching the station can be seen while still over a kilometer away.

B. The Road

A short road connects TN-6 with the main highway. This road, originally a gravel drive, is now little more than a faint trail in the desert soil.

C. The Fence

TN-6 is surrounded by a ten-foot high chainlink fence that extends two feet underground to discourage tunnelling and is topped by several strands of barbed wire. The fence is still in good shape. A team on foot could easily slip over the fence into the compound, a vehicle could not without knocking down some of the fence in the process.

Near the fence, just off of what was the gravel road, sit two sand-worn cars, late-model 1980s types from the look of them. Both are shot, having been sitting here for some 150 odd years. Little in, or of them, could be salvaged. They are the remains of vehicles abandoned by fleeing survivors after The War.

Signs on the fence indicate that this is PRIVATE PROPERTY, belonging to DELTRONICS, LTD. and that HIGH VOLTAGE

EQUIPMENT is present. The fence is not electrified.

The perimeter area of the water station is cleared and flat within the fenceline. This area is devoid of any plant life. There is no cover anywhere in the compound between the fenceline and the building itself.

D. The Gate

The road enters the station compound through a large gate which was originally barred by a chain-and-bar that sat in a small box: an electric lock. A sign on the box is still legible and reads: DELTRONICS LTD. REMOTE WATER MONITORING FACILITY No. 3, CHEMICAL ANALYSIS, NO TRESPASSING. Located below this is a cardslot and the words: INSERT IDENTITY CARD HERE. Should a MPID be inserted into the slot, the chain-and-bar will unlock. The bar must then be pulled out and the gates opened manually.

E. The Weather Station

This is a concrete tower, 20 feet northwest of the building. Its instruments are beyond repair, but its purpose is fairly obvious.

The Building: Exterior

The water monitoring station was designed for automated operation and its appearance results from its design. The building is rectangular, with its long axis running exactly east-west. It is a flattened pyramid and the base of the walls slope sharply upwards to a flat roof. The building is one story tall.

There are no windows. The exterior of the building is dark. It would be black, but the surface is very dusty. The color results from the fact that the walls are covered with solar power collectors, though this is not obvious until you get close enough to touch

The only entrances to the building are located on its north side. There are two openings in the sloping wall, one 5 feet wide, the other, 10 feet wide. The narrower leads to a normal sized personnel door, the wider to a vehicular door.

> P.D. NOTE: This place looks like a bunker and it can serve as one, though this was not the primary reason for the design. Building in the desert should always be avoided, but if you must, there are a few efficient designs and this is one of them.

> The walls and roof are thick. The concrete in the walls is 15 feet thick at the base and is still 4 feet thick at the junction with the roof, 10 feet above ground level. The roof is 3 feet thick. The thickness of the walls and roof is for insulation.

The slope of the walk reduces the effects of wind on the structure and provides the best angle for constant exposure of the solar collectors. This is why the doors are set in the north face of the building: they do not use surface area on those sides which receive more light. Little of this is obvious to the casual observer.

The Building: Interior A. Personnel Door

From the outside this is a featureless steel door with a hand grip, and a high security lock set in the door. This door was designed to be opened with a key. It is steel, two inches thick, and next to impossible to cut through. A LAW, Armbrust or heavier AT weapon will blow it down but a few ounces of C4 on the lock will open it with less fanfare. The key will open it too. From the inside the door can be opened easily. It opens inwards.

B. The Foyer

This is a 10 foot corridor ending in a glass wall and door. The purpose of this hall was to serve as an air lock for air conditioning and dust control purposes.

C. The Glass Wall and Door

These are just what the name implies: a clear glass door set in a glass wall at the far end of the foyer "air lock".

D. Lounge

A large room, 20 feet square, with a bookcase running the length of the west wall, the room contains sofas, chairs, low tables, a coffee maker, and a water cooler (both dry). The bookcase is full of technical works and some magazines and light reading.

The lounge served primarily as a comfortable place to receive visitors to the station and secondarily as a break area and technical

library for the station crew.

The most unusual feature of the lounge is the 10 foot square skylight set over the center of the room. Originally the glass in the skylight was clear but 150 years of desert sun has turned the glass a deep blue. This, during the hours of daylight, bathes the entire room in an eerie blue light which almost seems to make the room glow. This effect is constant in all areas with skylights.

E. Rest Rooms

One is for males, the other for females. They are typical of institutional latrine facilities. Neither one works, but both could be made functional.

F. Weather Station

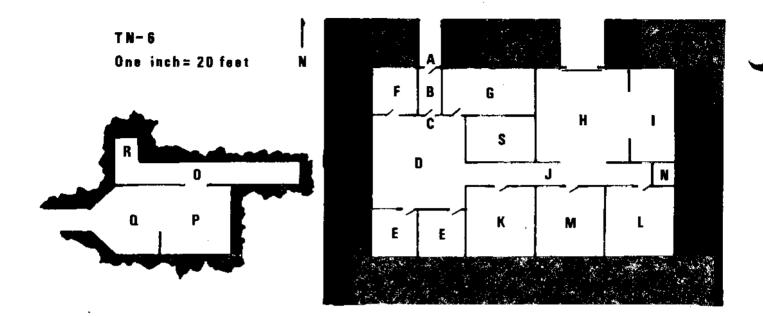
This 10 foot square room was the data collection center and monitoring point for the station's weather instruments. Since these instruments are long since gone, this room is not too useful. However, with work, the station could function again. Nothing in this room is broken, rather the instruments it used to monitor are gone.

G. Central Monitor Room

This room could be describes as the "nerve center" of the facility. However, though it looks like it, it is not. No part of the station's operations is controlled from here, nor can it be.

In fact, this was the data collection center. All of the electronic monitoring of the station can be done from here. Ideally, station inspection crews would enter only this room during their visits. Only if the monitors reported a failure would it be necessary to open any other room.

There is a map on the wall in common with Room S showing the local area. The map, if looked over carefully, will show one feature not shown on the team's auto navs; a town named Eden 5 miles to the west.



H. Garage

This very large room, with its 10 foot vehicle door, is exactly what it appears to be. It was included to protect the delivery of sensitive equipment and spare parts from the weather.

The door is made of steel and is designed to be opened only from the inside. Both the door and the room are large enough to accompdate a V-150.

I. Stores

The "nuts-and-bolts" room. It is full of very useful spare parts, among them a complete set of weather instruments, (replacements for those in the tower) can be found here.

J. Corridor

A long hall illuminated by a skylight for its full length.

K. Power

This room contains both monitors and controls for power. It is the nexus for the solar collection screens on the exterior walls.

The power screens collect a great deal of sunlight and provide a lot of power. This is transmitted through a network embedded in the outer walls and funnelled to this room. Thus the power room is about half full of batteries, which store power for use at night and during overcast weather.

The controls here allow a more complete and direct use of power, as well as providing power overrides, shut-offs, etc. Currently the station is operating at a minimum. There is enough power to fuel the automated monitors and systems. Any increase in power, say enough to make the lights work, has to be performed here. Until this is done, no system will function save the automatic monitors.

L. Air Center

The air center controls the air flow of the building but is most important for its air conditioning controls and apparatus. Air is drawn into the building from a duct on the roof. The duct has a sand/dust filter. There is a ladder here to a hatch in the roof for access to and inspection of the duct and filter. This is the only access provided to the roof.

M. Water Center

This room embodies the ostensible purpose of the station, the reason for its existence. The mechanisms, monitors and controls which sample the subsurface water table and the periodic floods in the nearby wash are kept in this room.

N. Lower Level Access

Note that the accompanying map shows no door for this very small room: none exists. However, the corridor "wall" is 1/4 inch dry wall attached to a light frame and held in place by four screws. A man could put his fist through it quite easily.

This room is the access point to the lower level of the station. In the center of the floor is a manhole with a ladder set in its side. There is nothing else here.

Note that the corridor wall is in all ways indistinguishable from the rest of the walls. But any search involving wall thumping and the like will reveal its odd character. Bullets impacting on it will make obviously different marks than on the other walls: they go through this one leaving great, ragged holes. If a heavy man leans on this wall, he'll fall through it!

This wall was occasionally removed by the regular inspection teams in order to check on the lower level. It was designed only to hide the hole behind it from casual observation, but it does this very well.

O. Subsurface Corridor

A featureless hall beginning at the foot of the ladder down from Room N, this corridor is 50 feet long and has no doors, just one opening and one bend.

P. Pump Room

All of the machinery actually needed to turn this station into a water pumping and processing plant is located here. It lies directly below the water center upstairs and, with work, could be connected to it.

Q. Auxillary Power Room

This room, actually a part of the room next door (Room P), is an auxillary power room and pipeline terminus. The center of the west wall is open and a 6 foot diameter tunnel heads off into the unknown.

However, only 4 feet of this tunnel shows here, two feet leave the room below floor level. This lower part of the tunnel is full of pipes, lines, and conduits. Their purpose is not obvious.

The one very large pipeline is for water; to carry water from TN-6 to the power station. The other lines are for carrying power from TN-7 to the station for the pumps, for communications and a few other purposes.



These lines fill the bottom of the tunnel and creep up its sides. The center of this mess is a clear path: an iron grid crawl/walkway set above the clutter. It is 3 feet wide and only 4 feet from the roof of the tunnel. A man can walk on it, if he is bent almost double. No lighting is provided.

R. Alcove

The bend in the corriodr shelters yet another ladder, leading up this time. It is the way to Room S.

S. Station Control Center

This room, unconnected with the other rooms on this floor, is the actual control center for the entire water station. From here all of the station operations can be controlled and monitored, and it is full of equipment for that task.

It has never been used. It was designed to be necessary only when the station came on line as a pumping facility. Having never been used, it is in excellent condition. There is a bare door-sized area in the common wall with Room G. It is obvious that this space is provided to be a door at some future time.

On this section of wall, there is a map of the area around the station similar to the one on the wall of Room G but this one has lines drawn and details added which are not shown on the other one. It shows the tunnel, its access points and shows that the tunnel ends abruptly at TN-7; whatever that may be.

General Notes On TN-6

Like all of the rest of the Project's endeavors, the water station was not designed to last as long as it has. The fact that it is still operational reflects great credit on its designers.

But the station was not buried, nor was it preserved with an inert gas. The building shows some of the ravages of time. The interior is enormously dusty; so much so that all surfaces appear to have been painted a dull, beige/grey. Books, manuals, magazines and other printed matter will fall to dust if disturbed. The upholstered furniture in the lounge will collapse if used.

But metal, glass and concrete are still viable. The "business end" of the station can be salvaged and made fully functional.

The solar collection screens still provide power enough to operate the station at full requirements, 24 hours a day. "Full requirements" means only the mission of water monitoring, but not of water pumping.

The water table in the Nevada desert is deep but not inaccessible. It cannot support a huge population. Indeed, the Babylon of Las Vegas was not possible until Hoover Dam and Lake Meade became a reality. But the desert water is sufficient to support a modest community, a social group to man and augment the power station. The fact that it has had over 100 years to return to its pre-civilization level also helps. Water now lies much closer to the surface than it did when the station was built.

Power from the screens is never used directly but is always channelled to batteries. Power for operation is drawn from the batteries. The batteries providing power are emptied and recharged on a regular schedule to help maintain battery life.

Massive impacts on the exterior walls will destroy the solar collectors. TOW or mortar fire, or the use of explosives, will not only destroy the screens but will disrupt the interior network of power lines. This will limit the station to operating on batterires alone, which it can do for 14 days at full power output. After this there is no more power unless the site is repaired or power is drawn from the power station.

Replacement screens for an entire exterior wall are stored in Room I, along with supporting equipment. If these are not used, power must be drawn from the power center. Controls in Room Q allow for this, but they are useless until the power station is activated.

The tunnel in Room Q leads directly to the power center, about 5 miles due west. This tunnel is cramped and it would require a man of exceptional stamina to walk the length of the tunnel.

Crawling might be possible, but it would be nearly as difficult, and the trip, either way, would take a minimum of 3 hours.

Nor is it possible to complete the trip! Two sections of the tunnel roof have collapsed. This has not affected the lines below the walkway, but it precludes travelling the length of the tunnel.

On the surface there are raised concrete entrances, spaced one kilometer apart, running the length of the tunnel. Each has a manhole and ladder which leads to the service tunnel below. These access points were not hidden. All are marked as the property of Deltronics and each is padlocked. Padlocks are not much hindrance to men with no scruples.

It is left to the P.D. to choose the areas where the tunnel has collapsed. If one or both are under the hill between the stations, the break will not be apparent from the surface. If the break occured on the flat, the surface will show an odd, and perhaps linear, depression, depending on how long the break is. These depressions will mean little to viewers who are unaware of the presence of the tunnel. At least one of the breaks ought to give some hint of the tunnel, and this one should be inhabited. A family of spotted desert skunks is recommended.

Finally, the existence of the power station cannot be construed from anything found in the "overt" areas of the water station. However, there are the two maps on the walls of Room G and S. The one in Room G shows the surrounding country and on it Eden is clearly marked as a ghost town. The map in Room S has the tunnel and its access points marked and instead of Eden, it has "TN-7" in its place.

For astute players, the tunnel itself is a clue and, in conjunction with the maps, it should give the team all it needs to find the power station, or at least the town of Eden.

TN-7: EDEN

The power station, TN-7, is located about 5 miles due west of the TN-6 water station. It cannot be seen from either TN-6 or from the road (Nevada 375), due to the low hills lying between them. It would not much matter if it were visible, for TN-7 is well designed.

Unlike TN-6, TN-7 was too big to hide in one lonely building, nor could the installation be buried. In the first place, TN-6 was too small a project to conceal the enormous amounts of earth moving equipment and moved earth that a buried power station would have required. In the second place, when TN-7 came on line, it would ultimately require a large number of personnel, and many of its essential operations would have to be above ground.

So TN-7 had to be built above ground (at least mostly) and yet still be concealed. How to do this? This sort of problem provided a novel challenge to the Project planners and designers, the sort of thing they enjoyed. In the end they came up with a novel solution.

What sort of man-made, large, artificial creation/artifact can hide a small town? And, at the same time attract minimal notice or interest, is found in the American Southwest and in the desert in particular?

The answer? Hide a small town in a small town; as part of a small town! An old, uninhabited, ramshackle, ghost town!

So, about five miles west of TN-6, "Deltronics" built TN-7 and hid it in a ghost town. Since everything necessary to the contruction of TN-6 had to be brought to the area, the huge truck convoys importing materials raised no eyebrows. Who would question what all of that stuff was for? Who would notice that too much activity was going on? Spencer was a dying mining town when the construction began and since the workers were based out of Tonopah, they hardly passed through Spencer at all. If anyone in Spencer questioned the activity, they were likely to chalk any perceived excesses up to the bureaucratic inefficiency of big companies. And Spencer was the sole source of nosey locals.

The ghots town was named "Eden". It was designed to be typical of the abandoned 19th century boom towns so common in that part of the world. Eden was typical of the sort of communities that sprang up overnight as the result of a lucky mineral strike. It would have all of the "boomer" businesses, and none of the earmarks of a permanent community.

Eden was based on hope and assumption, right down to a train station built in expectation of a rail line which never arrived. And, also typical, it was a perfect example of a bust, of a hope that failed and left only the skeleton of a dream to haunt the next

century.

The Project construction team had a good time building Eden. First, TN-7 had to be built and concealed. Second, the ghost town had to be strong and durable and built to last so as to provide the basis for a new town and to protect the facade which concealed TN-7. Third, the "new" town had to be convincing as an abandoned ghost town, capable of holding up to visits from antique hunters and others who might stumble on it. This was a formidable set of conditions.

To do all of this the town was designed with most of the vital parts of TN-7 hidden within the walls of the town. The town itself was built along the lines of the many ghost towns available in the area. All of these ghost town features were carefully appliqued

with the purpose of concealing the power station.

The framework of the town itself was built to last. Anything necessary for the town's structural integrity was made of strong, modern materials. Where a 19th century boomtown would have used a 4'x4' post, Project engineers used a steel I-beam. Vinyl coated steel or aluminum replaced many necessary wood pieces, steel beams replaced roof supports and wall studs, plastics and metals replaced wooden roof shingles.

