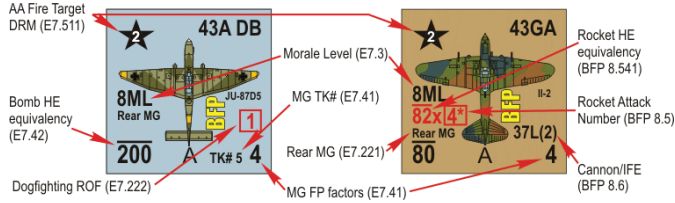


AIRCRAFT OF KURSK

8. AIRCRAFT: Several aircraft that made an impact on the Battle of Kursk are included for both the Germans and the Russians. Refer to this diagram for counter layout information and details.



8.1 GROUND ATTACK AIRCRAFT: The Germans and Russians have Ground Attack (GA) Aircraft, which differ from both fighter bombers and dive bombers in the system. The German GA aircraft represent three versions of the Henschel Hs-129 to depict its various weapons configurations. The included Russian GA Aircraft represent two versions of the IL-2 Sturmovik. GA Aircraft conduct attacks exactly as a fighter bomber [EXC: Dogfight Resolution (E7.221)].

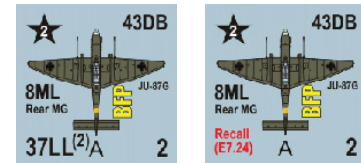
8.2 JU-87 STUKA: The 43 DB is a JU-87G² armed with 37mm tank busting cannons, and the 43A DB is a JU-87D5 with 20mm cannons instead of the standard machineguns.

8.11 ATTACKS: GA Aircraft are considered Stukas for the purposes of Dogfight Resolution (E7.221) [EXC: only those designated as such have a Rear MG]. Otherwise, all applicable Chapter E rules apply to GA Aircraft normally (except as modified here).

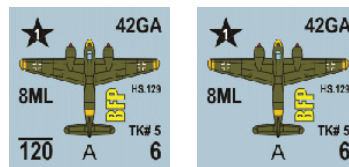
8.21 MODELS:

8.12 GERMAN GROUND ATTACK AIRCRAFT¹:

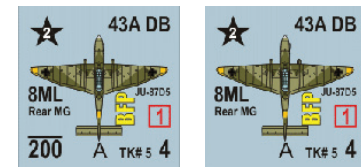
German 43 DB
Available: ≥ March '43
MG: 2
Cannon: 37LL(2)
ROF: -
Bombs: NA
AA DRM: 2
Rear MG



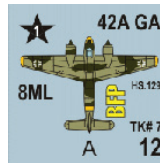
German 42 GA
Available: ≥ May '42
MG: 6
ROF: -
Bombs: 120
AA DRM: 1
TK#5



German 43A DB
Available: ≥ June '43
MG: 4
ROF: 1
Bombs: 200
AA DRM: 2
Rear MG
TK# 5



German 42A GA
Available: ≥ June '42
MG: 12
ROF: -
Bombs: NA
AA DRM: 1
TK#7



8.22 ATTACKS: The 43A DB is treated as a normal DB in every way except it has a MG TK # 5. The 43 DB can use a Strafing or a Point Attack, and may use its cannon or 2FP machinegun. The cannon (8.4; 8.6) may conduct 1 strafing run or 2 point attacks. A 43 DB is Recalled (per E7.24) after a cannon strafing run or after its second cannon point attack. A 43 DB does not Pin infantry per E7.404, even when making a point attack.

German 42B GA
Available: ≥ June '42
MG: 8
ROF: -
Bombs: NA
AA DRM: 1
TK#9



8.23 SIGHTING TC DRM: Sighting TC are conducted normally, but the 43 DB incurs a +2 DRM against non-vehicular targets.

8.24 REAR MG: Both models are considered 42 DB for all purposes of Dogfight Resolution (E7.221).

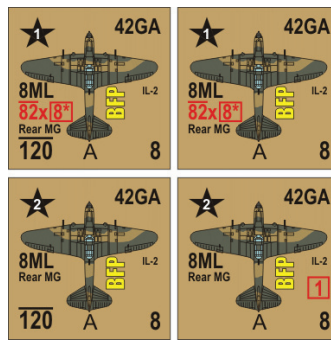
8.25 LIGHT AA FIRE: Like a FB, the 43DB is susceptible to Light AA fire (E7.51) prior to making any attacks.



