Rules Booklet

Credits
Game Design: Dan Verssen
Development: Gene Billingsley, Dan Verssen
Art Director/Physical Systems and Components Design: Rodger B. MacGowan
Lead Playtester: Holly Johnson
Ergonomics: Mike Anderson
Playtesting: Gary Doriott, Tom Svitajewski

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Game Components
   25 Target cards
   7 Campaign cards
   2 Situation cards (double sided)
   14 Special Condition cards
   13 Mission Event cards
   16 Aircraft cards
   36 Pilot/Crew cards
   17 Terrain cards
   300 Counters
   1 Display sheet, Sector Map sheet, Air Base sheet
   2 Pilot/Crew Experience sheets
   1 Ten-sided die
   1 Rule Book
I. Introduction

Thunderbolt+Apache Leader allows you to examine the various roles of Close Air Support (CAS) aircraft on the modern battlefield, featuring the A-10 Thunderbolt II tank killer and the AH-64 Apache attack helicopter. Since the days of World War II, CAS aircraft have been an ever increasing threat to enemy ground forces. Today, a state of the art CAS aircraft is equipped with a wide variety of guided "smart" weapons capable of destroying enemy targets from a distance. CAS aircraft are also equipped with the latest advances in cannon technology. With the ability to both strike from a distance, and hit hard in close, CAS aircraft will continue to be an effective counter to enemy ground forces well into the next century.

The counters included with Thunderbolt+Apache Leader include 32 counters for use with Hornet Leader, the first of the "Leader" games. A separate rules sheet gives you the details on how to use them with HL.

Clarification: Several of the components which appear on the back cover of the game box have had their format, quantity, and information changed. This is because the game box and its artwork requires the most time to produce, and therefore must be completed first. Several component modifications took place in the time after the boxes were finalized. The component list which appears in the rules is correct.

1.0 Game Components

1.1 The Rules

The rules are divided into sections in order to form a quick start format. Unlike our earlier game, Hornet Leader, this game focuses on a wartime Campaign. Thus, the rules are structured so as to get you right into the action as quickly as possible.

1.2 The Die

All of the die rolls required by the game are resolved using the single ten-sided die included. The "0" is read as a "10".

1.3 The Display Sheet

All Primary missions are resolved on the 22" x 17" Display Sheet. This sheet includes charts and tables, as well as locations for each card deck. The center area of the display includes ten rectangular areas. This is where you place the Terrain Cards to form a mission's particular Battlefield configuration. Each of the rectangular squares is assigned a number for the purpose of placing enemy units randomly. The rectangles are numbered from top left to bottom right as follows:

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1.4 The Cards

Terrain Cards

Each Terrain card represents an area roughly one mile across. There are various graphic details on the cards. The only detail which actually affects game play is the hills/ridges located along the edges of the cards. These hills/ridges affect Line-of-Sight (See 12.1). The backs of the cards identify three types of Terrain: Clear, Lighly Obstructed, and Heavily Obstructed. You'll divide the cards into these types before randomly selecting your Battlefield (See 8.1).

When playing in a Campaign, the number of each type of Terrain cards to be used are specified (See 8.1). Each Terrain card contains a "North indicator", which is used to orientate the proper edge of the card toward the top of the Display sheet. For the purpose of the examples in this Rulebook (Only!), we've created a Battlefield configuration. Certain examples (like Line-of Sight-12.1, 12.2) will refer to this Sample Battlefield.

The term "Battlefield" is used throughout the rules and refers to the 10 Terrain cards, and the assumption that they represent a contiguous area of ground over which your aircraft are flying and the enemy forces are located.

Campaign Cards

These cards are used to determine in what area of the world the battle is taking place. Specific areas of the card and their affiliated rules sections are highlighted below.

Campaign Location

- Troop Quality (2.5)
- Terrain Card Set-up (8.1)
- Enemy Break (#27.6)
- Enemy Battalion Recovery Roll (27.5)
- Enemy Initiative Range (14.0)
- Battalion Movement Modifier (27.3)

Situation Cards

- Starting Air Base Points (27.7)
- Friendly Forces on Sector Map (28.8)
- Condition for End Campaign (2.2)
- Victory Levels (2.2)

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Apache Leader

Target Cards

Target Value (5.2 and 8.4)
Target Status After Combat (21.0)

Enemy Group Composition (8.4)

Special Condition Cards (3.1)
Mission Event Cards
Target-Bound Mission Event (7.0)

Orders from the Top

Early Detection!

At least one A-10 or AH-64 must be attacked by enemy fighters before any may be assigned to a new mission.

Attacked by Enemy Fighters

Effect on Aircraft
1. Serious Hit
2. 2 Serious Hits
3. 3 Minor Hits
4-10 Missed

Home-Bound Mission Event (22.0)

1.6 Friendly Aircraft Cards and Counters
There are four types of friendly aircraft included in this game: A-10 Thunderbolts (Warthogs!), AH-64 Apaches, AH-1 Cobras, and AV-8B Harriers.

Each friendly aircraft is represented in the game with an Aircraft Card and a counter. The Aircraft card and the counter have the same aircraft identification number. The cards and counters are double-sided. The normal side is used when the aircraft is operational. The back side is used when the aircraft has been determined to be "Damaged" after a Mission.

1.7 Munitions Counters
Aircraft are loaded with Munitions when they fly Missions. A Munition is a bomb, missile, special pod, etc. In order to represent this in the game, Munition counters are placed on the "Munition Load" section of the Aircraft Cards as a reminder of the Munition load carried by each aircraft. The Munition counters provided in the game do limit the available selection for any given Mission. Sample Munitions are illustrated below.
II. CONDUCTING A CAMPAIGN

A Campaign is a series of Missions which take place during a military conflict somewhere in the world. The success or failure of each Mission will affect the conditions under which subsequent Missions are flown.

Every Campaign takes place in a pre-selected part of the world (Iraq, Libya, the Soviet Union, etc.) and under a general Situation (General War, Rapid Deployment, etc.). The following rules sections detail the various steps required to initiate and conduct a Campaign.

2.0 Campaign Set-Up

Each of the following steps is conducted each time you begin a new Campaign. A summarized list of the steps also appears on the back of every Campaign card as a reminder.

Card Errata Note: Sorry, guys. We didn’t catch this one before the cards went to the printer. The last item on the back of the Campaign Cards ("Determine Terrain Cards to be used") is wrong. You don’t place Terrain Cards until the Target-Bound Segment, as listed correctly on the Display Sheet and in these rules. The last item should read “Place Friendly Ground Forces” as per rules section 2.8. Again, our apologies for the oversight.

2.1 Select Campaign

First, select the country where you will fight. Do this by choosing a specific Campaign card, or by selecting one at random.

Each Campaign card is rated according to its Difficulty. They are rated from eases: to most difficult in the following order: Novice, Beginner, Skilled, Advanced, Expert. The other information on the card is explained in section 1.4.

2.2 Select a Situation

Four Situations have been provided in the game. Select one at random. Each situation card includes a “tactical situation” section which provides information regarding friendly forces’ initial placement and recovery, as well as the conditions for ending the campaign.

"General War"

The U.S. has had time to prepare for a large scale conflict and the objective is to destroy the enemy forces in your operating area.

This campaign ends when ALL enemy forces are eliminated or retreat off of the Sector Map. Note that you receive a one day penalty (for purposes of victory level determination) for EACH enemy battalion (full or half strength) that retreats off of the sector map (Because they’ve "lived to fight another day...").

"Holding Action"

The war is going poorly in your area, and the U.S. is pulling back. Your objective is to hold out as long as possible. Resources are scarce, and must be used wisely.

Clarification on Victory Levels: The information on the card is confusing. The numbers for victory levels apply ONLY if you are overrun or the Campaign lasts 7 full days. You achieve a Complete Success if you cause the enemy forces to "Break".

"Rapid Deployment"

The U.S. has had to act quickly to move forces into the region. Your squadron is among the first to become operational. You must make due with limited resources.

Determine victory once the enemy has been pushed behind the front line. If you are overrun or can’t force the enemy behind the front line by the end of Turn 10, the Campaign is a Complete Failure.

"Show of Force"

The U.S. has had time to prepare for the conflict. The objective is to hit the enemy hard and make them pull back. The less time it takes to accomplish this, the better.

The Campaign ends when 1/2 of the enemy’s total steps have been eliminated. Half Strength Battalions do not count as having 1 Step eliminated, only count those Battalions no longer in play.

Description of Victory Levels:

Complete Success - You "kicked and took names." The enemy has achieved none of his objectives in your sector. You have inflicted grievous casualties on enemy forces, and have seriously disrupted his war-making capability. You have terrorized the battlefield, striking fear into the hearts of enemy soldiers and causing mass demoralization as a result of the devastation you’ve wreaked. Your squadron has been awarded the Presidential Unit Citation to go along with numerous individual medals for valor. You are a "rising star" among your peers. A promising future awaits.

Success - You’ve contributed significantly to a successful war effort. You’ve shown solid leadership skills as well as bravery in combat. Unit morale is high as a result of your successes. The enemy advance has been blunted, and the destruction caused by your unit has cleared the way for success in the ground war with minimal friendly casualties. As a result of your success, you’re slated for promotion as well as a stint at the War College.

Draw - You have fought the enemy to a bloody draw. The battle lines in your sector are relatively static, with neither side able to gain the initiative. Although you’ve caused serious enemy casualties, it’s taken too long at too great a cost. Your superiors are disturbed by your inability to win a clear-cut victory. The frustration level in your squadron is high. You’ll probably get another shot at commanding a wartime squadron, but your commanders will be watching your every move.

Failure - You have failed to stem the enemy advance in your sector. Although you have fought bravely, you have been unable to plan, prepare, or carry out successful battlefield tactics. Your pilots blame you for their failures. Your failure at this level of command has virtually ensured that you’ll remain at your present rank for the remainder of your military career.

Complete Failure - Your complete failure to inflict even minor damage upon the enemy has caused friendly lines in your sector to collapse. Friendly troops have been routed with heavy loss of life as a result of Tac Air’s inability to interdict the enemy advance. Your squadron’s morale is so low that the brass has ordered your unit disbanded, and your battle-weary pilots and crews given to better-performing commanders. If your superiors have their way, your next flying billet will be in a Cessna.

Note: These descriptions are included to give you a "feel" for your Campaign results. They’re certainly not meant to insult you personally. Dan and I have been "Complete Failures" several times now. The great thing about wargames is that it’s only cardboard: you can learn from bad experiences and nobody (except maybe our egos) gets hurt.

2.3 Determine Enemy Battalions

Each Campaign card has a "Set-up" Area which lists the number of Battalions that are used in the campaign. The Battalions are divided into three types: Assault, Support, and Command. In general, the Assault
Battalions advance the fastest, and may overrun your air base the fastest. Support Battalions aid the enemy is regrouping its damaged Battalions. Command Battalions increase the advancement rate of all Battalions toward your air base.

Each Target card represents a Battalion size unit. The enemy forces for any given Campaign consist of anywhere from 5 to 12 Battalions. In general, the more Battalions, the higher the Campaign’s Difficulty rating.

Divide all the Target Cards into sets of Assault (Ex. 1A, 2A), Support (1S, 2S), and Command (1C, 2C) piles. Then randomly select the indicated number of Target cards of each type.

Example: The North Korea Campaign specifies: 5 Assault, 3 Support, and 2 Command. The following Targets are randomly drawn: 3A, 9A, 1A, 5A, 10A, 3S, 5S, 7S, 4C, 2C.

2.4 Place Enemy Counters on Sector Map
The Sector Map is used to indicate the position of enemy Battalions in relation to the “Front Line” and your air base. There are five Range Bands on the Map. Each Band represents a range of roughly 50 miles.

![Sector Map Image]

Each Target card has a corresponding counter. The counters are placed on the Sector Map. Place all enemy Assault Battalions in the “Front Line” Range Band. Place all enemy Support Battalions in the “Enemy Transit” Range Band. Place all enemy Command Battalions in the “Enemy Rear” Range Band.

3A Full

Example: Using the Battalions generated in the last example, they would be placed in the following Bands: 3A, 9A, 1A, 5A, 10A in the Front Line. 3S, 5S, 7S in the Enemy Transit. 4C and 2C in the Enemy Rear.

2.5 Determine Enemy Troop Quality
All enemy Battalions in a campaign have the same level of training and equipment. To determine this troop quality, roll a die and consult the “Quality” table on the Campaign card. The result indicates the quality of enemy troops in your Area of Operations. Place the appropriate Troop Quality counter on the card in the space marked “Troop Quality” as a reminder. The Troop Quality remains unchanged during the Campaign.

Example: On a die roll of a 5 on the North Korea Campaign card, the Troop Quality is “Normal”. The Normal Troop Quality counter is then placed on the campaign card.

2.6 Select Squadron Composition
Your squadron may be made up of A-10s, AH-64s or a combination of the two. The choices are:
1. 4 A-10s and 6 Pilots, or
2. 8 AH-64s and 10 Crews, or
3. 2 A-10s and 3 Pilots, and 4 AH-64s and 5 Crews

Once selected, the squadron’s composition may not be changed throughout the Campaign.

Place the counters of the selected aircraft on the Air Base Band of the Sector Map. Place the 4 Scout counters, 2 AH-1 counters and 2 AV-8B counters in the Air Base Band.

Two Player Option
Two or more players may play as teammates. Players may split up the previously detailed A-10 and AH-64 forces, and share the Air Support forces (if you have two or more games, with extra maps and counters, you can resolve ALL missions as Primary missions, with teammates simultaneously resolving separate Primary Missions against enemy Battalions). As a second option, each player may also select his own force (bringing all A-10s, AH-64, Pilots and Crews into play). If the first option is selected, no other adjustments are made to the game. If the second option is selected, double the number of enemy Battalions, Starting Air Base points, and Points per Day.

2.7 Place Air Base Points and Day Counters
Each Situation specifies the number of Air Base Points at the Start, and per Day. Place the Air Base Points counter on the appropriate box of the Air Base Points track on the Air Base sheet as specified by the Start number on the Situation card.

