Once again it is summer here in Charm City. Ice cream, picnics, baseball games, and the Fourth of July. And ORIGINS '87, the National Adventure Gaming Convention. Which just happens to be held on the Fourth in downtown Baltimore. By the time you read this column, ORIGINS will be upon us (or perhaps past). For those among our readership who will not be in attendance, maybe a brief glimpse of our doings will encourage you to take the effort to attend in the future.

First, and foremost for many, ORIGINS means tournaments—competition against the best players in the most popular games in our hobby. The products of the Avalon Hill Game Company are always well represented; indeed some of these tournaments have become traditions. For instance, the annual flight into danger in the 8-77 tournament or the race for merchandise through the medium of CIRCUS MAXIMUS; maybe you'd care to try your hand with the Wehrmacht in RUSSIAN FRONT or the British paratroopers in STORM OVER ARNHEM (hosted by the game's designer, Courtney Allen). Or you could join Ken Whitesell in his double-elimination UP FRONT/BANZAI tournament or his mad-cap SPEED CIRCUIT challenges. For those addicted to multi-player games, the "New York Game Board" will host competition in DIPLOMACY; there are also tournaments in KINGMAKER, TITAN, STELLAR CONQUEST, DUNE, ACQUIRE and CIVILIZATION. The "demo derby" format is used for competition in RICHTHOFEN'S WAR and AIR FORCE/DAUNTLESS. Napoleonic gamers are served by multiple-tournament winners for WOODEN SHIPS & IRON MEN and WARS & PEACE. And ace playtesting Jon Mishcon oversees the competition for ASL.

Our own designers get into the fray by hosting tournaments in some of Avalon Hill's latest releases.

Continued on Page 36, Column 3
PATTON'S BEST is The Avalon Hill Game Company's new solitaire game that puts you in the commander's seat of a Sherman tank in George Patton's best fighting division, the 4th Armored. You can play through a short engagement, a complete day of movement and battle, or follow the day-by-day European campaign of the 4th Armored Division. The success and survival of your tank depends on your decisions.

Button up for the safety or fight from an open hatch for better visibility? What type of ammo to load and fire at which target? Move forward for a more deadly side shot, fall back to a hull down position, or put down a smoke screen?

You control only your tank and crew. Each crew member is rated for skill at his position, and his rating will affect how well he performs. Your crew will start with relatively low ratings, but if they can survive to become veterans, their ratings and the efficiency of your tank can improve. You will start out in a basic M4 Sherman tank, but may later command any of 17 different Sherman variations. The solitaire game system controls the generation and action of the German units you will be facing, and the rest of the American task force of which you are part. Included are three types of scenarios: Advances, representing the breakthroughs and rapid movements through enemy territory; Battles, where the Division is attacking prepared enemy positions; and Counterattacks, where you defend against German attacks.

- Command any one of 17 different American Sherman tank variations or the British Sherman Firefly variant included for comparison.
- Fight a single engagement, a day of battle, or the entire campaign of the 4th Armored Division.
- Win promotions and decorations for valor.

PATTON'S BEST is now available for $25.00 from The Avalon Hill Game Company, 4517 Harford Road, Baltimore, Maryland 21214. Please add 10% for shipping and handling (20% for Canadian orders; 30% for overseas orders). Maryland residents please add 5% state sales tax.
In **HEDGEROW HELL** you'll receive four full-color, geomorphic, mounted 11" x 26" mapboards depicting typical country terrain, and eight specially-designed scenarios for use on those boards depicting the bitter fighting following the invasion of Normandy. New counters for use with the AFV cards are included; players will need no special rules for their use, these being contained in the ASL rulebook, the BEYOND VALOR and YANKS modules. Those wishing to use basic SQUAD LEADER rules may use these mapboards; possession of ASL is not necessary but is recommended for play of the specific scenarios enclosed herein.

**HEDGEROW HELL** is the second boxed module of Deluxe ASL, an enlarged 2.2" hex scale for playing ASL. The greatest thing about Deluxe ASL may be that once you know how to play ASL, you also know how to play the Deluxe version. The rules, for all practical purposes, are identical; the only changes deal with the physical stacking or positioning of counters within the enlarged hexes. In short, Deluxe ASL is no more difficult than ASL. In fact, it is much more playable, due to the many conveniences proffered by the larger hex size. Deluxe ASL is simply ASL without stacking. There is sufficient room in each hex to allow over a dozen counters to be placed without placing one atop another. This makes the game play faster, because pieces don't have to be constantly shuffled to count FP factors or moved out of the way to check LOS or the height of buildings. Even system counters can often be laid aside units rather than stacked atop them, so obscuring their identity. Other informational counters, such as CA markers, are not even needed because CA is readily determined by placement within the hex. Deluxe ASL is so much easier to play that we even recommend the use of 1/285th scale miniatures for those interested in the ultimate panoramic splendor in their gaming. Frankly, if you enjoy SQUAD LEADER or ADVANCED SQUAD LEADER, we can't recommend this scale highly enough. It magnifies the playability and enjoyment of the game even more than it increases the size of the hexes themselves.

**HEDGEROW HELL** contains no rules or counters; ownership of SQUAD LEADER or ADVANCED SQUAD LEADER is required.

**HEDGEROW HELL** is available now for $28.00 from The Avalon Hill Game Company (4517 Harford Road, Baltimore, MD 21214). Please add 10% to cover shipping and handling (20% for Canadian orders; 30% overseas). Maryland residents please add 5% state sales tax.
A VERY GOOD YEAR

Development Notes for 1830
By Bruce Shelley

Our design staff heard the first news of 1830's existence during "Origins" in 1982. Tom Tresham, the brother of 1830 designer Francis Tresham, had come to the convention representing an English game distributor and we questioned him at length for game news from England, especially regarding his brother. By this date we had already purchased CIVILIZATION from Francis and had been playing his 1829 games about British railroads for many years. The idea of an 1829-type game about American railroads appealed to us immediately, and we told Tom to pass along news from England, especially regarding his brother.

By this date we had already purchased CIVILIZATION from Francis and had been playing his 1829 games about British railroads for many years. The first major delay was quite simple to understand. In the fall of 1982 the game was not finished. Although Francis had a game that was being play-tested, he was not yet sufficiently satisfied to submit it. In Baltimore, we were quite anxious to get a prototype to examine, but Francis felt this would not be helpful and continued his development in England. The help we could give in this stage was mostly research on aspects of North American railroads and general encouragement. I recall sending information on possible private companies, suitable colors for the railroad pieces, and even designing a sample president's certificate. Word finally arrived that Tom and Francis were coming to Origins '83 in Detroit and were bringing an 1830 prototype to leave with us.

I don't believe I have looked forward with more excitement to any event in my gaming experience than I did to meeting Francis and seeing his 1830 prototype. By now I felt we had become good friends through our correspondence and I had the highest expectation for his earlier games. Our meeting was a great thrill for me, and I think also for the entire Avalon Hill entourage, as both Tresham brothers proved to be quite charming and good company.

My first exposure to the 1830 prototype was no less a success. The map and pieces looked much as they do today. We immediately arranged a playtest for the afternoon, and thereafter played it several more times before the convention ended. For our early playings we concentrated on learning the rules and components, and we all enjoyed it very much. I enthusiastically recommended it to Tom Shaw and was backed up by others who had had a chance to play. The convention ended too quickly for me, and the Treshams could not stop in Baltimore on their way home as they (and we) had hoped. I returned home with the prototype and quickly arranged to show it to the local enthusiasts who hadn't gone to Detroit.

My memory of what this first prototype was like is a little hazy as it did not remain in its original form for long. Also, that first copy was returned to England during the game's dark days. The largest differences between this early game and what was published are as follows:

1) On the stock market there were no orange and brown zones, and the highest prices reached $1000 instead of $350 (in the same number of spaces).
2) You could not buy stock in your choice of railroads after the private companies were sold. Instead, the companies were sold in order—PRR, NYC, CP, B&O, C&O, ERIE, NYNH&H, B&M. Shares in the NYC could not be bought until all PRR shares had been bought. Shares in the CP could not be bought until all NYC shares had been bought, and so on.
3) Initial share prices were fixed—PRR ($100), NYC ($90), CP ($82), B&O ($76), C&O ($71), and all others $67. Tokens were placed on the Stock Market in a specific box marked for each railroad.
4) Private Companies could be sold to railroads for up to five times their printed value. Printed values were higher; I recall the Camden & Amboy was $210 and the B&O was $265. (Thus, the C&A could be sold to a railroad for up to $1050.)
5) The PRR and NYC had no 20% certificate, just 10% shares, one of which was the president's certificate. The NYNH&H had a 30% president's...
certificate, a 20% certificate, and five 10% certificates. The B&O had a 40% president’s certificate, two 20% certificates, and two 10% certificates.

6) The map was very close to the published map, some important differences being no bypass track around the PRR home base in hex H-12 and the printed track on the New York hexagon connecting to hexes F-18 and G-17 instead of F-20 and H-18 as they do now.

Back in Baltimore we began playtesting in earnest. It took a few playings to get the rules down and get together a cadre of experienced players. As our play continued through the summer and fall, our district had a great deal of luck with game physics. The very wide open play of 1830 was a radical departure from the stately elegance we were familiar with from 1829. Bankruptcies were a common occurrence. To a large extent, a player’s fate in the game was out of his own hands.

Our first major concern dealt with the selling of the private companies for up to five times face value. The holders of the big private companies would sell for all they could get and then buy stock up. Players not in a position to do this seemed to be at a clear disadvantage, as the others would fill their stock portfolios much easier. I note that the B&O sold shares in 1833 where a 3% dividend was paid. During the stock round following the purchase of those “3” trains, every remaining company in the game (64-83) were floated. This resulted in almost every company share selling for less than $40, and a wild scramble for trains thereafter.

The extremely high stock values also seemed unsatisfactory, as they made share dividends substantially less important. The smart play seemed to be a consistent payment of dividends, regardless of the amount, to drive up the stock price. Obtaining a larger train was not worth any reduction in stock price because the last couple of jumps in the price ($100 per turn as I recall) could not be made up by any increase in dividends. In other cases, the player purchasing the last “4” train never got to operate it all, as his purchase was immediately followed by purchases of all the “5”s, one “6”, and a Diesel.

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I have already discussed what we didn’t like about the map. While the playtesting was going on, we experimented with a few additional ideas. One I liked was adding an additional row of hexes at the map’s bottom. In this row we added the city of Richmond, placing there the base of the C&O. Several hexes west of Richmond in the new row we placed a city which was actually to represent the Virginia coalfields. With this configuration, railroads in the game started east of the Appalachian Mountains except the Erie, and the only gap in the mountain range was through central New York where the Erie Canal and New York Central were historically built.

We had implemented with new geography in the upstate New York area around the Erie base hex. We had found a lot of congestion there in play. Several surviving prototype maps show a number of configurations for what became hexes D-14 and E-11. None of these experiments were found to be an improvement over Francis’s design so ours were abandoned.

Francis had asked me whether the game was salvageable and at the end of my November letter I replied yes, but added that changes would have to be made to make the game fun and interesting to enough people in Baltimore to convince myself and the managers of $50 share price of the road closer to 1829 in style of play, and gave examples of three radical suggestions that could be tried: remove the ability to sell private companies; add more trains, money, tile variations, railroads (to give the players more options and decisions in play); or remove the requirement for a railroad to be built with a train. I wanted to give the players more options to ponder, and eliminate some of the jarring game conditions that were difficult to foresee and plan for. I wanted to emphasize rewards for consistent good decision making.

Back with the November letter went the original 1830 prototype left with us at the Detroit Origins. I was certainly disappointed to see it go. Francis responded in late December and again in January saying that he would try a few more playtests. If nothing worked out he was going to consider a complete new design, perhaps on the entire United States or just the east coast. He also mentioned he had seven additional railroad games in some stage of development. (To my knowledge and regret, none of these has yet been published in England.)

Several months now passed with no additional news. Sometime in the spring we received word from Francis that he had met with 1830 and that he would bring a new prototype with him to Origins ’85. He did not provide any details of what had been done, so we could only wait and see. When Francis and the new prototype arrived, we were pleased to find that the new game appeared to be substantially improved. The first days of the convention were spent in playtests and discussions. By Sunday we were sufficiently convinced of the success of the prototype that we took some time off to visit the B&O Railroad Museum. Again the game was left with us, and we were to continue playtesting. Assuming no more serious faults were found, we were hoping to publish 1830 at the next opportunity in our production schedule.

1830 was saved by several simple changes, most worked out by Francis and one, I believe, from myself. Francis’s critical idea was to eliminate the strict order of appearance for each railroad, and to instead allow stock to be bought in any corporation. The consecutive order of appearance rule derived from his earlier games. By discarding this rule, 1830 was dramatically opened up as a game. Instead of focusing on minor decisions such as which tile to lay where, the player now focused on the major decisions of what railroads to begin. Once the private companies were sold, stock in all of the railroad corporations was available. To me, this offered the player the options I was looking for, and the variety of combinations possible seemed to assure each game would be different.

A second change from Francis was a limit on the sale of private companies. Now they could be sold for a maximum of twice face value, and this seemed a good compromise. A sale for the maximum possible gain remained a dirty trick to the general loss of other stockholders, but it didn’t necessarily wreak the player’s railroad to ruin. Francis later felt even the double face value limit was too high, but we were happy with it and got our way. This new limit allowed some representation of the “sharp practice” that characterized early railroad building, but did not massively disrupt the game as the limit did.

Other changes from Francis dealt with the private companies. In the original versions only the big three companies had special features (basically the same they have now). Francis added the current features of the Champlain & St Lawrence and the Delaware & Hudson. These were an immediate success. We found these two private companies became attractive as they could be important assets to railroads operating in their area. The C&SL is valuable mainly to the Canadian Pacific, but the D&H can be used to materially benefit almost every railroad in the game. We found it especially interesting to see and to study a rail map for the game of 1830.

Francis also redesigned the stock market scale into its current format. We arrived at this scale after much thought and discussion for the reason that we felt it brought the relative importance of stock value and cash (dividends) back into balance. It was no longer clearly more beneficial to drive up stock prices, or to ignore stock values and go for big trains and dividends. Each railroad had to be considered according to its situation. Stocks were only desirable for those corporations with good prospects for income.

My own contribution at this stage concerned the par price of railroad stock. (If this was not actually my idea, I apologize to the real originator.) In Francis’s revised game, any stock could be bought, but the price was already fixed ($100 per share for the Pennsylvania RR, $90 for the New York Central, etc.). I thought, why not let the purchaser of the president’s certificate set his own price? This idea gave the players another tough decision, as the par price determined not only the per share price, but also the amount of capital the railroad would begin with. A player could tailor the par price to fit his objectives and his pocket book. The lower the price the easier it would be to find buyers for the stock and the quicker the railroad could begin operating. However, the lower the price the less money the new railroad would have in its beginning treasury. Higher priced stock generally made lower the price the easier it would be to find buyers for the stock and the quicker the railroad could begin operating. However, the lower the price the less money the new railroad would have in its beginning treasury. Higher priced stock generally made less relative share value increases over the course of the game. As I recall, this idea of variable par prices was accepted by all parties almost immediately and proved successful.

These changes were worked out during Origins and during continuing correspondence through the Fall. In this manner we arrived at the game as it now exists. Our other objections now either disappeared with the new rules or faded in importance in light of the game’s success. We found it fun to play again, and the problems posed for successful play were challenging. Two old objections were specific to the limit of four trains and some of the game’s geography and history. The “4” train problem still remains to some extent, but as the game appears to be much more stable than in its previous versions, we accepted this. In my experience, players anticipate problems with the last “4” train and plan accordingly. Our geographic and historic objections lost their importance once the game was found to work to our satisfaction. As long as the previous versions were not successful, we pressed for having these historical and geographical changes incorporated as well. Now there was no need for change, and we compromised our objections.

From this point the story of making 1830 is an easy ride. I was given the “go ahead” by management in late 1985. It was my job to edit the rules based on Francis’s manuscript and incorporate all the last minute modifications. With the help of our artist, Charlie Kibler, Francis’s original art and graphic work was converted to finished art. I selected the locomotive pictures that appear on the private company cards and train cards, and tried to find locomotives that were historically appropriate.

The layout of the game board was just one of many contributions from Mick Uhl. The box cover was based on my design and painted by Jim Talbot. 1830 finally came rolling off the presses in the spring of 1986.

My personal task in games is for those that 1) reward skill and good decision-making, 2) offer many challenges and interesting decisions, and 3) have simple mechanics allowing players to concentrate on strategy, not the rules. I believe 1830 incorporates all three of my principles. The decision-making in 1830 centers on strategic problems, such as which railroad to start, investment in the capital stock, and the sale of the railroad stock. The tile play is somewhat restricted compared to Francis’s earlier games, both to keep the game short and to keep the number of components down. But this is more than made up for by the strategic decisions that are required. The lurking specter of bankruptcy (absent in some earlier games) and the potential for dirty tricks adds a nice element of uncertainty and tension. Various new rules for stock price movements give the stock market a large role. Stocks are continuously bought and sold, changing each player’s fortunes.

Despite the difficulties we encountered in bringing 1830 about, I am very proud of having contributed in some way to its creation. I think it is an excellent game, and it remains one of my favorites. Judging from the comments of those of you who have written us concerning 1830, you agree with me. With your continued support, I hope we can bring you more interesting games of this sort in the future.

THE PRIVATE COMPANIES AND RAILROADS OF 1830

What follows is a brief discussion of each private company and railroad in 1830. These are my opinions and I would not be surprised to find that other players disagree with me. Perhaps the discussion of each will be most valuable to new players with no previous basis for opinion. I have rated the railroads for suitability in two categories: one being one of the initial railroads started; and two, operating a Diesel Train profitably. An “A” is the highest rating, “C” the lowest. I also note which other railroads make good complements when run by the same player.

Private Companies:
Schuylkill Valley Navigation & Railroad: The SVN&R is nothing special but is better than having no private company. I pass on this at my first opportunity and bid on something more desirable. If I'm offered it again, I usually buy it. This company pays the highest relative return and can probably be sold for $40 later in the game to one of your railroads.
Champlain & St. Lawrence: The C&S-L matches up very nicely with the Canadian Pacific, but has
little value to any other railroad. If you plan to run the CP buy the C&S&L. Or, if you end up with the C&S&L, consider trying to float the CP (get 60% of the stock bought by yourself and/or other players so it will begin operating) in the first stock round. Again, I usually pass on this company at my first opportunity in order to bid on something better. I never pass it on my second opportunity. It pays the same relative return as the SVN&RR, with the added value to a CP president, and can be sold for up to $80 with little pain to the buying railroad. 

_Delaware & Hudson: The D&H is perhaps the most interesting private company due to its special feature. By building a railroad or buying a separate railroad in the D&H hex and should obtain access into or out of New York. This feature should be especially valuable to presidents of the C&O, B&O, and New Haven. Your railroad probably won’t be able to afford paying $140 for it, but $70 to $100 is possible. There are usually two or more bids for this company, and anything less than $100 is probably a fair price.

_Mohawk & Hudson: The M&H is the least valuable of the big three, and possibly less valuable than the D&H. I will probably buy it if it is available but I don’t recall bidding on it. The owner of the M&H is the key to the development of the New York Central can’t go too far without access to hex D-18. So if the owner plans on running the NYC well, he will probably have to forego the M&H revenue. I normally trade the M&H certificate for an NYC share just before I need to lay a tile in D-18, but selling the M&H has has attractions as well. Another option is to develop the NYC without incorporating hex D-18 and try and keep the revenue coming in as long as possible. Later in the game look to trade the M&H for an NYC share in the Bank Pool or any remaining in the initial offering.

_Camden & Amboy: In my opinion, the C&A is the most valuable private company. Besides the fact that it pays a good revenue and can be sold for up to $320, the icing on the cake is the free share of Pennsylvania RR stock. Some day I mean to record the return value of this free share by adding up the dividends it earns plus its final value. This company is normally the object of spirited bidding so if you ever have the opportunity to buy it at face value, don’t hesitate. The C&A usually goes for $175 or more in my experience, and I don’t think $200 is too high, though I’ve never seen it sell for that much. Selling the stock one may own for $320 and then selling out so that someone else can try and pick up the pieces is the second most nifty possible in 1830. If you hold more than one share in this player’s railroads, then selling out so that someone else can try and run this railroad ultimately with a diesel-C, complements-NYC, CP: The Erie is seriously handicapped because it may not place any tiles until the first ’3’ has been bought. Because of this and the attraction of other railroads, the Erie is tough to get going. Often the president will find it necessary to buy 60% of the stock himself. I have seen the Erie end up with an unattractive base and the largest holding of a winning portfolio, but I don’t expect that to happen often. It is possible to make the Erie work well, but it is not easy. Once started the Erie has one strong point, its base is a 40-point city. If it can be floated early, the Erie has the potential to make money quickly. I also like the plan of benefit from owning the D&H private company and placing a token in E-16 to gain access to New York. I usually see the Erie working its way into the double city at D-10 and from there connecting to CP track to western Canada or Montreal.

_Baltimore & Ohio: I normally don’t bid on the B&O, but will buy it at face value given the chance. Standard play in my experience has been to set the par price of B&O stock at $100 to discourage early investment, and then sit back collecting $30 per operating point placed by yourself and your opponent at your leisure, having recouped much of your investment. Unfortunately, other players often will force your hand by buying at least four shares of the stock in the first stock round. This will force you to close the private company, cutting off the revenue. This potential for an early start is not a disaster. Since my heart is for an early start and good development of the B&O (my favorite real world railroad), but my mind says collect the revenue now and run the B&O later, I usually am content to let someone else make the decision.

_Railroad Corporations:

_Pennsylvania RR (starting railroad—B, diesel—A, complements—C&O, B&O): I don’t like to get the PRR running right away because its opportunities for earning revenue are less than other railroads. It is handicapped by its base with a revenue of “10”, and the restricted development possible when only yellow tiles are available. However, in the middle and end games, the PRR is ideally situated to build a long and lucrative diesel route because of its stock in the first stock round. This will force you to get it going early and force the closing of the private company. The B&O can set up good routes for any train, but the president should be planning to run a Diesel. Successfully running the B&O requires some negotiation skill, as at least two other railroads (the C&O and PRR) will be wanting to use much of the same route. The B&O will probably want to run through H-10, H-16 and H-18, and can’t place tokens in all of them.

_Chesapeake & Ohio (starting railroad—A, diesel—B, complements—B&O, PRP): Possibly the best railroad in the game, the C&O is almost always one of the first railroads started. It can quickly earn high dividends and with decent management can keep earning them all game. Its consistently high revenue is paid out as dividends, so you won’t have to forego dividends as often as other railroads might. Compared to most other railroads, it should have relatively less trouble financing trains. Although I only rate it “B” for diesel suitability, it would rate “A” if the C&O president also controlled the B&O or PRP for “B&O”, because it doesn’t have easy access to New York from either the north or the south, and doesn’t have the flexibility around Baltimore that the B&O does. Consequently I don’t think it can expect to earn the revenue that the PRR and B&O may. I look to run the C&O from Chicago to New York (south), but New York (north) is a possibility through control of the D&H private company. First track is usually built towards the Gulf or Chicago, and both offer interesting possibilities. Careful negotiations will be needed to keep open C&O routes, as it will be competing with the B&O and PRP for routes and can only place two tokens outside of Cleveland.

_Erie (starting railroad—C, diesel—C, complements—NYC, CP): The Erie is seriously handicapped because it may not place any tiles until the first ’3’ has been bought. Because of this and the attraction of other railroads, the Erie is tough to get going. Often the president will find it necessary to buy 60% of the stock himself. I have seen the Erie end up with an unattractive base and the largest holding of a winning portfolio, but I don’t expect that to happen often. It is possible to make the Erie work well, but it is not easy. Once started the Erie has one strong point, its base is a 40-point city. If it can be floated early, the Erie has the potential to make money quickly. I also like the plan of benefit from owning the D&H private company and placing a token in E-16 to gain access to New York. I usually see the Erie working its way into the double city at D-10 and from there connecting to CP track to western Canada or Montreal.

_New York, New Haven & Hartford (starting railroad—A, diesel—C, complements—NYC, B&M): The NYNH&H can make money quickly by building track to Boston along the coast of Long Island Sound and placing a token in the city in hex F-22 as soon as possible. It may then operate two “2” trains and a “3” train for a good revenue. If instead of placing a tile in hex D-18, an especially plan for a “5” or “6” train and content myself with running the railroad for dividends thereafter and drive the stock value to the top of the chart. The high value of the CP’s base is big asset in this regard. If the NYC is late in getting started, the CP has the potential to build south to E-19. Place a token here as soon as possible and thereby gain access to New York. Not only does this help the CP, but it will hurt another railroad which would otherwise have expected to occupy that strategic position (probably the NYNH&H or B&M). A more ambitious plan for the CP is to build for Chicago north of the lakes if headed west, or place tokens in New York and D-14, and possibly D-10 if headed east that way.

_Canadian Pacific (starting railroad—A, diesel—B, complements—NYC, Erie): I have had a lot of success starting the CP right away, especially when I hold the C&S&L private company. It is then possible to quickly get two “2” trains and a “3” train for a good revenue. If instead of placing a tile in hex D-18, an especially plan for a “5” or “6” train and content myself with running the railroad for dividends thereafter and drive the stock value to the top of the chart. The high value of the CP’s base is big asset in this regard. If the NYC is late in getting started, the CP has the potential to build south to E-19. Place a token here as soon as possible and thereby gain access to New York. Not only does this help the CP, but it will hurt another railroad which would otherwise have expected to occupy that strategic position (probably the NYNH&H or B&M). A more ambitious plan for the CP is to build for Chicago north of the lakes if headed west, or place tokens in New York and D-14, and possibly D-10 if headed east that way.

_Baltimore & Ohio: I normally don’t bid on the B&O, but will buy it at face value given the chance. Standard play in my experience has been to set the par price of B&O stock at $100 to discourage early investment, and then sit back collecting $30 per operating point placed by yourself and your opponent at your leisure, having recouped much of your investment. Unfortunately, other players often will force your hand by buying at least four shares of the stock in the first stock round. This will force you to close the private company, cutting off the revenue. This potential for an early start is not a disaster. Since my heart is for an early start and good development of the B&O (my favorite real world railroad), but my mind says collect the revenue now and run the B&O later, I usually am content to let someone else make the decision.
greatly influence the decision of what stocks to buy. The B&O is perceived as a weak sister to the NYNH&H, making it difficult to convince other players to buy and hold the stock. The B&O serves best as second or third presidency for a player already controlling one of the northeastern railroads. I don't recall it ever being the most valuable holding in a winning portfolio.

**PLAYER'S NOTES**

Elsewhere in this issue is "All Aboard" by Ed Fahrmeier, a member of the nearby game group WARTHOOG (Washington Area Retinue of Tactically Highly Organized Gamers). Along with many other achievements, Ed has been awarded the title "Dr. Loco-Choo" for his recognition of his skills in playing railroad games. I understand he rarely fails to win a game of 1830, an enviable record within his group of very competent game players.

I mention Ed and his record as evidence that 1830 rewards skillful play. He apparently has the ability to consistently make correct decisions about his stock purchases and railroad operations. The fact that 1830 has no dice, random events, or similar mechanics (the only random element is the seating order for the players), while playing there is a tendency when things go wrong to claim bad luck. The reckless player can find himself suddenly president of a railroad with an expensive and nearly obsolete equipment, or have to dig deep into his own pockets to finance train purchases. Ed's consistent success is evidence that it is possible to manage and build a valuable portfolio of railroads and stocks while avoiding the disasters that can trap the unwary. In the following player's notes I have listed a number of principles to follow and tactics to employ while playing 1830. They will be most helpful to new and inexperienced players, but even old hands may find a helpful idea.

**HAVE A PLAN:** Many of the more important decisions you will have to make when playing 1830 are made as the game is just beginning. Specifically, you will need to decide what private companies you would like to own and how much you are willing to pay. After that, and assuming you have enough capital, you will need to decide which railroad to invest in during the first stock round. Since you can't afford the cost of certain private companies you will end up with, planners must prepare for several contingencies. Decide whether you will start the Canadian Pacific right away if you get the C&S, Decide whether or not to start the M&H if you get the M&H. Decide whether you will sell the par price of the B&O if you get the B&O private company. Look upon the private companies as the starting hand you are dealt with. Before you begin play have a plan as to which railroad you would like to start, or how to otherwise invest your money, and be on the lookout for opportunities.

**BUY A PRIVATE COMPANY:** Always try and buy at least one private company. I rate the Private Companies in order of desirability as follows:
1) C&O; 2) B&O; 3) CP; 4) PRR; 5) NYC; 6) NYNH&H; 7) Erie; and 8) B&M. This list would change according to what railroads you already control, what railroads your opponents control, what private companies you own, and at what stage the game is in. If the game is just beginning, you don't want to try and start the Erie. If you own the C&S, that is an incentive to start the CP. In the first stock round it will probably be easier to entice investors to buy the NYNH&H than the other than D&H or NYC stock, even though the second two railroads have better long-term prospects.

**PAR PRICES:** When you are about to purchase the president's certificate of a new railroad, the par price should be determined by three factors: how much money will they need to get started, how many shares can you afford to buy, how much capital you think the railroad needs; and how many shares you will need to buy. You want to buy as many shares as you can to make it easier to keep your presidency and to make it worthwhile to run your company well. Capital requirements are difficult to assess, as a general rule, I believe the larger a railroad starts, the more capital it will need. The earlier a railroad starts, the easier it is to manage with less capital. The lower the par price, the more attractive the stock will be to other players. I generally start companies at $1-$82 in the early and midgame and at $100 in the end game.

