Future-History Simulation Game

the time is: May 2002

AFTER THE HOLOCAUST

The Nuclear Devastation of America: Recovery and Reunification

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[1.0] THE SITUATION

Mutual counterforce strikes deteriorated into city-busting during the last hours of the Four Day War. The resulting destruction of population centers, communications, essential energy and industrial complexes indeed the national economic superstructure led to a collapse of government. While immediate megadeaths were 120 as a result of the war, the five years following the war saw the American population shrink to (approximately) 40 million, a level which primitive subsistence agriculture could feed. From this base, the recovery began-centered regionally on the few social organizations which had maintained cohesion. In the northeast this was primarily the Bell Telephone Company, an outfit enured to disaster in peacetime. In the Southwest a combination of National Guard, state police and veteran's associations were the seed. In California only one institution had a fort in every locality with managers who were trained to be local leaders: the Bank of America. While in the Midwest the Church of the Chosen Few (a radical splinter of the Missouri Synod) did the good work. For fifteen years the recovery slowly coalesced around the four regional groupings described above. While the population of each region had a memory of a United States they were confident that their memory was a more valid memory (of what used to be and should be again) than any other region's memory. Unwilling to surrender their individual sovereignties to a commonwealth, the successor "states" struggle for hegemony in America.

It is now twenty years after the holocaust. Each Player is cast in the role of the government of the four recovering regions. His task is to further the course of recovery in his region, extend this recovery to areas living in barbarism and finally restore the United States as one entity.

[2.0] GENERAL COURSE OF PLAY

Holocaust is primarily an economic management game. More so than most conflict simulation games the progress of the game revolves around off-map activities and transactions which are tracked via various displays. Basically the Players use the map to show who owns what (via control markers) and thus who has access to various areas and the right to exploit the mines and wells and plants, etc. It is possible (and more than probable) that Players may create military units which are placed on the map there to move and fight hex by hex with opposing military units during a part of each Game-Turn. However most of the time the map is used only as reference for geographical relationships, e.g., to establish that Player A has a common frontier with Player B and therefore they may trade with one another and if they do so what the conditions of that trade is in respect to distance and route. Most of a Player's attention and activity centers around the charts of his economy. Using these charts (called "Sectors") and the various tables associated with them, he will simulate production and consumption within his region (i.e., country). This requires him to make decisions each Game-Turn regarding the disposition of labor and capital within his economy. His goal is to see that the maximum amount of his population (i.e., labor points) are employed each Game-Turn, in one economic sector or the other and that as time goes by he provides this employed labor with an increasing amount of consumer goods to consume. The actions and routines he executes with regard to his economy are to a large extent solitary play and are, in physical terms, mostly record keeping. For instance each economic sector has a track (or "pool") on which he records (by shifting markers) how many labor points he has

devoted to that sector. If he decides (or some event in the game decides for him) to transfer labor from that sector he does so by reducing the pool total (shifting the markers down) and simultaneously increasing the labor pool total of some other sector (or heaven forbid, the unemployed pool). The production and consumption of economic goods (points representing food, fuel, etc.) are likewise tracked via the pool system. Money, i.e., gamescrip, is given to each Player to start. He may spend this money within his own economy to stimulate growth or purchase certain products or he may use it in trade with another Player. Each turn he may raise money by taxing his economy (every food, fuel industrial point, etc., that his economy produces in a turn roughly equated to \$1 in value per point the sum total of which is his tax base that turn), with the weight of taxation (what percent of his tax base he took for taxes) affecting his output the following turn. In other words, if he taxes heavily to derive a lot of cash he will tend to depress his economy on the following turn. Light taxation stimulates the economy.

While much of his play is solitaire in the sense of the self-management of his economy, a Player will at some point in the game interact with the other Players. There is a point in every Game-Turn where the Players trade (exchange products and money, etc.). No one is compelled to trade but the geographical distribution of mines and wells and plants, etc., is such that normally one Player has a surplus of some commodity and a deficiency of another that a second Player has and vice versa. Thus Players will seek to trade for mutual benefit. The other form of interaction which can be practiced each turn is war. A Player may raise and use military units to conquer (or defend) territory or he may spend cash to subvert and acquire areas touching his region's borders. Nothing in the rules requires war. In fact if the Players can refrain from military adventures, with all the inherent waste and cost, they will as a group be more prosperous. But human nature being what it is a Player who is losing the game peacefully will often attempt to conquer what he can't produce or buy. He would rather be a poor winner than a rich loser.

[3.0] GAME EQUIPMENT AND TERMINOLOGY

[3.1] GAME EQUIPMENT INVENTORY

The Players should spread out all the components to the game on a clean, dry surface and familiarize themselves with them but not yet punch out any of the playing pieces or game money. Each After the Holocaust game should contain:

One game map (in two 17"x22" jointed sections)

One set of counters (400 pieces)

One rules booklet

Four identical chart sheets

Eight sheets of perforated game money

(yielding a total of 144 pieces)

Two dice

One plastic compartment tray

One game box

Should any of the parts of the game be missing or damaged contact SPI Customer Service within fifteen days of purchase:

Simulations Publications, Inc.

44 East 23rd Street

New York, N.Y. 10010

After careful reading, should the Players have difficulty with the rules of play, they should phrase their questions so that they may be answered with a single word or phrase and send with a stamped, self-addressed envelope to the above address. Only questions concerning play mechanics will be answered (by filling out the blanks one leaves on his query letter). Staff and time limitations prevent us from responding to theoretical and design questions.

[3.2] THE GAME MAP

The geographical portion of the map is a simplified economic representation of the United States and part of Canada. A hexagonal grid has been superimposed upon the map in order to simplify the location and movement of the playing pieces. Each hexagon (abbreviated "hex" throughout the rules) is a scale 190 kilometers from side to side. See the terrain key on the map in order to identify its features. The four digit numbers in each of the hexes are a code useful when describing positions or recording moves for play-by-mail. For play, place the two halves of the map on a flat table and butt the edges together to form the familiar shape of the USA. Make sure the hexes meet properly by noting the code numbers in the west-east rows. The four Players should seat themselves around the map in front of the appropriate registers printed around the geographic area of the map. These registers (or "tracks") will be explained in Case 3.4 and in the other rules sections that deal with their use.

[3.3] GAME CHARTS AND TABLES AND GAME MONEY

The game makes use of a fairly large number of charts and tables. Many of these simulate the chance elements inherent in the economic and political decisions the Players may make. The "luck factor" in the game, however, is only that present in the real-world situation portrayed. Other charts list the various economic costs and consequences of given actions and routines. Each Player has been provided with a separate sheet that carries most of the charts and tables he will need to play the game. The two plastic dice are used in conjunction with many of the tables (either one or both of the dice). They are not used for movement of pieces. The "money" used in the game is carried on the perforated sheets. To neatly tear out the money, fold the sheets back and forth along the perforations and then hold down one edge with a ruler or the edge of the box. Separate the money and Corruption Chits into neat stacks, by denomination.

[3.4] THE PLAYING PIECES

The four hundred die-cut cardboard playing pieces either represent military units that are actually placed and moved on the geographic portion of the map; plants and control markers that are also deployed on the map; or register markers that are used on the tracks printed on the outer portion of the playing surface. Note that many of the counters are printed on both sides. After reading the following description of the pieces, Players should carefully punch them out of the frame and sort them into the compartmented tray for organized storage and access. When storing, the box should be horizontally on the shelf.

[3.41] Playing Pieces Used Directly On The Geographic Area Of The Map

MILITARY UNITS: Typical Unit:

Combat Strength Movement Allowance





Some Players' Regions may grow beyond the number of Political Control Center markers available to identify them; when this happens, the Player should simply take some of the markers from his inner Areas and use them to identify the expanding outer Areas.

[3.42] Markers Used On The Registers On The Playing Surface and How The **Registers** Are Used

The registers on the playing surface are a recordskeeping system which allows various markers to be used as abacus-like inicators to record the various economic activities and commodities. In testing, some Players preferred to record all their data on paper, some preferred the registers, and others used a mixed system of records-keeping. Almost all activity can be recorded exclusively through the use of the register/marker system although some actions or intentions will need to be written down. Each Player is provided with a full set of registers and of indicator markers, both of which are coded with his regional abbreviation. In the samples shown, the SW (Southwest) Player's indicator markers are displayed. Each Player has six major registers-one for his Region and one for each of his five economic sectors. Each major register is further subdivided into separate tracks each of which is used to record one or more features of that sector. As the various quantities change, the indicators are moved up or down on their tracks to reflect the changes. IMPORTANT NOTE: Some quantities are expressed by using two or three markers on the same track-"x1" and "x10" and "x100." For example, if an "x1" marker was set at "8" and the companion "x10" marker set at "3", this would indicate the number "38". Other markers have "x1" on their front and "+10" on their back. In such cases the "x1" side is used as previously described; the " \pm 10" side is used to record the number "13". As the Player reads the following descriptions, he should have the map in front of him and follow along (left to right) as the tracks and indicators for the SW Player's registers are described:

Good Area Indicators sw Sector State

box on the track; the Good Area indicators (for the SW) start with the "x1" in the "7" position; the "x10" in the "0" position. The Poor Area indicator



SW Total Starving Labor Points Starve x1

Both these indicators start the game in the "0" position. Note that each has a "+10" side to record levels of 10 or more.

Farm Sector Register:

Sector State Track:



Indicator starts in the number one position.

Farm Labor and Mech Track:



The Labor Indicators are set at start at the Player's discretion; the Farm Mech indicators start with the "x1" indicator in a position equivalent to the number of Good Areas the Player has.

Farm Output & Stock Track:

SW	SW	SW
Outpt	Outpt	Outpt
x100	x10	x1

Output (i.e., Food Points) Indicators

SW Stock x100	<i>SW</i> Stock x10	<i>SW</i> Stock x1

Stockpile Indicators

The Player sets the Stock indicators to reflect the Food Points that he has available in Stockpile to start (see 5.1). The Output will be set according to the results of the food production routine. During the Consumption Round, the Player feeds his Farm Output to his population from his Output (and from his Stockpile if necessary) reducing the indicator positions accordingly. Whatever a Player has left showing on the Output indicators after feeding his population are considered to be surplus (undisposed) Food Points.

Metal Sector/Fuel Sector Register:





Both the Metal and the Fuel Registers are identical in character. The Sector State indicator starts at position one; the Site indicator starts with its "x1" face showing and positioned to reflect the number of Metal (or Fuel) Sites in the Player's Region (see 5.1). Note that if the Player acquires a total of 10 or more Sites, he turns this indicator over to show the "+10" side.

Metal (or Fuel) Labor & Mech Track:



At the start of the game the Player determines how much of his available Labor and allocatable Mech Points he will place into the Metal (and Fuel) Sector and adjusts the indicators accordingly.

Metal (or Fuel) Output and Stockpile Track:



The Player starts the game with a certain number of Metal (and Fuel) Points in his stockpile. His per-Turn output depends on a combination of Sites, Labor, and Mech.

Industrial Sector Register:

Sector State and Plants Track:



The Player begins the game with his Industrial Sector State indicator in the one position. He places the two Plant Site Indicators to show the number of Plants in his Region (see 5.1).

Industrial Labor and Mech Track:



The Player starts the game with whatever Labor and allocatable Mech Points he assigns to this sector.

Industrial Capacity and Utilization Track:



A Player begins the game with his capacity indicators set at whatever level results from his labor and mech allocation to his available plant. The Utilization Indicators begin each Game-Turn set at zero. As the Player uses his industrial capacity, the Utilization indicators are moved upwards (but cannot be set to indicate a number that exceeds the Capacity indicators). If at the end of the Game-Turn, the Utilization indicators are lower than the Capacity indicators, the Player will suffer a reduction in Industrial Capacity. See 9.2.



Consumer Points Available Indicators

As Consumer Points are produced, they are recorded on this track. When the Player distributes or sells Consumer Points, the indicators are accordingly reduced.

Transport and Trade Sector Register

SW Sector State

Sector State Indicator



Labor Indicator

The Player begins the game with the Transport Sector State in the one position. The Labor indicator is set to show at least one Labor Point per every five Transport Points operating in the Domestic and Reserve Transport Pool (combined).

Domestic Transport Track:

SW	SW
Dmstc	Dmstc
x10	x1
x10	x1

Domestic Transport Indicators

At the start of the game, the Player has one Domestic Transport Point per Area. He may never **voluntarily** reduce this relationship (although he may exceed it). Transport Reserve and Trade Use Track:



The Player starts the game with a limited number of Reserve Transport Points (see 5.1). The Trade Use Transport always starts the Game-Turn in the zero position. By allocating one Fuel Point per Transport Point, the Player raises the Trade Use indicator to reflect how much of his Reserve is capable of carrying goods in inter-Regional Trade. At the end of the Game-Turn the Trade Use indicator is reset to zero. Note that both indicators have a "+10" side to use if the Reserve level exceeds nine.

Trade Goods Track:



Whenever the Player produces Mech Points that he is about to ship to another Player (or wishes to hold in reserve for himself) he records their existence on this track. Note that the indicator has a "+10" side as well. Also, when Players produce new Plants to be shipped to other Players, they may be temporarily held in the zero position of this track.

Time Record Registers:

The Sequence of Play Track



If they wish, Players may keep track of where they are in the Sequence of Play by positioning this marker on the track found above the MW/SW registers.

The Game-Turn Record Track:



Start with the Game-Turn indicator in the one position and as play progresses, advance the indicator to reflect the passage of the Game-Turns. Each Game-Turn represents a year.

[3.5] GLOSSARY

Region: A Player's "country." A geographically contiguous section of the old USA which is controlled by one of the four Players. It is composed of one or more **areas**.

Area: The old United States and a part of Canada are divided in Areas of one or more hexes delineated by boundaries. As shown, each Area is preno meaning in this game and are shown for purely sentimental purposes.) As shown, each Area is presumed to support a starting population of 1,000,000 at a subsistence level. The thrust of the game forces Players to "control" Areas either politically or militarily. Pursuant to that goal each Area has one hex within which is shown the Control Center hex.

Control Center: This may be loosely thought of as the "capital" of an area. However it is truly an abstraction to simplify play. The extent or lack of a Player's control of an Area is demonstrated by the quality and quantity of marker or unit which α Player has on the Control Center hex of the area.

Note that the hex number of the Control Center is in bold type: this number can be used as an identity number for the whole Area by prefixing it with the word "Area", e.g., Area 0321 describes the Area containing the Miami devastated hex.

Good and Poor Areas: Any Area can be characterized as being controlled by one Player or the other simply by the presence of a Control marker on the Control Center of the area. Moreover the Player either has "good" control of an Area or "poor" control of an Area again signified by either a Poor or Good Control marker. If a Player has good control it means that he has fully developed the transportation and communications of the Area and has strongly integrated it (politically and economically) into his region. Poor control means that he has not succeeded in fully integrating the area, the communications and transportations facilities remain substandard and politically the population has not completely "bought the Player's act," however a poor area is a notch above an uncontrolled Area. (one in which no Player has any control good or poor) or a hostile Area, i.e., an Area controlled by an opponent. (The term "hostile" being used generically because while it may or may not be true that an opponent is an enemy at any given point in the game, no Player may benefit from an Area controlled by an opponent without the opponent's specific permission.)

Labor Point: This is an indirect measure of population. It is the number of adult workers per 200,000 people; i.e., roughly 80,000 workers. If you wish you may look upon it as a unit of population.

Food Point: The amount of grain, meat, fish, fibre, wool, timber, etc., necessary to provide adequate diet, shelter and clothing to a Labor Point for one year.

Metal Point: An abstract amount of raw material basically metal ores (copper, iron, tin, lead, etc.).

Fuel Point: A unit of readily used energy; i.e., petroleum, coal and in some instances hydroelectric energy.

Transport Point: A unit of shipping, trucking and railway assets and the basic infrastructure of ports, roads and rail necessary to move goods and materials. Also a measure of communications.

Plant: Usable factory sites with a bare minimum of tooling such that one labor point can produce one Industrial Point per year from one plant. Within limits the yearly output of a plant can be expanded by adding labor points and mechanization points.

Mechanization Point: Tools and equipment which increase the ability of labor to produce. Mech Points are added to the economic sectors to raise output in these sectors.

Industrial Point: A measure of **output** by Labor and Mech Points in the industrial sector. A measure of the ability to fabricate or make things. Mech Points, Transport Points, new plants, Consumer Points can only be produced by a Player when he expends (among other things) Industrial Points.

Metal Site or "mine": A location on the map which serves as a source of Metal Points. Some hexes are given a multiple of sites. See fuel site.

Fuel Site or "well": Serves as a source of Fuel Points. Basically both mines (and wells) produce Metal (and Fuel) Points each turn according to the amount of Labor and Mech Points the Player has allocated to them.

Economic Sector: A Player's economy is divided into four production sectors, one each for producing Food, Metal, Fuel and Industrial Points. Each Player has a diagram for each of his sectors on which he tracks the use of Labor and Mech Points in that sector, and the output and disposition of that sector.

Consumption (or Consumer) Point: The good things in life be they prime steaks, Tv's, motorcars, waterbeds, fur coats, second homes, municipal orchestras, good books. Basically the Social Status of a Player's "country" is measured by the amount of Consumer Points he is able to provide to his Labor Points (i.e., population).

Social State: The general standard of living and level of productivity of a whole Region. Basically, the Regional Social, State is equivalent to the lowest Sector State prevailing in any of the Player's five economic sectors. The Sector State is determined by how many Consumer Points the Player gives (in effect, pays) the Labor Points in that Sector.

Cash: Measured in dollars. This is money. Players spend it to buy things for their economy from other Players or from their own economy. They raise it from taxation. Each game-dollar represents many millions of dollars.

Infantry Division: A combat unit which the Player mobilizes and uses for military action against his opponents.

Armored Division: A combat unit superior in military value to the infantry division but correspondingly more expensive to raise and maintain.

Supply Unit: A specialized form of transport unit which serves to maintain a supply path to a combat unit. Combat units must be **maintained** or suffer loss each turn. If they are to exist outside of a Player's Region (i.e., in an uncontrolled Area) they may only be maintained if they can trace a path to friendly control center. To do this may require supply units.

Militia Unit: A combat unit with limited movement and combat values which a Player may mobilize on an emergency basis to protect an Area.

[4.0] SEQUENCE OF PLAY

Holocaust is designed to be played by three or four Players, primarily four. The basic unit of play is the Game-Turn (which simulates a time-span of a year.) Each Game-Turn is composed of some five Rounds, each Round being broken down into specific Phases and Segments. During the phases of each round each Player will, in his turn (in sequence) execute the routines and functions called for at that point.

[4.1] SEQUENCE OUTLINE

A. PRODUCTION ROUND

Each Player using the proper routine will produce the various economic points he desires. The Round is divided into three phases. The first phase concerns the production of the basic economic points (food, fuel and metal), the second phase creates points which require the expenditure of one or more basic points (look on them as raw materials), the use of Industrial Points and possibly an outlay of cash, the third phase allows the mobilization and deployment of military units. Though each Player will be operating solely within his own economy it is necessary that the Players execute production in sequence (see 4.2) so that a Player's action may be monitored for errors.

1. Basic Production Phase

- a. Produce Food Segment (see 6.0)
- b. Produce Fuel Segment (see 7.0)
- c. Produce Metal Segment (see 7.0)

2. Secondary Production Phase

- d. Produce and allocate Mechanization Points
- e. Produce and allocate Transport Points
- f. Produce and deploy Plant sites
- g. Produce Consumer Points

3. Mobilization

- h. Create and deploy infantry, armored and supply units.
- j. Create and deploy militia

B. TRADE ROUND

The Players negotiate between themselves as to trade. In any order they mutually agree they may execute trade, swapping economic points and cash, etc. Because of the nature of trading which may involve three- and even four-cornered transactions the order in which trades are made is left to the discretion of the Players to be organized in whatever manner they find the most beneficial. There is no time limit for trading nor any restrictions on what can be traded. However, Players may trade only during the Trading Round. If a Player finds a need for some particular item at some other point in the Game-Turn, he cannot trade for it. During the progress of the game it is permitted even encouraged that Players discuss and negotiate their mutual situations with an eye toward trade but they may only consummate their deals during the Trade Round. During trade anything may be swapped. The terms of any trade are solely up to the Player. For example, Player A can exchange a Food Point with Player B for a Metal Point, or dollars, for the promise of future considerations, etc., (anything goes). The rules on trade require only that some participant in certain types of trade use a Transport Point and expend fuel to consummate the trade.

