FOOTNOTES

1. **1. FB SCENARIO SPECIAL RULES:** To the greatest extent possible, the rules specific to the *Festung Budapest* (*FB*) HASL were either imported directly or derived from existing HASLs, primarily the *Red Barricades* (*RB*) HASL, so as to minimize the learning curve associated with an already challenging rules system. Additionally, an extensive set of expanded Railroad and Tram Lines rules has been included since a number of the scenarios and two of the campaign games (CGs) are heavily influenced by the presence of an Embankment Railroad, which is mostly equivalent to a Hillock (F6.). Given that the B32 EmRR rules rely on the long out of print Chapter F, we felt that an expanded set of rules and examples in this area would significantly enhance playability. Several other important *FB* rules sections were taken from *Kampfgruppe Peiper* (*KGP*), *A Bridge To Far* (*AbtF*), and *Valor of the Guards* (*VotG*). *FB* is indebted to the designers of those modules for their trailblazing efforts.

2. **SSR FB1 ON-MAP & OFF-MAP TERRAIN:** The selection of the Budapest area to be covered in a HASL format was made by Bruce Kirkaldy during the late 1990s. As a first step, Bruce developed a playtest map divided into two sections based on period maps and a high altitude captured German aerial reconnaissance photo obtained from the National Archives at College Park, Maryland. Over the intervening years, Bill Cirillo, the designer, spent days in the Cartographic Records section of the National Archives securing a number of additional German aerial recon photos of the specific area. In 2005, Dean McGinley and Jim Sexton further modified the maps. Finally, in 2009, Charlie Kibler began creating the final map set. At that time, we decided to use a 1" hex size because of counter density issues associated with the CGs. This in turn required using four separate map sections in order to keep the size of each individual map section manageable.

3. **SSR FB2 MAP-EDGE BUILDINGS:** Because of the dense urban nature of the terrain in Budapest, it was impossible to create a set of maps with Open Ground along the entire perimeter of the map. As a result, we had to develop rules to clarify map entry from off-map in and around the various map-edge buildings. Based on the existing rules and playtest results, we determined that entry from "offboard" (or in this module "off-map") must always occur at ground level from an Open Ground hex. This allows players the ability to place minefields in any non-rubbled, map-edge building hex.

4. **SSR FB3 NARROW STREET:** Given a desire to create a realistic city map within the confines of a forty-meter sized hex-based map, it becomes impossible to model every individual road, especially in an urban setting, with its own dedicated hex. Therefore, some roads that would not be considered in the traditional European village sense as "narrow" are nonetheless treated this way in *FB*, but with some of the restrictions typically associated with B31.1 Narrow Street rules tempered.

5. **SSR FB4 AXIS FOOD SHORTAGES:** In addition to the severe ammunition shortages suffered by the Axis forces over the course of the siege, food supplies dwindled to such an extent that by the end of January the majority of the defenders received only a few grams of food as a daily ration. Included in this ration was a small amount of horse meat from the cavalry mounts of the German SS-Kavallerie-Division 8 "Florian Geyer." As a large amount of this meat had spoiled, the majority of the defenders eventually came to suffer from "blood-guts" — uncontrollable diarrhea, which made fighting outside in the freezing cold almost more preferable than sitting in the overcrowded, stinking dugouts, bunkers and cellars.

6. **SSR FB5 HAND-TO-HAND CC:** Like most of the urban fighting in WWII that came before Budapest, much of the combat in the city was conducted in close quarters with weapons that at this point in the war were quite lethal at short range, such as fully automatic machine pistols, assault rifles, flamethrowers, grenades, and demo charges.

7. **SSR FB7 NO QUARTER:** During the period 24 December 1944 through 13 February 1945,

approximately 30,000 of the 57,000 Axis defenders on the Buda side of the city were taken prisoner by the Soviets. These figures include those German and Hungarian soldiers captured during the breakout attempt on the night of 11 February. The vast majority of the units that surrendered belonged to the Royal Hungarian Army, while a much lower percentage of Germans, especially Waffen-SS units, surrendered to the Soviets. Despite this disparity, we decided to invoke No Quarter for both sides in order to reduce complexity and increase playability.