Campaign time is measured in Days. Each “wave” of Missions counts as one Day in the Campaign. Place the Day counter on the ‘1’ box of the Day of Campaign Track on the Display sheet.

2.8 Place Friendly Ground Forces
Each Situation specifies one or more Friendly Battalions. These are ground forces of the U.S. and are used during the Campaign as part of your forces.

Each Friendly Battalion is represented on the Sector Map with a counter. Friendly Battalions may be initially placed in the Air Base or Friendly Transit Bands.

Note: The friendly AVF Battalions represent Armored formations, including M-1 Tanks, Improved Tow Vehicles, and Self-Propelled artillery. The Mech Battalions represent mixed-mobile forces (ex-M-2 or M-3 Bradleys).

The rules covering their movement and combat are found in 27.0.

3.0 Daily Mission Preparation
For each Day of the Campaign, the Missions to be flown during that Day are planned and organized in advance. There are two types of Missions: Primary and Secondary. A Primary Mission is one in which the Tactical Combat is carried out over the Battlefield. A Secondary Mission is resolved using a simplified resolution system.

At least one Primary Mission must be executed each Day. Players are free to execute more than one Primary Mission per Day if they so choose.
3.1 Special Condition Check
A Special Condition may affect the day’s Missions in a variety of ways. Special Conditions are represented by the Special Condition deck of cards.

The Special Condition deck is shuffled at the start of every day. Once the deck is shuffled, place the cards face down in the appropriately labeled area of the Display sheet. At the start of a day, roll a die to determine if a Special Condition is present. A Special Condition occurs on a die roll of 1 through 4. If a Special Condition occurs, draw the top card from the Special Condition deck and turn it face up. Each Special Condition card details the effects it has on the day’s Missions.

Examples:
The Special Condition Card “Munition Shortage” is drawn. The effect is that the Air Base Point cost of Munitions is increased. Whenever Munitions are loaded on A-10s or AH-64s for the current day, 1 Air Base Point is expended for every 6 Munition Points selected (instead of the normal 1 per 10 Munition Points). This includes all types of Munitions for both Primary and Secondary Missions. Note: Some of the terms used in this example have not yet been defined, but will be in the upcoming sections.

“F-111 Aardvark Strike” is drawn. The Player selects one enemy Battalion to suffer the attack, and then rolls a die to determine the effect of the attack.

3.2 Allocating Scouts
There are four Scouts available at the start of a Campaign. Scouts are used to locate enemy Battalions for the strike aircraft. When attacking “scouted” targets, attack aircraft are allowed to carry more Munition Points due to the reduced time spent searching for the target.

Air Base Points must be expended in order to use one or more Scouts in a Range Band of the Sector Map. The Scout Cost is listed on the Sector Map. The Scout Cost must be paid for every Range Band which receives one or more Scouts (but this cost is NOT paid per Scout). After the costs are paid, Scouts are allocated to specific enemy Battalions within a particular Range Band.

Example:
1 Air Base Point is expended to Scout the Front Line Band, and 2 Points are expended to Scout the Enemy Transit Band. The Player then decides to allocate 3 Scouts to the Front Line, and 1 Scout to the Transit Band. Of the Battalions in the Front Line, the player selects 3 to be scouted. 1 Battalion is also scouted in the Enemy Transit Band.

3.3 Check For Success/Failure of Scouting Missions
After all Scouts are placed, roll a die for each Scout to determine if its mission was successful. If the die roll is greater than the Scout Cost for the Range Band being scouted, the scout’s mission is successful. If the die roll is less than or equal to the Scout Cost, the mission fails. If the mission fails, make a second die roll. If this result is greater than the Scout Cost, the scout survives the unsuccessful mission and returns to the Air Base unscaeted. If the die roll is less than or equal to the Scout Cost, the scout is destroyed. Place destroyed Scout counters in the Tactical Air Command section of the Air Base sheet. The destroyed Scout can be replaced at a cost of 2 Air Base Points.

Example:
You allocate one Scout to an enemy battalion located in the Enemy Rear and another Scout to a battalion in the Front Line. You roll for each Scout. The roll for the Front Line scout is a “2”, which is greater than the Scout Cost of the Front Line Range Band (1). So that mission is successful. You roll a “3” for the Scout in the Enemy Rear, which is equal to the Scout Cost of that Range Band (3), so that mission is unsuccessful. You make a second roll for the unsuccessful Scout. You roll a “2” (again less than the Scout Cost of that Range Band), so the Scout is destroyed. You place it in the Tactical Air Command section of the Air Base Display.

3.4 Effects of Successful Scouting Missions
Successful scouting missions allow your aircraft to carry larger payloads. The maximum Munition Points carried for every type of friendly aircraft is shown on each Band of the Sector Map. The number before the parenthesis is used for a Scouted Battalion. The number in parenthesis is used for non-Scouted Battalions.

Example:
An A-10 attacking a Scouted Battalion in the Front Line Band could carry up to 14 Munition Points. An AH-64 attacking a non-Scouted enemy in the Enemy Transit Band could carry up to 4 Munition Points.

AH-1s and AV-8B do not receive Munition Points. Each Cobra or Harrier carries a pre-set Munition Load. There are two types of Loads: Light and Heavy. The Load carried by the AH-1 or AV-8B is determined by referencing the Sector Map. A notation of “H” indicates a Heavy Load, an “L” indicates a Light Load, and a “-” indicates the aircraft may not fly the mission.

Example:
An AV-8B attacking a Scouted Battalion in the Enemy Transit Band would carry the Munitions listed for the Heavy Load. An AH-1 attacking a non-Scouted Battalion in the Friendly Transit Band would carry the Munitions listed for a Light Load.

3.5 Planning
Decide which aircraft, Pilots and Crews will fly Missions during the Day. Any Air Support aircraft to be used during the Day are also designated at this time. Reduce the Air Base Points for each Air Support aircraft taken. Each AH-1 costs 1 Point, and every AV-8B costs 2 Points. This cost covers their Munitions carried and the aircraft.

Decide which enemy Battalions you will attack today. Then choose one Battalion as the target of your Primary Mission. (Note that if you’re playing with several players and multiple mapsheets/counters as per 2.6, you may resolve ALL missions as Primary Missions). You’ll resolve the Primary Mission using the procedures for Tactical Combat detailed in sections 9.0-20.0. All other Battalions that you plan to attack will be attacked as part of your Secondary Mission.

Allocate your aircraft, pilots, crews, and support aircraft to fly the Primary or Secondary Mission (or can they stay at the Air Base—they don’t HAVE to fly a mission). The details for the Secondary Mission are covered in the next section. A Pilot, Crew, A-10, AH-64, AH-1, or AV-8B may not participate in more than one Mission per Day.

Example:
Enemy Battalions 4A, 7A, 12A, 3S, and 5C are in play. The Player decides to make 7A his Primary Mission. He decides to not attack 12A. This leaves 4A, 3S, and 5C for the Secondary Mission.

4.0 Pilot / Crew Recovery (Ignore on Day 1)
As mentioned earlier, it is possible for a Pilot or Crew to become injured or stressed to such an extent that it impairs his/her ability to fly. This step allows for the gradual recovery of those Pilots or Crews.

The way in which Pilots and Crews become Shaken or Not Ready is covered in 2.3.

All Pilots and Crews begin a Campaign with a status of Ready, and are placed in the Briefing Room section of the Air Base Display.

A Pilot or Crew which has suffered a Shaken result at the end of a Mission is placed in the Shaken section of the Air Base Display. Likewise, a Pilot or Crew which suffered a Not Ready result is placed in the Not Ready section. A Pilot or Crew which suffers a Lost result is removed from the game and placed in the Tactical Air Command section of the Air Base sheet.
Apache Leader

A Shaken Pilot or Crew may fly a Mission, but if so, the Skills on the Shaken side of the card are used. A Not Ready or Lost Pilot or Crew may not fly a Mission.

During this step, move any Shaken Pilots or Crews to Ready and any Not Ready to Shaken. Keep in mind that the Pilots and Crews to fly the current Mission have already been selected when Recovery takes place. Therefore, a Shaken Pilot or Crew would not Recover and would fly the Mission Shaken. Likewise, a Not Ready Pilot or Crew would not Recover to Shaken until after the Pilots and Crews had already been selected, and therefore would not be allowed to fly the current Mission.

Example:
At the start of the Mission, Leader, Rawhide, Shadow & Laser, Flash & Storm, Rock & Mac are Ready. Eagle & Arrow, Leader & Tex are Shaken. Viper is Not Ready.

The player selects Leader, Shadow & Laser, and Eagle & Arrow to fly the Mission. Eagle & Arrow will fly the Mission Shaken.

Leader & Tex then Recover to Ready status. Viper then Recovers to Shaken status.

5.0 Secondary Missions

Players may elect not to use the Secondary Mission rules and tactically resolve every Mission flown (This is especially good for multiplayer games). The Secondary Mission system is, however, recommended in order to allow Campaigns to be completed in a reasonable amount of time.

5.1 Allocate Forces

The first step toward resolving the Secondary Mission is to decide which forces will be devoted to the Day's Secondary Mission. Note that even though several Battalions may be Secondary targets, they are grouped together to form one, large "Secondary Mission".

Hint: Examine the possible unit makeup (listed on the Target Card) of your Primary Mission Target. Then allocate aircraft, weapons and pilots with capabilities that best neutralize the types of units. Optimize your Primary Attack, then allocate what's left to take care of the Secondary Target.

5.2 Determine Effect on Friendly Aircraft and Enemy Battalions

All of the information, modifiers, and tables used to resolve the Secondary Mission are located on the Sector Map in the area labeled "Resolution of Secondary Missions".

Step 1: Determine Enemy Battalion Combat Value

Total the Value of all Secondary Target cards. Remember to use their Half Value if the Battalion is at Half Strength.

Examples:
Targets 4A, 3S, and 5C are the Secondary targets. All are at Full Strength. They have a total Value of 32 + 18 + 24 = 74. If 3S were at Half Strength, they would have a total of 32 + 9 + 24 = 65. If all three were at Half Strength, their total would be 16 + 9 + 12 = 37.

Step 2: Determine Friendly Strength

Total the Strength of the friendly forces allocated to the Secondary Mission. The Strength rating of each aircraft is listed on the Sector Map. Friendly forces also gain Strength from having Skilled Pilots and Crews. The number of Munition Points carried by the aircraft also adds to their overall Strength.

The maximum number of Munition Points carried by each of the aircraft is limited by the Range Band of the Battalions under attack. If the Battalions under attack have different Munition Point limits due to their Range Bands or Scouting, use the Munition Points for the lowest.

Example:
Battalion 4C is located in the Friendly Transit Band and is Scouted. The A-10 Munition Point limit is 16. Battalion 3S is located in the Front Line and is not Scouted. The A-10 limit is 10. 5C is located in the Enemy Transit Band and is Scouted. The A-10 limit is 12. A-10s flying in the Secondary Mission would have a Munition Point limit of 10 each.

The specific Munitions purchased are not detailed for Secondary Missions. It is assumed that the aircraft would be carrying Munitions appropriate to their targets.

Example:
The Secondary forces consist of: 2 A-10s (Strength 5 each), 1 AH-64 (Strength 3), 2 Heavily loaded AV-8Bs (Strength 20). The A-10s are loaded with 10 Munition Points each (Strength 20). The AH-64 is loaded with 5 Munition Points (Strength 5). The A-10s are flown by Leader and Viper. Leader has 1 Special Ability and 4 Skill points for a total Strength 6. Viper has 1 Skill point and a Special Ability (Strength 3). The AH-64 is flown by Leader & Tex, who have a Strength of 6. The total Strength for the friendly forces is 79.

Step 3: Expend Air Base Points

For every 10 Munition Points used by AH-64s or A-10s on the Secondary Mission, reduce your Air Base Points by 1. Round all fractions up. Using 31 Munition Points would expend 4 Air Base Points. Remember: Air Base Points may never be reduced below zero.

Example:
The previous example would expend 3 Air Base Points for Munitions and 1 Air Base Points for Air Support aircraft. (A 7 Point reduction would be a large drain on the Air Base resources during a normal campaign.)

Step 4: Determine the Secondary Mission Modifier

In order to determine the effect of the attack on enemy Battalions designated as Secondary Targets, the Friendly attack Strength is compared to the Enemy Battalion Combat Value. The enemy Troop Quality also affects the overall results.

Calculate the ratio of the Friendly Strength to the Enemy Battalion total Value. Always round down (e.g. a ratio of 19 to 10 would be considered 1.5 to 1).

A modifier is listed for each ratio on the Sector Map. Ratios less than 2 to 1 are not allowed, and the attack may not take place. Ratios greater than 3 to 1 are treated as 3 to 1.

In addition to the modifier given for the Friendly to Enemy ratio, an additional modifier is listed based on the enemy Troop Quality. The lower the enemy Troop Quality, the better the modifier.

The higher the overall Secondary Mission modifier, the better the results will be for friendly forces.

Examples:
A Friendly Strength of 25 is compared to an enemy Value of 15. The ratio is 1.5 to 1, giving a modifier of +2. The enemy Troop Quality is Normal, giving a +2 modifier. The overall modifier is +4.

The Friendly Strength is 42, and the enemy Value is 20. The ratio is 2 to 1; giving a +4 modifier. Their Quality is Poor (+3). The overall modifier is +7.

Step 5: Effect on Friendly Forces

Roll a die for each A-10, AH-64, AH-1, AV-8B taking part in the Secondary Mission. Add the Secondary Mission modifier to each die roll before consulting the "Effect on Aircraft" table on the Sector Map. The result will indicate the number of Minor and Serious Hits suffered by the aircraft. Draw the Hit counters as explained in sections 15.2-15.5. Use the normal procedure for disregarding Hits due to Troop Quality and the aircraft type under attack. Furthermore, disregard all Hits except: Engine, Wounded, Killed, Rattled, Dive!, and Structure.
A modified die roll of zero or less results in the aircraft being Destroyed. Determine Pilot/Crew Fate as normal.