8.3 STORMOVIKS³: The Russians made considerable improvements to their GA Aircraft in several ways. The most significant improvement was redesigning the aircraft to include a second seat, which added a rear gunner manning a .50 caliber machinegun. New ordnance was also developed, making significant contributions during Operation Citadel.

Russian 42 GA

Available: ≥ Nov '42
 MG: 8
 ROF: 0/1
 Bombs: 120
 Rockets: 82 (8)*
 AA DRM: 2/1
 Rear MG



Russian 43 GA

Available: ≥ Apr '43
 MG: 4
 ROF: 0/1
 Cannon: 37L(2)
 Bombs: 80
 Rockets: 82 (4)*
 AA DRM: 2
 Rear MG



8.31 ATTACKS: Russian aircraft using rockets (8.5) use Red TH numbers. The 37L cannon equipped on the 43 GA incurs a +2 TH DRM.

8.32 REAR MG: The 42 GA and 43 GA aircraft are both equipped with Rear MGs, and are considered 42 DB for all purposes of Dogfighting (E7.221).

8.4 ORDNANCE ATTACKS: Aircraft armed with rockets/cannons have the following options in a single fire phase:

- a) MGs and/or bombs normally
- b) Rockets only
- c) Cannon only

The procedures for conducting a Sighting TC and resolving Light AA attacks remain unchanged per Chapter E. After a successful Sighting TC, but before any attack, the owning player must declare if the attack is to be made with MG/bombs or rockets or cannon. Conduct attacks per Chapter E if a MG/bomb attack is declared.

8.5 ROCKETS: This armament is listed in red below the Morale on the aircraft counters. If a rocket attack is declared, it is the only weapon that can be used by the aircraft in that fire phase. Russian aircraft are equipped with 82mm rockets. The Rocket Attack Number (RAN) is listed inside a box to the right of the rocket diameter. The RAN is the number of TH attempts that aircraft can make during the fire phase. The RAN is halved if ATT (C3.33) is used (Ex: the 42 GA can make either 8 ITT/VTT or 4 ATT attacks). Rockets, like bombs, may be used only once. After conducting a rocket attack, flip or replace the aircraft counter with one of the same type without rockets. An aircraft loaded with rockets engaged in Aerial Combat (E7.22) suffers the same penalty as an aircraft carrying bombs (E7.221). The DRMs for Rockets and bombs are cumulative in Dogfights. Rockets may be jettisoned like bombs (and at the same time as bombs) per E7.225.

8.51 INFANTRY/VEHICLE TARGET TYPE (ITT/VTT):

ITT/ VTT may only be used during a Strafing Run (E7.401). Any combination of TH attempts per hex(es) can be used up to the full RAN. After a rocket attack is declared, all hex(es) and the unit(s) being attacked must be announced prior to resolving the first attack. Each attack is conducted regardless of the outcome of the prior attack. Any To Hit Original 12 DR, using any target type, results in a malfunction of the rocket system. All remaining rockets are considered jettisoned; flip or replace the aircraft counter to the appropriate side (the aircraft continues to move along its attack route and is subject to light AA fire normally although it does not conduct any additional attacks in this Player Turn).

8.52 AREA TARGET TYPE (ATT):

ATT may be used only during a point attack. When using the ATT the RAN is reduced to half of its original number. Of the remaining RAN, half of the attacks are made from four hexes, and half from three hexes. Each attack is conducted regardless of the outcome of the prior attack. Each attack is conducted as Area Fire (C1.55). Any To Hit Original 12 DR, using any target type, results in a malfunction of the rocket system. All remaining rockets are considered jettisoned; flip or replace the aircraft counter to the appropriate side (the aircraft continues to move along its attack route and is subject to light AA fire normally although it does not conduct any additional attacks in this Player Turn).

8.53 ROCKET TH DRM: The E7.421 provisions for a Direct Hit or Near Miss do not apply to rockets. All hits while using the ITT/VTT are Direct Hits, and all hits with ATT use the IFT at half firepower. All aerial TH DRM apply normally, with the following additions:

DRM	Target Type
-1	Area (ATT)
+2	Infantry (ITT)
+3	Vehicle (VTT)

8.54 ROCKET TK DRM: The C7.22 Aerial Advantage vs. AFV applies; the C7.21 AFV Rear Target Facing is never used to modify a Rocket attack basic TK#.

8.541 ROCKET EFFECTS: Attacks against infantry use the applicable IFT column (82mm and halved if using ATT). If the VTT was used, AFVs are attacked on the applicable C7.34 HE/Flame TK Table (80+ column). If the ATT was used, vehicles are attacked per C1.55.

