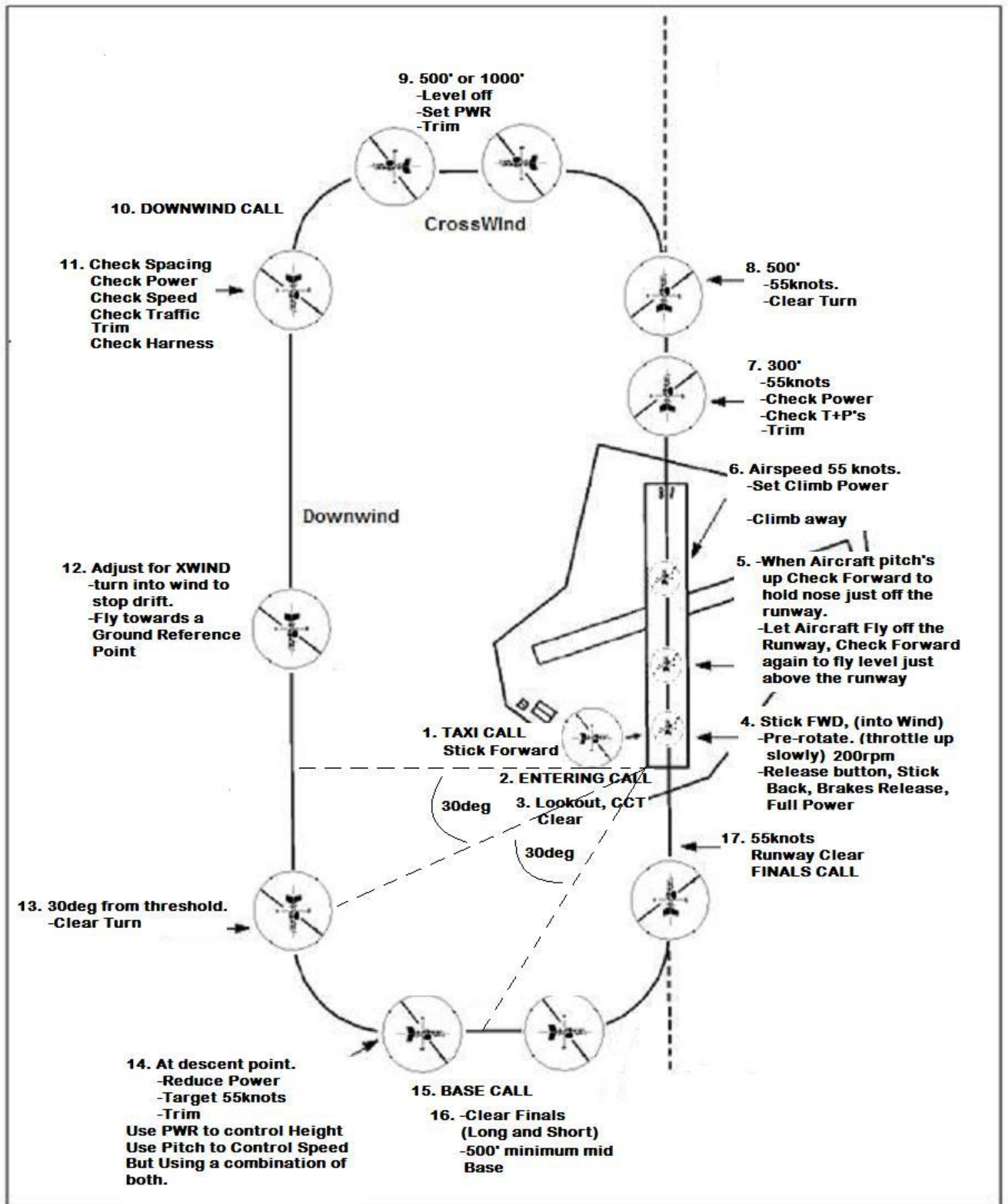


VISUAL CIRCUIT

GYRO



WRITTEN CIRCUIT

GYRO

Start the engine, keep the Rotor braked.

Taxi out with the stick full fwd and slightly into wind

TAXI CALL. KEMPSEY TRAFFIC
 Gyro 2354
 TAXING KEMPSEY
 FOR CIRCUIT TRAINING
 RUNWAY XX
 KEMPSEY TRAFFIC

Clear the Traffic

ENTERING CALL KEMPSEY TRAFFIC
 Gyro 2354
 ENTERING RUNWAY XX
 FOR CIRCUIT TRAINING
 KEMPSEY TRAFFIC

Once lined up, release the rotor brake and pre rotate. With the aircraft braked on the runway. (NO park brake use)

Apply power to help pre-rotation (stop engine from stalling). Once sufficient (200rpm)

Release the pre-rotate button, stick back and into wind and increase power and release the brakes.