This modern work was then carefully camouflaged and artfully "weathered" to present the proper appearance. Whenever possible, "authentic" materials were used to cover and conceal

the less than traditional construction and materials, especially in pieces such as porches, steps and doors where people entered the buildings.

In the end, Eden was a presentable ghost town. It looked broken down. Many of its buildings' roofs had fallen in. The well was dry. It had been stripped of all portable wealth. It was dirty. Parts of it were boarded up. It was dangerous to walk on the "sidewalks" or enter a building. In short, it was perfect.

I. TN-7: LIFE SUPPORT GROUP

A. Mrs. Mapley's Boarding House

This building is obviously a residence and appears to be in fair condition from the outside.

A1: Foyer

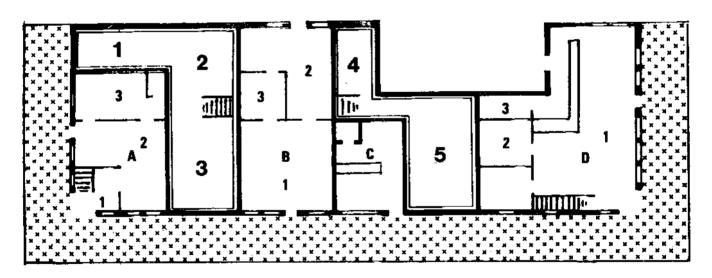
This is primarily a place to hang coats and greet guests and it has in it the stairs to the rooms. There is a broken mirror on the floor and a warped, wooden coat rack in the corner. Wallpaper is curling from the grey wood walls beneath it.

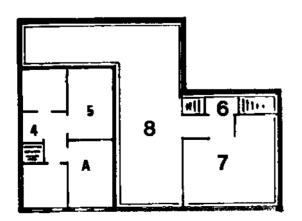
A2: Parlor and Dining Room

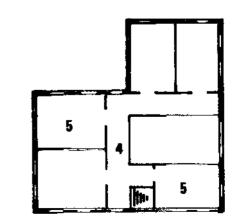
A few chairs remain, beat to hell and in such poor condition that they were obviously "left behind". An empty bookcase lines part of the north wall. Two chains still hang from the ceiling, but the chandeliers they once supported are gone. Also hanging from the ceiling is part of a bed. It is protruding through a hole, and the room that the bed is in can be seen fairly well. Lastly, a leaf from a dining room table lies near the kitchen door.

A3: Kitchen

The kitchen is as "poorly" as the rest of the place. All metalware has been salvaged, save for the big wood stove in the comer. Even the water basin/sink has been removed and only its wooden support remains. In the northwest corner is a broom closet. It still holds a threadbare broom, a rotted rope mop and a goodly collection of rubbish on the floor consisting of rags, broken glass, and what might be 200 year old garbage. It can be removed by







lifting it off its supports. Behind the shelf is a hidden door from TN-7 which cannot be seen nor opened from this side.

A4: Stairs

The stairs in the foyer lead up to a small landing. The bannister is weak and will break off completely if used. The open landing is bare of artifacts.

A5: Bedrooms

There are four bedrooms off of the landing, all are empty of anything of value or interest. The northeast bedroom has a hole in its floor and an unusually large and heavy rope bed is about half in and half out of the room. It is the only bed still in the building, and was obviously abandoned because of its size, weight and primitive construction.

B. Chez Louis Restaurant

A one story building which, because of the fake wood facades so popular in such towns, looks as though it might be a two-story building. It was a pompous restaurant, looking forward to big things which never came.

B1: Dining Room

Even the most myopic observer can tell that this dining room was supposed to look posh, but any observer with any taste can tell that the final effect had to have been one of monumental tacky.

The pseudo-brocade wallpaper of scarlet and gold, the smashed glass chandelier, the many broken mirrors (intact ones were removed), attest to boorish tastes. One table and a few chairs still remain; the ones destroyed by the fallen light fixture. Inspection of the chandelier will show that it was made of cast iron, then painted to look gilt! This may be why it, and the table and chairs beneath it, have crashed halfway through the floor.

B2: Kitchen

The kitchen has been stripped but its purpose can be divined. There is some garbage about, mostly empty cans and broken glass. The back door is half off its hinges and a lot of dust and sand has blown in, covering most of the floor.

B3: Private Dining Room

This was intended to be the most elegant of settings but instead it succeeds in being just the opposite. The room is about knee deep in refuse; all of the things the management did not deem worth salvage. Torn or frayed table linens (now rags), a stack of crumbling, mouse-eaten menus (still readible if care is taken), empty boxes, broken glass, bent iron tableware, etc.

C. Eden Assayer's Office

A private assayer's office, obviously catering to the needs of small-time independent prospectors. The place consists of a single large room, divided by a counter. A broken chair lies by the door, a bent and rusted balance scale sits on the counter. There is a collapsed desk behind the counter and lying in the dust is a wheel from an old style rolling chair.

The southwest corner of the room is taken up by a small strongroom (you couldn't call it a vault). The door is open about two inches, and is frozen there. If a serious attempt is made to open it, the door will tear free of the wall, hinges and all! The inside of the strongroom is lined with wooden shelves. There is a set of weights here (which do not weigh what the markings on them say they do) and a few piles of claims which will crumble to dust if disturbed.

D. The Mother Lode Saloon

Every boomtown had at least one such establishment and Eden is no exception. The saloon rivals Chez Louis in atrocious taste. The Mother Lode is in worse repair than the other buildings on this block. It was obviously thrown up quickly to meet a demand for its services. This was done as quickly and as cheaply as possible. No thought or investment went into durability, quality, expansion or maintenance, and it shows.

D1: Main Room

This room is now a good source of seasoned firewood. Since all of the Mother Lode's permanent fixtures were as cheap and shoddy as possible, they were deemed unfit for salvage. Indeed, it would have cost more to move them then it would to buy new (equally poor) ones.

The floor has fallen through in many places, most notably beneath an uncouth upright piano. Tables, chairs, the bar and other assorted furniture still remain, but they have mostly collapsed. Any furniture still intact will fall apart the first time anybody tries to use it. There are holes in both the interior and exterior walls. Some areas of the floor are unnaturally bleached and rotted. This is due to holes in the roof, high above, which have allowed in the infrequent rains. Walking around in here, there is a 10% chance per meter covered, of falling through the floor to the ground two feet below.

The back door leads out onto a small fenced yard. Beyond the yard was a storage shed, which was so poorly constructed that it has now collapsed into a pile of rubble. The fence has fallen too.

D2: Private Meeting Rooms

These smaller rooms were intended for small groups of drinkers, card players or what have you. There remains a lurid lithograph on one wall. In all other ways they are like D1.

D3: Storage Room

This is a small storage room, intended for use for "ready" or quickly needed items as opposed to larger stocks kept in the shed out back. It is empty, but the south wall is a door from TN-7 which cannot be detected or opened from this side.

D4: Balcony

This balcony runs around an area open to the floor below. It is hard to get to as the stairs leading to it are about half gone and the rest are not long for this world.

D5: Private Rooms

All of these were originally for rent for a night or perhaps more temporary occupation. Their furnishings remain but their quality is on a par with the rest of the place. The doors to the rooms are all lying next to the openings as the doors were removed and their metal hinges salvaged!

The effect of wind and weather up here has been more severe than on the floor below. The chances of falling through the second floor are 50% per meter covered. This is fairly obvious by looking at it and there are already many "natural" holes.

I. Life Support Group

The TN-7 facilities concealed in this block are, as the name implies, designed to provide for the requirements of day-to-day living. They can easily accommodate a dozen permanent residents and can handle twice that number with some crowding.

1. Stores

This area holds enough food to feed 12 people for one year. There is a tank with enough water to last 12 people for one month. There is a door in the northeast corner which leads to the kitchen closet of Mrs. Mapley's.

2. Kitchen

A large scale mass kitchen, similar to that in a medium sized restaurant, this room was meant to serve the needs of the permanent team. Worked in relatively continuous fashion, it could serve three hot meals a day to about 100 people.

It is seperated from the mess hall by a flight of stairs ascending to the next level. Another set of stairs, beneath the first, leads to the access tunnel below.

3. Mess Hall

This room can accomodate up to 50 diners at a time. It is roomy and relatively comfortable.

4. Latrine

Provision has been made here for continuous use by 8 people. There is a gang shower for 6 people. There is a 500 gallon water tank and a water heater, under the stairs. When this water is gone, more must be brought in, presumably from TN-6.

5. Day Room

This is a lounge for off duty personnel. It contains couches and comfortable chairs, a library, a good pool table, decks of cards, a chess set, and other, similar low-key entertainment facilities. The northwest corner is a door to the storeroom in the Mother Lode Saloon.

6. Stairs

Stairs lead upward from Rooms 3, and 4, to a common landing above. These are for access to the floor above and for getting from one half of the area to the other as there is no continuous ground floor access between them.

Ž. Infirmary

This is a small and limited medical facility, intended for use by permanent party personnel and for others assigned to the station or passing through. It has beds for four, and two MedUnits and one BioComp (both detailed on page 27 of the MPGB). A surgical kit, drug kit and stocks of the universal antibody are also present.

8. Quarters

These are small, private rooms for 12 people. Doubling up would allow twice that number and stackable bunks were provided for this purpose.

The infirmary and quarters were designed, in the long term, to be one unit. This would create a modest hospital where the quarters would become a ward and the infirmary, a clinic. This assumes that the permanent personnel would move to new quarters as planned.

TN-7: IL OPERATIONS GROUP

A. Hogan's General Store

Typical of the genre, no town is complete without one.

A1: Main Room

This room was where business was ordinarily conducted. It has been stripped of everything light enough to be taken. The walls are still covered with shelves, but these are empty but for rubbish; even the store counter has been taken away. Only two items remain.

First, in the center of the room, fallen through the floor, is a cast iron woodstove. The thin piping that used to vent its smoke still hangs from a wall, having been torn from the fallen stove. The other item in the room is a slot machine in the southeast corner. It may be one of the largest ever made as it's three feet wide, a couple deep and five tall. It is obviously heavy, seems to be built into the wall and is very ornate. It's base is four feet wide and proclaims in bold, raised letters:

Idle Hour Amusements Cincinatti, Ohio Pat. #98,913,010 1871

Next to the coin slot, by the handle, it says:

One Dollar, One Play

Try Your Luck!

It is obvious that it took gold or silver dollars. Otherwise the machine looks miserable. Dirty, dented, its glass filmed over or broken, covered with dust, it does not look functional.

Nevertheless, it does work, but not as a slot machine. If someone feeds the one-armed bandit a golden or silver dollar and pulls the lever, the base of the machine will open, leaving a 2.5 by 4 foot door into the TN-7 area beyond.

A2: Back Room

The back room of the store used to house the goods sold "out front". There is a large door in the back of the room, its size and height showing that it was a place for wagons to pull up to and unload. There is not much in the room now, save for a pile of empty and dry-rotted sacking.

Stairs lead up for the room and daylight can be seen through the debris partially blocking the egress. Investigation will reveal a collapsed second floor, with evidence of living quarters.

B. Reveille Mining Co.

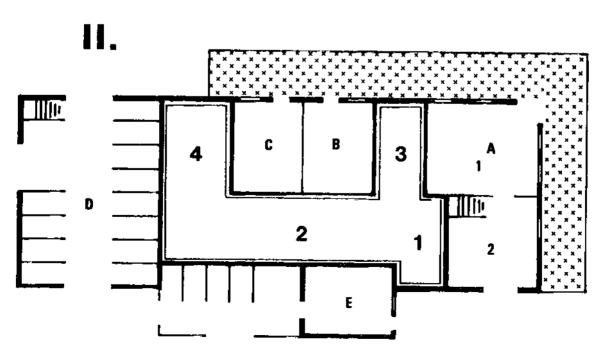
This is a one room office of the defunct (and of course, bogus) mining company, presumably responsible for the town in the first place. Once it contained chairs and desks, files and other items, but while evidence of these is present, they are all gone now. The only thing remaining is a couple of crates, each full of unsold and unassigned stock shares in the Eden Silver Mine. Worthless, they were "left behind".

C. Eden Barber Shop

Here again, only one room is present. The purpose of the place is obvious, both from the huge (broken) mirror on one wall and the ornate and heavy barber's chair on the floor. This chair has not fallen through. Yet. If somebody sit in it, it will! A pair of broken scissors on a shelf completes the inventory.

D. Murchisson Stable

This is a large, two-story barn. The ground floor, unlike the rest of the town, is not raised and is beaten earth. Three large doors serve it and only one is still on its hinges. Inside, the walls are lined with stalls, save for a set of stairs in a corner, leading



to the loft above. The loft is in bad shape, there are holes in it, and in the roof above it. The rafters supporting the roof are now the home of about a hundred desert bats, as a look at the floor of the loft or the open areas on the ground will show. The first man up the stairs, if he hasn't noticed this, is going to be in for a shock when, as he reaches the loft, all of the bats vacate at once.

The second stall from the northwest corner of the barn conceals a door to the TN-7 facility. As with the others, the door cannot be detected nor operated from this side.

E. Smith

This enterprise was originally part of the stable. It has open "holding" pens for waiting custom, but the fence that surrounded this yard has collapsed. The smithy itself lies at the north end of the yard. A shed, open on its south side, is all that there is to it. The roof has fallen in, but the forge, a work bench, an anvil and assorted metal paraphenalia can still be seen from the outside.

Operations Group

The Ops group is the command and administration center for TN-7. It is laid out as one large room, with wings and alcoves dedicated to specific purposes. As constructed, it is too large to be needed by the permanent team, but as TN-7's operations expanded, more men would be requiered, and thus this center would become necessary.

1. Air

The provision, filtration and circulation of fresh air is crucial to this enclosed power station. Ducts connect all of the areas, running beneath the surface where necessary, but the access tunnels themselves provide the single largest means of moving air. Pumping machinery lies in a room below this area, a part of the tunnel system. This room is a control and monitoring center for the entire station. From here CO2 count, humidity, temperature, and circulation can be monitored and controlled. The door from the slot machine leads to the northwest corner of this area.

2. Command and Administration

At the center of this room, along the east wall, lies the stairway up from the tunnel below. Around the stairs are tables, chairs, desks, computers and terminals, filing cabinets, and all of the impedimentia common to a business office. There are maps on the walls; one of them a twin of the map in the control room of TN-6. Otherwise, the maps show no surprises.

What all of this stuff is for is not readily apparent. Indeed, until the station is fully manned and on line, most of it is unecessary. But it does look impressive.

3. Security

The smallest wing of the Ops center, it is designed for remote monitoring. Banks of TV screens cover its three walls, with operator positions set before them.

These are, of course, dormant, and not only because there is no power. The cameras and audio circuits that would make all this operative are not even mounted, but rest in storage in the Mission Group.

These systems were not designed for use in the three groups, but were to be mounted in the tunnels and on buildings outside.

4. Communications

The final alcove in the Ops group is dedicated to commo. From here all of the power station's internal communications can be monitored and controlled; the switching system is here. But most important is the provision for land-line commo (via the tunnel) with TN-6, and long range commo with the Project (particularly Prime Base).

A broad beam radio antenna is concealed as the flagpole on the bank. A microwave horn/satellite dish is part of the power transmission pod. Both are controlled from the commo center.

