

Watch Algy Dogfight!

Rules for gaming WW1 Aerial Combat

*using
miniatures on a tabletop
and
beer in a hand*

INTRODUCTION

This is meant to be a lighthearted, beer&pretzel-style game that combines elements of Mike Clinton's "Watch Your Six", TFL's "Algernon Pulls it Off" (et al), and my own "Dogfight!" rules into something that will (hopefully) produce a couple hours of fun rolling dice and pushing little airplane models around on a tabletop --the beer drinking part is optional...I suppose a decent cognac could substitute. The elements I used were: The Pilot Points from Mike (so that players have to choose a limited amount of actions for each aircraft, ie: you can't do everything equally well in a single turn), the Activation Deck and Big Man from TFL (so that players don't know when they will get a chance to move, and certain key characters play a decisive role in the action), and my own Fog of Movement (so that players --even when they get a turn-- aren't sure that their well-laid plans will be executed with precision by the little fellows under their command) as well as my Engagement Zones that leave the details / specifics of the flying to the little fellows in the models. A fair amount of uncertainty, for sure --control freaks probably won't like it. For others, the decisions that need to be made (like "Where to go?" or "Who to attack?") are simple enough that they can be tackled with one hand --leaving the other free to hold the beer...

DISCLAIMER

I am not a professional game designer, nor an expert (or even authority) on aircombat --I am an amateur tinkerer who messes with this sort of thing for fun, and only hope that the results of my efforts may bring some fun to others. My use of (-sounds so much better than "theft of"...) the ideas of both Mike and the crew at TFL is not, I hope, seen as anything other than flattery --or at the least, that my abuse of their ideas is not seen as an indictment of the value in their own systems. In short: this is all my fault, and if anyone doesn't like what they see here, the blame should be laid at my feet and not spread to those who (whom...?) I credit inspiration to.

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PIECES - PARTS

Stuff you'll need to play the game...

1. Something to represent the airplanes. Models are assumed --though the game can, I suppose, be played using the counters found in boardgames, or pieces of wood...or very small stones...or a duck. Facets of each aircraft's status that will need to be displayed include: climbing or diving, maneuvering in a hex, and current speed. For the first two, pitching or banking the model, respectively, works well to communicate the ideas --though markers of some sort would suffice. The same goes for speed: an adjustable dial or scale on the stand itself is handy, but something as simple as a die placed next to the aircraft works as well. Each aircraft should also have some sort of identifying label (number, letter, ...?) for use in the turn sequencing draw, as well as a tag or marker to indicate if/when it is attached to a group. As far as the size of the aircraft pieces goes, the bigger the models (or whatever) chosen to play with, the more space will be needed to play, which leads to...

2. Somewhere to play = A surface with a hexgrid laid out upon it to regulate movement. Because any number of aircraft can occupy a single hex (which, in this game, represents an "engagement area" within which all occupying aircraft are assumed to be within effective combat range of one another), the spaces should be fairly large: big enough to hold at least four aircraft comfortably...six or eight is even better. If a mat is already available with a one-plane-per-hex -sized grid, a larger grid can be easily laid out using tape or other somesuch temporary / removable marking at the corners of larger hexes using the existing grid as a guide. Since the grid is not used for line-of-sight or similar thing that would require accurate alignment, a crude drawing / sketch would suffice (chalk on the dining room table, perhaps...?). A minimum of a six-by-six hex area is recommended --though bigger is always better in a genre whose arena is airspace! As to the possible need to fit large numbers of aircraft into a single hex should a popular furball occur during a game: separate, larger hexes can be made / used as sideboards (ala "Axis and Allies" battleboards) to hold the contents of such a hex. Since airplanes can go up and down in addition to side to side, you'll also need to have...

3. Someway to display altitude. This can be stands with telescoping or interchangeable rods, some sort of dial / scale on the stand, or just a die or chit placed next to the aircraft. While recording / tracking altitude can be done in a written log of some sort, the drag this places on play (by having players constantly inquire of each other as to the altitude of this or that aircraft) is worth avoiding at the cost of coming up with something that is open to public viewing. The game could be played without altitude, I suppose --but if that's the road desired I recommend / suggest you take a look at my "Skating Penguins" game that was made to address that very need. As far as other stuff needed for this game, all that's left is...