8. SSR FB8 HUMAN WAVE: Although under a significant amount of pressure to seize as much of Eastern Europe as possible (including the Hungarian capital of Budapest) before the Yalta Conference scheduled for February 1945, the commander of Soviet forces charged with the city's capture, Marshal Rodion Yakovlevich Malinovsky, was concerned about the overall strength of the divisions in his 2nd Ukrainian Front. Having recently been engaged in the fighting on the Great Hungarian Plain and the tank battle of Debrecen, Malinovsky was reluctant to employ his troops in human wave formations, choosing instead to reduce Budapest block by block.

9. SSR FB9 SEWER MOVEMENT: While records indicate that all combatants employed the sewers within Budapest to conduct reconnaissance type activities, the men of the Vannay battalion, many of them current city workers, had an intimate familiarity with the system. To reflect this knowledge, any leader stacked with a Vannay unit has an enhanced ability to employ Sewer Movement.

10. SSR FB13 PAVED ROADS: Prior to the arrival of Soviet troops near the New St. Janos Hospital on 25 December, 1944, the military leaders of Budapest had time to establish various types of fortifications throughout the city including anti-tank barriers and ditches, roadblocks, barbed wire barricades, and anti-personnel and anti-tank minefields. Many of these minefields were placed on the paved roads, tram lines, and rail lines within the city by removing sections of paving. In *FB*, it is possible to set up both A-P and A-T mines in paved road and Railroad hexes. Those set up in a paved road hex must still set up on map while those placed in a Railroad hex may set up HIP per B32.11. In addition, if a paved road or Wide City Boulevard is covered in Debris, mines may be set up HIP in such hexes. Finally, both A-P and A-T mines set up in such a manner may only be removed via the normal B24.7 Clearance rules. A-P mines are still not allowed to be placed on a bridge Location.

11. SSR FB16 OBA & SSR FB17: In contrast to the ever-increasing shortage of ammunition for the Axis, the Soviets were well supplied with munitions throughout the siege to the point that Soviet ammunition crates had the words "Don't Economize" stenciled on their sides. In game terms, this surplus capability is represented by giving all Russian artillery batteries automatic Plentiful Ammunition (C1.211) status and all Russian units (other than the Buda Volunteer Regiment) Elite status for the purpose of Special Ammunition Availability (C8.2). On the other hand, the Axis began to suffer from the debilitating effects of limited ammunition availability in the mid-to late January timeframe. Consequently, the Axis are never considered Elite for the purposes of C8.2 and suffer from Scarce Ammunition beginning in mid-January.

12. SSR FB18 RECALL: We decided early in the design process to require that all Weapons on an Axis vehicle, not just its MA, be Disabled (D3.7) prior to initiating automatic Recall. Also, because a number of scenarios have entry instructions that use multiple map edges or only a portion of a given map edge, we clarify what constitutes a Friendly Board Edge (A20.53) for Recall purposes.

Finally, contrary to A26.221, any vehicle under Recall is immediately counted as Eliminated for CVP purposes, crew included, the instant that the vehicle is Recalled. If the vehicle never makes it off a Friendly Board Edge or the vehicle is subsequently destroyed, but the crew survives, the CVP for that vehicle and crew have already been counted. Just don't count CVP again if they are later killed or captured.

13. SSR FB19 VEHICLE ABANDONMENT: Victory Locations are too important and Infantry too precious to allow Inherent crews to Abandon their AFVs at will. To be fair, if an AFV becomes Immobilized by other than ESB, the crew may get out. Otherwise, however, they are there to fight in their machines.

14. SSR FB20 AXIS FUEL SHORTAGE: Along with limited access to ammunition, Axis forces suffered from a severe shortage of petrol, espe cially as the siege lingered. Just prior to the breakout on 11 February, the Axis were forced to destroy a number of tanks and armored halftracks because of an absence of fuel.

15. SSR FB21 ASSAULT ENGINEERS & SAPPERS: By this point of the war, each nationality employed some form of assault engineer formation. In Budapest, German Pionier Companies were available from Panzer-Division 13, Panzer-Division "Feldherrnhalle," and SS-Kavallerie-Division 8 "Florian Geyer." During the second week of January, the Soviet "Budapest Group" was restructured into a series of assault groups consisting of assault engineers armed with flamethrowers and demo charges backed by rifle units with heavy machineguns, all supported by artillery used in a direct fire mode.

16. SSR FB22 AIR SUPPORT: There are multiple references throughout the literature of direct air support, both ground attack and bomber support provided by all three combatant nationalities. To aid playability, we provide Russian and Hungarian aircraft counters.

