SAFETYSENSE LEAFLET
AERODROME SENSE

1 INTRODUCTION
This leaflet is intended to be a reminder of good sense and consideration for others which is expected of aerodrome users. It will help you to pave the way so that your visit does not cause problems for others and is at the same time pleasant for yourself and your passengers.

2 BEFORE SETTING OFF
a) Look up the aerodrome in the UK AIP (Aerodromes) [which does not include unlicensed or most government aerodromes], or in Pooley’s or other commercial Flight Guide. Check on runway lengths, displaced thresholds, location of general aviation parking areas, runway lighting, local regulations, nearby controlled airspace, noise-sensitive areas, glider launching, parachuting or other special activities, warnings, opening hours, fuel availability etc. Also check on ATC procedures and visual reference points to save you a nasty surprise when ATC ask you to ‘report when passing X’ and you have no idea where X is!

b) Use the UK AIP and a current chart to find all the frequencies you may need. Check on the VFR charts section of the AIS website www.ais.org.uk for changes, then check NOTAMs through the same site for updates on those, and any work in progress, change in opening hours etc.

c) Make sure you know how to select 25 kHz frequencies on the aircraft equipment.
d) SafetySense Leaflet 12 gives comprehensive advice when using unlicensed aerodromes and private strips. Leaflet 26 gives additional guidance on the use of military aerodromes.

e) Check whether the aerodrome requires prior permission (PPR). At unlicensed aerodromes and strips this generally needs to be obtained by writing or telephoning beforehand. A telephone call is always useful in any case to check on local procedures and restrictions. At licensed aerodromes permission can normally be obtained by radio. Check on this as well as operating hours. Note that you may not be allowed to land outside promulgated operating hours.

f) Check what air traffic services are available. Air Traffic Controllers will provide instructions within the ATZ, but Flight Information Service Officers may only give instructions on the ground, and Air-to-Ground Communications Operators can only provide information (including the aerodrome operator’s instructions).

g) If you are non-radio or there is no air traffic service at your destination, phone to get the correct procedures, as well as the runway and altimeter setting details. Know the signal square markings.

h) There may be special procedures for helicopters or microlights.

i) Know the procedures in the event of radio failure.

j) Make sure you know about aerodrome lighting and markings. See Rules 56 to 60 of Rules of the Air 2007 or CAP 637, available free on the CAA website www.caa.co.uk.

3 ARRIVAL

a) Make sure that you have carried out field approach (including altimeter and fuel selector) checks, and have identified the correct aerodrome.

b) If an Automatic Terminal Information Service (ATIS) is provided, listen early, copy the details, and use the code letter in your initial call.

c) Identify the runway in use. Beware of confusing directions by 180 degrees!

d) Check the circuit direction. Make all turns near the aerodrome (especially inside an ATZ) in that direction.

e) Identify the ‘dead side’ – if there is one! Note and keep well clear of any glider launching cables and parachute drop zones.

f) Descend outside the circuit pattern, using the procedure illustrated below (taken from CAP 413 and also on the ‘standard overhead join’ poster illustrated inside the back page and available on www.caa.co.uk/safetysense), unless another procedure is published. Although called an ‘overhead join’ the pilot should normally fly around the aerodrome, keeping all of it in sight.

g) Avoid noise-sensitive areas and keep to published circuit height.

h) Consider using your landing lights, especially in poor visibility.

i) Keep a good lookout, using others’ radio calls to help identify all traffic joining or already in the pattern. Give way to aircraft already in the pattern.
4 CIRCUIT PATTERN

a) Follow the pattern illustrated, unless a different procedure is published. Watch out for others who may follow the ‘wrong’ pattern.

b) Remember wake turbulence separations if the airport operates larger aeroplanes or helicopters (see SafetySense Leaflet No. 15 ‘Wake Vortex’).