Example:
A die is rolled for an A-10 which took part in attacking the Secondary target with +1 modifier. The die roll is a 2, plus 1 for a total of 3. The A-10 suffers 4 Minor and 1 Serious Hit. The Hit counters are drawn. 1 Minor Hit is disregarded because it matches the Troop Quality of the enemy. 1 Minor Hit is disregarded because it lists A-10. 1 Minor Hit lists "HUD-2" and is disregarded (because this is a Secondary Mission). The last Minor Hit is a "Rattled" and is kept with the Pilot for future use. The Serious Hit is an "Engine Hit", and is returned with the Aircraft card for future use.

Step 6: Effect on Enemy Battalions
Roll a die for each targeted enemy Battalion and consult the "Effect on Battalion" table on the Sector Map. Add the Secondary Mission modifier to each die roll. The Battalion will either suffer no effect from the attack, be reduced one Step, or be eliminated.

By being reduced one Step, a Full Strength becomes Half Strength, and a Half Strength is eliminated.

Adjust the Battalion's counter on the Sector Map to reflect its new Strength. If the Battalion is eliminated, its counter is removed.

5.3 Returning Damaged Check
This is conducted in exactly the same way as the Returning Damaged Check detailed in section 23.2.

Pilot/Crew Checks
This is conducted in exactly the same way as the Pilot and Crew Checks detailed in section 23.4.

III. Target Bound

6.0 Arm Aircraft

Once the Secondary Mission is resolved, the Primary Mission is executed.

Arm the aircraft to fly the Primary Mission. For every 10 Munition Points used, or fraction thereof, expend one Air Base Point.

When arming aircraft for the Primary Mission, the actual types of Munitions must be selected for each aircraft. Remember to place the correct Munition counters on each Aircraft card to fly the Mission. The Munition Points limit for each aircraft is based on the Range Band of the enemy Battalion, and whether or not it has been Scouted.

The Munition Point cost of each Munition is listed in the Munition Information section of the Display sheet.

Examples:
Each Rockeye costs 2 Munition Points. Each Mk. 84 costs 3 Munition Points. Equipping an A-10 with a Dave Penny costs 2 Munition Points.

You are attacking an unscooted enemy battalion located in the Front Line Range Band. There is a Munition limit of 10 Munition Points for each A-10 and 5 for each AH-64. You decide to take 2 A-10s and 2 AH-64s on the Mission. The first A-10 is loaded with: 1 Rocket Pod (2 Points), 2 Mavericks (4 Points), 1 Mk. 83 (2 Points), and 1 Sidewinder (2 Points), for a total of 10 Munition Points. The second A-10 is loaded with 3 Mavericks (6 Points), and 2 Rockeyes (4 Points). The first Apache is loaded with 4 Hellfires (4 Points) and 1 Stinger (1 Point). The second is loaded with 2 Rocket Pods (4 Points) and 1 Stinger.

7.0 Target-Bound Mission Event Check

A Mission Event may occur on the way to the target that will in some way affect the Primary Mission. These Events are represented by the Mission Event deck of cards.

Shuffle the Mission Event deck at the start of every Primary Mission. Once the deck is shuffled, place the cards face down in the appropriately labeled area of the Display sheet. During this step of the Target-Bound sequence, roll a die to determine if a Mission Event occurs. A Mission Event will occur on a die roll of 1 through 4. If a Mission Event occurs, draw the top card from the Mission Event deck and turn it face up. There are two Effects detailed on each card. The top one is used for Events on the way to the target (Target-Bound), the one on the bottom is used for Events on the way back to the air base (Home-Bound). Apply the effects of the card as specified.

8.0 Battlefield Set-Up

As the aircraft arrive at the target, several procedures must be executed in order to prepare for the battle.

8.1 Place Terrain cards
Each Campaign Card details the specific Terrain Card types to be used when executing battles. Choose the specified number of each type of Terrain Card (by type, listed on the back side of the card). Do not look at the "terrain" side of the card until you place it on the Battlefield. Shuffle the Terrain Cards selected and lay them out on the Display sheet. Begin by placing the first Terrain card face up in the area numbered "1", and proceed until all 10 Terrain cards have been placed in an area. Remember to place the North Arrows toward the top of the Display sheet.

8.2 Place Friendly Aircraft
Place each of the friendly aircraft counters brought into the battle on one of the Terrain cards. Each aircraft counter is placed on one of the Terrain cards. Aircraft counters may be placed in different Terrain cards.

8.3 Place Loiter Marker
Loiter Time is a military term which refers to the amount of time an aircraft may spend over the target. In game terms, each Turn over the target represents roughly 30 seconds of real time. During a Mission, aircraft will usually have a Loiter Time limit of 7 Turns. This limit may be adjusted due to special circumstances.

You keep track of the Loiter Time over the target by using the Loiter Track located on the Display sheet. At the start of a mission, place the Loiter Marker in the 0 box on the Track. As you complete each Turn, move the counter to the next lowest numbered box. At the end of the 7th Turn, your aircraft have expended their time over target and must withdraw. The mandatory withdrawal procedure is detailed section 11.1.

It is possible for special circumstances to allow for more than 9 Turns over the Battlefield. The 9 boxes on the Loiter Track do not place an upper limit on the Turns spent over the Battlefield.

8.4 Determine Enemy Groups
Each Target card contains a section listing the various types of targets which may be present on the Battlefield. The Target card represents one Battalion of enemy forces. For game purposes, each vehicle counter represents one vehicle and each Infantry counter represents roughly twenty men.

The enemy units on the Battlefield do not represent the entire Battalion, but rather its key command and control elements. Once the key elements have suffered heavy losses, the remainder of the force is effectively neutralized for game purposes.

Each Battalion will have one of two Strengths during a Campaign: Full or Half. Each Battalion starts a Campaign at Full Strength. The Battalion may be reduced to Half Strength or eliminated by friendly attacks. The Strength of the Battalion determines the number of enemy counters on the Battlefield. The Group table on the Target card is used to determine the types of enemy units on the Battlefield. The number of units present is determined by the Battalion's Strength.
Roll a die and consult the Group table on the Target card. The enemy units listed to the right of that die roll form the first "Group" to be placed on the Battlefield.

Example:
While using the 3A Mechanized Target card, the die roll for the first Group is a 9. The first Group consists of 2 Tanks.

If the total Point Value of the first Group is less than the Battalion's Value (it almost always will be), the die is rolled a second time and a second Group is generated. The total Point Value of both Groups is then compared to the Value listed on the Target card. This continues until the total Point Value of the generated Groups equals or exceeds the Value based on the Battalion's Strength. Each Group is kept separate from the others, as they will be placed by Group on the Battlefield.

Example:
Mechanized Battalion 3A is at Full Strength and has a Value of 26+. This means that at least 26 Points of units must be generated. The first die roll is a 4 and 3 APC counters are set aside. Their Point Value is 6, which is less than the 26 required. The second die roll is a 1, and 2 Infantry counters are set aside. The total Point Value is now 8. The third die roll is a 10, and 2 Tanks are selected bringing the Point Value to 14. The fourth die roll is a 2, indicating a Command Vehicle, and the Point Value is 18. The fifth die roll is a 9 indicating 2 Tanks and the Point Value is 24. The sixth die roll is a 5 bringing in 3 APCs and the Point Value to 30. No more Groups are generated.

8.5 Counter Mix
The counter mix does limit the enemy forces which may appear. If the die roll indicates a type of enemy unit which no longer has the required free counters, the next unit type is used instead. Once the units in the die roll range of '9' to '10' have been allocated start at the top with the Group listed with a die roll of '1'.

Examples:
While generating the Groups for 3A, the first four die rolls are a 1, which means 8 of the 9 of the Infantry counters included in the game are in use. The fifth die roll is also a '1'. There are not enough Infantry counters to meet the Group's units, so the next unit type is used, in this case, 1 Command Vehicle.

While generating Groups for the 2S Convoy, the first 9 die rolls indicate 2 AAA Vehicles and 7 Trucks. The next die roll is a '7'. Both AAA Vehicles are allocated so the next unit is used, which is the Truck. All 7 Trucks are also allocated so the top most Group is used, 1 Command Vehicle.

8.6 Place Enemy Groups
Each enemy Group is placed on one of the Terrain cards in the Battlefield. Roll a die for each, and place the Group in the indicated Terrain card.

Example:
Referring to the example used for Determining Enemy Groups, the following Groups are present: 3 APCs, 2 Infantry, 2 Tanks, 1 Command Vehicle, 2 Tanks, 3 APCs. The placement die rolls are: 1, 9, 5, 4, 7, 9. This would result in 3 APCs being placed in Terrain card #4, 2 Infantry in #9, 2 Tanks in #5, 1 Command Vehicle in #4, 2 Tanks in #7, and 3 APCs in #9.

IV. Battlefield Resolution
Note: At this point we depart temporarily from the precise Sequence of Play in order to explain the basics of movement and combat. After reading sections 9 through 20, you'll be ready to continue your mission.

Friendly aircraft are capable of conducting three types of attacks: Cannon, Strike, and Stand-Off. The rules for each are presented in the following rule sections.

Players are not required to plan out and remember which Friendly aircraft are conducting which types of attacks against which enemy forces. Players are free to decide the order in which their aircraft will conduct attacks. If the aircraft is to conduct multiple attacks, the player may resolve an attack before declaring the next. All attacks for one Friendly aircraft must be declared and resolved, before moving on to the attacks for the next Friendly aircraft.

9.0 Cannon Attacks
All friendly aircraft are equipped with a cannon. Cannons may attack enemy ground units and aircraft. Air combat will be covered later in the rules. In this section we will concentrate on shooting enemy ground units.

Cannons have a range of zero. This means that cannons may only attack targets in the same Terrain card as the attacking aircraft.

In game terms, cannons NEVER run out of ammunition. Each aircraft is limited, however, to one Cannon Attack per Turn.

When you execute a Cannon Attack, roll a die to determine if you hit the target. Refer to the Munition Information Table on the Display sheet to determine the success or failure of all air to ground attacks.

To determine the die roll required to hit a target, cross reference the type of aircraft executing the attack with the target's Defense Type (Infantry, Hard Vehicle, Soft Vehicle. Non-Armored - found on the Enemy Information Table). If the die roll is equal to, or greater than the listed number (on the right side of the Munition Information Table), the target is destroyed.

Example:
An A-10 fires its cannon at an APC (Soft Vehicle). The A-10 will destroy the APC on a die roll of 4 or higher. An AH-64 fires at a Tank (Hard Vehicle), scoring a hit and destroying it on a die roll of 9 or higher. An AH-1 fires at an Infantry (Infantry), scoring a hit on a die roll of 7 or higher.

10.0 Strike Attacks
A Strike attack is any non-Cannon Attack targeted against an enemy in the SAME Terrain card as the attacking aircraft. A Strike Attack is resolved in much the same way as a Cannon Attack. The main difference is that the type of aircraft conducting the attack does not affect the chance of success. In the case of Strike Attacks, the specific type of Munition being used determines the chance of success.

As an aircraft conducts attacks with a Munition, the Munition is expended and the counter is removed from the aircraft. There are a few exceptions to this, including Gun Pods and Rockets Pods. These are explained in detail in the next section.

Each aircraft may conduct one Cannon Attack, or one Strike Attack per Turn (not both).

Examples:
You drop a Mk. 82 (pronounced "Mark 82") on a AAA Vehicle (Soft Vehicle). The AAA Vehicle is destroyed on a die roll of 4 or higher. A Mk. 83 attacks an Infantry unit (Infantry). You need a die roll of 4 or higher to destroy the Infantry unit. You drop a Mk. 84 on a Self Propelled Artillery vehicle (Hard Vehicle). You need a die roll of 5 or higher to destroy the Self Propelled Artillery unit.

10.1 Rocket Pods
Each Rocket Pod holds multiple rockets. In game terms, you can use a Rocket Pod in one of two ways. You can fire a "Burst" of rockets, thus...
allowing the Rocket Pod to be retained and used again. There is no limit to the number of times you can fire a Rocket Pod in Burst mode. You can also use all the Rockets in a Pod by firing a "Salvo." When you fire a Salvo, expend the Rocket Pod following the attack. You CAN use a Rocket Pod in Salvo mode even after it has executed one or more Burst attacks.

Two numbers are listed for the Rocket Pod on the Munition Table. Use the first number when you fire the Rocket Pod in Burst mode. Use the number in parenthesis when you fire the Rocket Pod in Salvo mode.

Example:
AH-64 Apache fires a Rocket Burst against a SAM Vehicle (Soft Vehicle). A die roll of 5 or higher will destroy the SAM Vehicle. If the attack is a Salvo, a die roll of 2 or higher will destroy the vehicle.

10.2 Rockeys
A Rockeye is a "Cluster Bomb." Unlike most gravity bombs, it does not simply hit the ground and explode. As a Rockeye falls to the ground it breaks open, releasing hundreds of small "sub-munitions." The sub-munitions are scattered over a wide area by the time they hit the ground. Thus, they have the ability to damage multiple targets in one game.

Rockeys have a chance of hitting up to four targets in a Terrain card. When an aircraft drops a Rockeye, designate its Primary target just like any other attack. The chance of the Rockeye hitting the Primary target is listed on the Munition table. Once that attack is resolved (whether or not they were successful), execute up to three Secondary attacks on other targets in the Terrain card (you choose which targets - throw an individual attack die roll for each). The chance of each of these Secondary attacks hitting is at a -3 to the normal die roll. You may NOT target any single enemy unit for more than one attack by a Rockeye.

Examples:
An A-10 drops a Rockeye in a Terrain card containing one AAA Vehicle, one APC, two Tanks, and an Infantry. The player decides to make the Infantry his Primary target, and one Tank, one APC, and one AAA Vehicle the Secondary targets. A die roll of 3 or higher will destroy the Infantry. The APC will be hit on a die roll of 6 or higher. The AAA Vehicle will also be hit on a die roll of 6 or higher. The Tank will be hit on a die roll of 10 or higher.

This time, the player decides to target one of the Tanks for his Primary target. He selects the Infantry, APC, and the other Tank as Secondary targets. The Tank is hit on a die roll of 7 or higher. The other Tank is hit on a die roll of 10 or higher. The Infantry is hit on a die roll of 6 or higher, and the APC on a die roll of 6 or higher.

