Microlight aviation is the branch of sporting flying which has developed from motorised hang gliding. The aircraft are very light and slow, and most have the aluminium tube and dacron construction introduced for hang gliders, with a few using composite materials. Nearly all microlights are single seaters, so pilots without previous flying experience learn solo. This can be achieved safely but may be a slow process.

Microlight aviation is growing rapidly all over the world because it is the only form of powered flying which many people can afford. It is also a starting point for new manufactuers of aircraft, engines and propellers.

Because microlights are light and fly very slowly they are basically safe. The attraction in flying them is to get into the air and gain experience. There is little interest in going into or using controlled airspace or even using 'conventional' airfields; a 250 m field is big enough.

It is important for many reasons that young people have the opportunity to fly and that aviation activities — in any country — are broadly based; but this can be achieved only where the grass roots are permitted to flourish by the civil aviation authorities concerned. This means the minimum imposition of regulations consistent with reasonable safety,

If microlight aviation is to develop effectively it can best do so if there are common international standards and requirements for its operation. It will be served least well if every national aviation authority draws up a different set of rules and regulations. This is happening and will lead to confusion.

FAI recognised the need to encourage and co-ordinate this new branch of sporting flying, and has set up an international Technical Committee (CIMA). The first need was to define a microlight so as to distinguish it from faster and heavier aircraft. The FAI definition, which has been approved by the 63 countries in FAI, is as follows:

A one or two seat aeroplane having an empty weight (W) not exceeding 150 kg and a wing area in square metres of not less than W/10 and in no case less than 10 m $_{2} \bullet$ 

Thès provides aircraft of low kinetic energy and with plenty of wing. The upper limit of 150 kg (for which there must be 15 m $_2$  of wing) allows for a training two seater.

If, as an addition to the definition, a civil aviation authority wishes to add a restriction; such as a limit on fuel capacity or engine power, this is better done by a Limitation of Use, than introducing a different definition. If an authority wishes to prohibit dual flying it can do so and bring the maximum empty weight down to 100 kg, without altering the basic definition.

At its meeting on November 17 in Paris CIMA found that civil aviation authorities were proposing not only different definitions but different requirements for the assessment of pilot competence; some wanted a full PPL while others were happy to leave this matter in the hands of the National Aero Club. Since microlight pilots will want to fly in other countries, even though the aircraft is more likely to cross the frontier on a roof rack than in the air, it is only sensible that there are as far as possible common standards. To make a start in this direction CIMA proposes the following:

- 1. Microlight aircraft to be subject to a simple form of registration so that they can be identified.
- 2. Pilots to have to pass written exams to PPL standard on air law, etc
- 3. Pilots to sign aa approved Declaration of Fitness before flying solo
- 4. Flying to be carried out clear of controlled airspace unless entry is specifically authorised.

Pilot Competence. CIMA proposes the introduction on an international FAI Microlight Pilot Certificate (MPC), This should be regarded as the basic standard at which a pilot is capable of flying without supervision. As the sport develops CIMA proposes to introduce higher qualifications as is done in gliding with its silver and gold badges.

The proposals for the MPC are:

1. 20 hours solo on a microlight including 50 logged flights.

2. 3 observed precision landings in a 20 m sware and 1 landing in a 40 m  $\,$ 

square from 1000 ft with the throttle fully closed.

3. Two 75 km triangular cross country flights with return to the take off place, one flight to include an outlanding at a designated point along the route. Requirement 2 to be successfully completed before attempting the cross country flights.

It is hoped that good sense will prevail and that microlight aircraft, as defined and flying outside controlled airspace, can be regarded as a sporting activity and controlled by the National Aero Club or its delegated microlight association to FAI requirements and standards. Long experience in gliding, parachuting and ballooning has shown this form of self regulation to be responsible, safe, and inexpensive.

Jum Welch 12 member 25 1981.

cc : Bob Buck