C. CONSUMPTION ROUND

Having produced (or traded for) various goods the Players will now expend some of these items simulating consumption by their populace. As in the Production Round there is solitaire activity which should be monitored for error.

1. Expend Food Points (see 11.1)

Reduce food pool by one Food Point for every Labor Point in the economy. This event simulates feeding the population. If a Player cannot feed his population he is penalized.

2. Expend Consumer Points (see 11.2)

The Player may expend all, some or none of the Consumer Points he has in that pool. He may only expend Consumer Points on employed workers (i.e., Labor Points).

3. Calculate and Declare Social Status

On the basis of the consumption of Food and Consumer Points which he has just executed the Player determines exactly what Social State his Region is in and so declares this fact. The Social State of a Region has an important bearing on a Player's ability to produce, consume, expand his territory and, in fact, win the game. Whatever Social State he is found to be in at this point will persist until this same step in the next Game-Turn.

4. Military Supply Phase

Each Player, in order, must expend cash and economic points to maintain military units (see 11.5).

D. MILITARY/POLITICAL ROUND

This Round provides the Player with the ability to expand the territories they control, either through political or military action. They can either annex an Area (or Areas) adjacent to one or more that they presently control by expending cash, Food, Transport and Consumer points thereby garnering the right to conduct and win a plebescite (election) for that Area or they can move military units into the area occupying it physically. When two or more Players seek control over the same Area (heretofore uncontrolled) or a Player tries to take away another Player's territory they are at war.

1. Political Contest Placement

In order (see 4.2) each Player will place political contest markers in those areas he wishes to establish control. At a later time he will secretly note the amount of cash he will expend on the ensuing plebiscite.

2. Initial Military Movement

In order each Player may move each of his military units.

3. Second Military Movement

In order each Player may move again. The order for this second movement is established afresh. It may or may not be the same order as the initial movement.

4. Combat Phase

In order the Players may execute combat using their military units against adjacent hostile units and markers, with consequent advance, retreat, etc. 5. Elections (Plebiscites)

The Players now simultaneously reveal their secret cash allocations for each Political Contest. These are compared and plebescites are held in Areas which qualify for them. Players place Political Control markers to reflect the outcome of these elections and expend Transport and Consumer points if necessary to annex Areas. They also make whatever adjustments necessary to their economic sectors to reflect the gain or loss of these territories. **E.** FINANCE ROUND

The chickens come home to roost. During this round the Players will have an opportunity to reallocate their labor and capital, shifting labor from one sector to another, investing money to increase industrial capacity, raising money through taxation and in general preparing for the next Game-Turn.

1. Political Disassociation Phase

If at this point a Player has significant numbers of unemployed and/or "starving" Labor Points he may be required to relinquish control over one or more areas.

2. Stockpile/Labor Reallocation Phase

Each Player may stockpile surplus production. Each Player may reallocate his labor points between sectors and re-employ unemployed labor, or vice versa.

3. Industrial Investment

Each Player commits cash to increase his next-turn Industrial Point output. This committment occurs before taxation.

4. Taxation

Each Player calculates his tax base, this requires him to prepare Form 1040. In some cases a Player may be exposed to corruption. Each Player in order executes the taxation routine extracting cash from the General Fund as he does so.

5. Industrial Capacity Adjustment

Each Player will calculate his Industrial Capacity and Industrial Point Output for the next Game-Turn, basing this calculation on his Industrial Utilization for his turn, his cash investment outlay, the effect of taxation, just completed, new plant installed, and Labor and Mech point allocated to industry. This process is known as completing Schedule D.

6. Industrial Labor Reallocation

Labor in the Industrial Sector is employed (or unemployed) to reflect any Capacity/Utilization change.

7. Depreciation and Shrinkage

Existing stocks of Food, Metal and Fuel points are exposed to shrinkage, and Mech Points are depreciated.

[4.2] PLAYER ORDER

Except when specifically noted otherwise, the Players perform and execute all actions called for in the game in a sequential order. To establish this order the Players should seat themselves around the map with the Northeast Player sitting on the northeast edge, the Midwest Player sitting on the Southeast, the Southwest Player sitting on the Southwest and the Far West Player sitting on the far west edges respectively. All Play is clockwise NE-MW-SW-FW. This clockwise rotation is the order of play. It is sometimes a benefit to be the first Player to do something (or be the last Player, etc). So that no Player can plan on an assured edge before starting any phase or segment of a phase, the NE Player will roll a die to see who goes first in the Player order. For the sake of determining who goes first we shall call the NE Player #1, the MW Player #2, the SW Player #3, and the FW Player #4. The NE Player rolls the die until a 1, 2, 3 or 4 results. That number determines who goes first with the other Players following in rotation. For example: it is the first Military Movement Phase. A four is rolled. The Far West Player moves all his units first, followed by the NE Player, the MW Player and finally the SW Player. On the second Military Movement Phase a one is rolled. The NE Player moves first, followed by the MW Player, SW Player and finally the FW Player.

Player's Note: In the vast majority of cases it doesn't matter a hoot who goes first. The Players can simply agree that unless one or more Players object the NE Player always goes first.

[4.3] POPULATION GROWTH CYCLE

Immediately before the beginning of every Game-Turn evenly divisible by "4" (i.e., just before the fourth and eighth Game-Turns in the Standard Game) the Labor Point population of a Player's Region increases by 10% (rounding off to the nearest whole point). This Labor is immediately distributed into the Player's economic sectors, as he sees fit, at no "entry" cost to the Player.

[5.0] DEPLOYMENT

GENERAL RULE:

There are four Players identified respectively as the NorthEast, SouthWest, FarWest and MidWest. The initial Region of each Player is composed of a varying number of contiguous areas whose Control Center hexes bear the Player's initials. (The Capital of each Player's region is the Control Center hex containing a circled star.) Each Player is presumed to start with a population in Labor Points equal to five times the number of Areas he possesses. Thus the SW Player begins the game with 35 Labor Points. Players should begin by placing Control Markers on all their initialed Areas. All Areas begin in "Good" Control.

Players then should inventory their regions to determine exactly how many Plant, Metal and Fuel sites they control. Then in order each Player will allocate his Labor Points to each of his Economic sectors as he sees fit. This may be done secretly. Following this each Player may allocate the Mechanization Points listed under his initial resources (5.1) to his Economic Sectors as he sees fit. Then each Player must register stockpiled Food, Metal and Fuel Points on the respective sector tracks. Consumer Points are also registered on the Consumer Point track. Available Transport Points are registered. (Note: if a Player plans to use these on Game-Turn One he will have had to allocate a Labor Point to the Transport/Trade Sector.) On this initial set-up the Industrial Capacity is registered to equal the Labor plus Mechanization Point allocation to Industry. Finally the Players draw the stated amount of cash out of the General Fund and begin Game-Turn 1.

[5.1] INITIAL RESOURCES CHART

All Regional Social and Sector States at level 1.

Item	NE	MW	SW	FW
Areas (in Good Control)	6	7	7	6
Mech Pts in Farm	6	7	7	6
Domestic Transport Pts	6	^{Test -} 7	7	6
Reserve Transport Pts	1	3	2	1
Labor Points (total)	30	35	35	30
Available Consumer Pts	5	5	8	7
Allocatable Mech Pts	2	3	4	4
Metal Sites in Region	2	6	1	4
Fuel Sites in Region	7	3	7	2
Plants in Region	16	14	4	8
Stockpiled Material				
Food Points	3	7	11	8
Metal Points	2	4	3	2
Fuel Points	5	1	6	2
Cash on hand(\$)	12	14	17	15

[5.2] INITIAL REGION SOCIAL STATES AND ECONOMIC SECTOR STATES

Everybody and every Economic Sector begins at Social State One. Note that in order to preserve this status a Player will have to expand at least one Consumer Point on each of his Sectors per turn. This means if he has all five sectors (Farm, Metal, Fuel, Industry and Transport/Trade) he must expend at least five Consumer Points during the Consumption Round.

[5.3] INDUSTRIAL CAPACITY

Each Player will know exactly how many Plants he starts with. Because his Industrial Sector State is given as one to start with he could allocate up to three Labor Points and one Mech Point for each Plant he owns. This voluntary allocation establishes his initial Industrial Capacity. For example, if the SW Player owning 4 Plants, allocates five Labor Points and three Mech Points to his Industrial Sector to start with he would set his Industrial Capacity at (5+3) eight.

[5.4] INITIAL NEGOTIATIONS

The Players are deliberately given significant imbalances in initial resources. Before allocating their Labor and Mech Points which will determine their first Game-Turn's production they should discuss trades they may wish to make.

[6.0] THE FARM SECTOR (Agriculture)

GENERAL RULE:

The very first act in every Game-Turn is the production of Food Points. This act revolves around the Food Production Routine executed by each Player. The amount of Food Points a Player produces per turn is dependent on the number of Labor and Farm Mechanization Points the Player has assigned to the Food Sector. All things being equal, the larger the Labor and Mech assigned, the greater the amount of Food Points produced through Food Production which unlike production of other things is subject to a chance table which can vary the actual number of points produced from the expected mean. The operation of this table can cause food production to decrease (simulating bad weather, disease, surpluses from past cycles, etc.) or to increase (simulating good weather, etc.) The larger the number of Areas a Player owns the less chance exists of a deviation from the mean expected production (reflecting a broader distribution of risk in any one year.)

[6.1] THE FOOD PRODUCTION ROUTINE

The routine consists of a series of steps as follows:

1. Total the number of Labor Points and working Mech Points assigned to Farm Production. The number arrived at is known as the "normal" production amount.

The number arrived at is known as the "normal" production amount.

2. Roll the dice and use the Food Table cross-referencing the number of Areas held by the Player in Good Control with the dice roll. The result located will be "N", or a -% or a +%. "N" means that Food Production in Food Points equals the "normal" production amount. A plus or minus reslt means that the Player must adjust the "normal" amount up or down by the percentage indicated. 3. Having determined the actual production amount, the Player adjusts the level of his available Food Point pool accordingly.

Example: The Northeast Player owns seven Areas in Good Control. He has 26 Labor Points and 11 Mech Points assigned to his Farm Sector. (His Social State is 1 so all his Mech Points are considered working Mech Points.) 26 plus 11 equals 37. He rolls a six on the Food Table. Cross-referencing six with the total number of Areas (seven) gives a result of -10% (37) less 3.7 equals 33.3, rounded to 33. Thus in this example the Northeast produces 33 Food Points.

4. VERY IMPORTANT: The Player must note on his Form 1040 the amount of Food Points produced. This number will form part of his tax base when in the later course of the Game-Turn he performs taxation.

[6.2] LIMITATIONS ON FOOD PRODUCTION

[6.21] Limits on Farm Labor

For each Area in Good Control a Player may have five Labor Points assigned to his Farm Sector; for each Area in Poor Control three Labor Points. Practically speaking this means he can place the bulk of his Labor force in his Farm Sector because his total population normally equals no more than five Labor Points per area.

[6.22] Limits on Mechanization

A Player may have any number of Mechanization Points assigned to his Farm Sector. The question is:how many of them can be considered working Mech Points, that is, points which count toward establishing the "normal" Production, and this number is determined by the Player's Sector State. At Sector State zero he may not count any mechanization, at Sector State One he may use one Mech Point for each Labor Point assigned, at Sector State Two he may use two Mech Points for each Labor Point assigned, etc.

[6.23] Effect of Surplus Food

Ideally a Player should be able to dispose of all Food Points he produces in a given turn. Some are consumed by his population directly or indirectly through production and consumption of Consumer Points, trade to other Players, or as a last resort by Stockpiling. However, often a Player will have undisposed Food Points in his Food Pool left over from a prior turn (or turns). These serve to depress the current Game-Turn's Production on a one-for-one basis. In the example given in 6.1, Step 3 the NE Player produced 33 Food Points. Assume, however, that he had five undisposed Food Points in his Food Point Pool then his actual Food Point Production would be reduced to 28 (33 less 5). And this amount (28) would be reported for taxes.

[6.24] Farm Unemployment

If for some reason the actual Food Point Production in a given turn falls below the number of Labor Points assigned to the Farm Sector the Player must 8

immediately reassign Labor Points in the amount of 50% of the shortfall to the Unemployed Pool. In the previous example the NE Player had 26 Labor Points assigned to the Farm Sector. If for some reason Food Production was only 21 Points, he would have produced 5 less Food Points than his Labor Points, and he would have to immediately reduce his Farm Labor by 3 (50% of 5 rounded up) and increase his Unemployed Pool by a corresponding 3.



If a Player owns one or more Metal (or Fuel) Sites he may produce Metal (or Fuel) Points. Each Site is capable of producing one or more points per turn. Depending on the Sector State a Player may allocate one, two or three Labor Points for Metal (and Fuel) Production per each Site he owns and an **Infinite** number of Mech Points. Unlike Food Production there is no chance associated with Metal Production.

[7.1] THE METAL (AND FUEL) PRODUCTION ROUTINE

1. Total the number of Labor and working Mech Points assigned to the Metal Sector.

2. This total is the number of Metal Points produced in the Metal Production Segment of the Game-Turn.

3. This total is recorded on Form 1040 and forms part of the Player's Tax Base.

The identical procedure is followed for Fuel Production using the Fuel Sites and the Labor and Mech Points which the Player has associated with them.

[7.2] LIMITATIONS ON METAL/FUEL PRODUCTION

[7.21] Limits on Metal and Fuel Labor

A Site can employ up to three Labor Points. Thus if a Player owns three Metal Sites he could assign nine (3x3) Labor Points to Metal Production. This is an upper limit. In Sector State zero a Player may only assign one Labor Point per Site, in Sector State One or above he may assign one, two or three per Site. The same restrictions apply to Fuel Sites.

[7.22] Limits on Mech Points

Any number of Mech Points may be assigned to the Metal and to the Fuel Sectors. However the Player may only consider a certain number as working Mech Points for the purposes of determining his Metal (and Fuel) Production according to its Sector State. In Sector State zero he may **not** use any Mech Points for Metal or Fuel production. In Sector State one he may use one Mech Point for each Site, in Sector State two he may use two Mech Points for each Site. etc.

Example: The NE Player has possession of two Metal Sites. He is in Sector State one, and has assigned five Labor Points and two Mech Points to his Metal Sector. His Metal Production per turn is seven (5 plus 2). Note he could increase this by one if he assigned one more Labor Point to Metal but eight would be his production limit until he either increased the Sector State or acquired more Sites.

[7.23] Effect of Surplus Metal (and Fuel)

If a Player fails to dispose of his Metal Points by using them in secondary production, trade or by stockpiling, they depress future production on a one-for-one basis. For example on Game-Turn One the NE Player produces seven Metal Points. During that Game-Turn he disposes of six of these leaving one point as an undisposed surplus. On Game-Turn Two his production is reduced from seven to six. Note that this is the only way in which production of metal can be affected within the Game-Turn. Fuel Sector procedure is identical.

[7.24] Unemployment in the Metal (and Fuel) Sectors

If production fails to match the number of Labor and Mech Points (because of an undisposed surplus) the Player must immediately shift Labor Points from Metal to the Unemployed Pool in the amount of 50% of the shortfall. In the example above the NE Player had five Labor Points and two Mech Points in Metal. He only produced six Metal Points because of his undisposed surplus. He must shift one Labor Point from Metal to Unemployed (50% of 1 is .5 rounded up to 1). Fuel Sector procedure is identical.

[8.0] SECONDARY PRODUCTION

GENERAL RULE:

In Secondary Production a Player creates Mechanization Points, Transport Points, new Plants, and Consumer Points. He does this in the sequence described in the Sequence of Play. The Secondary Production Cost Table describes exactly what the Player must expend or use to create one of these points.

Assuming he has the capability and materials a Player may produce whatever he wants.

[8.1] TO PRODUCE

A MECHANIZATION POINT

The Player simply reduces his production pools by the amount shown on the Cost Table for each point produced. He changes his Industrial Utilization Pool to reflect the use of two Industrial Points (see Industrial Sector. He now has a Mechanization Point. He must immediately deploy this point in some economic sector (his choice), or trade.

[8.2] TO PRODUCE A TRANSPORT POINT

The Player follows the same routine as for the Mech Point. He must immediately deploy the Transport Point to the Transport Sector.

[8.3] TO PRODUCE A PLANT POINT

Follow the same routine as in 8.1. The new Plant must immediately be deployed on the map on some Good Control Center Hex or placed in the Trade Sector for future delivery to some other Player.

[8.4] TO PRODUCE A CONSUMER POINT Follow the expenditure routine. Place the Consumer Point in the Consumer Point Pool.

[8.5] REPRESENTATION OF POINTS

Note that Plants are points existing as discrete counters. Transport Points and Mech Points and Consumer points on the other hand exist only as reflected by the marker level in the various pools. [8.6] MOBILIZATION

This event follows Secondary Production. Each Player in Turn is allowed to create military units. Expending economic points and cash from existing pools, using Industrial Points and most importantly expending Labor Points.

[8.61] To mobilize an infantry or armored division the Player expends the money and points described on the Cost Table. The unit created must be immediately placed in a "good" Control Center Hex. The Labor Point expended can only come from the Unemployed Pool.

[8.62] To mobilize a militia division, the Player expends the appropriate costs. The Labor Point must be drawn from the Farm Sector. The unit may be placed in any friendly hex.

[8.63] Supply Units do not require a labor expenditure since their labor is deemed to be in the Transport Labor Pool. Place in Capital. [8.64] Rebuilding Cadres. An armored or infantry unit can, due to combat losses or maintenance failure, be reduced to cadre status (flipped over). To rebuild a cadre back to a full strength unit the cadre must be in a home Region good Control Center hex during the Mobilization Phase. The Player must then expend cash and economic points equal to **double** the normal maintenance cost for that type of unit in order to flip it over to its full strength. This does not relieve the Player from paying the normal maintenance cost in the ensuing Military Supply Phase.

[9.0] THE INDUSTRIAL SECTOR

GENERAL RULE:



Unlike Food, Metal and Fuel Points, Industrial Points are not produced and consumed per se. They are not subject to stockpiling nor trading. Rather an Industrial Point is a unit of fabrication. On any given Game-Turn a Player is said to have an Industrial Capacity represented by roughly the total number of Labor and Mech Points allocated to the Industrial Sector, within the outer limit of his total Plants. During Secondary Production and Mobilization the Player will record the expenditure of Industrial Sector. He may expend Industrial Points up to the limit of his current capacity. In effect, he produces Industrial Points at the same instant he expends them.

[9.1] INDUSTRIAL CAPACITY

A Player's Industrial Capacity is defined as the number of Labor Points and working Mech Points he has allocated to the Industrial Sector. For example if the NE Player has six Labor Points and three Mech Points in Industry his Industrial Capacity is nine. A Player's Industrial Capacity can and will change from Game-Turn to Game-Turn, it is determined afresh at the end of each Game-Turn to apply to the following Game-Turn, during the Industrial Capacity Adjustment Phase, during which a Player's Industrial Capacity will be set on the Industrial Track using the Industrial Capacity markers. In the example above the NE Player would set his Industrial Capacity marker at nine.

[9.11] Limits of Industrial Capacity

A Player may allocate up to three Labor Points and an unlimited number of Mech Points to the Industrial sector per each Plant that he owns. At Sector State Zero he may only allocate one Labor Point for each Plant, Sector State One and higher, he may allocate as many as three Labor Points per plant. At Sector State Zero a Player may not employ any Mech Points in computing his Industrial Capacity. In Sector State One he may employ one Mech Point per plant, Social State Two two Mech Points per plant etc. He may only employ these Mech Points if he can show that he has at least one Labor Point allocated per plant. Thus (at Sector State One) if a Player owned three plants he could have a theoretical capacity of twelve Industrial Points per Game-Turn. (Three Labor and one Mech Point per plant times three plants equals twelve.)