**RUN A RAILROAD:** In order to have a chance at winning, you must be the president of at least one railroad. I have never seen a player win who wasn't. Besides the fun of operating a railroad and the control over the destiny of the railroad's stock, the game's strategy and the 4-sided die is for the most part a game of stock purchases and railroad operations. Getting control of a railroad has the obvious additional benefit of denying the presidency to another player, especially one who stands to gain by controlling more than one railroad in a region. For example, control over any two of the B&O, C&O or PRR, is a strong position as the two can work together to build and keep open lucrative train routes. When considering the purchase of a presidency to look out for such opportunities or to deny them to others.

**KEEP FULLY INVESTED:** It is important to keep your portfolio well invested. Cash in your hand does not earn interest and can easily be lost in the game by being invested in stocks that grow in value and pay dividends. At the end of a typical game the cash and stock values of player holdings will be worth around $25000 to $30000. This means each $1 of the $2400 distributed to the players at the start will grow to $10 to $12. If you have enough cash on hand to buy shares of stock in an operating company, it is generally wise to buy. You can often measure how you are doing in the game by comparing the number of shares (not certificates) of operating railroads you hold to the number held by others. If you hold shares, you will find that the company needs; and how many shares you will need to buy or sell before the current president, you can sell them down to only one share or less. If it looks like the priority deal card will end in a bad position, sell out your stock rather than take the risk. If the current president of the railroad you are concerning yourself with already has a priority deal in the game, then you will be safe as long as you are not the last player to buy or sell a stock.

**AVOID UNWANTED PRESIDEENCIES:** You don't want to be given the presidency of a railroad you don't need or won't be able to operate. I generally give my attention to spending your own money to buy that railroad a train. This can cause your bankruptcy, or at least knock you down in the final standings. You can be given such a presidency when you are holding two or more shares in the railroad and the previous president sells enough shares to leave you as the current largest shareholder. There are two ways to prevent this. The easiest is to never hold more than one share (10%) of a railroad of which you are not the president. If no other player holds two or more shares, the presidency cannot be transferred.

**ATCH THE PRIORITY DEAL CARD:** Ideally you want to always be the holder of the priority deal card. In this position you can never be stuck with the presidency of acrippled railroad and you have the first opportunity to buy or sell stock. You don't want to be the last person to buy or sell in a stock round if you can avoid it. It is sometimes preferable to pass on buying one more share and instead sit on your cash temporarily to keep the priority deal card in a more favorable position for the next stock round. Holding the priority deal card can be a strong temptation to pull a dirty trick and dump a presidency. (I rarely yield to this temptation as I think that if you have a railroad you can profitably operate, you should not be so careless. I have also seen players turn supposedly crippled railroads into valuable assets. If you are tempted to dump a railroad on someone else, be as certain as you can that this is a good move. Presidencies are very valuable assets and you shouldn't give one away without good reason.)

**PLOY #1—SELLING TRAINS:** When one player gets control of at least two presidencies, the ability to buy trains from each other often makes each railroad stronger. Such railroads are more competitive and efficient in keeping adequate trains on hand. Other players may be aware of this, but the other player is more likely to be also aware of this. This is why it is a common ploy to try to sell a railroad to the benefit of another. This is simply done by railroad A buying, say, a "4" train from the bank, and then having railroad B buy the same "4" train from A for $1. This is usually only worth considering if you plan to get out of control of a railroad and if the priority deal card is about to be bought by stock sales. You will be guaranteed to force the presidency on to another player. To my mind the nastiest ploy possible in 1830 is to buy away a railroad's only train and then force the presidency on another player when his only option is to buy a Diesel out of his own cash.

**Selling trains can be useful when you are operating a "feeder line" (see #14 below) and using it to buy trains which are then bought by another of
your railroads. I have also seen trains sold between railroads when a player judges that railroad A’s train would be more useful with railroad B, either because railroad B has a better route, or because he has more stock in railroad B.

PLOY #2—SELLING PRIVATE COMPANIES: Selling a private company to a railroad can clearly be beneficial to the player, the railroad, or both, depending on the price, the time of the sale and any special attribute that may accrue to the railroad. If the sale occurs soon after the purchase of the first “3” train, and if the price is reasonable (around face value), and if the railroad derives some real benefit from the transaction (for example, the railroad becomes a more competitive approach and have been operating with a smaller train and driving up their share prices while the others have been forcing their share prices down to finance bigger trains, the players holding a majority of the high value shares will be better off. The reason required to make a Diesel tremendously profitable is that the railroad is completely blocked by tokens from competitors, undoing any advantage that may have been gained. From my experience you will need a balance of shares paying a high dividend (usually those from railroads operating a Diesel) and shares with a high value. Having a portfolio heavy in shares of one type or the other will not beat a more balanced holding.

THE FEEDER LINE: This is a name I use for a railroad whose stock price is in the Yellow zone or worse on the Stock Market. While normally not desirable, some benefits can be derived from this situation. By paying out dividends only occasionally, the share price can be kept in the colored zone, and the money paid into the treasury can be used to not only keep the railroad going, but also to place tiles in mountain or river hexes, or to buy additional trains to be bought thereafter by other railroads you control. While in the colored zones, the shares in this railroad do not count towards the limit certificates you are allowed to hold. For example, in a four-player game where you could normally hold only 16 certificates, you could hold not only the 16 allowed, but an additional six in the feeder line (or more if the price is in the orange or brown zone). By carefully manipulating the price, the share value can be kept in the colored zone until near the end of the game. When the final operating phases are taking place, pay dividends to earn your maximum return because the position of the share price no longer matters.

I call this ploy the “feeder line” because it feeds cash or other assets into your other railroads. I would not deliberately set out to make a railroad a feeder line, but I understand that in some situations it is done regularly. The creation of a feeder line more often is the result of a ploy dumbing a crippled railroad into another player’s hands. Not to make immediate way of restoring the railroad to its former value and soundness, the new president converts it to a feeder line. The value of a feeder line is diminished if you can’t otherwise fill out your portfolio, or if for various reasons you can’t use it to significantly benefit other railroads.

SWALLOWING THE PILL: Since I first started playing 1830, to be stuck buying a train or a substantial part of one out of your own pocket has been considered a serious, if not a terminal, setback to your chances of winning. I have seen the demand of several instances where players have done so deliberately and have gone on to win. Their strategy in continuously raising the share prices and then, when the dividends they pay out. The money they lose out of pocket to pay for a train is apparently more than made up for in higher share values, and they ultimately get the larger train as well. I have never taken part in a game where this has been done successfully, but it has been done, and it has an advantage that works well in the new Tresham assumes me that it is quite possible and he credits one of his best playtesters with its conception. It may be that the “swallowing the pill” strategy, like the “big train” or “feeder line” strategies, only works so long as the other players haven’t given you an opportunity. I still believe in the “balanced portfolio” strategy, but will be looking at this new idea in the future. There is always something new to learn in a game as elegant as this.

KNOW YOUR COMPETITORS: This principle is not a revelation to game players, but 1830 can reward players who can accurately predict how others in the game are going to proceed. I have found that one type of player, whom I call the “empire builder,” can be counted on to make one railroad he controls the jewel of his portfolio and will strive continuously to make this railroad successful. If you can identify this railroad or predict which it will be, you can safely buy as many shares of it as you wish and ride his coattails. This player will rather accept defeat than willingly admit he did a bad job and dump it. Another player I see a lot of is the “trickster.” This player uses his kick-outs from the various plays he can pull off, and probably figures (correctly) that he has no chance in an orderly game where the premium will be on patience and planning. He attempts to create as much chaos and uncertainty as possible. Nothing makes this player happier than buying the first “4” train (usually when he has no use for it) just to force the retirement of all “2” trains. Never buy more than one share of a railroad the trickster controls, but be aware that his ploys can still affect you indirectly. Every game should have at least one trickster to add a little uncertainty.
This is the first time Mr. Moon's work has graced these pages since he left The Avalon Hill Game Company in 1983. Since then, he has relocated to Massachusetts, has married, and now does free-lance game design and consulting.

I first played 1830 in the summer of 1983 at the Detroit Origins. The Tresham brothers had brought the game over for Bruce Shelley and Tom Shaw to look over for possible publication by The Avalon Hill Game Company. We played several games of the original version that weekend, and while the game had some great ideas and a lot of potential, it just didn't quite work right. Still, a contract was negotiated and Bruce began work on the development. Three years and many versions later, the game became a reality. Was it worth the wait? Well, would I be writing my first article in over four years if it wasn't?

The biggest problem in the original design was the seeming inevitability that every game would end with one player going bankrupt, rather than the game ending with the bank exhausted. It is certainly still possible for the game to end in bankruptcy, but it is unlikely. Outfoxing a player on the stock market, the type of action that used to spell doom for that player, now usually just ruins his chances of winning instead.

Of course, there have been numerous changes in the game since 1983, but since I was not directly involved in the playtest, I am not the best person to describe them. Perhaps Bruce will volunteer some day. What I do have to offer is a variant for the game which consists of changing a few hexes and tiles, and adding a ninth company.

After you've played five to ten games of 1830, you will have probably been president of each of the eight corporations in the game. At this point, you have also probably figured out all the best tile combinations and possible stock manipulations. For some people, the game is then "learned" and there is not enough variety and incentive to play it much more. Others, however, will go on in an attempt to master the game, rather than just "know" it. I think this variant offers something for both types of players. The "Reading" variant adds some variety to the game. It also places a premium on player decisions involving the purchase of diesels, since they are now slightly cheaper and probably even more valuable, especially if you prolong the game by adding the extra $8000 I suggest.

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The Reading, like all the corporations, has definite advantages and disadvantages. Its major drawback is the number of tokens, allowing it to place only one station besides its home base. This will make the placement of this station extremely crucial because of the almost certain competition with the B&O, Pa and C&O over the same routes. The main advantage lies in the president's triple-share certificate. Perhaps the best way to run this corporation is to bring it on late in the game and set the price at $100. With the $1000 the company receives as operating funds, it will be able to buy a diesel and place the extra station, and run for cash each turn.

The proposed tile changes make the southeast section of the mapboard a hotbed of activity instead of confining it to simply B&O runs. In addition, there will be fierce competition for Boston and more chances for the B&M to expand to the north and northwest, and more chance for the CP to build southeast to New York City.

The new rules regarding obsolete trains are to ease the pain of the player who buys a new engine one turn before it becomes obsolete. Now he at least gets one turn to use it and can get some of his money back. This also gives each player a chance for the trade-in for a diesel.

Taking A Ride
1. The Reading is added as a ninth railroad for purchase.
   a. The Reading's base hex is H14. This hex is now a permanent grey hex (as shown on the New Tiles Chart). All routes may be traced through this hex; the Reading base station does not prevent a route being traced through this hex. Any corporation may begin or end their route by counting the Reading station as in the normal rules of play, but only the Reading itself can count the base station as an intermediary stop on a run.
   b. The Reading President's Certificate is a 30% share. (Note that this modifies several rules, especially 13.0.)
   c. The Reading has two tokens.
2. The Pennsylvania's base hex, H12, is changed to a different permanent grey hex, similar to the Reading's base hex, as shown on the New Tiles Chart. All the rules in 1.a. now apply to this hex as well.
3. Baltimore and Boston have different green and brown tiles. Grey tiles K15 and D24, and the red section for the Deep South (K13) are also changed. Consult the accompanying New Tiles Chart.
4. Train Changes:
   a. Add one more "4" train.
   b. Use the Optional "6" train.
   c. Diesels now cost $750 with a trade-in engine, or $900 without.
   d. Trains that become obsolete are not removed until after the owning corporation's next operating turn. For example: Player A buys the first "4" train making all "2" trains obsolete; Player B, who owns a "2" train, does not have to remove it until after his next operating turn. And if Player A owns a "2" train, he would not have to remove it until after his next turn of operation.
5. The player who buys the Camden & Amboy private company now has a choice of taking a share of either the Pennsylvania or of the Reading.
6. Increase the number of certificates each player can hold by one, regardless of the number of players in the game.
7. Optional Rule: add $8000 to the game bank. This will guarantee at least three more operating rounds in the game and will make the decision of whether to buy a diesel more important.

NEW TILES CHART

Hex H12, Pennsylvania Base (Grey)
Hex H14, Reading Base (Grey)
Hex D24 (Grey)
Hex K13, Deep South (Red)
Baltimore/Boston Tile (Green)
Baltimore/Boston Tile (Brown)
Here's the pitch—1830 is a great railroad game. It isn't really similar to any other game (except 1829, its English cousin); it is well-designed and has many interesting features. It is one of the best games around for four to six players in which opportunities to win are present throughout much of the game, even for players who make mistakes in the early stages of the game. Experience and skill allow good players to recognize and seize opportunities that arise, but everyone has equal access to them. It is also one of the best multi-player games in that "gang-up" on the leader to prevent a win is relatively difficult to engineer. And solid alliances with other players aren't usually necessary to enjoy the game.

There are alliances between players or between corporations, and there are some economic struggles, but because of the interlocking character of ownership of the corporations, it is seldom possible to make moves that benefit only one player at the expense of all the rest. More typically, the long term benefits and costs to each player of each move are difficult to predict in such a complicated economic environment. The first-time player, however, is at a disadvantage among experienced players simply because the "old hands" have an improved sense of recognizing the opportunities. Chance is involved in the determination of the arrangement of players for the share dealing phases of the game. (An experienced player might have some advantage in being placed to deal immediately after a novice, who is more likely to buy and sell the wrong stocks; likewise, a novice player is disadvantaged by dealing immediately after an experienced player since fewer "good deals" will be available.)

This game has a nice "feel" to it. Careful planning and analysis pay off, yet there is enough variety spawned by the various players' actions to present continuous interesting challenges. Each player is likely to have very different ideas about which actions are in his own best interest. The fewer the players, the more sedate the game. With only four players, each player has much more control over his own fate than in a five-player game. A six-player game is particularly tricky in that each has so little money and control, yet is immediately faced with difficult decisions. Games with fewer players are recommended for introducing novices to this classic railroad game.

As to the finer points of play, I have some specific suggestions in the following areas: the private companies, the special characteristics of each corporation, and the actions to be taken at the beginning of the game.

The Private Companies

In general, the private companies are good investments; but they must be unloaded before they lose their worth. The worth of the certificates, however, is determined by two factors: the certificate-holding limits and the face value of the stock. The companies are approximately correct in games with four or fewer players, but in five- or six-player games there are other factors to consider. Simply stated, purchasers of the three most expensive private companies are more at the mercy of other players with excess cash (due to their not buying these expensive items). A player buying the Camden & Amboy for, say, $200 has only $200 left to buy shares in the first round, and some other player is likely to gain the presidency of the Pennsylvania. Setting a par value of $67 per share is obviously going to hurt the_C&A_and the_B&O_stock, which is still at par at $90. Similarly, while a high par value of the Baltimore & Ohio shares will protect one's initial investment, other players can turn to cheaper stocks leaving the B&O president with just a private company.

Looking at each private company, we'll start with the B&O. The $30 it earns each turn won't make up for the retardation of early growth and the possibility that the liquidation of the few corporate shares one has will probably be necessary to make any big move. Unloading the C&A at this time to a corporation is also a great way to get cash.

In contrast, players buying no private corporations for the share dealing phases of the game, the B&O, are likely to gain the presidency of their choice. Since cash flow will generally be low at first, these players will have to either sit tight on long term investments or plan massive share liquidations to raise cash for further major moves. Since such major moves should only be made if the first corporation is in horrible financial trouble, timing must be perfect for such a move to succeed. Let's look at the corporations now for a better understanding of what can go wrong.

The Corporations

The Pennsylvania (PA) is disadvantaged by low revenues in the early stages of the game, but it typically is the dominant railroad in the game. It almost always gets started in the first turn. The PA has sufficient station markers, and two of them should be played in Pittsburgh and Philadelphia quickly. The PA should get into New York City and Chicago, and it should be able to use big engine power at the end of the game, both a "5" and a "6" are ideal, but a diesel usually can be profitable. The PA can usually make an "alliance" with either the C&O or the B&O for purposes of route enhancement. Its own interests should be carefully protected by its president, however.

The New York Central (NYC) is very disadvantaged at the beginning of the game. It has the worst available routes on the board until the "3" engines are in play, and it is poor choice for a first railroad. This corporation has to make its way into territories of other railroads to do well. The best possibilities are around Buffalo and Toronto or Chicago since simple blocks will keep the NYC out of Philadelphia and its environs. Local cooperation is usually necessary to exploit any area of the board. There are possibilities, but this railroad is difficult to play well.

The Canadian Pacific (CP) is a nice little isolated railroad—deadly dull to own and run. It is well suited for the lean-engine, steady-dividend, high-stock-value strategy to be discussed later. The corporation can also be run in the manner of an expansion-minded NYC, particularly if it buys the D&H. This play fills the New York area with hostile railroads and makes life difficult for all. The Baltimore & Ohio (B&O) can have a very cramped game unless it breaks into the PA territory early. An early grab of Philadelphia is a joy and should be attempted if the B&O has a chance. The B&O has to defend itself against a PA-C&O alliance by getting a station marker on the "H" tier or the B&O can have a very cramped game unless it breaks into the PA territory early. An early grab of Philadelphia is a joy and should be attempted if the B&O has a chance.

The Chesapeake & Ohio (C&O) is the great track-laying railroad. It has good revenues early in the game, but like the PA, it always seems to need more engines, more money, or both. Running the C&O is a roller coaster ride. Investors will typically dump the stock after five or six turns to buy other stocks in anticipation of the C&O stock value decline due
to frequent withholding of dividends in Turas 6 through 11. Of course, this corporation can be run leanly, but the C&O is a diesel-type of railroad and, as a result, timing of the purchase of new equipment is very critical. The best time to save is when revenues are high.

The Erie: does you spine tingle when you hear the word "B&O"—beware the Erie. It’s a lot safer to be president of the Erie than to invest in it, particularly if the president of it also controls another company. If the Erie starts late in the game with a par of $100, you can be sure that a diesel is going to be bought and that diesel will be sold to another company with no investors. The Erie is a nice second or third railroad to control: its success depends on the friendly assistance of other corporations.

The New York, New Haven & Hartford (NYNH&H) is another nice local railroad. With a little luck it can place its station marker in a nearby spot like the D&H or the NYC hex and set up a tidy "S" engine run into New York City (south) or Boston. There are even good breakout possibilities to the west, but saving for a diesel with this railroad doesn’t usually make much sense. The tile placements to the northeast and west of New York City are critical. This corporation is hard to keep the NYC president from making trouble, and you’ll likely do well enough with it.

The Boston & Maine (B&M) is another nice railroad, but its breakout potential is even less than that of the NYNH&H. In addition, mountain crossings are usually necessary. It is a single railroad to run, particularly if the NYC or NYNH&H is the other corporation controlled.

If I can’t get my favorites, I’ll take the best of what is left available; being president of several railroads is what the game is about. At the beginning of the game there is usually only enough capital to start three or four railroads. If you have a substantial stock share in one of the more lucrative corporations isn’t available, it makes sense to buy single shares rather than buy the president’s share of another corporation if there isn’t enough capital to get yours started anyway. Investor confidence is an important element in 1830, as the experienced players are likely to get better financial backing.

Corporate Strategy

The design of 1830 is such that carefully and competitively run corporations have the highest stock values at the end of the game. For such corporations, dividends might be lower on a particular turn than far more grandiose corporations, but the dividends are steadier than those for corporations that tend to be president of the Erie than to invest in it, particularly if the president of another corporation with no investors. The Erie is a nice second or third railroad to control: its success depends on the friendly assistance of other corporations.

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REVOLUTION AGAINST THE REVOLUTION
The Nicaraguan Contra War and FIREPOWER
By James P. Werbanth

On 17 July 1979, Anastasio Somoza Debayle resigned the presidency of Nicaragua, then flew to temporary asylum in Florida. The dynasty that had ruled Nicaragua since June 1936 came crashing down under economic and political pressure from the Broad Opposition Front (FAO) and a short, sharp insurgency waged by the Sandinista National Liberation Front (FSLN).

At the time, it appeared that Nicaragua had reached the end of a long nightmare. By the standards of Latin American authoritarianism, the new regime established by Anastasio Somoza Garcia in the 30's was not overly brutal; but a dictatorship it was nonetheless, and a most corrupt one at that. The central districts of Managua were virtually leveled by a series of earthquakes in 1972, and the second Anastasio Somoza's cronies availed themselves liberally of the relief funds that should have gone to rebuilding and revitalizing the city. Their theft was so pervasive that to this day it is a wasteland of vacant lots punctuated by a few broken buildings.

But “Tacho”s” flight marked the beginning of a new and worse nightmare. The FAO was a coalition of predominately middle class elements dedicated to overthrowing the Somoza dynasty. They were all unused to the practice of revolution instead of nonviolent opposition, and until a few months before would have found the idea of administering a revolutionary regime unthinkable. Due to the complete domination of Nicaraguan government by the Somozas and company, none in the FAO had experience in any other type of government. Highly experienced in opposition politics, they were relative greenhorns in using power.

Furthermore, in July 1979, few in the FAO had a firm idea of how post-somocista Nicaragua was to be run. With Somoza himself in luxurious exile, the pertinent question was, “Now what?”

The FSLN had no such problems. It was founded as a Marxist-Leninist “vanguard” organization in 1961 by Carlos Fonseca Amador, Silvio Mayorga, and Tomas Borge. All three founders, and those who joined them, wanted to stage a Cuban-style rural insurgency to seize power, after which they would establish a Marxist-Leninist state. From the beginning, Karl Marx, V.I. Lenin, Fidel Castro and Ernesto “Che” Guevara were the ideological idols of the Sandinistas and were to remain so over two decades later.

Unlike its eventual tactical allies in the FAO, the FSLN had a great deal of experience in revolutionary practice. Unfortunately for the Sandinistas, most of their experience in a series of rural insurgencies was unpleasant, resulting in the deaths of Fonseca and Mayorga and in the imprisonment of most other important leaders, including Borge and Daniel Ortega Saavedra.

Sandinista fortunes took a turn for the better in December 1974, following a string of military and political defeats by Somoza and his National Guard. FSLN terrorists raided a Christmas party attended by some of Somoza’s closest associates, including his brother-in-law. Two and a half days of negotiations under mediation of Archbishop Miguel Obando y Brava brought the release of fourteen imprisoned Sandinistas, one million dollars in cash, and the publication of a long anti-Somoza communiqué. The raiders flew off to training camps in Cuba. The FSLN had gotten attention.

The FSLN’s situation improved even more dramatically in 1978. On 22 April, a column of National Guardsmen entered the National Palace in Managua while the Chamber of Deputies was in session. Once inside the building, their commander identified his group as the “Army of the People, the Sandinista National Liberation Front” and seized the Palace and all those inside it.

Led by Eden Pastora Gomez, the Sandinistas had over fifteen hundred hostages, including the entire Chamber of Deputies. A force of National Guard commandos under the command of Michael Echavari, a United States veteran of the Vietnam War and mercenary soldier, stood ready to storm the Palace. Schanis and General Jose Ivan Alegret urged Somoza to allow an attack by a dozen or so elite National Guardsmen. But Somoza refused to give them permission. The Sandinistas held Luis Pallais Debayle, acting president of the Chamber of Deputies and Tacho’s cousin, and Jose Somoza Abrego, President Somoza’s nephew by way of an illegitimate brother. Anastasio Somoza opted for negotiations.

The crisis ended after almost two days. Somoza released about fifty prisoners (including Tomas Borge) and paid a half million dollars in ransom. To humiliate Somoza even further, he had to allow the publication of a six-page message in the Somozas’ own newspaper Novedades. Pastora led his force of terrorists and the freed Sandinistas to the Managua airport. Along the way, their buses were greeted by cheering throngs who shouted “Down with Somoza!” and “Somoza to the gallows!” Now the FSLN had not only the public’s recognition, but their imagination.

The Somoza regime had been weakened by the two Sandinista terrorist actions, the 1972 earthquakes, and Somoza’s own heart attack in May 1977. The Sandinistas enjoyed a great deal of support not only among Nicaraguans, but also from the governments of Cuba, Honduras, Costa Rica, Panama and Venezuela. In 1978 and 1979, it was around the Marxist-Leninist FSLN that the moderate, bourgeois FAO coalesced.

In the wake of Somoza’s downfall, the FSLN experienced none of the confusion and indecision that afflicted the members of the FAO. The Sandinistas were Marxists, and thus had a coherent and consistent vision of Nicaraguan and world history from the distant past to the literal end of history. As Leninists, they had a cohesive pyramidal organization of disciplined professional revolutionaries who, though they might make tactical alliances with others, strove inexorably toward the acquisition of unquestionable power in Nicaragua.

Leninist parties frequently suffer from stagnation after holding power for decades. This is due to their rigid organization and strong (often stifling) internal discipline. But for a Leninist party operating in the
context of a power vacuum and opposed by a hodge-
podge of less disciplined rivals, these attributes are a
veritable boon. Leninists never lose sight of their
ultimate goal and have the cohesiveness to overcome
obstacles that would destroy other organizations.

The FSLN began to press its erstwhile allies by
monopolizing the formation of the new military and
security organs and the mass organizations. In the
absence of the Carter-echos, no objections were raised.
Then the FSLN commenced diverting government money and facilities to itself.

A few voices were raised in dissent, but as th en-
member of the Junta of National Reconstruction
Alfonso Robelo remembered later, such matters were
ever discussed. They just happened.

At the center of the Sandinista strategy was the
propagation of the myth that only the FSLN was
responsible for unseating the last of the Somozas.

Unlike most myths, this one had no basis in fact.
The contributions of all others not affiliated with
the FSLN were ignored or ridiculed.

The FSLN also deliberately confused its identity
with that of the government, then administered by
a FSLN-dominated Junta of National Reconstruction.
The FSLN’s National Directorate assumed
semi-government trappings and when it contradicted
the junta, it was the will of the National Directorate
that prevailed. This too was answered with little, if
any, opposition.

The fiction of a FSLN-middle class coalition was
eventually dropped, and FAO members dropped out
of the junta. Robelo was one of the first to go. Also
leaving at about the same time was Violeta Barrios
de Chamorro. She was (and remains) the publisher
of La Prensa, a newspaper that has caused both the
Somozas and the Sandinistas grief as a center of
vocal opposition.

Within a year, the nature of the new Nicaragua
was clear. Though initially pledging to institute a
mixture of capitalism and socialism and the FSLN
government was committed to state socialism of in-
dustry and a transistion of collective and state farms
in agriculture. The social system was to be one of
liberalism and a transition of collective and state farms
in agriculture. The social system was to be one of
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But that is not the case. The FSLN will not put
up with pluralism of any sort. So now Nicaragua’s
civil war is the largest in Central American history.
Nicaragua’s tragedy is that this appalling war ought
to have occurred at all.

NICARAGUAN DEMOCRATIC FORCE

The Nicaraguan Democratic Force (FDN) was the
first of the contra organizations, and is now the
dominant force in the movement. Too, more than any
other contra group, the FDN owes its existence to
the alliance of former National Guardsmen and
foreign governments.

The Broad Opposition Front may have suffered
confusion in the summer of 1979, but it was the
conjunction of victory. The situation in the national
Guard was far worse and much more uncertain. It was the
confusion of absolute defeat and abandonment.

To a great degree, the 10,000-man National
Guard was a dynastic army, not a national one—defending
its own interests against Nicaragua cannot be
thought of as a progressive war.

One of the goals of the United States’ Nicaraguan
policy in 1978 and 1979 was the preservation of at
least a rump of the National Guard to protect against
totalitarianism in post-Somoza Nicaragua. Initial
agreements between the Junta of National Recon-
struction and the Carter administration provided for
the integration of National Guardsmen with
Sandinistas into a new Nicaraguan army. But the
National Guard lost its reason to exist when Somoza
fled to Florida, and there were no coherent National
Guard units to integrate with anything. Furthermore,
the deployment of such mortal enemies as Guardsmen
and Sandinistas serving amicably in the same force
was impossible only in the minds of the uninformed
or unrealistic, and the FSLN was neither.

Despite the total collapse of their economic, social
and political order, some exiled National Guard
veterans refused to believe that Nicaragua would
never reclaim its historic role as guardian of
Nicaraguan democracy for Nicaragua for eternity. About
300 Guardsmen in Honduras formed the Fifteenth
of September Legion, which commenced raiding
operations across the border into Nicaragua.

According to some observers, the Legion fired
the first shots in the struggle to rid Nicaragua of
totalitarian repression. Others, such as the liberal
historian Richard Alan White, believe that its
members “distinguished themselves by robbery,
murder, and indolence.”
Some foreign governments grew wary of the Sandinistas at this same time. Predictably, the new government established very close relations very early with the USSR, Cuba and Bulgaria (which sent economists to help plan and run the Nicaraguan economy). Close ties were also forged between Nicaragua and Grenada (then under Maurice Bishop and another of the "New Jewel Movement"), Libya, and the Palestine Liberation Organization. Other terrorist and guerrilla movements were welcome in Nicaragua. The Farabundo Marti Liberation Front (FMLN) fighting in El Salvador established its headquarters in Managua (see Vol. 2). The FDN, the Sandinista terrorist organization had a presence in Nicaragua; and Mario Firmenich, the leader of the Argentine group called the Montoneros, arrived in Managua to study the strategy that brought the FSLN to power.

The presence of these radical leftist groups, especially Montoneros, deeply alarmed the military government of Argentina. Enrique Bermudez, a National Guard colonel and former military attaché in Washington, and between 70 and 80 other former National Guardsmen flew to Argentina in late 1980 for training, advice, and $300,000 in cash to carry out the fight against the Sandinistas. Thus, the same concern for internal subversion and terrorism that led the Argentine government to launch the disgraceful and paranoid "dirty war" at home also induced it to become involved in the emerging Nicaraguan resistance.

The Argentines also helped a non-National Guard armed opposition group become established. The Nicaraguan Democratic Union (UDN) was formed in Miami in October 1980 by Jose Francisco Cardenal and other predominately middle-class opponents of Somoza. Reflecting the UDN's motto, "Sin somocismo, sin somocismo", its chief of staff was not a National Guardsman but Orlando Bolanos, a Nicaraguan whose military experience was in the United States Air Force.

