

AIRSPEED

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A PODRACING RIP-OFF GAME

BY CLIVE OLDFIELD

JET BIKE MINIS BY RAMSHACKLE GAMES

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These are rules for a mostly non-violent, jet bike, pod racer, type racing game. The vehicles are unarmed, but a bit of bumping and barging is considered to be fair racing. The assumption is that jet bike minis will be mounted on 40mm round bases, but converting to other sizes should be trivial.

The game can easily be played on a 6'x4' wargames table with a sprinkling of terrain. The course is likely to be one or more laps of the table. A 10' long course is probably about the minimum reasonable length, which fits nicely into one lap of a 6'x4' table. Bikes travel at around 20 inches per turn.

As well as a table and some models you will need eight six-sided dice (8d6) and some way of measuring angles. You can use a protractor, but purpose-built measuring sticks will make things easier.

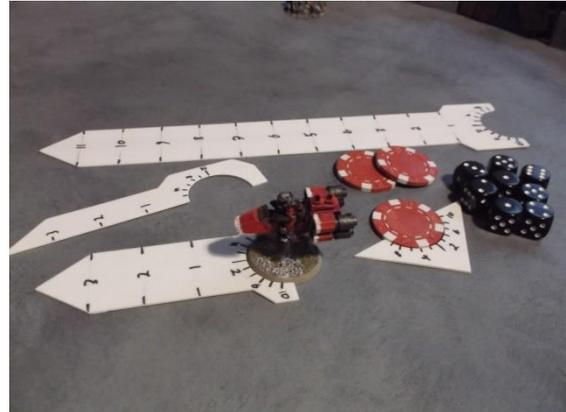
The extent of the bike is considered to be the base, regardless of the actual size and shape of the mini. It will be necessary to determine the exact direction the jet bikes are travelling. I mark the front-centre of my minis' bases with a thin black line for this purpose.

It will help to have proxy bases to represent the mini if it ends up in a position that the mini itself would not fit in conveniently. I use 41mm poker chips as these make excellent substitutes for 40mm round bases. It can also be convenient to use these as counters for tracking intended movement during a turn.

MEASURING STICKS

Here are the sticks I made for my game. The indentations fit with the round bases and are marked with lines showing a difficulty of 2 for every 15 degrees turned. They come in

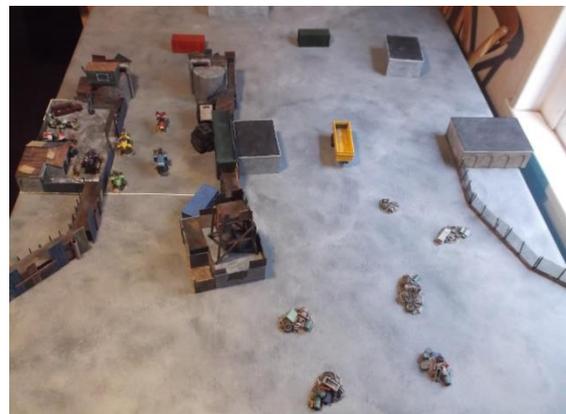
various lengths and widths to better fit in a crowded situation.



SET UP

The table should be set up not unlike a regular wargames table with a sprinkling of terrain. The players should consider how easy the course will be to fly around. This should not be made too difficult, as the difficulty should lie in flying around as fast as possible. The game is about balancing speed over certainty. The bikes are also unlikely to always fly exactly where the players want them to go, so some room for error should be built into the course.

Clearly marked start/finish line(s) are also necessary.



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What happens at the edge of the table will need to be defined. The simplest way is to treat anything off the table as impassable terrain. If it is treated as in-play, you will need a spare bit of table to accommodate bikes that stray off the main board.

THE DRIVING POOL AND THE DRIVING ROLL

The driving pool is a number of (usually 8) d6s that are rolled when making a driving roll. A driving roll includes manoeuvre rolls, bump rolls, and collisions rolls.

Simply roll the pool, and adjust for any handling bonus the bike has, and if the result is the same or greater than the target then the roll is a success. If it is less, then the roll is a failure.