c) Note others’ radio calls. Keep your own brief and unambiguous, and in the correct place (calling “late call” if unable to do so). Know the non-radio procedure, look for light signals.

d) If the controller tells you to “orbit”, maintain circuit height while flying turns in the circuit direction or as instructed, through 360 degrees. Allow for wind, aiming to return to the same point over the ground after every orbit.

e) Ensure you have completed your pre-landing checks – it is easy to be distracted at an unfamiliar aerodrome. A check on final such as “reds, blues, greens” may assist.

f) Check you are aiming for the correct runway (left, right, grass, hard?) and threshold (displaced?).

g) Be prepared (expect) to go-around, especially on the first approach to an unfamiliar runway. If you have to go-around, remember to side-step to the dead side so that you are flying parallel with the runway while able to see it, but not if other activity such as gliding, parachuting, or helicopter training is taking place there.
Markings in a signals square

- Circuit direction right hand
  (make all turns to the right near the aerodrome)

- Use hard surfaces only

- Poor surfaces

- Land / T-O on runway only
  (movements may be on grass)

- Landing prohibited

- Light aircraft may operate
  from separate area

- Land in emergency only

- Glider flying

- Land in this direction

- Take-offs may differ

Other markings visible from the air

- Standard Instrument Threshold
- Visual Threshold
- Temporary Displaced Threshold Markings

- Light aircraft
  Take-off and
  Landing area

- Helicopter
  Take-off and
  Landing area

- Towrope dropping area

- Runway (or part)
  unfit for use

- Runway (or part)
  may be fit for emergency use

- Taxiway (or part) unfit for use
<table>
<thead>
<tr>
<th>Light Signal</th>
<th>Meaning to Aircraft in flight</th>
<th>Meaning to Aircraft on Aerodrome</th>
</tr>
</thead>
<tbody>
<tr>
<td>STEADY GREEN</td>
<td>Authorised to land if pilot satisfied no collision risk exists.</td>
<td>Authorised to take off IF pilot is satisfied no collision risk exists.</td>
</tr>
<tr>
<td>STEADY RED</td>
<td>Do not land. Give way to other aircraft and continue circling.</td>
<td>Stop.</td>
</tr>
<tr>
<td>GREEN FLASHES</td>
<td>Return, wait for permission to land.</td>
<td>Authorised to taxi IF pilot is satisfied no collision risk exists.</td>
</tr>
<tr>
<td>RED FLASHES</td>
<td>- Do not land.</td>
<td>Taxi clear of landing area in use.</td>
</tr>
<tr>
<td>WHITE FLASHES</td>
<td>Land at this aerodrome, after receiving continuous green light.</td>
<td>Return to starting point on aerodrome.</td>
</tr>
</tbody>
</table>

### 5 AFTER LANDING

a) On an aerodrome without marked runways, turn left after landing (Rule 14 of the Rules of the Air Regulations 2007).

b) Taxi well clear of the runway and stop before doing your after-landing checks. Before raising the flaps, check visually that you are not about to move the undercarriage selector instead!

c) If you are unsure of your route to the parking area, wait clear of the runway and call the tower for assistance or a 'Follow Me' service.

d) **Never** cross an active runway or its taxi-holding position marker without permission from the controller or FISO, or informing the Air/Ground Communications Operator: there may be more than one active runway.

e) Keep a lookout for parallel grass runways, glider strips and tow cables or parachuting areas, and have a good look before crossing any runway. If you are non-radio or the aerodrome has no Air Traffic Service, have an **especially good look**.

f) Look for any marshaller's signals, but remember you are still responsible for your aircraft's safety. Most common aeroplane marshalling signals are shown in this leaflet. A full list is at Rule 62 of the Rules of the Air Regulations 2007.

g) When following a marshaller's instructions, reduce speed to a walking pace.

h) Always consider the effect of your propwash or rotor downwash on others. If you are flying a helicopter, do **not** land or hover near parked aeroplanes.
### AEROPLANE MARSHALLING SIGNALS
Meanings remain the same if bats, illuminated wands, or torchlights are used

