

Syllabus for the
UNITED KINGDOM
National Private Pilot Licence
(Self Launching Motor Glider)

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Designed and produced by the NPPL (SLMG) Instructing and Examining Panel with reference to the AOPA NPPL (SEP) syllabus

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Section 1 – Introduction

With the introduction of JAR FCL in the UK, the National Private Pilots Licence (NPPL) has been developed as a stand alone, sub-ICAO recreational licence limited to UK National airspace separate from the JAA licensing structure. The NPPL Licensing Group (NPLG) administers the NPPL.

This syllabus is designed for use during a training course for the NPPL (SLMG).

Training Objectives

The NPPL (SLMG) syllabus is designed so that the pilots under training are:

- Provided with the experience, the competence in flying and the theoretical knowledge demanded by the ground and flight tests for the initial issue of a NPPL.
- Able to use the motor gliders and facilities of the private flying environment within the privileges of the licence, ratings and qualifications
- Made aware of how to operate in a safe and responsible manner, and with an awareness of their own limitations

Definitions

The following definitions apply to this document:

General Skills Test. Applicants for the NPPL have to demonstrate their ability to perform procedures and manoeuvres in an aircraft for an examiner to assess their competency to hold an NPPL.

Navigation Skills Test. Applicants for the NPPL will be required to successfully execute a planned navigation test flight with an examiner prior to undertaking the qualifying solo cross country flight.

Qualifying Solo Cross Country Flight. Ab-initio applicants for the NPPL must consolidate the NPPL training course by planning and conducting a solo cross country flight of a defined distance that involves landing at and returning from another airfield.

Reference Material

- Flying Manual for the NPPL¹
- Aircraft Owners and Pilots Association (AOPA) Flying Instructors Manual
- Ground Training Manuals (eg. the AFE PPL series)
- The Training Aircraft Flight Manual/Pilots Operating Handbook
- Safety Equipment Manufacturers Recommendations & Instruction Leaflets
- Aeronautical Charts 1:500 000
- The ANO (Air Navigation Order)
- LASORS (Licensing, Administration, Standardisation, Operating Requirements & Safety)
- JAR-FCL (Joint Aviation Requirement – Flight Crew Licensing)
- National AIP (Aeronautical Information Publication)
- AICs (Aeronautical Information Circulars)
- CAP 85 – A guide to aviation Law, Flight Rules and Procedures
- CAP413 – Radio Telephony Manual
- CAA GA Safety Sense Leaflets²
- Accident Information Bulletins

¹ Currently unavailable

² Available on CD-ROM

Contact Addresses.

Useful contact addresses, including those of the Civil Aviation Authority, the British Gliding Association and the Popular Flying Association are listed in LASORS Section A, Appendix E.

Section 2 – The NPPL (SLMG) Course

The objectives of the NPPL (SLMG) course are that student pilots are given adequate theoretical knowledge and flying training to ensure that they are capable of safely operating an aircraft whilst flying in weather conditions appropriate to the visual flight rules.

Acceptance for Training. Before being accepted for training, the student should be informed of the medical requirements for solo and for the application for the NPPL.

Minimum Age. First solo – 16 yrs. Issue of NPPL – 17 yrs.

Medical Requirements. A certificate of fitness from a GP, equivalent to the DVLA Group 2 professional driving medical standards, is required for solo flying or for passenger carrying. It may be possible for individuals who cannot meet the DVLA Group 2 standards to operate as a solo pilot only with a certificate of fitness equivalent to the DVLA Group 1 standards.

Training Aircraft. An adequate training aircraft must be provided by the flying or gliding club and maintained to the appropriate BCAR standards. The types of self launching motor glider accepted as appropriate for training for the NPPL (SLMG) shall be approved by the NPPL (SLMG) Instructing and Examining Panel.

Training Airfields. Training for the NPPL (SLMG) shall be conducted at appropriately approved airfields.

Instruction. Instruction for the NPPL (SLMG) must be carried out by a holder of either the UK SLMG PPL flying instructor rating or the JAR TMG flying instructor rating.

Course of Training. Ab-initio students should complete a minimum course of flying training totalling 32 hours, excluding the General Skill test and the Navigation Skill test.

Record of Training. An individual record of training for the NPPL (SLMG) must be maintained for each student and retained by the flying training organisation for 5 years. Particular emphasis should be placed on recording emergency procedure training. The student should sign the record of training at the end of each phase to acknowledge that all the items in the syllabus for that phase have been taught. On completion of training, the students logbook should be signed by the students CFI or his representative as a true record of the completed training.

NPPL Enquiries. In the first instance, view the NPLG website www.nppl.uk.com.