The pool should be reduced by one dice if the jet bike is flying over low terrain, or touching impassable terrain it has collided with.

The pool is reduced by one dice when making a roll having already failed a driving roll in the same phase.

The pool size is never reduced voluntarily, ie the player must always throw the maximum dice he is allowed.

The pool's total may be manipulated by use of the skill dice mechanic. See 'Skill Dice.'

START SPEED, SPEED AND SPEED LOSS

Start speed is the speed at which a bike starts each turn before applying acceleration. It is therefore the slowest speed a bike can go in that turn. Once acceleration has been applied to the start speed, this is the speed the bike travels during the turn, and the number of inches it will move. Speed loss is how much speed the bike loses over the course of the turn.

Note that speed is used as the base difficulty for all the driving rolls that the jet bike will make. This is always the speed as described on the driving log. Speed loss is accumulated throughout the turn, but it is never applied to the actual speed of the jet bike (nor therefore driving rolls) until the bookkeeping round of the next move.

TERRAIN

There are several types of terrain, and these should be clearly defined during set up.

IMPASSABLE

Usually a rock, single large tree, densely wooded area, a high wall, or a building. These features should have a clearly defined border. A straight-ish, well-defined border is handy for determining types of collision, but of course, rocky outcrops and the like rarely come with straight lines.

LOW

Low terrain will damage and/or slow a jet bike but it can otherwise be crossed. A bike can 'hop' over low terrain, and if it clears the entire feature will suffer no ill-effects. If it touches any of the feature then it will suffer the full effects. There are two types of low terrain, damaging and slowing.

As well as the effects described below, flying over any low terrain makes it more difficult to manoeuvre. When making any driving roll while the bike's base is touching low terrain, lose a dice from the driving pool.

LOW, DAMAGING

Low damaging terrain can be an area of short-ish plants and trees, a low wall or fence, some uneven ground, a pile of rubbish, etc. Flying over these will cause 1d6 damage per turn. These features can be hopped over with a suitable manoeuvre. If the hop fails then full damage is taken, if the entire feature is cleared by a hop (or series of hops) then no

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damage is taken. Note that any damage done to a bike will also effectively slow the bike, too, i.e. any damage taken is also added to the speed loss for that turn.

LOW, SLOWING

Very soft ground, some uneven ground, water features, or no ground at all below a bike (a ravine, for example) will slow the vehicle. A bike travelling over slowing terrain at any point during the turn will suffer 1d6 speed loss. Hopping entirely over the feature will avoid the speed loss.

THE START

There are a number of ways to determine the start order of a race. A qualifying lap, a position in a campaign, etc, can all be used. The simplest way is to have a dice-roll-off. The winner positions their bike first, and the next player must place their bike behind the first, etc. A bike cannot be placed within three inches of any other bikes.

MOVE ORDER

The turn starts when the first player has their move, and ends after the final player has their move.

Through the course of the game the turn-order can change. Each turn the player leading the race will go first, then the next player, next, etc, going through the field until everyone has had a move.

Determining this order is not always as straight-forward as it sounds. Turn order between two bikes can be agreed upon between the relevant parties for the convenience of both players, i.e. one player who may be leading the other can effectively say, 'after you.' This may be because both players consider that going in strict turn order may be dangerous to both their vehicles, or potentially mess up their strategies. This is considered to be fair and good racing practice.

And groups of more than two can agree among themselves which order to go in. However, anyone can assert that their bike will go in strict turn order. If there is a dispute then measure the shortest possible distance between each bike and the finish line.

The spirit of this rule is that players who agree with each other that they wish to avoid bumps may be given the chance to do so.

MOVES

Each player's move is split into three elements, bookkeeping, the first move phase, and the second move phase.

BOOKKEEPING

Players should know their speed from last turn, 'Speed', and how much speed they have lost since then 'Speed Loss' because they were meticulous at keeping track of it and writing it down in their driving log. They should then add 4 to the speed loss to reflect drag, and take the speed loss from last turn's speed, and record this as start speed. If the result is less than zero, then it should be adjusted to zero. If it is four or less, then it can be adjusted to zero if the driver wishes (they can put their feet down at such a low speed).