4. Assorted bits of gaming bric-a-brac = An aircraft log / reference card printed up for each player, dice (six-sided, of at least two different colors), and an activation deck to draw from for turn sequencing. The activation deck can be built from a pair of regular playing-card decks (two needed to get a pair of each card) with a side-sheet to denote which card means what, or a set of same marked to indicate their purpose, or a custom-made / printed set of cards. Since the Factory's brawl tradition includes drawing chits from a battered old hat, I made some chits from an old bingo set that I draw from my flying helmet --helps the ambiance, wot? The details of the cards are covered in the ACTIVATION DECK section of the rules.

AIRCRAFT LOG / STATS

The information contained on the log includes:

Aircraft Type: Name of the plane the model represents (eg: SPAD 7, SE5a, or Fokker D-VII).

Section: Label used to identify the section the Leader / player controls (eg: letter or color).

ID# : Label used to identify the model for turn activation (eg: letter or number).

Speeds: Minimum, Maximum level and dive speeds for the aircraft type. Range = 0 to 13.
The speed scale used for the game has 0 = 34mph, and each additional point = ~11mph.

Power / Drag: Modifiers to apply to power or drag rolls. Range = -2 to +1.
Power is roughly based on power ratio, and Drag is based (equally roughly) on drag area.

Climb: Modifier to climbing ability (applied to MP allotment). Range = -2 to +2.
Modifier = Climb rate: -2 = <250fpm, -1 = 250-500fpm, +1 = 1000-1500fpm, +2 = >1500fpm.

Spin: Modifier to spin / stall roll. Range = -1 to +1.
Most aircraft should be a 0. Those with gentle stalls (eg: Fokker D-VII or Dr-I) should be +1, and those that are particularly nasty (eg: Camel) should be -1.

Pilot: See "PILOT POINTS" pg.3. Range = 1 to 10.

Crew: See "CREW POINTS" pg.3. Range = 1 to 10.

Move: See "MOVEMENT DICE" pg.3.

Dogfight: See "DOGFIGHT DICE" pg. 3.

Gun / Crew Gun: Number of dice to roll for attack. Range = 1 to 6.
A single gun firing ~450rpm is generally worth two dice. An unsynchronized Lewis or CC-synched Vickers (firing 650+rpm) would be worth three dice.

Ammo: Number of times a limited-ammo gun can fire before requiring reload. Range = 2 to 5.
Each point would be worth ~2 seconds of fire, therefore a Hotchkiss clip would be 2, an early Lewis drum 3, and a double Lewis drum 5.

Damage: Amount of damage taken before suffering result of marked row. Range = 2 to 10.
Strong / sturdy aircraft (eg: SPAD) should have ten, eight, eight, and six boxes (top to bottom rows); weaker / more fragile aircraft (eg: Nieuport 11) should have seven, five, five and three boxes.

Notes: Space to note results of critical hits or anything else of interest.

The ranges given above are meant as guidelines only: the availability of hard-and-fast data on aircraft of the era is scarce at best. Since this is not intended to be a serious, simulation-style game, historical fidelity in regards to assigning ratings for aircraft should take a back seat to the fun they generate in playing the game. Effort should be directed at creating good relative ratings between the aircraft instead of towards strict accuracy. Anyone interested in my opinion as to what numbers to use may drop me a line and I will provide it. The bottom line is: If all players involved agree on the numbers used, then it's okay.

PILOT POINTS

Pilot Points represent the available attention / energy of the little fellow in the cockpit for actions / tasks in each turn. The number of points allotted to any given pilot is indicative of their experience and/or ability: rookies / poor fliers have fewer points than veterans / hot sticks. One or two should be given to raw rookies / hopeless klutzes, three or four to an average pilot, five or six to a veteran, and seven or eight to an ace / hotshot. The numbers can be varied / adjusted to suit personal taste and/or specific scenario requirements.