[9.2] INDUSTRIAL UTILIZATION

Whenever a Player produces Mech Points, Transport Points, new plant, Consumer Points, military units etc., he must expend (among other things) Industrial Points. As he does so he records the expenditure of Industrial Points on the track of the Industrial Sector. In effect he is creating the points as he expends them. In the example we are using, assume that the NE Player produced a variety of Mech and Transport Points expending mine Industrial Points in the process. He would move his utilization marker on the track to reflect nine points expended. Note that he could not expend ten points since his capacity was determined and set at nine points. In fact in this case the Industrial Point Utilization Marker and the Capacity Marker would be at the same point on the track, reflecting that in the Game-Turn in question he had 100% utilization (produced and expended points up to his capacity.) If he expended only six points he would have a shortfall or **under utilization** of three points.

[9.3] INDUSTRIAL CAPACITY ADJUSTMENT

This event occurs in the Finance Round and is calculated on the basis of completing Schedule D. Several factors influence the adjustment of capacity. These are Industrial Utilization during the current turn, cash investment to increase capacity, effect of taxation, plant brought on line or lost.

[9.31] Effect of Utilization

If a Player has 100% utilization he must automatically increase his Capacity by one. For example a Player starts Game-Turn Two with a capacity of seven. He uses all seven points in the Game-Turn. He would change his capacity to eight for Game-Turn three. If a Player has under utilization he would **reduce** his capacity by fifty percent of the under-utilization. In the example, with a capacity of seven and utilization of say five he would reduce his capacity to six.

[9.32] Effect of Investment

By investing cash (see 18.0) a Player can purchase an increase of capacity.

[9.33] Effect of Taxation

The Taxation Routine in addition to providing a Player with money from the General Fund will, on a probability basis, increase or decrease a Player's Industrial Capacity.

[9.34] Effect of New Plant [or loss of existing plant]:

If a Player creates and deploys new plant he raises the theoretical upper limit of his capacity. By the same token a Player may lose control of Areas containing plants or suffer military occupation of same thereby reducing his theoretical upper limit of capacity. Note the word "theoretical" because deploying a new plant or plants does **not** automatically increase capacity. A Player would have to allocate Labor (and Mech) to utilize the increased potential in capacity.

[9.4] EMPLOYMENT/UNEMPLOYMENT IN INDUSTRY

At the conclusion of the Capacity Adjustment Phase the Player executes the Industrial Labor Reallocation, adjusting the number of Labor Points to reflect his new capacity. For example he has six Labor Points (assigned to three plants) and three Mech Points in Industry. His capacity had been nine. Because of one thing and another he is forced to reduce this capacity to five, which he does. He must now reduce his employment in Industry to reflect his reduced capacity. Unlike the situation in Farming, Metal of Fuel he has some leeway in his decision. He may choose to unemploy one Labor Point for each point drop in capacity (the most drastic decision) or he may choose to consider Mech Points as being in excess (which while it maintains his employment exposes the excess Mech Points to accelerated depreciation). In the example he must reduce his Labor and Mech total to five. He could unemploy one Labor Point and consider the three Mech Points as excess or unemploy two labor points and consider excess two Mech Points or unemploy three Labor Points and excess only one Mech Point (note that he couldn't unemploy four labor points and still leave a capacity of five because this would only leave him with two Labor Points assigned which would only permit him to man two plants.) If on the other hand the Player's new capacity was larger than the old capacity, (instead of dropping from nine to five it increased from nine to eleven), he could increase his labor allocation by two points (transferring them from Unemployed or some other sector) to meet this new capacity.

[10.0] TRADE

GENERAL RULE

During the Trade Round Players may exchange economic points, and money using Transport Points allocated to Trade to stimulate the actual movement of materials from one Player's Region to another Player's Region. Player's may trade anything they own and are limited only by their mutual agreement and the physical means to execute a trade. For purposes of trade the economic points in the game have no set cash value; this is a free-market situation.

[10.1] THE TRANSPORT POINT AND TRADE MOVEMENT

Each Transport Point may carry five Food, Metal or Fuel Points, or ten Consumer Points, or one Plant at any one time in executing a Trade. When two Players agree to a Trade they must be able to trace a path of contiguous hexes between their respective Regional Capital hexes. All the hexes on the path must be in Areas controlled by either of the two traders or a third player who specifically allows the path to be traced through his Area. A trade path may never be traced through a hex in an uncontrolled Area. However a path may be traced through sea hexes and there is a specific rule permitting trade between the East and West coasts.

To carry out a trade, one or more Transport Points must be designated as the agent of the transfer. The transporting Player reduces his Transport Reserve by the number of Transport Points to be used in trade, and increases these in the Trade Use category by the same number. In order to legitimately so change the status of these Transport Points, the Player must expend one Fuel Point for each Transport Point which has been shifted to the Trade Use category. Each Fuel Point expended for Transport in trade use supplies 200 Movement Points. The Transport Points then trace a movement path of connected hexes from Regional Capital to Regional Capital and back, expending the Movement Points called for by the Trade Movement Point Cost Chart. Of course, if the Transport Point(s) itself is also being traded, it need not make a round trip-it may terminate in the receiving Player's capital and be added to his Transport Reserve. Note that at the end of the Trading Round, all Transport Points are returned to reserve status.

[10.2] TRADE TRANSPORT RESTRICTIONS

No single Transport Point may expend more than 200 Movement Points in a single Game-Turn. Unused Movement Points may not be accumulated from Game-Turn to Game-Turn (although surplus points may be allocated to Domestic Transport. See 10.7). Players may move goods from their capital to another Player's then pick up a new load and take it to yet another Player's capital and return with another load. Any number of Players may involve any number of Transport Points in a "relay" system to make the most efficient use of allocated Fuel and Transport Points. Loads may be transferred from one Player's Transport Point to another's at no additional cost (although the normal fuel cost for trade use of a Transport Point must always be paid by the using Player).

[10.21] Overland vs. Waterborne Transport

No Transport Point may be used for both overland and waterborne hauling in the same Game-Turn. Players will note that the per-hex Movement Point cost for water transport is considerably less than that for overland. When moving by water the Player must be able to trace a continuous water route (rivers/lakes/coastal and all-sea hexes) from capital to capital. Devastated hexes through which water routes may pass have no effect on the waterborne transport.

[10.22] Once Players commit themselves to a trade (in the Trade Round), they must honor it: they may not seize or hijack shipments. A Player who permits transshipment through his territory (for whatever consideration) must honor the deal. Note that pure **money** transfers require no Transport Point use.

[10.23] Standard Trade Route Distances

(One-way) in Terms of Movement Points In normal situations, the shortest routes between capitals are as follows:

	Overland	Waterborne
NE to MW:	45	11
NE to SW	65	21
NE to FW	120	90
MW to SW	30	11
MW to FW	80	90
SW to FW	70	90

The most efficient trade route triangle exists between NE/MW/SW, one circuit of which consumes 43 Movement Points. Thus, a single Transport Point could make such a circuit four and one half times in a given Trade Round.

[10.3] MOVEMENT OF ECONOMIC POINTS

Nothing literally moves on the map. The trading players simply change their respective pools to reflect the transaction. When trading economic points it is necessary to differentiate between a stockpiled point and an undisposed point. If Player A trades a stockpiled Food Point to Player B it goes in Player B's Food Stockpile; if it was undisposed Food Point it would increase Player B's undisposed Food Pool.

[10.4] MOVEMENT OF PLANT

If a Plant has been traded it must be immediately located and deployed on the map by the acquiring Player according to new Plant deployment. In this case alone, the trade path is traced to the **deployment site** rather than the receiving Player's capital.

[10.5] TRADE OF TRANSPORT POINT

A Transport Point itself may be the subject of trade. In which case the Players make a physical trade of a Point, removing the Transport Point from Player A's trade pool and transfering it to Player B's trade pool. (This would always be the result of a one-way trade.

[10.6] LABOR AND TRADE TRANSPORT

In order to use a Transport Point a Player must have allocated one Labor Point for each five (or fraction of five) Transport Points operating in his Trade Sector. If allocated, this labor is considered employed regardless of any trading or lack of trading in a turn. Supply units (which are on the map) count as two Transport units for purposes of Labor allocation.

[10.7] DOMESTIC TRANSPORT

Each Player has a number of Transport Points assigned to the Domestic Transport pool (i.e., those that are in use in the internal economy of his Region). At the start of the Game, each Player has a

number of Domestic Transport Points exactly equal to the number of Areas in his Region. When new (previously uncontrolled) Areas are added to the Player's Regin, he must allocate one Transport Point per new Area to the Domestic Transport Pool. When gaining control of another Player's area, the gaining Player also gets its Transport. Once in the Domestic Transport Pool, a Transport Point may never be reassigned to the Transport Reserve/ Trade Use Pool. For every five Domestic Transport Points the Player must provide one Labor Point (note that this same Labor may cover part of the Trade Transport requirements, e.g., if a Player had seven Domestic and three Trade Transport Points in use, he would need only two Labor Points to operate them all). He must also provide each Domestic Transport Point with 20 Movement Points worth of fuel each Game-Turn (each Fuel Point yields 200 Movement Points). Part or all of this fuel may be unused Trade Transport surplus.

[10.71] If a Player fails to provide sufficient fuel for Domestic Transport, or if he fails to provide sufficient Domestic Transport (properly manned) he will be forced to depress a number of Areas equal to the number of Areas not properly served by Domestic Transport. Failure to provide sufficient fuel for one Domestic Transport Point results in the unemployment of one Labor Point; Player's choice of Sector. Failure to provide a Domestic Transport Point for an Area results in the conversion of that Player-designated Area from good to poor (or the disassociation of a Poor Area to an uncontrolled Area). These penalties are exacted at the end of any Trade Round in which the Domestic Transport requirements are not met.

[10.72] Transport Points may be placed into the Domestic Transport Pool from new production, purchase, or the Reserve. Transport Points assigned to Trade use may **not** be reassigned to the Domestic Pool in the same Game-Turn.

[11.0] CONSUMPTION OF PRODUCTION

GENERAL RULE:

In the Consumption Round, the Player must feed his Labor Points (employed, unemployed and starving) by giving them Food Points; pay them (only those employed) by giving them Consumer Points; raise his Social and Sector States (in effect his standard of living and potential productivity); and maintain his military units (if he has any).

[11.1] FEEDING THE PEOPLE

Every Labor Point must be fed at least one Food Point. The Player reduces his Food Points (both undisposed and stockpiled Food as he wishes) to reflect this consumption. "Every" Labor Point means all Labor Points existing on all the various sectors. If he does not have enough Food Points to feed every Labor Point, he must immediately transfer Labor Points into the "Starving" Pool, reducing his fed Labor to parity. He may choose from what sector or sectors he wishes to transfer the Labor Points. Feeding the people is one of the few mandatory actions a Player must execute during a turn. Starving Labor Points remain in the starving pool until the Player can feed them (presumably the next turn) in which case they are transferred to the unemployment pool.

[11.2] CONSUMER POINT CONSUMPTION

Having produced Consumer Points, the Player may now expend them on employed Labor Points (those allocated to the various sectors). Unlike Food Consumption this is a voluntary expenditure. However, the Social State of a Player's region is determined each turn (see 24.0) by the number of Consumer Points spent on each **employed** Labor Point. What is more, each Economic Sector has a Sector State rating and there are definite benefits to productivity for higher Sector States. To expend Consumer Points the Player simply states 'I am expending (X amount) of points on these specific Labor Points' identifying them as he does so, and lowering his Consumer Point pool.

[11.3] SOCIAL STATE ADJUSTMENT

As he expends the Consumer Points, the Player adjusts the Sector State Rating for each Economic Sector and, finally, the Social State Rating for the Region as a whole. The Sector State of Labor in any given sector depends on the consumption of Consumer Points per Labor Point employed in that Sector.

Sector State 0:

No Consumer Points expended at all.

Sector State 1:

At least one Consumer Point expended (for any number of Labor Points).

Sector State 2:

At least one Consumer Point expended for each employed Labor Point.

Sector State 3:

At least two Consumer Points expended for each Labor Point.

The Social State of the Region as a whole is equivalent to the lowest Sector State that prevails in any of the sectors.

[11.4] RESTRICTIONS ON CONSUMPTION

[11.41] No Labor Point can consume more Food Points per turn than its Sector State rating in its sector, except that a Labor Point at Social State Zero must still be fed one Food Point.

[11.42] The Sector State Rating of any given Economic Sector may never be more than 'one' above the Social State Rating of the Region as a whole. For example, a Player could not boost the rating of, say, his Metal Sector to three while his Farm sector remained at one.

[11.5] MILITARY MAINTENANCE

This is a specialized form of consumption. Every military unit in existence must be provided with food, Consumer Points, (fuel and cash), or it is instantaneously reduced in place to a cadre or eliminated if it has no cadre status or is already a cadre. The maintenance expense per type of unit is shown on the Military Maintenance Chart. If a unit exists in a Friendly controlled area and a supply path in hexes can be drawn to a Friendly Good Control Center hex, then the unit is maintained by simply reducing the Owning Player's Economic Points by the appropriate amount and expending the cash into the General Fund. However if the unit exists in an area outside of Friendly Control then it must have the assistance of one or more Supply units in drawing its supply path.

[11.51] The Supply Path

The Supply Path is defined as the contiguous hexes stretching from the unit's hex exclusive to a Friendly Good Control Center inclusive. No hex in the path may be in an Enemy Zone of Control unless the hex is occupied by a Friendly unit. The Supply Path may be of any length but it may not include a hex in an Uncontrolled or Enemy Controlled Area unless a Supply unit or units are present (see 11.52).

[11.52] Effect of Supply Units

For purposes of tracing a Supply Path at the moment of Military Maintenance, a Supply unit temporarily converts the hex it is in and all **adjacent** hexes into a Friendly Controlled Area, thus allowing a Supply Path to be drawn through what would otherwise be hexes of an Uncontrolled or Enemy Controlled Area.



Within limits a Player may store up Consumer Points rather than expending them each turn. The main reason for saving them would be to expend a large amount in one turn on all the Labor Points employed in one or more sectors, thereby in one fell swoop 'bumping up' that Sector's State. (Though you always want a few Consumer Points in reserve for expenditure if you win a plebiscite or if you transfer Labor out of Unemployed.) There is however a danger in hoarding Consumer Points since you are in effect denying Labor its immediate fruits. Therefore at the conclusion of a Consumption Round each Player will determine if there is a possibility of Labor Unrest via the following Routine.

[11.61] Labor Unrest (Strike) Routine

1. Total the number of employed Labor Points which did not receive a "fair" share of Consumer Points during the Consumption Round. Call this total the "deprived" Labor Points. **Example:** If you expended one Consumer Point on each of the metal workers but only one point for all thirty farmers, you have (in effect) 29 "deprived" farmers.

2. Divide the Consumer Points in your pool by the number of "deprived" Labor Points. This is your Unrest Index.

3. Use the Strike Table to determine what happens cross-referencing the Unrest Index with the die roll. [11.52] STRIKE TABLE

Unrest Index

Die Roll 0.5 to 1.0 1.1 to 2.0 2.1 to 5.0 5.1 +1 ø 6 0 ഒ 2 S 0 0 ۲ 3 S S ø 6 4 S S S ۲ S S 5 S S 6 S S S S

• = No Effect. Note also that if the unrest index is less than 0.5 there is no possibility of a strike. S = Strike. The Player must immediately expend Consumer Points to give the "deprived" Labor its "fair" share or shift the "deprived" points into Unemployment. The second alternative can be very grim.

Note that there is no need to use the Unrest Routine if all Consumer Points are distributed. Also, the Player may choose to satisfy only part of the deprived Labor (keeping some Consumer Points in the pool) and unemploy the balance.

[12.0] POLITICAL CONTROL

Each Area on the Map has some hex within it denoted as the Political Control Center. A Player is shown to be in control of the Area if and when he has one of his Political Control Markers on the Control Center hex. If he has such a marker in place he is said to control the Area. There are two types of control: "good" and "poor" and the marker shows its good side and a poor side as the case may be.

The game begins with each Player in control of a number of contiguous areas (see Deployment 5.0). One of the objectives a Player has in the game is to expand the number of Areas he controls. Each area is presumed to support five labor points at a subsistence level. Thus when a Player acquires control over an additional area he gains five labor points to allocate within his economy. Resource Sites and plants are located on the map in different areas. A Player may consider them his only if he has control of the Area. (There are, however, other criteria to exploiting them.)



[12.1] GAINING POLITICAL CONTROL

A Player may only gain Political Control (and thereby place his Control marker on the Control Center hex) during the Political/Military Round. This requires him to win an election (i.e. plebescite) and if he wins, to immediately expend Transport and Consumer Points. In any case it requires him to spend money.

[12.11] Procedure [Contest Placement]

During the Political Contest Placement Phase each Player places a Contest marker into the Area (or Areas) he wishes to control. This is an open declaration to every other Player of his intention. After all the Players have so placed, they all secretly and simultaneously note exactly how much money they will spend on each Area election. This is an irrevocable committment. In some cases two or more Players will have signified their intent to control the same Area, in other cases only one Player will be attempting to control and in some cases a Player may be seeking control over an Area already controlled by another Player.

[12.12] No Player may seek to control an Area which is not contiguous to an area he presently holds in Good Control.

[12.13] A Player must commit a minimum of \$1 for every Contest marker he places.

[12.14] Procedure [Election]

After the military Movement and Combat Phases have been completed the Players hold elections in each Area which has been designated in the contest placement. The results of each election are determined by the Plebiscite Table. If an uncontrolled Area is sought by only one Player it is called an uncontested election. The Player reveals the amount of cash he has committed to that area and the plebiscite routine is executed to determine the outcome. The cash is transferred from his treasury to the General Fund. If two or more Players seek the same Area of if it is already controlled by some Player or if the Control Center hex is occupied by a military unit other steps are necessary to resolve which Player, if any, can conduct a plebiscite.

[12.2] PLEBISCITE ROUTINE

A Player wins a plebiscite by spending money. All things being equal, the more money he spends the greater his chance of winning a plebiscite (placing his Control marker on the Control Center hex.) For purposes of calculating the plebiscite cost, each Area is considered to have a base value of \$1. Each permanent plant site in an area adds \$1 to the basic value of the area. When a Player has won the right to conduct an election for an Area, he uses the Political Control (Plebiscite) Table to determine the outcome of the Plebiscite. This table measures the amount of money spent by the Player compared to the basic value of the Area and a die roll determines the plebiscite result.

[12.21] Uncontested Plebiscites

1. The Player reveals the cash he had secretly allocated for the election. He expends this amount to the General Fund.

2. He subtracts the basic value of the Area from the cash spent. If he has spent an amount equal to or greater than basic value of the Area, he rolls the die and consults the table.

3. Depending upon the outcome he may place a political Control marker and effect the acquisition of the area.

[12.22] Contested Plebiscite

When two or more Players have placed Contest markers in the same area it is a contested plebiscite. All the Players reveal their secret allocations. The competing cash amounts are considered to cancel each other out. Only the Player who has allocated the larger (or largest) amount of cash wins the right conduct plebiscite. Only the amount of money he spent in excess of his nearest competitor may be used to conduct the plebiscite. For example, The NE, MW and SW Players all contest the same area. The NE Player allocates \$6, the MW Player allocates \$4 and the SW Player allocates \$5. The NE Player has allocated the largest amount (by \$1). He wins the right to conduct the plebiscite using \$1. Regardless of whether a Player wins the right to conduct a plebiscite, any money he has allocated for a contest is spent into the General Fund. (The MW and SW Players blew \$5 and \$4 respectively.) If all Players spend the **same** amount of money, **none** attain the right to conduct a plebiscite.

