

A★C★E★S



Aerial Combat Expansion System

What is ACES?

ACES is a free, generic airborne combat system for the d20 system. Its aim is to create a fast, fun, edge-of-your-seat roleplay. It is adaptable for almost any campaign, from hippogriff-mounted knights jousting with dragons in the azure skies over a sprawling fantasy kingdom, to gritty nail-biting dogfights over war-torn Germany, to operatic battles occurring in the silent depths of space.

GM'ing a game with ACES

ACES is very simple system, with one core mechanic at heart: the pilot's Pilot Check. To keep the system simple and streamlined, it abstracts many aspects of the combat; there are no hard-and-fast rules for performing a Loop, or a Split-S as there are in some other systems. The key to using ACES successfully is to add the details in yourself, describe the way they feel frame of their aircraft shudders and vibrates under increased strain, how they can see thick oily plumes of black smoke stream from the starboard engine or how they can hear the tell-tale slow hiss of an air-seal about to disintegrate. Never let an ACES combat slow down, keep the turns ruthlessly short, and above all use ACES as a tool that encourages role-playing over mechanical details.

Adapting Vehicle Rules

ACES can, with a little work be useable with minimal conversion, with any d20 game. The main things you will need to do is assign each vehicle a Manoeuvrability Rating, which is in essence a bonus to piloting checks representing how nimble their craft is. A good rule of thumb is to award each vehicle a rating of between 0 (very slow, such as a zeppelin) to 4 (quick and mobile, such as a helicopter), but feel free to adjust up or down as necessary.

The second most important part is to rule which weapons are classified as long-range. Suitable candidates include heat-seeking or other 'homing' missiles and similar weapons designed to be able to hit at a fair distance away, as opposed to those that are designed for up close and personal use (machine guns etc.). Lastly, large craft often have a number of light weapons to defend against smaller attack craft - these should be classified as Point Defense weapons, and usually consist of small pintle mounted machine guns, or light laser cannons etc.

You may find other things will come up - don't be afraid to rule on the fly to make ACES fit your campaign.

Developing Vehicle Rules:

A full Stat-block is not necessary for each vehicle in an ACES game - the most important things to decide for each type of craft are: Size (see Scale), Manoeuvrability Rating, Hit Points, Damage Reduction (according to the materials it's made of), and what it's armed with. Adjust these as necessary to reflect the craft's role and technology level.

The Piloting Check

The core of ACES is the Pilot Check. This is to place the focus on the skill of the pilots rather than some arbitrary system of stats representing the vehicle. In ACES the vehicle is almost an extension of the pilot. The Pilot Check in ACES is:

$$\text{Pilot Check} = \text{D20} + \text{Relevant Skill} + (\text{Size Modifier}) + \text{Manoeuvrability Rating}$$

The Size modifier is only added when calculating an opposed Pilot Check. It can be found by looking up the size of the pilot's craft vs. the target craft on the Relative Size Modifier Table (Table 1.1). This represents the fact that it's easier for a small craft to hit something much larger than it, as well as it's often difficult for something much larger to hit something much smaller.

If an opposed Pilot Check results in a draw, the pilot with the higher Dexterity score wins, otherwise roll of until a winner is determined.

If a pilot rolls a natural 20 on an opposed Pilot check, then he automatically wins, unless his opponent also rolls a natural 20, in which case calculate the result normally.

The most recent Pilot Check is also used to determine a given craft's Armour Class. If a pilot hasn't established a pilot check yet (i.e. has not had his turn yet), treat it as if he had rolled a 5 for his Pilot Check.

Scale

The size references above use the d20 nomenclature for size ratings, although not the same sizes. Most campaigns with existing aerial combat rules will have a scale already established. Otherwise the GM will need to establish a scale. A rough-and-ready guide to establishing scale follows:

<1 metre = Fine

1-4 metres = Diminutive

Table 1.1 - Relative Size Modifier

Craft Size	Fine	Diminutive	Tiny	Small	Medium	Large	Huge	Gargantuan	Colossal
Fine	0	+2	+2	+4	+4	+6	+6	+8	+8
Diminutive	-2	0	+2	+2	+4	+4	+6	+6	+8
Tiny	-2	-2	0	+2	+2	+4	+4	+6	+6
Small	-4	-2	-2	0	+2	+2	+4	+4	+6
Medium	-4	-4	-2	-2	0	+2	+2	+4	+4
Large	-6	-4	-4	-2	-2	0	+2	+2	+4
Huge	-6	-6	-4	-4	-2	-2	0	+2	+2
Gargantuan	-8	-6	-6	-4	-4	-2	-2	0	+2
Colossal	-8	-8	-6	-6	-4	-4	-2	-2	0

5-14 metres = Tiny
 15-29 metres = Small
 30-59 metres = Medium
 60-99 metres = Large
 100-199 metres = Huge
 200-349 metres = Gargantuan
 350+ metres = Colossal

Manoeuvring Ranges

There are three Manoeuvring Ranges in ACES: Extreme, Combat and Dogfight. Most Airborne encounters will begin in Extreme Range (the exact size of which will vary according to the system - suffice it to say that it is close enough for the combatants to be able to detect each other, but too far away for even the most high-tech weapons to fire accurately). It is important to remember that these Ranges are relative to each craft, they are not universal constants - e.g. a Spitfire that moves into Combat range with Fokker, is not in the combat range of any other craft. He has essentially singled out his opponent.