8.6 CANNONS: Cannons may be used to conduct a Strafing Run or a Point Attack. Any unarmored targets in hexes attacked by the cannon are attacked by the IFE with no placed Residual Firepower. The Russian 37L cannon incurs a +2 TH DRM. An Original TH DR of 12 disables that aircraft's cannon and it cannot conduct further cannon attacks; however, it may use other weapons if available in subsequent turns.

8.7 ANTITANK CLUSTER BOMBS⁴: AT Cluster Bombs are available to the Russians starting in April 1943 and the Germans in May 1943. These are only available per SBR or CG Purchase. This is primarily an antitank weapon, but can have an effect on Infantry/unarmored vehicles. Cluster Bombs always use the ATT for TH purposes.

8.71 Effect Against Armored/Partially Armored Vehicles: If an AFV is successfully hit, make a subsequent dr on the following table to determine the TK# to be used:

dr	Basic TK Number
1-2	Use Basic TK# 12
3-4	Use Basic TK# 9
5-6	Use IFT with 8 Firepower

Use the applicable TK# to determine the effect on an AFV. All DRM and Aerial Armor Factors normally associated with aerial attacks are applicable to determining the Final TK#.

8.72 Effect Against Infantry/Unarmored Vehicles: Cluster bombs attack Infantry/unarmored vehicles on the 8 FP column of the IFT, regardless of HE equivalency on the counter. All Cluster bomb attacks against any target type receive the following IFT/TK effects DRM:

DRM	Terrain
-2	Unarmored Vehicle
0	Open Ground
+1*	Crag/Shellhole
+2	Orchard
+2	Crew manning an emplaced gun
+2	CE AFV crew
+3	Woods [EXC: Airburst is NA]
+4*	Trench/Foxhole
?	Double normal DRM of all other terrain

*NA to vehicle

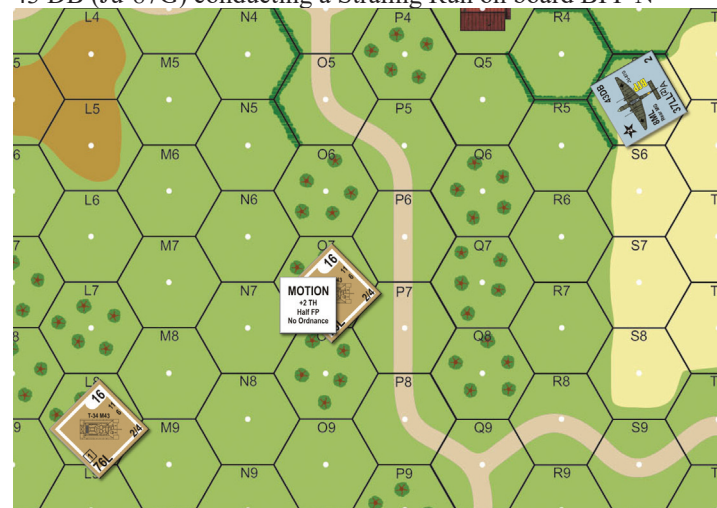
8.73 Critical Hits⁵: A cluster bomb Critical Hit occurs on any TH DR of 2, even if an improbable hit. Use Random Selection to determine which target is affected by the CH if that hex contains more than one unit. The firepower of a CH against

Infantry/unarmored vehicle is doubled to 16; TEM is not reversed, but all positive TEM becomes 0 [EXC: remains -2 against an unarmored vehicle]. Critical Hits against AFVs are resolved as if the dr were a 1 or a 2 on the 8.71 table.

EXAMPLES OF AIRCRAFT PLAY:

Example 1: Note: All aircraft in the examples would be subject to Light AA fire in accordance with Chapter E, but this has not been included to simplify the examples.