How and when a player uses / pays Pilot Points indicates what that pilot is concentrating on during that particular turn: either handling the aircraft or lining up a shot or keeping an eye out for bad guys who are trying to put holes in him. Only the best pilots can do all of them in a single turn (and even then with only a so-so degree of effectiveness) --the average pilot can only apply his efforts to one or at best two things each turn, and it is up to the player to choose what those things will be. Without the use of Pilot Points an aircraft can perform fairly well (given lucky dice rolls...), but will most likely not do anything remarkable and will most certainly fall victim to the first gremlin that rises up to remind the player that fate is an unfeeling, coldhearted PITA...ie: it pays to have a Pilot Point in reserve for unexpected mishaps.

Each Point can be used only once per turn for a single task. The uses for the Points include:

- Roll for: Combat (attack), reloading or unjamming guns, and reforming.
- Pay* to: Buy extra activation card, avoid movement failure, modify post-maneuvering exit side, modify stall/spin roll, reduce opponent's attack dice, avoid gun jam, and fire flare.

**to pay a point, no rolling is required: to gain the desired effect, the point is simply lost for the remainder of that turn the same as if a die were rolled.*

The full allotment of points is restored at the beginning of each turn (minus wounds / damage).

The number of points available / used by an aircraft will have to be tracked through each turn. This can be done on the aircraft log (erasing is a pain...maybe grease pencils on logs-in-sheet-protectors?) or better: with markers / indicators on the stands.

CREW POINTS

These are similar to Pilot Points, and are assigned to and used by crewmen for tasks such as observation, photography, and combat.

MOVEMENT DICE

Movement Dice are used for testing for the success of turns and maneuvering, and represent the handiness / flying-character of an aircraft: fewer dice mean a more docile, easy-to-control machine, while more dice mean an aircraft that requires a lot of effort by the pilot to go where he wants it to go. More dice is bad.

DOGFIGHT DICE

Dogfight Dice are used for attack / defense, and represent the agility / quickness of an aircraft: fewer dice mean a dull slug, while more dice mean a dervish that can snap to a new facing in the blink of an eye. More dice is good.

GROUPS

The forces should be combined into groups of varying sizes. The smallest group is a section comprising two or three aircraft. The Leader is the best pilot in the section, ie: the one with the most Pilot Points. Two sections of three aircraft, or two or three sections of two aircraft can be combined to create a flight under the control / command of one of the section's Leaders, and two or three flights can be joined to make a squadron in a similar manner. The subgroups (sections and/or flights) retain their identity even if joined together to make a larger group. All aircraft acting as a group must be in the same hex / level and match the facing of the Leader (exception: two or more flights joined to make a squadron may occupy adjacent hexes / levels). Aircraft are detached from their group if/when they move outside the Leader's hex / level (or beyond one for flights of a squadron) and/or use Dogfight Dice to attack or Pilot Points to defend.

REMAINING ATTACHED THROUGHOUT MOVEMENT

Each aircraft in a group must succeed in its own required turning and/or maneuver rolls in order to remain attached to the group (see **MOVEMENT** section). Any aircraft that fails to move so as to remain in the same hex/level as the Leader is detached from the group. Early War Option: Attached aircraft that roll movement dice and/or make an attack must roll a six(6) on a die to remain in the group –the number of dice rolled equals the number of Pilot Points available to that aircraft (not considering any already used that turn, but minus any losses due to wounds / damage).

REFORMING

This can be done to re-establish groups that have been disbanded and/or separated. Only those aircraft that began the game in a group may be reformed into that group.

The group's original Leader may order the reform of a dispersed group. When activated, he may pay two Pilot Points to fire a flare. The flare remains in play that turn and through the following two turns. Any aircraft from the appropriate group may, upon their activation later that turn or in the next two, attempt to reform by rolling a six(6) on a die using as many of its Pilot Points as it chooses to but a die to roll (subtract one die for every two hexes and/or levels that separate it from the Leader, and double the number of dice if in the same hex/level as the Leader). If successful, the aircraft is considered to be part of the group and activates upon the future draw of the Leader's cards. If not in the Leader's hex / level, the newly attached aircraft must move on every successive activation to move to reach the Leader's hex / level.