Extreme Range

A pilot has three options when at Extreme Range:

- Close to Combat Range
- Stay at Extreme Range
- Disengage

Close to Combat Range: The craft moves to combat range. This is at least a full-round action, although it may be more (GM's discretion).
Stay at Extreme Range: The craft maintains its distance, maybe by cutting speed, or circling the outskirts of the fray.

Disengage: A pilot can choose to disengage. If no opposing craft choose to or are unable to Pursue, the craft effectively breaks from combat. A Disengaged craft can be re-engaged at extreme range if it fails an opposed Pilot Check against a pursuing craft. Any craft that is not currently engaged in a Dogfight may Pursue. A craft that elects to Pursue makes an opposed Pilot Check, if they win they are automatically moved to Combat Range and the losing craft may not Disengage. If the Disengaging craft wins, they successfully Disengage. In addition, a craft that is pursuing is focusing all its effort in chasing down its opponent, and so any

craft that attacks a Pursuing craft gains a +10 bonus to hit with its weapons.

Combat Range

A pilot has five options when at Combat Range:

- Engage in a Dogfight
- Stay at Combat Range
- Retreat to Extreme Range
- Make a Strafing Run
- Ram
- Fire a Long Range Weapon.

Engage in a Dogfight: Make an Opposed Pilot check, if successful the pilot will, at the start of his next turn be automatically engaged in a Dogfight.
Stay at Combat Range: The craft maintains its distance, maybe by cutting speed, or keeping its distance.

Retreat to Extreme Range: The craft moves to Extreme Range.

Make a Strafing Run: This action can only be performed against a craft that is at least three times larger than the pilot's craft (Diminutive vs. Medium, Medium vs. Gargantuan etc.). This is a full-round action; the pilot lines up his craft with something much larger, and skims along it, firing as he goes. Make opposed Pilot Checks. If the attacking craft wins, it may fire each of its weapons once for every increment of three sizes (or part thereof). For Example, a Small craft could fire all of its weapons twice if it made a Strafing Run against a Colossal Craft - a Colossal craft is five times bigger than a Small craft (5 - 3 = 2 rounds of firing). During a Strafing Run, one-half of the defending craft's Point Defense weapons (if any) may fire at the attacking craft, using the attacker's Pilot Check as the AC. If the defending craft wins the Pilot Check, he may choose to automatically do one of the following: fire one-half of the craft's Point Defense weapons (see above), Ram, or engage in a Dogfight.

Ram: Both pilots make opposed Pilot Checks. If the defender wins, nothing happens - he has successfully dodged the attack, or the attacking pilot has aborted the attempt or some similar result. If the attacker wins, consult the Collision Damage Table to determine how much damage each ship takes. Each pilot looks up his craft size on the first column, and looks up the damage dealt

by the opposing craft on Table 1.2 - Ram Damage. After a Ram attack has been worked out, each pilot must make a Pilot Check against a DC equal to 10 + the damage sustained from the Ram, or go Out of Control.

Fire a Long Range weapon: If the pilot's craft has any weapons designated as Long Range (your GM will let you know which, if any) he may fire one (regardless of the number of such weapons the craft is equipped with). The rest of the time is spent aiming, calibrating sensor readouts or similar in order to make such a precise shot.

Dogfight

A pilot must succeed at an opposed Pilot Check to enter a Dogfight, unless the defending pilot chooses to allow it. A pilot in a Dogfight may only perform one of two actions:

- Continue the Dogfight
- Break Off

Continue the Dogfight: When a pilot continues a Dogfight, both pilots make opposed Pilot Checks. Whoever wins has gained the upper hand and may make a single attack. This may result in a pilot making an attack in his opponent's turn - this is fine, as Dogfights tend to be short, bloody affairs.

Break Off: A pilot that, in his turn, wins the opposed Pilot Check may choose to Break Off, he automatically retreats to Combat Range. In addition, the other pilot may make a single attack, a 'parting shot' - since the fleeing pilot is more concerned about putting distance between them than avoiding fire.

If there are more than two craft involved in a Dogfight, allied pilots receive a -4 penalty to Pilot Checks and attack rolls for each friendly craft beyond the first. This penalty stacks, and represents the pilots attempting to avoid hitting their own side.