<table>
<thead>
<tr>
<th>THIS BAY</th>
<th>ALL CLEAR</th>
<th>STOP</th>
<th>EMERGENCY STOP</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image1" alt="Signal" /></td>
<td><img src="image2" alt="Signal" /></td>
<td><img src="image3" alt="Signal" /></td>
<td><img src="image4" alt="Signal" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>COME AHEAD</th>
<th>TURN RIGHT</th>
<th>TURN LEFT</th>
<th>SLOW DOWN</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image5" alt="Signal" /></td>
<td><img src="image6" alt="Signal" /></td>
<td><img src="image7" alt="Signal" /></td>
<td><img src="image8" alt="Signal" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>APPLY BRAKES</th>
<th>CHOCKS INSERTED</th>
<th>RELEASE BRAKES</th>
<th>CUT ENGINE(S)</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image9" alt="Signal" /></td>
<td><img src="image10" alt="Signal" /></td>
<td><img src="image11" alt="Signal" /></td>
<td><img src="image12" alt="Signal" /></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>PILOTS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Use similar brakes and chocks signals with hands in front of your face. Ready to start - raise appropriate number of fingers on one hand.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>START ENGINE</th>
<th>CHOCKS REMOVED</th>
<th>PROCEED</th>
</tr>
</thead>
<tbody>
<tr>
<td><img src="image13" alt="Signal" /></td>
<td><img src="image14" alt="Signal" /></td>
<td><img src="image15" alt="Signal" /></td>
</tr>
</tbody>
</table>
Other markings visible from the ground

Pilots report here

Circuit direction right hand

Runway in use (26)

Taxi clearance required

Take off and landing directions may differ

Glider flying

Airfield boundary markers

Taxi-holding position before runway entrance

If in doubt, STOP and ask!
6 AFTER SHUT-DOWN

Control locks are in place

a) Before leaving the aircraft ensure:
   • it is parked into wind (if you can't get hangarage);
   • all the electrics are off and the magnetos are safe;
   • control locks are in place (another aircraft's propwash can be more severe than a strong wind);
   • the parking brake is on and/or the wheels are chocked;
   • pitot covers etc. are in place if you are staying for more than a couple of hours; and
   • it is locked, unless aerodrome personnel ask otherwise (remove or hide items which might be stolen).

b) Don't leave the aircraft in the way of others and then disappear with the key in your pocket.

c) If you are leaving your aircraft overnight or for a long time, check the weather forecast and, if necessary or in doubt, arrange for the aircraft to be tied down.

d) If you have to walk across a busy apron, keep well clear of aircraft with engines running and keep an eye on taxiing aircraft. Take particular care to escort passengers who may be in a completely strange environment.

Local rules often require a high-visibility jacket.

e) Report to the building which shows a black C on a yellow background.

f) Close any Flight Plan.

7 REFUELLING

a) Always supervise the refuelling of your aircraft because you are responsible for what goes into the tanks and how much. JET-A1 and AVGAS mistakes are easily made, and diesel-engined types are becoming ever more popular.

b) Ensure that earthing wires are attached before delivery begins and that the nozzle is earthed. Make sure a fire extinguisher is available.
c) After refuelling, personally check all filler caps and access panels for security.

d) Make sure hoses and earthing wires are wound back clear after use.

e) When you sign or pay for the fuel, double-check the invoice for the correct type/grade of fuel and quantity. (JET-A1 in a piston-engined aircraft has been discovered at this stage.)