17. 2. FB DEBRIS: Debris represents the scattered remains of automobile, tram car, and wagon wrecks, and machine parts, as well as more scattered building rubble resulting from shelling and bombing, which lined the roads within the city. Given that the vast majority of Budapest did not in general suffer heavy damage prior to January 1945, we decided not to create permanent debris and rubble art directly on the map but rather to include new 5/8" Debris counters. We also incorporated a process that allows multiple approaches for generating debris (and rubble) as part of most scenarios and all three of the campaign games. Besides the regular Debris counters, we found during playtesting that Debris-WCB counters were handy when a WCB was covered by both Debris and a large stack of counters. While we took the majority of the Debris rules directly from *RB*, we added clarification to account for the potentially transient nature of a terrain feature that can be cleared. While appearing to violate the laws of physics and conservation of mass and energy, we decided that Debris should behave in a manner similar to Rubble. Terrain features like brush and orchards can disappear under Debris and then "magically" reappear after a few successful Clearance DRs. Guns can be Emplaced (C11.2) in paved road hexes covered in Debris, reflecting the fact that historically the Debris served to provide additional cover for the Gun crews while initially shielding their presence and exact location from the enemy. Finally, even after years of playtesting, it remains to be seen whether extensive debris and/or rubble generation better aids the attacker or the defender.

18. 3. FB RUBBLE: Because of the wide spread creation of debris and rubble across Budapest during the course of the siege a rule was created to allow for variable Falling Rubble (B24.12) and Falling Debris (2.5) generation by SSR and game play during scenarios and CGs. Because of this, there is a high probability that no two playing of certain scenarios will ever be the same.

In March 1945, an official census was taken to determine the exact amount of structural damage suffered by the city's buildings during the battle. The census estimated that about 4% of all buildings in Budapest were completely destroyed, 23% were seriously damaged, and only about 25% avoided any damage. Additionally, over 25% of homes were either fully or partially damaged.

19. 4. WIDE CITY BOULEVARDS: Consistent with architectural styles across most major European cities a number of grand avenues existed throughout Budapest. Additionally, a large number of roads also had tram and rail lines in the middle of them or running parallel to them, thus creating an expanded open area that became that much more challenging to cross under enemy fire. Although not a Paved Road (B3.), WCB are treated very much like paved roads, except for a few things such as the -1 TEM, Dash (A4.63), and Street Fighting (A11.8).

20. 5. FB ORCHARDS: Two types of Orchards (B14.) exist in *FB*, normal Out-of-Season Orchards (B14.2) and Dense Orchards (5.12). Dense Orchards are used primarily on the Kis-Svábhegy (Hill 259) located along the western edge of *FB* map sections NW and SW; they represent a thicker form of growth that restricted lines of sight into the city below and are treated similarly to an Olive Grove (B14.8).

21. 6. FB RAILROADS & TRAM LINES: Budapest had both an extensive light and heavy rail system as well as a tram system running throughout the city. *FB* employs several types of existing Railroad (RR) (B32.1) elements including Ground Level RR hexes, Embankment RR (EmRR) hexes, and a RR Bridge (B32.14). The RR Bridge in G38 spans the Sunken Road hex below it and bridges the two separate EmRR sections—hexes F32 through F37, and then hexes H38 and H39. We also include a number of examples that deal with EmRR in an urban setting, as well as a clarification concerning artificial terrain features such as Wreck, Debris, and Rubble and their interaction with EmRR. Another important terrain feature involves the large amount of rolling stock present in the city. A large number of battles in both Buda and Pest occurred around the railway stations and marshalling yards present throughout the city. For playability purposes, rail cars and tram cars are treated the same. We were able to coordinate playtesting with *VotG* so that the railcar rules are almost exactly the same, except that blazing *FB* rail cars become Debris rather than Gutted—another concession to playability. Although not an issue in Stalingrad, players should remember that Railcars do not invoke Backblast penalties (C13.8).

Finally, the tramlines of Buda travelled through a number of different terrains, requiring a separate rules example for each.

22. 7.1 VARIABLE HEIGHT ROWHOUSES: Common to architecture found in Budapest are Rowhouses with varying levels within the same structure. The black bars separating Rowhouses still block LOS regardless of height.