STATISTICS FO	OR N	ON-	PL A1	TER (CHAI	RACI	ΓERS							
	AGE	Ħ	STR.	COM.	DET.	MOVE	END.	LVEAPON	Ą.	ĭ.	TOCK	SP/BP	BLOOD	НАМ
STEM								•	_		_	٠.		_
L. Muster Richards	51	М	10	4	8	2	32	15	15	18	13	140	В	4
2. Asst. L. Schoen	46	M	16	17	14	4	238	25	4	6	` 7	372	Ā	i
3. Atel. M. Raymond	34	F	17	6	6	2	36	30	13	13	3	202	Ö-	ģ
4. Asst. E. Beyma	44	м	13	12	4	1	48	30	7	12	ιĩ	256	Ă	ģ
5. Dr. J. DeMura	37	F	14	7	18	4	126	10	7	10	10	198	ô	Ś
6. Dr. M. Jehnke	35	F	12	- 11	13	3	143	25	14	11	3	232	ĀB	ő
7. Med. R. Logan	32	F	12	8	14	4	112	10	4	9	12	196	Ä	2
8. W. Manning	40	M	8	19	17	4	323	15	8	20	5	252	Ö	ī
9. B. Fowler	30	M	7	8	5	2	40	25	13	3	IÕ	156	Ă	i
10. J. Denning	28	F	16	- 1	4	- 1	4	20	6	2	18	116	À	ż
f f. C. Petronis	35	М	20	10	10	3	100	25	7	18	1	300	Ä	4
12. D. Adams	29	М	9	9	14	4	126	15	9	2	ı	181	A	4
13. R. LaLiberti	36	М	20	20	20	5	400	25	17	3	14	500	A	3
14. H. MacBride	30	М	10	20	3	2	100	25	18	8	- (300	0-	7
15. C. Stewart	24	F	12	16	7	2	112	20	20	18	6	192	0	4
16. G. Young	25	M	19	16	16	4	256	15	13	7	12	404	0	3
17. G. Mickey	50	M	15	20	14	4	280	15	13	20	12	400	Ā	6
ta. V. Riggs	47	F	11	9	10	3	90	8	•	61	11	199	В	8
9. J. Weaver	27	М	13	- 1	19	5	19	16	- 5	17	19	113	AB	8
20. L. Gurzinski	25	F	10	- 1	14	4	14	t 3	16	15	5	110	0-	3
21. E. McHate	38	M	15	11	9	3	99	f O	10	6	1	265	0	•
22. W. Barrett	36	М	16	10	19	5	190	6	5	- 1	20	260	0	6
23. J. Ford	21	М	8	12	8	2	96	12	4	16	3	196	A	4
24. R. Lee	26	М	15	20	5	2	100	18	8	7	4	400	A	7
25. J. Lee	24	М	13	10	17	4	170	12	11	6	19	220	3	7
LAVERS														
l. M. Cerriston	35	М	17	14	19	5	226	40	15	14	20	338	В	3
2. J. Lash	31	F	18	11	18	4	198	35	19	`` 6	8	298	ŏ	2
. M. Reitly	29	М	14	18	16	4	288	30	ió	10	19	352	ŏ	4
i. V. Fietcher	59	М	8	15	13	9	195	33	14	4	13	220	Ā	3
S. S. Della-Penna	29	F	12	12	17	4	289	55	14	17	.5	304	Â	3
5. G. Reimer	29	M	19	A	12	3	96	50	15	iá	16	252	ō-	ž
. A. Connor	27	F	12	17	ii	3	167	30	·é	16	iĭ	304	Ā	7
3. J. Ciere	30	F	8	19	19	5	361	15	12	18	.,	252	ô	6

III. Mission Group

A. Eden's Rest Mortuary

Every town, no matter how small, needs an undertaker. Undertakers, in the time that Eden was built to resemble, did not operate as we think of them. They had to handle rather more of their own unique requirements.

A1: Funeral Parlor

The front room of the mortuary can best be thought of as a combination funeral parlor and showroom. Like everything else in town, the building has been stripped, but for some reason, Eden's Rest was not plundered as completely. For instance, this room still contains an assortment of coffins, stacked against the east wall. There is still a table and on the table is a register of past "guests".

A2: Work Area

This smallish room is a work area. Though mostly bare, the two remaining tables and the shelves against the back wall show the nature of the work done here. The shelves still hold some glass bottles, and some other tools of the trade like hoses and pans. Behind these shelves is another exit fromTN-7 and, like the others, operates from the other side.

A3: Living Quarters

Here, in the back of the shop, are the undertaker's living quarters. It is obvious that they once held a bed, a table, and rudimentary cooking gear, but it has been better stripped than the rest of the place, The "back door" leads out to:

A4: Outdoor Work Area

This is another work area where the coffins, headboards and so on were made. A successful undertaker had to be a good carpenter. This is where such work took place. The fence here is still standing, but then, it was obviously more sturdily built...

B. "Daily Eden" Newspapaer and Printer

A one-room shop, this office handled all of the limited printing needs of the town. The huge iron and steel press is still here, crashed through the floor. Too heavy and/or expensive to move, much of the rest of the printer's gear is still present. A letter board, filled with metal block type, still reads:

"Daily Eden: Final Edition Dec. 24, 1886 by Steven J. Lindemere, owner, editor and operator."

C. Great Beginnings Bank

The foyer of the bank is typical of such establishments, throgh this one is empty. The teller's cage and counter seperates the foyer from C2.

This alcove was the manager's and clerks office area and was once full of files, desks, chairs and ledgers. A few charts and a faded balance sheet still hang on the wall and a broken kerosene lamp lies on the floor.

C3: Bank Vault

The vault was far too big and heavy to move, so it was left. It is empty, but it is also locked, so the fact that it is empty cannot be easily discerned. The vault rests on a concrete foundation, as it should. As a result it has not fallen through the floor. The door could be blown off, but it cannot be opened otherwise.

D. Great Beginnings Professional Offices

This is a small foyer to house the stairs that led to the offices above. The stairs are in fair shape.

D2: Upstairs Hallway

The stairs end in this small hallway that serves the offices. The floor throughout this second story is sound, as behooves the ceiling of a bank.

D3: Mayor's Office

This room still holds a desk, chairs, and a print or two but all small items have been removed.

D4: Bank President's Office

The purpose of this office is apparent, for its door, like all of the other doors on this floor is lettered on the outside. The lettering reads: Mr. C. Sheldon, Bank Manager, Great Beginnings Bank.

The size of the room gives some indication of the relative importance of the banker to the mayor in this boomtown. Unlike the mayor's office, the banker's has been stripped. The door in the north wall, marked "closet", is locked.

D5: Closet

This "closet" can be entered with some work. It does not hold clothes and, by the look of it, was never meant to. It is full of shelves, and was obviously hastily emptied given the amount of paper on the floor.

D6: Doctor Crenshaw

The Room is a doctor's office. There is still a table, a few, empty glass cabinets and a skeleton hanging from a stand in the corner.

D7: Doctor's Living Quarters

This is the doctor's "apartment". He must have been a man of independent means, since all of his personal effects are still here. Bed, dresser, clothing, the only thing missing is a doctor's bag. Everything is, of course, in terrible condition. Birds have been, and are, nesting in the remains of the bed.

D8: Empty Room

The purpose of this office is unclear as no lettering appears on the door. Inside, it is still furnished and has not been disturbed. In the center of the floor lies a skeleton, clad in rotting rags. Some of the skull is missing and that, combined with the ancient .44 black powder revolver still held in one hand, seems to tell its own story. There are no papers in the room and no I.D. on the body. A gold pocket watch, (no inscription) lies on a chain among the ribs. (This room, and its apparent suicide victim are also part of the bogus town. They were "planted," like everything else.)

E. Dead Lizard Bootery

This was a leather shop, specializing in footwear but making other items as well. While most of the works are gone, some things remain: an iron buckle in the dust, a handful of brass eyelets on the window sill, a broken wooden shoe last. What might be an old hide lies in one corner, and if disturbed, will reveal a family of desert rats and a hole in the floor beneath the hide.

F. Promise of Eden Hotel

This building was still under construction when the town was abandoned. The second floor was not yet completed: the trusses for the roof are present, but no roof was ever layed on them. The second story is open to the elements.

F1: Lobby

This is the "lobby" or entryway. A registration counter is still here, its back to the stairs.

F2: Dining Room

This room is completely empty.

F3: Kitchen

A stove is still present and its age aside, looks as though it was never used.

F4: Pantry

A storage pantry for the kitchen, it also is bare.

F5: Rooms

This series of rooms along the west wall may have been for guests, or for staff, or both, it's hard to say. Only the northernmost two show any sign of ever having been used. The second room past the pantry has an enormous, four-poster bed in it. A door from TN-7 is concealed by the wall panel.

F6: Stairs

These stairs lead up to a foyer amid the seven rooms of the hotel.

F7: Upstairs Rooms

The seven rooms upstairs can be clearly seen from the foyer as the interior walls were never built. Only a framework shows the outline of walls and doors. A few pieces of real wood lie about and a pile of nails, rusted into a lump, sits in one of the rooms. As mentioned previously, the entire floor is open to the sky since the roof was never attached. The footing here is as dangerous as that of the second floor of the Mother Lode Saloon.



III. Mission Group

The name refers to the mission of TN-7, which is to provide power. This group is the center which does that, the reason why all of the others exist.

1. Power Center

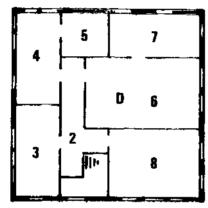
This room houses monitors and controls for the fusion plant and the transmission group. It is the true nerve center of the TN-7 station.

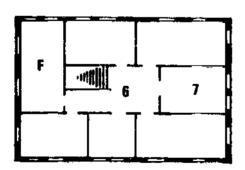
2. Circuitry Access and Library

This room is built on two levels. The upper or ground floor is the circuitry library. The lower, subsurface room is a mass of electronics and circuits coming directly from the "bottle" and the generation station. The potential power output of TN-7 makes these extensive facilities essential.

3. Circuit Breakers

An entire room devoted to controlling, manually, the flow of power from TN-7. The room is full of electronic gear, but most arresting is the number of hand lever circuit breakers. There is a hand trip for each automatic fuse and overload system, just to be sure.





4. Reactor Monitor

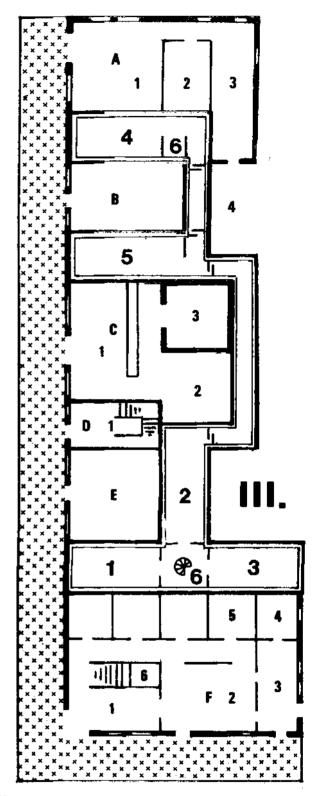
From here, the fusion reactor itself is monitored, and controlled. This has nothing to do with controlling the power, but only the reactor itself. The door to Eden's Rest leaves this room.

5. Nuts and Bolts

This is the flippant name given to the storage area of the mission group. It, like the circuitry access and library, is a two-level room. Essential spare parts are kept here, but only valuable and delicate ones. Others are stored in the mine. The parts to make the security system work are here.

6. Safety

Two of these areas exist. They are present for emergency use and contain radiological protective suits, geiger counters, etc. The eastern most one, between rooms A, B, and C, is also home to the stairway to the access tunnel. This room is also where the door from the hotel leads.



The Water Tower

Due east of the center of the hotel, only a few feet from the hotel's porch, is a round, 15 foot elevated water tower. It looks like a monstrous barrel on stilts, and it's quite close to where the railroad track, had it ever arrived, would have gone by. That was the purpose of the tower: to provide water for the steam engines.

The bogus wood of the tower and its huge, tree-trunk thick supports, conceal the power transmission antenna and its power and command links. A room below the ground, and the tower, holds the machinery necessary to control, move and aim the antenna. More will be said about this later.

The hallways in the mission group have several double doors. These are emergency doors which usually remain open. They close automatically if any alarm comes from the reactor.

The fusion reactor itself is buried beneath the bank vault, in a room with the generators. A fusion bottle need not be large and this one is not. The room that it and the generators occupy can be entered from the subsurface circuitry room, but this is done only in the case of breakdown or in the course of routine maintenance and checks.

Breakdowns, maintenance and checks apply only to the generators. The fusion bottle is sealed and cannot be reached. It should never malfunction, but if it does, it is automatically shutdown. No attempt will be made by the operations team to repair it. Indeed, none can be made. They have neither the tools, parts, knowledge or stupidity to tamper with it. Prime Base must supply those.

IV. Bolt Hole Group

The Second World War created a strange phenomenon among some of the more primitive inhabitants of the South Pacific. The armed forces of the United States, desiring a large number of airfields, often built them in out of the way places inhabited by primitive tribes. The great silver birds came and went, bringing strange and wonderful things with them. The natives were delighted with these visitations.

But when the war ended and the birds went away, the natives were unhappy. They did not understand about airplanes. However, they did understand birds and how to decoy them. So, they built mock-ups of DC-3s, surrounded by supplies. With these they hoped to attract and cause the return of the "great silver birds." This was the birth of the so-called cargo cults.

Anthropologists were delighted. They studied, drew parallels, made predictions, talked about the "sociological impact" of the meeting of cultures. They also said that such things can only happen among primitive cultures.

In the American West in the last half of the 1800s, there were no great silver birds. There were iron horses; trains and railroads. Many towns tried to decoy the iron horses into coming to them, usually by building facilities to attract them. Like the cargo cults, such towns were often disappointed.

A. Western Union Telegraph Office

A1: Front Room

The front room of the telegraph office, like much of the rest of Eden, shows all the signs of a hasty pullout. Two bare wires still hang from the wall where the telegraph equipment was removed. A few message forms remain on the floor, and the walls boast a rate schedule, a wanted poster and a glowing ad for the future of the telegraph in the coming century.

A2: Back Room

The back room was probably intended as a manager's office, but the town never became large enough to warrant one. Instead, it became the living quarters of the lone operator. A spring bedframe is still here, along with a broken shaving mug. A beat-to-hell coffee pot sits on the floor too. It has a brick in it and was apparently used as a door stop.

B. Eden Railroad Station

B1: Lobby and Ticket Area

The lobby and ticket area of the station, never having been used, is in pretty good shape. Somebody must have been hedging their bets, as the interior was never painted, plastered or wallpapered.

At the northernmost end of the room a once gaudy sign, now much faded, proclaims:

THE VERY LATEST MECHANICAL TRIUMPH! Brought to you all the way from PHILADELPHIA! THE MECHANICAL TICKET VENDOR! (Local Routes Only)

Insert one dollar and pull the lever for your destination: Reno or Carson City.

Don't Wait in Line! Don't Wait for the Railroad to get here first! Buy Your Ticket TODAY!

Beneath the poster is a bulky contraption, the size of an old time juke box, with a coin slot and two levers, one marked Reno, the other Carson City. (There are more levers, but these have no marked destinations.) Beneath the levers are smaller slots, probably where the tickets are issued.

This device, like the slot machine in the general store, is a coin operated entrance to TN-7. If a gold or silver coin is inserted, and any lever pulled, the bottom half of the machine becomes a small door leading into the operations team's bolt hole.

B2: Counter

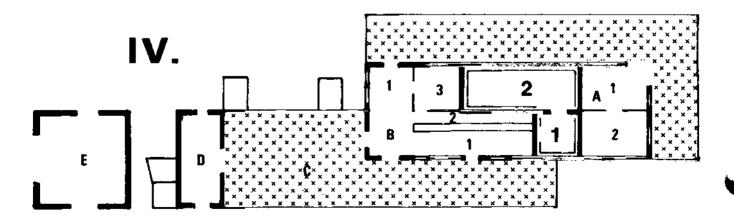
The counter and normal ticket vending area is nondescript, but very large for such a small town. Great things must have been planned.

B3: Manager's Office

The station manager's office was never used of course, and by the look of it, furniture was never moved in. But the door behind the counter is marked: Station Manager, and the door in the lobby is marked: Private. There are not even door knobs, much less locks, on the door.

C. Station Platform

This is a long, covered, open area for getting on and off the



train. Its wooden flooring has fallen in here and there, but it is impossible to fall far. The roof above the platform is in much worse condition, but the framework that supports it is still standing. Two ramps lead off of the platform on the off track side. A sign still hangs from one support, proudly proclaiming: Eden Station.

D. Freight House

This is a small lock-up for cargo, though it is not locked now. A livestock or heavy freight ramp sits on its south side.

B, C, and D, while floored with wood, are built upon a raised concrete foundation. The folks of Eden were trying hard to attract an iron horse.

E. Unmarked Building

This building has no identifying sign, and is merely a pole barn. It was put up to serve the railroad and was intended to hold wood, coal, rails, ties or whaterver else the rail company might have wanted to put there.

Its southern side is partially burned away. The cause is obvious from the inside: the remains of a fire and some 20th century beer cans can still be seen by the wall. Some wanderers, here for shelter, or a party, inadvertantly set fire to the nearby wall. (This is NOT a Morrow Project "plant".)