[12.23] Contesting a Controlled Area

A Player may seek to politically "buy" control of an Area that is already controlled by an opponent. When he does so he must publicly announce the amount of money he is allocating to the plebiscite (rather than secretly noting it). The controlling opponent then has the automatic right to allocate any sum he wishes to balance or reduce the contesting Player's amount. The plebiscite then follows the normal routine.

[12.24] Effect of a Control Marker on Basic Value of Area.

A Good Control adds \$5 to the basic value of an area. A Poor Control adds \$2 to the basic value of an area.

[12.25] Political Control [Plebiscite] Table

Roll	Cash Exp	ended in E	xcess of A	rea Value
	0	+1	+3	+7
1	۲	•	Р	G
2	۲	8	G	G
3	8	Р	G	G
4	Р	Р	G	G
5	Р	G	G	G
б	Р	G	G	G

\bullet = Plebiscite fails.

P = Place "poor" Political Control marker.

G = Place "good" Political Control marker.

[12.26] Conducting Plebiscites in Canada

Should Players seek to control Areas in what was once Canada, it will cost them **double** the normal amount of cash to get the same results on the Plebiscite Table, i.e., the Area is doubled in effective value and cash spent in excess must be doubled to attain the same column on the Plebiscite Table.

[12.3] EFFECT OF MILITARY UNITS ON ELECTIONS

If a military unit is occupying a Control Center hex of a contested Area, only the Player owning that military unit may conduct a plebiscite for that Area. However, a Player who has a contest marker in the area may in lieu of a plebiscite, attempt to subvert the military unit(s) in occupation of the Control Center hex. The presence of military units in an Area anyplace but the control center hex has no effect on plebiscites.

[12.4] SUBVERSION

To subvert a military unit the subverting Player totals the face value Combat STrengths of the Enemy units occupying the Control Center hex. This amount in Combat Strength Points is translated to an equal dollar value called the Basic Subversion Value. (A stack of a 3-3 and a 5-5 would equate to \$8.) The subverting Player would then spend his secret plebiscite amount attempting to subvert the military units. See Subversion Table.

[12.41] Restrictions on Subversion:

Subversion may only be practiced after all plebiscites have occurred. Only units in a Control Center hex of a contested Area are exposed to subversion.

[12.42] Effect of Political Control on Subversion

Essentially there is none. If a Player occupys his own Controlled Center hex he is in effect exposing that Area to disassociation since if his units are subverted the Control marker is removed.

[12.43] Multiple Subversion

If two or more Players contest an area whose Control Center is militarily occupied by a third, the contesting Players roll the die to decide who has the right to subvert that Area (highest roller wins the right, a tie prevents the subversion attempt). Only one Player may subvert in a given area in one Game-Turn.

[12.5] SOCIAL STATUS EFFECTS

[12.51] Effect of Social State on Elections

A Player in Social State Zero may not contest for Political Control of uncontrolled Areas or Areas controlled by other Players. A Player in Social State One may contest for political control. In an election for an uncontrolled area a Player in a Social State of two adds one to the die roll on the Plebiscite Table; Social State Three adds two to the die-roll, etc. If a Player is seeking control of an Enemy controlled area the Social States of the Players are compared and the die roll adjusted up or down by the numerical differences in Social States.

[12.52] Effect of Social State on Subversion

There is none.

[12.6] ACTION REQUIRED UPON ASSUMING CONTROL OF AN AREA

Whenever a Player acquires control of an Area (via Plebiscite) there are certain requirements he must meet in order to insure that control. There are two types of Areas which can be brought under control: those that are **uncontrolled** at the moment of the plebiscite; and those that **are** controlled by some other Player from whom the gaining Player is wresting control.

[12.61] Whenever a Player gains control of an Area that was uncontrolled at the moment of the plebiscite, he must immediately expend five Consumer Points (regardless of whether or not the control he has achieved is good or poor). In addition, if the control achieved is good control he must make available a Domestic Transport Point for that new good Area (either by having excess in his Domestic pool or by transfering one from his Reserve into the Domestic pool). He must take these actions immediately. If he fails to provide the Transport Point, the Area control is reduced to poor status; if he fails to provide the five Consumer Points, he loses all control of that Area (regardless of the result of the just completed plebiscite).

[12.62] Whenever a Player gains control of an Area currently **controlled** by some other Player he may have to take action depending upon the status of the former owner's control and the control achieved by the gaining Player (as a result of the plebiscite). In all such cases, he does **not** have to expend Consumer Points as is the case in 12.61.

a. If the Area was previously in good control and the gaining Player has achieved good control through the plebiscite, he assumes control of the Transport Point serving that Area. The previous owner subtracts one Transport Point from his Domestic pool and the new owner adds one to his.

b. If the Area was previously in poor control and the gaining Player has achieved poor control, no Transport Point transfer takes place (and the new

owner will have to go through the upgrading procedure described in 12.7 on some later Game-Turn).

c. If the Area was previously in poor control and the gaining Player has achieved **good** control, he must supply the Domestic Transport Point himself (immediately) or else the Area will immediately degrate do poor control (and he'll have to attempt to upgrade it on some later Game-Turn).

d. If the Area was previously in good control and the gaining Player has achieved poor control through plebiscite, the result is the same as **b** (no transfer of Transport Point; upgrade at some later date).

[12.7] UPGRADING AREAS IN POOR CONTROL

When a Player has an Area in poor control (at the beginning of a Military/Political Round) he may attempt to upgrade it by using the plebiscite procedure. He calculates the Area value normally (although instead of increasing the value due to his **own** poor control, he raises his die-roll number by one). He invests cash and reads on the column that the excess-of-Area-value cash has bought him and rolls the die (raising it by one). If he achieves a "P" or " \bullet " result, the Area remains his but is not upgraded; if he achieves a "G" result, the Area is upgraded providing that he has a Domestic Transport Point available to serve it.

[12.8] EFFECT OF HAVING AN AREA[S] IN POOR CONTROL

An Area in poor control is one that is not fully integrated into the regional economy—it is in effect depressed. An Area in poor control has a greatly diminished economic power that limits its usefulness to a Player. Areas can be in poor control because of a plebiscite result, because of failure to provide Domestic Transport, due to unemployment.

[12.81] Effect of Poor Control Upon Food Production

Calculate the per Area Food Point production by dividing the number of Food Points produced in that Game-Turn by the total number of Areas in the Region. Multiply the number of poor Areas by this per-Area yield. Subtract half this number from total of Food Points produced. This is the adjusted Food Point production for the Game-Turn. Note that Food Point production will also be influenced by poor Areas because only good Areas positively affect the Food Table column upon which the food production is determined. Additionally, poor Areas limit the number of Labor Points that can be assigned to the Farm Sector (see 6.21). Note that poor Areas only affect Food Production when they are in poor status during the Basic Production Phase.

[12.82] Effect of Poor Control on Metal and Fuel Production

Calculate the total Metal (or Fuel) production and pro-rate it to reflect production per Site by dividing it by the number of Sites. Multiply the per-Site production by the number of Sites in poor Areas. Subtract this number from the gross production. Sector employment unaffected.

[12.83] Effect of Poor Control on Industrial Production

Pro-rate the per plant **capacity** by adding up the number of Labor and Mech Points in the Industrial Sector and dividing it by the number of Plants. Multiply the result by the number of Plants in poor Areas. Subtract of this number from the raw capacity: the result is the adjusted capacity for that Secondary Production Phase. Sector employment unaffected.

[12.84] Effect of Poor Areas on Military Mobilization.

Regular military units may not be mobilized or demobilized in a poor Control Center. Only one militia unit per Game-Turn may be mobilized in a poor Area.

[12.85] Effect of Poor Areas on Trade.

Overland Trade Transport Points pay **double** movement costs when traversing poor Area hexes; waterborne Trade Transport pays **triple** movement costs for the **entire trip** if one of the terminal points of the trip are in poor control (otherwise they are unaffected by the poor Area waterways they may traverse). If both of the terminals are in poor control (unlikely) waterborne Trade Transport is not allowed.

[12.86] Taking Control of Poor Areas

When a Player gains initial poor control of an Area, he may not effectively use any of that Areas Sites or Plants until he has upgraded it to good control.

[13.0] MILITARY UNITS

Military units are defined as armored divisions, infantry divisions, militia units and supply units. They all possess the ability to move on the map as represented by their Movement Allowance and all have a value in combat as represented by their Combat Strength. (In certain circumstances Political Control Markers become the object of attack and having an intrinsic Defense Strength they would be treated as a military unit.) Infantry and armored divisions have a flip side which depicts them at a reduced Combat Strength. When displayed with reduced strength side up they are said to be a "cadre". Other than the reduced strength there is no functional difference between a cadre and full strength unit. Militia units have no cadre; the "1-2" side represents one Militia unit and the "2-2" side represents two units.

[13.1] MOVEMENT [of Military Units]

During a Movement Phase, a Player may move all, some or none of the units he has deployed on the map. During each Movement Phase the Players execute Movement in the order determined by Order of Play rule. Only one Player at a time may move his units, while he is moving the other Players may not. Each unit has an ability to move quantified in Movement Points expressed as its Movement Allowance (e.g., the armored division has a Movement Allowance of five Movement Points.) To move, a unit expends Movement Points as it moves hex by hex. This expense varies according to the terrain it moves through, the presence of Enemy units in adjacent hexes and the political status of the hexes it enters. Basically a unit expends one Movement Point to enter a clear terrain hex. Units are moved one by one, displacing hex by hex across the map. As the unit moves the Player must calculate the cost (in Movement Points) of entering each successive hex. The costs of entering successive hexes are cumulative and a unit may not exceed its Movement Allowance in a given Movement Phase.

[13.11] Effect of Terrain on Movement

When entering a hex a unit expends Movement Points according to the costs tabulated on the Terrain Effects Chart (TEC). These are assessed according to the type of terrain in the hex the unit enters and in some cases the type of terrain on the hexside that it crossed to enter the hex. Thus an infantry unit which crossed a mountain hexside and entered a clear terrain hex would expend two Movement Points; One point to cross the mountains and one point to enter the hex. Some hexes and hexsides are labeled "prohibited" which means that a unit may not cross or enter them. [13.12] Intraregional Movement

Military units that are in (or move to) a good Control Center hex in their own Region may move to any other good Control Center hex in their own Region at zero Movement Point cost if they can trace a path of connected traversable hexes (within the Region) that is free of Enemy units or their Zones of Control. Such moves may be combined in any order with normal military movement.

[13.2] STACKING

There is no limit to the number of his units that a Player may place in the same hex. A Player may move through his own units at no penalty. Military units owned by different Players may not end the Movement Phase stacked in the same hex.



Militia Units represent an emergency mobilization of citizens of a particular area. Overall they are less "expensive" to mobilize and maintain but their overall military value is less than infantry or armored divisions. They are also severely restricted in employment.

[13.31] Mobilization of Militia

During a given Mobilization Phase no more than two Militia units may be mobilized in a good Area and only one unit in a poor Area. Note that Militia units have no cadre: the "1-2" side represents one militia unit and the "2-2" side two units.

[13.32] Restrictions on Militia Units

Militia Units may not leave the Area in which they are mobilized. They may not attack a hex in another Area nor does their Zone of Control extend into another Area. No more than five Militia Units may exist in the same Area.

[13.33] Control of Militia Units

Militia Units are a neutral color. Control of existing Militia Units devolves on the Player who controls the Area in which they exist. If no Player controls the Area or if control of an Area changes hands, any Militia in that Area are instantly demobilized.

[13.4] ZONES OF CONTROL

All units control the hex they occupy. In addition, armored and infantry divisions also control the six hexes immediately adjacent to the one they occupy. The hexes a unit controls are called its Zone of Control. No unit may enter a hex occupied by some other Player's unit (exception see 13.43). Whenever a unit enters or leaves a hex controlled by another Player's unit that moving unit must expend one Movement Point to enter or leave in addition to the costs of terrain.

A Zone of Control does not extend across a sea or lake hexside or a mountain hexside.

[13.41] Effect on Combat:

Strictly speaking the presence of a Zone or Zones of Control has no effect on combat except if a defending unit is required to retreat. Units can attack only adjacent Enemy units.

[13.42] Effect on Movement:

If a unit has the necessary Movement Points it may enter and leave Enemy controlled hexes. A unit is not required to stop upon entering a controlled hex per se.

[13.43] Waiving Zone of Control:

A Player may always waive his unit's Zone of Control upon request by another Player. He may also grant an opponent's unit passage through a hex his unit occupies. However, no unit may ever end its movement stacked in the same hex with another Player's unit. If a Player waives Zone of Control or grants passage then no additional Movement Points are assessed for movement through that Zone of Control.

[13.5] DEMOBILIZATION

During the Mobilization Phase a Player may demobilize any Friendly Military units which are stacked on a Friendly Control Center. He simply removes the units from the map and recovers the Labor Point originally assigned to his Economy. He does not recover any other Points which may have been expended in the original Mobilization of the unit. A demobilized Supply unit recovers one Transport Point.

[13.6] DEVASTATED HEXES

The devastated hexes represent metropolitan complexes which were heavily "nuked" in the Holocaust. In addition to outright physical destruction extremely high concentrations of radioactive contamination rendered them uninhabitable for a period of years after the war. Though by the time of the game the contamination had fallen to an acceptable level permitting temporary occupancy, in the minds of all the post-Holocaust citizens these areas are "off-limits."

[13.61] Effect of Devastated Hexes on Trade

Essentially there is no effect. Players may trace trade routes through Devastated Hexes, paying the stated cost in Movement Points.

[13.62] Effect of Devastated Hexes

On Military Movement

For purposes of Military Movement a devastated hex is a type of terrain. Units may transit these hexes.

[13.63] Effect on Combat

There is no effect on Combat.

[13.64] Effect on Supply Path

A Supply Path to a Military unit may not be traced through a Devastated Hex. It may be traced into a Devastated Hex containing a Military Unit.

[13.65] Residual Effect on Military Units

If at the conclusion of a Military/Political Round a unit is found to exist in a Devastated Hex the Owning Player must roll the die. If he rolls a 1, 2 or 3 the unit is reduced to a cadre or eliminated if already in cadre form.

[13.7] MILITARY TRANSPORT AND TRANSFER OF COMMAND

Military units may be shipped to other (Friendly Player) Regions during the Trade Round. They are shipped like any other commodity except that they may be shipped from any good Control Center hex to any other good Control Center hex in the other Player's Region. Each Transport Point used to ship military units can carry at any one time, one armored division, or one supply unit, or two infantry divisions. In the same Game-Turn that they are so shipped, the units may engage in normal military movement and combat. Unless there is a transfer of command, such military units must trace a conventional supply line back to their own Region, for Military maintenance.

[13.71] Transfer of Command

In the Trade Round in which they are shipped (or in any subsequent Trade Round) a Player may turn over to an ally, the command of any of his military units operating outside the original owner's Region. The gaining Player replaces the military unit(s) with an equivalent one of his own color and then becomes responsible for all movement, combat, maintenance, and supply of that unit. He may of course, require the other Player to reimburse him for such expenses as he may incur but that is a matter of agreement between the two parties. [13.72] The gaining Player uses the transferred unit exactly as if it were one of his own (it may not stack with units of the original owner). If losses are taken by the gaining Player's army, the transferred units are considered to be the first to take such losses. Return of command to the original owner is the exact reverse of the original transfer: command may be returned in either Player's Region subject to mutual agreement. The gaining Player may however, unilaterally return command of the unit(s) in any Trade Round (i.e., abandoning it to its own devices). The unit(s) may only be demobilized in the original owner's Region.

[14.0] COMBAT

GENERAL RULE:

During the Combat Phase a Player may use his military units to attack adjacent Enemy units. This is called combat. Each Player, in order, makes as many attacks as he desires in any order he desires subject to the restrictions below.

PROCEDURE:

To attack the Player compares the Combat Strength of his attacking unit (or units) to the Combat Strength of the defending unit(s). After making adjustments for terrain he states the Attack Superiority of his units and rolls the die locating a Combat Result on the Combat Result Table. He applies this result immediately. In some cases his surviving Attacking units will be permitted to advance into and occupy the hex vacated by the defending units.

[14.1] RESTRICTIONS ON COMBAT

[14.11] No unit may attack more than once per Game-Turn.

[14.12] No unit or stack of units may be attacked more than once by the same Player in the same Game-Turn.

[14.13] No attack may be made at less than +1 Attack Superiority.

[14.14] A unit may attack only adjacent units.

[14.2] MULTIPLE UNIT/HEX ATTACKS

Units stacked in the same hex must be attacked together in one attack. They may be attacked by any number of units which are in any number of the surrounding adjacent hexes. Which units attack is at the sole discretion of the Attacking Player.

[14.21] A Player may use some, none, or all of his units to attack. He is never required to attack. He may attack some adjacent units and not others as he sees fit (subject to 14.1). He may use some units stacked in the same hex to attack one adjacent hex and use the others to attack another adjacent hex(es) or not at all. However no single unit may split its strength to attack units in d'fferent hexes.

[14.22] How to Calculate an Attack Superiority

Having stated which of his units are attacking a given hex (and the defending units therein), the Attacking Player totals the Combat Strengths of all his attacking units. He subtracts from this total one point for every unit which is attacking from a river hex, or across a mountain hexside. The new total is the net Attack Strength. He then totals the Combat Strengths of all the units in the hex under attack. If this hex under attack is a rough terrain hex or a river hex he adds one point per defending unit. This total is the net Defense Strength. He subtracts the net Defense Strength. He subtracts the net Defense Strength. This must be at least +1 or no attack is allowed.

[14.3] UNITS WHICH MAY NOT ATTACK

Supply units have a parenthetical Combat Strength of one. They may not attack. They may however be stacked with infantry, armored or militia units which do attack. A Political Control Marker has a Combat Strength (for defense only) of one. If the hex it is in is attacked it must be treated as a unit.

[14.4] RESULTS OF COMBAT

[14.41] No Effect Result:

In this case the attack fails to dislodge or destroy the defending units. Nothing happens. Note however that that attacking units have made an attack and may not be used in some other attack.

[14.42] Defender Retreat Result

The Defending Player must move his units out of the attacked hex and into some other adjacent hex. He can choose which hex or hexes to move to but he may not move into a hex which is in the Zone of Control of another Player's unit unless that hex is already occupied by one of his units. (Nor may he move into a prohibited hex or hexside). This forced movement does not cost Movement Points and unit could retreat with a move exceeding its Movement Allowance. If the defending units have no hex they can retreat to, they are destroyed instead.

[14.43] Exchange Result

The defending units are destroyed. The Attacker must eliminate Strength Points from his attacking units at least equivalent to the printed total of the Defending unit(s). He may do this by eliminating Attacking units wholesale or by cadreing full strength units. For example if he flips a full strength armored division over it reduces in strength from five to two effectively eliminating three Strength Points.

[14.44] Defender Eliminated Result

All defending units in the hex are eliminated (removed from play). Note that when military units are eliminated (for whatever reason) the Labor Points in them are **not** lost: they are returned to the economy in the next Mobilization Phase.

[14.45] Advance After Combat

On a result of Defender Retreat, Exchange or Defender Eliminated, the defended hex is vacated. The Attacking Player may then immediately move any number of his surviving attacking units into that hex, (ignoring as he does so, Zones of Control and Terrain costs).

[14.46] Effect on Political Control Marker

These are affected by all results. In addition they may not retreat but are destroyed by a retreat result. Thus a Player may eliminate another Player's control of an area by using his military units to attack the Control Center hex. Only a "no effect" allows a Control marker to survive.

[15.0] POLITICAL ASSOCIATION

GENERAL RULE:

A Player may lose control of an area as a result of another Player's military or political actions, or of the Player's "inept" handling of his economy. In the first case (military/political act) there may be a transfer of Control of an area. If an area is found to be isolated from a Player's region by intervening uncontrolled or Enemy controlled areas it must disassociate.