The player will then need to decide how much to accelerate. This can be anywhere from 0 to 8. They can also choose to use a nitro. To use nitro record that one is used, and then add 2d6 to the speed. This must be rolled after base acceleration is decided, and the entire nitro boost must be used. The total of start speed, nitro, and acceleration is recorded as the speed for this turn.

This may seem like a simple enough process that can be done in your head, but it is important to note down these stages methodically at the start of a player's move, and also to record any speed loss immediately as it happens over the course of the turn.

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MOVE PHASES

The first move phase and the second move phase are similar. The movement of the jet bike is merely split into two phases in order to allow for two separate manoeuvres during the course of the turn.

Move phases involve a manoeuvre and some movement. Half the total speed is moved in each phase, so a bike with a speed of 23 will move eleven and a half inches in the first move phase, and eleven and a half inches in the second move phase. If no manoeuvre is to be made, i.e. the jet bike merely continues in a straight line, no manoeuvre roll is required. The jet bike is simply advanced a number of inches equal to half its speed.

MANOEUVRES

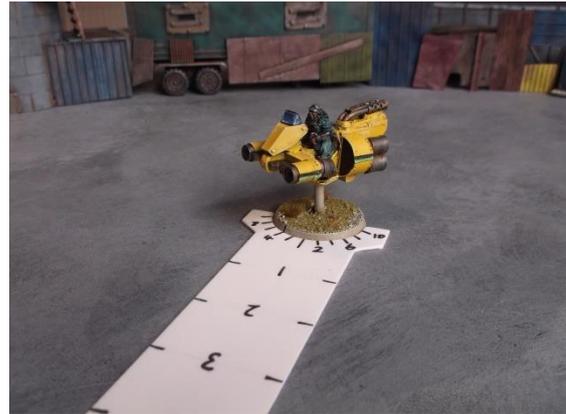
TURNS

A turn is simply rotating the jet bike to face a new direction. The most a jet bike can turn in a single move phase is 90 degrees. The exception is that if a jet bike started the turn at a speed of 0 (i.e. with a start speed of 0) and it is the first move phase, it can be faced in any direction and moved without requiring a manoeuvre roll (if no jinks or hops are made during the move).

The turn must come right at the beginning of a move phase.

For every part of 15 degrees the jet bike rotates, 2 is added to the difficulty tariff for that manoeuvre. E.g. turning up to 15 degrees is a difficulty tariff of 2, but turning more than 15 degrees, the tariff becomes 4. And more than 30 degrees, the tariff becomes 6, etc.

The further the jet bike turns, the harder the turn tariff, the more difficult it will be to roll a successful manoeuvre.



JINKS

A jink is a manoeuvre where the jet bike is moved directly to one side (i.e. at 90 degrees to the direction faced), but stays facing in the same direction. This is to represent drivers throwing their weight to one side to move the bike slightly, usually to avoid an obstacle.

The jink can take place at any part of the move, or even at several points of the move, but if there is a turn manoeuvre involved in the move phase, the jink must take place after the turn manoeuvre. E.g. if a jet bike jinks 2 inches, it might jink an inch and a half early on in the move, and not jink the final half inch until later in the move. It cannot jink in both directions (left and right) in one phase.



Each inch of jink the jet bike attempts adds 2 to the difficulty tariff. It cannot jink more than three inches in one phase. If the manoeuvre roll is failed no jinking at all takes place.

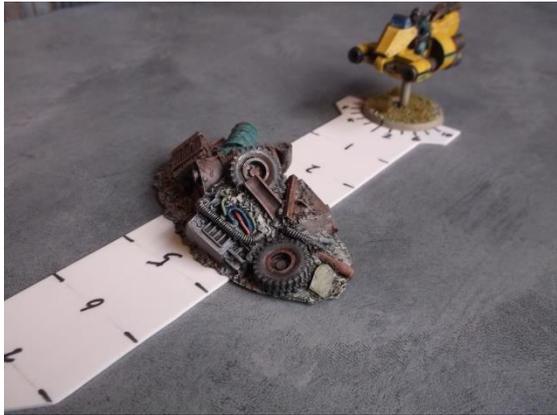
HOPS

A hop is a manoeuvre where the jet bike is coerced into traveling higher than usual. It

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stays facing the same direction and in the same position, but avoids low terrain.