23. 7.2 POSTAL PALACE: Located on the southern end of the Széll-Kálmán tér (hex T13), the central post office building in Buda not only dominated the defense of the square area but provided a defensive overwatch position into the Vérmező (Field of Blood) located further to the south. In order to capture both the importance and the dominating nature of this structure, it is represented as a Level 3 building. The Soviets never fully captured the Postal Palace, as elements of the Vannay battalion retained possession of the upper floors all the way until the breakout attempt on the evening of 11 February. Because of their staunch defense of this massive structure, Hungarian units in the building are always Fanatic (A10.8) and Axis units never suffer from Upper Level Encirclement (A7.72).

24. 7.3 VÁROSMAJOR SACRED HEART CHURCH: The Sacred Heart Roman Catholic Church in the Városmajor consists of three primary structures: the original Chapel with a Steeple at Level 1, the main building with its open sanctuary, and the Bell Tower with three levels of Steeple Locations above its ground floor.

25. 8. FB FACTORIES: There are six ASL Factory (B23.74) buildings on the *FB* map. The Sacred Heart Roman Catholic Church in T18, the Southern Railway Station (Déli Pá lyaudvar) in PP13, the railway engine house in XX13, and the three large Factory buildings that make up the heart of the Ganz Works located in the E11 area. Completely destroyed during the siege, the Southern Railway Station served as a cornerstone in the Axis defensive line. Pictured on the FB15 scenario card, the arch (RR15) in the front is basically all that is left of the western face of the building, while the rubbled area directly behind the arch is the collapsed center portion of the station (RR14). Probably taken during the summer of 1945 after most of the debris and rubble were cleared from in front of the station, the photo shows the remains of a German JgPz 38(t) "Hetzer" jammed into the side of a Soviet T-34/85 with its turret left pointing at the destroyed station. During the battle, the station served as a collection and holding point for Soviet prisoners until, after repeated assaults by the Soviet 297th Rifle Division, it was finally seized on 9 February.

The Factories around E11 represent the Ganz Electric Works, which consisted of a number of large manufacturing and assembly halls built in the late 19th and 20th centuries. The Large Hall (A11) was located along the northern map edge of the NE map section. This four-naved, riveted steel structure with its basilica-like main assembly hall is the only protected *FB* monument in the factory area. The Foundry in D6 today serves as a museum. The German Panzer-Division 13 successfully held major portions of the factory area until the breakout attempt on 11 February.

26. 9. FB CELLARS: Keeping with the rules established in *RB*, Cellar Locations are in play in multi-hex buildings. Unlike Stalingrad though, no extensive effort was put into place to establish a network of

Fortified Locations, so *FB* Cellars are not automatically Fortified. Like in *RB*, the likelihood of an AFV crashing through to an *FB* Cellar Location during a Bog Check is higher than its probability of falling into the cellar of a single-hex building (B23.41). Finally, we clarify here that, just as in *RB*, a Trench that "connects" to the Cellar Location of a building does not also "connect" to the ground level of the building.

27. 10. TENNIS COURTS: Clearly seen on the captured German aerial reconnaissance photos obtained from the National Archives, the tennis courts are treated as open ground hexes and are depicted on the map solely to provide historical flavor.

28. 11. RAILROAD UNDERPASS: Located just to the east of the Postal Palace, the RR Underpass cutting through the Széll-Kálmán tér is a unique ASL terrain feature that no rules designer would allow on a map if he could avoid it. Simply put, the RR Underpass is a tunnel through a Level 1 hill mass. The only real ground level LOS through the Underpass is along the Q10-Y14 Hex Grain.

29. 13. FB HUNGARIAN UNITS: Some of the basic *FB* rules for Hungarian Troops differ slightly from those in A25.86. Care should be taken when dealing with the *FB* Hungarian rules for Panzerfaust Availability and Usage (A25.85; C13.3-.31; 13.7) and PAATCs (A11.6; A25.81; 13.3).

In addition to the basic Hungarian units originally provided in *Armies of Oblivion*, *FB* also provides four new MMC units types and original artwork for select leaders and Hungarian heroes. The new Hungarian unit types include 5^1-3-7/2-2-7 SMG units that are 1st Line MMC modeled after the Axis Minor SMG Squad (A25.84). These units are used to represent a variety of Király 39M and 43M SMG armed troops including the Budapest Watch Battalion and various Hungarian Gendarmerie units. These units also reflect the fact that due to limited Axis ammunition supplies elements within some Axis units would often be armed with captured Russian PPSh-41 SMGs.