[15.1] DISASSOCIATION AS A RESULT OF ENEMY ACTION

If a Player has lost control of an Area he must reduce his total Labor Supply by five Labor Points.

Within Limits he may eliminate this Labor from anyplace in his economy. If the lost Area has Sites or Plants located within it he must calculate the effect of the loss within the particular sectors.

[15.11] If, for example, a Player lost an Area which contained one of three Metal Sites that he owned and he had some seven labor points assigned to the Metal Sector, he would have to consider at least one Labor Point in Metal reduced as part of his total loss of five.

[15.12] If the area lost was a "Good" area he may only lose one Unemployed Labor Point; if it was a "Poor" area he may lose two Unemployed Points.

[15.13] Association as a Result of Action

If a Player's area is disassociated, he will reduce his Labor Points by five. The gaining Player need not consider from where the losing Player deducted his five points. As far as the gaining Player is concerned he has gained a new area. And with this gain comes five Labor Points which he may immediately distribute into his economy as he sees fit.

[15.2] DISASSOCIATION AS A RESULT OF ECONOMIC HARDSHIP

Having adjusted his economy for military/political losses and gains, each Player must now determine if he loses any areas or degrades any areas because of the existing number of Unemployed and Starving Labor Points. For this he executes two separate Routines which determine how many, if any, "Good" areas he must degrade to "Poor" and then how many "Poor" areas he must disassociate (removing the control marker and reducing his Labor Points).

[15.21] Effect of Unemployment

If a Player has any Unemployed Labor Points he must execute the Unemployment Routine, as follows:

1. Cross indexing the number of unemployed Labor Points with the total number of good Areas in the Player's Region indicates which column on the Unemployment Table will be used.

2. Use the Unemployment Table to determine how many areas the Player must degrade from "Good" to "Poor".

3. If he must degrade, the Player chooses which of his areas to degrade.

[15.22] Unemployment Table (see Chart Sheet) [15.23] Effect of Starvation

If a Player has any starving Labor Points he must execute the Starving Routine as follows:

 Divide the number of Starving Labor Points by the number of poor Areas to derive the Starvation Ratio. Note if a Player has zero poor Areas the ratio is automatically the maximum shown on the Table.
 Use the Starvation Table to determine how many, if any, Areas the Player must disassociate.
 If he must disassociate areas, he chooses which to disassociate. He must disassociate "Poor" areas before "Good" ones.

[15.24] Starvation Table (see Chart Sheet)

[15.25] Effect of Disassociation

The Player must decontrol an area of his choosing, reducing his total labor by five points. He may take all five from among Unemployed and/or Starving Points as he sees fit. If for some reason he decontrols an Area containing sites or plants he must check this decontrol against his employment in the sectors affected.

[16.0] STOCKPILING

GENERAL RULE:

During the Stockpiling/Labor Allocation Phase the Player may, by payment of cash into the General Fund, convert undisposed Food, Metal and Fuel Points into stockpiled Points. One reason for stockpiling is to insure that in the following Game-Turn Production is not depressed by existing undisposed (surplus) points. In a way this process duplicates government price support or subsidy to commodity production. A Player is never required to stockpile but failure to stockpile can cause less tax revenue on later Game-Turns (because of a lessened tax base) and can cause Unemployment on later Game-Turns (because actual production would fail below Labor allocated to the sector affected by the undisposed surplus.)

[16.1] STOCKPILING COST CHART

POINTS BEING STOCKPILED

Number	Food	Metal	Fuel
1	\$1	\$3	\$2
2	\$2	\$5	\$4
3	\$3	\$6	\$5
4	\$4	\$7	\$6
5	\$5	\$8	\$7
6+	\$1 per	additional	1 point

[17.0] LABOR ALLOCATION

GENERAL RULE:

After Stockpiling, the Player may transfer Labor Points between his Economic Sectors. Note this is the only time in the Game-Turn that a Player may shift his labor "voluntarily". Labor Points in the Starving Pool may not be shifted. Labor Points in the Unemployment Pool may be shifted to any Economic Sector as the Player sees fit upon expenditure of one Consumer Point for each Labor Point removed from Unemployment. Labor Points in the Farm, Metal, Fuel, Industry and Transport/ Trade Sectors may only be shifted upon expenditure of \$1 per point transferred.

[18.0] CASH INVESTMENT IN INDUSTRY

GENERAL RULE:

Immediately prior to Taxation a Player may expend cash to increase the next Game-Turn's Industrial Capacity. He is never required to do this but it is a wise precaution against a possible adverse tax result. This cash investment merely adds to his Industrial Capacity, if he has or will have the Labor, Mech Points and Plant to realize the capacity through utilization.

[18.1] INVESTMENT CHART

Cash Spent	Capacity Increase
\$1	1
\$3	2
\$6	3
\$10	4
\$15	5

Add \$5 for each additional 1 pt capacity increase after the fifth.

[19.0] TAXATION

GENERAL RULE:

During the Taxation Phase each Player will calculate his Tax Base openly and then all will secretly and simultaneously note the Tax rate they wish to apply to the Tax Base. Each Player may then, in order, purchase Corruption Chits and note secretly if he is giving these Corruption Chits to any other Player. All the Players will then reveal their respective Tax Rates and any Corruption Chit Allocations. Each Player then will execute the Tax Routine and collect the resulting Tax Revenues from the General Fund.

[19.1] CALCULATING THE TAX BASE [FORM 1040]

A Player's Tax Base is defined as follows for each Game-Turn:

1. The Number of Food Points Produced, plus

2. The number of Metal Points Produced, plus

3. the number of Fuel Points Produced, plus

4. The number of Industrial Points Created/ Expended plus

5. The number of Consumer Points consumed.

Note that in order to calculate a Tax Base a Player would have to record the information needed as the Game-Turn progressed. This record keeping is known euphemistically as filling out Form 1040. Players need a lined piece of paper to duplicate the form we reproduce here.

FORM 1040

Line 1: Number of Food Points Produced

- Line 2: Number of Metal Points Produced
- Line 3: Number of Fuel Points Produced
- Line 4: Number of Industrial Pts. Utilized This number should currently be registered by the utilization markers on the Industrial Sector
- Line 5: Number of Consumer Points expended in Consumption Round
- Line 6: Number of Consumer Points
- expended during Labor Allocation____ リッピックチェン
- Total lines 1-6: TAX BASE

[19.2] CORRUPTION CHITS

[19.21] Purchase of Corruption Chits

A Player may buy any number of Corruption Chits (up to five) each Game-Turn at the following rates. He just pays the cash into the General Fund and sets the chits aside for himself.

To buy	Spend
1 chit	\$1
2 chits	\$3
3 chits	\$6
4 chits	\$10
5 chits	\$15

[19.22] Use of Corruption Chits

A Player uses Corruption Chits to reduce another Player's Taxation or to neutralize another's use of the chits against him. To use them against another Player he notes that he is doing so (secretly) and then when the Player Taxes, the chits are expended. Depending upon Corruption Table this action may cause the other Player to lose taxes. If some other Player corrupts him he may expend his own chits (from an unallocated stock) to neutralize on a one for one basis the corrupting chits.

[19.23] Corruption Table (see Chart Sheet)

[19.3] USING THE TAX TABLES

Knowing his Tax Base, each Player simply multiplies the Tax Base by the Tax Rate he had secretly plotted. A Player must tax at either 10%, 20%, 30%, 40%, or 50%, whichever of these five possible rates he has secretly noted. He calculates the tax to the nearest \$1 and subtracts from this any percentage for corruption. Example: assume a Player had a Tax Base of 83 and his tax rate was 30%. His Tax Revenue before corruption would be (83 x 30% equals 24.9 or 25) \$25. His opponents had corrupted him to the tune of 10% so his final tax revenue would be (25 less 2.5 = 22.5 or 23) \$23. Now the Player must determine by using the Tax Table, exactly what effect the Tax Rate he used has on his Industrial Capacity. This is a probabilistic table which says, in effect, that the greater the tax rate the greater chance of reducing your Industrial Capacity. The Player simply rolls two dice and crossreferences the result with his announced Tax Rate. The result will either be 'No Effect' or some percentage gain or loss. This percentage gain or loss is immediately figured into Schedule D.

[19.4] SCHEDULE D

Schedule D is the form used to calculate the Player's Industrial Capacity on the next Game-Turn. It consists of four lines as follows:

Line 1: Capacity purchased by Cash Investment

Line 2: Capacity Lost because of Under-utilization

Line 3: Capacity Gained due to 100% Utilization

Line 4: Capacity Gained or Lost because of Taxation

Total of lines 1-4: change capacity

[19.41 Cash Investment Purchase

Line one is derived from application of Rule 18.0.

[19.42] Under-utilization/100% Utilization

The Player looks at his Industrial Sector. He will either have produced/consumed (utilized) Industrial Points equal to his capacity (100% utilization) or he will have used less than his capacity. If he had 100% utilization he puts a +1 in line three. If he under-utilized he will subtract 50% of the difference between his utilization and his capacity as a negative number on Line Two.

[19.43] Tax Gain or Loss

The Player will multiply the percentage gain or loss (determined by the Tax Table) times his current Industrial Capacity, and note the plus or minus number on line four.

[19.44] The New Industrial Capacity

The Player totals Lines 1 through 4 of Schedule D. This total represents his gain or loss in Industrial Capacity. He will then shift the Industrial Capacity Markers on his Industrial Sector to reflect this gain or loss, thereby determining the new Capacity which shall prevail throughout the following Game-Turn. (Note however that this new capacity could never be made to exceed the theoretical upper limit of capacity represented by some multiple of the number of Plants the Player owns.) He then must reduce his industrial Point Markers to zero to prepare for the next Game-Turn.

[20.0] INDUSTRIAL LABOR EQUILIZATION

GENERAL RULE:

Immediately after the completion of Schedule D and the computation of the new Industrial Capacity a Player may allocate Labor to Industry to realize his new Capacity or he must reduce his Labor in Industry to meet a lowered new Capacity. He may only transfer Labor between Unemployed and Industry and vice versa. At the completion of this phase his Labor and Mech Point Allocation in Industry must equal his current new Capacity or he must further reduce the Capacity to meet the allocation. Unemployed Labor Points placed in industry cause the expenditure of one Consumer Point per Labor Point.

[21.0] DEPRECIATION/ SHRINKAGE

GENERAL RULE:

During the Depreciation/Shrinkage Phase of the Game-Turn a Player's Mech Points and Transport Points are exposed to depreciation (loss) while existing Food Points, Metal Points, Fuel Points and Consumer Points are exposed to shrinkage (loss).

PROCEDURE:

The Depreciation Routine is as follows.

1. Total the number of working Mech Points in all economic sectors. Use the Depreciation Table to determine how many (if any) points must be lost. If a point or points must be lost the Player decides which sector (or sectors) it will be lost from and reduces the track accordingly.

2. Now determine the total number of excess Mech Points in all sectors and using the table reduce accordingly.

3. Total the Transport Points in Domestic use and in reserve. Use the Depreciation Table to reduce this number.

The Shrinkage Routine is similar to the Depreciation Routine but uses the Shrinkage Table instead.

1. Total the undisposed Food Points and stockpiled Food Points and shrink.

2. Total the undisposed Metal Points and stockpiled Metal Points and shrink.

3. Total the undisposed Fuel Points and stockpiled Fuel Points and shrink.

4. Shrink any undisposed Consumer Points in the Consumer Point Pool.

[22.0] MONEY

GENERAL RULE:

Money is provided to the Player in the form of denominations of dollars. Each Player starts the game with a set amount of money (see 5.0). The rest of the cash is placed in the General Fund. Players may trade cash amongst themselves at any time and for any purpose. Cash is not a commodity that requires transportation under the terms of Trade (10.0). Players will also expend cash during Secondary Production, Military Maintenance, Industrial Investment, and Corruption, etc. This requires them to take the money spent out of their own total and toss it back into the General Fund. During Taxation the Players will extract cash (Tax Revenues) from the General Fund to replenish their treasury. There is no limit to the size of the General Fund. If by some chance it runs out of money because the Players have taxed it dry simply 'print' extra money on scratch paper.

[23.0] MECHANIZATION POINTS

GENERAL RULE:

These are "tools" (in the largest sense of the word) produced by a Player in his Secondary Production Phase and immediately allocated to some Economic sector in his own economy or reserved to trade to some other Player. Once allocated they may not be shifted between sectors. They serve to increase production of whatever economic sector they are allocated to, but only if they are properly served by Labor. I.e., a Player can put any amount of Mech Points into his Farm sector but he will only be allowed to consider a certain number of these points as "working" points, according to the number of Labor Points he has in Farms and the State of that sector.

[23.1] WORKING MECH POINTS

A working Mech Point is one that a Player teams with a Labor Point to produce an Economic Point. Example: A Player has three Labor Points and four Mech Points allocated to his Metal Sector. He owns two Metal Sites and the State of his Metal Sector is one. He has no undisposed Metal Points in his output track. The rules say that he may produce five Metal Points in that sector. All three Labor Points and two of the four Mech Points (one for each mine) work to produce these five Metal Points. The other two Mech Points are considered non-working or excess in this case. If the Player had had an undisposed Metal Point in his output track he would have only been able to produce four Metal Points and only one Mech Point could have been considered "working." On the other hand if his Metal Sector State was two instead of one he could produce seven Metal Points considering all four Mech Points as "working" (two per mine).

[23.2] SUMMARY OF

MECH AND LABOR LIMITS

Farm Sector State One:

Five Labor Points per good Area (three per poor). One working Mech Point per Labor Point.

Farm Sector State Two (or higher):

Five Labor Points per good Area (three per poor). A per-Labor-Point number of working Mech Points equal to the Sector State rating.

Metal, Fuel, or Industrial Sector State One: Three Labor Points per Site/Plant.

One working Mech Point per Site.

Metal, Fuel, or Industrial Sector State Two (or higher):

Three Labor Points per Site/Plant.

A per-Site number of working Mech Points equal to the Sector State rating.

Labor Minimum Note: There must always be at least one Labor Point per Site/Plant in order to consider that Site/Plant in operation. In the Farm Sector, the Player must have at least one Labor Point per good Area to count that good Area on the Food Table.

[24.0] SOCIAL STATUS

GENERAL RULE:

The Social Status of a Player's Region is a numerical measure of its well-being, standard of living, quality of life, etc. It is determined once per Game-Turn primarily on the basis of the number of Consumer Points expended versus Labor Points employed (see 11.3). Once determined this Social Status persists until the following Game-Turn when it is determined anew. Each Economic Sector has a Sector State which is determined at the same time that the Regional Social State is determined. The Regional Social State must equal the lowest Sector State of any sector. And a given Sector State may not exceed the Regional Social State by more than one. Every Player starts with a Regional Social State of one. Thereafter he should seek to progressively increase each of his Economic Sector States to two thereby raising his Regional State to two and eventually to three, etc. A high Regional Social State benefits a Player when he attempts to expand his territory via Plebiscite. Most often the Player who can achieve and maintain progressively higher Social States will win the game, if for no other reason than his region will produce more of everything, consume more of everything, generate a larger tax base, more easily support a military effort, etc.



[25.0] VICTORY CONDITIONS (How the Game is Won)

GENERAL RULE:

The Standard Game of After the Holocaust is ten Game-Turns in duration. At the end of the tenth Game-Turn, the Players use the Victory Point Formula to calculate how well they've done. The Player with the greatest number of Victory Points is the first place winner and whether or not the other Players can be considered ranking winners is determined by their relationship to the first place winner. [25.1] THE VICTORY POINT FORMULA

Each Player determines what his Regional Social State was in the ninth and tenth Game-Turn. In whichever of those Game-Turns it was lower, he uses that lower number to multiply the number of Areas under his control at the end of the game (this lower number is called his Effective Social State). Poor Areas count as only half an Area each for this purpose. The resultant number is called the Raw Victory Point Total. He now totals the number of military units (including militia) and unemployed Labor Points with which he ended the game and multiplies this by his Effective Social State. He subtracts that from his Raw Victory Point Total. Then he multiplies every starving Labor Point with which he ended the game by triple his effective Social State and subtracts this number from his Raw Victory Point total. This final number is his Adjusted Victory Point Score.

[25.2] RANKING THE WINNERS AND LOSERS

In a four-Player game, there can be as many as three winners or no winner at all. A Player who finishes the game with an Effective Social State of one (or zero) is automatically a loser-his relative score only indicates how big a loser he is in relation to any other losers. A Player must have an Effective Social State of two or higher in order to have a chance to be classed as a winner. Rank the Players according to Adjusted Victory Point Score. The Player with the highest score is the winner (assuming his Effective Social State is two or higher). The next ranking Player is the second place winner (assuming his Effective Social State is two or higher and his adjusted Victory Point Score is at least two-thirds that of the first place winner). The next ranking Player is the third place winner (if he has an Effective Social State of two or higher and his Adjusted Victory Point score is at least two-thirds that of the second place winner). Note that if the second-ranked Player is a loser because of his score being less than two-thirds, there is no third place winner regardless of his score. Follow the same rules in a three-Player game with the modification that the third-place Player is always considered to be the loser.

[25.3] TIE-BREAKING AND HANDICAPPING

Generally speaking, the natural order of the Regions (NE, MW, SW, FW) expresses the chance that (assuming Players of equal skill and luck) the Region has of winning the game. If by chance, two Players should be tied on points and equal in Effective Social State, the Region with the lesser chance is declared the better. Players should be aware that the Farwest Player is in a somewhat inferior position. A good showing in the standings by the Farwest indicates that the Player has played well. For game balance purposes, the Players may agree to add 15 bonus points to the Farwest Adjusted Victory Point Score to give that Region a fair chance at a first place win.

THE OPTIONAL RULES

After the Holocaust is an extremely complex game (even though it is a very simple rendering of an economic system). Nevertheless, Players will always demand even more detail and variation, regardless of the complexity of the Standard Game. Except where otherwise noted, none of the provisions of the Optional Rules eliminate any of the requirements of the Standard Rules. This Optional Rules Section may be used in whole, or in part, as the Players see fit.

[26.0] PRE-DEPLOYMENT The Recovery Game

GENERAL RULE:

To modify the deployments given in 5.0 the Players may simulate the first fifteen years of recovery by playing the following pre-deployment routine. There are three Recovery Game-Turns, each with the following Sequence of Play.

1. Plebiscite

2. Taxation

The entire Recovery Game is as follows.

1. Initial Deployment

2. First Recovery Game-Turn

3. Second Recovery Game-Turn

4. Third Recovery Game-Turn

5. Preliminary Game-Turn

[26.1] INITIAL DEPLOYMENT

Each Player places a good Control marker on his regional capitol, allocates five Labor Points to farming, and draws \$50 from the general fund.

[26.2] PLEBISCITE

The pre-deployment plebiscite follows exactly the same routine as normal plebiscite. The Player expends cash to win an Area, etc. However each Player is limited with regard to which areas he may attempt to control. On the first Recovery Game-Turn he may only acquire Areas adjacent to his capital Area. (Nothing new here.) On the second turn he must acquire good control of at least all areas adjacent to his capital Area. If he does not, any area he may have acquired which is not adjacent to his capital Area is automatically disassociated. On the third turn he may only acquire Areas which are adjacent to areas which are adjacent to his capital Area. As he acquires Areas he may allocate the Labor Points acquired to his economic sectors. Ignore the requirement to allocate Transport and Consumer Points to acquired good areas.

[26.3] TAXATION

On each of the pre-deployment turns a Player's taxbase is defined as the sum of the basic value of each good area. Thus a Player who owned four "good" Areas with no plants, one Area with two Plants and one Area with five plants would have a taxbase of \$13. His tax revenue is automatically 50% of his taxbase.

[26.4] PRELIMINARY GAME-TURN

After the third Recovery Game-Turn the Players should be in possession of a Region similar in extent to the one given them in the normal game. They will have some money in the treasury and their sectors will be staffed with labor. They now will execute a Preliminary Game-Turn (producing and consuming food, metal, fuel, etc.) with the following special rules in effect.