10.3 Gun Pods
Aircraft will sometimes carry a Gun Pod for additional firepower while conducting Cannon Attacks.

An aircraft may only carry one Gun Pod at a time. An aircraft carrying a Gun Pod adds 1 to all of its Cannon Attack die rolls.

Example:
An A-10 normally needs a die roll of 6 or higher to destroy a tank with its cannon. If the A-10 is carrying a Gun Pod, the A-10 needs a die roll of 5 or higher to kill the tank.

The Gun Pod is NOT expended after an attack. The Gun Pod continues to modify Cannon Attacks throughout the Mission.

10.4 Pave Penny
Pave Penny is not a weapon in itself, but rather a laser designation system. The Pave Penny pod is able to pick up the reflection of a laser beam directed at a target. A bomb equipped with a laser guidance system is then able to home in on the laser reflection. Close Air Support aircraft usually operate in conjunction with Forward Air Controllers (FAC); who are responsible for laser designating enemy targets. In game terms, the purchase of a Pave Penny system for an A-10 insures that the A-10 will have a FAC to designate targets, and that the A-10 will also have bombs equipped for laser Guidance (Note that you still have to buy the bombs - this just assures that they're capable of laser guidance). Infantry units do not present a large enough single surface to reflect a laser; therefore, the Pave Penny system does not aid in attacks against Infantry.

Whenever an aircraft equipped with Pave Penny drops a Mk. 82, Mk. 83, or Mk. 84 against a target (other than Infantry), add 3 to its attack die roll. An aircraft does not benefit from carrying more than one Pave Penny system.

Example:
An A-10 needs a die roll of 5 or higher to hit a Tank with a Mk. 84. If the A-10 is carrying Pave Penny, a die roll of 2 or higher will kill the tank. An A-10 needs a die roll of 4 or higher when dropping a Mk. 83 on Infantry, regardless of whether Pave Penny is carried.

The Pave Penny Pod is NOT expended when you drop a bomb. It remains with the aircraft throughout the Mission.

10.5 Advanced Rule- Multiple Attacks
Players should use this rule once they are familiar with the normal Strike Attack rules.

You may use multiple munitions when conducting a Strike Attack, but all munitions must be targeted against the same enemy unit. You must declare all munitions that you will use in the attack before any die rolls are thrown. If your aircraft is carrying multiple Rocket Pods, you may use them in different modes (i.e. Burst and Salvo).

Examples:
An AH-64 armed with 2 Rocket Pods fires them both at an APC. One Rocket Pod is fired in Burst mode, the other in Salvo mode.

An A-10 armed with 3 Rockeys, 1 Rocket Pod, and 1 Maverick is in the same Terrain card as 1 Tank and 3 Infantry. The A-10 targets the Tank and uses 2 Rockeys and 1 Rocket Pod (in Burst Mode). The Tank will suffer 2 Rockeye and 1 Rocket Pod attack. Each of the 3 Infantry will suffer 2 Secondary Rockeye attacks.

11.0 Movement
Throughout the course of a battle, aircraft move from Terrain card to Terrain card in order to be in a position to attack enemy forces.

Movement is regulated by the Terrain cards. An aircraft may move from its current Terrain card to any Terrain card which borders it.

Example:
An aircraft in Terrain card #1 could move to #2, #4, or #5. An aircraft in Terrain card #6 could move to #2, #3, #5, #7, #9, or #10.

All Friendly aircraft have the option to move to an adjacent Terrain card BEFORE they attack. Such movement is voluntary. Aircraft may decline the option to move and remain in their current Terrain card (But see 5.1.1).

Due to their higher maximum speed, A-10s and AV-8Bs may ALSO move to an adjacent Terrain card later in the turn AFTER they attack. This movement is also voluntary.

Example:
An A-10 begins the Turn in Terrain card #2. It then moves to Terrain card #5 and conducts an attack. Later in the turn it moves to Terrain card #9.
Apache Leader

Any aircraft that moves off a Terrain card on the edge of the Battlefield is immediately removed from the battle.

11.1 Loiter Time Limit
Once the Loiter Time limit has been reached, each Friendly aircraft MUST move toward the nearest edge of the Battlefield. One additional move is then required to exit the Battlefield. During this mandatory exit time, no movement option may be declined. Friendly aircraft are limited as to how they may conduct attacks during this time. The only attacks allowed are those against enemy targets in their same Terrain card.

Example:
An aircraft in Terrain card #5 could move to #1, #2, #4, #8, or #9 before being required to exit the Battlefield. An aircraft in Terrain card #2 would be forced to exit the Battlefield.

12.0 Stand-Off Attacks
A Stand-Off Attack is any attack which is conducted against a target outside the Terrain card of the attacking aircraft. Only Mavericks and Hellfires may be used to conduct Stand-Off Attacks against ground units.

12.1 Line of Sight and Obstructions
In order to conduct a Stand-Off Attack, you must have a clear Line of Sight (LOS) between the attacking aircraft and the Terrain card of the target. Many Terrain cards contain one or more Obstructed edges. An Obstructed edge is one containing a ridge or hill line. Obstructed edges block a Line of Sight.

IMPORTANT: An obstruction is assumed to cover the entire length of the affected card edge, regardless of the shape of the actual hill/ridge obstruction graphic.

An aircraft's LOS is NEVER blocked by the Obstructed edges in its own Terrain card.

A Line of Sight is the shortest path of Terrain cards between the attacker and target.

Example:
The attacking aircraft is in Terrain card #1 and the target is in Terrain card #3. The Line of Sight goes from card #1, to the left edge of card #2, to the right edge of card #2, to the left edge of card #3, to the target in card #3. If any of the 3 edges mentioned had contained an Obstruction, the Line of Sight would be blocked, and a Stand-Off Attack would not be possible. The range from card #1 to card #3 is 2.

12.2 Tricky Lines of Sight
When you conduct an attack at an angle across the Battlefield, it is possible to count out a "Shortest Line of Sight" that isn't really a straight line.

Example:
The attacker is in card #1, the target is in card #7. There are three "Shortest" paths:

<table>
<thead>
<tr>
<th>First Path</th>
<th>Second Path</th>
<th>Third Path</th>
</tr>
</thead>
<tbody>
<tr>
<td>South edge of #1</td>
<td>East edge of #1</td>
<td>East edge of #1</td>
</tr>
<tr>
<td>North edge of #5</td>
<td>West edge of #2</td>
<td>West edge of #2</td>
</tr>
<tr>
<td>East edge of #6</td>
<td>West edge of #3</td>
<td>South edge of #2</td>
</tr>
<tr>
<td>West edge of #7</td>
<td>East edge of #3</td>
<td>North edge of #6</td>
</tr>
</tbody>
</table>

Although all three paths in the previous example have a range of 3 cards, only the last (1, 2, 6, 7) is valid. This is because it best traces a straight line. In this particular example, a Line of Sight is not possible due to Obstructions. An official list of "Shortest" paths is given in rules section 31.0.

When you can trace a Line of Sight through one of two equally valid Terrain cards, you are free to choose the one which allows a clear Line of Sight (if one exists).

Example:
An attacking aircraft is in Terrain card #7, and the target is in card #9. A Line of Sight could be traced through either #6 or #10, both are the shortest path, and both are a reasonably straight line. With the Terrain setup used for Combat Situations, the path through #10 would be selected because it allows a clear Line of Sight.

Enemy units will also select the path which allows a clear Line of Sight when more than one is allowed.

12.3 Mavericks and Hellfires
Each of these weapons contains a warhead attached to a guidance package and rocket motor. These Munitions may attack an enemy target anywhere on the Battlefield, so long as a Line of Sight can be drawn. Due to their method of attack, Mavericks and Hellfires may not be used against Infantry. This is because their warhead contains a small, shaped charge. Although this is ideal for blowing a hole through the side of a vehicle, it does not possess the capability to inflict damage on a large section of ground, which is what is required to attack infantry.

The '3' on both Maverick and Hellfire counters is used as a reminder that the Munitions may be used up to a range of 3 Terrain cards from the attacking aircraft. A target will never be farther than 3 Terrain cards from the attacker. These weapons may therefore attack any target on the Battlefield, so long as a Line of Sight can be drawn.

Mavericks and Hellfires may also be used to conduct Strike Attacks. A Stand-Off or Strike Attack with a Maverick or Hellfire is resolved in the same manner as detailed for Strike Attacks earlier.

12.4 Guidance Locks
In order to conduct a Stand-Off Attack, you must place a Guidance Lock counter on the Terrain card which contains the target of the attack. You may NOT place a Guidance Lock counter on the same Terrain card as the attacking aircraft (this would be a Strike Attack). The specific enemy unit to be attacked is not declared until the attack is to be executed. Each aircraft has a Guidance Lock counter included in the game with its own unique identification number.

Example:
An aircraft may conduct one Cannon Attack, or One Strike Attack, or two Stand-Off Attacks each Turn. An aircraft with a Guidance Lock in play may not conduct Cannon or Strike Attacks.

After you resolve the first Stand-Off Attack, you may attempt a second attack. The second attack must be targeted into the same Terrain card as the first. The second attack may be against the same target (if the first attack failed), or against a different target in that Terrain card. An aircraft is not limited to using the same type of Munition for both attacks. It could use a Hellfire for one and a Maverick for the other.

After you complete a Stand-Off Attack, expend the Hellfire or Maverick counter that was used. Once an aircraft has resolved its stand-off attacks, remove its Guidance Lock counter for later use.

Example:
An AH-64 in Terrain card #3 is able to trace a Line of Sight to Terrain card #8 (3, 6, 5, 8) in order to attack one Truck and one APC located there. The first Hellfire is launched at the APC, and requires a die roll of 4 or higher to succeed. A '2' is rolled, and the attack fails. The player then decides to attack the Truck due to the better chance to succeed. This time a die roll of a 2 or higher is needed, and a '1' is rolled. Missed Again! (Must have been a "Stealth Truck"...
12.5 Moving with a Guidance Lock
When an aircraft has a Guidance Lock, its movement is restricted. If the aircraft moves closer to the Terrain card in which its Guidance Lock is placed. The new card must also be able to trace a Line of Sight to the target’s Terrain card.

If the aircraft moves into the Terrain card containing its Guidance Lock counter, the one or two attacks executed are treated as Stand-Off Attacks, not Strike Attacks. Such an aircraft may not then switch to Cannon or Strike Attacks.

Example:
An AH-64 in Terrain card #2 declares a Guidance Lock into Terrain card #1, which contains 3 APCs. The Apache then moves into Terrain card #1 and executes one Hellfire attack against an APC, and destroys it. It then conducts a second Hellfire attack against a second APC and destroys it also.

12.6 Enemy Activation When Guidance Locks are Declared
Each time you declare a Guidance Lock, there is a chance that an enemy unit in your Terrain Card will see you “pop up” to gain the lock. Section 16.0 provides the details of determining this.

13.0 A-10 Pilots and All-64 Crews
Each A-10 is flown by one Pilot. Each AH-64 is flown by a Crew of two. Until now, all of the Combat Situations have been played without the use of Pilots or Crews, in order to focus on the rules covering movement and attack.

When flying a Mission, one A-10 Pilot must be assigned to each A-10, and one AH-64 Crew must be assigned to each AH-64. AH-1s and AV-8Bs are assumed to be flown by pilots outside your squadron, and are not given a pilot or crew.

To signify a Pilot or Crew flying a certain aircraft, place the Pilot or Crew card side by side with the Aircraft card.

13.1 Skills
Each Pilot or Crew is rated in four different types of skills: Cannon, Strike, Stand-Off, and Cool. Skills are used to modify die rolls. The Cannon, Strike and Stand-Off Skills modify attack die rolls. The Cool Skill modifies die rolls which affect how well the Pilot or Crew handles the stress of flying a Mission.

Whenever a Pilot or Crew executes an attack in which it has Skill, the value of the Skill is added to the die roll.

Examples:
Thor has a Skill of 2 with Cannon Attacks. When executing a Cannon Attack against a Tank he would succeed on a die roll of 4 or higher. Leader & Tex have a Skill of 1 with Stand-Off Attacks, they would need to roll a 3 or higher when attacking APCs in a Stand-Off situation with Hellfires.

13.2 Special Abilities
Some of the Pilots and Crews have Special Abilities. In many ways a Special Ability is like a Skill. Each Special Ability has a different effect on play. A detailed description of each appears in section 32.0.

14.0 Initiative and Sequencing
Initiative is a game term which means, “Who goes first”.

An Initiative die roll is made after Guidance Locks have been declared, but before any movement or attacks are conducted. A low die roll will result in the enemy having the initiative, in which case their units attack before your forces may act. A high die roll will result in friendly forces having the initiative. When this occurs, your aircraft will be able to move and attack before the enemy forces have the chance to attack.

When playing a Campaign, the chance of the enemy gaining the initiative is based on the country and the Troop Quality of the enemy.

Example:
Good Quality enemy troops in North Korea would gain the initiative for the Turn on a die roll of 1 through 4.

15.0 Enemy Attacks
Most of the enemy units have the capability to attack aircraft. The range and firepower of each is listed on the Display sheet on the Enemy Information Table.

15.1 Ranges
Each enemy unit will attempt to attack the closest friendly aircraft it can. Calculate the shortest path to the closest friendly aircraft which is in Line of Sight to the enemy unit. Calculate range to the closest friendly aircraft as normal.

Example:
A SAM Vehicle is in Terrain card #1, an A-10 is in Terrain card #3. The range from one to the other is 2.

Like friendly aircraft, enemy units are not blocked by Obstructions in their own Terrain Card (exception: ALQ-119s-see 17.0).

Example:
Reference the Terrain cards used for the Combat Situations. Place an AH-64 in Terrain card #1, an A-10 in card #3, and a SAM Vehicle in card #6. The Vehicle cannot attack the A-10 (at range 1), because the obstruction along the South edge of #3 blocks its Line of Sight. It can, however, draw a Line of Sight to the Apache (range 2). The SAM Vehicle would therefore attack the AH-64.