Section 3 – Theoretical Knowledge Syllabus

The theoretical examinations for the NPPL (SLMG) are currently the complete JAR-FCL PPL written theoretical examinations. In due course, it may be possible for NPPL students to take NPPL specific theoretical examinations using computer based testing (CBT).

Further detail of each of the theoretical syllabus subjects are contained in the NPPL SEP PPL syllabus section 3 and LASORS.

The JAR-FCL PPL theoretical syllabus covers the following subjects:

- Aviation Law & Operational Procedures
- Human Performance and Limitations
- Navigation
- Meteorology
- Aircraft (General)
- Principles of Flight
- Flight Performance
- Communications

These subjects should be covered by use of lectures and by a course of directed study.

Section 4 – Flight Training Syllabus

The flying training section of the NPPL (SLMG) course will be covered by the exercises listed below, although the exercises will not necessarily be given in the order shown. Further detail of each of the flying exercises is contained in the NPPL PPL SEP syllabus section 4. SLMG specific flying exercises are detailed in this syllabus section 5.

To assist students who may wish to complete a JAR-FCL PPL in the future, the exercise numbering corresponds to the exercises conducted for the JAR-FCL PPL. However, the depth of coverage and time spent on each exercise will be appropriate to the NPPL course. A summary of the NPPL minimum flight training time is tabulated on page 7.

Summary of Flying Exercises in the NPPL (SLMG) Flight Training Syllabus

| Exercise No. | Exercise Description |
|--|---|
| 1 | Familiarisation with the aircraft |
| 1E | Emergency drills |
| 2 | Preparation for and action after flight |
| 3 | Air Experience |
| 4 | Effects of controls ¹ |
| 5 | Taxying |
| 6 | Straight and level flight |
| 7 | Climbing |
| 8 | Descending ¹ |
| 9 | Medium turns |
| 10A | Slow flight |
| 10B | Stalling |
| 11A | Spin avoidance |
| 12 | Take-off and climb |
| 13 | The Circuit, Approach and landing |
| 12E/13E | Emergency procedures (as appropriate) |
| 14 | First solo |
| 15 | Advanced turning |
| 16 | Forced landing without power ¹ |
| 17 | Precautionary landing |
| 18A | Pilot navigation |
| 18B | Navigation at lower levels |
| 19 | Instrument appreciation |
| Revision for the Navigation and General Skills Tests | |

¹ SLMG specific exercises apply that are additional to the AOPA instructor manual

Minimum Flight Training Time for the NPPL (SLMG) Flight Training Syllabus

| Exercise No. | Dual Time | Solo Time | Total Time Dual | Total Time Solo | Total Time Dual/Solo | Details of Exercise |
|--------------|-----------|-----------|-----------------|-----------------|----------------------|----------------------------------|
| 1 |) | | | | | Familiarisation with the a/c |
| 1B |) | | | | | Emergency drills |
| 2 |) | | | | | Prep. for/after flight |
| 3 |) 1.30 | - | 1.30 | - | 1.30 | Air experience |
| 4 |) | | | | | Effects of controls ¹ |
| 5 |) | | | | | Taxying |
| 5B |) | - | | - | | Taxying emergencies |
| 6 | 1.00 | - | 2.30 | - | 2.30 | Straight & level flight |
| 7 | .45 | - | 3.15 | - | 3.15 | Climbing |
| 8 | .45 | - | 4.00 | - | 4.00 | Descending ¹ |
| 9 | .45 | - | 4.45 | - | 4.45 | Turning |
| 10A | .30 | - | 5.15 | - | 5.15 | Slow flight |
| 10B | 1.00 | - | 6.15 | - | 6.15 | Stalling |
| 11 | .30 | - | 6.45 | - | 6.45 | Spin avoidance |

| | | | | | | |
|---------|------|-----|------|-----|-------|---|
| 12 | 1.15 | - | 8.00 | - | 8.00 | Take-off/climb to down-wind position |
| 13 | 1.15 | | 9.15 | - | 9.15 | Circuit approach & landing |
| 12E/13E | .30 | - | 9.45 | - | 9.45 | Emergencies during Take-off and landing |
| 14 | - | .15 | 9.45 | .15 | 10.00 | First solo |

| | | | | | | |
|-------|------|------|-------|------|-------|---|
| 12/13 | 1.00 | 2.15 | 10.45 | 2.30 | 13.15 | Consolidation on circuit Dual/solo |
| 14B | .45 | 1.00 | 11.30 | 3.30 | 15.00 | Leaving circuit, local area, compass turns, circuit rejoining |

| | | | | | | |
|----------|------|------|-------|-------|-------|--|
| 15 | 1.00 | .45 | 12.30 | 4.15 | 16.45 | Advanced turning |
| 16 | 2.00 | .45 | 14.30 | 5.00 | 19.30 | Forced landings without power ¹ |
| 17 | 1.00 | | 15.30 | 5.00 | 20.30 | Precautionary landings and operations at minimum level |
| 18A/B/E | 4.30 | 4.00 | 20.00 | 9.00 | 29.00 | Navigation, map reading Dual/solo x/country, Emergencies |
| 19 | 1.00 | - | 21.00 | 9.00 | 30.00 | Instrument appreciation |
| Revision | 1.00 | 1.00 | 22.00 | 10.00 | 32.00 | Revision as required |

| | | |
|------------------------|---|-----------------------|
| Navigation Flight Test | -to be conducted prior to the Qualifying solo cross-country | 1.00 (or as required) |
| Skill Test | -to be undertaken on completion of all the training | 1.00 (or as required) |