The usual distance for a hop is half the normal move for that move phase. That is a quarter of the speed. But with greater difficulty, the hop can be increased to three quarters of the move distance or the full move distance.



The tariff for a normal hop is 4. It is 6 for the longer one, and 8 for the longest (the full move phase distance).

The hop can begin at any point during the move. If it is to continue beyond the current move phase then make a note of this (perhaps mark it with a dice) and the bike will begin the next phase in a hop and can continue normally. It can even make a manoeuvre during the next phase that includes a hop.

This could mean it continuing the hop without a break. So therefore it is possible to hop over even the largest low obstacles with one long continuous, but difficult, multi-phase hop.

MANOEUVRE ROLL

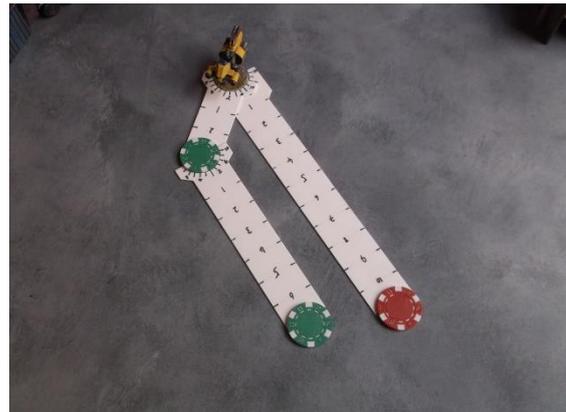
If the jet bike manoeuvres then a roll is required. The player must describe what they want the jet bike to do during that move phase, in terms of turns, jinks, and hops and the total difficulty is calculated. The player then rolls their driving pool. If they get equal to or greater than the difficulty then the manoeuvre is a success and the jet bike does exactly what the player described.

If the roll is a failure then any intended hop or jink does not happen. And if the bike was attempting to turn it will drift. It will drift by the amount the roll was failed by, or the full distance the bike was moving that phase, whichever is the shorter distance.

The amount the roll is failed by is also recorded as speed loss. This will slow the jet bike down, next turn.

DRIFTING

Drifting is done by simply moving the jet bike in the direction it is facing, before the intended turn. Once the drift is complete, the bike turns to face the intended direction. If the bike has any distance left to travel after the drift, then it completes its move in this new direction.



EXAMPLE OF A FAILED MANOEUVRE

Spoony is travelling at a speed of 18. He wishes to turn 30 degrees and jink an inch. The difficulty is 18 (for the speed) + 4 (for the turn) + 2 (for the jink) = 24. Spoony rolls a 20, however. This means he has failed by 4. He immediately notes down the 4 in the Speed Loss column of his driving log. He moves 4 inches in the direction he is facing, then he turns the thirty degrees, and completes his move phase by moving the remaining 5 inches in the new direction. He will not be able to make that jink he had planned.

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Any driving roll made in the same move phase after a failed manoeuvre roll is done with one fewer dice in the driving pool.

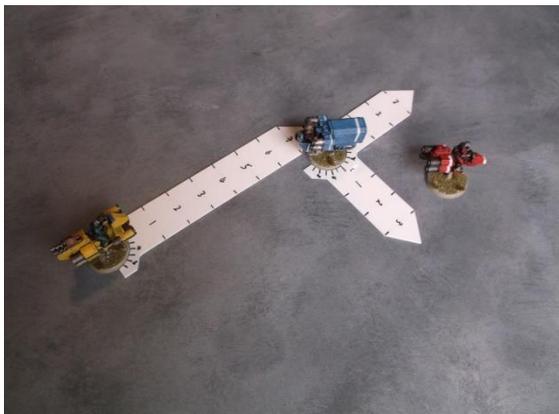
BUMPS

A bump is when one jet bike hits another. It occurs when any part of the base of a jet bike contacts the base of another bike.