The second new Hungarian unit type is an Elite Assault Engineer MMC. Built on the Hungarian SMG unit, the 5^3-3-7/2-2-7 units have an increased SMOKE Placement Exponent printed on the counter along with a DC symbol identical to the ones introduced in *VotG* for the German and Russian Assault Engineers. Like all Assault Engineers (except for SS vs Russians), HS of this type do Disrupt (A19.12).

The third new unit type is the Arrow Cross Militia unit. Represented by 5-2-6/2-2-6 MMCs with an Arrow Cross Party symbol located in the upper right hand portion of their counters, the ACM units or Hungarist represent the combat segment of the ruling fascist government party. Sometimes fierce in battle, the ACM were at best a mixed bunch of thugs often times assigned to security patrols behind the main defensive lines better known for their documented history of violence against the Hungarian civilian population.

The final new unit type represents the troops of the Vannay Battalion and is a 4^1-4-7/2-4-7 Elite Class MMC with an increased Morale Level on its broken side. Raised and commanded by Major László Vannay, this assemblage of battle hardened former WWI and WWII veterans now working as firemen, sewer workers, and utility men proved to be particularly adept at fighting within the city's urban battlefield. Assisting them were Hungarian officer cadets and young volunteers attached to the older fighters in a field-expedient "buddy system" nicknamed "Uncles and Pups." Together, the men of the Vannay Battalion under the command of their ardent anticommunist leader managed to hold the Városmajor area and the Postal Palace for several weeks in January against repeated attacks by a number of different Soviet divisions. Given their familiarity with the city's infrastructure Vannay MMC are Stealthy (A11.17) and have an enhanced ability to attempt Sewer Movement (B8.4). These special abilities are somewhat fleeting in that once a Vannay MMC suffers unit Replacement (A19.13), it is never able to regain these special abilities. This is indicative of the fact that the unit was not able to incorporate an equivalent level of combat experienced reserves.

30. 14. BUDA VOLUNTEER REGIMENT UNITS: As the siege of Budapest wore on, the Soviet Ukrainian 2nd and 3rd Fronts began to suffer a shortfall in available combat troops. This is understandable in light of their need simultaneously to reduce the Axis garrison holding Budapest and

deal with a number of German counterattacks from the west (known as Konrad I, II, and III), all the while trying to continue a general advance toward Vienna. As a means of augmenting their combat strength within the Budapest cauldron, the Soviet high command (working with the Hungarian Provisional National Government that had been set up in Debrecen) agreed at the end of January to form several company-sized units consisting of former Hungarian Royal Army troops to fight side by side with their Soviet counterparts. Eventually, these units were organized under the leadership of Lieutenant-Colonel Oszkár Variházy, the former commander of the Hungarian 6th Infantry Regiment of the 10th Infantry Division. Originally designated as the 1st Hungarian Volunteer Regiment, this unit was commonly referred to as the Buda Volunteer Regiment (Budai Önkéntes Ezred).

For ease of identification, all Hungarian units fighting as Soviet Allied Troops in *FB* are designated as belonging to the Buda Volunteer Regiment (BVR) and are considered Russian troops for all rules purposes. Additionally, *FB* provides new two-tone counters with a Russian brown outer and Axis Minor green inner to help distinguish these Soviet allied Hungarians from the Axis Hungarian units allied with the Germans. These new counters help substantially with the "fog of war" in the CGs and make possible the 3-player scenario FB14 "At The Narrow Passage." By the end of the siege, some 2,500 Hungarian soldiers wound up fighting on the Soviet side. With almost 600 casualties suffered over a three-week period, the willingness of these Hungarians to fight and die was never questioned. One volunteer company, under the command of Reserve Artillery Captain Kázmér Várady ended up suffering 98% casualties, while another company under the command of First Lieutenant László Cseresnyés was responsible for accepting the German surrender of the Royal Palace on 12 February, thus officially ending the siege.

31. 15. FB GERMAN UNITS: Based on research into the SS-Kavallerie-Division 8 "Florian Geyer" and its performance in Budapest, we decided to represent the SS-Kavallerie in Budapest as a combination of 6^2-5-8, 5^2-4-8, 4^2-6-8, and 4-4-7 squads. In addition, we adopted a special Unit Substitution method in order to better reflect the toll that the siege took on this particular unit. We also created a number of unit-specific counters utilizing the insignia from Panzer-Division 13 and Panzer-Division "Feldherrnhalle" in order to reduce the amount of record keeping in the CGs. Along the same lines, we provide a number of German infantry counters with red colored Identity (A1.24) letters to represent troops of *Kampfgruppe* Europa.