[26.41] The Social State and Sector States of all Players are defined as "one" for the duration of the Preliminary Furn regardless of production and consumption of Consumer Points. (In fact a Player should not expend any Consumer Points on Labor this turn.)

[26.42] The Food Production norm is defined as 150% rather than the usual 100% of labor and mech.

[26.43] Industrial Capacity is the number of Labor Points in Industry.

[26.44] Each Player gets one free domestic Transport Point for each good Area and one free Transport Point in Reserve. On this Preliminary Turn (only) he may ignore Fuel requirements for Trade and Domestic Transport. He gets one free Mech Point for each good area.

[26.45] Players may not expand politically though they may attempt to upgrade poor Areas.

[26.46] Unemployed and Starving Labor have no effect on this Preliminary Turn. That is, there is no Disassociation Phase (they'll be waiting to drag down the Region on the furst normal turn, however.)

[26.47] At the conclusion of the Preliminary Turn the Player's Social and Sector States are defined as one. The Players are now ready to begin the first Standard Game-Turn.

[27.0] FEDERAL RESERVE BANK

GENERAL RULE:

Any active Player or a fifth non-Player may manage the Federal Reserve Bank. There is considerable paper work involved and it is suggested that one Player handle the job for the duration of the game. Normally the Farwest Player is in the best position from a workload standpoint to operate the "Fed." Regardless of who operates the Fed it is owned by no one, but stands as a separate, autonomous "Player" in the game.

CASES:

[27.1] LOANS

During the Taxation Phase a Player may borrow money from the Fed. For purposes of making loans the Fed has unlimited access to the General Fund. A Loan is executed by manager of the Fed reaching into the General Fund and handing money to the borrowing Player.

[27.11] Unsecured Loans. A Player may obtain, and have outstanding, one unsecured loan. He may borrow up to 50% of his most recent Tax Revenue. In other words if a Player received \$38 in tax revenue on Game-Turn Four he could borrow up to \$19 from the Fed on Game-Turn Four.

[27.12] Secured Loans. If a Player has an outstanding loan(s) he may obtain additional loans from the Fed by putting one or more of his Areas up as collateral. The Collateral Value of an Area is equal to the number of Plants, Metal and Fuel sites extant in the Area. In other words if a Player collateralized an area containing two Plants and one Metal site he could obtain \$3 from the Fed.

[27.13] Only good Areas may be used as collateral. If a Player loses a collateralized Area to another or because of disassociation, the principal on the secured loan becomes due on the following Taxation Phase, whereupon he must pay off the loan or put up some other Area as security.

[27.14] Repayment of Principal. A Player may remit to the Fed some or all of the principal on a loan during the Taxation Phase. He is never required to repay principal (except 27.2).

[27.15] Interest. Every Taxation Phase a Player must pay the Fed 20% of the remaining principal on any loans outstanding at the beginning of the Phase. If the Player fails to make this interest Payment by the end of the Taxation Phase he is declared in defalut. A Player must not obtain additional Loans from Fed unless his current interest payment has been made.

[27.16] Interest due must be paid in its entirety. If a Player has three loans outstanding with Interest due

of say \$11 for all three combined he must pay the entire \$11. He may not pay the interest on two of the loans and default on the third. A default on one loan is a default on all.

[27.17] Interest is calculated by rounding **up** to the nearest whole dollar.

[27.18] Note that a Player may not borrow money from the Fed to pay off current interest. However, he has until the **end** of the Taxation Phase to pay interest so that he may use current tax revenues to pay interest that came due at the beginning of the Phase.

[27.2] DEFAULT

When a Player defaults, any Areas he has collateralized become the property of the Fed. The Fed must offer these Areas to all of the non-defaulting Players in an immediate auction. The base price must start at the Collateral Value of the Areas. The highest bidder assumes ownership of the Area. Money received in this sale is used to offset the amount in default. Any excess accrues to the Fed, not the defaulting Player. If the Fed fails to dispose of the collateral, it assumes receivership over the Areas in question.

[27.21] When a Player defaults he immediately owes the Fed the total amount in loan principal and current interest. This total is his default. Interest accrues on this amount at the rate of 25% per Game-Turn. Until he repays this amount (plus accrued interest) he is in default. While in default he may not obtain loans. Note that a Player's default may be cured in whole or in part by the forced auction of his collateralized Areas.

[27.22] At the conclusion of the game, the amount a Player is in default is subtracted from that Player's Victory Point total.

[27.3] RECEIVERSHIP

If no Player buys a collateral Area, the Fed operates the Area during the following Game-Turn(s). The area will be stricken from the economy of the defaulting Player and transferred to the Fed, with Five Labor Points assumed to be in Farming and one Labor Point for each Plant, Metal and Fuel site in the Area. The Social and Sector States are defined as "one" upon takeover. The Fed produces food, fuel, metal, etc., and operates the plants during the flow of the ensuing Game-Turn. Any excess food above mandatory consumption may be traded for cash. Metal, fuel, and industrial utilization may be traded for cash (highest bidder in all cases).

[27.31] An area in receivership is a special case. Normal considerations of starving, unemployment, etc., are ignored. The area simply raises food and eats it—and produces metal, fuel, etc., for sale.

[27.32] A Player in default may not trade with the Fed.

[27.33] Each Taxation Phase the Fed must offer all Areas in receivership for auction at a minimum price of their collateral values.

[27.34] If a Player purchases an Area through auction he receives it in good condition with five Labor Points in Farming and one Labor Point for each Metal, Fuel Site and Plant in the Area.

[27.4] THE DOLLAR IS MIGHTIER THAN THE SWORD

[27.41] When an Area enters receivership all military units belonging to any Player must leave the Area by the end of the following Military Movement Phase. Militia is automatically demobilized. If they do not the Player is said to be at war with the Fed and the Player operating the Fed is given the right to draw on the General Fund to buy unlimited corruption chits to use against the offending Player.

[27.42] Invasion of an Area in receivership is war against the Fed. The moral to all this is don't go to war against the Fed. If the warring Player and the operator of the Fed are the same person some other Player may act as the Fed.

[27.5] MANAGEMENT OF THE FED

The Fed manager must maintain records of all loans and payments of principal and interest thereon. At the conclusion of the game he will prepare a balance sheet listing the amount of interest paid to the Fed throughout the game (even though the actual bills were tossed into the General Fund when it was paid), plus any money earned by the Fed as receiver, less any loan principal amounts still in default, less any money spent on Corruption chits. The balance is the Fed's Victory Point total. Thus it is conceivable that the Fed could win the game.

[28.0] TECHNOLOGICAL IMPROVEMENT

GENERAL RULE

One of the principal means by which limited resources are enhanced is through technological change. In the game, much of the "new" technology introduced would represent re-discovery of preholocaust technology. It is for this reason that the research and development (R&D) programs and their resultant payoff would be generally shorter in term than with present-day R&D.

[28.1] INVESTING IN R&D

Players invest in R&D during the Industrial Investment Phase of the Finance Round. This is a cash investment, by Sector. Once an R&D program is started in a Sector, it must be supported every Game-Turn until it pays off or is terminated (either voluntarily or as a result of the R&D Table). When an R&D program is successfully concluded, it results in the increase in the efficiency at production of a sector (this increase is permanent) starting in the ensuing Game-Turn.

[28.2] R&D TABLE

Dice Roll:

2	3	4	5	6	7	8	9	10	11	12
F	F	F	F	С	С	С	10	%10	%20	%30%
					R	esult	:			

How to Use the R&D Table:

F = Program fails; immediately terminated without payoff.

- C = Program continues.
- % = Program succeeds. In the following Production Phases the productivity of the Sites, or (Farm) Areas, or Plants is increased by the indicated percentage. This percentage is always measured against the base productivity of the Sector (i.e., what it would be without any R&D augmentation).

The investing Player rolls the dice for each program each Industrial Investment Phase it has been in **continuous** operation (if a Player fails to invest, the program is automatically terminated). In order to roll the dice the Player must have made the minimum annual investment (that Game-Turn) in the program.

[28.3] MINIMUM ANNUAL INVESTMENTS:

Fuel (or Metal): \$1 per five Sites and \$1 per five Mech Points in the Sector (rounding up) Plants: \$1 per three Plants and \$1 per three Mech

Points in the Sector (rounding up)

Farm Areas: \$1 per two Areas and \$1 per two Mech Points in the Sector.

Transport: \$2 per five Transport Points (rounding up)

Military: \$1 per regular division.

Players may increase their annual investment by doubling it, tripling it, etc. Increasing the

investment increases the chance of success by adding to the dice-roll.

[28.4] ADDITIONS TO THE R&D DICE ROLL:

Add one to the dice-roll for every year the program has been in operation beyond the first year. Add one to the dice roll for every additional multiple added to the minimum annual investment.

[28.5] BENEFITS

Successful completion of an R&D program increases the yield of the appropriate Sector (in the case of Sites, Plants, and Areas) or increases the efficiency of the unit in the case of Transport Points by adding Movement Points to those acquired by expending a Fuel Point in trade use and increasing the number of Domestic Transport Points that may be operated by one Fuel Point by the indicated percentage. Military units (regular infantry or armor only) have their Combat Strengths and Movement Allowances increased by "1" for every 10% increase in efficiency. Military units may never be more than doubled by virtue of technology. When mobilizing and maintaining military units, add \$1 to the cost for each point by which their Strengths and Allowances are technologically augmented.

[28.6] ADDITIONAL R&D

Except for military units, there is no theoretical ceiling on technological improvement. Once an R&D program is completed in a Sector, the Player may initiate a new one in the same Sector. He may not have programs running simultaneously in the same Sector. Remember, however, that the percentage increase is always applied against the base productivity or efficiency of a Sector—it is **not** compounded. When a new R&D program is run in a Sector that is already technologically improved, the total annual minimum investment carries a surcharge equal to the existing improvement percentage.

[28.7] BUYING R&D

Players may sell technological advances to other Players for whatever they can get. The purchasing Player must pay an **implementation** cost equal to double the minimum investment cost (to the General Fund). If a Player takes control of a technologically advanced Area, the Area lapses back to that of the seizing Player. If a technologically advanced Player seizes an Area with a lower technology, he must immediately expend double minimum investment to raise the technology of any appropriate Sites or Plants to match his own, otherwise the Area will remain in poor status until he does.

[29.0] GAME VERSIONS FOR A NUMBER OF PLAYERS OTHER THAN THE STANDARD FOUR

[29.1] SOLITAIRE PLAY EXERCISE

Because of the complexity of play, no automatic solitaire play system has suggested itself to the designer. A Player may wish, however, to operate some or all of the economies independently, "changing hats" as he goes along playing against himself as he assumes the roles and interests of the various Regions in turn. He may also simply start as one Region and track his growth as he spreads throughout the country, managing it as a single system.

[29.2] TWO PLAYER VERSIONS

Because of the dynamics of trade, it is difficult to have a truly representative two-Player game. Players may wish to experiment with the following approaches: [29.21] COALITION SYSTEM: One Player operates the Midwest and the Farwest; the other operates the Northeast and Southwest. All economies must be operated independently. Normal procedures for order of play are used. Victory Points are totaled. This version is likely to produce overt military action early in the game.

[29.2] Dummy Third Player System: One Player operates the Southwest and the Farwest economies as if they were "allies" (i.e., they are still independent economies, but he may make all leagl trade decisions between them with complete discretion). The other Player operates the Northeast economy. Jointly, the two Players operate the Midwest economy. The Midwest is always last in any sequence. All trade with the Midwest is on a bid basis: the trade being made to the Player that offers the best deal. In the internal allocations of the Midwest the Players must both agree to a given course of action. Deadlocks will be determined by the roll of a single die: even die-rolls going in favor of the Northeast; odds in favor of the Southwest/ Farwest. The Midwest may build military units, but they may only be used defensively (i.e., they may not leave the Region). If either Player invades the Midwest, the other Player assumes sole control of the Region for the remainder of the game.

[29.3] THREE PLAYER VERSIONS

[29.31] Farwest Exclusion. A very viable three-Player game can be conducted simply by dropping out of the Farwest and restricting play to the territory east of the demarcation line printed on the map. Standard rules apply.

[29.32] Southwest/Farwest Alliance. The Southwest and the Farwest are operated by one of the Players as independent but completely cooperative economies. The other two Regions are operated in the normal manner. Normal order of play is used.

[29.4] VARYING THE STANDARD FOUR PLAYER GAME

One of the best ways to vary the game is by altering the composition of the starting Regions simply by adding and subtracting Areas and changing the position of the Region's capital.

[29.5] MORE THAN FOUR PLAYERS

After the Holocaust is certainly complex enough to warrant team play for each of the Regions. Members of the team should be assigned a Sector or Sectors within the economy and one Player should be elected Region President (or Dictator, whichever is preferred). This is especially viable in a classroom situation where group decision making and leadership skills can be practiced in addition to gaining geographic/economic exposure.

[30.0] FUEL, FERTILIZER, AND FARMING

Increasing crop yields in modern agriculture depends to a large extent on energy input in terms of fertilizer, pesticides, and irrigation. In the game, this can be simulated by the expenditure of previously stockpiled Fuel Points on the Farm Sector. When the Farm Sector State is at one, for every three good Areas (rounding up) the Player has in his Region he may expend one Fuel Point to raise the Food Production dice-roll by one. At Sector State two he may expend two Fuel Points for every three Areas and raise the dice-roll by two: this progression increases with the Sector State (although the Player may expend such Fuel at lower rates and experience the lesser increase in the dice-roll). If R&D has been applied to farming, it increases the effectiveness of Fuel Points for fertilizer by lowering the R&D effect. Calculate the normal expenditure for the dice-roll increase desired then discount the expenditure by the percentage of the R&D effectiveness.

[31.0] TRADE CENTERS

All trade in the Standard Game takes place between regional capitals. If the Player wishes he may establish any number of other Control Centers (in good Areas) from which trade may be conducted) (i.e., goods shipped and received). Such a Trade Center must meet the following requirements: The amount of Plant in the Control Center hex must at least equal that of the capital; three additional Transport Points must be added to the Domestic Transport Pool for each such Trade Center; the Trade Center must be able to trace a line of hexes, in good controlled Areas, to the capital. Once instituted, the Trade Center may not **voluntarily** be shut down.

[32.0] SOUTHWEST MILITARY ADVANTAGE

Since the Southwest is deemed to have sprung from military and para-military origins, the Players may wish to give it the following advantage: whenever the Southwest intends to move, or have combat with a military unit it may determine the order of play in that Military Movement or Combat Phase by announcing that it will go first or last.

[33.0] INCREASED HOLOCAUST DAMAGE

The damage (in terms of plant remaining) on the map is a relatively optimistic portrayal of the results of a massive nuclear attack. Players may increase this damage assessment by use of the following routine before the start of the game: roll a single die for each Control Center containing plant—if the die roll is equal to or less than the plant indicated on the map, roll the die again and subtract the second result from the printed plant, if the second die-roll is also equal to or lss than the first die-roll. If the Plant is totally eliminated in the capital hex, the Player's capital is shifted to nearest Control Center hex containing plant.

[34.0] DEFICIT SPENDING

The Player may borrow money from himself. After taxes are collected, in the Taxation Phase he may incur a debt relative to his current tax yield. He may borrow (by taking cash from the General Fund) any amount of money in 10% increments up to and including 100% of his tax yield. He pays interest (rounded up to the nearest whole dollar) on this loan at a rate equivalent to its percentage of the tax yield. For example, if the principal were 20% of the tax yield, he would pay an annual rate of interest of 20% (to the General Fund) at the end of every succeeding Taxation Phase in which the loan was outstanding. Should he default on the interest he immediately must disassociate an Area (or Areas) whose assessed value is equal to the dollar amount of the principal and the interest due. The assessed value of an Area is \$1 for each Plant and Site in the Area plus \$1 for the Area itself. At the end of the game all such loans fall due (both principal and interest). Players may of course pay up such loans before the end of the game.

[35.0] SUGGESTIONS FOR CREATION OF A BANK-ING SYSTEM AND A STOCK MARKET

If at least three Players agree, they may create an inter-regional banking system and/or stock market or commodities market. The details of its structure

is left up to the Players—they should write it up into a formal charter which all members must sign and adhere to. Breaking the charter should result in the fining of the offending Player by the other members acting as a tribunal.

[35.1] BANKING SUGGESTIONS

The Players should each capitalize the Bank with an agreed upon amount of cash. They should then routinely deposit tax revenues into the Bank and make all inter-regional payments by check drawn upon this account. **Intra**-regional payments must still be made in cash. The Bank may make loans to the participants (and to non-participants) at whatever rates of interest the Trustees (the charter members) determine. The Bank should be able to exceed its actual cash on hand by a fixed multiple of its excess reserves to be determined by the Trustees. Charter members should share in the profits of the Bank in relation to their initial investment.

[35.2] STOCK AND COMMODITIES EXCHANGE SUGGESTIONS

Players should form such organizations in order to provide themselves with capital for expansion and to create a mutual interest in the performance of their Sectors. As with a Bank, a charter should be drawn up that all Members of the Exchange agree to and sign. A given Player may offer shares in any of his Sectors to raise money for its enhancement by R&D or by increase in Sector State and productivity (which generates increased tax revenue for the owning Region). At the end of each Taxation Phase, prudent dividends should be distributed to the shareholders. These dividends should be funded from the pro-rated tax revenue generated by the Sector. If the records keeping system is elaborate, less than whole dollar amounts may be accounted for. Players who buy control of another Player's Sector should of course have a decided amount of control over the workings of the Sector. A commodities market can be established by agreeing to bid on future production of Metal, Fuel, and Food Points. Player's buy "futures" for a certainf fraction of the market price per Point (which they can establish by bid, offerings, etc). When the commoditie is produced the Player then holding the future order takes delivery and pays the balance due. Naturally, not all of the aspects of banking and exchanges can be modeled in the Game. The limited number of Players and the more sharply drawn self-interests of the Players interfere with the real-world dynamics of such institutions. However, with a little imagination, Players will be able to invent routines that mimic some of the aspects of these systems.

[36.0] THE OPEN ENDED GAME

Play may continue beyond the tenth Game-Turn until one Player literally dominates the others. If this is done, population expansion should be continued (10% increase preceding every Game-Turn divisible by four). Also, once the Social State is six or more, additional energy requirements must be taken into account. The Player should calculate the number of working Mech Points he could have in his economy at the five level and subtract that from the actual total of working Mech. He must expend one Fuel Point for every five Mech Points represented by the balance. If he cannot, he must reduce his working Mech to bring it into line with the energy available.

[37.0] DETAILED EXPLOSION OF THE ECONOMIES

Players may choose to treat each Area within their Region as a separate economic entity for accounting

purposes. That is to say, they may track the internal shipment of goods from Area to Area; determine exactly which Labor Points are working at which Sites and Plants; ship trade goods from specific Site to another specific Site; permanently separate Domestic ground transport from waterborne transport, etc. In other words the Players should feel free to drive themselves crazy with as much detail as they see fit. This will require the establishment of another, more detailed set of records on paper. Electronic calculators are mandatory equipment. Most of the detail that can be safely added to the game will suggest itself on a common-sense basis.

[38.0] PLAYER'S NOTES

Holocaust is an easy game to lose and an easy game to lose quickly. The subheadings of these notes will tell you how to lose. The text tells you how to avoid losing.

Starve Your People.

Each Player starts with a given amount of Areas in good control, each area has been given a Mech Point in the farm sector, the Sector States are level one and each Player has a small amount of food in stockpile. The implications are stark. The Player must allocate at least 80% of his initial labor to the farm sector to have an even chance to produce sufficient food on the first turn to meet his consumption requirement. In other words if he has six areas he will have thirty Labor Points to start with. Twenty-four of these at least must go to farming. These twenty-four plus the six farm Mech Points establish a production norm of thirty just enough to feed his labor for the first turn assuming an average harvest. Actually a Player should calculate his risk even finer than this. On the first turn he should provide for disaster calculating the absolute worst he could reap (snake-eyes on the table) which combined with his stockpile will still feed his region. You might say, 'what's a couple of starving Labor Points?' If it happens on the first turn it will mean that the Player will lose one or two Areas through disassociation. And that puts him right behind the eightball. While the other Players have expanded their region's population and materials base his region's size has remained constant or even shrunk, placing him at an enormous disadvantage for the remainder of the game.