The first support for the UDN came from Nicaraguan exiles, who funded the purchase of two hundred hunting rifles, shotguns, sub-machineguns and civilian models of the M16 from Miami gun shops. By prior arrangement with friendly Honduran officers, the weapons were shipped from Miami to Honduras in the name of the Honduran armed forces. The UDN believes that an anti-Sandinista uprising is inevitable. Its objective was to hasten the insurrection and be in force when the government would lack power from collapsing FSLN. With this goal in mind, the UDN coordinated guerrilla bands in the mountains of the department of Jinotega on Nicaragua's northern border.

But the organization suffered from shortages, especially of food. Founding member Edmundo Chamorro led a UDN delegation to Argentina in May 1981. The Argentines gave them a plastic bag containing $50,000 in hundred-dollar bills, which the organization used to purchase food in Honduras and more guns in Miami. The Argentine military sent messages to Chamorro, Bermudez and other important leaders of the UDN, by couriers, and byexchanged US aid and advisors to Honduras, where the Argentines would train the resistance fighters. This was contingent on the unification of the various exile groups into one large front, however.

At about the same time as Argentina, the United States entered the picture. The new Reagan administration was concerned that massive US aid to Nicaragua, much of it laundered and transferred as a birthright by the Sandinistas, was going to the construction of a Yankeephobic state founded on Marxism-Leninism andless willing to insist that every aspect of Nicaraguan economic, social and political life be within its purview. The Argentines were not quite so picky about the future of Sandinista Nicaragua; they were not quite so picky about the future of Sandinista Nicaragua; they simply wanted to overthrow the FSLN, and their way of achieving that goal was not a concern to them. They wanted the FSLN to be out of power and let someone else clean up the mess.

United States goals in Nicaragua have been, and remain, the most uniformed when taken at face value. The United States began its aid to the FDN ostensibly to intercept arms shipments from Nicaragua to the FSLN. By this same policy, the United States is officially far more interested in a negotiated political settlement with the Sandinistas than in toppling their regime. The purpose of the contras is to allow the United States to negotiate from a position of relative strength and force the FSLN's present behavior more to a North American liking.

This policy ignores the intransitability of both sides in the conflict. The Sandinistas have risked their lives in war, 25,000 of them, and senior Sandinista leaders, who were not so picky about the future of Sandinista Nicaragua, not El Salvador or the United States. While the contras might get some pleasure in frustrating FSLN ambitions outside of Nicaragua, the overriding goal remains the destruction of sandinismo.

An overly successful FDN could be an embarrassment to the United States. If the contras appeared ready to defeat the Sandinistas in short order, the official policy of building strength for negotiations would be badly undercut. The United States has a strong interest in keeping the FDN functioning as an effective force. But until the United States domestic body generally accepts that the contras have a future in Nicaragua, not El Salvador or the United States. While the contras might get some pleasure in frustrating FSLN ambitions outside of Nicaragua, the overriding goal remains the destruction of sandinismo.

The FDN's objective was fundamentally political in the Clausewitzian sense: the replacement of the Sandinista government with one not committed to Marxism-Leninism and less willing to insist that every aspect of Nicaraguan economic, social and political life be within its purview. The Argentines were not quite so picky about the future of Sandinista Nicaragua; they simply wanted to overthrow the FSLN, and were quite apathetic regarding the government to succeed it—just so long as the new regime did not support leftist with such alarming fervor. The Sandinistas were understandably very deeply concerned about the fate of their country; and Argentina, not El Salvador or the United States. While the contras might get some pleasure in frustrating FSLN ambitions outside of Nicaragua, the overriding goal remains the destruction of sandinismo.

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The US and the United States currently face a situation in which they have a strong interest in keeping the FDN functioning as an effective force. But until the United States domestic body generally accepts that the contras have a future in Nicaragua, not El Salvador or the United States. While the contras might get some pleasure in frustrating FSLN ambitions outside of Nicaragua, the overriding goal remains the destruction of sandinismo.
But due to the low capabilities of the contras and the relatively low intensity of their operations, this appears unlikely.

The area of operations chosen by the FDN is highly conducive to anti-Sandinista guerrilla activity. Separated from Honduras along much of the border's length by the Rio Coco, the northern departments are mountainous, heavily forested, and to a large extent wilderness. The population is sparse, and the settlements tend to be small and widely separated. The road network is underdeveloped; transportation is often difficult. The population likewise favors the contras. The inhabitants are largely small independent farmers. Many have had their land confiscated by the Sandinistas, who followed their triumph with a frenzy of confiscation against "somocestas," National Guardsmen and their families, and other "enemies of the people." This has not only created a large group of northerners predisposed to fight the Sandinistas, but has made many others receptive to the contras by instilling the fear that too will lose all they have worked for.

The people of the north are also more conservative in general than others in Nicaragua. Appeals to class consciousness and Marxist ideology carry far less weight than appeals to religion and political conservatism. An indication of the northern departments' inherent trend is that the region was a fertile recruiting ground for the National Guard right up to its bitter end in 1979. The lifestyles of the northerners is also different for the most part than that of the more populated Pacific lowlands. They tend to have a pioneer ethos rather than a collectivist spirit. Thus, the northern border region is separated from the rest of Nicaragua by far more than distance and bad roads.

The net result is that the northern departments are favorable to the contras. Furthermore, the FDN's Honduran bases are nearby. On one side of the Coco are the vital training camps and supply bases. On the other side is a source of recruits and fertile and vital to the FDN as it was once was to the National Guard.

The FDN suffered a severe setback in early October 1984, when the United States Congress voted to terminate aid to the contras. The Argentines had left the year before, and now the FDN was left with the thin support of only such relatively minor benefactors as Taiwan and Israel. At the time of the aid cut-off, the FDN had about 9000 combatants. Some observers felt that the FDN'sWife was in fact a creature of the CIA, and that without assistance from North America the organization would fade away. But the FDN not only survived, but doubled the number of guerrillas under its banner to 18000 by the end of 1985. The FDN found a way to survive on private aid from the United States and others.

The organization did have to curtail its tempo of operations for awhile, but did not cease fighting altogether. At the same time, the political leaders of the FDN made a strong effort to secure private aid from abroad. Spearheading this was Adolfo Calero, former FSLN guerrilla and Marxist, who became the political chief of the FDN. While Enrique Bermudez attended to matters in Central America, Calero feverishly made the rounds in the United States, soliciting donations from wealthy Christian Democrats in politics and remains a practicing Catholic.

Pastora is nothing if not ambitious. When the FSLN took power, he was frustrated to be on the fringe rather than in the center of power. The overwhelming authority in Nicaragua was (and remains) the National Directorate of the FSLN, which consists of nine members. Pastora was not a member. In essence, he was the tenth man in a country ruled by nine.

The Sandinistas did grant Eden Pastora positions of lesser authority. He was Vice Minister of Interior, a member of the Secretariat of the Party, and a member of the National Committee, and the founder of the militia. He was, however, still shut out from the real seats of power. The other Sandinistas knew of his ambition and were keenly aware of his politics. Pastora's exclusion from power was no accident, and it had to gall him. Eden Pastora was a Christian Democrat in politics and remains a practicing Catholic.

The Nicaraguan Democratic Revolutionary Alliance would not be Sandinista. As the commander of the National Palace raid, he thrust the FSLN into the public limelight and made the Sandinistas the most important anti-Somoza group in the country. As the commander of the FSLN's southern front operating out of Costa Rica, he diverted a great deal of the National Guard's strength and allowed the main Sandinista thrust from Honduras to enter the capital after facing minimized armed opposition. Thus it was hardly surprising that Pastora was an immensely popular Sandinista hero.

But Pastora was far different than his colleagues. Whereas the Marxist-Leninists were motivated by class struggle and secondary issues of nationalism, Pastora's opposition to Somoza was powered by more personal reasons. His father was killed in a land dispute that the younger Pastora blamed on the National Guard, and by association on the Somoza dynasty. As Marxist-Leninists, men such as Borge and the Ortega brothers consider themselves "scientific socialists" and atheists, though they may use the religious beliefs of others to cynically advance the Sandinista cause. Whereas Pastora was a Christian Democrat in politics and remains a practicing Catholic.

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The Sandinistas did grant Eden Pastora positions of lesser authority. He was Vice Minister of Interior, a member of the Secretariat of the Party, and a member of the National Committee, and the founder of the militia. He was, however, still shut out from the real seats of power. The other Sandinistas knew of his ambition and were keenly aware of his politics. Pastora's exclusion from power was no accident, and it had to gall him. Eden Pastora was a Christian Democrat in politics and remains a practicing Catholic.
were coming true. Because of his abhorrence of Marxism-Leninism and his lofty ambitions, a break between Pastora and the FSLN was virtually inevitable. Pastora publically broke with the Sandinistas at a press conference in San José, Costa Rica on 15 April 1982. He read a statement that he had prepared with the cooperation of former FAO and junta member Alfonso Robelo. Pastora praised the revolutionary example of Cuba, then proceeded to condemn nearly everything else connected with FSLN Marxism-Leninism. No longer was Pastora a bourgeois naieness in the FSLN but an avowed enemy with a vast following.

Pastora and Robelo founded the Democratic Revolutionary Alliance (ARDE) as an armed opposition group independent of the FDN. As did his former comrades in the FSLN, Pastora was somewhat hostile toward the United States, and like them he viewed the superpower to the north as imper-sonal and distant. Pastora accepted the aid with the notion that he would coordinate ARDE strategy with that of the FDN. As did his former comrades in the FSLN, Pastora was some-

ARDE did not. The desolation among his subordi-nates increased, and his hostility toward the FDN and grievances toward the United States did not lessen. In 1985, the ARDE and the Indian con-trary groups accused the FDN of not defending them for the lion’s share of foreign aid.

Costa Rica also grew wary of the ARDE’s con-tinued presence. Eventually the Costa Ricans be-came worried that the ARDE’s militancy was endangering their precarious neutrality. Lacking a standing army, Costa Ricans were drawn into Nicaragua’s war. By 1986 it was clear that the Costa Rican government wanted no part of Pastora or the ARDE.

The ARDE limped on through 1985 and into 1986. Numerous commanders abandoned it for the greener pastures of the FDN. Eventually even Alfonso Robelo went. The end came on 16 April 1986. Eden Pastora announced that he was leaving the war and seeking asylum in Costa Rica. The ARDE was a dead issue.

Pastora now lived in exile in Costa Rica, which considers Pastora at peace far more tolerable than the directives issued by his rebel authority. Costa Rica no longer poses a problem for the FSLN. Perhaps it can be recast, but only by the FDN or a subsid-ary organization and only if Costa Rica becomes no longer as afraid of contra threats to its neutrality and security. Neither seems likely in the foreseeable future.

When the ARDE went into action, Pastora expected a short insurgency. According to his plans, Nicaragua was impressed with this celebrity would stage a general insurrection against their betrayers. Desertsions from the army would swell the ranks of the ARDE and Pastora would use Managua and Zelaya as bases. It is now obvious that Pastora grossly overestimated his popularity in Nicaragua in 1983. There were no desertions from the army and no cheering throngs of pastoristas. What there was was a protracted war, and the ARDE proved inadequate to face it.

ARDE-FDN rivalry was as strong as ever. Eden Pastora launched the most ambitious ARDE operation ever on 18 November 1983. About 1000 ARDE contrastraced across a ninety-mile stretch of the southern border department of Río San Juan in operation “Blazing Tooth.” They attacked, but did not take, about two dozen towns and managed to penetrate approximately forty miles inside Nicaragua.

The ARDE reached its zenith in April 1984, when it became the first contra group to take a Nicaraguan town. It seized San Juan del Norte, an Atlantic seaport near Costa Rica. The Sandinistas quickly retook the town but this did not diminish the political benefits of the operation. The Sandinistas had used a larger and better-equipped FDN in taking and holding a population center, if only for a short time.

The fortunes of both Pastora and his organization declined precipitously after the battle of San Juan del Norte. On 30 May a bomb exploded at a press conference called by Pastora, who was seriously injured. Some blamed the attack on Borge; others on the CIA. In any event, the effect was devastating.

With the ARDE’s leader out of commission, feuds broke out among the group’s other commanders. One of the most important points of disagreement appears to have been the willingness to coordinate its operations with the FDN, and disputes erupted by others who shared Pastora’s revulsion towards the senior organization. The situation was exacerbated by Sandinista military successes following the ARDE’s San Juan del Norte coup.

Pastora recovered from his injuries, but the
A heavy Sandinista propaganda campaign in the coast region reinforced the belief that the “Spaniards” were lousy Christians, and now spread the notion that they were also dangerous radicals. Posters of Lenin and Ho Chi Minh glued to public buildings in Puerto Cabezas were not just mildly distasteful, but very offensive to many of the inhabitants who resented the foreign economic and political interest in their political consciousness.

But the biggest Miskito grievance was the presence of thousands of Cuban doctors, nurses and teachers. The doctors and nurses were viewed as haughty, unconcerned about their patients’ health, predisposed to work for political reasons, and usually incompetent. The teachers were viewed as similar to the Sandinistas in that they were propagandists for atheistic Marxism. Furthermore, the Atlantic Coast already had a relatively high rate of literacy, and there was a general feeling that Miskito teachers would be far more appropriate than the godless foreigners, who were keeping local teachers out of work.

Despite its Sandinista roots, the constituency of MISURASATA was Miskito, not Sandinista. Fagoth led peaceful Miskito resistance to the FSLN’s Atlantic policies and broke dramatically with his old allies in early 1982. As a result, he was jailed in February 1981, sparking even more demonstrations. Indians began to flee to Honduras, which had a sizable Miskito minority of its own.

Zelaya was a major problem for the FSLN. Characteristically, the Sandinistas responded with ham-handed violence. But force could not quiet the Indians. Fagoth, their undisputed leader, was released with the understanding that he would try to calm the Indians, then go into exile in a Communist country. But he fled to Honduras himself by way of Puerto Cabezas and made contact with the anti-Sandinista exiles. Steadman Fagoth was now a contra.

At least 25000 Miskitos have fled Nicaragua, and about that many more have been forcibly relocated by the Sandinistas away from contra-infested areas. These relocations have only further alienated a people already hostile toward sandinismo. Sometimes relocated Indians have broken through the generally weak security forces of these camps and escaped to Honduras (as one large group from the new “settlement” of Francia Serpe did in September 1983).

The Indian resistance is badly fractured. The ramp of MISURASATA under Brooklyn Rivera aligned itself with the ARDE in 1983 and angrily denounced the FDN-allied Indians, whom Pastora called “worse than Sandinistas”. Affiliated with the FDN are Steadman Fagoth and the bulk of the armed Miskitos who are now organized under the name of MISURA. The possibility of reconciling these old friends and their groups appears remote, as there has been too much said and too many feelings hurt.

The Miskito contribution to the anti-Sandinista cause has been erratic. Hindered by fractionalism and a tendency to, in Fagoth’s words, “fight one day and forget the next”, the Miskitos have not been generally the most committed of soldiers, the exiled Miskitos passionately wish to see their homeland freed and left alone. But they also want to preserve their culture, one that does not place a high value on hunting other human beings. Consequently some exiled Miskitos have given up the fight in order to go home and keep their culture and language alive. Although some of its bases forward into Nicaragua, it would take a giant step toward toppling the FSLN from power.

Some of the specialized comando units operating out of Honduras have been composed of Miskitos. A unit of Indian frogsmen, for example, successfully raided the port facilities of Puerto Cabezas in January 1983. These were also the troops that attacked the MISURA command post at La Sal Tanca (“Big Star”); surprisingly it was trained in hand-to-hand combat, the martial arts, and booby traps by Japanese military advisors. The Miskitos are the quintessential irregular force in the contra war. They are strategically undependable, yet capable of feats so bold that the FSLN has been forced to rely on them as their prominent allies as to be embarrassing. In short, they show both the positive and negative attributes of people who would rather not fight, but do so for immediate, personal and compelling reasons.

**SANDINISTA MILITARY FORCES**

According to the Sandinistas, the most important task of the Nicaraguan people is the defense of the revolution, by military force if need be. Now it is necessary for the FSLN to employ formal military forces to remain in power.

The first Defense Minister of post-Somoza Nicaragua was Bernardo Larios, a former National Guard colonel named to placate the United States. But Larios never had any real power, and was soon out of office and in a Sandinista prison. He was replaced by Humberto Ortega, the brother of current president Daniel Ortega. Humberto’s appointment was not so much a change in leadership but the formal affirmation of FSLN supremacy in matters of defense.

The force that fought the National Guard in 1979 was highly irregular. Its weaponry was of mixed Western European and American manufacture, with the Cubans supplied and Belgian-manufactured FAL, the primary rifle and the United States M14 and West German G3 as secondary weapons. The people who carried these weapons were also something of a mixed bag. The FSLN “army” was overwhelmingly Nicaraguan, but there were significant numbers of foreigners. Many were Marxist “internationalists” from elsewhere in Latin America, but there were those who were not. There was even a unit of Panamanian volunteers raised by Hugo Spadafora (until 1978 the Vice Minister of Health in Panama). Demonstrating that Spadafora’s unit had the approval of Panamanian General Omar Torrijos, it had the approval of Panamanian General Omar Torrijos. Torrijos’ younger son, Martin.

The FSLN army began to shrink soon after the fall of Tacho. Many had joined in the final stages of the insurgency, and most went home to their old jobs. All of the foreigners were sent home. Dr. Spadafora returned to Nicaragua a few years later, but it was to fight on the side of the Miskitos.

The Sandinista Popular Army (EPA) was formed officially on 18 August 1979 by the stridently Leninist Humberto Ortega Saavedra. Almost immediately, it began to re-equip with new Soviet weapons and goad Nicaragua into a decision to stand its ground as its aggressors moved in. In 1980, the EPA took on the role of the Sandinista People’s Police, and by 1985, the EPA had grown to 23500 soldiers. By 1986, it was far bigger than the old National Guard. It had over 1000 tanks and 12000 guns and surface-to-air missiles, plus about 700 SA-7 shoulder-fired missiles. With a large armed force and substantial air defenses, the EPA is more than a one-dimensional force of foot soldiers in the mountains and forests.

The EPA now has 15 battalions and 3 “strategic defense bases”. These bases are a permanent force, a one-third reserve.”

**PREVIOUS PAGE:**

“We [the FSLN] are saying that Marxism-Leninism is the scientific doctrine that guides our revolution, the instrument of analysis for understanding the revolution’s historical process and for carrying out our revolution; sandinismo is the concrete expression of the historical development of the fight in Nicaragua. Without sandinismo we cannot be Marxist-Leninists, and with Marxism-Leninism cannot be revolutionary. For that reason they are indissolubly united and for that reason our moral force is sandinismo, and our doctrine is Marxism-Leninism.”

Even had he dispensed with the jargon, Ortega could not have made the ideological emphasis any more plausible.

Though the EPA is primarily an infantry army, it has a surprisingly substantial armored force. In mid-1981, the Sandinistas acquired about 30 second-hand Soviet-built T55 tanks from Algeria. This first shipment of tanks was put into storage near Managua, but more tanks continued to arrive and not all of them were mothballed. By late 1984, Nicaragua had more than 100 T54s and T55s.

At the same time, the Sandinistas received a wide variety of other military vehicles of Soviet and Eastern European origin. By late 1984, the EPA had over 20 PT76 amphibious light tanks and approximately 1200 152mm howitzers, including the German BRDM2 recce vehicles. They also had more than a thousand trucks of Soviet and East German manufacture.

The Soviets have also provided the Sandinistas with defense against aerial attacks upon their revalution. Nicaragua has about 120 each of anti-aircraft guns and surface-to-air missiles, plus about 700 SA-7 shoulder-fired missiles. With a large armed force and substantial air defenses, the EPA is more than a one-dimensional force of foot soldiers in the mountains and forests.

The FSLN has responded to the contra threat by not only expanding its army to the largest in Central America but by creating specialized anti-guerrilla units. The EPA now has twelve “light hunter battalions”. They were apparently first deployed in 1985, and half were formed in the first part of 1986. These units number between 400 and 600 soldiers each and are trained in counterinsurgency.

The light hunter battalions are assigned to specific areas, which they aggressively patrol in company-sized forces of about 100 men. Their advantages are their speed and机动性, with a war to drive out of the contra, special insurgency training, and intimate knowledge of their assigned areas from which their recruits are drawn. They also cooperate closely with local militia units that guard potential guerrilla targets such as farms and villages, thereby fitting into an integrated antiguerrilla strategy.

Supporting the light hunter battalions are fifteen “irregular warfare battalions” (BLIs). These appear to have been first raised at about the same time as the light hunter units, and seem to be similar in operation. However, the BLIs are intended to be more quickly deployed against low-intensity threats and as the empty tanks. Components of BLIs are often transported by Soviet-built Mi-8 or Mi-17 helicopters. In the past the Sandinistas have lacked the airlift capacity to transport an entire BLI by air, but the acquisition of new Mi-17s makes this probable in 1987.

The command of the Ministry of National Security is a special forces unit called the “Pulito Ubeda Brigade”. It is reported to have seen action, but its nature is so shadowy that it is impossible to even reasonably speculate as to its organization, equipment, or strategic role. It is even impossible to determine the year that the “Pulito Ubeda Brigade” was created. The army commander Ortega gave a speech to a gathering of army and military officers that was not meant for public consumption, but which left no doubt whatsoever of FSLN ideology. In part, Ortega said:
in 1978 and 1979 and who wished to stay in the army, and to provide a ready manpower reserve. Little noteworthy was happening in either Sandinista Nicaragua faced absolutely no significant external or internal threat. Since its foundation, the MPS has performed in a variety of military and political roles. At the beginning of the contra war, it bore the brunt of the Sandinista effort, patrolling regions and attacking contra units as well as defending against United States air strikes. In 1982, the MPS had a hand in fighting the small invasion by the United States. The theoretic, the MPS was formed when the Sandinista government. Thus the MPS has had a hand in fighting the contras, guarding against a United States invasion, and those who had earned the ire of the Sandinista government.

The militia performs a vital political function by supplying some of the manpower of the Sandinista military. The militia performs a vital political function by supplying some of the manpower of the Sandinista military. The militia performs a vital political function by supplying some of the manpower of the Sandinista military. The militia performs a vital political function by supplying some of the manpower of the Sandinista military.

The contras have a reputation in many circles as at best retrogressive and at worst downright sonomistic. The word “contra” itself is a contraction of contrarrevolucionario, which (with “boguesmost”) is a favorite Sandinista invective used against anyone who objects to anything from Lenin’s peculiar interpretation of Marx to Sandinista rationing of toilet paper. The campesinos who stream into Honduras to join the FDN are hardly insulted by the label, however.

Assumptions that the contras, in particular the FDN, are indelibly sonomistic are false, despite the National Guard roots of the contra movement. A new generation of contras, far different in composition than the Fifteenth of September Movement, now fights the FSLN. Writing in the September, 1979, issue of the public magazine Contra, Eiri and Virginia Valenta concluded that of the 19,000 men then in all contra organizations, no more than 3,000 were veterans of the National Guard. In the oft-malignied FDN, only one to three percent of combatants are former Guardsmen. The vast majority were recruited from the disenfranchised farm and urban poor, members of the middle, and those per- cent were actually disillusioned former Sandinistas.

The current contra leadership is likewise non-sonomistic. Enrique Bermudez may be a former National Guard colonel, but he lacks the personal charisma and ambition to function politically as an Anastasio Somoza Garcia. Adolfo Calera, his former superior, has an impeccable record of opposition to the Somoza dynasty. The functioning contra groups are now under the umbrella of the United Nicaraguan Opposition (UNO), a political front headed by Adolfo Robelo and Arturo Cruz. Robelo was a member of the FAO and the Junta for National Reconstruction, and was a close associate of Pastora in the ARDE. Cruz succeeded Robelo in the Ministry of Agriculture, and was president of the Central Bank after the fall of Somoza, and ran for president against Daniel Ortega in 1984.

The most important military man in the contra movement is Bermudez, and the movement is dominated politically by the triumvirate of Calero, Bermudez and Cruz. Should the contras take power, these four men will be the ones to run Nicaragua. Their personalities and the political orientation of the bodies of the ARDE and the Popular Army, and it was intended to defend the nation against the FSLN.
Contra Guerrilla Squad (1981 on): 3/2; 1C, 1s; 1xLMG4, 9xRFL5 or RFL10 or RFL14. (183 points; Group 7)
Contra Guerrilla Squad (1981 on): 3/2; 1C, 1s; 1xLMG4, 9xRFL1. (149 points; Group 6)
Contra Guerrilla Squad (1981 on): 3/2; 1C, 1s; 1xGLR2, 8xRFL10, 1xRFL13 (M2), 1xSMG7. (155 points; Group 6)
Contra Guerrilla Squad (1981 on): 3/2; 1C, 1s; 1xMPL20, 9xRFL5 or RFL10. (152 points; Group 6)
Contra Guerrilla Squad (1981 on): 3/2; 1C, 4xRFL1, 4xRFL10, 2xRFL13 (M2). (131 points; Group 5)
Border Raider Squad (1979-1980): 3/2; 1C, 1s; 1xLMG4, 1xGLR2, 8xRFL5. (176 points; Group 7)
FDN Guerrilla Squad (1981 on): 3/2; 1C, 1s; 1xMPL20, 8xRFL5, 1xMRT6. (183 points; Group 7)
FDN Guerrilla Squad (1981 on): 4/2; 1C, 1s; 1xLMG4, 1xGLR2, 2xRFL5. (233 points; Group 9)
FDN Guerrilla Squad (1987 on): 4/2; 1C, 1s; 1xMPL20, 8xRFL8, 1xMRT6. (240 points; Group 10)
Sandinista Infantry (EPS) Squad (1980 on): 4/2; 1s; 1xLMG20, 1xMPL20, 6xRFL1. (157 points; Group 6)
Sandinista Infantry (EPS) Squad (1981 on): 4/2; 1s; 1xLMG20, 1xMPL20, 7xRFL1. (180 points; Group 7)
Sandinista Light Hunter or BLI (EPS) Squad (1985 on): 4/2; 1s; 1xLMG20, 1xMPL20, 7xRFL1. (176 points; Group 7)
Sandinista Infantry (MPS) Squad (early 1980 on): 3/2; 1s; 1xLMG20, 6xRFL21, 1xSMG7 or SMG11. (95 points; Group 4)
Sandinista Infantry (MPS) Squad (early 1980 on): 3/2; 1s; 7xRFL1, 1xSMG7 or SMG11. (95 points; Group 4)
Sandinista Infantry (EPS) Squad (1979-1980): 3/2; 1s; 1xLMG11, 7xRFL5 or RFL11 or RFL14. (131 points; Group 5)
Sandinista Infantry (EPS) Squad (1979-1980): 4/2; 1s; 1xLMG11, 7xRFL5 or RFL11 or RFL14. (173 points; Group 7)
Sandinista Infantry (EPS) Squad (1979-1980): 3/2; 1s; 1xLMG5, 7xRFL5 or RFL11 or RFL14. (132 points; Group 5)
Contra Weapons: GLR2 (rare to 1987), GLR3 (M203—very rare); GMG4 (M60); LCW3; LPL3; MPL13; MPL19; MPL20; MRT6 (M19); PST1; PST2 (HP35); PST3 (TT33, Super Star); RFL1 (AK47, Type 56-1), RFL5 (FAL), RFL7 (various hunting rifles—no grenade launcher or bayonet; or M1903 for training purposes); RFL10 (M16A1; also semi-automatic M16—4 points); RFL13; RFL14; RFL18 (M1 Garand); SMG1 (rare), SMG7 (Uzi, VZ23, VZ24, VZ25, VZ26), SMG11 (APS).
Contra Vehicles: TRK2 (Weapon 31).

The purpose of the following scenarios is to give the FIREPOWER player a feel for the civil war in Nicaragua. Most are the kinds of actions that took place in the indicated years. Blazing Tooth is based on an actual ARDE campaign that saw such assaults on about a dozen towns. “San Juan del Norte” simulates a part of another actual battle, as does “Flight to the Coco.” Players are strongly urged to use the following optional rules:

16.2-Assorted Optional Firing Modifiers
16.4—Suppression of Non-Automatic Weapons
16.6—Pinned and Inactive Status
16.7.2—Optional Nightfight Rules
16.8—Extra Major Personal Weapons
16.9—Standing Behind “2” Height Cover
21.—Fires
23.—Wounds and Cover
24.—Action Scale

This list is derived from Michael Craighead’s “Play-tester’s Note” to my article “Struggle for El Salvador” in The GENERAL (Vol. 22, No. 6). Players would do well to consult Mr. Craighead’s comments regarding FIREPOWER in the setting of a guerrilla war.

The victory conditions of the following scenarios are consistent with the Victory Condition rules on page 42 of the FIREPOWER Battle Manual. For scenarios in which victory points are part of the victory conditions, each player receives one point for each wounded or eliminated enemy soldier and two points for each enemy soldier taken prisoner.

The orders of battle are self-explanatory, but one note must be made about contra weapons. The RFL10 is a standard fully automatic M16A1, and the RFL7 is a hunting rifle in all scenarios. The semi-automatic M16 and the M1903 are included in the Contra Equipment Lists above for DYO scenarios only, and are not represented in any of the following.

SCENARIOS
The following scenarios are based on actual battles and campaigns in Nicaragua between 1980 and 1986.

“BORDER RAIDERS 1980”

Soon after the flight of Anastasio Somoza Debayle and the disintegration of his National Guard, former Guardsmen exiled in El Salvador and Honduras coalesced into a number of armed groups that commenced raiding into Nicaragua. Depending upon one’s point of view, these organizations were either the first bands of freedom fighters or bandits who terrorized recently liberated campesinos. In any event, they were the seeds of the contra movement.