15.2 Attack Strength
Resolve enemy attacks by drawing the specified number of chits from a cup or other container. There is no die-rolling to resolve enemy attacks-no “To Hit rolls, etc. While players may find this a bit strange at the outset, you’ll soon note that the chi-drawing process and immunities (15.5) handle the concepts of “To Hit” and “To Kill” quite accurately.) The Enemy Information section of the Mission Display indicates the quantity and type of attacks each enemy unit generates. Attack Types are divided into two categories: Minor Hits and Serious Hits.

Examples:
An APC at range 0 (same Terrain card) would score 1 Minor Hit. A AAA Vehicle at range 0 would inflict 2 Serious Hits. A SAM Vehicle at range 2 or 3 would score 1 Minor Hit.

15.3 Hit Counters
The Hit counters are double sided. The Yellow sides are used for Minor Hits, the Red sides for Serious Hits. At the start of each Campaign, all Hit counters should be placed in a cup for easy use.

There are three pieces of information on each Hit counter: Order of Attack, Immunity, and Effect. The Order of Attack, top left corner, is only used when there is more than one aircraft at the same range from the attacking unit. The Immunity, top right corner, is based on the enemy Troop Quality and the type of aircraft under attack. The Effect, center, is the result of the attack. Each Hit Effect is described in detail at the end of the rules. Reference that section as needed while playing through the next Combat Situation. Order of Attack and Immunity will be covered in detail in sections 15.4 and 15.5.

After resolving the attacks from one enemy unit, return the Hit counters to the cup before drawing for the next attacking enemy unit. Note, some
16.0 Pop-Up Attacks

In order to conduct a Stand-Off Attack, an aircraft must gain altitude to obtain sight of the target. By gaining altitude, a previously unspotted enemy unit may reveal itself by attacking the aircraft.

Draw one Pop-Up counter at random for each aircraft declaring a Guidance Lock. The Pop-Up counters should be placed in a cup for easy use. If the back side of the counter specifies "No enemy", then it is ignored. If there is a position to attack, then the other side of the counter reveals a ground unit, place the Pop-Up counter in the Terrain card containing the aircraft attempting the Stand-Off Attack (with the enemy unit face up).

The Pop-Up unit will attempt to escape from the battle area for the remainder of the Mission. When conducting a Campaign, Pop-Up units do not affect the enemy's remaining Value.

After checking for all Pop-Ups, each aircraft with a Guidance Lock may receive a turn to Range. When a Guidance Lock is terminated, its counter is removed from the Battle Area and set aside for later use. By terminating the Lock, the aircraft is free to execute Cannon or Strike Attacks against enemy units as normal (including Pop-Up units).

17.0 ALQ-119 Pods

The ALQ-119 is an Electronic Counter-Measures Pod designed to help defend an aircraft against enemy attacks. In this game, carrying an ALQ-119 gives your aircraft two benefits:

1. When attacking an A-10 carrying an ALQ-119 Pod, enemy units are considered to be blocked by obstructed edges in their own Terrain card for purposes of Line of Sight. Carrying more than one ALQ-119 Pod will not increase defense against enemy attacks.

Example:
Refer to the Terrain cards used for the Combat Examples. A SAM Vehicle in Terrain card #3 would normally be able to attack an A-10 in card #6. The attack would not be allowed if the A-10 were carrying an ALQ-119 Pod.

2. Whenever ANY enemy unit attacks an A-10 equipped with an ALQ-119 AT A RANGE OF 1 OR GREATER, there is a chance that the Pod will "jam" the attack. Roll one die BEFORE drawing any damage hits to resolve such an attack. If the "jamming roll" result is LESS THAN OR EQUAL to the range of the attack, the jamming succeeds and no damage hits are drawn.

Example:
An Mi-28 attacks an A-10 equipped with an ALQ-119 at a range of 3. Normally you would draw two Minor Hit counters to resolve the attack. Because of the ALQ-119, however, you make a jamming roll first. You roll a "2", so the jamming succeeds and no hits are drawn.
18.0 Enemy Moving to Cover

Enemy units usually travel in the open in order to maximize their cross-country speed. When attacked, the ground units then attempt to find cover, attempting to conceal themselves beneath nearby trees or other terrain features. Well-trained troops tend to move to cover faster than poorly-trained troops. Thus, in the game, Troop Quality is an important element in determining when enemy units go to cover.

The conditions under which units in a Terrain card will move to Cover are detailed on the Sector Map sheet. The conditions are actually checked during the "Check for Ground units moving to Cover" step of the sequence. When units move to Cover, move their counters to an Obstructed edge of the Terrain card. If the Terrain card they occupy does not contain an Obstructed edge, the units may not go for Cover. (When this occurs, players are encouraged to taunt the enemy (cardboard) with the likes of "You can run, but you CAN'T hide!", "I've got you now, Sacka!", etc. Yeah, we know... we've been playing this game too long...)

Enemy units under Cover are harder to hit. Whenever you attack an enemy unit under Cover, subtract 2 from the die roll. Enemy units under Cover continue to attack aircraft as normal.

Once the enemy units in a Terrain card move to Cover they will remain under Cover for the remainder of the Mission.

18.1 Description of Each Condition

A small section of the Sector Map sheet is devoted to detailing the conditions under which the various qualities of troops will "Move to Cover". The following descriptions cover each in more detail. As stated above, these conditions are checked during the "Check for Ground units moving to Cover" step of the sequence.

"Friendly aircraft in their Terrain card"

If one or more friendly aircraft are in a Terrain card containing enemy ground units, the ground units in that Terrain card will move to Cover.

"Friendly aircraft in an adjacent Terrain card"

Ground units in a Terrain card will move to Cover if there are one or more friendly aircraft in a Terrain card which is adjacent to their Terrain card.

Example:
A friendly aircraft in Terrain card #5 would force ground units in Terrain cards: #1, #2, #4, #6, #8, and #9 to go to Cover.

"Just attacked by Stand-Off"

If any unit in a Terrain card suffers a Stand-Off Attack (regardless of a hit or miss) all of the ground units in that Terrain card go for Cover.

"One or more destroyed by Cannon or Strike"

If one or more ground units in a Terrain card are destroyed by a Cannon or Strike Attack, all of the remaining ground units in that Terrain card go for Cover.

19.0 Enemy Aircraft

The enemy will also have aircraft operating over the Battlefield. The primary role of the enemy aircraft is to shoot your aircraft down as quickly as possible.

19.1 Arrival

While flying a Mission there is a specified chance for one enemy aircraft to arrive over the Battlefield each Turn. You determine this during the Enemy Air Arrival Check on the Battlefield Resolution sequence. It is possible to have one or more enemy aircraft over the Battlefield at the same time.

When a die roll indicates the arrival of an enemy aircraft, select one of the enemy aircraft counters at random. The counters have a different aircraft on each side, so be sure and look at the counter when it has one definite side up. There are four enemy aircraft counters provided in the game. This does limit the number of enemy aircraft which may be present over the Battlefield at any given time. If all four enemy aircraft are already present, do not conduct this check. As enemy aircraft counters are eliminated, they DO become eligible for later selection.

Roll a die to determine which Terrain card an enemy aircraft appears in. Place the aircraft counter in the appropriate Terrain card.

19.2 Movement

Enemy aircraft will attempt to close-in on friendly aircraft. Enemy aircraft move during the Move Enemy Aircraft step in Battlefield Resolution. Mi-24s, and Mi-28s move with a speed of one. Su-25s, Su-17s, and MiG-27s move with a speed of two. (They may, however, stop after one move if they occupy a card with a Friendly air unit (A-10, AH-64, AV-8B, or AH-1).

An enemy aircraft will move toward the closest friendly aircraft to which it has a Line of Sight. If there is more than one friendly aircraft, equally close, which is in Line of Sight, draw a Hit counter and use its Order of Attack number to determine which friendly aircraft the enemy aircraft moves toward. If an enemy aircraft is in the same Terrain card as a friendly aircraft it will not move out of that Terrain card.

Example:
An Mi-28 is in Terrain card #9. There is an AH-64 in card #8, an A-10 in card #5, an AV-8B in card #6, and an AH-1 in card #2. The Mi-28 does not have a Line of Sight to the Apache, so the Mi-28 will not move toward it. The Cobra is at range 2, while the Thunderbolt and Harrier are both at range 1. This excludes the Cobra. A Hit counter is then drawn, and its Order of Attack number referenced to determine if the Mi-28 will move toward the A-10 or the AV-8B.

19.3 Attacks

Enemy aircraft conduct their attacks against your aircraft in the same manner as ground units.

Examples:
An Mi-24 at range 1 will inflict 2 Minor Hits. An Mi-28 at range 0 will inflict 3 Minor Hits. A MiG-27 at range 0 will inflict 1 Serious Hit.

IMPORTANT: Enemy air units have the same troop quality as the ground units you're facing. Thus, your aircraft have the same immunities (15.5) against air attack as they do when attacked by ground units.

19.4 Going for Cover

Enemy aircraft never go for Cover.

20.0 Air Combat

Friendly aircraft carry munitions designed to engage enemy aircraft. The three Munitions included in this game are: Sidewinders, Stingers, and the cannon.

The procedure used for attacking an enemy aircraft is much like the procedures used for attacking enemy ground units. Use the Air Combat section of the Display sheet to resolve air to air attacks. Cross reference the weapon being used, with the range to the enemy aircraft to determine the die roll or higher needed to score a hit. A ½ result indicates the enemy aircraft is out of range for that weapon. The Stinger counters
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include the number 2, which indicates the weapon has a range of 2 Terrain cards. The 3 on the Sidewinder indicates a range of 3 Terrain cards.

A successful die roll destroys the enemy aircraft. Once destroyed, the counter is placed with the other enemy aircraft counters for possible selection at a later time.

Example:
An A-16A launches a Stinger at an Su-71 at range 1. It needs a die roll of 7 or higher to hit. An A-10 that fires its cannon at an Mi-28 at range 0 needs a die roll of 8 or higher to hit.

Certain conditions modify the die roll. The Mi-24 is a very heavily armored helicopter, so a -1 is applied to the die roll when it is attacked. The MiG-27 is a fast moving aircraft, so a -1 is applied to the die roll when it is attacked. An AV-8B is a very agile aircraft with a strong air combat capability, so all attacks made by a Harrier have 2 added to the die roll.

Example:
An A-10 fires a Sidewinder at an Mi-24 at range 1. It will hit the Mi-24 on a die roll of 5 or higher. An AV-8B that fires its cannon at a MiG-27 at range 0 will hit on a die roll of 7 or higher.

20.1 Pilot and Crew Skill
Pilot and Crew Skills apply to Air Combat exactly as they did to attacking ground units. If the friendly aircraft is using its cannon, Skill with Cannon modifies the die roll. If a Sidewinder or Stinger is fired at an enemy aircraft in the same Terrain card, Strike Skill is used. If the target is in a different Terrain card, it is considered a Stand-Off Attack.

20.2 Stand-Off Air Combat
In order to target an enemy aircraft in a different Terrain card, the attack must be declined by placing a Guidance Lock counter in that Terrain card. The Obstructed edges of Terrain cards block an Air Combat Line of Sight just as they did a Stand-Off Attack against a ground unit. These aircraft are flying very close to the ground. Thus, even small hills and ridges tend to hide them from enemy ground-support aircraft which are also flying very low.

If a Terrain card contains both enemy ground and air units, a single Guidance Lock counter is sufficient to declare Stand-Off Attacks by a friendly aircraft. The decision to attack the ground or air units is not made until the time of each Stand-Off Attack. An aircraft may conduct one attack against a ground unit and a second against an aircraft. The Stinger or Sidewinder counter is expended after its attack is resolved.

All of the rules which applied to conducting Stand-Off Attacks against enemy ground forces also apply to attacking enemy aircraft.

20.3 Advanced Rule- Single Shots
Players should use this rule once they are familiar with the normal Stand-Off, Strike, and Air Combat rules.
Each Sidewinder, Stinger, Maverick, and Hellfire counter represents two weapons. This rule allows players to use the weapons individually.

In Strike situations, the previously mentioned Munition counters may be broken up into 2 attacks against the same target. Each attack die roll is at a -2 penalty. Each Strike Attack permits 2 attacks to be made from the same counter. The decision to conduct the second attack need not be made until the result of the first attack is determined.

Example:
An A-16A conducts a Strike Attack in a Terrain Card containing 1 AAA Vehicle and 1 Truck. The A-16A uses 1 Hellfire counter as 2 single Hellfire attacks vs. the AAA Vehicle. The first attack will succeed on a die roll of 6 or higher (4 or higher normally, -2 for a single weapon). The first die roll is a 9, destroying the AAA Vehicle. The second Hellfire from the counter cannot be used, and is retained.

In Stand-Off Situations, each counter may be used against two different targets in the same Terrain card. Each Stand-Off Attack permits 2 weapon attacks from a single counter. The attacks from the second Stand-Off Attack need not be declared until the results of the first Stand-Off Attacks are determined.

Example:
An A-10 armed with 2 Maverick counters, conducts 2 Stand-Off Attacks into a Terrain card containing 2 APCs and 1 Tank. The A-10 uses its first Stand-Off Attack to execute a single Maverick attack against each of the APCs, (both die rolls are at a -2 penalty). One APC is destroyed, the other is missed. The A-10 then uses 2 single Mavericks from the second counter to conduct one attack against the APC and one attack against the Tank (both die rolls are at a -2 penalty).

20.4 One Weapon Remaining from a Two Weapon Counter
Rotate the Munition counter 90° on the Aircraft card to indicate that one of the two weapons has been expended. If an aircraft is carrying two counters of the same type which have both been reduced to a single weapon, discard one counter, and treat the other as having two weapons.

V. Home-Bound

21.0 Calculate Mission Success
An enemy Battalion will have a Status of Full, Half, or Eliminated after conducting Battlefield Resolution. Its Status is based on the Point Value of units which haven't been destroyed.

Total the Point Value of all operational enemy units. Enemy aircraft do not have a Point Value, and are not counted. If the Value equals or exceeds the number in parentheses next to Full on the Target card, the Battalion is Eliminated. If the Value falls below the range specified next to Half, the Battalion is at Half Strength. If the Point Value is less than the Half range, the Battalion is Eliminated.