If a pilot ever rolls a natural one on his Pilot Check whilst engaged in a Dogfight, something has gone terribly wrong - both craft suffer damage as if the pilot had succeeded at a Ram. Note that this is an exception to the normal rule that you can never critically fail a skill check.

Out Of Control

Occasionally a craft will go Out of Control, usually as the

Table 1.2 - Ram Damage

Ship Size	Fine	Diminutive	Tiny	Small	Medium	Large	Huge	Gargantuan	Colossal
Fine	5d8	5d8	10d8	10d8	15d8	15d8	20d8	20d8	25d8
Diminutive	5d8	5d8	5d8	10d8	10d8	15d8	15d8	20d8	20d8
Tiny	4d8	5d8	5d8	5d8	10d8	10d8	15d8	15d8	20d8
Small	4d8	4d8	5d8	5d8	5d8	10d8	10d8	15d8	15d8
Medium	4d8	4d8	4d8	5d8	5d8	5d8	10d8	10d8	15d8
Large	3d8	4d8	4d8	4d8	5d8	5d8	5d8	10d8	10d8
Huge	3d8	3d8	4d8	4d8	4d8	5d8	5d8	5d8	10d8
Gargantuan	3d8	3d8	3d8	4d8	4d8	4d8	5d8	5d8	5d8
Colossal	2d8	3d8	3d8	3d8	4d8	4d8	4d8	5d8	5d8

result of a collision or some other damage. A craft that is Out of Control spirals erratically and unpredictably, and the pilot must wrestle the craft back into line. Each round, the pilot can do nothing but try and regain control of his craft - make a Pilot Check against a DC of 20 minus the Manoeuvrability Rating of the Craft. This is a full-round action. A craft that is Out of Control suffers an additional one point of damage for every round that it is out of control for. In addition, if there are obstacles in the vicinity, the craft takes an additional d4 damage per size category of the objects per round.

Critical Hits

If a pilot makes a critical hit (rolls a natural 20 on an attack roll) against another craft, roll a d6 on the table below::

1	Explosion: Double damage
2	Damage Manoeuvrability: -2 to Pilot Checks
3	Damage Propulsion: -4 to Pilot Checks
4	Damage Weapons: -2 penalty on attack rolls
5	Major Explosion: Triple Damage
6	Catastrophic failure: Roll twice (ignore further 6s)

In addition, the pilot of the damaged vessel must make a piloting check, with a DC of 10 + Damage Sustained.

Critical Misses

If a pilot rolls a natural 1 on an attack roll, something terrible has gone wrong - roll a d6 on the table below::

1	Control Failure: -2 to Pilot checks for d4 rounds
2	Weapon Inoperative: the weapon is unusable for d4 rounds
3	Propulsion Failure: The craft goes Out of Control
4	Explosion: the craft suffers 2d8 damage
5	System Failure: -4 to Pilot checks for d6 rounds
6	Catastrophic failure: Roll twice (ignore further sixes)

ACES Feats

Any feats whose name includes the word 'craft' should be adapted to suit the campaign, thus Craft Dodge should become Fighter Dodge in a WWII game.

Craft Dodge [general]

You are extremely good at avoiding incoming fire. You gain a +2 bonus to your AC against a single designated opponent.

Kamikaze [general]

You like to use your craft as a weapon. You treat your craft size as one size larger when working out Ram damage.

Barnstormer [general]

Prerequisite: Dex 14+

You are renowned for your daredevil feats of flying. You gain a +4 bonus to Pilot Checks when flying around obstacles.

Natural Pilot [general]

Flying is in your blood. You gain a +4 bonus to Pilot Checks to regain control of your craft.

Obsessive Maintenance [general]

You keep your craft religiously maintained. If you roll a Critical Miss, you have a 75% chance of ignoring the result.

Bombing Run [general]

You are exceptionally good at making Strafing Runs. When you engage in a Strafing run, you may fire all your weapons one additional time.

Evasive Manoeuvres [general]

You are extremely adept at throwing off pursuit. When you attempt to Break Off or Disengage, craft that are making a parting shot or attempting to Pursue suffer a -2 penalty to attack rolls/pilot checks.

Deadeye [general]

You have an almost unnatural knack for long range targeting. When you roll a Critical Hit, you add +1 to your roll on the Critical Hit table.

Weapon Modification [general]

Prerequisite: GM's Approval.

You have extensively modified one of your craft's weapons to make it far more accurate. Choose one weapon that is not already designated Long Range or Point Defence, that weapon becomes either Long Range or Point Defence. In addition, if given enough time, you can make the same modifications to the weapons of other craft. Due to the extensive continual maintenance involved, you may have only one Weapon Modification active at any one time.

Special: with your GM's approval, you may take this feat more than once, each additional time expanding the number of Weapon Modifications you may have at any one time.