Because the turn order lets the leading jet bikes go before those behind, usually the only time a bump will occur is when one bike is overtaking another. The bike which is moving is designated the aggressor, and the bike that is hit, the target.

The aggressor must make a bump roll. A bump roll is similar to a manoeuvre roll. The difficulty is 6 plus speed. If the aggressor has already failed a driving roll this phase, then it loses one dice from the driving pool.

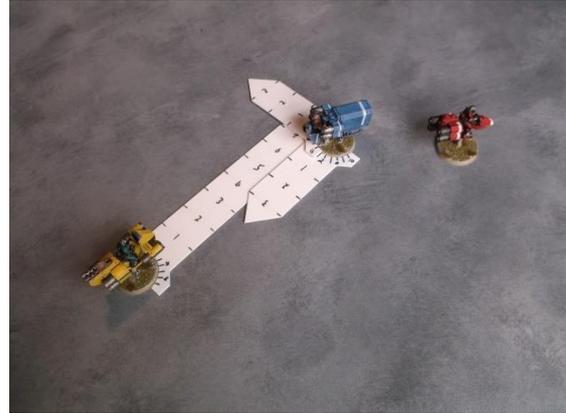
If the bump roll is successful then the target is moved 1d6 inches in a direction chosen by the aggressor. This direction must be between straight ahead (in relation to the aggressor) and 90 degrees away from the aggressor's side. E.g. if the attacker comes up the left side of the target, then the target can be moved any direction from straight ahead to 90 degrees to the right.



If the aggressor fails the bump roll then it is moved 1d6 inches in a direction chosen by the target. This direction must be between straight behind and 90 degrees to the side

(away from the target) in relation to the aggressor.

Care should be taken during these bumps not to alter the bikes' direction of travel.



Whoever wins, both bikes take 1d6 damage (make separate rolls). Any damage the bikes take is also recorded as speed loss.

After a bump the aggressor should continue their move to the full distance for that phase without taking into account the distance of any bump moves. E.g. a bike travelling at 20, moving 10 inches this phase, will end up travelling a total of 14 inches should it get bumped for 4 inches. This 4 inch bump distance is not recorded as speed loss.

Note that a bump roll is not actually a manoeuvre roll.

Failing a bump roll does not cause speed loss in the same way failing a manoeuvre roll does. The speed loss from bumping comes only from the damage caused by the bump.

Sometimes a bike will need to make more than one bump roll during the phase. These subsequent bump rolls work in a similar way to the first. But, if the bike has already failed a driving roll during the phase, it must lose one dice from its driving pool. Even if it has failed several rolls, this only ever leads to losing one dice from the pool (although it can lose additional dice for other reasons).

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Note that one purpose of the bump move is to get the bikes away from each other. The idea is to bump the bike out of the way so it can be overtaken. Therefore, if at all possible, bikes should never be bump-moved to a location that means they will be bumped by the same bike again, as it continues its normal move.

CHAIN BUMPS

If bumping a jet bike causes a bike to hit another bike then another bump occurs. This time, the bike that is moved is considered the aggressor. It is resolved in a similar way to a normal bump. The aggressor gets to make the bump roll using that bike's speed +6, reflecting that driver's ability to react in the face of a sudden bump.

Whole chain reactions of many bumps can occur, and these should be interpreted in a way that means only one bike can hit one other bike at a time. If it looks like a bike is hitting two simultaneously then roll randomly to see which one is actually hit.

If the aggressor has failed a driving roll already during this phase then it will get one fewer dice in its driving pool.

Every time a jet bike is involved in a bump it takes 1d6 damage, whether it is the aggressor or the target, whether it bumps or is bumped. Damage is rolled separately for each bike. Every time a bike takes damage from a bump it also adds that amount to its current speed loss.