(The alternate if no pre-rotation is available is to t/o slowly increasing power and speed as the rotor spools up)

Keep the stick fully back until the nose POPS up, be ready its sudden and then push the stick fwd to a central position, attempt to hold the nose 2 inch off the runway, (stick slightly into wind)

Note the rudder is directly linked to the nose wheel; be careful not to touch the nose down with a lot of rudder in.

The aircraft will fly off the ground, check the stick forward and fly level just above the runway.

Accelerate to 55 knots, (best rate and glide), then reduce power to climb power and climb away.

Climb to 300 feet, target 55knots, Check Power, Check T+P's, Trim
(if eng fails lower the nose target 55 knots and land straight ahead...)

500 feet, 55knots, Clear the Turn

Turn Crosswind

Level off at selected circuit height

Set Power, Trim

Turn Downwind

DOWNWIND CALL KEMPSEY TRAFFIC
 Gyro 2354
 DOWNWIND RUNWAY XX
 KEMPSEY TRAFFIC

Check Spacing, (within glide range of the runway or a suitable landing field if engine were to fail), Check Power, Check Speed, Check Traffic, Trim and Check Harness

Adjust for the Crosswind. ie turn slightly into wind so as to fly parallel to the runway

30deg past abeam the threshold, turn Base

At decent point, Reduce Power, Target 55knots, Trim,

Use power to control height

Use Pitch to control speed

Use a combination of both as required

BASE CALL. KEMPSEY TRAFFIC
 Gyro 2354
 BASE RUNWAY XX
 KEMPSEY TRAFFIC

Aim to be at 500' mid base.

Clear Finals and turn (note: traffic can be on long finals or short finals)

Finals,

55knots, Clear Runway, FINALS CALL KEMPSEY TRAFFIC
 Gyro 2354
 FINALS RUNWAY XX
 KEMPSEY TRAFFIC

Landing 55 knots, in the flare close the throttle, (standard flare, however only 1 foot of the ground) on mains touchdown stick all the way back and slightly into wind, be careful with the rudder on nose touchdown, due to the direct linkage to the nose wheel. (USE 55 knots minimum as it is above the power curve and provides good safety margin, yet still know the capabilities of the Gyro in an emergency situation)

Apply brake and then you can go again for a touch and go, make sure min (200rpm or need to gradually increase the power, so as to increase the rotor RPM).

For a full stop, push the stick full fwd after landing and slow down, wait for the rotor to slow down and apply the rotor brake and park it.

For a soft field/short T/O, pre rotate rotor faster, apply full power on the brakes and get into ground effect or keep the nose wheel off and flat.

For Landing, approach close to 40, and flare and apply brake soon after, stick full back to act as a air brake as such.

Common problems

Emergencys

In flight any problems centralize the stick and reduce power and wait. The Gyro scope will in most cases correct itself...

When Engine Fails you need to positively but not forcefully push the stick forward and obtain 55knots ASAP.

If while on the ground on takeoff you get retreating blade stall, ie the stick moving abruptly side to side, push the stick full forward, close the throttle and brake. (ABORT THE T/O)

Always keep the rotor blades positively loaded. That is no Negative manoeuvres as you will lose control.

THE NUMBERS IN (Micks MTO sport)

45 best angle

55 best rate

55 best glide

40 slowest land, under power

55 t/o

5800 max t/o

5000 climb

5200 pref for t/o

46-4800 in Cruise.

100 VNE

200 rotor RPM min for Full power takeoff.

15 litres per hour, 10 litre gradations on the tank bottle.

General car unleaded fuel. (petrol)

Takeoff Weight = approx 550kg

CERTIFIED

GYRO 2354

Red with radio and transponder, GPS, strobes and nav lights.

OTHER PILOT NOTES

Power off, need left rudder, power on right rudder.

There is a slight AOB in the cockpit, due to gyro effect of the engine, you can leave it or straighten it with left stick and right rudder (slight side slip)

Retreating blade stall, when you have too much fwd speed and not enough rotor rpm, Stick fwd and reduce power and speed.

The Gyro is inherently stable, relax and let it fly itself, just guide it assertively