The most noteworthy raider group was the Fifteenth of September Legion, which would eventually be a core group of the Nicaraguan Democratic Force. In this scenario, a unit of the Legion encounters a Sandinista FDN Guerilla Squad that has not fully made the transition from irregular insurgent unit to part of the regular standing army. The engagement takes place in the mountain wilderness of Nueva Segovia department near the Honduran border.

A. MAPBOARD TERRAIN: Ignore all buildings and fences. All free-standing walls, hedges, the well, and dark green hexes as well as tree hexes are considered tree hexes. Hills are height “4”; depressions are height “2”. Roads are unpaved.

B. SPECIAL RULES: Game length is 5 Turns. Fifteenth of September Legion units may exit off the north mapboard edge, and Sandinista units may exit off the south edge.

WEATHER: Normal.

VISIBILITY: Condition 1.


C. OPPOSING FORCES:

a. Sandinista Infantry Squad (—): Set up first four hexes, inclusive, of the south board edge. 3/2; 1C, 1s; 1xLMG11, 5xRFL5, 2xPST2, 1xSMG7 (G), 2xMPS, 1xHGN3 and/or HGN5 (G), 1xSHG (143-148-28 points).

b. Fifteenth of September Legion Squad: Set up second within four hexes, inclusive, of the north board edge. 3/2; 1s; 4xRFL5, 4xRFL7, 2xSMG7 (Uzi), 2xSCP (for RFL7 only), 5xHGN3 and/or HGN5 (G), 5xHGN8, 1xSHG (143-148-28 points).

D. VICTORY CONDITIONS: Each side receives two victory points for each of its surviving, unwounded soldiers on the opposite side (i.e., past the mapboard fold) of the mapboard at the end of the game. If one squad is panicked at the end of Turn 5, the other side wins regardless of the victory point count.

“TERROR FOR THE MILITIA 1982”

In the early stages of the contra war, the Sandinistas relied on their MPS rather than the full-time regular soldiers of the army. In this scenario, a militia patrol is ambushed in the Jinotega department by a squad of the Nicaraguan Democratic Force.

A. MAPBOARD TERRAIN: Only mapboard panel 2 is used.
Observation Conditions 2 or 3, roll the die again: "1-4" raining; "5-6" Fog; "7-10" Night.

FIRES (OP): Wet if Mud or Raining—otherwise Normal.

C. OPPOSING FORCES:

a. Defenders: FDN Guerrilla Squad: 3/2; 1S; 1XLMG4, 8XRLFL, 1XMPL20, 1XSF, 1XPML20AMO, 2xRFL1, 5XSMG7 (VZ23), 1XBPD, 1xRPL3, 1xRFL1, 1xBRDM2.


1st Sandinista Militia Squad (+): 3/2; 1C, 1S; 1XLMG20, 8XRLFL, 1xSMG7 (Uzi); 1xHGN3, 1xHGN5, 1XPML20, 1xXPML19AMO, 1xXPML20AMO, 2xRFL1, 1xSF.

2nd Sandinista Militia Squad (+): 3/2; 1C; 1XLMG20, 8XRLFL, 1xSMG7 (VZ23), 1xHGN3, 1xHGN5, 1XPML20, 1xXPML19AMO, 2xRFL1, 1xSF.

3rd Sandinista Militia Squad (-): 3/2; 1S; 7XRLFL1, 1XPML20, 1xXPML19AMO, 1xXPML20AMO, 2xRFL2 (for LMG and MPL), 1xSCP.

D. VICTORY CONDITIONS:


1st Sandinista Infantry Squad (+): includes BRDM2 crew and truck driver: 4/2; 1C, 1S; 1XLMG20, 1XMP20, 6XRLFL, 4XSMG7 (VZ23), 1XBPD, 1xRPL3, 1xBRDM2.

2nd Sandinista Infantry Squad: 4/2; 1S; 1XLMG20, 1XMP20, 6XRLFL, 1XBPD.

Extra Equipment: 2XBNC, 50xHGN3, 8XMPL20AMO, 4xRFL3 (for LMG and MPL), 2XSF.


1st Sandinista Militia Squad (+): 3/2; 1C, 1S; 1XLMG20, 8XRLFL, 1xSMG7 (Uzi); 1xHGN3, 1xHGN5, 1XPML20, 1xXPML19AMO, 2xRFL1, 1xSF.

2nd Sandinista Militia Squad (+): 3/2; 1C; 1XLMG20, 8XRLFL, 1xSMG7 (VZ23), 1xHGN3, 1xHGN5, 1XPML20, 1xXPML19AMO, 2xRFL1, 1xSF.

3rd Sandinista Militia Squad (-): 3/2; 1S; 7XRLFL1, 1XPML20, 1xXPML19AMO, 1xXPML20AMO, 2xRFL2 (for LMG and MPL), 1xSCP.

D. VICTORY CONDITIONS:


1st Sandinista Infantry Squad (+): includes BRDM2 crew and truck driver: 4/2; 1C, 1S; 1XLMG20, 1XMP20, 6XRLFL, 4XSMG7 (VZ23), 1XBPD, 1xRPL3, 1xBRDM2.

2nd Sandinista Infantry Squad: 4/2; 1S; 1XLMG20, 1XMP20, 6XRLFL, 1XBPD.

Extra Equipment: 2XBNC, 50xHGN3, 8XMPL20AMO, 4xRFL3 (for LMG and MPL), 2XSF.

D. VICTORY CONDITIONS:


1st Sandinista Infantry Squad (+): includes BRDM2 crew and truck driver: 4/2; 1C, 1S; 1XLMG20, 1XMP20, 6XRLFL, 4XSMG7 (VZ23), 1XBPD, 1xRPL3, 1xBRDM2.

2nd Sandinista Infantry Squad: 4/2; 1S; 1XLMG20, 1XMP20, 6XRLFL, 1XBPD.

Extra Equipment: 2XBNC, 50xHGN3, 8XMPL20AMO, 4xRFL3 (for LMG and MPL), 2XSF.

D. VICTORY CONDITIONS:


1st Sandinista Militia Squad (+): 3/2; 1C, 1S; 1XLMG20, 8XRLFL, 1xSMG7 (Uzi); 1xHGN3, 1xHGN5, 1XPML20, 1xXPML19AMO, 2xRFL1, 1xSF.

2nd Sandinista Militia Squad (+): 3/2; 1C; 1XLMG20, 8XRLFL, 1xSMG7 (VZ23), 1xHGN3, 1xHGN5, 1XPML20, 1xXPML19AMO, 2xRFL1, 1xSF.

3rd Sandinista Militia Squad (-): 3/2; 1S; 7XRLFL1, 1XPML20, 1xXPML19AMO, 1xXPML20AMO, 2xRFL2 (for LMG and MPL), 1xSCP.

D. VICTORY CONDITIONS:


1st Sandinista Militia Squad (+): 3/2; 1C, 1S; 1XLMG20, 8XRLFL, 1xSMG7 (Uzi); 1xHGN3, 1xHGN5, 1XPML20, 1xXPML19AMO, 2xRFL1, 1xSF.

2nd Sandinista Militia Squad (+): 3/2; 1C; 1XLMG20, 8XRLFL, 1xSMG7 (VZ23), 1xHGN3, 1xHGN5, 1XPML20, 1xXPML19AMO, 2xRFL1, 1xSF.

3rd Sandinista Militia Squad (-): 3/2; 1S; 7XRLFL1, 1XPML20, 1xXPML19AMO, 1xXPML20AMO, 2xRFL2 (for LMG and MPL), 1xSCP.

D. VICTORY CONDITIONS:


1st Sandinista Militia Squad (+): 3/2; 1C, 1S; 1XLMG20, 8XRLFL, 1xSMG7 (Uzi); 1xHGN3, 1xHGN5, 1XPML20, 1xXPML19AMO, 2xRFL1, 1xSF.

2nd Sandinista Militia Squad (+): 3/2; 1C; 1XLMG20, 8XRLFL, 1xSMG7 (VZ23), 1xHGN3, 1xHGN5, 1XPML20, 1xXPML19AMO, 2xRFL1, 1xSF.

3rd Sandinista Militia Squad (-): 3/2; 1S; 7XRLFL1, 1XPML20, 1xXPML19AMO, 1xXPML20AMO, 2xRFL2 (for LMG and MPL), 1xSCP.

D. VICTORY CONDITIONS:


1st Sandinista Militia Squad (+): 3/2; 1C, 1S; 1XLMG20, 8XRLFL, 1xSMG7 (Uzi); 1xHGN3, 1xHGN5, 1XPML20, 1xXPML19AMO, 2xRFL1, 1xSF.

2nd Sandinista Militia Squad (+): 3/2; 1C; 1XLMG20, 8XRLFL, 1xSMG7 (VZ23), 1xHGN3, 1xHGN5, 1XPML20, 1xXPML19AMO, 2xRFL1, 1xSF.

3rd Sandinista Militia Squad (-): 3/2; 1S; 7XRLFL1, 1XPML20, 1xXPML19AMO, 1xXPML20AMO, 2xRFL2 (for LMG and MPL), 1xSCP.
Extra Equipment: 4×BNC. 60×HGN3 and/or HGN5. 10×MPL20AMO. 4×GLR2AMO. 5×PST3 (for LMG, MPL, GRL), 2×SHG.

D. VICTORY CONDITIONS: The ARDE player wins in either of two ways: by possessing two buildings on panel 3 at the end of the game, or if any two Sandinista squads are panicked at the end of Turn 6. The Sandinista player wins by avoiding ARDE victory conditions.

**“MISKITO COAST 1984”**

The Miskito Indians if the Zelaya department are not a warlike people. But the highly offensive actions and attitudes of their Sandinista and Cuban overlords, administrators, health professionals, teachers and propagandists drove many to arms. Here, a Miskito village loyal to MISURASATA, resisting efforts by the EPS to bring it back to the way of socialist progress.

**C. OPPOSING FORCES:**


Set up second. Either 1, 4, 7, or 10 in Vol. 22, No. 6—a study to which he has devoted other fine articles in this issue.

b. 1st Sandinista Infantry Squad: 4/2; 1C, 1S; 1×LMG20, 1×MPL20, 7×RFL7.

2nd Sandinista Infantry Squad (+): 4/2; 1S; 1×LMG20, 1×MPL20, 6×RFL1L1, 2×SCP.

3rd Sandinista Infantry Squad (+): 3/2; 1S; 1×LMG20, 1×MPL20, 4×RFL1L1. Extra Equipment: 4×BNC, 30×HGN3, 12×MPL20AMO, 6×PST3 (for LMG and MPL), 2×SHG.

**b. MISURA (Defenders):** Set up second in any hex south east of hexrow 2Q inclusive. This is the second in Mr. Werbaneth's studies of revolution in Central America (the first appeared in Vol. 22, No. 6)—a study to which he has devoted much of his adult life. However, before the readers are tempted to dismiss him as another narrow specialist in our hobby, it is recommended that they read this two other fine articles in this issue.

**D. VICTORY CONDITIONS:** The ARDE player wins by controlling a total of seven buildings, which may include those in which he set up, by the end of Turn 5. The Sandinista player wins by avoiding ARDE victory conditions, or if both ARDE squads are panicked at the end of Turn 5.

**“FLIGHT TO THE COCO 1983”**

If the Sandinistas had tried to formulate a plan with the purpose of antagonizing the Miskitos, they could not have invented one more effective than that implemented to administer the Indian territories. The FSLN should have been the least surprised in Nicaragua when they and their Cuban allies incited the Miskitos to revolt. When the uprising began, the Sandinistas responded with stark repression. Part of this was the wholesale movement of Miskitos from their villages in guerrilla infested territory to relocation centers more easily controlled by the FSLN.

Francia Serpe was one such relocation camp. On the night of 19 December 1983, MISURA guerrillas overpowered the policemen guarding Francia Serpe and open the gates to the inhabitants to escape. Having waited this moment for some time, the people were prepared and eager to flee to Honduras. On the second day of the 30-mile trek, government soldiers caught up with the rear of the Miskito refugee column. They were met with a MISURA rear guard, which drove them off. Late the next day the Indians crossed the Rio Coco in large canoes. They had reached the safety and freedom of Honduras in time for the Christmas celebration.

**A. MAPBOARD TERRAIN:** All dark green hexes, as well as tree hexes, are considered tree hexes. Hills on panel 2 are height “2”; hills on panel 3 are height “1”. Treat all depressions as level ground. Building 3Q2 is of brick construction; all other are of wood plank construction. All roads are unpaved.

**B. SPECIAL RULES:** Game length is 4 Turns. MISURASATA soldiers may exit off the east mapboard edge; Sandinista units may exit off the west mapboard edge.

**C.OPPOSING FORCES:**

a. MISURASATA (Defenders): Set up any whole hex on panel 3. (290-224-66 points).

Set up second in any whole hex of panel 2 west of the edge. Building 3Q2 is of brick construction; all other are of wood plank construction. All roads are unpaved.

**C. OPPOSING FORCES:**


Set up second. Either 1, 4, 7, or 10 in Vol. 22, No. 6—a study to which he has devoted other fine articles in this issue.

b. 1st Sandinista Infantry Squad: 4/2; 1C, 1S; 1×LMG20, 1×MPL20, 7×RFL7.

2nd Sandinista Infantry Squad (+): 4/2; 1S; 1×LMG20, 1×MPL20, 6×RFL1L1, 2×SCP.

3rd Sandinista Infantry Squad (+): 3/2; 1S; 1×LMG20, 1×MPL20, 4×RFL1L1. Extra Equipment: 4×BNC, 30×HGN3, 12×MPL20AMO, 6×PST3 (for LMG and MPL), 2×SHG.

**b. MISURA (Defenders):** Set up second in any hex south east of hexrow 2Q inclusive. This is the second in Mr. Werbaneth's studies of revolution in Central America (the first appeared in Vol. 22, No. 6)—a study to which he has devoted much of his adult life. However, before the readers are tempted to dismiss him as another narrow specialist in our hobby, it is recommended that they read this two other fine articles in this issue.

**D. VICTORY CONDITIONS:** The ARDE player wins by controlling a total of seven buildings, which may include those in which he set up, by the end of Turn 5. The Sandinista player wins by avoiding ARDE victory conditions, or if both ARDE squads are panicked at the end of Turn 5.

**“SAN JUAN DEL NORTE 1984”**

The area in which the contras operate is generally sparsely populated and heavily defended by EPS and MPS units. Seldom have the rebels been presented with opportunities to seize towns and cities, and even less frequently has the fighting been taken to significant population centers.

The first contra group to take a town from the Sandinistas was not the FDN, which has enjoyed the largest share of foreign assistance and has generally had the largest number of men under arms. It was the ARDE, Pastora’s group that spent its short life fighting for its own independence and foreign recognition as well as for the overthrow of the FSLN. In April 1984, the ARDE seized the port of San Juan del Norte and struck a political coup against the FDN as much as the Sandinistas.

**A. MAPBOARD TERRAIN:** Only mapboard panel 4 is used.

All buildings are of wood plank construction except building 1 (brick) and buildings N and F (both concrete). Treat hedges as “1” height free-standing stone walls. No building is greater than two stories in height except buildings L and O. Streets are paved.

**B. SPECIAL RULES:** Game length is 5 Turns. ARDE units may exit off the south mapboard edge. Sandinista units may exit off any edge hex north of the mapboard fold exclusive. No unit may exit by way of a building hex.

**C. OPPOSING FORCES:**

a. Sandinista Popular Militia (Defenders): Set up first in any building except I, J, K or L. (399-310-89 points).

Set up second in any hex south east of hexrow 2Q inclusive. Treat hedges as “1” height free-standing stone walls. No building is greater than two stories in height except buildings L and O. Streets are paved.

**D. VICTORY CONDITIONS:** The ARDE player wins by controlling a total of seven buildings, which may include those in which he set up, by the end of Turn 5. The Sandinista player wins by avoiding ARDE victory conditions, or if both ARDE squads are panicked at the end of Turn 5.

This is the second in Mr. Werbaneth's studies of revolution in Central America (the first appeared in Vol. 22, No. 6)—a study to which he has devoted much of his adult life. However, before the readers are tempted to dismiss him as another narrow specialist in our hobby, it is recommended that they read this two other fine articles in this issue.
RAIL BARON is a fast-paced game of strategy for three to six players, which has the unique feature of being able to be completed in an afternoon. Each player assumes the role of an empire builder from the heyday of American railroading, and is in competition with his rivals to assemble from the 28 railroads available for purchase a system that will make victory possible. Although the luck of the dice and personal interactions among the players can have a decisive effect on the outcome of the game, most often than not it is the player who has acquired the best rail net who will win. The individual railroads are the raw material from which winning—and losing—strategies will be constructed, and any discussion of RAIL BARON must have at its heart an evaluation of their strengths and weaknesses.

NORTHEASTERN LINES

The Pennsylvania is quite possibly the most valuable railroad on the board, and is certainly the most valuable within reach as an initial purchase. It provides direct access to 75% of the Northeast and 34% of the North Central, two regions which between them cover the bulk of the Rockies. The presence of the Line will thus have a decisive effect on the outcome of the game, and on the connections it offers to the SAL and the ACL. The access that it provides gives its owner the security to select the Northeast when given a choice of regions—a great advantage which no other railroad confers. This is an important advantage, not only because the Northeast offers the highest payoffs for trips that begin west of the Rockies, but also because it is the region most likely to be called for by the destination table. A player who chooses the Northeast as a destination region will have one chance in five of having a choice again on the next trip. In addition to all this, the PA is the most-used line into New York, despite the well-founded consensus among those who do not own it that it should not receive the trade. The advantages that it offers are so great that the PA is the one railroad which should be bought whenever it is available, and the one most worth taking chances to acquire.

The New York Central is a poor second to the PA among the Northeast/North Central lines, but is nonetheless one of the five most valuable railroads in the game. It delivers access to 82% of the North Central region, more than any other railroad and more than enough to give its owner the freedom to go there when given a choice. But it gives access to only 33% of the Northeast (although this does include a virtual monopoly on the 6% that is Albany). Possession of the NYC will make a trip to Boston or to Portland less daunting than it otherwise would be. The NYC is the best initial purchase if the PA is not available.

The poor man’s PA, the Baltimore & Ohio provides access to 47% of the Northeast and to 46% of the North Central, enough to be useful but not enough to inspire confidence. It benefits from serving many of the same destinations as the PA (since same players shut out of a city will use the B&O instead whenever the choice is forced upon them). The B&O also provides access to the BNE and points north of any line that does not serve that city. It is the best initial purchase if the PA and NYC are not available.

In a three-player game, the Chesapeake & Ohio is a sort of rich man’s N&W, valued primarily for the connections on its northern end to service destinations that the N&W misses, and for the access it provides to certain cities. The addition of a fourth player transforms it into the pauper’s NYC, bearing the same relationship to that line that the B&O bears to the PA. Although the C&O provides access to a respectable 56% of the North Central, the 19% access it provides in the Northeast is too small an amount to inspire anything but fear. Despite its limitations as a Northeastern line, the C&O does offer a player deprived of a better one as close an approach as possible to the cities in the region. For such an unfortunate it is a necessary purchase—and one that will allow him to send most of the road smear the Southern.

Although it can be a real moneymaker for whoever has it, the real attraction of the New York, New Haven & Hartford is for the owners of the PA and the NYC. In combination with the PA, it provides direct access to 89% of the Northeast and a close approach to the remainder. With the NYC it delivers access to 31% of the region with guaranteed revenues on trips to 25% of it. These advantages are so great that players who are wary of the owners of the PA and NYC will not allow the NYNH&H to fall into the hands of either.

With a monopoly on the 6% of the Northeast that is Portland, the Boston & Maine is another potential moneymaker, and an added attraction for the owner of the NYC. In combination with that railroad, the B&M provides access to 53% of the Northeast and a monopoly over 11% of it. While it is not as attractive to him as the NYNH&H, the B&M is still pretty enough that the other players should not allow him to acquire it.

SOUTHEASTERN LINES

The best of the Southeastern railroads, the Seaboard Air Line provides access to 69% of that region and a monopoly on the 14% of it that Miami represents. The access that it delivers will allow its owner the security to select the Southeast when he is given a choice of regions, but only if he has the necessary connecting railroads, which can be difficult to acquire. Routes to and along the SAL are often so convoluted that it makes little sense to choose the Southeast unless no other safe region is available. The SAL is the first railroad away from the Northeast to be purchased, and its sale usually precipitates a rush among the other players to pick up those Southeastern lines that remain.

The Atlantic Coast Line bears the same relationship to the SAL that the B&O bears to the PA. It provides access to 51% of the Southeast—a useful amount—and has the advantage of paralleling and serving many of the same cities as the SAL (and the closest approach to Miami of any but the SAL). Players shut out of destinations served by the SAL will usually perversely attempt to alternate turns on the two railroads to avoid overburdening either of the two players with money. This only benefits the player who holds the PA, especially whenever anyone must travel to Miami. As with the SAL, it can be difficult to acquire railroads to connect with the ACL.

The Louisville and Nashville provides access to 50% of the South Central, more than any other railroad, and is the only railroad to have a monopoly on the 3% of the region that is Louisville. Despite these credentials, the relative inaccessibility of the Southeast insures that the main contribution of the L&N to the value of any rail net will be as a Southeastern line. The L&N provides access to 42% of the Southeast, third best of any railroad; thus it is an added attraction for the owner of the SOU.

The Southern and the L&N are quite similar railroads, and they offer similar advantages as Southeastern acquisitions. The main difference between them is that the SOU offers those advantages in significantly smaller quantities. It provides access to 37.5% of the Southeast and to 31% of the South Central, less than the L&N in each case, and the connections it offers to the SAL are not nearly as profitable. In addition, the SOU fails to connect with the NYC at all. Despite these relative shortcomings, the SOU is, like the L&N, a much sought after railline, and for all the same reasons. The only player which is not likely to pursue its ownership is the owner of the L&N. Although the SOU is inferior to the L&N as a Southeastern line, it does offer one advantage that the L&N does not—access to Washington D.C. A player shut out of the Northeast will not regard the SOU as inferior to the L&N, whatever its limitations in the Southeast.

Although the monopoly it has on the 10% of the Southeast that is Norfolk makes the Norfolk & Western a worthwhile addition to any rail system, its greatest value lies in the connections it offers between railroads. The N&W is the only minor railroad to offer connections to all of the major Northeastern and Southeastern lines, an advantage that makes it particularly attractive to the owners of the SAL, the ACL and the NYC. It is equally attractive to players deprived of a Northeastern line for the route that it offers into the North Central allows as close an approach as possible to many of the destinations served by those railroads. The N&W is often purchased ahead of any of the Central lines—especially if someone must travel to Norfolk early in the game.

The only player for whom the Richmond, Fredericksburg & Potomac is likely to have any attraction are the holders of the SAL and the ACL. If one of them also holds the PA or the B&O, he will value the RF&P for the ideal connections that it offers between his Southeastern and Northeastern lines. If one of them is shut out of the Northeast, he will value the RF&P for the access that it provides to Washington and for the close approach that it offers to other destinations in the region. But the appeal of the RF&P is the most limited of any railroad in the game, and it is often the very last railroad to be purchased.

NORTHEASTERN LINES

The Northern Pacific provides access to 69% of the Northwest, enough to give its owner a strong incentive to select that region when given a choice. This is a significant advantage, for the Northwest is in the rare position of having in its possession the only railroad that runs through and to the major western cities. Hence, it will usually be gratifyingly large. To best exploit this advantage, however, the owner of the NP must acquire railroads connecting with it at either end, a goal which is always difficult and often impossible to attain. The rewards are worth the effort, though, if one can achieve it.

The Great Northern and the NP are as much alike as any two railroads in the game. Which is the most valuable to a particular player will depend entirely upon his situation. The GN provides
access to 62.5% of the Northwest, which makes it marginally less desirable than the NP to a player seeking access to a safe region to select when he has to make a choice. On the other hand, the GN has connections with the WP, which makes it more desirable than the NP to a player concerned about being shut out of the Southwest. Both lines are difficult to establish connections to, but either will make a significant contribution to any rail system. Others will disagree, but I consider both the GN and NP to be more valuable than the SAL. The purchase of either of them can ignite a rush among the other players to acquire those Northwest lines that remain.

The Chicago, Milwaukee, St. Paul & Pacific provides access to only 39% of the Northwest, not nearly enough to give its owner leverage to select that region when a choice is offered. This greatly reduces its value in comparison with the NP and the GN, since a major reason to pursue a Northwestern line is to secure the Northwest as a region of choice. Further reducing its value is an almost total lack of connections west of Minneapolis, with the UP offering the only hope of a speedy trip between the two Western regions. These disadvantages far outweigh the one advantage that the CMSTP&P enjoys over the NP and the GN, an abundance of connections at its eastern end. On a positive note, the acquisition of the UP will give the CMSTP&P owner connections to the Southwest and a Northwestern system that is second to none. Although the CMSTP&P is an inferior Northwestern line, the consequences of being shut out of the region are devastating enough that it is a necessary purchase for a player deprived of a better one.

SOUTHWESTERN LINES

Arguably the most valuable railroad in the game, the Atchison, Topeka & Santa Fe provides direct access from Chicago to 76% of the Southwest, including a monopoly on 10% of that region (San Diego), as well as access to 41% of the Plains and 21% of the South Central. The access that it offers in the Southwest gives its owner the security to select that region when he has a choice, and the direct route that it offers insures that a minimum of time will be lost in transit. These are tremendous advantages, not only because any trips to the Southwest pay very well, but also because the Southwest is, next to the Northeast, the region most likely to be called for on the destination table. A player who chooses the Southwest as his destination has one chance in six of having his choice again on the return trip. Perhaps the only weakness of the AT&SF is that it affords no easy connections to the Northwest.

More valuable than the AT&SF to the player with the right connections, the Southern Pacific provides access to 82% of the Southwest, 37.5% of the South central and 24% of the Northwest. Although the owner of the SP is even more secure in selecting the Southwest as his region of choice than is the owner of the AT&SF, without the right connecting railroads his trip there is likely to be a good deal more time consuming. On the other hand, the SP does offer one advantage that the AT&SF does not—connections to the NP and the GN. Which Western line is the more valuable railroad will depend primarily on which connecting railroads the owner is able to acquire.

The Union Pacific is the only railroad in the game to have monopolies in two different regions (8% of the Southwest, Las Vegas, and 6% of the Northwest, Pocatello). Even with this advantage, it is a distant third among the three major Western lines, providing access to only 32% of the Southwest, to 49% of the Northwest, and to 51% of the Plains. The greatest weakness of the UP is its failure to provide adequate access in either of the two Western regions to secure it as a region of choice. Its greatest strength is the thoroughness with which its combination with any of the three Northwestern lines will correct this weakness. In combination with the NP, the UP provides access to 87.5% of the Northwest and a monopoly on 6% of it. With the GN or the CMSTP&P, it provides access to 81% of the region and the monopoly as well. The acquisition of the UP will guarantee the owner of any of these three Northwestern lines the superior system in that region—an advantage that will greatly offset the weakness of the UP in the Southwest. Without a Northwestern line to complement it, the UP is markedly inferior to either the AT&SF or the SP. Even an inferior Western line is far better than no Western line at all, and the UP—despite its limitations—is still one of the five most valuable railroads in the game.

Dollar for dollar the most valuable railroad on the board, the Western Pacific gives its owner a great advantage in the competition for routes into the Southwest. In combination with the AT&SF, it provides direct access to 88% of that region, a monopoly on 10% of it, and connections with the GN. With the SP, it delivers access to 82% of the region and a monopoly on 11% of it. With the UP, it offers access to 69% of the region and a monopoly on 8% of it. In short, possession of the WP will guarantee the buyer of the AT&SF or of the SP the superior system in the Southwest, and will give the buyer of the UP a system nearly the equal of the AT&SF or SP alone. It is the extent to which the WP relieves its owner of the pressure to acquire a particular western line, the degree to which it expands his options, that is the real value of the WP. (It goes without saying that a player who cannot acquire any of the three western lines had better have the WP, and connections to it.) The WP is the best initial purchase if the PA, NYC and B&O are all unavailable.

The Denver & Rio Grande Western offers so many potential advantages that it is almost always purchased early in the game, long before its actual value to the player who buys it is clear. To the owner of the WP, it offers the best connections to his railroad should be deprived of a major Western line. To the buyer of the SP, it offers a direct route into the Southwest, one that will make his Western line as valuable to him as the AT&SF is to its owner. To a player shut out of the Southwest or the Northwest, it offers as close an approach as possible to

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**TABLE 1**

<table>
<thead>
<tr>
<th>TABLE 1</th>
<th>PERCENTAGE OF ACCESS, BY REGION</th>
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<tbody>
<tr>
<td>NE</td>
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**TABLE 2**

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<thead>
<tr>
<th>TABLE 2</th>
<th>PERCENTAGE OF MONOPOLY</th>
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<tbody>
<tr>
<td>NE</td>
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<tr>
<td>B&amp;M</td>
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<td>C&amp;NW</td>
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**TABLE 3**

<table>
<thead>
<tr>
<th>TABLE 3</th>
<th>CHARACTERISTICS OF REGIONS</th>
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<tbody>
<tr>
<td>Region</td>
<td>Accessibility</td>
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<tr>
<td>North Central</td>
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<tr>
<td>Southeast</td>
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<td>South Central</td>
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<tr>
<td>Plains</td>
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<td>Northwest</td>
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<tr>
<td>Southwest</td>
<td>2.38</td>
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<tr>
<td>Overall</td>
<td>3.22</td>
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Accessibility—expected number of railroads per destination

Probability of Choice—probability a choice of regions will be offered

Minimum Regional Probability—occurs if region is never region of choice

Maximum Regional Probability—occurs if region is always region of choice
RAIL BARON is a game that lends itself to analysis. Anyone who writes on the subject will be sorely tempted to suggest some sort of theoretically derived rating system that assigns precise values to each of the 28 railroads in order to allow direct comparisons to be made between them. Although I have presented tables from which readers may draw their own conclusions, I have resisted the temptation to offer such a rating system—not because I do not consider it a worthwhile goal, but because I believe it is a goal that cannot be attained through theoretical analysis. Any analysis straightforward enough to be easily understood would necessarily ignore too many important factors to be more than an approximation of reality, while any analysis that took every factor into account would be far too complicated to inspire confidence. No theoretical analysis of a game as complex as RAIL BARON can be both comprehensive and comprehensible, an ugly fact that deprives any theoretically derived rating system of its credibility.