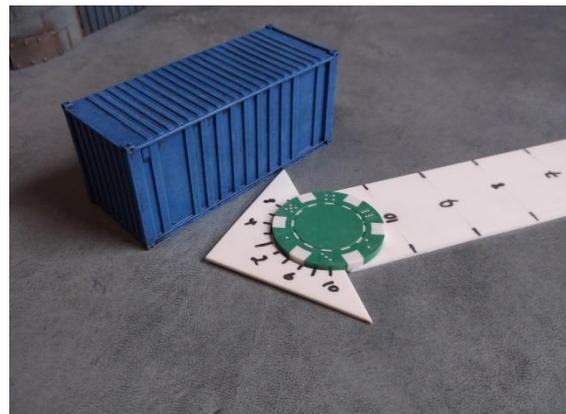
HOPPING AND BUMPING

Hopping is for clearing low terrain only. It does not clear other bikes. Jet bikes cannot move through or over another jet bike by means of a hop. If a bumped bike is currently hopping, i.e. it finished its last move while still hopping, or it is hopping during the move it hits another bike, then the hop immediately ends. So, even if it was hopping, a bike that

crosses low terrain by means of a bump move will suffer the effects of that terrain.

COLLISIONS

Jet bike bases can never be positioned on top of impassable terrain. When a jet bike hits a piece of impassable terrain this is a collision. Some collisions are considered direct, and some glancing. If the bike is pointing at more than a 45 degree angle to the edge of the terrain then it makes a direct collision. If it is travelling at less than a 45 degree angle then it makes a glancing collision. Note that this is the direction the model is pointing, not the direction it is travelling. This can be an important distinction for models being moved as a result of bumps.



It is acknowledged that it is almost impossible to adequately define the difference between direct and glancing collisions when using roundish and irregular shaped terrain. This often comes down to an 'I'll know it when I see it' sort of definition. If this is not satisfactory, then one solution is to place all

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terrain on rectangular or similarly regular-angled bases, which are then used to define the exact extent of the feature.

DIRECT COLLISIONS

Direct collisions can be dealt with the easy way or the hard way.

THE EASY WAY

On a direct collision, the jet bike must pass a collision roll at speed + 6. If it fails this test then it takes 4d6 damage. It must also stop and its speed becomes 0. It will not be able to move again until its next turn, and the start speed will be 0.

If it succeeds the collision roll then it continues as if this were a glancing collision, except it takes 2d6 damage instead of 1d6.

THE HARD WAY

On a direct collision the jet bike explodes in a ball of flames and oily smoke. The bike takes no further part in the game.

The way direct collisions are dealt with will lend a lot of flavour to the game. If you play the hard way, this makes some moves particularly fraught and tense, which is good for the game. On the other hand, you might end up with players turning up for a three hour game, and having to bow out after five minutes, which isn't always satisfactory.

GLANCING COLLISIONS

On a glancing collision the jet bike can continue its move (if necessary) as it scrapes along the piece of terrain. It doesn't change its facing, but the direction of movement follows the edge of the terrain. It takes 1d6 damage, and this amount is added to the speed loss, also.

A jet bike can therefore start its turn in contact with a piece of terrain. If it does, it can continue its route in a manner that continues the glancing collision. And if it does

so, will take another 1d6 damage. Or it may attempt to turn away from contact. If it drifts during this attempt, then it may continue to scrape along the terrain for the duration of the drift, and will therefore take 1d6 damage from this.

Any driving pools made when the bike is still touching terrain it has collided with are made with one fewer dice.

ARMOUR

Though there is no armour in the basic game, the build rules allow you to build armoured bikes, which use the following rules.

Whenever a damage dice is rolled, armour allows you to ignore that number on the dice. These levels are not cumulative. So, even with 6 armour you will still take damage whenever 1s to 5s are rolled. E.g. with armour level 3, if you take 4d6 damage for hitting a wall, and roll 1,2,3,4, you ignore the 3, and take 7 damage instead of 10.

SKILL DICE

Skill dice act as second chances for the player and represent the skill of the driver of a jet bike. Each player gets 10 dice to set aside for emergencies. After making a driving roll the player can remove a number of dice from the pool and re-roll them. This can only be done once for each pool. And during the entire game (or lap) no more than 10 dice can be re-rolled in this way.

For longer races the players can agree to have more skill dice each. For races which involve repeated laps then the skill dice should reset every lap. So in a three lap race, every player starts with 10 skill dice. As they cross the line for the next lap, the number of skill dice is reset to 10, regardless of the number of skill dice that have been used up on the previous lap.