IV. Bolt Hole

This is a non-standard bolt hole, in a far from common facility. The concrete foundation below the rail station is for the bolt hole, and its "mini-reactor" buried below it. It is smaller than the norm, but with more people in it. This is because the operations team does not have to go far to perform their mission, and everything they need is close at hand.

1. Common Room

This small room is the "common room" of the bolt hole. It houses the computer (standard), periscope, radio, lockers and the other essentials of the bolt hole package. It is quite cramped.

2. Sleeping Chamber

This long room behind the common area is the sleeping chamber. 12 freeze tubes are ranged against the west wall, 6 on the the floor, and 6 more racked above them. It is very crowded.

These confined quarters were considered acceptable by the Project planners because the Ops team was to spend so little time here. The team was to move out to start TN-7 soon after awakening. More will be said about TN-7's operation team, and their mission, later on.

The TN-7 Underlevel

The P.D.'s overall map of Eden shows the main tunnels below the town. This map is on the inside cover of the module.

Not much detail is given because not much is needed. The main tunnels are 7 foot diameter cylinders, featureless and uninteresting as sewers. One goes from the Life Support Group to the Operations Group. The other goes from there to the Mission Group. The only underground rooms of any size are below the Mission Group and these have been mentioned. The tunnel from TN-6 leads to the Mission Group.

There are other "tunnels" present but these are more like very small pipelines. They house commo wire, power lines and the like. They are far too small for a human and can only be reached by tearing up the ground.

The crew of TN-7 was never supposed to use the tunnels for longer than necessary. The whole idea was to get up on the surface and build.

The "Eden's Reward" Silver Mine

Hardly a quarter mile west of Eden lies the Eden's Reward silver mine, the ostensible reason for the town's existence. The mine, like Eden is a sham. Oh, it looks real, and all of the proper props are present but the hole in the mountain side is just that: a hole.

And it is not much of a hole at that. When it was built a typical mine entrance was created, with a typical mine cave in about twenty feet beyond it. The entrance was designed to look unstable and dangerous, though it was neither. The "cave in" was only a few feet thick. A few hours work with a half a dozen men would remove the "cave in". Beyond it lies a door and a wall, operable by a Morrow Project I.D. card in the usual way.

But now, 150+ years later, the forces of wind, weather, gravity and especially erosion, have moved about 20 feet of the mountain down over the old mine entrance. The remains of several landslides are apparent. Now, a hundred men and one weeks time would be required to get into the mine shaft.

The entry tunnel, if it is dug out, is still there and in good shape; it actually supports less weight now than it used to. Beyond it, the access door is still "buried", but this too can be cleared. The door will still work.

What lies beyond the door is a treasure trove of useful items.

Beneath Reveille Peak

The room beyond the personnel door is vast; the weight of the mountain above is supported by a network of immense pillars. The area that remains is full,

Most of the gear stored here pertains directly to the mission of TN-7. There are spare parts for just about every piece of equipment in TN-6 and TN-7. There are huge cable reels for establishing land line commo and power links. There is the equivalent of a cache's worth of small arms stores and ammo. Tons of equipment.

There are also vehicles for the use of the Ops team: an XR-311, an unarmed and empty Commando Ranger, an earth moving vehicle which is a combination of a backhoe, a scoop loader and a forklift, just for moving things around in here! There are several trailers and even more gear. The Ranger MPV has been specially modified to operate with a trailer as a cable hauling and laying unit. The XR-311 is a standard version as described in PF-02, **DAMOCLES**.

The fly in the ointment is the vehicular door. It is set against the side of the mountain, and was built in place. This room was not excavated, it is a natural cave (heavily modified of course). This means that the exterior of the doors must be reached; a job that will require 3 times the work of clearing the way to the personnel door! This would be no problem if that earthmover was outside...

Power Transmission

TN-7 was not going to do anybody any good unless the power it generated could be brought to those who needed it. Set as far out in the middle of nowhere as it was, this could have been a serious problem. But TN-7 was built where it was because the Morrow Project planners had a solution.

The cables and other hardware stored in the mountain warehouse were strictly for local use. They were to serve the community that would run TN-7. There is not enough gear in the warehouse to reach Las Vegas, even if the Project planners had wanted to! How then, was all this power going to be used?

It was to be transmitted.

For each power station of the TN-7 type (and there were not many), the Project managed to deploy one satellite. Each station had a transmission tower and disk. Power from the fusion reactor was to be beamed to the satellite in geosynchronous orbit via the dish.

The satellites were to be controlled and deployed by Prime Base. Each would serve as a "mirror" (though they looked nothing like mirrors), and beam the power back down to the surface at a specific point. These reception points were to be constructed after The War from materials prefabricated and stored in Morrow Project facilities. They could be erected whenever and wherever they were needed, at the direction of Prime Base, and then the power personnel could angle the satellite as necessary to "complete the circuit". TN-7 could, therefore, provide power to, say, the

Johnson Space Center near Houston, with no physical link between the two!

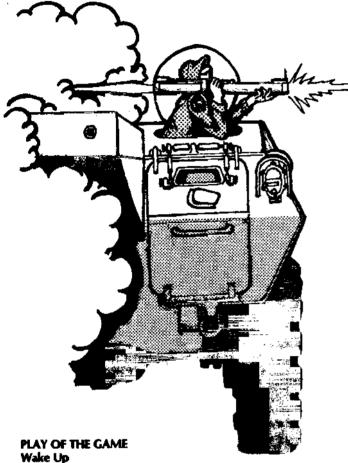
But there are three problems:

1, The satellites have not been activated.

2 No reception points are activated.

3. Prime Base, necessary to any of the above, is out of action and apparently "lost".

So, until Prime Base is back in business, TN-7 cannot perform its whole mission. Well, the Ops team can alway string up lights for the covotes and make popcorm...



Team N-2's wake-up will be somewhat unusual. Because the there are several teams in the Combined Group N, the plan was to wake up the Group leader's team who would begin looking over the situation and who would then be able to wake up the other teams as needed.

The group leader received a random wake-up call and since things seemed peaceful enough and the radiation levels were lower than expected, the Group CO, William Chenault, sent the recall code to activate Team N-2.

His plan is to have two teams, his and N-2, do a fast, preliminary recon to get a feel for conditions over as wide an area as possible. Chenault will then decide whether or not to activate more tams or even start-up TN-7.

Team N-2 Wake Up

So it is that team N-2 is not woken at random, but at the command of their Group leader. They will find this out when they turn on their radio and hear Chenault's team RTO speaking. A bored voice will repeat: "N-2, N-2, this is N-1, come in N-2. N-2, you must have been up for an hour now, one of you must have thought to switch on your bloody radio. N-2, N-2, this is N-1, over..."

When the team answers, Chenault will give them the following message and orders:

"Good Morning people! I trust that, since you've had a nice little nap, we're ready to go to work now! We've been up for a couple of hours already, and had a quick look around.

"Situation doesn't look too bad. No significant radiation, no chem, no bio. Check your own area out before you pop the cork though, and remember you've got the air force range to your west.

"There is one hitch: we have not been able to raise Prime Base, or anybody else, and I mean anybody else. Sparks tells me the ether is dead as a doornail. We should be having trouble with commo. We should be getting, even a few years after, a lot of electrical interference, but we are not. Folks, something is wrong, and I don't know what it is.

"So this is what we are going to do. I'm a few miles east of you right now, and am going to head down to Spencer. You pop out and go look over Carson Wells, see if it's still a ghost town. Stay loose and look around!

"Now, as soon as we are done talking, I want your radio off. Not turned down, not "just listening", but off. Sparks thinks, things being so quiet, even a carrier wave could be traced, and I agree. Fire up again and report in when you've checked out Carson Wells, and we'll compare notes. I plan to work us up north a few miles, me on the east side of the Reveille Range, you on the west, and figure out what to do then. My radio will stay on, so if you just have to, you can call me. But it better be important.

"That's about it. Any questions? Make 'em quick!"

Chenault will answer reasonable questions, but there shouldn't be many, as all of the important points have been covered. He will **not** put up with a discussion! He has given orders, he expects them to be carried out.

Movement

The team's bolt hole is located in the northern reaches of the Belted Mountain Range, only slightly outside of the Nellis Air Force Range. To the west lies the Tonopah AEC (Atomic Energy Commission) Range, and while it is old, it is still "hot".

South, across the mountains and the desert, is Frenchman's Flat, roughly 100 kilometers away. Frenchman's Flat was the site of many early atomic tests. It is no danger at this distance and after so much time, but the team may not know that.

All of this means that the team's CBR kits will be growling all of the time as the area is mildly "hot". This is not dangerous. The area most unhealthy is the Reveille Valley, the flat area west of the mountains. This area, closest to the AEC range, is so deadly, that if a man built a house here, never went anywhere else, and lived right there, he would almost certainly die of natural causes like old age, and **not** radiation.

But it is hot outside anyway, in terms of simple temperature. The team is going to have to start getting used to it right away.

Remember that the team has been frozen for 150+ years. This means that all but Negro player-characters are pale; they look like dough. The hot, desert sun will rapidly change this.

Some characters may start taking off their clothes in the heat. Use the following formula for awarding damage to exposed areas of the body: In temperatures of 90°F.+, award one Dp per minute of exposure. Since it is summer, it will be 90°F. or more from about 2 hours after sunrise to about an hour before sunset.

Refer to the Burn Severity section of the MPGB on page 42. Note that 8-14 Dp is a first degree burn; a very serious and painful sunburn. This can be acquired in less than 15 minutes. It may not even be noticed. Second degree burns will occur in 20 to 40 minutes and these will be noticed as blistering begins to occur! These effects apply to all team members who expose themselves to the sun, Negroes included.

It is essential that team members keep themselves covered, it is the responsibility of the P.D. to reveal this information to the team, however slowly or indirectly. Cause vs. effect is probably the best way, though sometimes a bright player will spot the danger right away.



The sunburn preventative ointment issued to the team will help some: it will double the time required to burn. The salve is not defective, it's just that it was not made to protect people so completely defenseless.

The sun block will prevent burn, but it has two drawbacks. First, while wearing sun block, the character will get no sun. Thus, he or she will not get a nice tan, they will stay fish-belly white. Second, as the characters sweat, the sun block will run and cease to be effective. After about an hour in the heat they must put another dose on. There is only enough sun block to last the team for a day if they insist on running around in the heat and bright sun of the day.

Team members who fail to wear their sunglasses or polarized goggles are also in for trouble. Characters who gaze steadily across the terrain for an hour or more without eye protection will be blinded. The chances of this are 10% per hour, cumulative. Thus, after 10 hours of bare-eyeball contact with the desert sun, the chances for blindness reaches 100%. The blinding is temporary, but will take exactly twice as long to clear up as it took to acquire. (Here again, the team should be unaware of the cure time, unless they deduce it on the basis of experience in the course of the game. Indeed, they should not even be sure that it will wear off at all, the first time it happens.)

Over the course of a month of game time the team will become acclimatized to the desert. Exposure times can be increased by about 3% per day, until, at the end of about a month, the team members will be able to operate in the desert nearly as well as its natural inhabitants.

They may even learn that reasonable desert inhabitants never move in the heat of the day, drink lots of water, and always stay covered up. This is important; NO ONE is completely immune to the desert sun. The flowing robes of the Bedouin tribesmen were traditionally made of wool. They were hot. But it was hotter, and more dangerous, to do without.

Covering up is a must when 30 minutes of sun on exposed skin can cause second degree burns. But covering up itself has problems of its own.

Ideally, covering should take the form of many loose layers of cloth. Team members have the many layers, but lack the looseness. This means that they will be hot.

The necessity for drinking water in copious quantities has been stressed already. The penalties for not doing so have not. There is not room in this module for a complete rundown on the effects of dehydration and exertion in heat. Suffice it to say that, working under the sun, in or out of clothes, without sufficient water, will lead to trouble in the form of heat prostration, heat exhaustion or heat stroke. All of these are dangerous, each can cause shock, and the last one, heat stroke, is invariably fatal if not treated. Check a good first aid text, or even a Boy Scout manual for causes, symptoms and effects of these, and remember that there is no warning at onset. Any of them can and will hit if certain conditions are met.

Engaging Targets in the Desert

No recommended loads were listed for this module; any can be used. This is the PD's opportunity to turn the players loose with all of the long range, highly lethal hardware that so many players so ardently desire. It is unlikely to do them much good.

The weapons will work fine but the operators probably will not. Nor is this their fault. Desert conditions will prevent the effective use of long range weaponry much of the time.

If fighting occurs in this module, and it probably will, it will most likely be centered in the relatively flat areas between the mountains. It is precisely in these areas that "desert effect" will be most pronounced.

On any normal desert day the heat becomes extreme early in the day and remains intense until almost sundown. This heat, falling on rock, sand, gravel and baked earth, creates a heat haze: the same effect you may have seen on a hot summer day on the highway when distant parts of the road seem wet. In a desert valley this effect is all pervasive; it is all around you. So from about two hours after sunrise until an hour before sunset, heat haze is a constant wherever the ground is roughly even or slightly rolling, up to about 300 meters above the normal mean height of the area (NOT sea level). It will make the mountains look as though they are floating. Anything in this lower 300 meters will appear to shimmer, much as the air does. This interferes with visibility.

The cause of this is a uniform layer of heated air rising from the ground. Anything viewed through this layer will be distorted and, after a while, the refraction caused by this layer will attenuate the light waves to the extent that things will seem to simply "disappear". The closer to the ground you are, the worse this gets.

Of course, anything above this layer can be seen as usual. This creates the odd situation where mountains, towers or any other tall, abrupt irregularity will seem to be floating above the ground; their bases cannot be viewed because of the interfering layer of air but above this layer, they look the same as always.

Acquisition Difficulties

This distortion will effect the team in two ways. The first is the limitation it places on seeing anything at all, due to attenuation. Under desert conditions, small groups of people and small vehicles like jeeps, dune buggies and pick-up trucks can only be accurately located if they are within 500 meters or less of the observer. Objects the size of the V-150 can be seen accurately to about 1 kilometer. Buildings or semi trailers can usually be seen to about 2 kilometers.

Because of heat haze, distances will be deceiving. Inexperienced desert denizens like the Morrow team will make mistakes in judging where and how far away targets are. If any of the following conditions apply, the characters will think objects are half as far away as they truly are: A bright, clear day; looking across a ravine or water course; the sun is in front of the target; the target is higher up than the observer; or the target is very large (say like a semi trailer). Thus a team might spot a group of men 300 meters away, but if any of the above conditions are true, they will think the group is only 150 meters away.

If any of the following conditions apply, double the estimated distance: Hazy or dusty air, or if the sun is behind the target. In these cases, the group mentioned above would seem to be 600 meters away.

Under either set of conditions, things will not be at the distance they seem to be. This is known as the mirage effect.

There is no way around this problem, no "magic" solution. Experience is the only sure, long term cure for misjudging range to targets. And for experience to come into play, you must first realize that there is a problem and then, you must determine what is causing the problem.

The second major distortion problem was implied in the first. Because the heat bends the light, objects will appear to be somewhere they are not. Like attenuation, there is no cure for this problem either.

For example, a team member sees an enemy vehicle, judges it to be 2 kilometers away (maybe he's right, maybe not, it doesn't matter), and fires a TOW at it. The missile goes where he points it, seems to pass through the target and eventually detonates harmlessly against some innocent rock! The problem is not with the missile: it did what it was "told". The problem is with the gunner: he thinks he fired at the target but he actually fired at its heat image. Under conditions like these, direct fire, point accuracy type weapons are severely limited.

Nor do rifle scopes, binoculars or other gadgets help. All are necessarily directed at the image, so they "bring the image closer." They confirm and enhance the eyeball error. They cannot magically find the "real" target. Think about it.

Lasers? Lasers, whether weapons or range finders, have the same problem. A laser weapon is guided by eye, and when directed at an image, will miss the target. A laser range finder pointed at an image will give a reading, but not the distance to the image, much less the target. It will give the range to whatever solid object

the beam finally hits, which may be closer than the image! But in any event, it will give a range to some solid object that the user cannot even see. (Or maybe he can see it, or rather its image, and is unaware that the laser is trained on it as the image, like that of the target, is elsewhere.)