An empirically derived rating system would be another matter altogether. The real value of any railroad lies exclusively in the contribution it makes toward the victory of its owner, and one of the best indications of the worth of any railroad must consequently be the success with which it is able to support the winning player’s rail systems. If a large enough sampling of winning systems were available for study, it would be a simple matter to derive from it just such frequency values for each of these 28 railroads. The resulting empirically derived rankings would offer as accurate a representation of the actual worth of the railroads as it is possible to obtain. While it could easily take an individual a lifetime to record a large enough sampling to make analysis worthwhile, a cooperative effort among many RAIL BARON enthusiasts could produce significant results in a short time. I am proposing here just such an effort, which I will call, for lack of inspiration, Project RAIL BARON.

For the sake of simplicity, the project is limited to face-to-face games that are played to completion in a single session, with the winner determined according to the standard victory conditions, no optional house rules in use, and the same players remaining in the game from beginning to end, except, of course, for any eliminated during play. Players who wish to contribute their results are urged to record the following information upon the completion of every game that meets these criteria:

- Date of Game
- Location of Game
- Number of Players at Beginning
- Number of Players Eliminated during Play
- Home City of Winning Player
- Railroads owned by Winning Player at End of Game
- Other Holdings of Winning Player (Express or Superchief)

Please forward this information to me, Mr. Matt Ellis, Project RAIL BARON (5003 Biddix Avenue, Baltimore MD 21206). Although the information will fit on a postcard, any contributor who includes a self-addressed, stamped envelope will receive by return mail a summary of my findings to date. Project RAIL BARON is an unprecedented opportunity for those interested in the game to make a significant contribution to the body of knowledge surrounding it, and I hope that other players will be as enthusiastic towards it as I am.

CENTRAL LINES

The best of the Central lines, the Chicago, Rock Island & Pacific provides access to 72% of the Plains, a monopoly on 7% of that region, useful access in the South Central, and connections to Chicago and Tucumcari. The access delivered in the Plains gives the owner of the CR&P the freedom to select that region when given a choice—although this is of dubious benefit since, if he has no better choice available, his victory is assured. The CR&P lies in the access it provides—not to cities, but to other railroads. The only major railroads to which the CR&P does not offer connections are the SAL and ACL; possession of it practically guarantees a well-connected system. Although the advantages that it offers makes the CR&P attractive to players, its greatest attractiveness is for the owner of the SP. The purchase of the CR&P will give him a route into the Northwest that is nearly as direct as that offered by the AT&SF, and will make the SP even more valuable to him than the AT&SF is to its owner. The CR&P is seldom the first of the Central lines to be purchased, but its sale initiates a scramble among the other players for those connecting railroads that remain.

The Chicago, Burlington and Quincy provides access to 58% of the Plains and to 12.5% of the Northwest, and offers connections to Chicago, St. Louis and Fort Worth. Despite its strength in the Plains, the CB&Q's relative inaccessibility of the Northwest insures that the market of the CB&Q will be on that region. It provides the deepest penetration into the Northwest of any of the Central lines, and its acquisition is the best way for a player shut out of the region to minimize the painful consequences of a trip there. The greatest attraction of the CB&Q, however, is for the owner of the NP. In combination with that railroad, the CB&Q provides access to 75% of the Northwest, a monopoly on 7% of it, and badly needed connections to Chicago. The acquisition of the CB&Q is the one sure way for the owner of the NP to make the most of his rail line that is not available to the owner of the GN. The greatest weakness of the CB&Q, in comparison with the CR&P, is its failure to offer connections to either the GN or the SP.

The Chicago & NorthWestern provides access to 33% of the North Central, to 29% of the Plains, to 12.5% of the Northwest, and is the only Central line to have a monopoly in one of the Western regions (7% of the Northwest that is Rapid City). The greatest attraction of the C&NW is for the owners of the NP and GN, and it is equally valuable to both. In combination with either, the C&NW provides access to an additional 12.5% of the Northwest, in a monopoly on 7% of it, and connections to Chicago. The acquisition of the C&NW will guarantee the owner of the NP the superior system in Northwest, or will give the GN owner a Northwestern system every bit the equal of the NP-CB&Q combination. The advantage that it offers owners of any two systems are too insufficient to be worthwhile that and the C&NW is almost always the first of the Central lines to be bought.

The Missouri Pacific provides access to 36% of the South Central and to 32% of the Plains. Although the access it delivers can make the MP a worthwhile addition to any rail system (along with connections to St. Louis), its greatest benefit is the owner of the SP. The MP offers connections to the SP that are second only to those offered by the CR&P, and its purchase will give the SP-owner a Western line that is nearly as valuable to him as the AT&SF is to its owner. The appeal of the MP among the other players is limited enough that it is usually among the last of the Central lines acquired.

The St. Louis-San Francisco railroad provides access to some 37.5% of the South Central and to 36% of the Plains, with connections to St. Louis. Although the SLSF, like the MP, can be a nice addition to any system, its greatest attraction is for players seeking routes into the Southeast. The SLSF offers connections to the SAL and ACL that are only slightly inferior to those offered by the SOU, an advantage that makes it attractive both to players shut out of the Southeast and to owners of those coastal roads. The SLSF is a railroad of broad appeal; it is almost always purchased by the owner of the MP.

The Gulf, Mobile and Ohio is unique among Central lines in offering no profitable access in any of the three Central regions. It provides access to just four cities, only one of which is not served by at least six other railroads. What value the GM&O has lies almost exclusively in the connections that it offers to other raillines. To a player seeking routes into the Southeast, that value is substantial, for the GM&O offers connections to the SAL and the ACL that are next only to those offered by the L&N. The connections that it offers to the SAL, in particular, are far better than those offered by the SLSF. Despite this advantage, the failure of the GM&O to have worthwhile access in the Central regions makes it less valuable than the SLSF to every player but the owner of the SP. In a game in which no one is shut out of the Southeast, the GM&O is usually the last of the Central lines to be purchased; but in any other game, it is often one of the first.

The Illinois Central has access to 36% of the South Central and offers connections to Chicago and St. Louis. In most games that is the full extent of its value. The IC does offer connections to the SP, but if the owner of that railroad must rely on him he will waste much time and effort in trips to the South- east that the SP will be much less valuable to him than the AT&SF is to its owner. In addition, the IC fails to connect with the UP at all. The few advantages that it offers are so modest that in any game in which connections to the Southeast are dear, the IC is usually purchased.

The Texas & Pacific provides access to 36% of the South Central and to 6% of the Southwest. Although it complements well every railroad that connects to it, the T&P is particularly attractive to the owners of the L&N and the MP. In combination with the L&N, the T&P provides access to 74% of the South Central, while with the MP it provides access to 72% of the region. The acquisition of the T&P will give the owner of either enough additional trackage in the South Central to secure it as region of choice—a modest advantage, to be sure, but an advantage nonetheless. In addition, for a player recently shut out of the Southwest, the T&P is often the only railroad still available that offers anything like a close approach to the destinations in that region.

CONCLUSION

These are the railroads of RAIL BARON. Some offer great advantages to whoever holds them and will be pursued by every player, while others offer specific advantages but limited advantages to certain players and will be of little interest to anyone else in the game. Despite this wide variation in the appeal of the individual railroads, under the right circumstances the outcome of a game can hinge upon the ownership of any of them. Each railroad has the potential to be, in the only sense that really matters, the most valuable railroad in the game—the one whose acquisition makes victory possible for the winning player.
The Second World War on the Eastern Front was the most massive, destructive and, for those who have studied it, fascinating military campaign in the history of the modern world. The scope of Nazi Germany's epic death struggle with the Soviet Union is vividly simulated in the classic THE RUSSIAN CAMPAIGN.

When playing THE RUSSIAN CAMPAIGN from May/June 1941 to May/June 1945 (the “Fall of Berlin” scenario), the Axis player faces a strategic challenge similar to that faced by his German counterparts in the actual campaign. When Barbarossa was launched on June 22, 1941, the Germans had only a vague idea of the military and political conditions that could lead to the defeat of the USSR. Their plans called for the forces of Germany and its allies to drive deep into the Soviet Union, capture the vital cities of Moscow, Leningrad and Kiev, and complete the destruction of the USSR on a broad front until any lingering Soviet resistance collapsed. Despite the phenomenal victories enjoyed by the Axis in 1941, the Soviets proved far more than equal to the challenge. The German invasion plan was conceived out of strategic uncertainty, and failed the enduring dismemberment of the defeated Germany.

Like the officers of the OKH, the Axis player in THE RUSSIAN CAMPAIGN begins with an uncertain knowledge of conditions that will result in victory on the Eastern Front. He knows that he must hold Berlin at the end of the May/June 1945 game turn, but he does not necessarily know how to accomplish this. Should he conduct a methodical advance into the USSR, committing his forces to a defense in depth west of the Soviet heartland for the time that his opponent develops a significant counterattack capability? Or, should he maintain aggressive operations for as long as possible, retaining control of the initiative and thus diminishing the Soviet player’s ability to strike back? Should he try to seize Soviet cities—or break the back of the Red Army? The Axis player must make several critical strategic decisions, in which miscalculation can well lead to defeat.

As are all military conflicts, that of THE RUSSIAN CAMPAIGN is decided by power. Strategy is the marshalling and exploitation of one’s own power while eroding that of the opponent. When the Axis player recieves reinforcements or takes control of an oilfield, he enhances his own military power. When he forces the removal of a Soviet combat or worker unit, he diminishes Soviet military power. When he forces the removal of a Soviet combat or worker unit, he diminishes Soviet military power.

Territory is both a product and an element of military power in THE RUSSIAN CAMPAIGN. It is also the most fluid. In THE RUSSIAN CAMPAIGN, an AE, EX or DE result on either side in combat involving territories. The added value on both sides can result in an immediate and dramatic change in the relative power of the players. In such a case, the sudden absence of friendly units along an appreciable stretch of front will often enable the opponent to destroy even more units, take cities and territory, and thus increase the imbalance of power created by the original combat.

Reinforcement capability is neither as obvious, nor as fluid as the first element of military power. For the Axis player, power derived from this source is modest at best. He receives such a limited quantity of reinforcements that he must preserve the bulk of his originally deployed forces if he hopes to win. In contrast, the Soviet player could conceivably lose his entire order of battle in 1941 and still roll into Berlin by the end of the game due to his ability to receive massive reinforcements and replacements. The Axis player’s relative weakness in this area is increased by his nearly insignificant level of replacements, received once a year. This capability can be augmented only by the seizure of the two Caucasian oilfields, a difficult and hazardous task.

An even more important type of territory is that of major and minor cities. A city is a supply source, regardless of any rail links with a map edge. A detached pocket of resistance formed around a city will remain in supply and hence will not disappear by itself, but must be reduced by combat. A major city, on the other hand, which is the most powerful feature of substantially enhancing defensive efforts. In THE RUSSIAN CAMPAIGN, a major city fulfills the role of fortresses, and can be effective anchors in any defensive line. Thus, cities can be critical factors in the calculation of military power.

The second strategic option is less-sensititive and forces the player to be competitive from start to finish. The Axis player does not gamble on an early victory, but tries to hold onto Berlin at the end of the game. He does not try to break his opponent, but to outlast him. Such a victory might not be perceived as a real triumph in terms of the actual “Great Patriotic War,” particularly if the game ends with overwhelming Soviet forces west of Vistula. Nonetheless, such would be sufficient to gain the Axis player victory in THE RUSSIAN CAMPAIGN.

Unlike his real-life German counterparts, the Axis player who understands the nature of power in THE RUSSIAN CAMPAIGN should also know the conditions under which the Soviet player will be defeated. Such a victory requires both the wholesale destruction of Soviet units and the capture of a large number of cities, some of them very difficult to seize.

To decide the game early in his favor, the Axis player must capture all of the important cities in the Soviet Union. These are Moscow, Leningrad, Kiev, Kharkov, Stalino and Stalingrad. Possession of these obvious objectives will deprive the Soviet player of at least eleven points of replacements per turn, dismember the Soviet rail network, and facilitate the easy and rapid transfer of Axis forces, thus insuring that the initiative—and hence the advantage—will remain in Axis hands.

Seizure of these six cities will be of much less value, however, if the forces that take them are unable to hold them against Soviet counterattacks or flanking maneuvers. Therefore, the Axis player must maintain a broad, strong front with few gaps or weak spots exploitable by Soviet countermeasures. In addition, large numbers of Soviet combat units must be destroyed. The best remedy against a strong defense or counterattack is to make sure that one’s opponent lacks sufficient forces to mount such resistance. The Soviet player’s replacement capability is one of his most valuable assets, so Soviet losses must be monumental for this gambit to succeed. Furthermore, Axis losses must be kept to
an absolute minimum. As impressive as were the German victories in the summer and autumn of 1941, they would be inadequate to win THE RUSSIAN CAMPAIGN through a rapid decision. If these conditions are met, then the Axis player has won. The Soviet player will have little ability to prevent his opponent from going wherever and doing whatever he wants to in the USSR, as his military power will be too limited to stop it. The game may continue into 1943, but it will be an exercise in futility for the Soviet player.

But this strategy risks a stunning Soviet victory as well as a quick and dramatic Soviet defeat. The Axis player may push too far east too quickly with his critical and almost irreplaceable resources, leaving them isolated from the main forces of "leg infantry" and eliminated in detail. Furthermore, one can seldom predict when the Red Army will perform like the commissar-ridden, purged-depleted, multi-national near mob that it was in 1941, or when Soviet counters will triumph in crucial combats early in the game. The first strategic option relies much more on fate than does the second alternative.

As is the case should he choose to aim for a quick victory, the Axis player has to be both lucky and good to win by way of a protracted strategy. But, unlike the first alternative, the second does not demand that the Axis player sacrifice units in order to meet the enemy from the flanks. Instead, the only units he will be sacrificing are the Axis player's own units. A city serving as the focus of a pocket of resistance may be bypassed, but only temporarily. Though this can be a disadvantage in a battle, it is easily the most important rail center in the swamps from Leningrad to the northern shores of Lake Ilmen. A handful of weak units can be held back to cope with the Soviet counterblows and partisans.

The objectives of Army Group Centre will be much more ambitious. To win via the quick victory strategy, the Axis player must use Moscow. This is an absolute prerequisite to defeating the USSR before 1943. If he opts for the second strategy, his chances of winning are greatly enhanced if he can take and hold the Soviet capital. In either case, the Axis player must remember the value of captured territory in terms of military power.

massive territorial seizures are worthless, especially when they are only achieved at the cost of massive destruction of the Soviet order of battle. In overextending his lines against a Soviet player with an immediately or readily acquireable counterattack capability, the Axis player leaves his forces open to encirclement and destruction, with ensuing losses of territory, cities and even rail centers. Strong units are costlier to replace and are necessary to hold stretches of line intact.

The only major city that these units must capture to win a protracted game, Leningrad, should be attacked only if an opportunity to capture it with minimum losses presents itself.

The offensive years of 1941 and 1942, objectives of Army Group North and the Finns (along with any units detached from Army Group Centre) will be the least ambitious for the three Axis groups. The only major city that these units must capture is Riga, a crucial rail center. Leningrad must be isolated from the rest of the Soviet Union. Should a player aim to defeat the USSR quickly, it must be captured instead. But if the Axis player wishes to win a protracted game, Leningrad should be attacked only if an opportunity to capture it with minimum losses presents itself.

Commemorate with Leningrad's modest importance to the Axis cause are that player's territorial objectives. He should move a few counters of his northern forces into the swamps south of Leningrad. If he desires an early decision, most of his counters in Army Group North and the Finnish army should be set north through Leningrad and Vitebsk, then through Finland reinforcements on a push north of Lakes Ladoga and Onega toward Archangel. The player who decides to surround Leningrad must be content to settle the Finnish army into defensive positions north of the city and establish a defensive line in the swamps from Leningrad to the northern shores of Lake Ilmen. A handful of weak units can be held back to cope with the Soviet counterblows and partisans.

The objectives of Army Group Centre will be much more ambitious. To win via the quick victory strategy, the Axis player must seize Moscow. This is an absolute prerequisite to defeating the USSR before 1943. If he opts for the second strategy, his chances of winning are greatly enhanced if he can take and hold the Soviet capital. In either case, the Axis player must remember the value of captured territory in terms of military power.

Moscow is a critical asset to Soviet military power as well. It is easily the most important rail center in the Soviet Union, and truly "all roads lead to Moscow" in THE RUSSIAN CAMPAIGN. It is also the most important site for entering Soviet reinforcements and replacements. Substantial reinforcements enter Moscow in late 1941, and its worker unit's replacement value of three makes it the most valuable to the Soviet player. By taking Moscow, the Axis player strikes a severe blow at his opponent's ability to receive and move reinforcements and replacements.

But conquering Moscow is never easy. Its role as the site of incoming units insures that substantial Soviet forces will be waiting to defend the city when the Axis player's own units are approaching it, most probably in Sept/Oct or Nov/Dec 1941. Army Group Centre can virtually annihilate the forces deployed in the Western Military District, only to find a stronger concentration of Soviet units standing before Moscow. Terrain further facilitates the defense of Moscow. To reach the city, the units of...
Army Group Centre to have advance through two large forest east of the Pripet Marshes, an area that is also increasingly laced with rivers the nearer the attackers come to Moscow. When they do reach their objective, they find a major city made difficult to flank by defensive river lines.

Moscow is the only city in the Soviet Union for which the Axis player is supposed to be prepared to trade important units. If attempting to win a protracted struggle, he can win Moscow in his possession . . . though this would be more difficult than winning it with his control. But he must not sacrifice so much power taking Moscow that he cannot hold it to maintain the integrity of his front. To do so would be to learn the true meaning of a Pyrrhic victory.

There are a number of minor city rail junctions in Army Group Centre's path that the Axis player should capture. It is absolutely necessary that wherever the Axis advance ends, Vitebsk, Smolensk and Bryansk remain under Axis control. It is not imperative but nonetheless highly desirable to take Kalinin and Tula as well, though holding these cities would be difficult if Moscow remains in Soviet hands.

The territorial objectives of Army Group Centre lie deep in the USSR. Ideally, the Axis player should construct a defensive line from the southern edge of the mountains adjacent to Lake Ilmen to a point near the headwaters of the Don (whether he occupies Moscow or not) at the end of 1942. But a less successful drive into the USSR will seldom doom the Axis cause here.

The forces of Army Group South and the units deployed in Rumania have an assignment nearly as critical as that of Army Group Centre. At the beginning of the game, these forces are confronted with a fairly strong Soviet order of battle deployed in terrain favorable to the defense. But once the Axis player has overcome Soviet resistance, for instance by deploying a defensive river line, he can normally move deep into the southern USSR, driving as far as the Donets River in 1941.

Lwow is the first city objective of Army Group South, and is one of the more difficult minor cities to take. But because of its status as a critical rail center, as well as its position astride one of the few clear terrain routes into the Ukraine, the Axis player needs to capture it in the first two game turns.

No matter which strategy is chosen by the Axis player, his southern group forces must make something of a headlong dash across the Ukraine in 1941 — taking cities, acquiring territory, and destroying Soviet forces in his rear to clear the way for battles of encirclement. His pace must be nearly frantic, with the safety of his rear and flanks guarded by his own momentum, continuing threats to Soviet cities and forces, and the destruction of Soviet combat units.

The only place at which he should consider slowing his advance is Kiev. Kiev is second only to Moscow in importance in THE RUSSIAN CAMPAIGN. It is the second most important rail center in the USSR, and has a worker unit with a replacement value of two. Its defense is aided by nearby swamps and the Donet River. But if the Axis player is to win, Kiev must fall to his forces in the summer of 1941.

He can accomplish this most easily by wheeling northward across the Donet, sweeping into and behind the southeast corner of the Pripet Marshes. In this manner the Axis player can bring to bear the greatest strength available to Army Group South against Kiev, as well as secure a bridgehead across the Donet. This maneuver can be assisted by the diversion of one of two panzerkorps from Army Group Centre to the Ukraine, formations that would circle behind the Pripet Marches and strike the Soviet forces from their rear. This was the historical decision made in 1941, when Heinz Guderian's panzer divisions drove south to engage in the battle of encirclement around Kiev. The Axis player should not discount such a commitment of Army Group Centre mobile formations just because Guderian's participation in the capture of Kiev has remained controversial for 45 years.

The Ukraine contains the most open terrain outside of the Caucasus region, and is therefore suited to the battles of encirclement in which the Axis side excels. If the Axis player has overcome Soviet resistance, the Axis player should be able to sweep south and west toward the Donets, renewing his frantic race for the Soviet heartland. He should view Kharkov and Stalinog as his next city objectives. If the Axis player has executed his strategy well, the Soviet player will likely mount a determined defense west of the Donets.

The Black Sea ports of Odessa and Sevastopol pose special problems for the Axis player in the south. These cities may be bypassed in some games, and many a player will feel safe if he leaves weak Rumanian, Italian and Hungarian units to contain their garrisons. But this is often a very serious mistake. The Axis screening forces will be comprised of units best utilized to maintain the offensive momentum or guard against Soviet countermoves elsewhere in the Ukraine. Furthermore, a player who leaves Odessa and Sevastopol in Soviet hands also depletes a potentially nagging naval and amphibious capability to the Soviet player while abandoning his own.

It is also possible that the unimpeded Soviet naval and amphibious capability on the Black Sea could prove worse than a nuisance for the Axis player. Soviet pockets built around either port differ from inland pockets in that they can be easily reinforced regardless of the current position of the mainline of defense. An alert Soviet player may exploit an insufficient port by reinforcing it by sea, then attacking the screening forces and advancing inland. The Axis player thus finds a strong, supplied and reinforced Soviet force marching into his rear areas. The initiative will fall into Soviet possession in the south, and perhaps throughout the Eastern Front as the German reacts to this threat. Because of this, an Axis player with the choice of diverting a few units to screen Odessa and Sevastopol or expending them to take the Black Sea ports should exercise the second option.

The southern half of the map represents the best opportunity for the Axis player to capture huge parcels of Soviet territory early in the game. By the winter of 1942-43, the Axis front should have reached at least the Donets River, and optimally Voronezh. As major cities are functional fortresses, the forces of Army Group South-Rumania and Army Group Centre should have their junction somewhere around the source of the Don. In either strategy, two or more Axis units should be sent to the Crimea to always guard the Kerch Strait against any Soviet moves from the Caucasus unless the Axis player's forces are already firmly established in this part of the USSR.

The years of 1941 and 1942 are years of the strategic offensive for the Axis player. The Soviet player will launch counteroffensives during the first winter using THE RUSSIAN CAMPAIGN, and although their efforts may be slight, they should be temporary reverses of fortune. The Axis player should be able to retake the initiative in the spring of 1942.

Sometimes these offensives actually help the Axis player, their intended victim. A Soviet player who has success counteringack against snow turns will yield to the temptation to continue applying pressure on his opponent when the snow melts. But in Spring 1942, the Axis player is normally able to preserve enough of his forces to hold against Soviet attacks, which will nearly always result in the destruction of a larger number of destroyed Soviet units. The Axis player can regard these Soviet losses as a gift, and can exploit the depletion of Soviet military power when he resumes the offensive, in this instance actually a counter-counteroffensive.

Such was the historical situation in 1942. The Soviets were able to drive across the Donets during the winter, tearing a salient centered around the east shore city of Izyum. The Soviets were flushed with success and elected to launch an offensive in May against Kharkov. But the Germans, already planning for their own offensive against the Izyum area, assisted Kharkov and counterattacked from the south while the Soviet effort was being launched from the northern half of the bulge. The result was a battle of encirclement in which the Soviet tank and cavalry units, carefully marshalled and concentrated, were lost in large quantities and rendered unavailable to defend against the upcoming attack of Army Group South-Stalingrad. Often a Soviet player in THE RUSSIAN CAMPAIGN will conduct such a premature offensive and present the Axis player with a similar opportunity.

THE DEFENSIVE: 1943-1945

The strategic situation of THE RUSSIAN CAMPAIGN changes radically in 1943. No matter how many Soviet units were destroyed in the previous two years, the Soviet player will have a large and resurgent Red Army at his command. By contrast, the Axis player will have units in his replacement pool that has no hope of play, and his Stuka capability will pass from miniscule in 1943 to non-existent in 1944 and 1945.

The spring of 1943 is the time when the Axis player who has not gained a quick and decisive victory has to permanently assume a defensive stance. Unless presented with an irresistible opportunity for attack by the Soviet player, he must contain his moves against his opponent to limited counterattacks of Soviet breakthroughs and flanking moves. An Axis player who launches a large offensive of his own in 1943 or thereafter will meet with, as did the Germans at Kursk, an unparalleled defeat at a time in which he can least afford it.

The first priority of the Axis player on defense is to preserve the bulk of his units in a broad front. A properly constructed front will stretch from the Baltic to the Black Sea and will be impossible to flank and penetrate only through difficult, risky and costly frontal assaults. Along a broad front, the Axis player makes the task of his opponent as difficult as possible. The Axis player has insufficient power to beat his opponent in a war of attrition. A player who engages in such a struggle with his Soviet opponent is virtually conceding the victory to his foe, and the possession of battle and replacement capability allow him to contest every hex of the USSR under his control.

As can the Soviet player when defending Moscow or Kiev, the Axis player can use the terrain of the Soviet Union to his advantage from 1943 until May 1945. The greatest geographical assets enjoyed by the Axis player are the rivers that flow from north to south (and vice versa) in the USSR. As major cities are functional fortresses, rivers are natural defensive lines. Because of the defensive attributes of rivers in THE RUSSIAN CAMPAIGN, the possession of hexes adjacent to them contributes to the role of terrain as a source of military power.

An Axis line struck by overwhelming Soviet forces on open terrain should be immediately withdrawn westward behind the nearest river, even if the Axis player's units are marginally victorious in combat along the line. The Soviet army can regroup its losses quite rapidly during the last three years of the conflict, so all but the most stunning Soviet defeats will be ephemeral at most. The Axis withdrawal should not be hasty, but must be made before so many units are lost or the line so badly penetrated that any river defense is doomed from the start.

Continued on Page 39, Column 3
Dear Mr. Martin: I would like to tell you a little about myself. I have been wargaming for five years now and am a member of a highly regarded local gaming group and club. Mr. Markuss' article, I believe, would interest many of the members of my group, and I am planning to attend (and judge) at Gen Con XX this year and Origins next year. I consider myself a knowledgeable wargamer and a contributor to gaming magazines. I have designed a few games myself and have contributed articles to various gaming publications. I believe that Mr. Markuss' article would be of interest to many of my fellow wargamers, as it discusses the evolution of a particular type of wargame that has been a focus of our group's efforts. I am confident that Mr. Markuss' article will be well received by my group, and I look forward to sharing it with them.
THE ROAD TO LITTLE ROUND TOP

DEVLIN'S DEN By Mail

By James Lutz

Presented here, for those who enjoy games of the Civil War period but lack face-to-face opponents, is a play-by-mail system for DEVIL'S DEN. Admittedly players could come up with a similar system on their own, but having one in these pages provides a standard format that players can agree on and use without resorting to long phone discussions or innumerable letters. A Random Number Table is essential for the system; and, although the table and a variation of the method that will be used have been described in these pages before (as recently as Vol. 19, No. 6), it is provided again to demonstrate its use in the context of the by-mail play of this game.

It should be mentioned that DEVIL'S DEN is well-suited in some respects for play by mail, and in some ways it is not. As a simulation, the game loses some of the "feel" of the tactical situation when played at a leisurely pace by mail. With each hex representing a small amount of ground and counters for individual regimental commanders and companies, the tactical level of the game is obvious. The equivalent units on the GETTYSBURG board are represented by three infantry counters each on the Union and Confederate side (the number of artillery counters vary depending on the version of GETTYSBURG played); approximately 20 hexes on the GETTYSBURG mapboard cover the same ground as the boards in DEVIL'S DEN. To some extent the game bears the stamp of SQUAD LEADER in its tactical scope, although without (thankfully) the multitude of complexities. Weaponry is simpler in this period. The general similarity to S.L. does mean, however, that the game system has significant potential for adaptation to other battles or portions of battles from the Civil War.

The game can profit by a mail system, notwithstanding the loss of the tactical feel. The length of the game, particularly the long scenario, favors mail play. Face-to-face play can consume a very long evening, particularly when the Advanced Rules are used. Fatigue, not only on the part of Law's Brigade, often becomes an operative factor. Of course, such fatigue on the part of opposing players can be an excellent simulation of reality, but it isn't necessarily very stimulating. What is lost by way of simulation may be regained in a mail contest in terms of game playability. Face-to-face play is probably the better simulation, but by mail may make for a better game. Even with Advanced Rules in play, the mail system will require only three mailings per each player portion of a turn in which there is combat—two by the moving player and one by the defending player. Action by the defender is relatively simple in any event. Two weeks would normally suffice for players on different coasts per each player segment, and a turn can be completed in a month. For players residing closer, with a two- or three-day delivery period for mail, the pace of the game will be much quicker.

First Mailing

The first mailing constitutes the command phase, activation phase, and movement phase of the Confederate or Union player turn. (Spontaneous rally attempts are covered in a different mailing.) The moving player deals with these activities as necessary. The moving player must be very careful to specify the facing of his units. The hex grain runs east-west on the mapboard; therefore, the possibilities are defined to be W, NW, NE, E, SE and SW. The compass on the board will facilitate the identification of the appropriate facings. If a player fails to list a facing, it is assumed to be the facing necessary to enter the final hex reached by a moving unit, or the facing from the previous turn for a non-moving unit. The moving player will also need to remember to indicate which unit is on top of a stack. Any convenient and agreeable convention, such as "(1)" for top and "(2)" for second in the stock should work. If the moving player neglects to provide a stacking order, the defending player has the choice in fire combat of which unit in a stack to fire at.