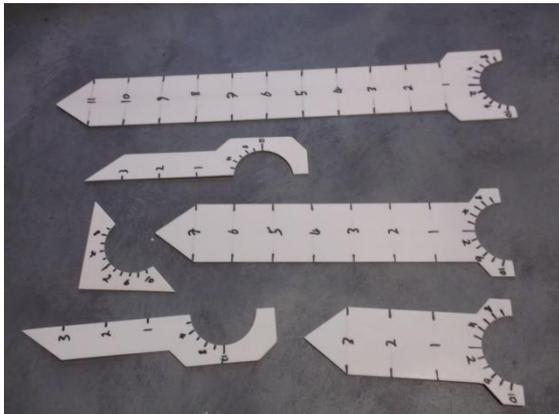
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NB. Skill dice cannot be used for nitro rolls and damage rolls, etc.

ROUND BASES, MOVEMENT, AND PROTRACTORS

Sometimes it can be fiddly to determine the exact angle the jet bike model moves. Using a rectangular base can make it easy to see what direction the model is travelling, and can help with changing angles, but can make determining collisions and bumps awkward. With round bases it can be difficult to see the exact direction, and also changing angle can be a bit vague.

My solution is to use a round base with a clearly marked direction of travel in conjunction with measuring sticks that act as protractors. I cut them in a range of lengths so that they can fit in crowded areas of the course when required.



I also use blank bases (or actually poker chips which are conveniently a similar diameter to the movement bases). These can be used to mark the stages, or potential stages, of a move phase, and can even be left in place to represent the jet bike if the situation on the table is particularly crowded or fiddly.

The smallest stick is also useful for showing the angle of impact of collisions, to help determine whether the collision is glancing or direct.

If you are going to use rectangular bases then it will help to use measuring sticks cut to the precise angles (15, 30, 45 degrees, etc).

WINNING THE RACE

Simply, the race is won by the first jet bike to cross the finish line. Things might not be as simple as that, though. The game should be played until the end of a full turn, allowing every bike the same number of turns. Therefore it is possible for more than one bike to cross the finish line in the same turn. A bike crossing the line in its first phase, finishes before a bike crossing the line in its second phase.

All jet bikes should do their full moves even after crossing the line, and keep their place marked on the table. Then all the bikes that crossed the line in the same phase can measure their distance from the finish line. Subtract their speed loss for the current turn, and the bike with the highest total is declared the winner.

Note that if you're interested in the exact finishing positions of each bike in the race, then you will need to play through until every bike that can (except perhaps the very last one) has crossed the line. In some games you might get rewards for just finishing the race, so it might be important to play through until the very last jet bike crosses the line, or crashes out.



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CUSTOM BIKES

All bikes in the basic game have the same statistics and characteristics. It is possible to build your own customised bikes using a points system.

The standard build point total for building a custom jet bike for a one-off game is 60.

Under these rules, a standard jet bike for the basic game would cost 63 build points.



HIT POINTS

In the basic game a bike can lose 20 hit points before crashing out. A custom jet bike can have any number of hit points. Each hit point costs 1 build point.

SPEED

In the basic game a bike can accelerate by up to 8 each turn. For custom bikes acceleration ratings can be bought for the following costs.

Acceleration	Build Points
10	30
9	27
8	24
7	21
6	18

HANDLING

Some bikes handle better than others. In the basic game, the handling is effectively 0, but better (or worse) handling can be purchased. Minus 1 handling means that you must subtract 1 from your driving roll total. Plus 1 handling means you add 1. So positive handling is better.

Handling	Build Points
+4	+4
+3	+3
+2	+2
+1	+1
0	0
-1	-1
-2	-2
-3	-3
-4	-4

SKILL

In the basic game each player gets 10 skill dice to reflect the skill of the driver. Playing with custom rules, skill dice can be purchased for 1 build point each.

NITRO

In the basic game a bike has 3 nitro boosts. For a custom jet bike each nitro costs 3 build points.