Reminder: do not count the Point Value of Pop-Up units.

Examples:
After resolving the strike against 3A, the following units remained unharmed: 3 Tanks, 1 Command Vehicle, 4 APCs, and 1 Infantry. Their total Point Value is 22. A Value of 14+ indicates a Full Strength for 3A, so the Battalion is still at Full.

After resolving a strike against 2S, a total of 7 Points remain, 2S is then reduced to Half Strength.

After resolving a strike against 6C, 5 Points remain and 6C is eliminated.

22.0 Home-Bound Mission Event Check
A Mission Event may occur on the way back to the air base that will in some way affect the Primary Mission. These Events are represented by the Mission Event deck of cards.

During this step of the Home-Bound sequence, roll a die to determine if a Mission Event occurs. A Mission Event will occur on a die roll of 1 through 4. If a Mission Event occurs, draw the top card from the Mission Event deck and turn it face up. Apply the effects on the bottom of the card as specified.

23.0 Effects of Damage and Stress
Damaged aircraft may crash on the way back to the air base, and Pilots and Crews may suffer so much stress from a Mission that they may not be able to fly the next Mission.
23.1 Returning Damaged Check
This applies to any aircraft which suffered one or more Structure, Abort, or Engine Hits during the Mission. Aircraft which have not suffered one or more Structure, Abort, or Engine Hits do not conduct this Check.

Consult the section of the Air Base sheet entitled “Aircraft Returning Damaged”. Roll a die for each aircraft and apply the listed modifiers.

Example:
An A-10 ends the combat having suffered 2 Structure Hits, 1 Wounded Abort Hit, and 1 Engine Hit. The Returning Damaged die roll is a 6. The die roll is modified to a 2, and the A-10 is Damaged.

23.2 Ready, Damaged, or Crushed
A Ready aircraft is able to fly the next Mission. It is assumed that whatever damage it suffered was minor enough to be quickly repaired. All Hits, including Structural Hits, are removed.

A Damaged aircraft may not be flown until it has been Repaired. The Aircraft card is placed in the Damaged section of the Air Base sheet and all Hits, including Structural Hits, are removed. The details for Repairing an aircraft are covered later.

A Crushed aircraft must be Replaced and is placed in the Tactical Air Command section of the Air Base sheet. All Hits, including Structural Hits, are removed. The details for Replacing an aircraft are covered later.

23.3 Fate of Lost Pilots/Crews
When an A-10 or AH-64 Crashes, determine the fate of its Pilot or Crew.

Consult the section of the Air Base sheet entitled “Pilot/Crew Fate After Crashing”. Roll a die to determine their fate. A Shaken result means they were lucky enough to survive with few injuries and were picked up by a rescue aircraft and returned to base. A Not Ready result means the aircraft was damaged too severely to be repaired. A Lost result indicates either incapacitating injuries or capture by enemy forces. Lost Pilots are placed in the Tactical Air Command section of the Air Base sheet.

23.4 Pilot/Crew Checks
A Check is conducted for each Pilot or Crew which returns from a Mission. This Check is not conducted for Pilots or Crews of Crushed aircraft, their fate and status has already been determined.

Roll a die for each Pilot or Crew and consult the table on the Air Base sheet entitled “Pilot/Crew Check”. Apply the appropriate modifiers to the die roll.

23.5 Modifiers
If the Pilot or Crew has a Cool Skill, its value is added to the die roll. If the Pilot or Crew suffered a “Wounded Abort” Hit, 3 is subtracted from the die roll. 2 is subtracted from the die roll for every “Rattled” Hit suffered. If the Pilot or Crew returned in an aircraft which had a “Damaged” result on its Returning Damaged Check, 1 is subtracted from the die roll.

Example:
Throughout the course of a Mission the Leader (in an A-10) suffered 1 Wounded Abort Hit, 1 Rattled Hit, and his aircraft was determined to be Damaged upon returning. The Pilot Check die roll is a 4, +1 for Cool, -3 for Wounded, -2 for the Rattled, -1 for returning in a Damaged aircraft. The modified die roll is a -1, and the Leader is Not Ready.

VI. Strategic Actions
Several Strategic Actions must be completed before the end of the Day. The sequence in which the Actions are performed is listed in the Strategic Actions section of the Display sheet.

24.0 Gain Air Base Points for the Day
The number of Air Base Points gained each Day is specified on the Situation card. Move the counter on the Air Base Points track on the Air Base sheet to reflect the new Air Base Points.

If the Air Base Points exceed 15, flip the counter to the “+15” side. Air Base Points may never exceed 30.

Example:
The Air Base has 14 Points, and 3 are gained due to the Daily gain from a Rapid Deployment Situation. The counter is flipped to the “+15” side and placed on the “2” (indicating 17 Air Base Points).

24.1 Penalty Points
Each Penalty Point scored by an enemy Battalion reduces the Air Base Points gained for the Turn by one. Each enemy Battalion in the Friendly Transit Band scores 1 Penalty Point. Each enemy Battalion in the Air Base Band scores 3 Penalty Points.

It is possible to actually lose Air Base Points due to Penalty Points. Air Base Points may not be reduced below zero.

Example:
While conducting a General War, 5 Air Base Points are gained each Day. If there is 1 enemy Battalion in the Friendly Transit Band, and 1 enemy Battalion in the Air Base Band, only 1 Air Base Point would be gained.

25.0 Repair/Replace Aircraft
Air Base Points may be used to Repair Damaged aircraft, and replace aircraft which have previously Crashed. Air Base Points may also be used to Replace previously Lost Pilots or Crews.

The Air Base Point cost to make a Damaged aircraft Ready is listed in the Hangar/Damaged section of the Air Base sheet (2 for an A-10, 1 for an AH-64, AV-8B, or AH-1). A Damaged aircraft which has been Repaired is moved to the Flight Line/Ready section of the sheet.

The Air Base Point cost to Replace a Crushed aircraft is listed in the Tactical Air Command section of the Air Base sheet (4 for an A-10, 2 for an AH-64, AV-8B, AH-1, or a Scout). A Crushed aircraft which has been Replaced is moved to the Flight Line/Ready section of the sheet.

26.0 New Pilots or Crews
You must expend 5 Air Base Points to replace a lost Pilot or Crew. A replacement Pilot or Crew is placed on the Briefing Room/Ready Pilots and Crews section of the Air Base Display.

Players may use the Squadron Generation rules, detailed later, to generate a totally new Pilot or Crew, rather than re-using a previously Lost pilot. The new Pilot or Crew receives 1 Build Point for generation.

27.0 Sector Map Movement and Combat
27.1 Check for Recovery of Friendly Battalions
Friendly Battalions have a Full Strength and Half Strength status (like enemy Battalions). Friendly Battalions usually begin the Campaign at Full Strength (they begin at Half Strength for Campaigning using the Holding Action Situation). Friendly Battalions may be reduced to Half Strength in battle with enemy Battalions.

Roll a die for each Half Strength Friendly Battalion. The die roll required for Recovery to Full Strength is listed on the Situation card. Add 2 to the die roll if the Battalion is in the Air Base Band.
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Example:
During a Show of Force a Half Strength Friendly Battalion in the Front Line Band would Recover on a die roll of 7 or higher.

27.2 May Move Friendly Battalions
Movement of Friendly Battalions is controlled by the player. It is assumed that the friendly air and ground forces are operating with a joint plan. So although they are not actually under the command of a squadron commander, it is safe to assume that air and ground forces would operate with the same plan (yours).

Each friendly battalion may either remain in its current band, or move to an adjacent band. Battalions may not be moved behind the Air Base Band. A battalion may not be moved forward (away from the Air Base Band) if one or more enemy battalion's are in its band. Battalions are permitted to remain in a band containing enemy battalions.

27.3 Check for Movement of Enemy Battalions
Each enemy battalion has a chance of Moving to an adjacent Band. The chance and direction of Movement is based on the Campaign, Troop Quality, the individual Battalion, the Battalion's Full or Half Status, and the number of Full Strength Command Battalions in play.

A battalion will either "Advance" one band (toward the Air Base), "Stay" in its band, or "Retreat" one band (away from the Air Base) each day. Each target card contains a section dedicated to indicating the Movement of the Battalion. The top row of numbers is used when the battalion is at Full Strength, and the lower row is used when the battalion is at Half Strength.

Example:
The Movement for the 4S Air Defense Battalion is as follows. The Full Strength Battalion will Advance on a die roll of 6 or less and Stay in its band on a die roll of 7 or higher. If the Battalion is reduced to Half Strength it will Advance on a die roll of 5 or less, Stay on a die roll of 5 to 7, and Retreat on a die roll of 8 or higher.

Each Campaign card lists the modifiers for the Troops of different Quality. These Movement modifiers are added to, or subtracted from, the Movement die roll of each battalion.

Example:
An Elite Quality Battalion in the Germany Campaign has a Movement die roll modifier of -3.

Each Full Strength Command Battalion in play subtracts 1 from all Movement die rolls (even its own).

A Battalion will not Advance beyond the Air Base Band. Once in the Air Base Band, any Advance results are ignored. If a Battalion retreats while in the Enemy Rear Band it is removed from play.

27.4 Conduct Ground Combat
Ground Combat takes place in Bands which contain both Friendly and enemy Battalions.

Each friendly and enemy battalion in the commonly occupied band conducts one attack against the opposing force. All Ground Combat is assumed to be simultaneous. This means that even though a battalion may be reduced or eliminated before its attack is resolved, it uses its original Strength when its attack is executed.

Roll a die for each battalion in contact, and add the listed modifier in the Ground Combat section of the Sector Map. The table for that section is referred to determine the number of Step losses suffered by the other side. Each loss is allocated to a Battalion before the next attack is conducted. The player is free to allocate Step losses for both friendly and enemy Battalions.

Add 1 to enemy die rolls if they are of Elite Quality. Subtract 1 from enemy die rolls if they are of Poor Quality.

Example:
The Front Line Band contains 1 Friendly Full Strength Assault, 1 Friendly Full Strength Mechanized, 1 Enemy Full Strength Assault, and 1 Half Strength Command. The enemy troop Quality is Normal. The player decides to resolve the friendly attacks first. The die roll for the Assault is 4, plus 4 is 8, which results in one enemy Step loss. The player allocates it to the Command Battalion, which will eliminate it. The die roll for the Mechanized is a 1, plus 0 is 1, which fails to inflict a Step loss. The die roll for the enemy Assault is a 6, plus 4 is 10, which inflicts 2 Step losses. The player decides to eliminate his Mechanized with the 1 Step, and reduce the Armored to Half for the second Step. The die roll for the Command is a 6, plus 0 is 6, which inflicts 1 Step loss. The Armored Battalion is eliminated.

27.5 Check for Recovery of Enemy Battalions
Each enemy battalion at half strength has a chance of recovering to full strength. The chance of recovery is based on the campaign, troop quality, number of full strength support battalions in play, and the battalion's location on the sector map.

The base chance of a half strength battalion recovering to full is listed on each campaign card. The chance of recovery is based on the troop quality in play. Subtract 1 from the die roll for every full strength support battalion in play. If the Half Strength Battalion is located in the enemy rear band, subtract 2 from the die roll. Subtract 1 from the die roll if it is located in the enemy transit band.

Example:
A Good Quality Battalion will Recover to Full Strength in the Libya Campaign on a die roll of 2 or less. With 1 Full Strength Support Battalion in play, recovery would take place on a die roll of 3 or less. If the battalion were also located in the enemy transit band, the die roll would be on 4 or less.

27.6 Check for enemy Break
In real life, armies do not fight to the last man. In most cases a ground force ceases to be "combat effective" after suffering anywhere from 10% to 40% casualties. A "casualty" does not always mean the destruction of a vehicle or the death of a soldier. A unit may become a temporary casualty due to the loss of its commanders, losing contact with other friendly forces, or running out of fuel or ammunition. In all of these cases, the vehicles and men of a "combat ineffective" unit may be regrouped to fight at a later time.

Compare the number of Battalions (both full and half strength) on the sector map to the Break number listed on the campaign card. If the number of Battalions is greater than the listed Break number, the campaign continues as normal. Once the enemy Battalions are reduced to their Break number or below, they are considered broken.

Example:
The break number for North Korea is 3 or less. After a day has been completed, the Korean forces consist of 2 full strength battalions and 2 half strength battalions. The Korean forces have 4 battalions in play, and are not broken. They will be broken should one of the remaining battalions be eliminated.

27.7 "Break" Effects
When the enemy forces are broken, each enemy battalion will move one range band toward the top of the map during each "check for movement of enemy battalions" step. Do not roll for their movement. Each battalion automatically moves 1 range band away from the air base range band.

27.8 Check For Overrun
All enemy battalions present in the air base band at the start of a day must be eliminated or driven out of the air base band by the end of the Day, or else the air base is overrun and the campaign ends.
27.9 Check for Victory and/or Advance Day Marker
If you've met the conditions for Victory or END (as specified on the Situation Cards), the Campaign ends. If not, advance the day marker.

VII. Descriptions and Advanced Rules

28.0 Munitions

Each of the Munitions included in the game is detailed below.

Maverick
Each Maverick counter represents two AGM-65 Maverick Air to Ground Missiles. Each Maverick weighs 480 pounds and carries a 125 pound warhead. They have a maximum range of 10 miles.

Hellfire
Each Hellfire counter represents two AGM-114 Hellfire Air to Ground Missiles. In many ways the Hellfire is a smaller version of the Maverick. A Hellfire weighs 100 pounds and carries a 20 pound warhead. The maximum range for a Hellfire is 4 miles.

Mk. 82, Mk. 83, and Mk. 84
The Mk. 82 is a 500 pound guided bomb. The bomb is aligned with a target by the pilot and released to follow a gravity-guided path to the ground. The Mk. 83 weighs 1000 pounds, and the Mk. 84 weighs 2000 pounds.