Provision for die rolls for random movement and ammo gathering may be needed for the troops of the moving player. In both of these instances, the moving player may have to make contingency plans for random movement (advance or retreat), and perhaps in terms of ammo gathering as well. The rulebook is actually unclear as to when ammo gathering occurs. It is suggested in the body of the rules as occurring in the Activation Phase (p. 19, 40.4). The turn sequence, on the other hand, places it at the end of the turn (p. 31, "Sequence of Play" Chart). The players will need to agree on exactly when it does occur. If they agree that the end of the turn is the logical place to discover ammo (thus preventing troops from firing offensively), the die roll for this will occur in the third mailing, although the orders must still be given in the first mailing. Regardless of when ammo gathering does occur, the players might prefer for movement to occur as written whether the units successfully gather ammo or not, since the commander would not necessarily know whether the attempt was profitable. The lack of this foreknowledge for random movement is an appropriate reflection of reality also since units did not always follow orders as given.

The moving player will mail his turn to the opponent with a CTD later than the postmark if his move requires die rolls. He can list units attempting to gather ammo, and either individual stocks for results or one stock that will determine the starting point for die rolls to be drawn from the Random Number Table. A similar procedure can be followed for possible random movement.

Second Mailing

Once the defending player receives the move, he plots the units on the board and checks the results for random movement and ammo gathering, if applicable. He will have to report these results to his opponent, of course. He then allocates his defensive fire on his move. He will need to provide for the series of possible die rolls for various activities (listed below) with an appropriate CTD and stocks. He lists his attacks in any order he desires and picks a stock for use with the Random Number Table. On that table, the first of the pairs of numbers represents the tens and the second the ones (that is, a "3" and a "4" equal "34"). Scattering of artillery fire is also included in the defensive fire list, except that the two numbers are added together rather than being sequential (that is, a "3" and a "4" equal "7"). The moving player will be able to calculate casualties and disrupted results from this list. If a top unit is eliminated (by artillery fire, for example), the second unit in the stack, if any, is now affected by results from any subsequent infantry fire.

Another stock must be provided for possible officer casualties that may occur. (This stock can be omitted, of course, if there are no hexes con-
taining officers that are fired on.) Once casualties to infantry units are determined, any possible officer casualties are checked with the pairs of numbers used being added. The order in which the casualties are checked can be the order in which they appear in the list of attacks and are in jeopardy, or in the order in which they are listed in the “Morale and Officer Casualty Chart.” If the chart is used, the brigade officers are checked first (if endangered) and any regimental officers affected next, per the order on the chart. If the officers commanding the 4th Alabama and the 47th Alabama are both in hexes where casualties have occurred, the officer for the 4th Alabama is checked first. The order is not changed as a result of replacement officers appearing. They are treated as if they were the originals. If Hood’s Staff is in play, it is checked first since it is the lower numbered company. After any retreats are made, any morale checks due to the retreat of friendly units are made. A separate stock may have to be provided for using the Random Number Table from the point where the last morale check for casualties occurred. The order provided in the Morale and Officer Casualty Chart will be essential for these checks resulting from the retreats of friendly units. Any unit suffering losses in the Defensive Fire Phase is checked for morale according to the listing in the “Morale and Officer Casualty Chart,” with only one number form the table being needed for each check. If the 86NY/2 and 86NY/4 both must be checked, the 86NY/2 is checked first since it is the lower numbered company. After any retreats are made, any morale checks due to the retreat of friendly units are made. A separate stock may be provided for these checks or the checks can simply be a continuation on the Random Number Table from the point where the last morale check for casualties occurred. The order provided in the Morale and Officer Casualty Chart will be essential for these checks regardless of which method is used. If you do not know your opponent well, you may wish to require him to make his retreats, mail a list of the units affected by retreats, pick a stock and CTD, and then check and report the results of the retreats before he conducts his offensive fire. This method will result in a two-day delay or so in the move being finished. Most of the retreat routes will be fairly obvious, I should think; your opponent would not voluntarily retreat any unit through friendly fires if such action could be avoided. A stock may have to be provided for possible ammo depletion due to volley fire early in the game, or the chance of low ammo late in the game. If no volley fire is attempted in the first half of the long scenario, or in the Devil’s Den scenario, there will be no need for this stock selection. The defender or player can either list the units that need to check, or let the moving player use the order in the “Morale and Officer Casualty Chart” again. Since the possibility of running low on ammo does depend upon inflicting casualties, the Chart is probably the better method. Units that might run low are checked. Units firing but not inflicting casualties with regular fire, for example, could be ignored. It should be noted that in this sequence of activity, fire and results are simultaneous rather than sequential—a more realistic simulation of combat—as are the morale checks that occur at the same time. There will be a subtle change in the play of the game since units will not be subject to immediate retreat. In a face-to-face game, the firing player has the advantage of observing the results of one fire effort before allocating the next fire attempt. A retreating unit could actually expose a new unit to fire in the face-to-face game!

Third Mailing

Once the moving player has checked the results of the defensive fire, made the necessary morale checks and retreated units, he can conduct his offensive fire and perform the other functions necessary to conclude the player turn. The first part of the move parallels that for defensive fire:

1. List all combat fire attacks, including artillery fire, and pick a stock for use with the Random Number Table.
2. Provide a stock for possible officer casualties, if applicable.
3. Provide a stock for morale rolls resulting from the fire combat and retreats (one stock or separate stocks as the players may agree).
4. Provide a stock for possible ammo depletion.

In addition, this mailing must take into account the possibility of melee combat generated by the moving player. A stock must be provided for the resolution of melee, if applicable. In addition, the moving player will also have to indicate whether he will occupy a particular hex should it become vacant due to fire combat.

If melee combat is possible, a stock may have to be provided for possible officer casualties if an officer is involved for one or both players. If officers for both sides may suffer wounds, the Confederate officer is checked first.

Morale rolls as a result of casualties are possible. Units that charged will need to check morale, as will units that retreated. If only one stock is used, first morale is checked for any Confederate units suffering losses, then any Union forces suffering losses, then the possibility of retreats by charging units of the moving player, then any Confederate units affected by retreat of friendly units, and finally any Union troops affected by retreats. The order listed in the “Morale and Officer Casualty Chart” can be used for all these morale checks.

When melee combat is possible, the moving player will have to specify various alternatives that

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### OUTLINE OF MAILINGS

<table>
<thead>
<tr>
<th>Mailing</th>
<th>Activities Included</th>
<th>Possible Die Rolls (and number of “die” required)</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Command Phase</td>
<td>Gathering Ammo (1)</td>
<td>Random Movement (1)</td>
</tr>
<tr>
<td>2 Defensive Fire Phase</td>
<td>Results of Fire (including Artillery Fire Scattering (2)</td>
<td>Results of Fire (including Artillery Fire Scattering (2)</td>
</tr>
<tr>
<td>3 Offensive Fire Phase</td>
<td>Results of Fire (including Artillery Fire Scattering (2)</td>
<td>Results of Fire (including Artillery Fire Scattering (2)</td>
</tr>
<tr>
<td>Melee Phase</td>
<td>Results of Melee Combat (1)</td>
<td>Results of Melee Combat (1)</td>
</tr>
<tr>
<td></td>
<td>Possible Officer Casualties (2)</td>
<td>Possible Officer Casualties (2)</td>
</tr>
<tr>
<td></td>
<td>Morals for both Combatants (1)</td>
<td>Morals for both Combatants (1)</td>
</tr>
<tr>
<td>Breastworks</td>
<td>Attempts to Complete (1)</td>
<td>Attempts to Complete (1)</td>
</tr>
<tr>
<td>1 Fatigue (Union only)</td>
<td>Check for Fatigue of Law’s Brigade fr Next Turn</td>
<td>Check for Fatigue of Law’s Brigade fr Next Turn</td>
</tr>
<tr>
<td>Spontaneous Rally</td>
<td>Attempts for Disrupted Units of the Defending Player</td>
<td>Attempts for Disrupted Units of the Defending Player</td>
</tr>
</tbody>
</table>

* May occur in the Third Mailing if players agree.

### MORALE AND OFFICER CASUALTY CHART

<table>
<thead>
<tr>
<th>Confederate</th>
<th>Union</th>
</tr>
</thead>
<tbody>
<tr>
<td>Benning</td>
<td>Ward</td>
</tr>
<tr>
<td>Robertson</td>
<td>Vincent</td>
</tr>
<tr>
<td>Law</td>
<td>Weed</td>
</tr>
<tr>
<td>Hood</td>
<td>Warren</td>
</tr>
<tr>
<td>44th AL</td>
<td>4th ME</td>
</tr>
<tr>
<td>15th AL</td>
<td>86th NY</td>
</tr>
<tr>
<td>44th AL</td>
<td>124th NY</td>
</tr>
<tr>
<td>47th AL</td>
<td>2nd USSS</td>
</tr>
<tr>
<td>48th AL</td>
<td>4 NY Battery</td>
</tr>
<tr>
<td>3rd AR</td>
<td>99th PA</td>
</tr>
<tr>
<td>1st TX</td>
<td>23rd ME</td>
</tr>
<tr>
<td>4th TX</td>
<td>16th MI</td>
</tr>
<tr>
<td>5th TX</td>
<td>44th NY</td>
</tr>
<tr>
<td>2nd GA</td>
<td>83rd PA</td>
</tr>
<tr>
<td>15th GA</td>
<td>6th NJ</td>
</tr>
<tr>
<td>17th GA</td>
<td>140th NY</td>
</tr>
<tr>
<td>11th GA</td>
<td>155th PA</td>
</tr>
<tr>
<td>59th GA</td>
<td>140th NY</td>
</tr>
<tr>
<td>Branch Artillery</td>
<td>91st PA</td>
</tr>
<tr>
<td>Rowan Artillery</td>
<td>155th PA</td>
</tr>
<tr>
<td>1st TX SS</td>
<td></td>
</tr>
<tr>
<td>4th TX SS</td>
<td></td>
</tr>
<tr>
<td>5th TX SS</td>
<td></td>
</tr>
<tr>
<td>3rd AR SS</td>
<td></td>
</tr>
</tbody>
</table>

Infantry Casualties: Check morale of affected units in the order above, ignoring officers that are separate counters. If more than one company of the same regiment must check morale, the lowest numbered company is checked first.

Possible Officer Casualties: Order for regimental officers is the same as the order for the regiments above. Replacement officers are treated as if they were the original officers for the regiment or brigade.
### THE RANDOM NUMBER TABLE

<table>
<thead>
<tr>
<th>TABLE 1</th>
<th>TABLE 2</th>
<th>TABLE 3</th>
<th>TABLE 4</th>
</tr>
</thead>
</table>
| 1) 5212242632 2) 2536466633 3) 4441446011 4) 2133532433 5) 2113133662 6) 5436454316 7) 5143441652 8) 5136134355 9) 2143542441 10) 5551222514 11) 5565312631 12) 5236466122 13) 6236243133 14) 55611242255 15) 2554232255 16) 4464654313 17) 3423225622 18) 7215256422 19) 6565136253 20) 12566221626 21) 1221323651 22) 1513626512 23) 4434151233 24) 5224215561 5 25) 1256424363 6 26) 3314655361 7 27) 6536643216 8 28) 6612431233 9 29) 2645246543 10 30) 4164211613 11

<table>
<thead>
<tr>
<th>TABLE 5</th>
<th>TABLE 6</th>
<th>TABLE 7</th>
<th>TABLE 8</th>
</tr>
</thead>
</table>
| 1) 5451415462 2) 3556466461 3) 1232336562 4) 3335534562 5) 4362433433 6) 5134621564 7) 3512242112 8) 3425315556 9) 3345611326 10) 5153162225 11) 6524542266 12) 6431635536 13) 6611232325 14) 6532561566 15) 1515635564 16) 4362351516 17) 5543214255 18) 7164653111 19) 2112642116 20) 5466321224 21) 2323443324 22) 6114324653 23) 3561614136 24) 2463312136 25) 1266344356 26) 3515351326 27) 2552331143 28) 2626124624 29) 2454251163 30) 56341563441

### USE OF THE RANDOM NUMBER TABLE

Rather than relying on a seemingly endless list of stocks, the Random Number Table below can be used to compute results. It does rely on having a newspaper available to select stocks that specify a starting point in the table that will be used, but the effort involved for the players is much less. A stock is chosen for each series of die rolls that are necessary for a mailing in "DEVIL'S DEN" (as described in "The Road to Little Round Top"). The sales in hundreds provide the number, row number and column entry to be used. For example, if the stock sales for the selected date are 567, it means that the first die roll will be located in table 5, row 6, the seventh entry. In this case, the first die roll is a "1". The next die rolls would be "3", "6", "4", respectively. When the end of a round is reached, continue on with the first number in the beginning of the next round. When the tenth entry on the tenth row is reached, proceed to the first entry on the first row of the next table. Note that table 1 follows table 0 in the latter case. If the stock chosen has sales above 999, ignore the additional digits; thus, 12356 sales in the hundreds means that the second table, fifth row and sixth entry will provide the first die roll. The "1" is ignored. If a stock is picked that has only a two-digit sales figure, the table is "0"; thus 92 for a sales figure translates to the 0th table, ninth row and second entry. It is probably better to choose the better known and more active stocks when a choice is made to generate more variation in terms of the tables that will come into play.

As an example, it is Turn 2 of the game and time for the CSA offensive fire. The Rebel troops have taken some early casualties, but their opportunity to inflict damage has arrived. For ease of presentation of the following example, this illustration assumes that there are no column shifts on the Fire Table.

<table>
<thead>
<tr>
<th>CSA Offensive Fire</th>
<th>Stock CBS</th>
<th>1418</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hex</td>
<td>Attackers</td>
<td>Defenders</td>
</tr>
<tr>
<td>1632</td>
<td>4TX/4 (4)</td>
<td>124NY/5</td>
</tr>
<tr>
<td>1532</td>
<td>4TX/5</td>
<td>124NY/5</td>
</tr>
<tr>
<td>1432</td>
<td>4TX/3 (D)</td>
<td>Col. Ellis</td>
</tr>
<tr>
<td>1233</td>
<td>3AR/1</td>
<td>4NY/1</td>
</tr>
<tr>
<td>1333</td>
<td>3AR/2</td>
<td>4NY/2</td>
</tr>
<tr>
<td>1733</td>
<td>15AL/2</td>
<td>4ME/1</td>
</tr>
<tr>
<td>1832</td>
<td>15AL/4 (5)</td>
<td>4ME/2</td>
</tr>
<tr>
<td>1932</td>
<td>4AL/4 (5)</td>
<td>4ME/3</td>
</tr>
</tbody>
</table>

(N) indicates that units are at reduced strength
(D) indicates disrupted units, -1 from fire strength

After resolving the fire combat, it is time for the Union player to check for possible officer casualties. The stock provided is ABC, with sales in the hundreds of 2212. Only Col. Ellis requires a check. The seventh table, third round and second entry yields a "1"; the next entry is also a "1". The final result equals "2", which means that Col. Ellis is killed.

The next step would be to check for the morale of affected units. The order in which they must be checked would be 4NY/1, 4NY/2 and 124NY/4. Any units subsequently affected by retreats of these units would also then have to be checked. The other activities for this mailing that may have occurred would then follow, using the stocks listed to draw numbers for the tables.
his units may face in terms of retreats or taking casualties to enable the defending player to move on to the next 'first mailing' without delay. A little bit of writing is involved, but melee combat may not be all that frequent. The present method does eliminate a separate mailing for this type of combat.

If relevant, the moving player next provides a stock for the completion of brestworks.

The moving player will not provide a stock for the possible spontaneous rally of disrupted units belonging to the defending player. Using this mailing will permit the defending player to identify all his affected units after all retreats and combat, and he can then move to the command and activation phases without delay. The ‘Morale and Officer Casualty Chart’ is essential to this particular check since neither player will know at the time of the mailing which units are disrupted.

Lastly, the Union player will need to supply a stock for the next game turn for fatigue in the regiments of Law's Brigade for the appropriate turns.

Closing Comments

The above outline and summary in the attached “Mailing Chart” take into account virtually all of the Advanced Rules. If the Advanced Rules are not being used, the mailings become much simpler (and the game less realistic). Using none of the Advanced Rules will not limit the number of mailings, however. The only Advanced Rule not easily incorporated in the mail system is “Opportunity Fire.” The players could agree that, in the case of a unit exiting from ZOC in the Movement Phase, defensive fire by the units adjacent at the beginning of the Movement Phase could be taken as if it were one hex range. Any retreat as a result of fire combat would be applied from the hex exited rather than the last hex moved into. Players insist on including this rule in its entirety (firing at retreating units) can feel free to devise a mutually agreeable procedure of their own, realizing that there will be a cost in terms of extra mailings or long-distance phone calls. The Opportunity Fire rule is a realistic one, but it is not readily adapted to a play-by-mail system.

The order of the units provided in the “Morale and Officer Casualty Chart” is essential for limiting the number of mailings. It provides a mechanism that, in combination with the Random Number Table, insures die rolls that cannot be specified in advance.

A number of conventions for play by mail are useful and worth noting. The player making the mailing should provide listings on a separate sheet for items that require die rolls—such as fire combat—so that the receiving player only need fill in the results. On other activities, the receiving player can list the units that are affected and provide the results. This list will also facilitate using the “Morale and Officer Casualty Chart.” For example, using values from the attached Random Number Table:

<table>
<thead>
<tr>
<th>Morale Checks</th>
<th>Stock AT&amp;T</th>
<th>1736</th>
</tr>
</thead>
<tbody>
<tr>
<td>4A/2 (5)</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>4A/4 (5)</td>
<td>2</td>
<td></td>
</tr>
<tr>
<td>4A/2 (3)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>4A/2 (3)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>4E/6 (3)</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>86YN1 (5)</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>86YN1 (6)</td>
<td>6</td>
<td></td>
</tr>
<tr>
<td>124/2/3 (4)</td>
<td>3</td>
<td></td>
</tr>
<tr>
<td>124/2/3 (5)</td>
<td>5</td>
<td></td>
</tr>
</tbody>
</table>

The more active stocks should be used for starts on the table. Flicking small companies with low sales in the hundreds will lead to use of the “G” table with unwarranted frequency. One possibility is the “Most Active Stocks” list that is included in most major papers. The tables used will then vary greatly, and it is quite easy to use and clip for your opponent.

For the second mailing, by way of example, the most active stock could be used for defensive fire combat results, the next most active for officer casualties, the third for morale rolls, and the fourth for possible ammo depletion.

The final important convention in playing mail to remember is that only affected units are checked when using the chart. Only the officers in danger of being hit can be checked, and only units in danger of running out of ammo. This convention on affected units includes every unit subject “in theory” to a morale check, even if the presence of an officer with an “A” rating insures that morale will hold. Assign a number in this case. It is easier than assigning a number, then discovering that the unit does not have a corps, and thus what to do with the number assigned before. A second defense is to gang up on these corporations to maximize revenues by blocking routes.

A third version of such a scheme is a true swindle. This is to start a railroad like the Erie relatively late in the game, set share value at $100; and then convince the buyers to buy a share or two, but not enough to take away the presidency. Three shares (the president's certificate plus another share) are usually enough to pull this one off. If the Erie does float, the $1000 (with an added $100 of personal money) buys a new diesel for a small investment of private capital. The diesel is transferred at once; no track is ever laid. And no other engine is ever bought. With a little luck, the villain will even get to unload his three shares for $76 each. The best defense here is not to invest; the second is to build a line into Buffalo so that the Erie has a run and must buy an engine. A lot of cooperation may be needed to accomplish this task for an unwilling president.

The scheme of selling shares to lower stock values usually has the effect of reducing the options of the remaining players holding that stock to sell and then buy something else. However, this usually doesn’t affect the long term value of the stock a great deal, and can actually assist the long term investor to pick up these shares cheap. If the seller has a better deal available elsewhere, the selling must be done; but such trading should be evaluated in terms of long term gain for oneself rather than temporary gains to others.

Final Thoughts for Successful Play

Winning 1830 depends a lot on careful planning and taking advantage of opportunities when they occur. Resorting to the worst swindles may result in a victory in a particular game, but since each of us usually plays with the same few players repeatedly, regardless of our own personal proclivities, there are other opportunities available to any player who can get others to invest in the corporations he controls, particularly in the initial share dealing round. Later diversions of corporate funds should be on the conservative side so as to be dismissed as merely good business sense. Always remember that the free enterprise system that made America great is being simulated in your dining room.

All Philosophy... Cont'd from Page 2

Don Greenwood introduces our new, easy-to-learn family game of television ratings. TV WARS. Craig Taylor takes you into the deadly skies with his tournament for FLIGHT LEADER. Charlie Kibler and Bob McNamara have you stung among the hedgers of corn in the round-robin competition for HEDGEROW HELL, the Deluxe ASL module being premiered at the convention.

Some games go to the convention to meet and talk with the hobby professionals, taking them to task for their latest projects or picking their brains for what's in store for the future. Informal Avalon Hill seminars have been held to include our own regular “GENERAL Subscriber’s Seminar” on Saturday and the ASL seminar hosted by Bob McNamara and Don Greenwood on Sunday. Of course, you can usually buttonhole any specific designer on our staff at some point during the long weekend. Just drop by our product booth or keep an eye open for them wandering around looking shell-shocked.

Speaking of our booth, the Avalon Hill Game Company always takes advantage of ORIGINS to release several new games to the acclaim of the crowd. This year we hope, we feel, a superior crop. Already mentioned (and already elsewhere in this issue) is HEDGEROW HELL. This Deluxe ASL module details the bitter fighting the Americans faced in the hedgerows of Normandy in June and July of 1944. With beautiful mapboards by Charlie Kibler, eight new scenarios, and vehicle cards for American AFV's, it is the perfect buy for those who have enjoyed STREETS OF FIRE. I understand that GHQ will have miniatures of American vehicles available at their booth; those are perfect for playing at this scale and is the ultimate for the hard-core ASL devotee.

RAID ON ST. NAZAIRE, a solitary game developed by Don Greenwood from a design by Rob Markham and Mark Seaman, is sure to be a hit. From the initial run-in by the Campbeltown and the host of small boats to the final stand by the remaining commandos, it covers the controversial British raid to disable the great drydock. Counters represent everything from German beams to demolished cranes, MTBs to German armored cars. The comprehensive rules allow the entire action to be recreated in minute-to-minute detail. Optional rules allow you to vary the objectives and composition of your forces, as well as certain circumstances surrounding the attack. Can you do as well as, or better than, those highly-trained commandos? Those buyers at ORIGINS will be the first to try.

Finally (an unheralded surprise), Craig Taylor's design of PLATOON, a man-to-man tactical game based on the Academy Award-winning movie, will be released. Simple rules allow players to recreate three of the actions from the script of the story, as the Americans struggle against hordes of Vietnamese regulars. Hidden units, dense terrain, deadly weaponry, mines and fortifications, all serve to simulate the hell that was a daily environment for the “grunts” of that bitter war. The game's easy-to-play system is based upon Craig's best-selling FIREPOWER. Intended as a mass-market item, it is hoped that PLATOON will introduce wargaming to many intelligent adults interested in history but who have been unaware of our unique pastime. And, of course, our other recent releases, games that many attending may not have seen yet—BRITANNIA, PATTON'S BEST, YANKS and TV WARS. Our booth will also have copies for sale of older and still popular games from Avalon Hill. Once again we will run a full “parts service” for those players needing extra mapboards, counter sheets or rules to their favorite games. Just drop by on Friday and let us know what you want; we'll have your parts order waiting for you on Sunday.
BEYOND MANIFEST DESTINY

American Play in PAX BRITANNICA

By James P. Werbaneth

PAX BRITANNICA is essentially a game of European competition for dominance of the vast underdeveloped areas of Africa and Asia. Yet the United States can become a leading power, especially if the American player relies on the resources of his own hemisphere. If the American player establishes his state as the predominant power on the western map, he will accumulate military power and use prudent investment, expansion, and diplomacy to end the game in a vastly improved position.

The United States player must systematically implement a coherent strategy that takes advantage of the country’s unique advantages and recognizes its long-term disadvantages. Its most important advantages are an early access to Latin America that can be challenged by only the most determined European power; a steadily growing merchant marine service that will carry American investment and expansion throughout the New World; and the possibility that American “yellow press” journalism will allow it to wage an unprovoked war to add Spain’s colonial possessions to the ascendant American empire. Its principle disadvantages are a small initial overseas empire, the need to expand the American military from a pathetic size to an adequate size, and a relatively low colonial office income.

American investment and expansion must be centered on the Western Hemisphere. Because European attention will be almost always concentrated on Africa and Asia, particularly in the early game turns, the United States will have relatively little competition on the western map. Furthermore, rules presenting the United States with a caesar bell against any other power expanding into the Western Hemisphere increase the chances that the only new control markers placed there will bear the Stars and Stripes.

Early American Investment and Expansion, 1880-1892

The placement of markers in PAX BRITANNICA represents two distinct but related efforts—investment and expansion. The establishment of interest and influence markers represents investment, as their primary purpose is to gain new revenues. Though protectorates, possessions and states/dominions sometimes produce impressive income, their most important function is to extend the power’s sovereignty, gaining new territories and overseas military bases, thus representing expansion.

The United States has to engage in constant investment and opportunistic expansion. Its first investments should be an influence marker in Mexico and interests in Central America, Colombia, and Venezuela. The first reinforcing merchant fleets are best placed in the South Pacific, then the South Atlantic, allowing the introduction of influences to Argentina and Brazil with interests in every other coastal area. The American Latin America investments will provide economic power to fuel expansion, military strength to support further investment. Without a web of interest and influence on its own map, the United States is doomed to poverty, weakness and unimportance in this game.

Early American expansion is necessarily restricted by a low initial income, a weak army and navy, and rules limiting expansion to areas those in unrest or beset by some political crisis (mostly, relevant South American war). Because of these factors, the United States is seldom able to expand in more than one or two areas before 1896.

It is imperative that the United States makes Hawaii a possession in 1880. In that year only, the United States has a merchant fleet prepositioned to provide a supply line back to a major power. Control of Hawaii is vital to the American player, and he has to insure that his control of the islands is indisputable as early as possible. Even if the American player has to spend every available treasury point to maintain this control, the expenditure and neglect of other investments are worth it. Because Hawaii borders both the North and South Pacific, naval units maintained there can safeguard the sea-lanes to Latin America as well as to Alaska and Asia. Strategically, Hawaii is as vital to the United States as the Cape Colony is to Great Britain. Later in the game, the American player should concentrate most of the units of his navy based in the Pacific basin at Hawaii. At that time, statehood will become necessary. Income will be reduced, but the ability to base large military forces in Hawaii will make the upgrading cost-effective.

If the United States is to expand anywhere else in the early game, it must be against “targets of opportunity” created in the Western Hemisphere by unrest or South American war. Such opportunities must be exploited with extreme care, as the early American army is a small and brittle instrument. Panama and Central America, especially the former, are attractive areas because they are the possible locations for the Caribbean-South Pacific canal. The least attractive areas are Mexico, Brazil, and Argentina. Though their high economic values would make their control highly desirable, they possess high combat strengths as well that make them unsuitable for colonial combat.

Should the player feel tempted to engage in questionable expansion and flag-waving, he should remember that at no time is expansion on the New World’s mainland imperative. The only area that must fall under American control is Hawaii.

Middle American Investment and Expansion, 1896-1904

During the middle period of PAX BRITANNICA, the United States investment effect in Latin America is one of consolidation. Interests in Brazil and Argentina are upgraded to influences, and interests are played in any as yet empty areas on the western map. Thus the great Latin American money machine is completed.

American investment should reach the Asian mainland in 1896. Siam and the coastal areas of the Chinese Empire are the most probable entry points for American investment. Interests in these areas pay for their costs of placement in two turns or less, and influence marks have the additional benefit of frustrating others’ colonial ambitions. In this region of multi-lateral imperial competition, investment can have some heavily political connotations.

As the American army expands, the risks of exploiting Latin American unrest or war in South America decrease. By 1900, every Latin American area but Brazil and Mexico should be regarded as a potential target for expansion. However, influence markers established by competitors may prove to restrict United States expansion more stringently than the area’s intrinsic combat strengths.

This type of expansion is necessary for American expansion into any heretofore uncontrolled area of Oceania. These tend to be unprofitable, but are very easily controlled. Furthermore, American expansion here in the middle turns may inhibit late Japanese investment and expansion south of China later in the game.

Late American Investment and Expansion, 1908-1916

The late game turns are those in which the American player uses his assets to insure his country’s status as one of the premier colonial powers. In the New World, interests are converted to influences. Often this means sacrificing income, but it always results in doubling the victory points extracted at game’s end from areas in which the investment was interest.

American investments should be in every coastal Chinese Empire zone not controlled by an imperial power. Also, the American player should be ready to place investments in any accessible areas in the Indian Ocean. Almost always, British-Russian competition will keep Persia independent and thus open to American investment.

By this time, the prudent American player will have expanded his military forces to the point that he has an extremely impressive ability to wage colonial combat. Yet his opportunities to do so in the Western Hemisphere will diminish sharply, often disappearing. As the formerly empty spaces of Africa and Asia become saturated with European status markers, every power except Russia will have the treasure to invest heavily in Latin America and the merchant fleets to maintain their investments. Though the United States will have more extensive investments than ever in its own hemisphere, the New World will cease to be its exclusive economic preserve.

But the American player finds new opportunities to expand in the Chinese Empire, particularly during the inevitable Chinese rebellion. Perhaps the American player will have to settle for a co-dominion with one or more competitors in China, but American expansion in some form should reach China. Also, it is occasionally possible for the United States to seize an Oceania area, or an African area on the Indian Ocean. “American New Guinea” or “American East Africa” might sound strange but they can and do happen in PAX BRITANNICA.