ARMOUR

In the basic game armour is not used but if you choose to include it in your game, you can buy it for the following costs. A bike can only have a single level of armour.

Armour Level	Cost
6	6
5	5
4	4
3	3
2	2
1	1

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CAMPAIGNS

A campaign for Airspeed involves playing a series of races to find the ultimate Airspeed champion. The rules below are intended as a guideline, and can easily be changed to suit the players.

First decide on a build cost for the jet bikes and design the bikes accordingly. I would suggest around 50 build points in order to start slowly and leave room for the bikes to improve over the course of the championship.

There is prize money for each race and that converts into extra build points, to improve the bikes. Build points will also be required to fix damage. If not enough build points are earned, or players decide to spend them elsewhere, bikes may go into races already damaged.

Players may choose to have build points left over which they can keep to spend later, to cover damage in the future, or to effectively save up for something expensive.

Build Points can only be used to buy extra items and improve existing systems or to buy new systems. Systems cannot be made worse in order to use extra points to invest elsewhere on the bike.

Decide on the number of races that will make up the championship, and the format of each race (e.g. how many laps). Players should take it in turns (dice-off for the order) to design the course for each race. If you have eight players, it would be convenient to run the championship over eight races, allowing each player to create a home course (which they can even design to suit their own jet bike if they wish).

If you have time, have a qualifying stage for each race. Each player should run a lap (or part of a lap) as quickly as they can. Make a

note of the number of moves, and use this as the basis for grid placement.

An alternative is to have jet bikes start in the order they currently lie in in the championship. A more fun alternative and a good leveller, is to use the championship order in reverse. The bike currently coming last in the championship should have first choice of start position, etc.

Position	Championship Points	Build Points
1	10	7
2	8	6
3	6	6
4	5	5
5	4	5
6	3	4
7	2	4
8	1	4

Note that for championships with many more or many fewer races you may wish to change these points for ones with a more suitable spread.

Jet bikes get no championship points at all for not finishing the race, but everyone always get the minimum build points, just for taking part in the race.

Damage stays on the bike until repaired. It costs 1 build point to repair 5 (or part thereof) damage points.

Used skill dice are replenished for free between races.

If you have a smaller number of players, say fewer than five, you might wish to consider running racing teams, i.e. each player gets to run two or more similar jet bikes in each race, which can work together. Take care to differentiate between the rival drivers on each bike.

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EXAMPLE USE OF DRIVING LOG

The driving log is deceptively useful for working out your speed and for keeping a record of speed loss. It is also a record of hit points, nitro, and skill dice available, etc. It should be updated as soon as the relevant event occurs in the game

Spoony has started the race. He has acceleration 8, and so went full acc for the first turn, and also burned a nitro. He rolled 7 and so made his first turn at speed 15.

In the second turn he reduced his speed by 4 for drag and then did full acc again for a speed of 19. Unfortunately, he got bumped by a rival and took 5 damage, which he also records as a speed loss.

So, for the third turn he reduces his start speed to 10 (19 minus 5 for the bump and 4 for drag) and then accelerates by the maximum 8 again for a speed of 18. During this turn, despite using up 1 skill dice he fails a manoeuvre roll by 3, causing him to hit a bit of terrain for 2 damage.

The next turn Spoony has a start speed of 9. He decides to do full acc again, and burn another nitro, rolling a 10. The current state of Spoony's driving log is shown below.

Basic Driving Log	<i>Spoony</i>		
HP (20)	<i>-5, -2</i>		
Nitro (3) +2d6	<i>-1, -1,</i>	Skill Dice (10)	<i>-1</i>
Speed - Speed Loss - 4	= Start Speed + Acc (8)	= Speed	Speed Loss
<i>-</i>	<i>0 + 8 + 7</i>	<i>15</i>	
<i>15 - 4</i>	<i>11 + 8</i>	<i>19</i>	<i>5</i>
<i>19 - 5 - 4</i>	<i>10 + 8</i>	<i>18</i>	<i>3, 2,</i>
<i>18 - 3 - 2 - 4</i>	<i>9 + 8 + 10</i>	<i>27</i>	