Pave Penny
Ground teams and Scout aircraft use laser designators to highlight enemy targets. The Pave Penny system then displays designated targets on the pilot's HUD (Head Up Display). The pilot then locks a bomb equipped with a guidance package on to the laser energy reflecting from the target. The bombs used for the task are a modified Mk. 82, Mk. 83, and Mk. 84. When equipped for laser guidance, their designations become GBU-12, GBU-16, and GBU-24, respectively.

Rockeye
The Mk. 20 Rockeye is a very useful munition for clearing out a tight formation of enemy units. Each Rockeye contains 247 sub-munitions which disperse to cover an area roughly 300 feet by 150 feet before hitting the ground. A Rockeye weighs 300 pounds.

Hydra 70
There are two types of Hydra pods, one holding seven rockets, the other holds nineteen rockets. Each rocket is two and three quarter inches in diameter. The pilot can select to fire one, two, or four at a time. At its maximum rate of fire, the nineteen rocket version can fire all rockets in only a few seconds.

Sidewinder
There are many different versions of the Sidewinder air-to-air missile. The most current versions of the missile are the AIM-9L and AIM-9M. Sidewinders home-in on the heat emissions of an enemy aircraft. Each missile weighs roughly 200 pounds. Sidewinders have a range of roughly 5 miles.

Stinger
The Stinger is a small air-to-air missile. Each missile weighs only 30 pounds. Although Stingers are not very useful for attacking high speed, high performance aircraft, they are very effective against slower moving aircraft and helicopters.

Gun Pod
There are a wide variety of gun pods in use by today's air forces. Most contain a 20mm or 30mm cannon and roughly 1000 rounds of ammunition.

ALQ-119
An Electronic Counter-Measures system is basically an electronic noise maker. When an A-10 is the target of some type of electronic lock-on, the ALQ-119 attempts to hide the precise location of the aircraft by throwing out a “cloud” of electronic noise. The attacking system may then lose the aircraft against the normal background clutter of hills, trees, etc.

29.0 Enemy Units

Each of the enemy ground and air units included in the game is detailed below.

APC (Armored Personal Carrier)

APCs are used to transport infantry at a high speed from place to place. Once the APC arrives in the designated area, the infantry dig in. An APC usually carries around twelve men plus a crew of two or three. Most APCs have a top speed of around 20 to 30 miles per hour. Their armor is thin, consisting of only an inch or two of steel or even aluminum. APCs usually mount several .50 caliber machine guns or 20mm mini-guns for fire support and anti-aircraft protection.

Tank
Tanks are used to break through enemy forces and for high speed flanking maneuvers. With a powerful main gun and heavy armor they are the toughest target on the battlefield. In addition to their main gun, tanks carry .50 caliber machine guns for air defense.

Truck
An army truck is used to carry troops or supplies to the front line units. They usually carry very little armor in which to protect the driver or troops.

Command Vehicle
Most Command Vehicles are built from a modified APC design. Instead of carrying troops, it carries command personnel. A Command Vehicle will usually carry the same armor and weapon mounts of the APC it was based on. Because of their importance to the command and control of a unit, they are usually armed with better than normal air defense weapons.

AAA Vehicle (Anti-Aircraft Artillery)
Most AAA Vehicles are constructed on an APC or tank type hull. Their main weapon mount will be one or more high speed cannons, usually in the 20mm range. The most advanced AAA Vehicles use both visual and radar guidance.

SAM Vehicle (Surface to Air Missile)
A SAM Vehicle is the missile version of the AAA Vehicle. A SAM Vehicle usually carries several heat seeking or radar guided surface to air missiles.

SSM Vehicle (Surface to Surface Missile)
These vehicles carry one or more surface to surface missiles for use as bombardment support. They tend to be large, slow-moving vehicles.

Self Propelled Artillery
In many ways these vehicles are like tanks. The main difference is the tower. A Self Propelled Artillery vehicle mounts an artillery cannon instead of the tank's main gun. These vehicles are very useful for providing long range battlefield support for ground forces.

Mi-24
The "Hind" is a superior ground assault helicopter. It is designed to engage armored and infantry forces, carry troops, and even possess air to air capability. It is also one of the most heavily armored helicopters in service.

Mi-28
The "Havoc" is designed to fill the same role as the Apache. It has good speed and range air-to-ground as well as air-to-air capabilities.

Su-17
The "Fitter" is an older ground support aircraft. It is limited to carrying light air-to-ground and air-to-air munitions.

Su-25
The "Frogfoot" was first thought to be the Soviet version of the A-10. As more information came forward, it has been found to be lacking in several major areas. It cannot lift as much ordnance as the A-10, and although it does have a cannon, it is not in the same class as the heavy-duty tank buster of the A-10.

MiG-27
The "Flogger-D" is the strike version of the MiG-23 Flogger. The Flogger-D carries both air-to-ground and air-to-air munitions. Its high speed and high altitude allow the ship to fly over the enemy and drop a deadly payload.

Infantry
Each Infantry counter represents a group of roughly 20 men. The group is equipped with a variety of assault rifles and shoulder launched surface to air missiles.

Troop Quality
The game places a great deal of importance on the quality of the enemy troops. There are two major reasons. The first is training, the other is equipment. As the quality of troops declines, their ability to engage aircraft also declines. An Elite force is not only armed with the best of weapons, but they are also trained in their use. It is also reasonable to assume that they have been trained in the tactics used by opposing aircraft. A Poor quality force does not possess state of the art weaponry, they have not received the best of training, and odds are they know little of the enemy's tactics.
Apache Leader

The anti-air capabilities built into the various enemy forces in the game represent as much of an "attack opportunity" as an actual attack. As a result, a good many attack opportunities are lost to poorer quality troops due to inferior training and equipment.

30.0 Hit Counters

Each of the Hit counters included in the game is detailed below.

**Structure**

These Hits reduce the structural strength of the aircraft. Aircraft suffering these hits are more likely to be seriously damaged at the end of the Mission. Each Aircraft card has a Structural Hit track to record Structural Hits taken during a Mission. The first time an aircraft takes a Structural Hit, place a Structural Hit counter on the left most box of the track, advance the counter with each additional Structural Hit taken. Should the counter be advanced into the "Crash" box, the aircraft immediately crashes.

**Rattled**

These Hits indicate an attack that has more of an effect on the Pilot or Crew rather than the aircraft itself. The aircraft isn't damaged by these attacks, but the Pilot or Crew suffer a -2 penalty to their Pilot/Crew Check die roll for each Rattled Hit taken during a Mission. Place the Hit counter on the Pilot or Crew card for future reference.

**HUD-2**

These Hits indicate damage to the Heads Up Display which is used for calculating attacks as well as providing the pilot with other useful information. The aircraft will suffer -2 to its attack die rolls for the remainder of the Mission. Place the Hit counter on the Aircraft card for future reference. An aircraft may only suffer one HUD-2 Hit at a time, any others are ignored.

**Engine**

A-10s and AV-8Bs

The first Engine Hit scored prevents the aircraft from moving during the "Option to A-10s / AV-8Bs". A second Engine Hit forces the aircraft to leave the Battlefield. Use the same rules as for exceeding the Loiter Time Limit. The third Engine Hit forces the aircraft to Crash.

AH-64s and AH-1s

The first Engine Hit forces the aircraft to leave the Battlefield. Use the same rules as for exceeding the Loiter Time Limit. The second Engine Hit forces the aircraft to Crash.

**Dive!**

In order to avoid certain destruction, the pilot is forced to maneuver the aircraft close to the ground. When a Dive! Hit is scored, roll a die. On a die roll of 2 or less, the aircraft hits the ground and crashes. Add the Pilot or Crew's Cool Skill to the die roll.

**Must Move**

In order to avoid certain destruction, the pilot is forced to move the Terrain card. As a result, the aircraft is forced to move during its next opportunity. Place the Hit counter on the Aircraft card for future reference. Once the aircraft has moved, the counter is removed from the Aircraft card and returned to the cup. An aircraft may only suffer one Must Move Hit at a time, any others are ignored.

**Tracking**

Enemy forces have a solid lock-on to your aircraft, as a result, their attacks will have a higher chance of success in the near future. All enemy attacks executed during the next Turn against a "Tracked" aircraft ignore all aircraft and troop quality immunities of the aircraft and the Aircraft card on the Aircraft card for future reference. After the enemy has tracked during the next Turn, the counter is removed from the Aircraft card and returned to the cup. This does not affect enemy attacks conducted during the current Turn. An aircraft may only suffer one Tracking Hit at a time, any others are ignored.

**No Effect**

The attack failed to score any significant damage to the aircraft.

**Lose Guidance Lock**

If the aircraft has a Guidance Lock counter in play the Guidance Lock is lost and is removed from the Battlefield. The aircraft losing the Guidance Lock is free to execute Cannon or Strike Attacks.

**Wounded Abort**

The aircraft must immediately start moving off the Battlefield. Use the same rules as for exceeding the Loiter Time Limit. Place the Hit counter on the Pilot card for future reference. If the aircraft suffers a second Wounded Abort Hit, the Pilot or Crew is killed and the aircraft crashes.

**Killed Crash**

The Pilot or Crew was killed by the attack. The aircraft crashes.

**Lose Attack**

In order to avoid being hit, the pilot is forced to maneuver in a way which makes attacking an attack impossible. Place the Hit counter on the Aircraft card for future reference. After the next opportunity to attack has passed, the counter is removed from the Aircraft card and returned to the cup. An aircraft may only suffer one Lose Attack Hit at a time, any others are ignored.

**Attack at -2**

In order to avoid being hit, the pilot is forced to maneuver in a way which makes an attack difficult. Place the Hit counter on the Aircraft card for future reference. After the next opportunity to attack has passed, the counter is removed from the Aircraft card and returned to the cup. It is possible for an aircraft to be penalized by more than one of these Hits at the same time.

**Pylon**

As a result of the Hit, some of the Munitions are damaged and are unusable. Select 2 random Munition counters from the Aircraft card and remove them from the aircraft. Ignore these Hits if the aircraft is not carrying any Munitions.

1. **Serious**

These counters indicate an attack which might cause more damage than normally expected. When one is drawn, draw a Serious Hit counter and apply the effect.

2. **Minor**

These counters indicate an attack which might cause more damage than normally expected. When one is drawn, draw 2 Minor Hit counters and apply the effects.

Minor and Major Hits Note: When drawing counters as a result of a "1 Serious" or "2 Minor" Counter, it is possible to draw an additional "1 Serious" or "2 Minor" Counters. If this occurs, continue drawing counters until all have been resolved.

Example:

An A-10 takes 2 Serious Hits from a range 0 SAM Vehicle. The first lists A-10 in the top right corner and is ignored. The second has an effect of 2 Minor. Both of these also have an effect of 2 Minor. Of the 4 Minor Hits to be taken, 2 are Structure Hits, 1 is No Effect, and the other is 1 Serious. A Serious Hit is then drawn and it indicates No Effect.

31.0 Lines of Sight

In some cases a player may be unsure of the proper Line of Sight from one Terrain card to another. This section defines the proper Lines of Sight for each Terrain card.

**Terrain card #1 to...**

#2: #1 to #2
#3: #1 to #2 to #3
#4: #1 to #2 to #3
#5: #1 to #3
#6: #1 to #2 to #6, or #1 to #5 to #6
#7: #1 to #2 to #6 to #7
#8: #1 to #4 to #8, or #1 to #5 to #8
#9: #1 to #5 to #9
#10: #1 to #5 to #6 to #10, or #1 to #5 to #9 to #10

**Terrain card #2 to...**

#1: #2 to #1
#3: #2 to #3
#4: #2 to #1 to #4, or #2 to #5 to #4
#5: #2 to #5
#6: #2 to #6
#7: #2 to #3 to #7, or #2 to #6 to #7
#8: #2 to #5 to #8
#9: #2 to #5 to #9, or #2 to #6 to #9
#10: #2 to #6 to #10

**Terrain card #3 to...**

#1: #3 to #2 to #1
#2: #3 to #2 to #1
#4: #3 to #5 to #4
#5: #3 to #2 to #5 to #4
#6: #3 to #6
#7: #3 to #7
#8: #3 to #6 to #5 to #8, or #3 to #6 to #9 to #8
32.0 Special Abilities

Each of the Special Abilities appearing on the Pilot and Crews cards is detailed below. Several of the Abilities listed do not appear on the Pilot and Crews cards included in the game and are used when generating your own Pilots and Crews.

Add 1 to Loiter Turns over target
These individuals possess the command knowledge needed to organize their forces in the most time efficient manner possible. As a result, they are permitted to spend one extra Turn over the target. Gain one extra Turn over the target for each Pilot or Crew present with this Special Ability.

+1 to hit Infantry
These pilots are good at attacking enemy Infantry. One is added to their attack die rolls when attacking Infantry.

+2 to hit enemy aircraft
Some pilots are good in air combat, as a result, they add two to their attack die rolls against enemy aircraft.

May do 2 Cannon Attacks per Turn
These pilots are very good at keeping their aircraft under control after doing a Cannon Attack. They are allowed to conduct a second attack against the same target (if the first Cannon Attack failed) or a different target in their Terrain card. They may shoot at enemy ground forces and aircraft in the same Turn. They may not combine a Cannon Attack with a Strike or Stand-Off Attack in the same Turn.

May do 2 Strike Attacks per Turn
These pilots are skilled in executing a second Strike Attack in quick succession to the first. They are allowed to conduct a second attack against the same target (if the first Strike Attack failed) or a different target in their Terrain card. They may combine a Strike Attack against enemy ground forces and aircraft in the same Turn. They may not combine a Strike Attack with a Cannon or Stand-Off Attack in the same Turn.

May do 3 Stand-Off Attacks per Turn
These pilots are skilled in executing rapid fire Stand-Off Attacks. They are allowed to conduct a third Stand-Off Attack against a previously attacked target (if the first or second Stand-Off Attack failed), or a different target in their Terrain card containing their Guidance Lock counter. They may execute Stand-Off Attacks against enemy ground forces and aircraft in the same Turn. They may not combine Stand-Off Attacks with Cannon or Strike Attacks in the same Turn.

Ignore both...Hits against their aircraft
Pilots and Crews with this Ability are skilled in evading enemy attacks. As a result, their aircraft is Immune to Hits listing its type (A-10 or AH-64), and Hits that the AV-8B is Immune to.