43 DB (Ju-87G) conducting a Strafing Run on board BFP N



In this situation a Russian tank is moving in O7, and one is stationary in L8. The 43 DB starts its attack from S5, as the moving tank in O7 makes it easier to pass the Sighting TC. The Sighting TC receives the following DRM:

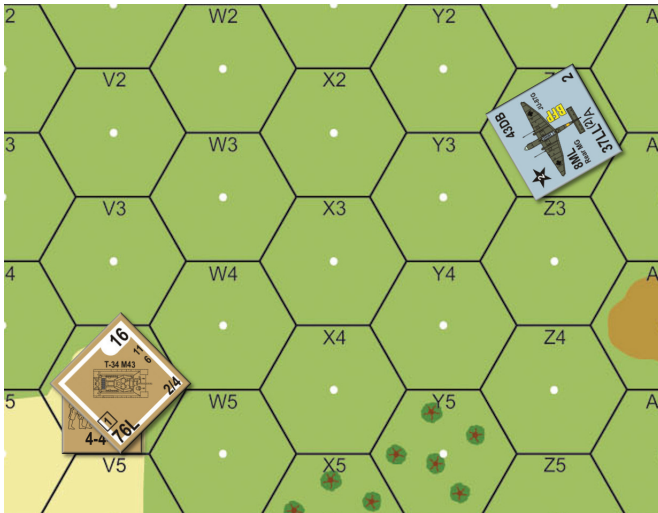
DRM	Target Type
-1	Vehicular Target
-2	Target not Concealed
-1	Target has entered a new hex / been in Motion

Note that the Sparse Woods are always treated out of season Orchards, therefore there is no Orchard DRM.

Any DR results in a successful Sighting TC and the Stuka may now start its attack. The 43 DB may use only its cannons or its MG, and in this instance it will use the cannons. A hit is achieved against the tank in O7 with a DR ≤ 7 (Base 9 for Aerial Range with a +2 DRM for a moving target, Case J). The 43 DB continues to attack along the hexgrain, although it does not have to actually make a roll on the empty hexes. A DR ≤ 9 is required to hit the T-34 in L8 (Base 9 for Aerial Range and no modifiers); assume a hit is achieved. The Stuka can Eliminate/Immobilize/Shock the T-34 on a DR ≤ 10. The Base TK# is 11, +1 rear target facing, +1 height advantage, -3 Aerial AF. No residual is placed in any of the hexes, and because the 43 DB attacked using a cannon strafing run, it is Recalled per E7.24.

Example 2:

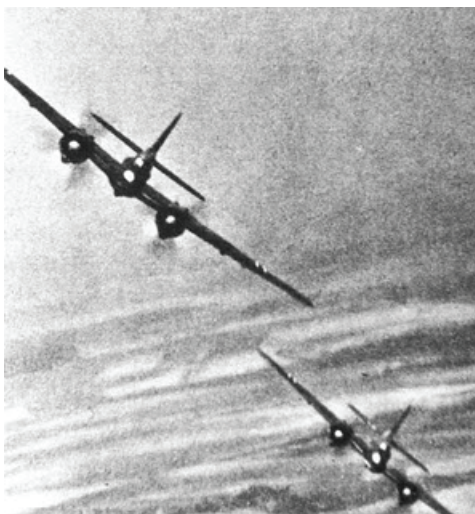
43 DB (Ju-87G) conducting a Point Attack on board BFP N



A 43 DB conducts a Point Attack from Z2 into V4. The Sighting TC receives the following DRM:

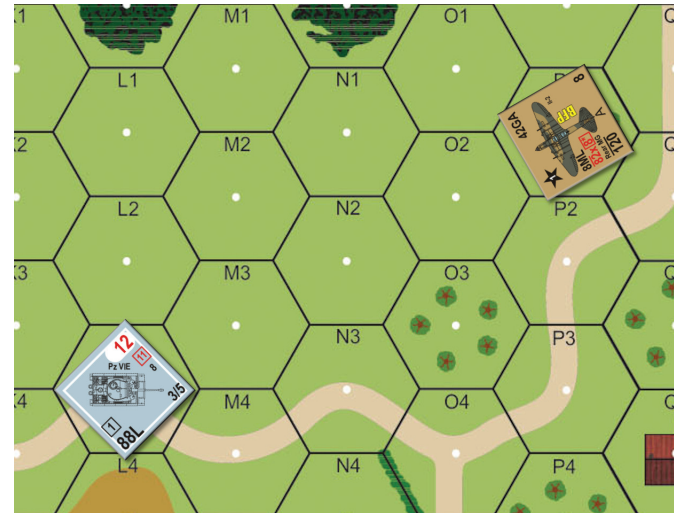
DRM	Target Type
-1	Vehicular Target
-2	Target not Concealed
+1	Grain

A $DR \leq 10$ results in a successful Sighting TC, and all units in the hex are potentially susceptible to the attack. Although making a Point Attack, the 43 DB will not automatically Pin the Russian squad. The aircraft must make a TH attempt from four hexes, or 7-12 for Aerial Range. A $DR \leq 9$ is required for a hit (Base 9 and no DRM). As in example 1 a Final $DR \leq 10$ will have an affect on the T-34. The TH DR also attacks the squad on the IFT with 2 fire-power, with a +1 DRM for vehicle TEM. The 43 DB is now considered to have made one Point Attack, and may make one other Point Attack during the course of the scenario before being Recalled.