32. 16. AXIS AMMUNITION SHORTAGE: Probably the single hardest decision in creating *FB* was how best to model the debilitating effects of the siege nature of the battle while still creating a fun and balanced situation. Fortunately, *AbtF* had already paved the way in the form of Ammunition Shortage rules that transitioned from a rather benign set of relatively low probability effects on the low end to a higher probability set of high consequence effects on the other end of the Ammunition Shortage spectrum. Fundamentally, the first few scenarios and the first few CG Days of CGs I & II play almost exactly like the normal Ammunition Shortage rules. For the majority of game situations, the Axis player will not have to worry too much about the effects of Ammunition Shortage. For the later scenarios and CG III, the Axis player must give serious additional thought to the benefits and risks associated with various low value attacks. The Axis had prepared, in terms of ammunition and food availability, for a sustained siege, but these plans were sabotaged by efforts of several high-ranking Hungarian officials including the chief quartermaster of the Hungarian I Army Corps, Dezső Németh. In addition to providing false papers to victims of the persecution by the new ruling fascist (and anti-Semitic) Arrow Cross Party, Németh was directly responsible for moving a large amount of food stocks to the outer suburbs so that they would more readily be captured by the approaching Soviet army. Németh also was responsible for storing large amounts of the Corps' ammunition in rail cars on the Margit Quay in the hopes that the Soviets would be able to destroy them, which they eventually did. Eventually, Németh would end up switching sides and become a leader of one of the BVR companies fighting alongside the Soviets.

Finally, the capture of the major airports in the Budapest area directly affected the ability of the besieged Axis troops to defend themselves. In response to the loss of the airports, the Axis attempted to resupply the trapped defenders by sending food and munitions down the Danube and by establishing makeshift

airfields in Pest and Buda. Under the overall command of Lieutenant-General Gerhard Conrad, the "Budapest Supply Group" of the German *Luftflotte* 4 was created on 29 December 1944 and given responsibility for the air resupply effort. *Luftwaffe* pilots, mainly from Gruppe I of *Luftlandgeschwader* 2, flying Ju-52 transports, were able to bring in ammunition and fuel throughout the majority of the siege.

After the last of the bridges crossing the Danube were blown on 18 January, the final remaining makeshift Axis airfield was constructed on the Vérmező (Field of Blood) where volunteer Hitler Youth from German flying clubs would land their gliders during the night. He-111 bombers were used to drop supplies into the city via bomb canisters attached to parachutes. Unfortunately, because the majority of these resupply runs were made at night in order to minimize losses from Soviet anti-aircraft batteries, many of the supply "bombs" would inevitably end up either behind Soviet lines or fall into the "no-man's-land" between the two warring sides.

By 5 February, the gliders had stopped landing on the Vérmező, which was now under direct Soviet fire. Ironically, the last day of resupply flights was one of the most successful when 97 ton of ammunition, 10 tons of fuel, 28 tons of food and four engine-oil drums and spare-part crates were successfully delivered.

33. 17. FB CAMPAIGN GAMES: With the large number of variables inherent in the design and play of a CG, especially compared with most scenarios, it should be expected that CGs are more likely to be prone to larger variations in expected outcome. Given this, the probability of playing a statistically large enough number of CG playtests to significantly reduce this uncertainty is highly unlikely. Fortunately, a number of very gifted ASL players sank a large amount of time into the playtesting of the three *FB* CGs. CG I is the smallest of the three at six potential CG days and covers the initial stages of the siege in the area around the Városmajor. Played out on only the NW map segment, the CG finds the Soviets trying to establish and expand a hold on the park area. Due to its size, daily available purchase points are cut in half. The second CG is the largest in terms of CG Day length (15 days) and plays out over the combined area of the NE and NW map segments. This CG starts out with a reduced purchase capability, but after several days grows into all-out mayhem. The third CG is potentially nine CG days long. Played out on both southern map sections (SE & SW), this CG occurs later in the siege, so the initial Axis Ammunition Shortage ramifications are potentially more pronounced.