-1 penalty vs. units with Cover
Most pilots suffer a -2 penalty to their attack die rolls when targeting an enemy unit under Cover. Pilots with this Ability suffer a -1.

+1 to hit with Hellfires
These Crews are particularly skilled when using Hellfire missiles. One is added to their attack die rolls when attacking with a Hellfire.

+1 to all Pilot Check die rolls for Mission
These Pilots have the ability to boost the morale of their comrades after a Mission. Add one to the Pilot Check die roll of every other Pilot and Crew which flies in the same Mission (a Pilot or Crew with this Ability does not gain the bonus). This modifier is not applied when a Pilot or Crew with this Ability crashes during the Mission.

33.0 (Optional) Experience and Fatigue

This rule section takes into account the increase in skill due to experience. It also introduces a detailed system for pilot fatigue. The Pilot/Crew Experience Log is used to record both Experience and Fatigue.

33.1 Experience
A Pilot or Crew gains Experience Points by scoring Hits on enemy ground units and aircraft. One Experience Point is gained every time an enemy ground unit or aircraft is destroyed. Experience Points are recorded on the Experience Log for each Pilot or Crew. Pilots are free to use any convenient tally system to record Points scored. Every time a Pilot or Crew completes a set of 15 Points, they gain a +1 to all Skills (Cannon, Strike, Stand-Off, and Cool). This modifier is recorded in the box provided for each Pilot or Crew. The actual bonus is not gained until the end of the Day.

33.2 Secondary Missions
In order to reflect the Hits scored during a Secondary Mission, a
Apache Leader

table has been provided on the Log sheet.

Cross reference the number of aircraft which participated in the Secondary Mission, with the total number of Steps the Secondary Battalions were reduced. The resulting number is the number of Experience Points scored by each Pilot or Crew.

Example:
2 A-10s, 1 AH-64, 1 AV-8B, and 1 AH-1 conduct a Secondary Mission. The enemy forces targeted for the Secondary Mission began the Mission with 2 Full Strength and 2 Half Strength Battalions. When the Mission is completed, 1 of the Full Strength Battalions was Eliminated, and a second was reduced to Half. Both Half Strength Battalions were Eliminated. The enemy took a total of 6 Steps of loss (2 + 1 + 1 + 1 + 1). Each A-10 Pilot as well as the AH-64 Crew gain 4 Experience Points.

33.3 Fatigue
The basic rules allow for a Pilot or Crew to fly every Mission of a Campaign (given some good die rolls). The Fatigue rules take into account the build-up of stress on a Pilot or Crew over an extended period of time.

Conduct the Pilot/Crew Check or Fatig Check as normal. When you have determined the Pilot/Crew to be Ready, Shaken, Not Ready, or Lost, consult the "Fatigue Suffered" table on the Log sheet.

The result of the Pilot/Crew Check determines the number of Fatigue Points suffered from the Mission. The Fatigue Points suffered from the Mission are added to any Fatigue Points already recorded for the Pilot or Crew from previous Missions. If a Pilot or Crew's total Fatigue Points equal or exceed 46, the Pilot or Crew is Lost and is removed from the Campaign. Record the Fatigue Points of each Pilot and Crew on the Log sheet.

Example:
An AH-64 Crew has been determined to be Not Ready. The Crew suffers 25 Fatigue Points (a die roll of '5 + 20').

The Pilot or Crew's readiness is found by comparing their current Fatigue Points with the Readiness section of the Log sheet.

Example:
A Pilot or Crew with 25 Fatigue Points is Shaken.

33.4 Rest
Each day a Pilot or Crew does not fly a Mission, their Fatigue Points are reduced by 4, plus twice their Cool Skill. The reduction takes place during the Pilot/Crew Recovery step in the Pre-Battle sequence. A Pilot or Crew's Fatigue Points may never be reduced below zero.

Example:
A Pilot or Crew with a Cool of 1, and 37 Fatigue Points, sits out a Day. Their Fatigue Points are reduced to 31.

33.5 Skills and Fatigue
The Fatigue Points of a Pilot or Crew are reduced by a die every time they gain a Skill bonus.

Example:
At the start of a Mission, a Pilot has 25 Fatigue Points and flies the Mission Shaken. During the course of the Mission he gains his 15th Experience Point. His Fatigue is reduce by a die because of the bonus (the die roll is a '7', reducing his Fatigue to 18). The result of his Pilot Check at the end of the Mission is Ready. He gains a die roll of Fatigue (the die roll is a '2', boosting his Fatigue to 20).

34.0 (Optional) Squadron Generation

Instead of using the Pilots and Crews included in the game, players may create their own squadron using the following rules.

Make a copy of the blank Pilot and Crew card sheets to record the following information.

34.1 Pilots and Crews
First, decide if your squadron will consist of 6 A-10 Pilots, 10 AH-64 Crews, or 5 A-10 Pilots and 5 AH-64 Crews.

For every Pilot or Crew taken, you receive 5 "Build Points" toward customizing the Skills and Special Abilities of your squadron.

Example:
A player decides to command a squadron of 6 A-10 Pilots. He receives 30 Build Points to distribute to the 6 Pilots.

34.2 Building a Pilot or Crew
Build Points are allocated to a Pilot or Crew in order to build up their Skills, or grant them a Special Ability. The following table details the Build Point cost based on the Pilot or Crew's total Skill points.

<table>
<thead>
<tr>
<th>Total Skill points</th>
<th>Build Point cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>0</td>
<td>0</td>
</tr>
<tr>
<td>1</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>3</td>
</tr>
<tr>
<td>3</td>
<td>6</td>
</tr>
<tr>
<td>4</td>
<td>10</td>
</tr>
<tr>
<td>5</td>
<td>15</td>
</tr>
</tbody>
</table>

A Pilot or Crew may not be given more than 4 Skill Points and 1 Special Ability. For the purposes of the table, a Special Ability is equal to 1 Skill Point.

A Pilot or Crew may never have more than one Special Ability, and the Special Ability may never be taken more than once.

34.3 Allocating Skill Points
Skill Points are allocated to the Pilot or Crew's 4 different Skills: Cannon, Strike, Stand-Off, and Cool. A Pilot or Crew may not have more than 2 Skill Points allocated to any given Skill.

34.4 Special Ability
As noted earlier, a Special Ability is treated as a Skill. A Pilot or Crew having 3 Skill Points and a Special Ability would pay the cost of having 4 Skill Points (10 Build Points).

The following table lists 10 Special Abilities for both A-10s and AH-64s. When a Special Ability is purchased, roll a die on the appropriate list to determine which Ability has been gained. If you wish to select the Ability instead of rolling a die, pay 1 extra Build Point.

Example:
A Pilot or Crew with 3 Skills Points and 1 Special Ability, would require 10 Build Points. An eleventh Point would be required if the Ability was to be selected, instead of randomly determined.

<table>
<thead>
<tr>
<th>10</th>
<th>Special Ability</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>+1 Loiter Turns over target</td>
</tr>
<tr>
<td>2</td>
<td>+1 vs. Tanks and APCs</td>
</tr>
<tr>
<td>3(A-10)</td>
<td>Ignore both A-10 and AV-8B Hits against...</td>
</tr>
<tr>
<td>3(AH-64)</td>
<td>Ignore both AH-64 and AV-8B Hits against...</td>
</tr>
<tr>
<td>4</td>
<td>+2 to hit enemy aircraft</td>
</tr>
<tr>
<td>5</td>
<td>May do 2 Cannon Attacks per Turn</td>
</tr>
<tr>
<td>6</td>
<td>+1 to hit Infantry</td>
</tr>
<tr>
<td>7</td>
<td>-1 penalty vs. units with Cover</td>
</tr>
<tr>
<td>8</td>
<td>May do 2 Strike Attacks per Turn</td>
</tr>
<tr>
<td>9</td>
<td>May do 3 Stand-Off Attacks per Turn</td>
</tr>
<tr>
<td>10</td>
<td>+1 to all Pilot Check die rolls for Mission</td>
</tr>
</tbody>
</table>
34.5 Shaken Skill Reduction
The Shaken side of the Pilot or Crews cards is generated after all Build Points are allocated to the specific Skills and Abilities of the Pilots and Crews. The Shaken side Skill numbers reflect how badly a Pilot or Crew is affected when Shaken.

A Shaken Pilot or Crew will always lose its Special Ability.

The Cool Skill assigned to a Pilot or Crew may never be reduced when Shaken.

Roll a die and consult the following table to determine the number of Skill Points lost by a Pilot or Crew when Shaken.

<table>
<thead>
<tr>
<th>d10</th>
<th>Skill Points Lost</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>4</td>
</tr>
<tr>
<td>2-3</td>
<td>3</td>
</tr>
<tr>
<td>4-10</td>
<td>2</td>
</tr>
</tbody>
</table>

Reduce the Pilot or Crew's Skill Points by the number indicated by the table. Cannon, Strike, and Stand-Off Skills may be reduced, but Cool cannot.

A Skill may not be reduced to -2 until Cannon, Strike, and Stand-Off have all been reduced to -1.

Example: A Pilot or Crew has been assigned a Skill of 1 with Strike Attacks and Cool, and the "+1 to hit Tanks and APCs" Special Ability.

The Pilot or Crew automatically loses the Special Ability when Shaken. The die roll for Skills Lost when Shaken is a '1'. Cool may not be reduced, so 4 Points must be taken from Cannon, Strike, and Stand-Off. The player decides to reduce each by 1 Point. This reduces the Skills to: Cannon +0, Strike -1, Stand-Off -1, Cool -1. The fourth Point Lost must come from Cannon Skill, reducing it to -1. The Cannon Skill must be reduced, because a Skill may not be reduced to -2 until Cannon, Strike, and Stand-Off have all been reduced to -1.

Design / Development Notes:
When we decided to create Thunderbolt / Apache Leader as the second of our 'Leader Series' games, we really had no idea where that decision was to take us in terms of design. We initially thought that it would be an easy sequel. Since Hornet Leader worked so well and was well received, it made sense to try to "copy" our original design for this game. We quickly discovered, however, that getting a Close Air Support game to work with the same game systems as our operational career-based air game was about as easy as getting pigs to fly.

Once we decided to create a brand new system, we were reminded of just how hard it is to create an elegant game system from scratch. Our first version (played by Dan Rodger, and I in Los Angeles hotel room in May, 1991) used plastic airplanes on stands with little flags to mark aircraft altitude and hit status. Well, it took us all of 5 minutes to figure out that THAT was our final version. We wanted something that "felt" like Hornet Leader in terms of a smooth integration of cards, maps, counters, and systems, but challenged gamers in an entirely different way than HL. We wanted to give you a feel for the ground war. It's a fundamentally different thing, as opposed to dropping bombs from 5,000 feet or shooting HARMs from 5 miles away, to be down in the weeds, low and slow, dicing it out with tanks, SAMs, and enemy CAS aircraft. Well, anyway, something like eleven versions later, here it is!

The toughest decision we had to make during this process (we didn't decide until literally the last minute) was to make this purely a campaign game, unlike Hornet Leader. One of the aspects of Hornet Leader that we really liked was being able to pick up any target card, and go fly a mission for 15-30 minutes, then pack up and do something else. That aspect of HL helps make it an "approachable, playable" game, and probably contributed greatly to its popularity. Of course, Rodger's artwork is probably just as responsible-and we think he's done an even better job on this game!) For TAL, however, the concept of "one mission just didn't work, for a couple of important reasons.

First, real CAS aircraft are NOT designed for one-shot surgical strikes. Naval aircraft, because they're based on carriers near the shores of hot spots around the world, are often called on to make such a strike. The limited U.S. actions against Libya, Iran, and Lebanon during the 80's showcased this capability. The CAS aircraft, conversely, are designed specifically for ground wars. If you see A-10s and AH-64's parked on the runway of some foreign airbase, you can bet the farm that there's a serious ground war happening or about to happen nearby.

Second, it just took TOO LONG to get the "feel" of the game when we included the additional rules structure and completely different Sequence of Play for resolving single missions. Play testers said things like "Now which Sequence of Play do I use?" and "Which effects do I ignore for Single Missions?" It just led too much confusion. We wanted a focused game that gamers could get into from the beginning of the rules. Thus, we designed it as a Campaign, and thrust you into the midst of it starting with rule 2.0. We hope you'll enjoy the results!

As far as game hints and tactics go, this time you're on your own. Since most of you are veterans of HL with dozens or even hundreds of hours in (cardboard) high performance aircraft, you should learn pretty quickly. One note of caution: DO NOT play your first Campaign against Elite troops unless you want to get slaughtered (Still, somebody out there's saying "I do! I do!"). Because of the difficulty of killing elite units before they move to Cover and in light of their devastating combat capabilities (almost No immunities versus Elite Troops), your first tactical foray against them should wait until you've become a veteran of the game. I know, you love a challenge, but I'm serious. Cutting your teeth on some of Saddam's or Gadhafi's poor troops will give you valuable experience with and insight into the game system (Just don't expect the moves you pull on those troops to work in Korea or Central Europe!)

Well, okay - just a couple of hints. First, take the ALQ-119 whenever you can. It'll save your life many times over. Unfortunately, the Apache can't carry it, so you'll have to count on stealth and evasion with your helicopters. Second, hiding behind a ridgeline in your own terrain card and making Stand-Off Attacks into other cards is good strategy (and tactics). Since terrain in your own card doesn't block YOUR line of sight out, but does block enemy line of sight in, this is a pretty safe way to fight (The equivalent of Apaches hovering behind a ridge, then quickly popping up to fire a Hellfire). Unfortunately, you usually don't have enough Stand-Off missiles to wipe out the enemy this way, and sometimes terrain configurations just don't give you a good shot. So sooner or later you'll probably have to brave the Air Defense Fire and kill the enemy on his terms. Hey, you can do it! You're a cardboard Ace, remember? Once again, Good Hunting.

Gene Billingsley and Dan Vessen

If you have questions about these rules or want information about other GMT Games, contact us at:

GMT Games
310 W. Lacey Blvd.
Hanford, CA 93230
(209) 583-1266