8 DEPARTURE

a) Don't forget to pay landing and parking fees.

b) Book out and/or let the ‘tower’ know your departure intentions (and if going to or from certain UK islands the Terrorism Act applies, see UK AIP GEN 1-2-1). Especially if you are non-radio, get the runway and altimeter setting details. There may be an Aerodrome Terminal Information Service (ATIS) available by telephone or on a dedicated frequency.

c) Ask for, and/or use an airfield map to study, your likely taxi route(s). Identify any possible areas for confusion or runway infringement.

d) **Always** get the latest (and best) weather information, even if staying in the circuit. **GET MET** lists a variety of methods for obtaining this. Allow time to obtain recorded or faxed weather information.

e) **Thoroughly** pre-flight the aircraft, making sure that no damage has occurred and that no birds have built a nest overnight. Don't forget the obvious things like pitot covers, tie-down blocks, external control locks, towing bar or baggage doors.

f) **Visually** check that your fuel has not 'disappeared' overnight. Always check fuel drains for water etc. especially if parked outside in heavy rain. Water can get into the tank via worn filler cap seals.

  g) At some aerodromes you must obtain permission to start engines. Before start-up, ensure that no-one is near the propeller/rotors and that the brakes are on and/or chocks in place, particularly when hand-swinging a propeller.

  h) If a marshaller is standing by for start-up, give clear and unmistakable signals.

  i) Never start engines in a hangar, nor immediately in front of open doors.

  j) Don't use high power settings when a door is open or another aircraft is parked close behind in your slipstream.

  k) Switch on the red anti-collision beacon, prior to starting the engine [Rule 47(3)(b) of the Rules of the Air 2007]. Do not cause dazzle with strobes.

  l) Do not taxi on the manoeuvring area without agreement from the ‘tower’. If a controller or FISO is on duty, a taxi clearance is required. Write it down, and if in doubt about its meaning, ask for clarification. Do not taxi beyond the point to which you have been cleared.
m) Although aircraft have right of way over vehicles on the manoeuvring area (except those towing aircraft), if in doubt **STOP** until the way ahead is clear.

n) When taxiing, don't just follow someone else – they might be wrong or have a different clearance.

o) If you are given a departure clearance, write it down, read it back to the controller, and follow it when airborne.

p) A departure clearance is **NOT** a permission to take off, or even to enter the runway. Ensure the runway and approach are clear, and that you have the appropriate clearance from the controller or FISO. Many pilots who have been cleared to “line up” have been known to take off without the necessary clearance. If in doubt, check!

q) If your flight plan must be activated once airborne, ask for it.

r) If returning to land at the aerodrome don't assume it's the same runway as when you took off – the wind may have swung round.

### 9 MISCELLANEOUS

a) Don't leave chocks, tie-down ropes or weights where they might be struck by other aircraft.

b) Don't drop litter or allow it to blow out of your aircraft – it could be ingested by the engines of other aircraft.

c) Comply with aerodrome warnings and signs, e.g. CRASH EXIT KEEP CLEAR.

d) Do not smoke or allow others to smoke inside hangars or near aircraft, nor on aprons or manoeuvring areas.

e) Do not taxi onto a Customs area unless you are clearing Customs.

f) If you note any obstructions, debris, pot holes, etc. on the aerodrome – **tell someone in authority at once!**
10 SUMMARY

- Before setting off, obtain aerodrome details including frequencies, reporting points, runway and taxiway layout, operating hours etc.
- If necessary, obtain permission by telephoning destination.
- Call the aerodrome in good time and be ready to follow joining procedures/reporting points.
- If no procedure is published, use the standard joining and circuit pattern.
- On arrival, make sure it is the correct runway – and aerodrome.
- If you are uncertain of your taxiing route, **STOP** and **ASK**.
- Book in and close any Flight Plan.
- Supervise re-fuelling yourself.
- **YOU** are responsible for the passengers’ safety until they are in the clubroom/terminal.
- When departing, allow time to obtain weather information, file Flight Plan, book out etc.
- Do not taxi, or cross a holding position, onto a runway without the required clearance.

ALL AERODROME USERS BRING HAPPINESS

SOME BY ARRIVING

OTHERS BY DEPARTING!