Military Construction

Military construction can present a profound problem in this game. Military units are needed to take and hold controlled areas, protect supply lines, deter major powers from war against your power, and prosecute when it does occur, and they usually contribute to the country’s desirability as an ally and its undesirability as a member of an opposing alliance.

Yet expenditures on military power can be wasted money if excessively large forces are built and maintained overseas. Often players construct large armies that they cannot afford to maintain beyond the home country, and thus are useless for empire-building and of limited usefulness in deterring war. Such bloated forces reach their full level of usefulness in war—an unpredictable, destructive, and destabilizing phenomenon that even the strongest powers do well to avoid. Players on the course of such self-defeating policies do far better to scale back their military construction and devote the freed resources to investment and expansion.

Status markers ultimately win PAX BRITANNICA, not armies and navies.

It is very easy for Britain, France or Germany to make this mistake. The historical example of
Kaiser Wilhelm II’s attempt to build the world’s greatest navy can be viewed by game player’s as military construction at its most wasteful, destabilizing and ultimately counterproductive worst. The temptation to build inflated military establishments tends to be the most pronounced among powers with the greatest disposable income and the most extensive empires, and those with fewer holdings who feel that their most ambitious imperial designs are about to be realized.

However, this is hardly a problem for the American player. The initial forces of the United States are so inadequate that throughout most of the game, players will have to be content to acquire colonial possessions. The best option is to use the extra income derived from yellow journalism for investment and military construction, foregiving the declaration of war, and hope that yellow journalism reasserts itself when the United States is better prepared.

By the middle period, the United States should be able to seize Cuba, Puerto Rico and eventually the Philippines with little or no trouble. Spanish naval units in Cuba and the Philippines should be defeated quickly and all three possessions forced to surrender by naval blockade. Ideally, the Spanish navy will be defeated in detail and the Spanish army neutralized by a large American navy, before reinforcements from Spain can complicate local decisions. Proper preparation and careful planning always results in a quick and decisive American victory.

If the American player has built up his military forces and colonies in the Western Hemisphere, the game will literally not have a chance of winning a Spanish-American war; late in the game, it will be hard-pressed even to make the American player momentarily uncomfortable. The American player can consider adding to the fruits of inevitable victory by placing a merchant fleet in the North Atlantic, possibly from the Caribbean, and seizing Rio de Oro as well as the rest of Spain’s possessions. In this way, it is possible for the United States to gain a foothold in Africa, albeit an impoverished one.

Of course, there is no guarantee that the United States will ever have a casus belli against Spain. An American player with an early casus belli has to realize that an excuse for war may not arise later in the game. Yet he cannot declare war if the risk is unacceptable. The growth of the American military should be with a view toward relieving the Spaniards of their colonies. But the American player should never assume that he will have the opportunity to deploy his navy in the North Atlantic and capture Havana. He must be prepared to end the game without the Philippines and the Spanish Caribbean colonies. The Spanish-American war is a contingency for which the American player should prepare; it is not an entitlement.

If American seizure of the Spanish possessions depends largely on luck, completion of a South Pacific-Caribbean canal is strictly a matter of determination. It is absolutely imperative that the United States build a canal in Panama or Central America. The fifteen special victory points awarded for Panama Canal construction are important. But even if an American canal is not built before the Spanish player, the United States must still complete one of its own. By having a canal under its control, the United States gains guaranteed freedom of movement and redeploymen for its naval units. In addition, a canal of its own allows the American to foster friendly relations with potential ally, and a desire to install a South Pacific-Caribbean transit.

The United States receives ten victory points if no other power has acquired permanent control of a Chinese Empire area in the course of the game. By no means should the American player make any effort to receive these points. It is in the best interests of Britain, France, Germany, Russia and Japan to strive to establish control throughout China, particularly after the Chinese rebellion that is always a consequence of substantial major power investment in the Middle Kingdom. For the United States, trying to preserve the political integrity of China is almost as realistic as trying to keep a pack of starving wolves from a bloody side of beef.

Such unrealistic aspirations may have a great bearing on the influence of domestic politics on foreign policy. If they have a reality, the United States can acquire PAX BRITANNICA—or at least in playing PAX BRITANNICA well. Expansion in the Chinese Empire will normally result in more victory points at the end of the game than the unlikely preservation of China. Furthermore, by becoming a full partner in the partition, the United States can assert a voice in the Empire’s final disposition, and can subtly redirect competitors’ energies from the Western Hemisphere. Seriously trying to prevent Chinese subjugation serves neither end, and is a bad investment.

Foreign Policy

In this game, foreign policy performs the same function that strategy and tactics perform in other, more purely military simulations. For game purposes, foreign policy is the use of previously acquired advantage and influence to increase one’s objective and subjective power. As defined by Hans Morgenthau, the seminal foreign policy scholar, in his work Politics Among Nations, power is the ability of one actor to determine the thoughts and actions of other parties. For the purposes of both Mordecai and Titus, foreign policy is the ‘chief and most relevant’ political tool, primarily the use of power against the use of power—primarily, influence, prestige, economic deterrence and applied diplomacy.

The concept of power is central to everything that the player does. Use of military force in a war is an obvious manifestation of power, against another player or against a minor power. Colonial combat is also the use of power, in this case against the indigenous peoples or government of an area. Convincing one or more other players to support the player’s initiative in a treaty or the restriction of investment and expansion in a region of the world is a primarily subjective example of power.

If the American player has to act as both objective and subjective power, the program to increase objective power has four components. Aggressive investment, primarily in the Western Hemisphere, is to dramatically increase the United States’ income. Using this new revenue, military units are built in increasing strength and quantity. Third, the proceeds of investment and the new military power fuel opportunistic expansion, almost always in the Western Hemisphere and Asia. Fourth, the United States builds a transoceanic canal, regardless of whether one is already in place.

Subjective power is related to objective power. Constructing a sizeable military and acquiring a network of investments and colonies contributes toward the nebulous asset of ‘prestige’. Sometimes nothing can earn more respect than a big fleet in the right place. In addition, the player has to act as a willing and eager member of the world imperialist community and assert claims and making deals like the more powerful Europeans. Acting as a New World “King Canute” ordering the major powers’ tide from the beach of China is not the way to build subjective power, and subtly working to turn the other players from China is self-defeating from an objective point of view.

PAX BRITANNICA’s system of emerging alliances represents a growing opportunity for the American player to increase his subjective power. Every
European power, at some point in the game, is likely to consider joining an alliance; often this desire leads to the active recruitment of possible allies. If a country has a low level of objective power, the chances of it becoming a leading member of an alliance are small. A weak ally will find itself manipulated by its more powerful partners. As repudiation is more difficult for an alliance than for a country, repudiation results in a *casus belli* by the other signatories, repudiation is difficult, especially for a weak power. Thus, the weak ally is caught in a dilemma between manipulation and destruction—a dilemma of its own making.

The situation changes if a country has significant objective power, or if its power is rising. It is much harder to manipulate an ally that can and is willing to resist encroachments on its autonomy. The more powerful a country is, the more likely its allies will make decisions affecting all members of the alliance by consensus, or at least by consultation. A strong ally is likely to be a full partner, and a weak one liable to be a pawn.

Despite the likelihood that it will be of a more independent mind, a strong ally is more valuable than a weak one. An alliance’s strength is the strength of its members; an ally that brings little power to a conflict can be a liability for the force that depends on it. Alliances are not associations of sentiment. They are the rational (even cynically) concluded partnerships between powers with converging interests, primarily the advancement and defense of investments and colonies. In this game, the so-called “traditional friendships” between countries have even less basis in domestic affairs. Any major power can find strong reason at one time or another to sign a treaty of alliance with any other major power.

A basic tenet of American foreign policy should be to increase the desirability of the United States as an ally, to counteract the increasing temptation that if it did enter into an alliance, the United States will not be a pawn of its partners. The American player should sound open to the concept of any alliance but negotiate towards getting significant, tangible gains as the price of that alliance—preferably concessions out of proportion to the United States’ relative power. Possible American demands include reduced European investment in the New World, restrictions on non-American naval deployment in the Pacific, and guarantees that the United States has the exclusive right to build a transoceanic canal. Of course, any such concession must be written into the agreement.

The American player has to take great care in concluding alliances. In the early game turns, alliances are generally ill-advised and result in the exploitation of the United States. Even when the United States is at the zenith of its power, alliances are fraught with hazards, and the gains inherent in preferred alliances must be carefully weighed against the dangers.

An historical example of value to the American player is that of England between the reign of Henry VIII and the end of the 19th century. In that long period, England was alternately allied with and antagonistic to Spain, Prussia, Austria, PAX BRITANNICA, the United States, and Russia though it mainly held itself aloof from alliances. Britain’s role was to play the “balancer”, entering coalitions at the last moment to decide which alliance would prevail. To its detractors, the “balancer” was “perfidious Albion”, but the political British was regarded as a master of the outcome of war and other political phenomena in Europe though the resources at their disposal were often less than those controlled by other major powers. With eventually massive economic power and carefully handled military power, especially on the seas, Britain became the premier colonial power in the 19th century. When Britain did enter into an alliance, it was mostly on a temporary basis. It would join forces with other powers for a time, then slip back in nonalignment at the first opportunity, eventually to join another alliance at the proper time. This is the central principle of relevance to the American player.

The United States is seldom strong enough to effectively play the “balancer”. But it can reap many benefits by entering into alliances of short duration to advance its interests, and the potential for future, longer alliances. This will signal that the American player is open to alliance with any major power, gain the aid of allies, and avoid extended entanglements. In addition, if the United States is to be manipulated by its allies, it will not be for long. By avoiding alliances in general while negotiating with a view toward joining one that can offer the most, then signing a treaty of short duration, the American player significantly increases the probability that any agreed-to treaty of alliance will be largely on its own terms.

For PAX BRITANNICA players, war is a political phenomenon that can result in massive territorial and economic gains, loss of territory and investments, or the complete destruction of the game’s “world order”. In the early stages of the game, war is improbable as there are so many accessible areas open to investment and expansion that there are few “flash points” worth a confrontation. In short, there’s enough of the world for everybody. Only when the “empty spaces”, as Morgenthau called them, are filled and the means of investment and expansion are greater than the opportunities does war become a real danger to major powers. In addition, the later game turns the players have built many naval units, seen South American and Balkan wars, witnessed domestic agitation by irredentist and expansionist elements within Europe and Japan, and maybe even fought a war or two. Consequently, the European Tensions Index is often high and the “Great War” looms on the horizon.

Throughout the game, the American player must strenuously avoid war with the other major powers. Military units are vital components of power, but when players turn them against each other, imperial futures are gambled. Going to war against a European major power, even with the help of a powerful ally can be suicide for the United States. Even declaring war against a weak major power can result in the loss of carefully accumulated military units for debatable gains. It is best for the American player if he leaves war to the less wise.

Conclusions

Despite entering the game with negligible power and only one overseas possession, the United States went into 1916 with a potent army and navy and possessions on three continents. A canal allows the navy to quickly shift from ocean to ocean, and in most of its own territory the United States does not have to worry about its borders. It is an active participant in the world order. By the early 20th century, the United States is respected as much by its prudently fluid and activist foreign policy as for its far-flung and amply defended empire.

The goal of the American player. He must increase the assets at his disposal and use them to further his standing in the global community. Though his efforts concentrate initially on the New World, they carry him to China and the rest of East Asia.

In the seven-player game, it is extremely difficult for the United States to amass more victory points than Great Britain, France or Germany/Austria. All enjoy generous colonial office incomes, and Britain starts the game with an already sizeable empire. Early access to the “empty spaces” of Africa and Asia allow them to expand and invest quickly and profitably.

But the United States should be able to surpass Italy, Russia and Japan. These countries share relatively low, and sometimes downright poor, colonial office incomes. Italy is perennial weak and easily tempted in the race to divide Africa. Japan poses the greatest problem of the three, for it shares with the United States a need for substantial Asiatic investments and colonies. In fact, whereas Asia is the site of the American empire’s completion, it is the core of dai-Nippon’s future. If the United States has any natural antagonist, it is Japan. But because Japan’s merchant fleets multiply less rapidly than those of the United States, the American player may be able to preempt much of Japan’s planned investment and expansion.

The goal of the American player is to finish ahead of Russia and Italy, with such a gap in victory points between the United States and its closest competitor that it can finish with a rank no lower than fourth. This increases the chances that because of the players’ relative skills or fate either Britain, France or Germany/AH finishes marginally lower than the United States, raising the American finishing rank to third.

PAX BRITANNICA is unusual in that a player should be gratified to finish third or fourth out of seven. But when playing the United States, one’s concern lies not in building the “Empire to End All Empires” but in making something out of nothing. In the end, the American player should have something indeed, including mastery of his own hemisphere.

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Long Haul . . . Cont’d from Page 31

In almost every game of THE RUSSIAN CAMPAIGN, the Soviet player will be able to push his opponent’s forces steadily westward, drawing ever close to the Rumanian oilfield, Berlin, and victory. A player who opts for the protracted game has to accept this. He cannot try to fight his opponent on the ground line but must fight him on a standstill in the heart of the Russian rodina. What he can do is limit the Soviet advance so that May/June 1945 arrives before the Red Army can reach striking distance of Berlin.

The Axis player’s conduct must be basically reactive, but not passive. If the Soviet player extends himself and leaves a flanking advance or advances in disarray, the Axis player can and should counterattack if he feels that there is minimum risk in doing so.

Though he does not enjoy the initiative from 1943, the Axis player faces a difficult and frequently fascinating challenge during the defensive phase of the game. He must preserve as much of his order of battle as possible, remembering that this is but the means to the end. His objective must be to retain possession of Berlin, at all costs, at the end of the game.

CONCLUSION

In THE RUSSIAN CAMPAIGN, the Axis player faces a monumental challenge in vanquishing the Soviet Union. It is thus more realistic to strive for a more modest and attainable goal, control of Berlin at the end of May/June 1945. He can be afflicted with a terrible strategic situation in the final turns of the game, but so long as he holds Berlin he has won THE RUSSIAN CAMPAIGN—though certainly losing World War II on the Eastern Front.

Compared to many other games, THE RUSSIAN CAMPAIGN is based on a very simple system. But such simplicity does not prevent it from dictating that the successful player understand subtle concepts. On the contrary, he must have a firm grasp of military power as it relates to the game, and then apply this understanding to formulating a strategy that keeps in mind exactly what is needed to win. The player who accomplishes this accomplishes more than his German historical counterparts.
The following comes to us by way of the "zine" "Politesse", who in turn picked up this fine article from "The Washington Gamer". The sidebar, "Economics of Trading", originally appeared in "The Washington Gamer". Both articles appeared with the kind permission of the editors of both those amateur publications.

A recent game of CIVILIZATION served as a simulation to confirm the findings of the noted German archeologist, Kurt Schlange, about the growth of ancient cities around the eastern Mediterranean and their effect on early civilizations. In that five-player game, Egypt began developing cities as soon as possible and permanently stunted his civilization. This set me to thinking about the optimal point in the game at which to start converting population into cities.

To review, each player, attempting to control the destiny of an early Mediterranean civilization, begins with one counter on the board which represents a minimal rural population of farmers and herders. This population can double every turn and expand into new regions, where it can double again. Six such counters can be converted into a city, which can begin trading for valuable commodities and piling up the points (through trade and taxation) that permit the purchase of "Civilization" cards, which are ultimately required for victory in the game. Each city must be supported by at least two rural population units. This description is oversimplified somewhat, but includes the basic assumptions on which this analysis is based. There are circumstances in which the non-urban population would not be able to double, but I assume here that the player is skillful enough to avoid them (except for Crete, who is constrained by geography).

Let us consider first the extreme strategy (close to that followed by the Egyptian player I observed) of forming cities as quickly as possible. In the first turn, the single population counter would double to two. In the next turn, these would double again to four. Following the possible exponential curve (which population equals $2^n$, where "n" is the number of completed turns) would yield the usual progression of 2, 4, 8, 16, 32. The premature urbanizer would "trade in" six counters on the third turn to form a city. He would then be back to a population of two (just enough to support his city) and would require two turns to get back to eight, at which point he would form his second city with an insufficient rural population of two. However, in the next turn, his population would double to four, just enough to support two cities. However, he would now have to wait until his population increased to 16 before he could form a third city; otherwise, he would lose one of the cities for lack of a sufficient rural base to grow food for it.

Table 1 shows the process by which the premature urbanizer would reach the maximum of nine cities.

Table 1: City Formation—Early Urbanization Strategy

<table>
<thead>
<tr>
<th>Turn</th>
<th>Population Remaining</th>
<th>Converted to Cities</th>
<th>Population New</th>
<th>Total Cities</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>2</td>
<td>0</td>
<td>2</td>
<td>0</td>
</tr>
<tr>
<td>2</td>
<td>4</td>
<td>0</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>3</td>
<td>8</td>
<td>0</td>
<td>4</td>
<td>0</td>
</tr>
<tr>
<td>4</td>
<td>16</td>
<td>0</td>
<td>8</td>
<td>0</td>
</tr>
<tr>
<td>5</td>
<td>32</td>
<td>0</td>
<td>16</td>
<td>0</td>
</tr>
<tr>
<td>6</td>
<td>64</td>
<td>0</td>
<td>32</td>
<td>0</td>
</tr>
<tr>
<td>7</td>
<td>128</td>
<td>0</td>
<td>64</td>
<td>0</td>
</tr>
<tr>
<td>8</td>
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<td>0</td>
<td>128</td>
<td>0</td>
</tr>
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<td>0</td>
</tr>
<tr>
<td>11</td>
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<td>0</td>
<td>1024</td>
<td>0</td>
</tr>
<tr>
<td>12</td>
<td>4096</td>
<td>0</td>
<td>2048</td>
<td>0</td>
</tr>
</tbody>
</table>

Suppose a civilization develops cities just a little later? If a player waited until he had a rural population of 16 before he formed his first city, he would do so on Turn 4 and still have ten population counters, which would double to 20 on Turn 5. If he converted only six into a second city, he would have 14 to double to 28 on Turn 6; converting 12 into his third and fourth cities would leave 16 counters to double to 32 on Turn 7. If this player continued to form two cities per turn, he would get to his ninth city on Turn 9.

As a third case, consider the late urbanizer. He lets his population continue to double through five turns, at which point it has reached 32 counters. He can't double again to 64 because the rules put ceilings on the number of counters each civilization can have in play (e.g., 55 with seven players, 47 with five players). Therefore, he forms two cities on Turn 5, reducing his population to 20. Then on Turn 6 he doubles his folk to 40 and forms three more cities, leaving a population of 22. By judicious expenditures from his treasury, he can arrange to add 18 rural counters each turn thereafter, which he immediately converts into three cities. Although he started later than the moderate urbanizer, he would be able to form his tenth city on Turn 8.

The premature urbanizer would be the first to have an opportunity to draw trade cards, but early in the game he will have no one to trade with. In the long run, moreover, he would be outstripped by either the moderate or late city-builder. Table 2 shows the number of cities each of our three prototypical civilizations would have each turn and the trade cards which could be drawn.

Table 2: Trade Cards Drawn under Three Urbanization Strategies

<table>
<thead>
<tr>
<th>Turn</th>
<th>Early Urbanization</th>
<th>Intermediate Urbanization</th>
<th>Late Urbanization</th>
</tr>
</thead>
<tbody>
<tr>
<td>3</td>
<td>1</td>
<td>1</td>
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</tr>
<tr>
<td>4</td>
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<td>2</td>
<td>16</td>
<td>9</td>
</tr>
<tr>
<td>12</td>
<td>2</td>
<td>18</td>
<td>9</td>
</tr>
</tbody>
</table>

From the number of trade cards, it is evident that the early urbanizer has hurt himself badly. Losing the exponential effects of doubling his rural population over a prolonged period, he forms his cities slowly and painfully. The other two cultures start more slowly, but then experience an explosive growth of their urban areas. The ultimate differences among the three strategies become apparent if we add up the values of all the trade cards each player could potentially draw in 12 turns; the figures are in Table 3.

Table 3: Total Value of Trade Cards under Three Urbanization Strategies

<table>
<thead>
<tr>
<th>Trade Card Value</th>
<th>Early Urbanization Total Value</th>
<th>Intermediate Urbanization Total Value</th>
<th>Late Urbanization Total Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10</td>
<td>10</td>
<td>9</td>
</tr>
<tr>
<td>2</td>
<td>8</td>
<td>16</td>
<td>9</td>
</tr>
<tr>
<td>3</td>
<td>5</td>
<td>15</td>
<td>9</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
<td>16</td>
<td>9</td>
</tr>
<tr>
<td>5</td>
<td>3</td>
<td>15</td>
<td>9</td>
</tr>
<tr>
<td>6</td>
<td>3</td>
<td>18</td>
<td>9</td>
</tr>
<tr>
<td>7</td>
<td>2</td>
<td>14</td>
<td>9</td>
</tr>
<tr>
<td>8</td>
<td>2</td>
<td>16</td>
<td>9</td>
</tr>
<tr>
<td>9</td>
<td>1</td>
<td>9</td>
<td>9</td>
</tr>
<tr>
<td>Total</td>
<td>129</td>
<td>251</td>
<td>279</td>
</tr>
</tbody>
</table>

Of course, these totals do not take into account several important factors. Even without the supplemental trade cards, the three lowest-valued trade cards are split between two different commodities. One player can be luckier than another in drawing mostly one kind, which enables him to compound their value even without favorable trades. Favorable trades themselves can enormously increase the value of trade cards drawn. Then there are the disasters, wars with other players, and similar events which can wipe out cities or reduce the rural populations. Nevertheless, it is clear that the potential of a late urbanization strategy is much greater where it really counts—in drawing trade cards and piling up enough points to buy Civilization cards. Civilization cards can also be bought, wholly or in part, with taxation revenue, which in turn is based on the number of cities. Here too the early urbanization strategy fails. Assuming that no cities are lost for any reason and that the Coinage card is not used to increase or decrease taxation, the premature urbanizer would collect a total of 76 counters worth of taxes from his cities in the first 13 turns. In contrast, the intermediate urbanizer would collect 114 and the late urbanizer, 120.
The Economics of Trading

Trade cards held singly have values from "1" to "9", as printed on their face. Mutiple cards of the same commoditiy, however, increase the value not linearly (that is, as a simple multiple of their value) but rather exponentially, varying as the square of the number held. Expressed as an equation, the total value \( T_n \) of \( n \) cards of the same commodity with a simple value of \( 'v' \) is:

\[
T_n = n^2
\]

The total value of cards of various simple values is listed in the table below:

<table>
<thead>
<tr>
<th>Commodity</th>
<th>1st</th>
<th>2nd</th>
<th>3rd</th>
<th>4th</th>
<th>5th</th>
<th>6th</th>
<th>7th</th>
<th>8th</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hides/Ohire</td>
<td>1</td>
<td>4</td>
<td>9</td>
<td>16</td>
<td>25</td>
<td>36</td>
<td>49</td>
<td>64</td>
</tr>
<tr>
<td>Iron/Papyrus</td>
<td>2</td>
<td>8</td>
<td>18</td>
<td>32</td>
<td>50</td>
<td>72</td>
<td>100</td>
<td>144</td>
</tr>
<tr>
<td>Salt/Timber</td>
<td>3</td>
<td>12</td>
<td>27</td>
<td>48</td>
<td>78</td>
<td>107</td>
<td>147</td>
<td>192</td>
</tr>
<tr>
<td>Grain/Oil</td>
<td>4</td>
<td>16</td>
<td>36</td>
<td>64</td>
<td>100</td>
<td>144</td>
<td>196</td>
<td>256</td>
</tr>
<tr>
<td>Cloth/Wine</td>
<td>5</td>
<td>20</td>
<td>45</td>
<td>80</td>
<td>125</td>
<td>180</td>
<td>245</td>
<td>320</td>
</tr>
<tr>
<td>Bronze/Silver</td>
<td>6</td>
<td>24</td>
<td>54</td>
<td>96</td>
<td>156</td>
<td>216</td>
<td>288</td>
<td>384</td>
</tr>
<tr>
<td>Spices/Resin</td>
<td>7</td>
<td>28</td>
<td>63</td>
<td>112</td>
<td>175</td>
<td>252</td>
<td>343</td>
<td>452</td>
</tr>
<tr>
<td>Gems/Dye</td>
<td>8</td>
<td>32</td>
<td>72</td>
<td>128</td>
<td>205</td>
<td>304</td>
<td>432</td>
<td>583</td>
</tr>
<tr>
<td>Gold/Ivory</td>
<td>9</td>
<td>36</td>
<td>81</td>
<td>144</td>
<td>225</td>
<td>324</td>
<td>441</td>
<td>580</td>
</tr>
</tbody>
</table>

Careful examination of this table indicates that even low-value commodities can be quite valuable in large numbers. Three humble ochre cards are worth as much as one of the gold cards that players see only late in the game. They are also worth as much as one grain and one cloth card, even though grain and cloth are individually worth several times as much as ochre. This table also gives a clue about trading. With trades limited to three cards at a time, a player could profitably give up a grain, a cloth and a bronze (which have a total value of "15") for three iron or papyrus (which have a value of "18"). A cloth, bronze and spice for three iron or papyrus would be an "even" deal.

Often, however, a player will have two or more of a certain commodity in his hand and, given the exponential increase in value from adding cards, he will be trading to get more of one of the commodities he already holds. Therefore, it is "marginal value" which is most important in trading: how much value is gained or lost from obtaining one more card of some commodity or trading away the highest-numbered card of a commodity. Our second table lists these marginal values. The numbers in each column show how many points a player gains by holding the second, third, etc. card of each commodity.

<table>
<thead>
<tr>
<th>Commodity</th>
<th>1st</th>
<th>2nd</th>
<th>3rd</th>
<th>4th</th>
<th>5th</th>
<th>6th</th>
<th>7th</th>
<th>8th</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hides/Ohire</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
<td>5</td>
<td>6</td>
<td>7</td>
<td>8</td>
</tr>
<tr>
<td>Iron/Papyrus</td>
<td>2</td>
<td>4</td>
<td>6</td>
<td>8</td>
<td>10</td>
<td>12</td>
<td>14</td>
<td>16</td>
</tr>
<tr>
<td>Salt/Timber</td>
<td>3</td>
<td>6</td>
<td>9</td>
<td>12</td>
<td>15</td>
<td>18</td>
<td>21</td>
<td>24</td>
</tr>
<tr>
<td>Grain/Oil</td>
<td>4</td>
<td>8</td>
<td>12</td>
<td>16</td>
<td>21</td>
<td>25</td>
<td>30</td>
<td>35</td>
</tr>
<tr>
<td>Cloth/Wine</td>
<td>5</td>
<td>10</td>
<td>15</td>
<td>20</td>
<td>25</td>
<td>30</td>
<td>35</td>
<td>40</td>
</tr>
<tr>
<td>Bronze/Silver</td>
<td>6</td>
<td>12</td>
<td>18</td>
<td>24</td>
<td>30</td>
<td>36</td>
<td>42</td>
<td>48</td>
</tr>
<tr>
<td>Spices/Resin</td>
<td>7</td>
<td>14</td>
<td>21</td>
<td>28</td>
<td>35</td>
<td>42</td>
<td>50</td>
<td>58</td>
</tr>
<tr>
<td>Gems/Dye</td>
<td>8</td>
<td>16</td>
<td>24</td>
<td>32</td>
<td>40</td>
<td>48</td>
<td>56</td>
<td>64</td>
</tr>
<tr>
<td>Gold/Ivory</td>
<td>9</td>
<td>18</td>
<td>27</td>
<td>36</td>
<td>45</td>
<td>54</td>
<td>63</td>
<td>72</td>
</tr>
</tbody>
</table>

This table should make clearer what getting a third card is worth. For instance, you would gain nothing by giving up one of your five ochre cards to get a second ochre card. On the other hand, it would be slightly advantageous to trade away one of your five iron cards to add a grain card to the two you already have. Sometimes, however, moving up in number is not worth the loss in value; you would be foolish to give up one of your three bronze cards (marginal value of 30) to get a fourth oil card (marginal value of 28). These marginal values can be combined to evaluate a trade involving two or three cards of the same commodity as well. For instance, if you have a possible trade partner who will give you two cloth cards and an iron for your three bronze, and you already have two cloth cards, the transaction balances out for you as follows:

<table>
<thead>
<tr>
<th>Giving Up</th>
<th>Gaining</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Bronze - 6</td>
<td>3rd Cloth - 25</td>
</tr>
<tr>
<td>2nd Bronze -18</td>
<td>4th Cloth -35</td>
</tr>
<tr>
<td>3rd Bronze -30</td>
<td>1st Iron - 2</td>
</tr>
<tr>
<td>Total Loss -54</td>
<td>Total Gain -62</td>
</tr>
</tbody>
</table>

Clearly, this is a profitable trade for you, although not overwhelmingly so. At the same time, it could be tremendously profitable for your partner/opponent. Suppose he only has two cloth and one iron card, but also has just one bronze. His balance sheet would look like this:

<table>
<thead>
<tr>
<th>Giving Up</th>
<th>Gaining</th>
</tr>
</thead>
<tbody>
<tr>
<td>1st Cloth - 5</td>
<td>2nd Bronze -18</td>
</tr>
<tr>
<td>2nd Cloth - 15</td>
<td>3rd Bronze -30</td>
</tr>
<tr>
<td>1st Iron - 2</td>
<td>4th Bronze -42</td>
</tr>
<tr>
<td>Total Loss -22</td>
<td>Total Gain -90</td>
</tr>
</tbody>
</table>

There are some peculiarities in single-card trading. Looking along the diagonals in Table B above, it is a good deal to give up your fourth hides to get a third papyrus card, but it is not smart to give up that third papyrus to get a second timber. These differences become progressively larger as cards become more valuable. "Trading up" from your second salt to your third iron gains a value of only "$1"; but giving up your second ivory to get a third dye nets you a value of "$13"! The right-hand columns also show that it is rarely advantageous to give up a card to get the same number of cards at the next higher level. For instance, if you have four grain and two cloth, you would lose by having three of each-your fourth grain (marginal value of 28) is worth more than your third cloth (marginal value of 25). Never give up a second card to get a commodity you do not have unless what you are getting has a simple value at least two higher than the simple value of what you are trading away.