Don't Mechanize Your Agriculture

So long as a Player must keep 80% of his labor in agriculture just to feed himself (assuming he can balance bad years with good years) he will only have 20% of his labor to man his other sectors. From this 20% he must man his factories, mines, wells and transport plus his army. 20% is not enough to do all this. Therefore he must throw mechanization points into farming. Every Mech Point will release a Labor Point for some other sector.

Don't Trade with the Other Players

The Northeast Player has the most balanced metal-fuel-industrial base to begin with. But he lacks food reserves. He is in a position to deal with the Southwest Player trading Mech Pts for food and fuel. They should trade; it will help both Players. Cooperative Players can use the trading mechanism to merge the individual Regions into one large economy. There is every incentive to do this. Trading pacts allow a Player to rationalize his economy concentrating labor in a Sector which will bring immediate benefits. The Southwest in fuel, the Midwest in metal, the Northeast in industry. In the early turns this concentration permits the highest material return on investment for the nation as a whole. This material return can be translated into more Mech Points for everybody's Farm Sector as opposed to the case when each Player goes his own way.

Build an Army

When you are sick of being a nice guy, tired of playing Holocaust, bored with the dull routines of peaceful development-mobilize a few divisions. This has several interesting effects. For one thing it eliminates your unemployment problem (at least temporarily). For another it creates a new demand on your economy for Consumer Points, cash, etc., to maintain the army. These are resources you would have otherwise devoted to the dull business of raising your Sector and Social States or in acquiring new Areas etc. But the most amazing effect of all is the one your mobilization has on the other Players. They are so envious of the fun you had building your army that they build armies of their own. And since 'more' is 'better' they build bigger armies than you have. Pretty soon just having an army isn't enough but a Player decides to use his. This brings on a state of war. Which is nice if a Player can win the war quickly crushing his opponent's forces, annexing new Areas, etc., and then demobilizing so he can profit from his gains. But this rarely happens. Instead, the belligerents bleed themselves white and often end up in worse shape than when they began the game. Actually building an army isn't the same as threatening to build an army. The threat to mobilize and become the bull in the china shop is one asset a Player has when he feels the other Players are not treating him fairly. Any Player can be a Samson in the temple.

Spend All Your Money

It seems no one ever has enough cash. A Player can spend it in a myriad of ways for many different benefits. It can also be used as a weapon against an opponent. A Player with no cash in hand at the start of the Political/Military Phase can find his region pared down like the skin of an onion by Players who have money to spend on seducing his Areas.

Almost as bad, a Player can develop unconsumed surpluses which if not stockpiled will result in lower production and unemployment on the next Game-Turn. If he doesn't have cash to stockpile he could start an unemployment-underconsumption spiral from which he will find it difficult to recover. The moral is keep a cash reserve: An absolute minimum of \$1 for each area in the region.

A Player's main source of cash is taxation. Obviously a Player who taxes at 50% will derive the highest revenues possible from a given tax base. During the early turns when a Player's Industrial Sector is a small part of his economy, 50% taxation is probably his wisest course of action. Later when he must maintain a large industry he will find that a high tax rate can play havoc with his Industrial Sector. At a point where he relys on his industry to fabricate Consumer Points to maintain a Social State of two or three, the last thing he needs is to play guessing games with the tax dice roll.

Ignore Geography

Some areas are more valuable than others because of the fuel, metal or plant sites they contain. Others are important because waterways run through them. Plan your expansion accordingly. On the other side of the coin some Areas have no premium value beyond their population and increment to the food base. In the end, of course, a Player will expand where he can, but even in the middle game he will want one or two "minimum value" Areas if only as a safety valve in case a bad run of luck forces him to degrade or disassociate an Area. If he has a purely farm area he can dump it with a minimum dislocation to his economy as a whole.

[39.0] DESIGNER'S NOTES

To most people, nuclear war and its aftermath is unthinkable. Popular wisdom indicates that such a catastrophic release of man-made hellfire would truly be the end of the world-the destruction of the biosphere, the obliteration of civilization, and the death of humankind. This usually has the effect of paralyzing all further thought about the subject: since everything's going to be destroyed, why speculate on what sort of formless void will obtain after the holocaust? At every mention of strategic weapons, the popular press trots out the statistics showing that for each human on earth, there is enough nuclear explosive power in the world's arsenals to vaporize him ten (or a hundred, or a thousand) times over. Most of the sundaysupplement accounts depict an On the Beach style scenario for the survivors-a few pockets of human residue awaiting death by radiation poisoning.

The foregoing may seem like an attempt to minimize (by ridicule) the effects of large nuclear war. This is not my intention. A nuclear holocaust would be truly horrendous-a disaster on a scale never before experienced by humankind. It would not, however, be the end of the race nor even the end of civilization. It would be the end of the United States (and other industrial countries of the world) as coherent political units. More importantly, it would be the personal end of hundreds of millions of people. Over one hundred million Americans would die as an immediate consequence of the war and several tens of millions more would perish in the five years following the holocaust. I have no patience with the various experts that pontificate about "surgical" strikes and limited use of strategic nuclear weapons that would result in the deaths of only "two to three million" of our countrymen. It is indeed ironic that both the voices against the use of nuclear weapons and those for the limited use of nuclear weapons, use as part of their respective arguments an approach that cheapens the value of human life. The former can only see wholesale race-death as a deterrent; the latter soft-peddles the casualty figure higher than the combined deaths of all the wars in which America has fought. One would think that the possibility of a "mere" 100,000 of one's fellowmen being murdered by nuclear destruction would be enough to make even the hardest heart shudder in horror. Apparently not.

The premise of the simulation is that a major nuclear was has taken place. I feel that the starting of such a war would be the result of miscalculation and the drastic limiting of one side's options by the other. It is envisioned that the US causes the war by deploying an almost fool-proof orbiting anti-missile system. Within hours prior to its activation, the Soviet leaders learn of it. They make the ultimate threat. They have no time to consider. The US response is confused and seemingly a stall. The Soviets panic and take the only option they see as an alternative to domination by a "missile-proof" America. They attack with everything they have.

The spasm strike by the USSR devastates every major city in North America. Virtually all communications and distribution systems in the US are knocked out in a few days. The civil government ceases to exist and the high-technology military organization soon follows it down the tubes. Amongst the masses of urban survivors, food becomes the paramount objective. The more clever survivors immediately begin to disperse to the relatively undamaged countryside and to the warmer climate zones of the US.

A period of virtually complete chaos follows. Refugees fight landowners and farmers. Freebooters maraude the extant small towns and working farms. Huge die-offs take place during the winter months. Most of the remaining trappings of late-twentieth century America are vandalized, misused, or allowed to rot through neglect. In about four or five years, 40 million people are spread over

and a barter economy. Some organizations have survived, however-more by sheer chance than natural selection. The surviving organizations begin to exert an influence upon the surrounding power vacuums. People and land begin to fall under their control. The emergency authority they thought themselves to be exercising becomes the natural order of existence. Economic life begins to assert itself once more. Scrip is issued (later to become "lawful" money); the name of the US Government is invoked whenever new acquisitions resist integration. The power-centers take on the aspects of regional governments. Contact with other regions is made. Conflicts of interest are perceived. Loss of newly won power becomes a possibility. As the years wear on, four major regions in North America take the form of proto-nations-each seeing itself as the rightful heir to Federal power.

the land and are engaged in subsistence agriculture

After the Holocaust is an economic game because the designer feels that the re-forging of the economic power of the land would be the primary arena of conflict in the period beginning about twenty years after the war. Even though at first glance the Regions in the simulation seem to be bustling economies, the Players should keep in mind that all that is relative. In reality they are mere shards of the former United States/Canadian economy. Even the higher Social States attainable in the simulation are only about one-tenth of the present economic level of the US. It is partly for this reason that the exercise of military power is so expensive. In a country the size of North America, operating from such a depleted economic and manpower base, military adventurism would be a severe strain.

The map shows (in a very simple way) the distribution of resources and plant in the United States. Even though many of the metal and fuel sites shown are nearing the end of exploitability in present-day terms, in the reduced post-holocaust environment most of the qualitative/quantitative differences are lost. This is because the scale of activity is so diminished that "worn out" sites are virtually as useful as rich ones. The biggest problem

is applying labor and tools efficiently enough to raise the per site output to a reasonable rate.

One can, over time, only throw so much labor and machinery into a given area and achieve acceptable results. Greater input means a faster approach to the point of diminishing marginal utility. The Areas on the map are divisions of the land into parcels capable of supporting about one million people with subsistence agriculture—the sort of agriculture that would be the way of life for a totally disrupted population that has literally cast itself upon the countryside to avoid the starvation of the urban centers. The shapes of the Areas are semi-arbitrary—although in most cases they reiterate the hexagonal grid (which incidentally is a favorite academic approach to the organization of economic space).

What Isn't Explicitly in the Game:

As you can readily see, **Holocaust** is very complex—for a game. But as an economic model it is very simple—necessarily so since the management problem would become immense if only one more layer of detail were added. I regret that the allocation and distribution of labor is not more detailed. The social and material stresses that arise out of forced dislocations (as required in the game) are enormous. A much more graphic presentation of the re-urbanization of the population would have been nice to have.

It is also regrettable that a more detailed display of the distribution heirarchies in the economies is not present. The trade and domestic transport pools are gross simplifications of the problems of distribution. Because one Player-one interest-operates both the private and public sectors of each Region there is an unfortunate, but necessary, blurring of the distinction between the two (and indeed, within each). Taxes and profit-making have been merged in such a way that I'm sure any economist playing the game must feel scandalized. Not to mention laissez-faire capitalists. The effects of banking and the credit system as a generator of money are present in the game, though not modeled in detail. Players may spin-off the optional rules suggestions (and quickly find that banking is a game all to itself). Players should be aware that the "good gray banker" is more responsible for enabling economic growth than any other single force. Fans of

American Capitalism will note the strong resemblance the game bears to robber-baronism. Devotees of K. Marx will recognize the heavy dose of economic planning. I've tried to keep you both happy—this is a way of saying that Players may inject whatever ideological coloration they wish into the game system. Early attempts at forcing ideological roles upon the Players proved to be too confining. Players may choose to adopt the inefficiencies of whatever economic dogma they espouse. Foreign trade has been left out due to the postulated sad shape of the rest of the world (even the parts that weren't in the war).

The Goals of the Design:

My basic objective was to create a multi-player game in which the Players were **forced** to seriously deal with each other in order to survive. It turned out that this objective was realized in economic dress—although a more heavily political or sociological approach might have done as well. Most multi-player games lack the tension between serious competition and necessary cooperation. The "deals" in such games usually are bereft of ramifications sufficient to input earnest intent. In other words, you can promise her anything and take the train out of town in the morning. I've striven to avoid such empty dealing—although the personalities of the Players themselves still must provide the catalyzing spark to make it all happen.

I also wished to illustrate some of the aspects of location theory and its relevance to economic growth in a fluid situation. I hope Players can see that the regionalism that is still apparent in this great land of ours is more than the application of convenient labels to an overlarge country.

AFTER THE HOLOCAUST DESIGN AND PRODUCTION CREDITS

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CHARTS AND TABLES

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[5.1] INITIAL RESOURCES CHART All Regional Social and Sector States at level 1.

Item	NE	MW	SW	FW
Areas (in Good Control)	6	7	7	(
Mech Pts in Farm	6	7	7	6
Domestic Transport Pts	6	7	7	6
Reserve Transport Pts	1	3	2	1
Labor Points (total)	30	35	35	30
Available Consumer Pts	5	5	8	7
Allocatable Mech Pts	2	3	4	4
Metal Sites in Region	2	6	1	2.4
Fuel Sites in Region	7	3	7	2
Plants in Region	916	14	4	8
Stockpiled Material				
Food Points	3	7	11	8
Metal Points	2	4	- 3	2
Fuel Points	5	1	6	2
Cash on hand(\$)	12	14	17	15

[6.3] FOOD TABLE

Die Roll	Number 1-5	of Good (6-10	Controlled 11-20	Areas 21+	
. 2	-30%	-30%	-20%	-20%	
3	-20%	-20%	-20%	-10%	
4	-20%	-20%	-10%	-10%	
5	-20%	-10%	-10%	-10%	
6	-10%	-10%	0	Ø	
7	•	۲	0	۲	
8	•	۲	•	۲	
9	+10%	۲	۲	0	
10	+20%	+10%	+10%	+10%	
11	+20%	+20%	+10%	+10%	
12	+30%	+20%	+20%	+20%	

+ or -% = amount that actual food production varies from normal production, to nearest point. "Normal" production is 100% of labor and mech Points allocated to farm sector.

 $\circ =$ no effect.

[11,52] STRIKE TABLE

GP. /STRIKSOL

Unrest Index				
Die Roll	0.5 to 1.0	1.1 to 2.0	2.1 to 5.0	5.1-
1	۲	۲	۲	۲
2	• ·	۲		S
3	0	••••••••••••••••••••••••••••••••••••••	S	S
4	•	S	S	S
5	S	S	S	S
б	S	S	S	S
		~~		

• = No Effect. Note also taht if the unrest index is less than 0.5 there is no possibility of a strike.

S = Strike. The Player must immediately expend Consumer Points to give the "deprived" Labor its "fair" share or shift the "deprived" points into Unemployment. The second alternative can be very grim.

Item Produced	Food Pts	Fuel Pts	Metal Pts	Indust Pts	Trans Pts	Cons Pts	Cash \$
2 Mech Pts	۲	۲	1	2	۲	۲	0
1 Transport Pt	@	1	1	2	0	9	@
1 Plant	۲	۲	2	3	۲	۲	2
5 Consumer Pts	2	1	1	3	6	۲	3
MOBILIZATION	COSTS	5:					
1 Infantry Div*		۲	۲	1	1	0	1
1 Mech Div*	() ()	•	1 1	3	3		2
1 Millitia Pt *	۲	۲	۲	1	0	۲	1
1 Supply Unit	0	•••••••••••••••••••••••••••••••••••••••	on e na tra Chapter de Marsen ()	1 1	2	() () () () () () () () () () () () () (• •
* a Labor Pt mu	ist be al	located					
MILITARY MAI	INTENA	NCE C	COST:				
1 Infantry Div	1	9	۲		۲	2	1
1 Mech Div		1 1	00000000000000000000000000000000000000		oper Hobertanija ()	2 2	1 1
1 Militia Pt	1		•	- 		1	

[8.77] SECONDARY PRODUCTION COSTS TABLE

[10.7] TRADE TRANSPORT MOVEMENT POINT COST CHART

When the Transport Point traces through	Movement Point Expense is	
a clear or rough hex	5MP	
mountain hexside	+5MP	Note: The load status of the Transport Point makes no dif-
a devastated hex	25MP	ference in Movement Point costs; i.e., movement costs are
Water Transport a river hex along the river or a sea hex or lake hex (inc. those with coast)	1MP	the same whether a point is considered empty, half-full or at its capacity.
oneway between East and West Coast hexes	90MP	

[12.25] Political Control [Plebiscite] Table

Die Roll	Cash Exp 0	ended in l +1	Excess of A +3	rea Value +7	
1	e	•	P	G	
 2	0	e P	G	G	
4	reso e trilificamente P	P	G	G	2
5	P	G	G	G	
6	P	G	G	G	
$\circ = Ple$	biscite fails.		- · ·		
P = Pla G = Pla	ce poor	Political (Control m	arker.	

Place "good' ' Political Control marker.

Die Roll	[Mo	ney Sp Subve	ent Sul ersion ^v	bvertin Value]	ig vs.
	1:1	2:1	3:1	4:1	5:1
1	۲	۲	0	۲	•
2	•	۲	٩	۲	S
3	۲	۲	۲	S	S
4	۲	•	S	S	S
5	۲	S	S	S	S
6	S	S	S	S	S
e = S = exch subv	No Effe Subvers ange m erting p	et; mo ion su ilitary i olayer.	ney spe ccccds; units to Remove	nt is w immed those e any u	asted. liately of the nder-

[13.13] TERRAIN EF	FECTS ON	MILITAR	y movem	ENT
	MOV	EMENT C	OST TO EN	ITER
		(or cross)FOR	
Type of Terrain	Mech Div	Inf Div	Militia	Supply
Clear Hex	1 MP	1 MP	1 MP	1 MP
Rough Hex	2 MP	1 MP	1 MP	2 MP
Devastated Hex	3MP	2MP	Prohbtd	2 MP
Mountain Hexside	+2 MP	+1 MP	+1 MP	<u>+3 MP</u>
Lake/Sea Hex	-	Proh	ibited	
Lake/Sea or Blocked	Hexside	Prohi	ibited	·····

Note: Control Center hexes, rivers, Resource Sites and plants, etc., have no effect on Military Movement.

[14.5] COMBAT RESULTS TABLE

Die /	Attack	Super	riority			
Roll	+1	$+\overline{2}$	+3	+4	+5	+6
1	Dr	Dr	Dr	Dr	Dr	Dr
2	۲	Ex	Ex	Ex	Ex	Ex
3	۲	۲	De	De	De	De
4	۲	0	۲	Ex	Ex	Ex
5	۲	0	0	۲	De	De
6	۲	۲	۲	۲	۲	Dr

• = No Effect; the attack fails, all attacking and defending units remain in place. Dr = Defender Retreat; the Defending Player

must vacate the hex moving all Defending units to some adjacent hex

Ex = Exchange; All defending units are destroyed and removed from Play. The Attacking Player must reduce his attacking units by a strength at least equal to that of the printed. strength of the Defending Units

De = Defender Eliminated; Remove all Defending Units from play.

[15.22]	UNEMPL	OYMENT	TABLE
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		ľ	lumber	of Unem	ployed I	Labor Poù	nts
21(+)Good Are 11 to 20 Good A	as: reas:	1 1	24 23	57 45	89 68	1114 911	15(+) 12(+)
6 to 10 Good Ar	eas:	0	12	34	56	79	10(+)
1 to 5 Good Are	as:	0	1	2	3	4	5(+)
Die Roll:	1	•	0	۲	۲		1
	2	0	۲	۲	0	۲	2
	3	۲	۲	•	1	1	2
	4	۲	۲	1	1	1	2
	5	۲	1	1	1	1	2
	6	۲	1	2	2	2	3
	7	6	1	2	2	2	3
	8	۲	2	3	3	3	3

= No Areas degraded.

= Degrade the number of Areas indicated (from good to poor) Depending upon how many good Areas the Player currently controls, he reads across one of the three horizontal lines of headings until he comes to the number of unemployed Labor Points in his Region. This tells him the column upon which the effects of this unemployment will be resolved. He rolls a single die, adding to the die-number the Social State of his Region minus 1 (if the State were "3" he would add 2). He cross indexes this adjusted result with the proper column and reads the number of Areas that he must degrade from good to poor. Adjusted die-rolls greater than "8" are treated as "8".

[15.24] STARVATION TABLE

Total Areas	(Starv	Starvat ing Lab	ion Rat or Poin	lo ts: Poor	Area
21+Areas: 11 to 20 Areas:	1999 1	1:1	2:1 3:1	3:1 5:1	3+:1 5+:1	
Die Roll:	1	•	9 3:1	0 9 1:1	AFI O	
	2	٩	•	0	ی 1	
	4	ě	Ő	1	1	
	5 6	•	1 1	1 1	2 2	
	7	1	1	2	2	

= The number of Areas that the Player must disassociate (lose) from his Region.

The Player expresses Starving Labor Points as a ratio with the number of poor Areas in his Region. For example, 2 Starving Labor Points to 1 poor Area would be a "2:1" ratio exactly. He then reads across on the horizontal line of headings that corresponds to the total number of Areas (good + poor) in his Region until he locates the expressed ratio. This will indicate the column upon which he will resolve the effects of Starving Labor Points. He rolls a single die, increasing the resulting number by his Region Social State minus 1 (if the State were "3" he would add 2). He cross indexes this adjusted die-roll result with the proper column. The number indicated is the number of Areas that the Player must disassociate (lose) from his Region. Poor Areas must be disassociated in preference to good Areas.