An aircraft that has become separated from its group may rejoin it by spotting its Leader. Before moving, the aircraft spots the Leader by rolling a six(6) on a die using as many of its Pilot Points to buy them as it chooses (subtract one die for every two hexes and/or levels that separate it from the Leader, double the dice if in the same hex/level as the Leader, and halve the resulting number of dice if the Leader is maneuvering). If the spotting succeeds, the aircraft is immediately considered attached and activates upon the future draw of the Leader's cards.

GROUP MARKING

Each aircraft that is attached to a Leader's group should be marked in some way to indicate that status. Example: I use little colored magnet-pieces that are coded to each Leader that can be easily added / removed during the game.

ACTIVATION DECK

The turn sequence is determined by drawing cards from a deck. The deck is built at the beginning of each turn from the cards described below: the description includes when and how many of a particular card to include. A turn consists of all the moves / actions taken in the course of drawing down through the entire deck.

Aircraft Cards are for a group's Followers and should be included in the deck if, during the previous turn, they have become or are separated from their Leader. The player may also voluntarily choose to detach an aircraft from its group at the beginning of the turn when the deck is built. One Aircraft Card is placed in the deck for each qualifying (unattached) aircraft; a second Aircraft Card may be placed in the deck if the Follower pays three Pilot Points at the beginning of the turn when the deck is built. When a card is drawn the aircraft is activated: it may move, shoot, reload or unjam guns, and/or reform.

Section Cards are for the Leaders and are always included in the deck (provided he's still alive, of course!) unless his section has attached / subordinated itself to another section (creating a flight) --the same would apply if one or more other flights are joined to create a squadron. A section within a flight (or flight within a squadron) is considered separated from the larger group --or may voluntarily detach itself-- in the same way individual aircraft are/do, and may then act as a group unless/until its own elements (aircraft or sections) separate via movement or combat or choice. Two Section Cards are placed in the deck for each qualifying (unsubordinated) section; a third Section Card may be placed in the deck if the Leader pays three Pilot Points at the beginning of the turn when the deck is built. When a card is drawn the Leader is activated: he may move, shoot, reload or unjam guns, and/or signal a reform. After the Leader has moved, any aircraft attached to him (either as section or flight or squadron) are also moved. If an aircraft (or subgroup) moves away from the Leader (ie: into a different hex / level / facing) or uses Dogfight Dice in attack or Pilot Points in defense it is immediately detached from the group and therefore will not be activated if, later in the turn, another of the group's Leader's cards is drawn.

Pilot Cards (one for each side) are always included in the deck. When the card is drawn, the aircraft on that side with the highest number of remaining Pilot Points is activated. If a tie, the one at the greater altitude (or if the same height: greater speed) is chosen. If all factors are equal, resolve with a simple roll-off.

Group Cards (one for each side) are always included in the deck. When the card is drawn the section, flight, or squadron whose Leader has the highest number of remaining Pilot Points is activated -ties are resolved as with the Pilot Cards. If there is no currently formed group for that side, ignore the draw.

High Flight Card is always included in the deck. When the card is drawn, the group (or if none: aircraft) at the greatest altitude is activated --ties are resolved with Pilot Points, speed, or roll-off.

Archie Cards are always included in the deck if ground and/or AA fire is part of the scenario. The number and type of cards included is up to the GM / scenario designer. When the card is drawn, any qualifying infantry or AA unit may fire at aircraft within range.

MOVEMENT

MOVEMENT POINTS

Upon activation roll 1d and add to the current speed to determine how many MP *must be* used.

Die roll + speed: < 4 = **0** MP, 4 - 6 = **1** MP, 7 - 9 = **2** MP, 10 - 12 = **3** MP, and 13+ = **4** MP

GROUPS: One roll is made for the Leader and added to each aircraft's speed. (Exception: An aircraft attached via reforming but distant from the Leader will roll its own MP.)

NOT SO FAST! : An aircraft not wishing to use all of its mandated MP may pay two Pilot Points to reduce its allocation of MP by one. This may only be done once per activation.

HORIZONTAL MOVEMENT: HEX-to-HEX

Aircraft must move to the adjacent, faced hex - cost = 1MP. (Exception: MANEUVERING)

Turns are done concurrently with a move into a hex (ie: the aircraft is faced in the new hex).