¹SLMG with flap may require additional dual training time during this exercise

NPPL SLMG Solo Navigation Briefing Certificate

Note: The completed certificate should remain at the base aerodrome.

I certify that student pilot.....has been briefed for a solo navigation flight as follows:

From.....To.....

From.....To.....

for an estimated ETD of.....hrs local on (date).....

The navigation plan has been checked and the following items discussed. Where applicable, the required facts have been noted on the flight plan.

| | |
|---|---|
| Weather | Altitude to fly & terrain clearance. Minimum safety altitude. Destination actual weather. |
| Route | Requirement and method of maintaining VFR flight Procedures for crossing zones, civil & military Regulated airspace entry/exit lane procedures Danger areas ASR's NOTAMs TNWs including Royal Flights |
| Destination | PPR? Knowledge of runways, noise abatement, joining procedures, frequencies Landaway procedure, including refuel and booking in/out. |
| Abnormal/ Emergency Procedures | Knowledge of controlled/regulated airspace & related min altitudes/levels Action in the event of an airspace intrusion Action in the event of weather deterioration and/or fuel shortage Action on becoming lost Use of RT including use of DF & PAN procedure Action in the event of an unscheduled landing |
| Aircraft | Full fuel and oil level Serviceability Mass & Balance. Mass & Performance |
| Radio | Use of radio if lost MAYDAY procedure Noting frequencies for normal & emergency use |

Certifying instructors signature..... Licence No.....

I certify that I have been briefed for the navigation exercise detailed above and understand that in the event of an unscheduled landing I will contact the CFI or his deputy by the quickest possible means and act according to their instructions.

Student pilots signature.....Date.....Time.....

NPPL SLMG Solo Cross Country Certificate

Note: the student pilot should carry the certificate during the flight. After flight, the completed certificate should be handed to the authorising instructor for retention at the operating base.

PILOTS TO NOTE

In the event of a landing being made at a place other than the airfield named below, the authorisation for the flight is terminated. The authorising instructor must be contacted and the flight must not be continued without specific authorisation.

Contact telephone no.....

| |
|--|
| <p>This is to certify that.....is the student pilot of G-..... and was authorised to leave..... at (time).....(date).....for the purpose of.....</p> <p>Signed.....Authorising CAA SLMG FI</p> |
|--|

| |
|---|
| <p>This is to certify that student pilot.....landed at..... The landing was normal and the standard of airmanship displayed was/not acceptable. As far as can be ascertained, the pilot was alone in the aircraft. I have briefed the pilot for a departure from this airfield.</p> <p>Signed.....CFI/Deputy CFI/Rated Instructor/Air Traffic Control</p> |
|---|

| |
|---|
| <p>This is to certify that student pilot.....landed at..... The landing was normal and the standard of airmanship displayed was/not acceptable. As far as can be ascertained, the pilot was alone in the aircraft. I have briefed the pilot for a departure from this airfield.</p> <p>Signed.....CFI/Deputy CFI/Rated Instructor/Air Traffic Control</p> |
|---|

| |
|--|
| <p>The above cross-country flight was carried out to my satisfaction.</p> <p>Signed.....CAA SLMG FI at student pilots operating base</p> |
|--|

Section 5 – SLMG Specific Exercises

Some flight exercises for the NPPL (SLMG) are specific to Self Launching Motor Gliders and are naturally not included in the available PPL Flying Instructors Manuals. The following SLMG specific exercises are to be included in the NPPL flying training syllabus at a point appropriate to the flying exercise number:

Exercise 4 - Effect of Airbrake or Spoiler

Instructors Note: *This exercise is to show the effect that airbrake (or spoiler) has on the pitch attitude and to the performance of the aircraft. The reasons for using airbrake (or spoiler) will be covered during subsequent lessons.*

Demonstration Part 1. In trimmed level or gliding flight, remove your hands and feet from the flying controls. Point out or remind the student of the location of the airbrake lever. Progressively select $\frac{1}{2}$ to $\frac{2}{3}$ airbrake (or spoiler) and note the change of attitude and speed. Close the airbrake (or spoiler) and note the attitude and speed change. Then take control and demonstrate maintaining the attitude and speed while opening and closing the airbrake (or spoiler).