Note: The player will use the "1:1" column only if the number of Starving Labor Points is exactly equal to the number of poor Areas. If he has fewer Starving Labor Points than poor Areas, he need not use the table (i.e., there is no effect). In all other instances, the ratio is rounded up, i.e., "1.3:1" becomes "2:1" on the 21+ Areas line. If a Player has no Poor Areas and has at least one Starving Labor Point, he automatically uses the right-most column for his Region size. "NA" means that column is never used for a Region of the indicated size.

[16.1] STOC	KPILING C	OST CHAR	r	
Number	Food	Metal	Fuel	
1	\$1	\$3	\$2	
2	\$2	\$5	\$4	
3	\$3	\$6	\$5	
4	\$4	\$7	\$6	
5	\$5	\$8	\$7	
6+	\$1 per	additional	1 point	

[18.1] INVESTMEN Cash Spent	I CHART Capacity Increase
\$1	1
\$3	2
ծօ \$1Ռ	3
\$15	5
Add \$5 for each add after the fifth.	litional 1 pt capacity increase

[19.23]	CORRI	UPTIO	n tab	LE		
Die	1	Net Co	rruptio	n Chits	<i>a</i>	
Koli 1	1	4 0	ა ი	4	3	
2	•	•	•	۲	10%	ini ana ini Ny Grandsia
3	٥	0	۲	10%	10%	
4	۲	۲	10%	10%	20%	
5	10%	10%	10%	20%	20%	
б	10%	20%	20%	20%	30%	

% = Reduce the corrupted Player's Tax Revenues by the indicated percentage.

 \bullet = No Effect.

"Net Corruption Chits" equals those allocated by all Players to corrupt, minus any expended by corrupted Player to neutralize.

Die	Announced Rate						
Roll	10%	20%	30%	40%	50%		
2	+40%	+40%	+30%	-20%	-30%		
3	+40%	+30%	+20%	-10%	-20%		
4	+30%	+20%	+10%	-10%	-10%		
5	+20%	+10%	+10%	-10%	-10%		
6	+10%	+10%	٥	-10%	-10%		
7	+10%	+10%	٠	-10%	-10%		
8	+10%	٥	۲	-10%	-10%		
9	0	۲	۲	-20%	-20%		
10	+10%	+10%	-10%	-30%	-30%		
11	+20%	+10%	-10%	0	-40%		
12	+20%	+10%	-20%	۲	0		

Die Roll Limit	Mech (Working)	Mech (Excess)	Transport
1	1-5	1-2	1-5
2	6-10	3-5	6-10
3	11-15	6-9	11-20
4	16-20	10-12	21-30
5	21-25	13-15	21-50
6	26-30	16-18	51-100

HOW TO USE THE DEPRECIATION AND SHRINKAGE TABLES

Treat each of the item categories as a separate procedure, resolved separately on the appropriate table. Total the number of Points in the category and find this total in the appropriately headed column. Read across to the die-roll column. The number found is the Limit Number. Roll a single die. If the die result is equal to or less than the Limit Number, roll the die again. If the second die-roll is equal to or less than the first die-roll; then the category is depreciated (or shrunk) by the number of Points equal to the second die-roll. For example: the Player has 12 Transport Points in his whole economy; his Limit Number on the Depreciation Table is therefore "3". He rolls a "2" on his first die-roll (and so) he rolls again and gets a "1"-he loses one Transport Point (his choice) through depreciation. Had he rolled a "3" on his second die-roll, he would not have lost any, because the second die-roll would have been greater than the first. If the first die-roll is higher than the Limit Number, there is no depreciation (or shrinkage) in that category. If the total in any given category is greater than those shown on the tables, simply treat the overage in that category as a separate group of Points and resolve separately on the appropriate new line.

[21.2] SHRINKAGE TABLE

Die Roll Limit	Number of Points of Food or Metal Consmr Pts. or Fuel Pts					
1	1-2	1-3				
2	34	4-7				
3	5-7	5-12				
4	8-12	13-25				
5	13-18	26-40				
6	19-25	41-80				

[28.2] R&D TABLE

Dice Roll: 2 3 4 5 6 7 8 9 10 11 12 F F F F C C C 10%10%20%30% Result:

How to Use the R&D Table:

F = Program fails; immediately terminated without payoff.

C = Program continues.

% = Program succeeds. In the following Production Phases the productivity of the Sites, or (Farm) Areas, or Plants is increased by the indicated percentage. This percentage is always measured against the base productivity of the Sector (i.e., what it would be without any R&D augmentation).

The investing Player rolls the dice for each program each Industrial Investment Phase it has been in continuous operation (if a Player fails to invest, the program is automatically terminated). In order to roll the dice the Player must have made the minimum annual investment (that Game-Turn) in the, program.

SAMPLE 1040's and SCHEDULE D's Players who wish to use these "official" versions of the forms are encouraged to make machine copies of them.

ł

"FORM 1040" Game-Turn	Y	2	3	4	5	6	7	8	9	10
1. Food Pt. Output:	-									
2. Metal Pt. Output:										
3. Fuel Pt. Output:	1									
4. Industrial Pts. Utilized:			. .							
5. Consmr Pts. Expended										
6. Labor Allocation Consmr Pts.										
7. TAX BASE (total lines 1-6)										
8. ANNOUNCED TAX RATE (%)										
9. Raw Revenue (line 7 times line 8)										
10. Corruption %										
11. Revenue Loss (line 9 times line 10)										
12. NET TAX REVENUE (line 9 minus line 11)										
"SCHEDULE D" Game-Turn	1	2	3	4	5	6	7	8	9	10
1. Capacity Purchase		1								
2. Capacity Loss (by under-utilization)										
3. Capacity Gain (through 100% utilization)										
4. Taxation Effect on Capacity										
5. NET CAPACITY CHANGE (total lines 1-4)										
			1		-	ar provide and the second s	1		1	1717-1717-1717-1717-1717-1717-1717-171

"FORM 1040" Game-Turn	1	2	3	4	5	6	7	8	9	10
1. Food Pt. Output:						1				
2. Metal Pt. Output:										
3. Fuel Pt. Output:		<u></u>								
4. Industrial Pts. Utilized:										
5. Consmr Pts. Expended										
6. Labor Allocation Consmr Pts.										
7. TAX BASE (total lines 1-6)	-									
8. ANNOUNCED TAX RATE (%)										
9. Raw Revenue (line 7 times line 8)										
10. Corruption %								-		
11. Revenue Loss (line 9 times line 10)										
12. NET TAX REVENUE (line 9 minus line 11)										
"SCHEDULE D" Game-Turn	1	2	3	4	5	6	7	8	9	10
1. Capacity Purchase		· fft								
2. Capacity Loss (by under-utilization)				,						
3. Capacity Gain (through 100% utilization)										
4. Taxation Effect on Capacity										
5. NET CAPACITY CHANGE (total lines 1-4)										

AFTER THE HOLOCAUST COUNTERS (Front)

××	××	××	××	××	××	××	××	××	××
3-3	3-3	3-3	3-3	3-3	3-3	3-3	3-3	3-3	5-5
×× 5-5	×× 5-5	×× 5-5	×× 5-5	O (1) 3	O (1) 3	0 (1) 3	0 (1) 3	O (1) 3	

NE	<i>NE</i>	NE	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	NE	<i>NE</i>
Social	Good	Good	Poor	Unemp	Starve	Sector	Sector	Sector	Sector
State	x1	x10	x1	x1	x1	State	State	State	State
NE	<i>NE</i>	<i>NE</i>	<i>NE</i>	NE	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>
Sector	Site	Site	Site	Site	Labor	Labor	Labor	Labor	Labor
State	x1	x1	x1	x10	x1	x1	x1	x1	x1

Northeast

| <i>NE</i> |
|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|-----------|
| Labor | Labor | Labor | Labor | Mech | Mech | Mech | Mech | Mech | Mech |
| x10 | x10 | x10 | x10 | x1 | x1 | x1 | x1 。 | x10 | x10 |
| NE | <i>NE</i> | NE | <i>NE</i> | <i>NE</i> | NE | NE | <i>NE</i> | <i>NE</i> | <i>NE</i> |
| Mech | Mech | Outpt | Stock |
| x10 | x10 | x1 | x1 | x1 | x10 | x10 | x10 | x100 | x1 |

NE	NE	<i>NE</i>							
Stock	Stock	Stock	Stock	Stock	Stock	Cpcty	Cpcty	Utiliz	Utiliz
x1	x1	x10	x10	x10	x100	x1	x10	x1	x10
<i>NE</i>									
Cnsmr	Cnsmr	Cnsmr	Dmstc	Dmstc	Res	Trade	Trade	Good	Good
x1	x10	x100	x1	x10	x1	x1	x1	Area	Area

<i>MW</i>	MW	MW	MW	MW	MW	MW	MW	MW	MW
Good	Good	Good	Good	Good	Good	Good	Social	Good	Good
Area	Area	Area	Area	Area	Area	Area	State	x1	x10
MW Good Area	MW Good Area	MW Good Area	MW Good Area	MW Plbsct	MW Plbsct	MW Plbsct	MW Poor x1	<i>MW</i> Unemp x1	<i>MW</i> Starve x1

Midwest

	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	<i>NE</i>	SW	SW	SW
	Good	Good	Good	Good	Good	Good	Good	Social	Good	Good
	Area	Area	Area	Area	Area	Area	Area	State	x1	x10
1	<i>NE</i> Good Area	<i>Ne</i> Good Area	<i>Ne</i> Good Area	<i>NE</i> Good Area	<i>NE</i> Plbsct	<i>NE</i> Plbsct	<i>NE</i> Plbsct	SW Poor x1	SW Unemp x1	SW Starve x1

×× 3-3	×× 3-3	×× ⊠ 3-3	×× 3-3	×× 3-3	×× 3-3	×× 3-3	×× 3-3	×× 3-3	×× 0 5-5
×0 5-5	× 5-5	×× 5-5	××0 5-5	O (1)3	(1)3	O (1) 3	(1) 3	0(1)3	0(1)3

SW	SW	SW	SW	SW	SW	SW	SW	SW	SW
Sector	Sector	Sector	Sector	Sector	Site	Site	Site	Site	Labor
State	State	State	State	State	x1	x1	x1	x10	x1
SW	SW	SW	SW	SW	SW	SW	SW	SW	SW
Labor	Labor	Labor	Labor	Labor	Labor	Labor	Labor	Mech	Mech
x1	x1	x1	x1	x10	x10	x10	x10	x1	x1

Southwest

| SW |
|-------|-------|-------|-------|-------|-------|-------|-------|-------|-------|
| Mech | Mech | Mech | Mech | Mech | Mech | Outpt | Outpt | Outpt | Outpt |
| x1 | x1 | x10 | x10 | x10 | x10 | x1 | x1 | x1 | x10 |
| SW |
| Outpt | Outpt | Outpt | Stock |
| x10 | x10 | x100 | x1 | x1 | x1 | x10 | x10 | x10 | x100 |

SW	SW	SW/	SW	SW	SW	SW	SW	SW	SW
Cpcty	Cpcty	Utiliz	Utiliz	Cnsmr	Cnsmr	Cnsmr	Dmstc	Dmstc	Res
x1	x10	x1	x10	x1	x10	x100	x1	x10	x1
SW	SW	SW	SW	SW	SW	SW	SW	SW	SW
Trade	Trade	Good	Good	Good	Good	Good	Good	Good	Good
x1	x1	Area	Area	Area	Area	Area	Area	Area	Area



×× 3-3	×× 3-3	×× 3-3	×× 3-3	×× 3-3	×× 3-3	×× 3-3	×× 3-3	×× 3-3	××0 5-5	<i>FW</i> Social State	FW Good x1	FW Good x10	<i>FW</i> Poor x1	<i>FW</i> Unemp x1	FW Starve x1	SW Good Area	SW Good Area	SW Good Area	SW Good Area
×× 5-5	×0 5-5	×× 5-5	×× 5-5	0(1)3	0(1)3	0(1)3	0 (1)3	O (1) 3	0(1)3	<i>FW</i> Sector State	FW Sector State	<i>FW</i> Sector State	<i>FW</i> Sector State	FW Sector State	FW Site x1	<i>FW</i> Site x1	SW Good Area	SW Plbsct	SW Plbsct
						ALC: N		Times.	and the						19 BA				
MW Sector State	MW Sector State	MW Sector State	MW Sector State	MW Sector State	MW Site x1	MW Site x1	MW Site x1	MW Site x10	MW Labor x1	<i>FW</i> Site x1	FW Site x10	<i>FW</i> Labor x1	<i>FW</i> Labor x1	FW Labor x1	FW Labor x1	<i>FW</i> Labor x1	FW Labor x10	FW Labor x10	<i>FW</i> Labor x10
MW Labor x1	MW Labor x1	MW Labor x1	MW Labor x1	MW Labor x10	MW Labor x10	MW Labor x10	MW Labor x10	MW Mech x1	MW Mech x1	<i>FW</i> Labor x10	<i>FW</i> Mech x1	FW Mech x1	FW Mech x1	<i>FW</i> Mech x1	<i>FW</i> Mech x10	FW Mech x10	FW Mech x10	<i>FW</i> Mech x10	<i>FW</i> Outpt x1
				Mid	west		i dan se							Farm	vest				
MW Mech x1	MW Mech x1	MW Mech x10	MW Mech x10	MW Mech x10	MW Mech x10	MW Outpt x1	MW Outpt x1	MW Outpt x1	MW Outpt x10	<i>FW</i> Outpt x1	Fw Outpt x1	FW Outpt x10	FW Outpt x10	FW Outpt x10	FW Outpt x100	FW Stock x1	FW Stock x1	FW Stock x1	FW Stock x10
MW Outpt x10	MW Outpt x10	MW Outpt x100	MW Stock x1	MW Stock x1	MW Stock x1	MW Stock x10	MW Stock x10	MW Stock x10	MW Stock x100	FW Stock x10	FW Stock x10	<i>FW</i> Stock x100	FW Cpcty x1	FW Cpcty x10	<i>FW</i> Utiliz x1	<i>FW</i> Utiliz x10	<i>FW</i> Cnsmr x1	FW Cnsmr x10	FW Cnsmr x100
MW Cpcty x1	MW Cpcty x10	MW Utiliz x1	MW Utiliz x10	MW Cnsmr x1	MW Cnsmr x10	<i>MW</i> Cnsmr x100	⊠ 2-2	⊠ 2-2	⊠ 2-2	FW Dmstc x1	FW Dmstc x10	FW Res x1	FW Trade x1	FW Trade x1	<i>FW</i> Good Area	<i>FW</i> Good Area	<i>FW</i> Good Area	<i>FW</i> Good Area	<i>FW</i> Good Area
MW Dmstc x1	MW Dmstc x10	MW Res x1	MW Trade x1	MW Trade x1	MW Good Area	MW Good Area	⊠ 2-2	⊠ 2-2	2-2	<i>FW</i> Good Area	<i>FW</i> Good Area	<i>FW</i> Good Area	<i>FW</i> Good Area	<i>FW</i> Good Area	<i>FW</i> Good Area	<i>FW</i> Good Area	<i>FW</i> Good Area	FW Plbsct	<i>FW</i> Plbsct
										-									
2-2	2-2	2-2	2-2	2-2	⊠ 2-2	⊠ 2-2	2-2	⊠ 2-2	⊠ 2-2	X 3-3	3-3	×× 3-3	×× 3-3	×× 3-3	×× 3-3	×× 3-3	×× 3-3	×× 3-3	×× 5-5
x1	x1	x1	x1	x1	x1	x1	×1	Game- Turn	Seqnc of Play	5-5	×× 5-5	×× 5-5	× 5-5	0 (1) 3	O (1) 3	(1) 3	(1) 3	(1) 3	(1)3
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SW Poor Area	SW Poor Area	SW Poor Area	SW Poor Area	<i>FW</i> Starve + 10	FW Unemp +10						CDR 2-5	CDR 1-3	CDR 2 1-3	CDR	CDR 1-3	CDR 2 1-3	CDR	CDR 2 1-3	CDR	CDR 2 1-3
		SW Poor Area	FW Site +10	FW Site +10													CDR 0 2-5	CDR 2-5	CDR 2-5	CDR 0 2-5
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													MW Site + 10	MW Site + 10						
		· · · · · · · · · · · · · · · · · · ·																		
										-				1						
<i>FW</i> Poor Area	<i>FW</i> Poor Area	<i>FW</i> Poor Area	<i>FW</i> Poor Area	<i>FW</i> Poor Area	<i>FW</i> Trade + 10	<i>FW</i> Trade + 10	<i>FW</i> Res + 10				⊠ 1-2	⊠ 1-2	⊠ 1-2							
		<i>FW</i> Poor Area	<i>FW</i> Poor Area	<i>FW</i> Poor Area	<i>FW</i> Poor Area	<i>FW</i> Poor Area	<i>FW</i> Poor Area	<i>FW</i> Poor Area	<i>FW</i> Poor Area		⊠ 1-2	⊠ 1-2	⊠ 1-2	MW Poor Area	<i>MW</i> Poor Area	MW Trade + 10	<i>MW</i> Trade + 10	<i>MW</i> Res + 10		
									00.0											
CDR 2-5	CDR 1-3	CDR 1-3	CDR 1-3	CDR 1-3		CDR 2 1-3	1-3	1-3	1-3		⊠ 1-2	⊠ 1-2	⊠ 1-2	⊠ 1-2	⊠ 1-2	⊠ 1-2	⊠ 1-2	⊠ 1-2	⊠ 1-2	⊠ 1-2
						CDR 2-5	CDR 2-5	CDR 2-5	CDR 0 2-5				<u></u> x2	<u></u> x2	<u></u> x2	×2	mil x2	x2	×2	×2
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* *									JEL SECT abor Mech					100	1000	1010	10801	1001	1011	1021	toei	1501	1091	IOLI				
0	7	2	4	5	6	7	8	9	Output & Stock	SEQUENCE OF PLAY	(nr = number of Sites) Regional Capital	Metal Site (nr = Number of Sites) Industrial Plant	Devastated Hex Fuel Site	- CEN	COAST	ZOLO COLO	FW 3		ZOIL	Far	T SOE	1502	2081	LUG				
0 Sites	1	3	4	5	6	7	8	9	Sector State	1. Basic Produ a. Produce For b. Produce Fue c. Produce Me	Control Center	River Hex	3			and the second	OBD3	Miles and 1003	THE DATE OF THE PARTY OF THE PA	vest	- Hol	504	Senttle	1704	F.	0	0	0
0	1	3	4	5	6	7	8	9	SW ME	od d. Pr el e. Pr etal f. Pr g. Pr	T	R		TEDD	Desod	5070	Section 4	1004	1105	1204	305	runoizo	1804	1705	1	1	1	1
* *									TAL SE Labor & Mech	roduce/allocat roduce/allocat roduce/site Pla roduce Consur	hree-Player Boundary	ough Terra Hex		A TNI 12T			0805	1005		5021	FW	2	1805	anti-state and a state	N	N	N	N
0	1	3	4	5	6	7	8	9	CTOR	te Mech I te Transp. j ants mer Pts.	r Car	ain Ar			0000	0706	2 9080	1006	1106	120EL	- 1406	1506	and the second second		ŝ	ŝ	లు	ŝ
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METAL SEC Labor & Mech	TOR Output & Stock	MW Sector State	INDUSTRIAL Labor & Mech	SECTOR Capacity & Utiliztn	Consmr Points
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8	8	8	8	8	8
7	7	7	7	7	7
6	6	6	6	6	6
5	5	5	5	5	5
4	4	4	4	4	4
3	3	3	3	3	3
2	2	2	2	2	2
1	1	1	1	1	1
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