Practical Target Acquisition

As stated, there is no way to remove the difficulties of lineof-sight acquisition in desert heat haze. There are ways to engage targets in spite of heat haze.

The easiest and most direct are simple and are based on the principle of "don't fight it". Heat haze only exists at a particular time of day, thus fighting near dawn, at twilight or at night gets

around the problem.

Elevation helps too since the mirage effect is only dominant when the viewer is looking horizontally through the heat haze. Thus, if you can get up high enough, you can accurately shoot down through it. How high do you have to be? High enough so that the distance down to your target is greater than your horizontal distance to it. This can take some doing and is not always possible. (In World War II, some British units in North Africa used towers built onto the back of trucks to fight the mirage effect.)

The most direct way through the problem is to close with the enemy to the point where heat haze is neglible. This is possible. Chase an image long enough, close with it, and eventually it gets close to its source. Finally, light refraction is reduced to the point where you can really see the target (though you may not be

able to tell the difference!).

How close is that? The rule of thumb is: 300 meters or less for men and small vehicles, 750 meters for a V-150, 1000 meters for a building or a semi. How do you know you are seeing the real thing and not its image? Noise is the best way. If, for instance, engine noise seems to be coming from exactly where you see a vehicle, it's a good bet that the vehicle is really there. Another way is to shoot at it; if you hit where you are pointing, it's there! Of course, the disadvantage to this method is that it works both

It is also possible to hit targets beyond the "sure" ranges with some weapons. It is never possible to hit with a point type weapon fired by line of sight, like a TOW, Dragon, laser or rifle. But with a machine gun or the Mark 19 Mod 3 40mm grenade launcher,

it can be done.

With an M60 or an M2Hb .50 cal, machine gun and the normal mix of tracer to ball ammo, you merely aim at the target and fire a burst. The burst will not hit the target, but it will hit somewhere. Watch the tracer path and the "beaten zone" the bullets will produce on impact and pay no attention to the gun or its sights. Somewhere, a mirage image of the impact will be visible. When it is, adjust fire according to the mirage!

This is "walking your fire in" with a novel twist. You don't ever actually "see" the target, but when your bullets are on it, the two mirages will become one and you're there! Now, look through the sights again and set the indicated range on the rear aperture. You now know the approximate range to the target and its rough direction. (Direction is given by the gun barrel. It is now pointing at the target and not at the mirage.) You still can't aim, but what the hell?! Hose 'em down.

Of course tracer burn out occurs at 900 meters for 7.62mm rounds and at 1600 meters for .50 cal. Furthermore, if the sun is behind you when you fire, you'll loose sight of the tracers in the glare and shine long before they reach the target. But the beaten zone caused by bullet impact is reliable for aiming. If it cannot be brought on target, the target is simply out of range.

Using the 40mm grenade launcher for indirect fire and ranging works in exactly the same way but takes longer due to the flight time of the rounds. A continuous ranging burst will not work: you may hit your target but you do not know how or why.

Using This Information

The team awakens unaware of these facts, though savy players may figure out the theoretical effects of heat haze on fire. No

help should be given the team in this regard!

If they figure out what is wrong, they may or may not figure out what to do about it. The best way to handle this is to provide them with accurate information on the results of their activities and let them make their own decision accordingly. Playtesting shows that most teams burn up a lot of valuable ammo uselessly and become quite distraught before they start to think. (If they ever do.) The ranging by fire method is also useless if employed from a moving vehicle.

When a team fires at a hopeless target, remember that they do not know it is pointless. Roll your dice, consult a table or two and announce a miss. Let them figure things out. To really confuse things, you might want to have a random chance to hit based on the gunner's luck; but do not tell them so! This will allow a few hits under impossible conditions, which, from the players' point of view, only adds to the confusion.

Remember that "the enemy" does not operate under the same illusions. They are well aware of what the limitations are, if not the whys. They do not waste ammo, and they are much better

at "guesstimating" ranges.

Their tactics reflect this. The Syen believe in closing to close range and blasting from there. The Slavers, by virtue of their profession, prefer to operate with stealth by night. But neither group will fight if running is a viable option.

But, should fighting erupt, the team is likely to find itself being hit before they can effectively engage the enemy. This will almost certainly be true if the team tries the high-speed daylight attack on the raiders.

Carson Wells

The team must make its way from the bolt hole to Carson Wells. The bolt hole is set high up on the slopes of the Belted Mountains. Driving down should be possible for any careful driver, but it will probably take an hour to reach the relatively flat area of the gap between the ranges.

Spencer is not visible from the bolt hole, nor will it be at any time during the trip to Carson Wells. Once on the flat, the air will be hotter then on the mountain and visibility will be severely

limited for reasons that were explained above.

The maximum practical speed on the slopes of the mountains is 5mph. On the flat of the "valley" floor, it will be possible to reach speeds of 30mph without difficulty or danger. On a well preserved road the MPVs can maintain their maximum speeds, save in the mountains. Some watch should be kept for the occasional wash, dry streambed or gulley as at these points the road is likely to be washed out.

Merely finding Carson Wells may be tricky, as little of it still exists. Heat haze on the flat will prevent the team from driving right for it. The only sure way to get there is to navigate by autonay. The auto-nay is not confused by the mirage effect. A smart

team will learn something from this.

The dirt road shown on their auto-nay has long since faded away. Here and there a mile or two may yet remain, but the rest has been obliterated by water, erosion, wind and drifting sand. Think of it from this perspective: the roads in these parts have been without maintenance or use for longer than Nevada was a state!

Without the road as a guide, the team may miss Carson Wells altogether unless they are paying attention to the auto-nay. Everwith the auto-nay, they are likely to be among the mounds that mark the "town" while still vainly searching for the "real town".

Obviously they won't have much to report to Chenault but this hardly matters. By the time they try to raise him on the radio, neither Chenault, nor any other member of N-1 will, or can, respond.

Spencer

Most teams, sensing trouble when they can't raise Chenault, head for Spencer. The quickest route is to hook south on the flat along the old road (what there is of it). The shorter crosscountry route over the intervening foot hills, while being a straight line, will require 3 times as long to travel. By rolling across the flat the team can arrive in Spencer in about 30-40 minutes as it is only 16 miles or so. By going across the hills, they will use up 1 1/2 hours or more. But again, the team may not figure this out.

When they are within 4 miles of town they will see a column of smoke rising from it. This may slow them down, but there

is no danger present. Now.

Eventually the team will reach Spencer where they will find the aftermath of an ambush; and the remains of team N-1. The V-150 is there, partially crashed through the wall of a house. This has bent the barrel of the 20mm. Small fires are burning all around, the aftereffect of the 20mm's incendiary ammunition. There is a lot of drifting ground smoke. The hatches of the V-150 are open but there is no movement.

When they get to within 100 meters, the team will see a number of bodies. Quite a fight went on, albeit a short one. The nearby walls are scored with 20mm fire and the MPV shows the raw

metal of multiple small arms hits.

Two bodies, both near the middle of the street, are in Morrow uniforms. They lie 20 meters or more from the crashed V-150. One of the bodies belongs to William Chenault, and he is still alive, though barely. A qualified doctor would guess that he has no more than moments to live and that there is no hope. There is a crude wooden spear sticking a foot out of his stomach on both sides of his body. He will say this before he dies:

"We came in slow, we could see some trucks, trailers, a couple of dune buggies. We didn't want to scare anybody, so we were unbuttoned. Didn't see anybody (gasp), so Michelle and I got out of the side (wheeze). A couple of 'em came out a door an' started talking. They're not from around here. Said they were searching or something. Wanted to know who we were, if we were from here (cough). I tole 'em we were strangers here too, come to help people out, and the shooting started (rattle).

"Caught me across the legs, Michelle in the head. Stoppard got the track going and Benson was on the 20, but the side door was still open. They threw something inside (choke), and Stoppard

must have lost it; the track crashed (hack).

"I was yellin' for our guys to surrender so they'd stop killin' us. They tried, comin' out of the track. The others were comin' out of everywhere (twitch). They just grabbed our guys and started beating 'em. Couple of 'em ran to the track, one stuck a gun in an' cut loose! Stoppard and Hines were still inside! Oh God! (croak, choke, wheeze)

"One of 'em, I think they called him Richards, came over, looked at me, told them to kill me, slowly. They did this (he winces, indicates his impalement). He didn't even watch, just kept talkin' about "the Greater Good" and "Pure Stock", while they stripped our gear and some of them started carvin' on Benson. (shudder,

blanche)"

Chenault tries to raise up, a wild light in his eyes and says:

"You gotta go after 'em! They're heading north! I told Sparks where TN-6 is! He and Benson were still alive! You've gotta save them! The Ops Team! TN...

And Chenault dies, coughing blood.

The other bodies nearby are those of the enemy. All have been looted, and it may be significant that the enemy are people who do not care about their own dead. The V-150 is a total loss for

any immediate purposes. Two bodies, presumably Stoppard and Hines, are inside. Many secondary detonations were caused by whatever was thrown in through the door; it's a wonder anybody lived. The interior is gone. The auto-nav looks as though Sparks had time, (and the sensel) to hit the destruct.

P.D. NOTE: Many mechanical spare parts could be salvaged here along with tow cables, tires, external tools, etc., etc. This would, however, take time and lots of it. No usable ammo remains, and a quick, careful look will show that it is unlikely the "enemy" found any to cart off.

Interlude

Before the narrative can continue, the P.D. needs more facts. What is going on here?

Well, as to what happened, Richards, the Syen and the Slavers rolled into Spencer earlier this morning. Desert wise, they do not travel in the heat of the day unnecessarily.

Holed up in Spencer, they saw the approach of N-1 in plenty of time to arrange an ambush. The Slavers wanted to talk, the Sven did not. There were more Syen then Slavers, so...

Chenault's account is essentially correct, but one-sided. The raiders were horribly surprised by the V-150, its strength, its firepower. Killing it was a matter of luck, as neither cannon nor mortar were available to fire. The raiders were scared.

The mop up after the fight has not improved their spirits. Any fool could see that these people (team N-1) were tremendously well armed and equipped. They were powerful.

And, most dangerous to the Great Work, there might be more of them. Chenault said that they were strangers in the area, and the team was seen to come from the south.

With all of these things in mind, Richards has decided to end the raid and head toward home, in the heat of the day or not! The Slavers have readily agreeed. But there is one more twist to this tale: Sparks, seeing the plight of Benson, offered to tell the raiders something if they would only stop cutting up Benson. We'll get back to Sparks.

The next matter to consider is just what Chenault said, and what facts this has given the team to work with. Chenault said:

He and his team were ambushed.

- 2 Everyone is dead but for two captives.
- 3. One captive knows where "TN-6" is.
- 4. The "enemy" headed north.
- 5. There is an "Ops team."

Chenault said more, but these are the most important points. He may have implied still more.

Now, what does the team know?

They know what Chenault said, so they have the above facts. They also know that:

- 1. Chenault was the only member of the "defensive" teams who knew where the power station was.
- 2. They know there is a power station, and an Ops team to run it, but they do not know where they are located.
- 3. That there are two more "defensive" teams, but again, not where, nor how to raise them.
- That there is something called "TN-6" this from Chenault.
- 5. That they, the defensive teams, were to support and eventually participate in the mission of the power station.

The obvious implications of all of this must be determined by the team, as well as what action to take, it is important for the P.D. to remember that Chenault never said what TN-6 was, nor where it was located. He never said anything about a power station. The team may think that more was said or implied. They may talk themselves into believing some really amazing things, but that is entirely their own doing.

The P.D. may legitimately refuse to repeat any of Chenault's last words. He's dead, the team got to hear them once. If they've become confused or uncertain, that's their problem! They, the players, may complain that this is unfair.

Fair?!? Too bad! Welcome to role playing!

The P.D., in order to bring everything together, needs a timetable to use in conjunction with the map. We have provided one here. Feel free to pick your own time of day; the times themselves are not significant, the intervals of time are.

ime	EAGUE
1000	Team N-2 activated.
1030	Team N-2 speaks with Chenault, receives orders.
1100	Team leaves bolt hold for Carson Wells, a journey of only six or seven miles. Still, getting down the mountain takes time.
1130	Chenault enters Spencer and is ambushed.
1140	Richards decides to pull out of Spencer, gives his march orders.
1200	Team N-2 reaches Carson Wells. Raider convoy leaves Spencer, heading north along Nevada 375.
1205-	
1215	Team N-2 radios Chenault and receives no reply. Does the team head toward Spencer?

From this point on it is practical to give only a timeline for the raiders, as what team N-2 does, and when they do it, is beyond the power of the authors to predict accurately.

-	
1215	Moving at an average speed of 15mph (or about one mile every four minutes), the raider convoy sights TN-
	6 from the northern end of the gap. Lead elements of
	the column will be sent to look over the building. These can reach TN-6 as soon as 1225.
1235	Raider convoy converges on TN-7. Richards will order
	a light vehicle or two back to the gap to watch for pursuit.
	(This is about the soonest team N-2 might reach Spencer.)
1245	Raiders manage to blow the personnel door of TN-6
	and enter. Exploration begins. "Rear guard" reaches the

north end of the gap. They will continue to the south

end of the gap if a decent leader is with them, reaching

Play of the Game Interlude: Continued

it by 1248.

It is now time to return to Sparks, the captured RTO of Chenault's ill-fated team. Sparks was not panicked into making a statement to save Benson, nor was he motivated by cowardice or fear. Sparks is a very cool NPC caught in a very dangerous position. He is taking steps not only to maximaize the prisoner's chances for survival, but more importantly, to defend the power station.

He has correctly surmised that he and Benson will be killed as soon as the raiders get around to it. The only way to prevent this is to be too valuable to kill, and the only valuable commodity he has is information.

Furthermore, he knows that his captors are dangerous to the Project as a whole. They have to be taken out of the game.

Sparks figures that team N-2 can do the job, or at least make a good start at it. But N-2 can only do the job if they can find the raiders, and this means that the raiders have to be delayed. They must be slowed down so that N-2 can catch them.

It is worth noting that the Syen have not kept them alive out of kindness. As long as Sparks keeps coming up with the answers to their questions, he and Benson will remain relatively unharmed. If they ever doubt the truth of his answers or if he tries to barter with them too brazenly, they will simply begin torturing him or Benson (whichever seems most effective) until they are satisfied they have what they want (probably when the victim is dead). Sparks realizes this and is walking a very narrow tightrope to delay them while keeping himself and Benson alive.

Sparks does not know what TN-6 is. He does not think it is

the power station because Chenault never talked about TN-6 as though it was. He does not know where the power station is. Sparks hopes to delay the raiders by giving them TN-6, and perhaps by providing a highly imaginative and thoroughly phony tour of the place, complete with descriptions, theory, purpose, and if it looks like they'll buy it, magical properties.

Run Sparks as smart, resourceful and cool. If he lives, he'll try to help N-2 in any way he can. If he is untied and unwatched, he might do a lot.

Pursuit

Team N-2 has a lot of good reasons to go after the raiders, not the least of which is that they are reported to have live Morrow captives. The P.D. needs to keep careful track of the timing of the pursuit action, to determine the activities of Richards & Co.

The quickest and most direct route is, of course, the road. There are two danger points on the road though, the gap north of Spencer and the bridge across the wash.

The gap looks worse than it is as it's nearly a mile wide! Not great for an ambush! If the team has moved as fast as it can, it may reach the gap just as Richards' rearguard does. If playtesting means anything though, this is unlikely. Most teams dither about considerably before following the bad guys.

So it is most likely that the rearguard will be in place before the team starts to move. If the whole team rolls for the gap at once, the rearguard will run away to warn Richards. Only if a single FAV heads for the gap will the watchers try to arrange an ambush; and maybe not even then. Richards said watch. In the unlikely event that they are surprised or cornered, they will fight desperately, but still try to escape if possible.

Cornered Syen will not surrender. Slavers might surrender, now or later, which leads to an interesting point. Captured Slavers will try to escape, and by virtue of their profession, they know a lot about escapes! It will be interesting to see if a team can hold onto them!

The most dangerous choke point on the road is the bridge. It is made of steel for the most part and is still in good shape, even its guardrails. If Richards has even five minutes warning of the team's approach, he'll order the Slaver's mortar truck into a position to cover the bridge.