In all three CGs, the primary design intent was to represent the nature of the fighting that took place in a suburban and urban environment at this late stage of World War 2. This is not some huge, late-war, heavy metalfest. Even though two of the primary defending units in Budapest were German panzer divisions, the majority of their armor capability at this point in the siege had either been destroyed or abandoned due to a lack of fuel and ammunition. On the other side, once it became apparent that the German relief efforts would be unsuccessful in relieving the city, the Soviets withdrew the majority of their armor elements; they instead resorted to using a combination of heavy artillery pieces in a direct fire mode combined with Soviet infantry assault teams using flamethrowers and demolition charges to reduce the city block by block.

34. CG16 ELR GROUPS: A significant change from previous HASL CGs was to not have one universal ELR number for all of a side's units, but rather have separate ELRs for groups of similar unit types. At the start of each *FB* CG, a higher ELR number is given to the better Class units. For example, at the start of each of the three CGs Elite Russian units (leaders and Elite MMC) have an ELR of 4, whereas non-Elite Russian MMC have an ELR of 3, and BVR MMC have an ELR of 2.

35. 17.6 REFIT PHASE: As mentioned earlier, the *FB* rules were adapted from existing HASL rules to the maximum extent possible and practicable, primarily from *RB*. This is especially true for the CG RePh rules. We used approximately 80-90 percent of the *RB* RePh rules in *FB*. If you are familiar with the basics of the *RB* CG rules, you should easily be able to adapt to *FB*. Otherwise, finding an opponent who is familiar with the ins and outs of CG play may be advisable.

36. 17.6073 T-34/85 WITHDRAWAL: To promote a historical use of armor, we encourage the Soviet player, through a refund type process, to limit the loss of his purchased T-34/85s. For each non-Isolated, Mobile T-34/85 with a functioning MA that survives a CG Day, the Soviet player is rewarded with 1

SCPP (17.6162) to spend on the next CG Day. With this approach, a skillful (and somewhat lucky) Soviet player has the capability to generate additional SCPP each time he purchases a T-34/85 Medium Tank RG. This can occur after purchasing an AR1 Medium Tank Section I for 2 SCPP if the Soviet player receives an RG with three T-34/85s. If he can retain all three non-Isolated, Mobile T-34/85s with functioning MAs at CG Day's end, he would receive 3 SCPP in return, a net gain of 1 SCPP.

37. 17.609 EXTINGUISHING BLAZES: Most of the rules in the RePh dealing with Flames and Blazes (17.609) remain the same from *RB* with a few important exceptions. Rail Cars (6.2) and Factories (8.) do not become Gutted. Instead, a Blaze counter in a Factory hex is replaced by a Rubble counter. A Flame counter in a Factory Location is not flipped to its Blaze side, but is removed instead. A new Blaze counter is not placed into an adjacent Factory Location. A number of the Ganz Electric Works factories were "gutted" during the siege, whereas the Southern Railway Station became mostly rubble. Given the choice, simplicity won out, and we dropped the concept of "Gutted Factories." Having done so, it made sense to drop the concept of "Gutted Rail Cars," so Rail Cars consumed by a Blaze become Debris.

Finally, given the historical ability of the Postal Palace to tolerate large fires and not become Rubbled, all Blaze and Flame counters in the building are removed during the RePh without any associated Rubble/Blaze counters being placed or spread.

38. 17.614 ARMOR WITHDRAWAL: We made one small change from *RB* with regard to armor withdrawal in order to simplify game play. All Mobile AFV under Recall, whether Isolated or not, are automatically removed from the map.

39. 17.616 CPP REPLENISHMENT: One of the major changes from *RB* made during the design process was the decision to include two distinct types of Purchase Points. The first type, Generic Campaign Purchase Points (GCPP), allows a player to purchase any of the RGs from their associated RG Chart. The second type, Specific Campaign Purchase Points (SCPP), may only be spent to purchase AFV RGs ("A" designated RGs) and Gun RGs ("G" designated RGs). We did this to encourage players to purchase more than only Infantry RG to better reflect historical reality.

40. 17.6163 AXIS ATTACK SCENARIO GCPP REPLENISHMENT ADJUSTMENT: Typically, HASLs involve a relatively small area that was fought over for a number of days that can be depicted on a few hex-based historical mapsheets. This can lead to the defending player feeling sorely oppressed, with very limited options. In Budapest, however, the Axis conducted at least 22 major counterattacks to stabilize their lines in the hope that the Konrad relief efforts would reach the city. We reflect this ability to concentrate units in support of a major counterattack by allowing the Axis to increase their GCPP allotment by 10 points when choosing an "Attack" Initiative chit. In order to better exploit this counterattack, the Axis are also allowed to purchase one extra Infantry RG. This GCPP enhancement needs to pay off, however, since the consequence of failing to meet that CG Day's Victory Conditions is a subsequent loss of 12 CPP on the following CG Day.