MANEUVERING: REMAINING IN A HEX

Instead of moving into the adjacent hex, an aircraft may remain in its current hex - cost = 1MP.

While maneuvering the aircraft has no facing - the model should be banked / marked to indicate its maneuvering status. To leave the hex, the aircraft must either use one MP to face an adjacent hex of the player's choice, or use one MP to move into a randomly-determined adjacent hex. In the latter case Pilot Points may be paid to modify the exit hexside (1pt / side).

MOVEMENT TEST

Many turns and all maneuvering require a roll of the aircraft's Movement Dice to succeed.

The table below shows the failure chances and speed costs for tests at different speeds:

SPEED:	0 - 3	4 - 6	7 - 9	10+
60°turn	no test req'd	no test req'd	fail on 1s	fail on 1s & 2s -1 speed
120°turn	no test req'd	fail on 1s	fail on 1s & 2s -1 speed	fail on 1s, 2s & 3s -3 speed
180°turn	fail on 1s	fail on 1s & 2s -1 speed	fail on 1s, 2s & 3s -3 speed	not allowed
Maneuvering	fail on 1s	fail on 1s	fail on 1s & 2s -1 speed	fail on 1s, 2s, & 3s -3 speed

Each failure results in the aircraft turning one less hexside than desired, or –if maneuvering- in the aircraft moving out of the hex into a randomly-determined adjacent hex. A point of speed is lost for each extra failure. Pilot Points may be paid to cancel any failures.

Any sixes rolled while turning or maneuvering in a hex count as a bonus Dogfight Die in combat for the current activation if the target is in the same hex as the turn / maneuvering.

VERTICAL MOVEMENT: LEVEL-to-LEVEL

An aircraft pays one MP for each level it moves to.

The speed cost / gain for moving vertically is based on an aircraft's current MP-allowance:

MP 0 = **n/a** (1*). MP 1 = **n/a** (2). MP 2 = **3** (1). MP 3 = **2** (1). MP 4 = **1** (0)

* dive only – no climb allowed at MP 0

The first, bold number is the number of speed points lost / gained by a climb / dive into the adjacent level. The second number (in parenthesis) is the number of speed points lost / gained by a half-level climb / dive (see below).

An aircraft may, if desired, use the speed cost / gain from an MP less than its own allowance.

Half-Level Climb / Dive: Instead of moving a full level a player may choose to make two half-level moves in two successive activations. On the first, the model is marked to indicate its climbing / diving status and loses / gains the number of speed points shown in parenthesis. The aircraft is still considered to be in its current level. On its next activation the aircraft *must* complete the move into the adjacent level (losing / gaining the half-level speed cost indicated by its *current* MP allowance) and the model is returned to a level state. No MP cost for vertical movement is incurred for such half-level moves. An aircraft may make a normal, full-level move on its second activation to complete the climb / dive, but moves into the next level as if it began in the usual, non-climbing / diving state (ie: losing / gaining speed points and paying one MP for the move) --it does not retain its half-level status after moving to the new level.

CLIMBING AND DIVING IN THE SAME ACTIVATION

Aircraft that attempt both must pay the costs for each as if the single MP-usage were for the entire activation. An aircraft that attempts to dive using another MP in the same activation after using one for climbing must roll its Movement Dice as in a 120° turn --any 1s not cancelled by Pilot Points prohibit the action and cost the aircraft one speed point. An aircraft that attempts to climb using another MP in the same activation after diving must roll as described above with a -1 penalty on each die --any failures not cancelled by Pilot Points prohibit the action, and the aircraft must take a Stress Test whether it succeeds or not --and all uncancelled failures are counted as -1 modifiers to the Stress Test.

STRESS TEST

Stress Tests are required for aircraft that:

- Climb in the same activation after diving
- End a move at a speed greater than their maximum dive speed
- Roll Movement Dice at a speed greater than their maximum level speed
- Roll Movement Dice after all of their damage-box rows have one mark
- Have all of the damage-box rows double-marked (test on each activation)

Roll 2d: <2 = dead. 2 = mark current and next damage rows. 3-4 = mark current damage row.