Example 3:

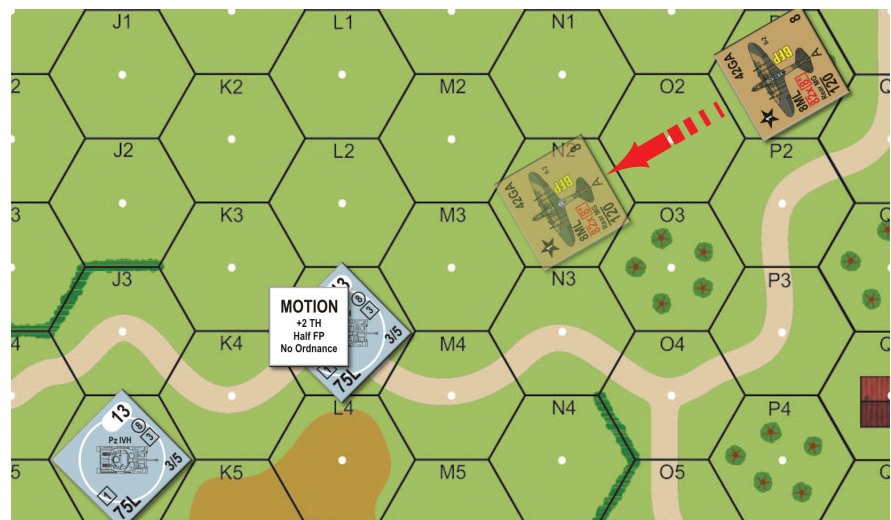
Russian 42 GA conducts Point Attack on board BFP N



The 42 GA conducts and passes a Sighting TC. The player must decide if the attack is going to use rockets or MGs/bombs and whether the attack will be a Strafing Run or a Point Attack. Once the attack type is selected, the player must pre-designate all rocket attacks prior to resolving the first attack. A Point Attack is declared, thus this will be an Area attack (8.52), and subsequently a maximum of four attacks may be made as the RAN of 8 is halved to 4. The first two attacks must be made from P1, and the second two from O2. Each TH attempt requires a $DR \leq 9$ to achieve a hit (Base 7, -1 Rocket ATT, -1 Target Size). Any hits attack the Tiger on the IFT because this was an Area attack. The attack is resolved on the 8 FP column with +1 for all $AF \geq 4$.

Example 4:

Russian 42 GA conducting a Strafing Run on BFP N



The PzIVHs in L3 (Motion) and J4 are attacked by a 42 GA from P1. The 42 GA conducts and passes a Sighting TC from P1. The controlling player declares the use of rockets and a Strafing Run, thus VTT will be used. The player wants to attack both PzIVHs. All rocket attacks must be pre-declared.

Any combination can be used on any of the hexes; the player chooses to attack each PzIVH four times. Four TH attempts are made at the PzIVH in L3 from P1. Each rocket is fired at a 4 hex range (7-12 aerial range), and a DR ≤ 3 is required for a hit (Base 8 (Red TH #s); +3 VTT, +2 Motion). A DR ≤ 7 is required for an effect (Base TK# 8; -2 Aerial AF, +1 Aerial Advantage). When the 42 GA reaches N2 it attacks the PzIV in J4 with the same TH/TK modifiers except that this PzIV is not moving, and thus would be hit on a DR ≤ 5 .

NOTE: On both Examples 3 and 4, any TH DR of 12 immediately ends the rocket attack and any remaining rockets that have not yet been fired are considered to have been jettisoned.

Example 5:

German 42 FB without bombs and Russian 42 GA with bombs and rockets in Aerial Combat.



The German 42 FB without bombs entered Aerial Combat with the Russian 42 GA Aircraft with bombs and rockets (*note that only an undamaged fighter bomber may voluntarily enter Aerial Combat; E7.22*). The 42 FB is the ATTACKER and attacks first. The DRM for the attack are: -1 Target has bombs, -1 Target has rockets, -1 Target is not a FB. Thus, the Russian 42 GA is Eliminated on a DR ≤ 7 and Damaged on a DR of 8. The FB has a ROF 2, and if maintained, may continue to attack without itself being attacked. If the 42 FB rolled an 11 on any of its attacks, it would be Damaged/Eliminated by the Rear MG per E7.221.