41. 17.6171 AXIS AMMUNITION SHORTAGE DETERMINATION: As the siege progressed, the Axis found themselves in an ever-worsening situation regarding food and ammunition availability. In *FB*, the Ammunition Shortage Level (16.1) may increase by one level each RePh. The probability of this increase occurring is directly related to the Soviets' ability to gain Control of select buildings bordering the Vérmező. The last functioning landing strip in Budapest was on the Vérmező; once the Soviets were able to bring direct fire onto the meadow, the Axis had to stop using it.

42. 17.6195 DAILY MAX: Usually, a side is limited to two Infantry RG purchases on any given CG Day. The Axis may increase this limit whenever they play an Attack Initiative chit as discussed in Footnote 40. The Russians also have the ability to augment this number through the purchase of the MR3 RG, providing them with some limited ability to offset a series of unlucky CPP Replenishment or RG Strength DRs or unusually high infantry casualties. This represents the Soviet high command's ability to add additional reserves to a particular part of the front, albeit at a cost.

43. 17.6197 MANDATORY AXIS CG CPP EXPENDITURE RATIO: The Axis must maintain a

balance in the ratio of German to Hungarian troops that are purchased each CG RePh (17.6197) to help ensure a more representative mixture of the forces caught in the siege. The ratio varies between each CG as a function of date and location, and its determination is spread out over every other CG Day to allow for some flexibility. Originally, failure to maintain a proper ratio resulted in an immediate Soviet victory. We thought this penalty was a bit too harsh, however, and eventually removed it. Nonetheless, a proper Axis force purchase balance is central to our design intent.

44. 17.6233 AXIS ASSAULT: Whenever the Axis player selects an "Attack" Initiative chit during the Initiative Determination Step (17.6232), he automatically may conduct an "Axis Assault" (17.6233). This requires the Soviets to set up first while the Axis moves first. Per SSR CG3 (17.4), the Axis player may also choose to apply a +1 drm to the Game End dr for that particular CG Day, giving the Axis a greater chance of exploiting a successful counterattack. These mechanisms reflect the demonstrated ability of the Axis to launch counterattacks throughout the siege.

45. 17.62422 RUBBLE GENERATION CHECK: To help simulate the Soviet ability to control the amount of shelling inflicted on Buda, the Russian player may opt to generate Rubble and Debris at the start of each CG Day that is played. This uses the same process outlined in 3.4, except that the building selection process is more random. Players should remember that when a building is selected for Rubble Generation, all hexes of the building are subject to a Rubble Generation Check dr.

46. 17.619 REINFORCEMENT GROUP CHARTS: Because many of the Infantry RGs in each of the three RG Charts have a mix of Classes, the Class type of each Infantry RG is listed as a superscript on the "Group Type" column entry. This information is required to calculate the appropriate DRMs for each side's ELR LOSS/GAIN (17.6172) determination.

47. FB SCENARIOS: We had a number of goals in designing the scenarios in *FB*. First was that they be fun and balanced. Close behind was that we have a set of scenarios that varied in size, complexity, unit mix, and map placement. Where the scenarios occur on the maps was important so that the scenarios might serve as to familiarize players with as many of the terrain features on the map as possible before the player had to tackle the CGs. To that end, the seventeen scenarios cover between them approximately 75% of the map area.

We also wanted to create a set of scenarios that varied in character. Six of the scenarios have purchase tables that allow each side to vary its OB based on individual style and perceived situational needs. The forces purchased from these table are typically fed into the scenario over a period of several game turns and are meant to historically represent a local commander's ability to commit his reserves on an as needed basis. We specifically designed one scenario for three players with the added twist that the Hungarian player gets to play "both sides of the fence" as he controls both the Axis Hungarian forces and the Russian allied BVR forces. One scenario uses secretly recorded simultaneous setups with overlapping setup areas, so the possibility exists that multiple units will start the game already locked in CC. In addition, the random generation of Debris and Rubble counters in eleven of the scenarios should provide a unique experience in each playing.