The third table shows the marginal values of cards considered two at a time. This table can be used to evaluate two-for-two trades or, in comparison with Table B, two-for-one trades. Thus, you should give up your second wine card (marginal value of 15) for a second and third iron card (marginal value of 16).
Players in MAGIC REALM quickly learn that teaming up with other characters is the best insurance against being eaten by hungry monsters. The stronger, armored members of the team can lure monsters onto their shields, while lighter, more vulnerable members can take the critters from behind. This strategy was illustrated in Richard Hamblen’s article, “Magical Mystery Tour” (Vol. 16, No. 4). Amazon and Swordsman mastered a gaggle of goblins that would have gobbled either character fighting solo.

Teaming up confers other advantages, too. By writing the “follow” orders, characters can share the Special Advantages of their companions. In the Swordsman-Amazon team, Swordsman could move an extra Move Phase by “following” the Amazon; or the pair could choose when to execute their move without having their Attention counter picked, when Amazon follows Swordsman.

Table 1 lists the Special Advantages that can be shared. Special Advantages not listed in Table 1 cannot be shared. For instance, players cannot use Dwarf’s “Short Legs” to rest two asterisks in a Rest Phase. Note that the Pilgrim, Witch, Black Knight, and Witch King have no Special Advantages that can be shared. Avalon Hill has also ruled that: 1. Dwarf can execute at most one extra Sunlight Phase per day, by following characters or using a treasure.

No one can “follow” or spy on the Witch’s familiar.

A follower can learn what another character learns through Magic Sight only if he is entitled to use Magic Sight himself.

Peace with Nature does not extend to characters “following” Druid; they trigger monsters normally.

A player must be careful in choosing characters to travel with. The best travel mates are ones which can help the player achieve his Victory Requirements; but, remember, traveling companions harbor hopes of winning the game themselves. Choose mates who don’t threaten you. Woods Girl may find the Elf amiable enough at the Inn, while both are penniless; but will chivalry stand in Elf’s way when the Girl finds a precious treasure on the road? No, my friends. He will quietly ready his bow during daylight. In the evening, Woods Girl can’t escape. Elf is too fast, and Elf’s longer bow will hit before hers. Elf comes away with Wood Girl’s notoriety, gold and treasure.

Table 2 shows which characters can pair safely at the beginning of the game. There are two ways in which a pair can be “safe”. Characters are safe from each other if both characters have a fair chance to kill the other in combat. Pairs safe by “mutual threat” are marked with a • in the table. Even if one character is vulnerable and the other is not, the pair can co-exist if the vulnerable partner has a certain escape. Such pairs are marked •. In other cases in the table, pairing is unsafe because one character can block the other’s escape and deal a mortal blow with little risk to himself. For these pairs, the dominant character is marked in the space.

This table assumes that a character wishing to do away with his companion will ready his weapon or attack spell during Daylight. Since activities are recorded secretly, a player cannot anticipate when his companion will do so. Magic characters are assumed to record their best available attack spells. Characters with Type II Magic chits record “Stones Fly”, those with Type IV record “Fiery Blast” and, if possible, “Lightning Bolt”.

The table does not consider “Melt into Mist” or “Transform”, because the target is not killed. Indeed, the spell is unavailable to its owner until the target is killed, leaving the spellcaster horribly vulnerable. In the case of “Mist”, the target’s possessions are out of reach of the spell caster because they are mist-ified with the target. In the case of “Transform”, the target may carry his possessions away with him. Even a frog can carry gold; it has negligible weight! The “Mist” or “Transform” caster can’t get his target’s notoriety until he kills him. It is tough enough to kill a squirrel before it runs away to a clearing the caster can’t reach. The little buggers don’t need to follow the roadways.

Characters with Type V spells could use “Curse” or “Power of the Pit”, but these are unreliable in a tense situation. Would the threat of “Squeak” dissuade the Berserker from biseeting Witch’s cranium? “Broomstick” is a much more useful spell. Its owner should cast the spell on himself in advance, in a deserted clearing. Later, when trouble threatens, playing a light Move counter to run away safely to sweep the spellcaster out of the clearing—literally. The table does take “Broomstick” into consideration. Remember, I said Table 2 applies to the first turn of the game. As soon as characters pick up treas-
ure, armor, horses or wounds, all these relationships change. For instance, if the Magician finds "Dragon Essence" and recorded "Fiery Blast", his row in Table 2 would look like this:

```
<table>
<thead>
<tr>
<th>Character</th>
<th>Armor</th>
<th>Horse</th>
<th>Weapon</th>
<th>Magic</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black Knight</td>
<td>5</td>
<td>3</td>
<td>L-8</td>
<td>2</td>
</tr>
<tr>
<td>Amazon</td>
<td>4</td>
<td>2</td>
<td>L-8</td>
<td>2</td>
</tr>
<tr>
<td>Captain</td>
<td>3</td>
<td>1</td>
<td>L-8</td>
<td>2</td>
</tr>
<tr>
<td>Black</td>
<td>2</td>
<td>1</td>
<td>L-8</td>
<td>2</td>
</tr>
<tr>
<td>Purple</td>
<td>1</td>
<td>1</td>
<td>L-8</td>
<td>2</td>
</tr>
</tbody>
</table>
```

Characters, such as Sorcerer or Wizard, originally too strong to serve as companions, are now possible mates for the Magician with his "Dragon Essence". Old friends like Pilgrim should avoid him. Of course, Pilgrim may not know that the Magician has "Dragon Essence" in his knapsack. Magician does not have to reveal his potion until he activates it. Magician may wait until Pilgrim obtains some notoriety, treasure or gold, before popping his surprise.

It is interesting to identify the factors that influence pair-safety most. Possession of armor was very important, giving its owner an opportunity to attack once or twice before the opponent's blow could kill. Armor gives the Black Knight, Amazon and Captain the edge against Sorcerer and Wizard in Table 2. Horses conferred the same benefit, unless the optional rule permitting attackers to target the rider was in effect.

The "Stone Fly" spell was a more important factor than "Fiery Blast"; although Stones is an L-8 attack and Blast is L-8. Stones has a longer effect, hitting once in the first round of combat, usually the only round that matters in combat between unarmored characters. But even more important is that the Stones-caster resolves four attacks against each opponent, compared to one single attack for Blast. Richard Hamblen changed the Stones spell in this way to boost the power of Druid and Witch, previously perceived as weak characters.

Terrain makes a difference, too. "Lightning Bolt", available in mountain clearings, has even longer length than "Stone Fly". In the flats, Druid and Witch get the drop on Sorcerer and Wizard; but the Purple-specialists have the edge in the hills. A "safe" pair of characters may become unsafe, when one player fatigues or wounds a vital action chit. The converse is not true, however. An unsafe pair cannot become safe by fatiguing a chit because the owner gets the chit back by writing "Rest" on it to fatigues the player during the day, but his weaker partner cannot anticipate the threat. I have seen some players, forming a partnership, give each other physical possession of chits that would either allow either to kill the other—but this practice is illegal by the rules!

Table 2 demonstrates that, in general, tight characters should not team up with light or magical characters. Magical characters cannot team up with other magical characters safely. But the heavy characters can match up with anybody. They will surely pull their weight in any team. Medium characters are in-between: some pairings are fine and others are not.

The final thing to note is that Table 2 only depicts interactions between pairs of characters. Interactions within teams of three or more characters was beyond my ability to compute. Diplomacy gets involved, too. Joining a team with two "safe" characters is not safe if the two can cooperate to do in you with little risk to themselves.

Having read all this, do you know how to pick your friends in MAGIC REALM? Are your sweaty palms nervously clutching the grip of your baldric sword? Is there a jealous gleam in your next action? If you have this much trouble dealing with these other characters, how will you face the Native bands that roam the realm? Read my next installment: "Bashing the Bashkars".

---

**CONTEST #136**

For the purposes of this contest, assume that you are the President of the New York Central in a game of 1830. Your job is to maximize revenue possible on the existing track shown in the illustration with various combinations of trains. For each combination shown on the entry form, fill in the letters of the tiles each train would pass through to earn the maximum revenue. For example, the best route for a single "2" train is already shown (ADN = $90); please follow this format when recording your answers. Routes must be listed in order, but may be run backwards or forwards (i.e., "ADH" is the same as "HDA"). When finished, add up the total value of all revenue earned with each combination (including the $90 already shown). The contest winners will be those Presidents scoring the correct total. In case of ties, Presidents with the most correct routes will be declared winners.

The answer to this contest must be entered on the official entry form (or a facsimile) found on the insert of this issue. Ten winning entries will receive merchandise credits from The Avalon Hill Game Company. To be valid, an entry must include a numerical rating for the issue as a whole and a listing of the three best articles in the judgement of the contestant. The solution to Contest 136 will appear in Vol. 24, No. 1 and the list of winners in Vol. 24, No. 2 of The GENERAL.
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Vermon gamer wishes to be GM for FT, FL, and PB, also desires PB for *VITP* (using Simultaneous Movements), **FE**, *FP* and **VG**'s Vietnam. Jeff Thompson, 2619 NE 4th Street, #112, Redmond, OR 97756-7246.

Fox opponents wanted for fun or blood. **R3**, **B5**, **CAE**, **ACF**, **FOG**. Leader! I want to check out ftf or PBM. Must be able to meet at least once per week. Steve Overton, 12538 Dayton Ave., N. Seattle, WA 98133 (206) 367-1260.

Look for something for **DPM**. The Handwheels of War -- opening on *ASL*? I want to play War on a Sunday night. Bob gardon, 7213 Briarville Road, Cheyenne, WY 82009. (307) 637-6207.

Any opponents for **DPM**?联络人, please write to: Ian Krult, 3903 Oakwood St., Victoria B.C. Canada, VUV-39M.

Area games and **SL**. Smoke gets to us first. Tom Brady, 2196 EE Street, Palmetto, FL 33569. Does anyone play war games up here? I will play almost any game, especially **ASL**, **FT**. It doesn't matter if you're German or American. Mike Smith, HHC, 54rd AD, Box 513, Bremen, Germany, APO YW 09069, (4071) 805225.

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21.0 If a railroad has no train but has the cash to buy one from the bank, may it instead purchase a train from another corporation (and perhaps even more than the bank's train would cost)?

A. Yes (yes).

21.2 May the president of a corporation sell a train to another corporation he is also president of, and then have the second railroad operate the train during the current Operating Round?

A. No. Trains are not sold, they are bought. There is a distinction. Any transfer of trains takes place during the purchaser's turn. The purchase of trains occurs in Step 5 of the operating sequence, after Step 1 when trains are delivered. Therefore trains cannot be operated during the same Round they are acquired. If that were not so, all eight railroads could operate using the same single train.

23.1 Does the sale of a private company between two players count as a transaction for the purpose of placing the Priority Deal Card?

A. Yes, the sale of a private company between two players counts as a transaction for the purpose of placing the Priority Deal Card.

23.4 Whether selling stock to assist a corporation or buying stock from them, must the shares be sold as a block or can they be sold one at a time, receiving the next lower share value each time?

A. Either way is proper, but the second procedure seems reasonable if you are trying to game Bankrupt.

24.0 If a railroad has no trains but does have the cash to buy one from the bank, may the president add some of his personal funds to buy a train instead of another transaction?

A. No. The president's cash may only be used to purchase necessary funds when buying a train from another corporation.

Table 1: When exercising the D&H's special feature on behalf of either the NYC or the Erie (both of which must lay a tile on their base hexagons to establish their base station), may the player lay a city tile and a station using the D&H's special feature as their first tile placement? If so, does the station established in the D&H hexagon count as the first free tile which the railroad would normally have laid on its base station?

A. No, the station established in the D&H hexagon does not count as the first free tile which the railroad would normally have laid on its base station. However, the railroad could place a station on the NYC or Erie base hexagon, provided it is not occupied by another railroad.

Table 2: When a railroad has no trains and no trains remain for sale in the bank (all "S", "G", and D&H railroads), may the bank be purchased by another railroad that has no trains but has the cash to buy one from the bank, so it just will not make any more money and its stock will continue to fall in value unless it can raise necessary funds when buying a train from another corporation?

A. Yes. The bank can be purchased by another railroad that has no trains and no trains remain for sale in the bank (all "S", "G", and D&H railroads). However, if the railroad has no trains and no trains remain for sale in the bank (all "S", "G", and D&H railroads), the bank cannot be purchased by another railroad that has no trains and no trains remain for sale in the bank (all "S", "G", and D&H railroads).

EMPIRES IN ARMS

The Game of Grand Strategy in the Age of Napoleon

EMPRESSES IN ARMS

The Avalon Hill version of the popular wargame from Australia by the same name, is surely one of the most complex games in our line. Indeed, the complexity of this game is such that players guide the fate of entire nations during one of the most turbulent periods of Europe's history. And, with even the shortest scenario taking some three- to six-hour blocks to play, this isn't a game that can be completed in a casual afternoon.

Nevertheless, the balance between the various elements of the game has been well received, with players reporting that the game is both educational and entertaining. The artwork is highly detailed, with accurate depictions of historical events and figures. The game also includes a comprehensive rulebook, which provides clear instructions on how to play.

The following games are ranked by their reader-generated overall Value rating, which combines factors such as players' enjoyment, replayability, and overall appeal. These ratings are based on feedback from game enthusiasts and provide a comprehensive guide to the strengths and weaknesses of each title.

WARGAME RBG

The Game of Grand Strategy in the Age of Napoleon

Ratings for the artwork and components were surprisingly disappointing. In fact, the artwork was taken directly from negatives supplied by the Australian designers. However, readers seem to have come to expect highly colorful yet artistic rule booklets and counters, player's aids and rulebooks of our resident artists.

Overall Value: 3.49
Components: 3.55
Map: 4.80
Counters: 3.56
Player's Aids: 3.16
Complexity: 9.10
Completeness of Rules: 3.11
Playability: 3.52
Excitement Level: 3.63
Play Balance: 4.80
Authenticity: 2.07
Game Length: Shortest: 3 hrs., 35 mins.
Longest: 11 hrs., 24 mins.
Year: 1986
Sample Base: 18
**Infiltrator’s Report**

Our long-overdue look at some of our Napoleon period games, highlighted by the introduction of *EMPIRES IN ARMS*, seems to have pleased the majority; the overall rating (2.98) certainly reflects this satisfaction. Surprisingly, however, the best rated games deal not with EIA, but rather with those three old stand-bys for wargamers—THIRD RITCHIE and WOODEN SHIPS & IRON MEN and WAR & PEACE. The ratings for all the articles in Vol. 23, No. 4 of *The General* are as follows:

- **THE EMPIRE STRIKES BACK** .......................... 282
- **THE ROYAL NAVY TRIUMPHANT** .................. 153
- **TETE-A-TETE WAR & PEACE** ................... 141
- **AH PHILOSOPHY** .................................. 118
- **GRAND-AND GRANDIOSE- STRATEGY** .......... 107
- **DESIGN ANALYSIS** .................................. 98
- **FAKE OF EMPIRE** .................................. 96
- **THE ALLIED SCHOOL OF STRATEGY** ............ 82
- **WE MAY FRIGHTEN THEM TOO MUCH** ........ 71
- **BAMBI’S WAR** ........................................ 54

Elsewhere in this issue is a superb little article analyzing city construction strategy in CIVILIZATION. For those who did not read the brief acknowledgement, it should be noted that this piece first saw print in *The Washington Gamer*, a fine amateur publication and voice of the Washington Gamers Association. After twelve years, the WGA is the area’s oldest and most active gaming organization, with weekly game sessions and many special events. Membership information may be obtained from Mr. Bill Cumberland (4140 South Dickerson Street, Arlington, VA 22204). Membership dues (last report, $5.00) bring a subscription to *The Washington Gamer*, which is devoted to reviewing and analyzing games of interest to the members; past issues have looked at a number of Avalon Hill games and the upcoming issue takes a look at *Ambush* and its sequel, *Siege*. More information, such as independent subscription costs or sample copies, may be obtained from Mr. Albert Parker (3303 Cannongate Road, Fairfax, VA 22030).

For four years, the 120-page monthly magazine *Tactics* has served the vast number of experienced wargamers in Japan. To the many among our readership who have recognized Japanese-language written to us, have no fear—no copyright infringement has occurred. The Japanese editors have a knack for reporting on the hard facts of writing for the oldest wargaming magazine on the market.

The Avalon Hill Game Company has obtained the rights to the use of the characters and plot line of both the novel *Pistoos* by Dale A. Dye and the Academy Award-winning movie of the same name. The playing pieces represent each of the main characters from the story, and the mapboard is a colorful recreation of typical Vietnamese terrain where the action took place. *PLATOON*, designed by Craig Taylor as an entry-level wargame (two pages of rules) portrays the author’s philosophical approach to the Vietnam War. A recent announcement from the studio reads as follows:

“At the request of the director of this film, any proceeds allocated to him will be donated to the Vietnam Veterans of America Foundation.”

Appealing to a wide audience, historians and veterans alike should appreciate the extreme accuracy in the design of *PLATOON*. The game, which should be available to the few you read this column for, costs $16.00. Look for it or order it direct from The Avalon Hill Game Company (4517 Harford Road, Baltimore, Maryland 21214).

Contest 134, a challenge to anyone who has ever played France in a multi-player game of *EMPIRES IN ARMS*, brought few responses. Likely, many of our readership have time or opportunity to master this complex “monster” game. However, some did take up the challenge. Unfortunately, most seemed to want to punish the defeated Prussians (moving to Kustrin or Berlin) rather than take on the more dangerous Austrians. And one respondent moved the Grand Armee to Wittenberg, apparently wanting his double move! The only respondent to move in the general direction of the Austrians at Linz did not engage in a battle. Seems we have no new Napoleonians among our readership.

Contest 135 pitted our readership against a Zeppelin in one of the solitary scenarios from *KNIGHTS OF THE AIR*. The trick for the Camel pilot, short on time and fuel, is to reduce his speed to 70 mph, thereby permitting the craft to make 1T left turns. This positions it directly facing the airship. The only answer received was to move the airplane last shot at it. Beware moving the Camel adjacent to the Zeppelin, however, because at this range a successful hit almost certainly does the airship as well as the airplane to a fiery end. Successful contest entry forms shall have the following information:

- **Control Stick**
  - **Engage Power**
  - **Final Turn**
  - **Turn Angle**
  - **Attitude
t

At Start
- **Preparation**
- **Target**
- **Kite**
- **Turn**
- **Airship**
- **Guns**
- **Adjustments**

Maneuver
- **No. of Hexes**
- **1T Left Turn**
- **2T Straight**
- **3T Left Turn**
- **4T Straight**
NBA FRANCHISES AVAILABLE:
RATES REASONABLE!

(REQUIREMENTS: Knowledge of professional basketball.
Capable of dealing with giants. Ability to handle
high-pressure situations. Must bring own temper.)

Can YOU do the job?

Find out if you have what it takes in NBA, the animated stat-
based basketball game. Take control of Larry Bird, Dominique
Wilkins, Michael Jordan, Kareem Abdul-Jabbar and Bob Cousey.
Pick the starting line-ups, send in substitute and call for the
fast break and full-court press. NBA takes into account
everything that occurs on court. On offense, you call the play.
Choose the sequence of passes, but be careful: it increases the
chance of two points, but also can lead to a steal or blocked
shot. Work the outside, or just go for the three-pointer. On
defense, set up outside or close to the basket, go for the
rebound, or turn on the pressure and try for a steal. A good
NBA coach has to work the bench as well as the floor. Each
player's stamina is rated by the number of minutes he can play.
Use up your starter too early in the game, and you'll have to
send in a sub during those final crucial minutes, and that could
turn an overwhelming victory into a closely-contested defeat.

From the designers of Super Sunday, NBA
is the first and only fully-animated
statistically-accurate basketball game
on the market, coming in like a fast break
with the following features:

• A STAT-KEEPER PROGRAM that allows you to keep track of how
  well your team is doing. This valuable accessory lets you save
  stats from the NBA game for later review. Individual players'
  performances and statistics are updated throughout the game.
  You can view them during and after the game on your screen
  or printer.

• 20 GREAT TEAMS from the 1959-60 Boston Celtics to the four
top teams from the 1985-86 season: Boston, Milwaukee,
Houston and Los Angeles! In between are some of the
greatest teams that ever played the game: the 1966-67
Philadelphia 76ers with Wilt Chamberlain and the classic match-
up from the 1969-70 season between the Lakers and the New
York Knicks!

• YOUR BRILLIANT PLAY re-enacted by all 10 players on screen.

• THREE MODES OF PLAY: head-to-head, solitaire and autoplay. The
  autoplay function also allows you to play the same teams several
games in a row . . . a needed option to replay a season.

NBA can be played on the Apple® II family.
Commodore® 64/128 or IBM® PC computers.
Price: $39.95.
Watch for the release of Accessory disks; 1987
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Available at leading game and computer stores
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A MONARCH AVALON, INC COMPANY
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WHAT HAVE YOU BEEN PLAYING?

Top ten lists are seemingly always in vogue these days. Whether the subject is books on the Best Seller List, television Nielsen ratings, or even games, the public never seems to tire of seeing how their individual favorites stack up numerically against the competition. Our preoccupation with this national pastime is almost akin to rooting the home team on to victory every Sunday. So to further cater to your whims (and to satisfy our own curiosity) we unveil The GENERAL's version of the gamer's TOP TEN.

We won't ask you to objectively rate any game. That sort of thing is already done in these pages and elsewhere. Instead, we ask that you merely list the three (or less) games which you've spent the most time with since you received your last issue of The GENERAL. With this we can generate a consensus list of what's being bought. The degree of correlation between the Best Selling Lists and the Most Played List should prove interesting.

Feel free to list any game regardless of manufacturer. There will be a built-in bias to the survey because you all play our games to some extent but it should be no more prevalent than similar projects undertaken by other magazines with a special interest-based circulation. The amount to which this bias affects the final outcome will be left to the individual's discretion.

The games I've spent the most time playing during the past two months are:

1. ____________________________
2. ____________________________
3. ____________________________

CONTEST #136

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Total Revenue of Routes = ____________________________

The answer to this contest must be entered on the official entry form (or a facsimile) found on the insert of this issue. Ten winning entries will receive AH merchandise credits. To be valid, an entry must be received prior to the mailing of the next issue of The GENERAL and include a numerical rating for the issue as a whole, as well as listing the three best articles. Sorry, only one entry to a contest from each subscriber will be accepted; entries subsequent to the first will be discarded.

Issue as a whole: (Rate from 1 to 10 with 1 equating excellent, 10 equating terrible)
Red 3 Articles:
1. ____________________________
2. ____________________________
3. ____________________________

NAME

ADDRESS

CITY ___________ STATE _______ ZIP _______
IF YOU’VE BEEN THERE, now you can
go back and take command!
IF YOU HAVEN’T, this may be the
closest you ever get — without
being shot at!

From the publishers of the acclaimed Vietnam: 1965-1975 comes the most important historical simulation of the decade, Central America: The United States’ Backyard War. Go beyond spotty news reports to study the complex and ever-changing conflicts south of our own borders. With Central America, you are in command, manipulating over 700 playing pieces, representing everyone from the CMA to the Sandinistas, from US Marines to Cuban “advisors,” from the CIA to the FMLN. Maneuver and engage across a full color 22”x32” map sheet that covers all of Nicaragua, Honduras, and El Salvador, as well as adjacent areas of Costa Rica and Guatemala.

Central America is not a game to play with the kids. It is a comprehensive, dynamic model of a complex military-political situation that makes demands on your time, energy, and imagination. Drawn from non-classified sources, Central America organizes an enormous body of data into an exciting game system that allows you to adjust the level of complexity — by playing the basic game, advancing to the Superpower intervention level, or by adding any of the optional rules provided.

Central America includes 16 distinct scenarios, each of which details a portion of the conflict in 1 to 10 hours of playing time. Moreover, a complete system of scenario generation is provided, allowing you to decide the intensity of the conflict, permitting you to commit air and ground forces as you see fit, and demanding that you live with the effect of your command decisions on the ever-dangerous index of World Tension!

CENTRAL AMERICA:
The United States’ Backyard War
Product Nr. 30024. $30.00
Available in game and hobby stores nationwide, or order direct by telephone.

THE SECRET WARS
Not since the lost nights of super spy Reinhard Gehlen (and the now legendary post-World War II Berlin intelligence war) has so much mystery shrouded a battlefield. The modern conflicts that have convulsed Central America erupted with the tragic “Soccer War” between El Salvador and Honduras. They then escalated from pre-revolutionary Nicaragua to the fall of Somoza, spread to the struggle in El Salvador, and returned again to the post-revolutionary Nicaraguan civil war. This cycle of strife continues even unto today.

Excerpted from Central America’s situation analysis, which provides an historical framework spanning the era from 1930 to the present.

THE GENERAL
SINGLING, FRANCE, 6 December 1944: For nearly a month the US 4th Armored Division had been fighting in difficult terrain to clear Lorraine. On 6 December, in an attempt to take Bining and Rohrbach and reach the River Sarre and the German border, Lt. Col. Creighton Abrams' tank battalion was broken into two combat teams to facilitate its advance. Sweeping north, the leading task force came under heavy direct and indirect fire from the direction of Singling, a village occupied by elements of the 111th Panzergrenadier Regiment. Abrams decided on his own initiative to attack the town and attempt to hold it while the remainder of his force turned toward Bining. Cpt. Leach, in command of Company B with armored infantry aboard, was given no time to scout enemy positions or make plans. Spreading his command into a line abreast formation, Leach led them in a grand charge over the crest to the south in finest cavalry tradition, while supporting artillery poured smoke and HE into the town to mask his approach.

BOARD CONFIGURATION:

BALANCE:

- Add 9-1 Armor Leader to German OB.
- The American must Control three of the four multi-hex buildings on board 12.

**SPECIAL RULES:**

1. EC are Wet with a Mild Breeze blowing to the southwest. All woods and brush are considered orchards. All buildings are ground level (B23.21), except those hexes with a stairwell symbol which are considered Two-Story houses with a level 1 Location as well (B23.22). Rowhouse rules still apply. 12R7 is not subject to VBM nor do vehicles therein receive building TEM unless they actually enter the building. Vehicles may enter 12R7 normally provided they do not pass through a building hexside. Place a Blaze counter in hexes 12P9 and 1209.

2. The American player, prior to play but after all setup, may automatically place two Smoke Concentration FFE anywhere on the mapboard. Roll normally for Accuracy; any Extent of Error dr is halved (FRU). See A24.4 and A24.61. Any six American AFV may be designated as having Stabilized Guns (D11.1) prior to German setup; the remainder may not.

3. One battery of 81mm Mortar OB is available to the German player. During the first Game Turn, German units may move only during their APf/RPh unless Recalled.

4. Civilian Interrogation (E2.4) is available, but is considered hostile to the American player.

**AFTERMATH:** The neat American formation was soon broken, as two tanks lagged behind and the leading tank was hit by three AP shells. With that, the armored battle became a confused free-for-all in the streets and alleys of the picturesque French village. The infantry had dismounted as the tanks passed the hedge bordering the houses on the south and had swept the village free of German infantry while avoiding the worst of the armored battle. Only a volley of enemy mortar rounds on the square checked their advance. A stalemate soon developed, with the armor of both sides stalking each other in the village and its environs. At dusk, the Americans—since reinforced by a further armored infantry battalion—were ordered to pull back and corps artillery put a heavy barrage on the town. The final reckoning of the battle of Singling shows the action a draw; American casualties amounted to five Shermans and 22 men while the Germans lost two Panthers and some 57 men.
THE FORGOTTEN FRONT

ASL SCENARIO G3

HENNEBONT, FRANCE, 9 February 1945: The 66th Infantry Division was typical of many raised from draftees in preparation for the invasion of Europe. Yet when the “Panthermen” arrived, they found themselves relegated to a relative backwater—containing the isolated German pockets around Lorient and St. Nazaire. Their war was no less bitter, however, as both sides continuously probed and raided opposing lines. The village of Hennebont lay in the “no-man’s land” north of Lorient. On this nondescript day, a limited American assault was “laid on”. It was typical of the fighting around the embattled Nazi bastions. It was also typical of the heroism shown by the conscript soldiers of both sides.

BOARD CONFIGURATION:

BALANCE:
- Reduce American ELR to 3.
- Allow the Americans to set up on any four hexes of board 12.

TURN RECORD CHART

GERMAN Sets Up First [106] 1 2 3 4 5 6 7 8 END

AMERICAN Moves First [220]

Elements of the 895th Grenadier Regiment [ELR: 3] set up on Board 19 hexes numbered > 6: {SAN: 5}

Elements of the 262nd Infantry Regiment [ELR: 4] set up within five hexes of 12Q10: {SAN: 3}

SPECIAL RULES:
1. EC are Moist with no wind at start. 12U5 is a third-level building hex.
2. German pillboxes must be placed in Open Ground non-road hexes, no closer than five hexes to any other pillbox.

AFTERMATH: As the infantrymen left the shelter of the ruined village, to which they had probed without incident, fire from a bunker raked their ranks. The Americans sheltered behind armored cars coming in under their support but a flanking bunker opened fire also. Intended solely to probe defenses and to bring back prisoners for G2, the mission was proving costly. But Sgt. Chunfar—who saw his entire squad go down—charged straight at the bunker, found the entrance and with phosphorus and explosive grenades, silenced the machine gun nest. Leaving the bunker, he stumbled into a German communications trench and ambushed the enemy within. The American attack, despite heroism like this, was stymied. The bitter “little war” continued. Despite heavy shelling and constant pressure, the German forces in Lorient did not surrender until the collapse of the Reich.