Now, the Slaver's pitiful HE rounds cannot penetrate the V-150, even with a direct hit. They can at most sheer off antennas and mirrors and ruin lights and vision blocks. However, an open V-150 might have cause to worry. And the HE rounds can carve up the unarmored FAVs and their occupants. But the team, and the raiders, do not know that the V-150 is impervious to their mortar fire. The team may be scared off.

The Slavers have only 8 HE rounds in any case. The mortar is a tool of their trade, and their trade is not slaughter, they need to take their goods alive. They have 31 mortar rounds charged with a primitive tear gas, which is what they usually fire. The HE rounds are kept only for self-defense, for use in a dire emergency. They do not have many HE rounds, cannot get more soon, and so will hoard what they have.

As a result, if they fire on the bridge, they will mix gas rounds with the HEs, to make things seem hotter than they are. Run the Slaver's gas rounds as having the same burst and cloud size as a Project 40mm CS round, but only half of the 40mm round's potency or effect.

The team may not know they are being gassed until the effects start to be felt. The burst of gas rounds may not be recognized for what they are. How do you tell the difference in smoke, flames, whizzing shrapnel and other distractions?

The bridge is the only fast way across the wash for vehicles. There are many nearby places where a way down to the floor of the wash can be found, and a like number of ways up on the far side. But all of these would take time to find, and then a solid hour or so would be wasted in the crossing. It's not the wash floor, which is sandy and fairly smooth, it's the slopes that are the problem. It would be quicker and easier to go around





the wash, in either direction, then to cross it.

Yet one way or another, if the team is goint to reach TN-6, the wash is going to be important. Richards, if things look chancy, will have his vehicle and driver stash themselves in the wash as a reserve for a quick getaway. If serious fighting develops and if he can manage it, Richards will abandon his people and run for his go-buggy. He'll take a Morrow captive with him if he can.

If the team pursues the raiders via 375, they'll have their first view of TN-6 from the north end of the gap... across the wash. The building is only a little over 2 miles from the gap and can be seen clearly. Chances are that the larger vehicles of the raiders will also be in evidence. If the team arrives within 10 minutes or so of the raiders arrival, they'll be able to see the dust plume kicked up by the raiders' convoy, which had to leave the road and move cross country to reach the site.

Remember that the team's MPVs are much faster than the raider convoy. The question is whether or not the team will make use of that speed, and if they do, how.

Richards and his crew did not know TN-6 was here. When they came down 375 from the north, they were, sensibly, travelling at night. They didn't see the building. (Also, refer to the map. TN-6 cannot be seen from the road to the north.)

The Syen will be fascinated by TN-6, and will understand none of it. (Though they may think they do!) Given slow or non-existent pursuit, they will drop everything and loot the joint. They will take everything that is not nailed down. They will try to pry loose anything that is. The glass and meters of the monitors are particular prizes; they don't know what they are or what they do, but the ignorant Syen recognize them as "scientific instruments". Only a concerted assault will make the Syen pull out of TN-6 before they complete their looting.

If nothing is done to stop them, the highly destructive stripping of TN-6 will be complete by 1830 hours. The fake wall in the corridor probably won't be discovered. Sparks does not know about it, so he cannot reveal any information about it. If the way to the "secret" areas of TN-6 is discovered, the Syen will be very interested. They can read maps, and they'll see the tunnel, so they'll know that there is something off to the west. In this case they will head for TN-7.

More likely, team N-2 will attack the raiders at TN-6. It's not necessarily the brightest thing to do, but it's certainly the most probable.

There are several things to keep in mind about an attack on TN-6. The first is the aforementioned atmospheric and thermal modifiers peculiar to the desert. The next is the presence of all of those innocent people penned up by the raiders. If the team is close enough to see the Syen and the Slavers, they can hardly miss the load of humanity in bondage. Does the team plan to kill them too? If the slaves are to live through a fight, the team will have to be real careful with its weapons.

The team's weapons cannot easily penetrate the walls of TN-6. Two TOW hits against the same point on a wall will get through but will destroy anything in the room on the far side of the wall. A TOW round will penetrate the roof of the building, but there is no point both high enough and near enough to serve as a firing platform to allow such an overhead shot. 40mm fire will not get through the walls, but plunging fire will smash up the skylights - and anything beneath them. But does the team know about the skylights? If so, how?

The big problem with using either of these weapons against the building is the building itself. Does the team want it intact? Do they think it is the power station? Do they dare shoot it up?

Because of all of this, most teams wind up in a close assault on TN-6. This breaks down into several problems.

Getting close to TN-6 is the first. If Richards knows they're coming, he'll try to make it hard for them. Slavers, if they spot a FAV or a lone man or two, may try to snatch them! The slavers are good at figuring the odds for such things.

Once close enough to TN-6 for effective small arms fire, the

next problem is clearing the perimeter. This means shooting up the place or otherwise influencing events so that the raiders either all die, run away, or hide in TN-6. The slaves are inside the fence, still locked in their trailer cages. Fighting will necessarily go on all around them. But no matter what, the perimeter has got to be cleared of bad guys before TN-6 can be taken. There are several ways to do this, and the team must find one of them.

Making the assault itself is very intense. It's a good bet that some raiders are holed up in the building, armed and cornered. The team has to go in through the doors, unless they know about the skylights. The defenders do know about them and they may have found the way to the roof from the air room. Thus they may try to escape over the top of the building, or get to the roof to fire from it. There is no parapet or railing on the roof; it is flat. Men wandering around on it, or crawling near the edges, can be seen.

However the team decides to go in, things will be rough. Small arms fire up to and including 7.62mm will not penetrate the interior walls, but 9mm and up will go through the doors. Grenades can be very useful in here, but thermite and white phosphorous will not be easy on the station.

it is very unlikely that the defenders will have figured out how to get the lights working in here. Even if they do, small arms fire and grenades are very hard on light bulbs. This means that many rooms will be black inside. Rooms that have intact skylights will be lit with a diffuse, eerie blue light (which may make the more imaginative players think of radiation...). Light, and its lack, will be a key factor in the fighting.

Another thing to consider in here is dust, sand and debris. Because of the fact that everything is coated with 150 years of dust, a grenade thrown into any room will cause a dust storm, no matter what else it does. Lots of running around and small arms fire will produce the same results. Gas masks not only do not filter dust, they will clog up on it. (Which can be embarrassing if you've just touched off a CN-DM...)

Then there is all that glass in the skylights. Grenades and automatic fire will be hard on it. Imagine large pieces of glass crashing down from the ceiling! All that glass falling on you...

Any kind of fire will penetrate the false wall hiding the ladder to the level below. Even if the defenders had not seen it before, they might notice it now (or maybe not!). Desperate men will use what fortune offers. This could turn into a very messy fight in the tunnel and rooms below.

No matter how you cut it, it would be hard to think up a worse place to fight in. In the dark, in the dust, amid the glass and rubble, with the amplified reports of your firing ringing in your ears, with screaming, running and sweating, it's going to be hard to tell friend from foe. Very, very bad.

All things considered, it would be more sensible to clear the perimeter and watch the doors. The stack of the air intake on top of the air room is visible from the ground. A helathy man with a running start could run up the sloped sides of the building and reach the roof. (Indeed, a FAV could drive up the side, but Oh Lord, don't let there be a skylight nearby!!!)

Once on the top, some gas grenades (perhaps a random assortment?) could be fed into the air intake stack. Boisterous players might chuck a few things through the skylights too, though this is hardly necessary.

Surprisingly, the Slavers and Syen do not have gas masks! They don't know they exist! After a few minutes, team members (masked of course), could walk in and take the place cheap. But then, how many teams are sensible?

Possible Results

A firefight within TN-6 will hurt the station but should leave it still capable of its mission. The most important machinery and controls are either too massive or too out of the way to be hit or damaged. But it won't look it! The nonessentials on the upper level can be destroyed. This may depress the team, as they won't know how to tell the difference between crucial and expendable

systems. Only a member of the Ops team can do this with certainty. It may still take days to make TN-6 operable again.

It is likely that the team will discover the "hidden" areas of TN-6 after a fight, but not certain. If they do, the map showing TN-7 can hardly be ignored, and the tunnel to the west has its

own implications.

It is possible for a team to so saturate TN-6 with firepower that the place is destroyed, but they must be trying to do exactly that; it can't happen accidentally. It is also possible for the team to take the place and not discover the hidden areas. In either of these cases the team will have no clues as to the existence, let alone the whereabouts of TN-7. The team may believe that they have destroyed, or captured, the power station: TN-6. Only the manhole to the tunnel will remain to give a clue, and these must first be found.

Beyond TN-6

The fighting powers of the Syen are not great. The typical Syen is eager but incompetent. The Slavers are the opposite: proficient but more inclined to run. The Syen are fanatics. They will not surrender.

Syen will enter into negotiation only to ambush and kill the negotiators. Treacherous is too mild a word to describe them. Nor are they very skilled in combat or tactics; they've never had to be. Terror, treachery and fanaticism have always done the job.

They'd make good terrorists but terrible soldiers.

The Slavers are different. They'll negotiate but are not to be trusted; they'd like to capture the negotiators! In a patently hopeless position, they will surrender, but they may not stay surrendered. The Slavers are not fanatics. They are in business to make a profit and dying is not attractive to them.

They do understand tactics and combat. In a sharp perimeter fight, no Slaver with any choice will allow himself to be trapped in TN-61 They'll run away first. If a Slaver leader is present and there are still enough of their band left to be a force, they'll try to grab the Syen slaves and their water trailer and run! They have no interest in TN-6.

If Richards is able to, he will control his people personally in any fighting, however ineptly. But if things look like they are going badly, he will run, with or without the rest of his people.

If running is to be done, which way will they go? That depends on the team's position(s) and what the raiders think is going on. Ultimately, both groups want to head north. The Slavers want to do this very badly. Richards wants it too. Unless he knows about TN-7.

To head north the raiders want the road, but they'll use the wash to go around if they think the team is watching and waiting for them on the road. Will they go east or west through the wash? That depends on where the team is.

This becomes very important if the team made an aborted attempt on TN-6. The raiders will leave come sundown because of the desert conditions mentioned above. Which way will they

Should the raiders follow the wash west, they will come out of it and pass very near Eden. Slavers alone, believing themselves ahead of any pursuit, will not stop there. They'll stop there to fight only if they think they need to.

Running Syens will do the same unless they are in fairly good shape and know that "TN-7" is there or nearby. Richards, if he is running away alone or with very few followers, will avoid stopping, even if he knows about TN-7. Only if he thinks he must fight, or hide, will he enter Eden.

The Slaves

It is possible for the team to liberate some or all of the raider's slaves in the course of the game. This can lead to some problems.

If the slaves are released in the course of a fight most of them won't go anywhere because most of them can't. They have been cooped in their cages for too long, in the desert sun, with just enough food and water to keep them alive. Only the most recently

captured are in any condition to be active; about 15 of the 200 or so present. (This can be a cruel disappointment to a team that was counting on the slaves to "help out".) None of those left are good fighters. The good fighters were not caught. The mediocre fighters were killed. Only the poor fighters were captured. But there may be as many as 5 slaves fit and willing to participate in a fight. (They won't last long.)

Released in a fight or not, what will the team do with them? The lot of them qualify as a major medical emergency! They have nothing and cannot help themselves. They need water, food, medicine, shelter, and hopefully a way home. None of these things

are ready to hand, not in the quantitites needed.

The only good news is that they are in no condition to give the team any physical trouble.



Eden

Thus there are several possible sets of circumstances that could lead to a firefight in Eden. There is very little chance that raiders in Eden could find their way into TN-7. The most they could be expected to do is slowly fathorn that there is something queer about the place, and even that is not certain.

Anyone taking refuge in Eden would soon form the opinion that he had made a terrible mistake. Nothing about the place looks like it could even slow down, much less stop, bullets. Then

too, nothing feels as haunted as a ghost town by night!

A firefight in Eden would create quite a mess; pieces would still be falling days later! However, the walls enclosing TN-7 could be breached only accidentally by a "lucky" hit. The walls of the Ops team's bolt hole could be penetrated only by a TOW or Dragon (but talk about a disaster!!!).

Yet a firefight in Eden would be the surest way to reveal the hidden buildings it conceals. The fake facades might be stripped away rather quickly! Bear in mind though that in the confusion, smoke, dust, flash and dark (if the action takes place at night), people might only get brief glimpses or impressions of the dual character of the town. If a hot pursuit/running battle is in progress, this is doubly true.

Beyond Eden

It is entirely possible that the raiders heading north will be pursued by N-2, or elements thereof. Perhaps Morrow captives are still held, or believed to be, perhaps the team decides to follow for other equally good reasons. The raiders will head for "home" by the only route they know: the one they followed south. This now leads through very hostile terrain; lands that their slaves were taken from.

The locals are sure to be trigger-happy (or bowstring, knife, or rock-happy!). They may well be too nervous to draw a distinction between Morrow Project "good guys" and the returning raiders. "Shoot first and ask questions later" is bound to be the rule in most places. This is just one more complication to think about!

Handling TN-6 and TN-7

If you have read this section carefully you can see that there are many possible outcomes to the team's actions. Perhaps the most interesting ones are those that will mislead the team about the power station they were placed to guard. It is possible to go through the whole module and never see Eden, much less find TN-7.

It is also possible to believe TN-6 is the power station and thus it is possible to believe it destroyed through the team's own actions. (This was not the case in Mr. Benedetto's manuscript, blame Mr. Voss for this piece of perfidy!) We think most P.D.s will want the team to find TN-7, or at least have the chance. But the option has been provided to allow the P.D. to handle things in his own

Finding TN-7 can be the most fun in the game, for the P.D. (and maybe even for the players!). Team members can run around Eden for some time and not find TN-7, even when they've seen

the map in TN-6 which has Eden marked as TN-7.

TN-7 was designed to fool fairly close scrutiny. There are no overt pardoxes in any of its construction; no doors into brick walls and the like. The team can wander around it and leave it, convinced that it really is a ghost town. The longer they search, the more they may believe this! This is due to the feel of the place.

The builders of TN-7 are responsible for the atmosphere but they're not here so it is up to the P.D. to get this feel across. This can be done by playing up the "normal" qualities of the town. The heat beating down on the empty streets, perhaps the sighing of the desert wind through the town. The overwhelming quiet of the scene.

Physical aspects of boarded up windows and doors, broken glass, maybe an intact and unboarded window all add to this. Collapsed sections of porches and their covered roofs, signs faded away

by the sun give the town an "old look".

The P.D. should try to add some hints to give the place more feeling. The difference between the bright street and the dimness of some of the buildings, the dust kicked up by the team's passage hanging in the rays of light falling into a room, the moldy smells indoors, these are all faint reminders of things long gone.

You are not bound to limit yourself to the props provided. The addition of a broken wagonwheel, tumbleweeds and perhaps some more small animal life (snakes!) will all enhance the air of desolation. Use your imagination! Eden is as convincing as you make it!

There are some inconsistancies about the town which, if they are noticed, will interfere with the illusion. Eden may have been a boomtown, but there ought to be more to it. For instance: there are no houses. No church, no school, no sheriff's office. There are no stock pens or corrals. There are many other things missing, no one of which is essential. But the absence of all of them is suspicious. There are also some glaring holes. Eden has a funeral parlor, but there is no cemetary, no "boot hill" nor any sign of one! There is no well, nor any other source of water!

Eden cannot stand close inspection. If anyone becomes suspicious enough to pace off the outside of a block and compare his results with a pace count of the inside, it will be obvious that something is very wrong. Hacking or pulling at some walls and beams will reveal more anomalies. Since when do ghost towns have steel I-beams or aluminum slats covered with woodgrain vinyl? Or concrete interior walls? But these things must be found to reveal anything.

Once the team figures out that something is hidden in Eden they still have to find a way in. Remember too that they may find evidence of odd construction on one block of Eden and never find or even look for more! Getting in can only be accomplished in three ways:

Using the coin operated entrances provided.

Blasting through a wall.

3. Following the tunnel from TN-6, from its last cave-in or a nearer manhole.

Blasting is expensive, it will take half of a demo pack to make a shaped charge large enough to blow open a useable hole in one of the foot thick walls. Any of the anti-tank missiles in the game will also make a hole. Blasting will cause damage on the other side of the wall and that is its greatest drawback. Lots of sweaty work with a pick and shovel will also do the job, but few teams are so direct.