Assume the 42 GA survived the 42 FB attacks, and now has the opportunity to attack. The DRM are: +1 Firer has bombs, +1 Firer has rockets, +1 Firer is GA. The Russian Sturmovick GA only has ROF when it has no Bombs or Rockets on board.

AIRCRAFT NOTES:

(1) HENSCHEL Hs-129: This aircraft was specifically designed as a tank destroying aircraft, and nicknamed the “Panzerknacker” (tank cracker). Several prototypes were developed in 1941 with accepted versions reaching the front line in May 1942. Two major types were designed, the B1 and B2, which differed only slightly, and were delivered at roughly the same time. The Hs-129 relied more on the various gun configurations than bombs. The models represent the various weapons configurations which included machineguns, 20mm, and 30mm cannons.

(2) JU-87G STUKA: Experimental flights of this “tankbusting” Stuka began in March 1943. The first significant combat use was during Operational Citadel in July 1943, but otherwise this aircraft remained a rare commodity. This aircraft was used throughout the war almost exclusively on the East Front. The “G” model is basically a “D” model with the bomb racks and

forward MGs removed; two heavy 37mm guns replaced the bomb racks, and at least one MG was fitted to fire forward to help site the guns, strafe ground targets, and provide some air-to-air self defense. The weight of the guns did not allow the conventional dive-bombing that had made the Stuka famous, thus this model does not automatically pin infantry with a point attack. Each of the 37mm guns carried between 12-16 rounds. The rounds were composed of a special high quality tungsten which provided excellent penetration of armored targets.

(3) IL-2 STORMOVIKS: Stormoviks were aircraft specifically designed as ground attack aircraft. In 1942 they were redesigned as a two-seater with a rear .50 caliber machinegun. Although relatively slow, they were well armored and armed, earning them the nickname of “flying tank”. They were very effective against ground targets, but took losses to anti-aircraft fire because they attacked low and slow. Additionally, they were also vulnerable to German fighter bombers. The 37mm cannon version was essentially designed for the battle at Kursk.

(4) ANTITANK CLUSTER BOMBS: Both the Germans and Russians used various forms of cluster bombs. These differed from conventional bombs in that instead of impacting as one large explosion, numerous “grenade” type bomblets discharged at a certain height. The Russian versions, called PTAB, contained up to 192 bomblets. The German version, called the butterfly bomb, contained up to 108 bomblets. Although used earlier, versions of cluster bombs that would be effective against frontline troops were not used until 1943. The TH procedure for a cluster and conventional bomb is relatively similar. The IFT DRMs differ because bomblets affect the target in a much different manner. Overhead cover such as trees and buildings significantly reduced their effects.

(5) CLUSTER BOMB CH: Clusterbomb Critical Hits are different from conventional Critical Hits for several reasons. The number of bomblets falling over an area significantly increases the chance one will land directly in a foxhole, window, etc. However, because of their generally small size compared to a normal bomb, the effects are not as devastating.





BFP3 Errata and Clarifications (as of October 2011)

BFP3 Aircraft Notes Errata

Page BFP 10 (example of play 4): The sentence, “The second way a hit could be achieved is with an Original DR of 4 by disregarding the Light Jungle TEM” is incorrect. The sentence should state, “The second way a hit could be achieved is with an Original DR of 6 by disregarding the Light Jungle TEM”.

For clarification, the second way to achieve an effect is if in ignoring the Light Jungle TEM (+1 NA), a hit is achieved, then the attack is still a Vehicle Target Type attack (the ATT reference only impacting the base FP or TK value) with a base TH # at 7-12 hex range of “9”. Since it is still a VTT you must apply the VTT modifier (+3) for this “Tiny Tim” attack = net +3, so a “6” on the original DR will achieve a Hit. On the TK modifier you would have a base TK of 8 (1/2 value for now being an “ATT-like” attack) with +1 for Aerial, -0 Aerial AF, and -1 for TEM for a Final TK of 8.

Page BFP 10 (example of play 5): The second to last sentence, “The DRM are as follows: +1 Firer has bombs” should also include an additional DRM of +1 for GA (ref. BFP Aircraft 2.3). The sentence should state, “The DRM are as follows: +1 Firer has bombs, +1 Firer is GA”.