Modifiers: -1 per row of marked damage boxes, -2 per row of double-marked damage boxes, -1 per point of speed above max dive, and -1 per uncancelled failure of a climb-after-dive.

Tests should be made after movement and before any combat is resolved.

SPEED GAIN / LOSS

Speed may be gained by diving and/or by applying power. To gain speed via power, roll 1d at the end of an aircraft's move and apply its power modifier (including any from current damage): the aircraft gains one point of speed on a roll greater than two, and gains two points of speed on a roll greater than six. Power may not be used to increase speed beyond the maximum level speed.

Speed may be lost by failing a Movement Dice roll, by climbing, and/or by applying drag. To lose speed via drag, roll 1d at the end of an aircraft's move and apply its drag modifier* : the aircraft loses one point of speed on a roll greater than two, and loses two points of speed on a roll greater than six. Any non-diving aircraft ending its turn above its maximum level speed must roll for drag.

* if the aircraft dove this activation, subtract the number of speed points gained in the dive.

STALL / SPIN

An aircraft that ends its move at its minimum speed or less must roll to see if it stalls or spins.

Roll 1d and modify with aircraft's spin rating: @ minimum: 1 = spin, 2 - 3 = stall, 4+ = no effect.

@ <minimum: 1 - 3 = spin, 4+ = stall

A player may pay Pilot Points to gain bonuses / penalties to the roll at the cost of one point per \pm modifier.

Spinning aircraft are marked as such, their speed is set to minimum-1, and are marked to indicate a half-level dive (but gain no speed). On subsequent activation(s) the player may attempt to recover. If recovery is not made, move the aircraft down one level and change the pitch to level (no speed gain). On the next activation (if no recovery) mark the model as in the beginning of the spin and continue the process of marking / moving on alternate activations until either recovery is accomplished or the aircraft moves down from level 0 (ie: crashes).

Recovery is made by rolling a 6 on a die. Each die costs one Pilot Point. A player may roll as many as desired, though only one roll is allowed per activation and all dice must be rolled at the same time.

Aircraft that recover are marked in a half-level dive or moved down a level the same as if no recovery was made (but do gain one point of speed), and the facing is set randomly. If a Pilot Point is paid, the facing side is randomized between three (adjacent) sides of the player's choice. If two Pilot Points are paid, the player may choose the facing.

Stalled aircraft are marked to indicate a half-level dive (but no speed gain). If the aircraft was maneuvering at the time of the stall, its facing is determined randomly as detailed above for aircraft recovering from a spin (including Pilot Point modifiers). On the aircraft's next activation it is not considered stalled, but it must continue the dive into the next level as detailed previously in VERTICAL MOVEMENT describing half-level moves.

Both spinning and stalled aircraft are immediately detached from any group, and may not perform any other action, including: combat, reloading or unjamming guns, or reforming.

COMBAT

Combat is done by having the firing aircraft roll its attack dice: any 6s scored are potential hits.

To attack, an aircraft must, at the end of its move, be either in the same hex as the target or in an adjacent hex and facing the target's hex. (If in an adjacent hex and maneuvering the aircraft may not fire.) The attacking aircraft must also be in the same level unless it is in a half-level-move dive in the level immediately above the target's level. An aircraft in a half-level dive or climb in the same level as its target may not fire unless the target is in the same state.

For crew-guns: In cases where the target aircraft is in the same level rear-mounted guns may only fire at aircraft that are in the same hex or in one of the three hexes to the rear. If the target aircraft is in a half-level dive in the level above, crew-guns may fire into the same or any adjacent hex.

ATTACK DICE

The dice available for the firing aircraft consist of:

- Gun Dice. A player may choose as many as desired up to the maximum available shown in the Aircraft Log. At least one gun die must be used to attack (after all modifications below).
- Dogfight Dice. A player may choose as many as desired up to the maximum available shown in the Aircraft Log only if the aircraft is currently maneuvering in the hex. A bonus Dogfight Die is awarded for any six(6) rolled on that activation's movement test in the hex.
- Pilot / Crew Points. A player may buy as many dice as desired (cost = one point per die).