The tunnel from TN-6 ends in an airtight steel door not far from the machinery room below the water tank (about 50 feet). The door is provided with the usual card slot, which will open the door if an MPID is inserted. The door gives access to the last 50 feet of the tunnel, the machinery room and beyond that, the access tunnel, stairway and subterannean circuitry room below the Mission Group.

The coin operated entrances were intended for use with the money in the trade pack. (Frugal players will be relieved to learn that they get their money back on the other side.) Their operation has been described. What has not been mentioned is this: the first time any of these entrances are used, the door will open only after a two minute delay.

TN-7, and its bolt hole, are filled with the usual inert gas at slight overpressure. This must be vented before the doors will open. Gas evacuation equipment is present but takes time to do its job: hence the delay in the opening of the doors.

The gas will be vented area by area, beginning with the Operations Group. If the bolt hole door is opened, only the bolt hole will be vented. Opening TN-7 will not vent the bolt hole.

The first time any of the access doors are used, they will remain open for 5 minutes (to help vent the gas). Thereafter, these doors, and the exit doors, will always close automatically after one minute. Each door is equipped with an electric eye circuit which will prevent its closing if anything remains in the doorway. (It is possible, though not likely, that an entire team can go out and return to find the door closed. If they didn't bring any money with them, they are locked out!) The Ops team can change these arrangements given time, but for a while, a wise team member will always keep some change on him! Or block open the doors (not a good security practice.)

Note that blasting a hole in TN-7 will vent gas fairly rapidly but it will be unhealthy to remain in the area and breathe the

escaping gas.

The team may get into TN-7 before they find the Ops team (if they ever find the Ops team), but this will only be a partial victory. Nothing in TN-7 is working.

The powered doors and the gas evacuators are the only portions of TN-7 which are operable, because these and only these are fed by the mini-reactor in the bolt hole. The lights, controls, air handling equipment, don't work Nor will they work until the Ops team powers up the fusion reactor. Team N-2, even if they blunder around in the dark long enough to find the control center, cannot do the job because they do not know how. Clear and easy to follow directions have NOT been placed on the controls.

As is usual with Morrow Project technology, there is no way, (even by fumble-fingered idiocy) that the fusion bottle can be made to explode. There is no way it can be "rigged" to explode. It is not a bomb and can never be one.

The Ops team is the only outfit that can make TN-7 "go". There is no clue anywhere in TN-7 as to the location of the Ops team.

To get any practical use out of TN-7, the team must have the Ops team. The Ops team, if they are not accidentally killed by N-2 before they are found, can operate TN-7.

The Ops team numbers 12 personnel. The youngest member is 35 years old, the oldest, Commander Martin, is 57. All are Science Team members.

When they are raised they may show some surprise: there's nothing like waking up to see sweaty, smoke-smellin', gun-totin', maniacs grinning at you? But things should settle down quickly.

In the absence of Chenault, Mr. Martin will assume control. The first thing he'll want is a status report from the team. Everything else will wait for that. Martin is a gruff old Navy NCO with 20 years aboard nuke subs. When he retired, he used his GI bill to complete a Ph.D. in physics. He is an engineer, a physicist, a dockside brawler and the respected leader of the Ops team. His people do what he says. If the members of N-2 look like they need it, he'll break some whiskey out of a trade pack and order it passed around. All of this will occur in his bolt hole. This man is no sunken chested, universtiy sheltered, high-strung prima donna!

If the report seems to show that security is under control, Martin will grunt, dig a gold dollar out of a pack, gather his team and casually head out the door, heading for the general store. If he notices the team, he'll curtly tell them to come along.

His first order of business is to power up TN-7. He and his team will spend a day doing nothing but performing equipment checks. The second day will be spent in bringing the reactor fully on line. The third day is for power checks. And so on.

Eventually he'll look over the mine. Seeing that it is blocked and likely to remain so for a while, Martin will order the team to ferry a couple of his people over to TN-6, to get the pumps working. And so on.

What will the team be doing? Well, Martin will leave security to them, and if a pursuit is still necessary, send them on it. If they get bored he'll put them to work clearing the mine entrance, or clearing the tunnel to TN-6, or beginning to strip off the remains of the bogus Eden with a view to new construction, etc. There are lots of things he can find for them to do! The truth is that the team was always intended to wind up as a part of the labor pool of TN-7, if only for a while, and they know it.

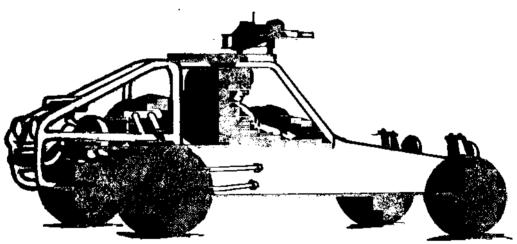
If anyone suggests that one of the other teams be raised to help out, Martin will reply: "And what the hell are they going to drink?" and refuse. Martin will not raise either of the other two teams until he actually needs them.

But a day will come about a month after the Ops team has been raised when he will call the team to him. He will then say:

"We have problems. It is obvious that much more time has passed than was supposed to. What happened? Did all of the Project come out, try valiantly and fail? What happened to us? Has what happened to us happened to everybody else? We don't know what's going on.

"We need to know more. I, for one, am not going to sit here and rot waiting for orders! Not forever. I've been trying to get commo on the radio, but no luck. (Sparks will have been doing this, if he made it.) We can't get a line on our satellite. We can't get anything from Prime Base.

"But we still need to find out what's what. So, I want you to load up for a trip. I'm sending you to Prime Base."



DESIGNER'S NOTES

Yep, well, that's the big one: Martin knows where Prime Base

This constitues fair warning: the next Morrow Project module is Prime Base. It will not be quite like our other modules to date. It is going to be more in the character of an exhaustive description of the place. But it is a big place and will keep any team busy. And there is always the chore of operating it!

There will be more Morrow modules after Prime Basel Things are only beginning. Things are going to get really interesting. And, of course, difficult.

Also coming is the Atlantis Project: the companion of the Morrow Project, the sister organization whose function is to begin rebuilding the rest of the world. There will be modules for it, too.

But none of that much helps poor N-2! They don't know what's going to happen. There are Syen and Slavers out there somewhere. There is the disturbing evidence of a primitive arms industry somewhere. Primitive? With auto shotguns, mortars and tear gas? And there is all that desert to watch, police, and to cross on the way to Prime Base.

Well, we'll get Prime Base out to you soon. As for team N-2 and TN-7: Good Luck!

FAV: Fast Attack Vehicle

Crew: 3.8 meters Length: Width: 1.3 meters Height (To top of roll cage): 1.1 meters 0.2 meters Ground Clearance: Turning Radius: 6 meters 100 kph. Max. Road Speed: Water Speed: NONE 60% Gradient: Vertical Obstacle: 0.3 meters NONE Trench:

Armor Class: Unarmored
Armament: 1 TOW Laund

1 TOW Launcher OR 1 Mark 19

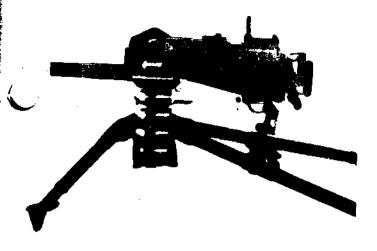
Mod 3/M174E3

Ammunition: 3 TOW missiles OR 200 40mm

Grenades

Additional Comments:

(For additional comments, see the section on FAVs in the team equipment section.)



M174E3 Grenade Launcher

The specifications for this weapon given in the MPGB are not wholly accurate and are amended as follows:

Name:

M174E3 Grenade Launcher

Cal. Wt. (Empty) 40mm 77 lbs (34.958 kg.)

Eff. Range

1500m. (point type target)

2000m. (area type target)

Max. Range

2500 m. (Average)

Type of Fire Rate of Fire

Selective 350 rpm

Feed Device

20 or 50 round belt

Feed Device Wt.

N/A

Basic Load

See FAV Above

Load Wt. Total Wt. 95.4kg. 125.3kg.

Additional Comments

This weapon, known in the U.S. Army as the Mark 19, Mod. 3, is belt fed, but the grenades must be loaded into the belts: they do not come that way. This takes time but it allows for a mix of any 40mm ammo in any desired combination. This weapon can fire the M576E2 round and cannot be hand fired, but is otherwise similar to the M174E3 Launcher in the book.



FAV Crewman's Helmet

Name: Type: FAV Crewman's Helmet Protective, Armored

Wt.: Unit of Issue: 1.8kg. 2 per FAV

Comments

This is a heavy, wraparound helmet, similar to old U.S. "tanker" helmets; it looks like a motorcycle helmet painted flat green. It is provided for FAV crewmen to protect their heads during the rough rides their vehicle is prone to give them.

The helmet has an integral, flipdown, polarized vizor/gogles. An AN/PRC-68 Personal Communicator is also integral to the design, modified to fit the helmet. The helmet is made of a kevlar landariante and it proof against ammo up to and including E-factor

The helmet is heavy and, due to its "over the ears design", tends to interfere with normal hearing.



12 Ga.

Slaver Shotgun

Name: Slaver Shotgun

Cal.: E-Factor:

E-Factor: 8
Wt. (Empty): 4.1kg.
Eff. Range: 10m.
Max. Range: 150m.

Type of Fire:
Rate of Fire:

Feed Device:

60 rpm 10 round magazine

Full Auto

Feed Device Wt.:

Additional Comments

Details on the operation and use of this weapon were presented in the body of the module. While the weapon has been modified for full auto fire, the Slavers can squeeze off single shots. People unfamiliar with the weapon cannot.

.7kg,



M16A2

Name: M16A2
Cal.: 5.56x45mm

E-Factor: 15
Wt. (Empty): 3.58kg.
Eff. Range: 500m.
Max. Range: 2,653m.
Type of Fire: Selective Fire
Rate of Fire: 45/135 rpm
Feed Device: 30 rd. magazine

Feed Device Wt.: .455kg.

Basic Load: 12 Mag. (360 rds.)

Load Wt.: 5.46kg. Total Wt.: 9.04kg.

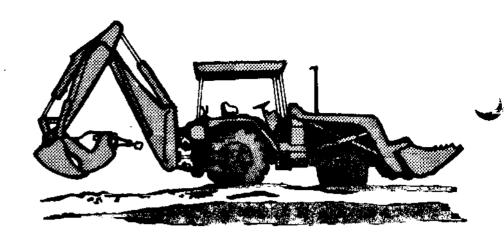
Additional Comments:

The M16A2 is the latest incarnation of the M16 rifle. It embodies several improvements over the M16A1, but the only ones that need be mentioned here are those which influence game use.

The effective range is increased from 400 meters to 500 meters. This reflects improvements in the sights, ammo, and general handling characteristics of this weapon.

The maximum rate of fire is lower. This is because the weapon is no longer capable of full auto fire. The auto fire option has been replaced by a 3 round burst mechanism. When the trigger is squeezed, only 3 rounds are fired.

Editorial Comment. The M16A2 is a better weapon than the M16A1 or M16. But it remains a mediocre rifle because of poor basic design.



Saver Mortar

Slaver Mortan Vame: 3 inch Cal.: Wt.: 50kg. 1,200m. Range: Single Shot Type of Fire: Rate of Fire: 4rpm

Additional Comments

This is a fairly crude mortar of recent manufacture. It is mounted in the back of a pick-up truck and cannot easily be removed from it. It has no sights and is aimed "by the seat of the pants" and the fall of shot. Thus it relies on skilled operators for any

Its fairly short range is the result of the low power propellant used in its rounds. HE rounds have a burst radius of only 10 meters and an E-factor of 4 per fragment. The round is contact fused and has minimal penetrative capabilities: it is strictly an antipersonnel round.

Parts and rounds for this weapon and the Project's M29A181mm. nortar are mutually incompatible.

Syen Cannon

Syen Cannon Vame: 5 inch Cal.: Variable E-Factor: Variable iff. Range: 151kg. .Vt.: Single Shot Type of Fire: Rate of Fire: 2rpm

Additional Comments

This is a smoothbore, muzzle loading, blackpowder cannon, nounted on the back of a truck. It is similar to the Slaver mortar in all of its operational characteristics.

The cannon is charged with black powder and then loaded with either a solid shot lead ball or with a pre-bagged shrapnel mix. The lead balls are accurate to a maximum of 500 meters with an E-factor of 45. The bag shot is effective to 50 meters with an E-factor of 4. Neither sort of ammo will penetrate a V-150.

DED

DFD Name: Crew: 6804kg. Weight: Length: 7.2m Width: 2.1m Height: 2.9m Ground Clearance: 0.33m**Turning Radius:** 21m Max. Road Speed: 27kph Water Speed: NONE Gradient: 60% Verticle Obstacle: 0.3mNONE Trench Armor Class: Unarmored Armament: NONE

Additional Comments

This is a monsterous tractor equipped with a scoop bucket on the front and an articulated backhoe arm on the rear. The machine is designed to fulfill all of the following roles: earthmoving, post driving, backfilling, loading trucks and trailers, constructing drainage systems and fortifications, stockpiling, excavation for pipelines, and building footings.

It's a big machine but it's very useful.

Solar Still

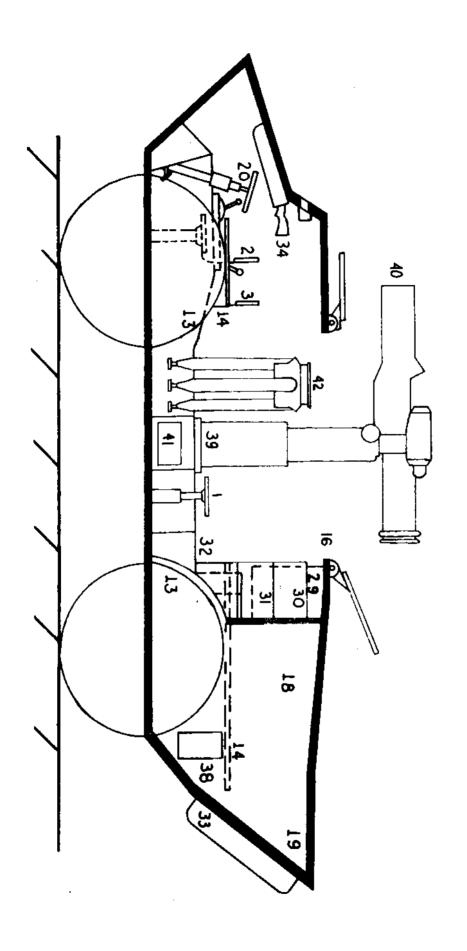
Solar Still Name:

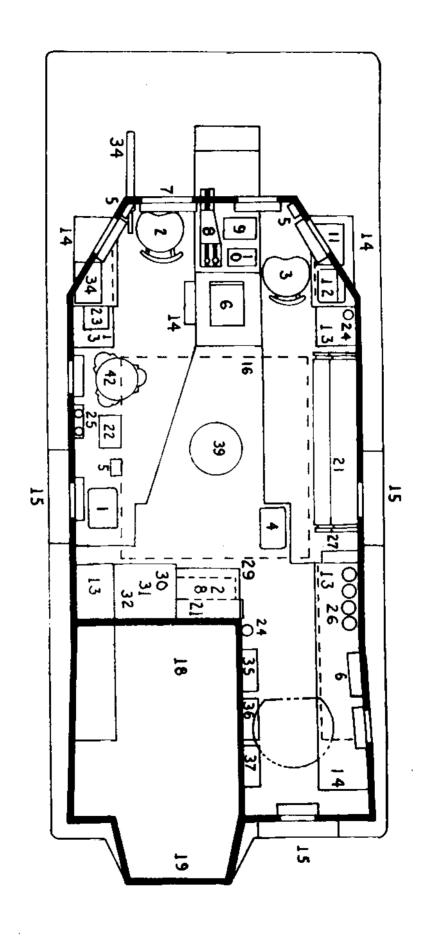
Water Condensing Unit Type:

Wt: Negligible

Additional Comments

This unit is a simple "solar still" for condensing water out of the air. The user digs a hole, places the clear plastic sheet over the hole, weights it, and waits for water to condense on the underside of the plastic. The unit consists of 1.8 meters of plastic tubing (comes out from under the plastic sheet, allows the user to drink water from cup without disassembling the still); a 1 meter square sheet of heavy plastic, and a metal cup to collect water in. (Instructions on use included).