The number of dice is reduced by the Dogfight Dice of the target if the target is maneuvering.

For Crew-guns, subtract the firing aircraft's Dogfight Dice if the firing aircraft is maneuvering.

The target may pay some/all of its available Pilot Points to reduce the number of attack dice. The number of points used may not exceed its available Dogfight Dice +1. Only one aircraft's attack dice may be reduced in the manner per activation.

The attack dice are then modified by the following factors:

Bonuses - Add half of the number of dice if firer: did not move any hexes or (full)levels, and/or dove or is in a half-level dive from the level above this activation.

Penalties - Subtract half the number of dice if firer: moved more than one hex or level, is not maneuvering and is taking a front or side-shot, and/or is in an adjacent hex.

NOTE: All halving should be rounded up (exception: half of one die is rounded to zero).

Also: Bonuses and Penalties should offset each other, ie: if one of each is applicable simply ignore them rather than go through multiple steps of adding / subtracting.

SPECIAL: Crew-gunned Target – If target aircraft has a Crew-gun it may fire simultaneously at the attacking aircraft (as per normal fire with the usual restrictions / modifiers). The attacker may cancel the Crew-gun Dice with its own Dogfight Dice and/or Pilot Points.

DAMAGE

If the number of 6s rolled on the attack dice equals the number of hits on the target aircraft. Roll 1d for each hit: a result of 1 - 5 indicates the number of damage boxes to be marked on the target's Aircraft Log, and a result of 6 indicates a critical hit (roll again on table below).

Hits for Crits: Three normal hits may be traded for a single roll on the Critical Hit table. This choice must be made prior to rolling for any damage.

Aircraft that suffer hits should mark off the Damage boxes (if any) before resolving the criticals. The top row should be filled before marking any boxes in the row beneath it, and so on down the rows. When all have one mark, repeat from the top adding a second mark. As each row is completed, the aircraft suffers the effects listed at the end of the row:

- Move. The number of dice used to test for turns or maneuvering is increased by one.
- Pilot. The number of points available each turn is reduced by one. NOTE: This is different from the "Pilot " critical hit - this damage represents the greater demand placed upon the pilot due to general damage to the aircraft, while the critical hit is representative of the pilot being wounded. Wounds should be shown by filling in boxes, and this effect by marking the boxes.
- Dive. Reduce the maximum dive speed by one (but not beyond the minimum speed).

CRITICAL HIT TABLE:

- 1 = Engine.* Destroyed. No power rolls allowed, and must roll for drag on each activation.
- 2 = Fuel. Shut off engine and treat as #1 above **or** roll for fire as if smoking*.
- 3 = Engine.* -2 to all future power rolls.
- 4 = Structural. Mark off current row** of damage boxes.
- 5 = Structural. Mark off current and next row** of damage boxes.
- 6 = Pilot. Roll 1d***: 1= lose 1 Pt, 2-3 = lose ½ Pts(round up), 4-5 = lose all Pts, 6 = dead.

* Roll 1d: 4-6 = mark with smoke, lose two Pilot Points. If smoking, roll 1d now and on every future activation: 6 = mark with fire, lose two more Pilot Points, and roll 1d fire damage on each activation.

**The current row is defined as the row in which the next box that would be marked is located.

*** Add one to roll for each successive Pilot Hit. Add roll to number of Movement Dice.

JAMMING

If three 1s are rolled by the firing aircraft on its attack dice, a gun jams. Circle the GUN boxes on the Aircraft Log to indicate this status (If a two-gun aircraft, circle half) If four or more 1s are rolled, then both / all guns jam. Pilot pOINTS may be paid (on a one-for-one basis) to cancel any 1s rolled. (NOTE: Pilot Points used as attack dice DO NOT count towards jamming.)

To unjam a gun, the player must roll a 6 on a die. Each die costs one Pilot Point. Any number may be rolled, but only one roll may be made per activation and all must be rolled together. While attempting to unjam, an aircraft may take no other action beyond straight-and-level flight – if currently maneuvering, the direction of the aircraft is determined randomly. If three 1s are rolled while unjamming the gun is considered permanently broken

RELOADING

Reloading is done the same as detailed above for unjamming.