INTERIOR KEY: COMMANDO V-150 w/TOW MISSILE LAUNCHER

```
NO. QTY. DESCRIPTION
          GUNNERS SEAT
          DRIVERS SEAT
 2
          RADIO OPERATORS SEAT
          LOADERS SEAT
 5
          INTERCOM
      2
          AN/PRC-70 RADIUS
     10
 7
          WINDOW/VISION BLOCK
 8
          DRIVERS CONTROLS
9
          AUTO NAV NAVIGATION SYSEM
          "RDF" RADIO DIRECTION FINDER (VEHICLE MOUNTED)
10
          COMPUTER
11
1.2
          CRT & KEYBOARD FOR ITEM 11
13
          WHEEL WELLS
          MOUNTING PLATES (MOUNT ON WHEEL WELLS)
14
15
          DOORS
          CENTRAL OPENING
16
      1
17
          HULL RAISED IN THIS AREA TO CLEAR DRIVE TRAIN
      1
          ENGINE COMPARTMENT (CONTAINS DRIVE TRAIN AND FUSION REACTOR)
18
      1
19
          VENTILATION FOR ENGINE COMPARTMENT
      1
20
          STEERING WHEEL
          TOW MISSILES (BLOCKS RIGHT HAND DOOR)
21
          LASER RANGE FINDER (MOUNTED UNDER ROOF)
22
          AN/TVS-5 BINOCULARS
23
      3
          FIRE EXTINGUISHERS
24
          1 CASE EACH: 12 GUAGE MAGNUM DO BUCKSHOT, 5.56mm BALL,
25
          7.62mm BALL, 9mm BALL
26
          ARMBRUST 300
      1
          LARGE MEDKIT
27
          TOOL KIT
28
          EXPLOSIVES LOCKER
29
30
          CASE, M7A3 CS GAS GRENADES
          CASE, M34 WHITE PHOSPHOROUS GRENADES
31
32
          CASE, M26A1 FRAGMENTATION GRENADES
33
          1 EACH: AX, SLEDGE HAMMER, MACHETTE, SHOVEL, TRIPOD
      1
          M21 RIFLE, 12 MAGAZINES
34
      ì
35
          MOUNTAIN KIT
          TRADE PACK
36
          RATION PACKS
37
38
          CASE, MIBAL CLAYMORE MINES
39
      1
          TOW PEDESTAL BASE
40
      1
          TOW LAUNCHER
      1
41
          TOW EXTERNAL POWER SOURCE
          TOW TRIPOD (FOR EXTERNAL USE OF LAUNCHER)
42
```

BASIC LOAD (VEHICULAR) STANDARD ISSUE)

1 M21 Rifle, 20rd mag, Semi-Auto, E=17, 12 mags.

1 pr. AN/TVS-5 Binoculars	1 Machete
1 Laser Rangefinder	20m Tow chain (breaking
1 AutoNav navigation system	strength 5.25 metric tons)
1 AN/PRC-70	3 Fire extinguishers
1 Radio Direction Finder	Tool kit
1 Large MedKit	1 Shovel
1 Ax	1 Tripod (M122 or .50 Cal.)
1 Sledgehammer	2 Ration packs
1 Mountain Kit containing;	
2-33m coils 11mm nylon rope (br	(breaking strength 1,700kg)
1 Folding grappling hook	1 225 gram Hammer
20 Pitons * * * * * * * * * *	
30 Snaplinks * * * * * * * * *	*****
* * * * * * * * * * * * * * * * * * * *	
6 M688 40mm Rocket shells (to 1	40mm Rocket shells (to launch grappling hook from M79)
* * *	
1 set Climbing spikes (for ice)	
1 Trade pack containing;	
50 Gold Double Eagles	
香油香食物 经水平 医水子 计自然 医多种性 医多种性 医多种性 医多种性 医多种性 医多种性 医多种性 医多种性	************
50 Silver Dollars	
法教师的证券的证券的证券的证券的证券的证券的证券的证券的证券的证券的证券的证券的证券的	法律保持的法律法律的法律法律
6 one-liter bottles of Whiskey	* * * * *
6 Sewing kits * * * * *	4 Mirrors * * * *
6 Comb and brush sets * * * *	* 6 Hunting knives * * * * *
6 250g packs Tobacco * * * * *	* 6 packs Candy * * * * *
Various toilet articles	6 Fishing kits * * * * *

在各种中的企业的企业的企业的企业的企业的企业的企业的企业的企业的企业的企业的企业的企业的
如果你!! 你有如果你是我们的女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女女
我们的现在分词 "我们的一个,我们们的一个一个,我们们的一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一个一
在某些战场一带他的专项会员的现在分词 医克拉特氏征 医克拉特氏征 "我就是我我的女子的女子,我也是我说话的一位你们也是你们的人,我们们就是我们的人,我们们们的人们的人,我们们们们的人们的人们的人们们们
1 1 1 特种合物性质的
ARMBRUST 300, Single-shot, E*441, Dpw=533 (4)
l case M34 White Phosphorus Grenades (16)
**** * * * * * * * * * * * * * * * * * *
1 case M26Al Fragmentation Grenades (30)

1 case M7A3 CS Gas Grenades (16)
1 M183 Demolition charge (16 M112 C4 blocks)
1 roll Primercord (152m)
10 M2A1 Detonators (8 second delay)
2 M1 Timers
-
2 M18A1 Claymore mines
1 case 9x19mm Ball (2880 rds)
1 case 7.62x51mm Ball (920 rds)
1 case 5.56x45mm Ball (1640 rds)
1 case 12 gauge magnum OO buckshot (500 rds)

BASIC LOAD (VEHICULAR) STANDARD ISSUE: FAST ATTACK VEHICLE

- 1 pr. AN/TVS-5 Binoculars
- 1 Laser Range Finder
- 1 AutoNav Navigation System
- 1 AN/PRC-70 Radio
- 1 Shovel
- 1 Axe/Pick
- 1 Ration Pack
- 1 Tool Kit
- 1 Spare Tire

40mm. Ammunition

- 1 case M381 HE 72 rds.
- 1 case M433 HEDP 72 rds.
- 1 case M651 CS Gas 24 rds.
- 1 case mixed, containing:

M576E2 MP 30 rds.

M583 10 rds.

M585 5 rds.

M663 5 rds.

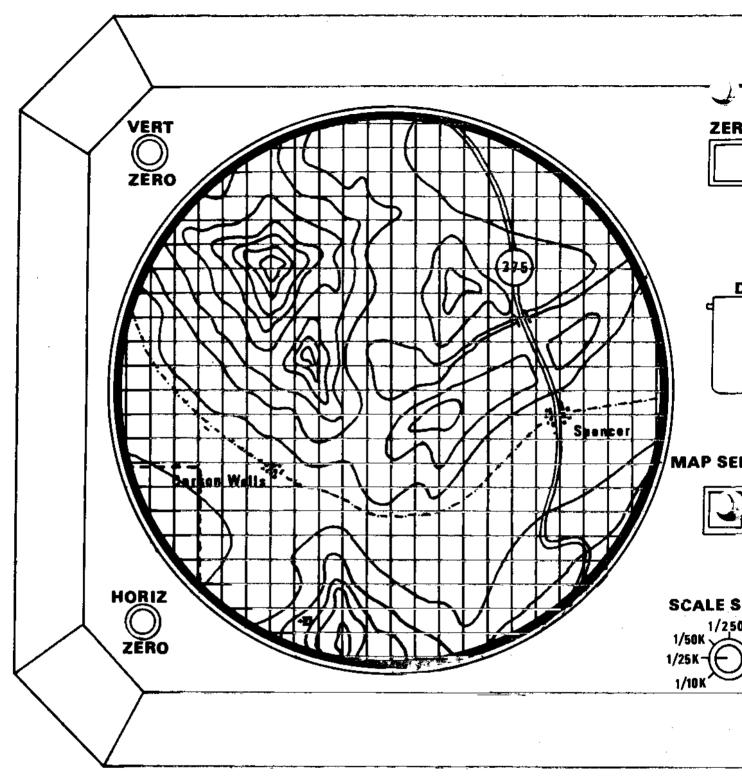
M664 5 rds.

Coming in late 1985: Morrow Project metal miniatures from:

CRIMSON DRAGON...
MINIATURES



TAG INDUSTRIES 316 MAIN ST. CASTALIA,OHIO 44824



VERT ZERO; Allows adjustment of the displayed map to the unit in the vertical plan.

HORIZ ZERO; Allows adjustment of the displayed map to the unit in the horizontal plane.

ZERO; Allows the use of the Vert and Horiz adjustment dials.

DESTRUCT ARM; (covered toggle switch) Arms the destruct system causing a beeping sound once per second until fired or disarmed.

DESTRUCT; (covered push button) With the seal wire broken, cover lifted, and button depressed the system fires an internal thermite charge in five seconds. The charge destroys the interior of the AutoNav.

MAP SELECT; Initiates system allowing the use of the keyboard to select a specific map.

SCALE SELECT; Determines scale of map displayed.

KEYBOARD; Used to input information into system.

SENSOR SYSTEM SELECT

RDF; Allows radio direction finder (if a screen.

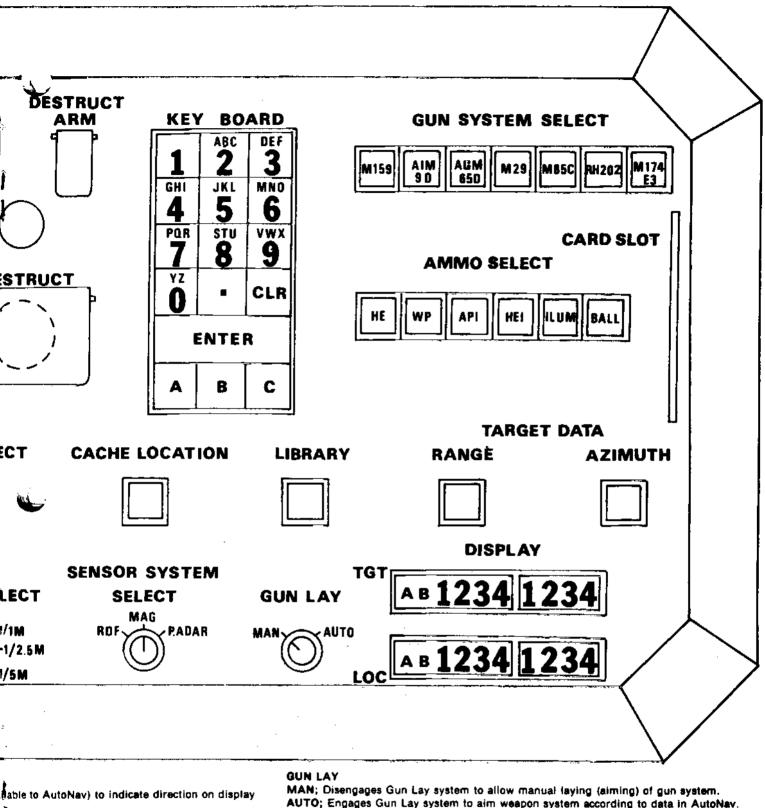
MAG; Allows magnetic sensor (if avaitargets on display screen.

RADAR; Allows radar set (if available screen.



CACHE LOCATION; Shows all assigned

LIBRARY; Reads out all available map



AUTO; Engages Gun Lay system to aim weapon system according to data in AutoNav.

GUN SYSTEM SELECT; Allows AutoNav to aim indicated weapon system, if vehicle is so equipped, using Gun Lay system.

AMMO SELECT; Indicates ammunition fired in selected Gun System.

TARGET DATA

RANGE; Allows input of data for Gun Lay system. AZIMUTH; Allows input of data for Gun Lay system.

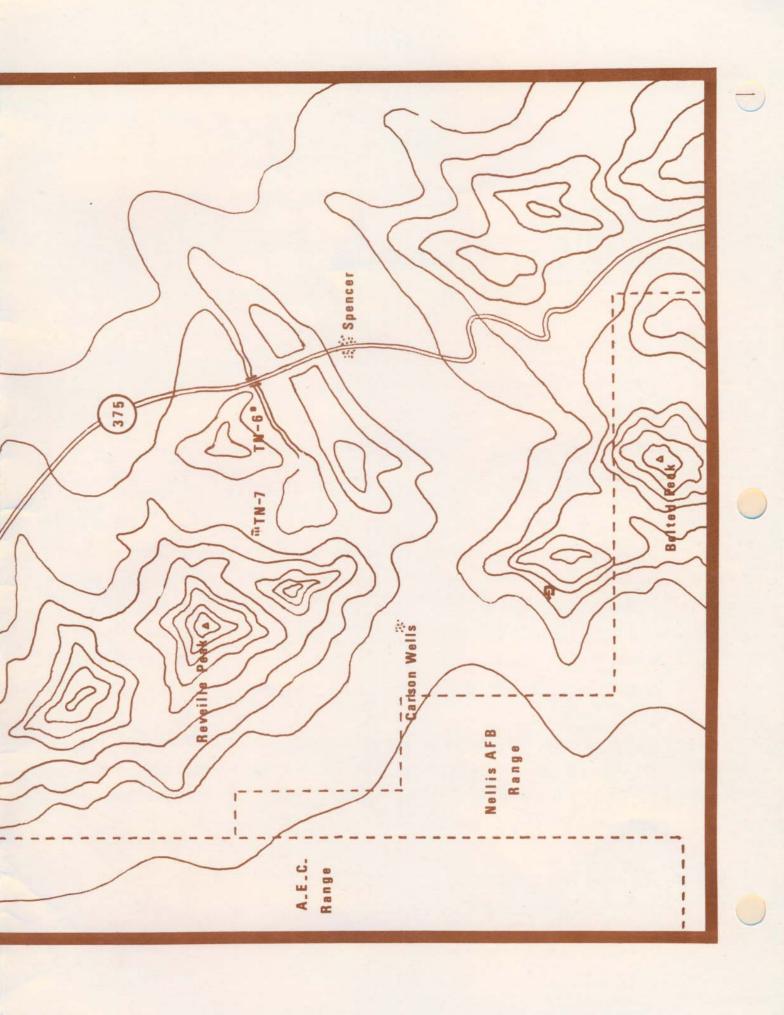
DISPLAY; Indicates data, either Target or Location, shown on display screen or keyed into system from keyboard.

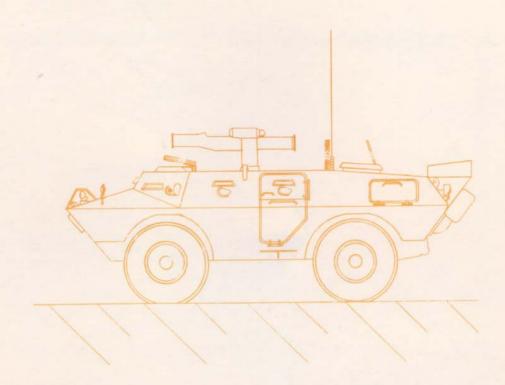
CARD SLOT; Allows insertion of Morrow I.D. card to activate AutoNav displays, AutoNav will function (track its movement) without card but will not display any information or allow any other functions.

ofe to AutoNav) to indicate location of detected AutoNav) to indicate detected targets on display

caches when depressed.

on display screen.





Somewhere in the wind swept Nevada desert is the Morrow Project power station. Recon Team N-2 must find it and find it fast before it is captured by a mysterious group known only as the Syen. To do this they must search some of the most inhospitable land in North America, sift through the rubble of the 20th century and fight on when all hope is gone. At stake is not only the first Morrow Project power station, but the lives of their comrades still asleep and defenseless before the coming onslaught.

This game package contains all of the information, maps and systems necessary for the Project Director to run this scenario. It includes information concerning new weapons, the V-150 TOW vehicle, details on the TOW weapons system, the power station, the all new Morrow Project Fast Attack Vehicle (FAV) and more.

POSSESSION OF THE MORROW PROJECT GAME BOOK IS NECESSARY TO THE USE OF THIS GAME PACKAGE.