Student Practice. Ask the student to take control and maintain the required attitude and speed while he or she opens, pauses, and then closes the airbrake (or spoiler).

Demonstration Part 2. In level or gliding flight, while maintaining the required attitude, progressively open the airbrake (or spoiler) to $\frac{1}{2}$ and note the increased rate of descent. Fully open the airbrake (or spoiler) and note a further increase in the rate of descent. Close the airbrake (or spoiler) and note the reduction in descent rate.

Summary: *The airbrake (or spoiler) can affect the pitch attitude and therefore the speed of the aircraft. More significantly, the airbrake (or spoiler) affects the rate of descent of the aircraft. The operational use of airbrake will be covered later.*

Exercise 8 – Gliding Performance Appreciation

Instructors Note: *During exercise 16 the student will be expected to have an appreciation of the glide performance of the aircraft to enable him or her to make appropriate judgement when gliding to a landing area. Additionally, pilots of SLMG's will inevitably utilise the aircraft for soaring flight with the engine stopped. This exercise demonstrates the best glide performance against a glide flown at an inappropriate speed. The exercise is best flown in a non-soaring environment.*

Demonstration 1. At an appropriate height, note the position above the ground and close the throttle. Fly the aircraft in the straight glide at the best glide speed and note the rate of descent. Having descended approximately 1000', again note the aircraft position.

Demonstration 2. Climb away and then close the throttle at the same position and height above the ground as in as the previous demonstration. Fly the aircraft in the straight glide on approximately the same heading as the previous demonstration, but at, say, 20 kts faster than best glide speed and note the rate of descent. Having descended approximately 1000', again note the aircraft position. Note the shorter distance travelled for a similar height loss.

Summary: *The speed of the aircraft significantly affects the glide performance. The operational use of appreciating glide performance will be covered during exercise 16, 'forced landings without power'.*

Exercise 16 – Stopping and Starting the Engine in Flight

Instructors Note: *This exercise has significant airmanship implications! It is, of course, important that the instructor ensures that the student is fully aware of the requirement to remain within gliding range of an airfield with the engine stopped, and to ensure that he or she understands the concept of a height envelope, including a 'height floor'. For example:*

3000' – Stop the engine

1500' – Restart the engine

*1000' – Exercise 'height floor'. Abandon engine start attempt.
Get established in the glide circuit*

This exercise demonstrates the procedure for stopping and starting the engine in flight using normal engine starting for the aircraft type.

Demonstration - Stopping. Having carefully addressed the airmanship considerations, at an appropriate height and position (ideally close to an airfield) reduce the power to allow the engine to cool to the recommended temperature. Having achieved the recommended temperature, stop the engine as recommended in the flight manual or pilots notes. Note any post engine stop requirements, for example electrical power conservation, propeller adjustment, engine cooling flap closure, etc.

If the type has no recommended engine stopping procedure, the following guidelines may be appropriate. After the engine cooling down period:

- Carb Heat 'Check Fully Hot'
- Ancillary electrics 'Off'
- Radio 'Off'
- Ignition 'Off'
- Fuel 'Off'
- Check airspeed
- Apply the propeller brake, or feather the propeller, or reduce the airspeed until the propeller stops
- Adopt the normal gliding attitude
- Radio 'On'

Demonstration – Starting. Having addressed the appropriate airmanship considerations and any pre starting requirements, for example un-feathering the propeller or opening cooling flaps, etc, start the engine as recommended in the flight manual or pilots notes.

If the type has no recommended engine starting procedure, the following guideline may be appropriate. If above the minimum height to attempt a start:

- Fuel 'On'
- Choke 'As required'
- Throttle 'Set'
- Ignition 'On'
- Radio 'Off'
- Starter 'Operate', and when engine starts,
- Choke 'Off'
- Starter Warning 'Check'
- Oil Pressure & Temperature 'Check'
- Carb Heat 'Cold'
- Radio 'On'

Summary: *Stopping and starting the engine in flight is a relatively complex procedure and in some types may require the use of flight reference cards. **The priority must always be to FLY the aircraft, and to remain in gliding range of a safe landing area.** Switching off the ignition and fuel will prevent the engine running under its own power but the gliding speed will continue to make the propeller rotate due to the windmilling action of the slipstream.*

Exercise 16 – Windmill Starting the Engine in Flight

Instructors Note: *This exercise uses a considerable amount of height, and therefore the airmanship considerations previously described in exercise 16 should again be addressed. This exercise should be carried out close to an airfield. Consideration*

should also be given to some older aircraft types with a low Vne – the speed required to windmill the propeller may be too close to Vne for safe windmill starting.

It is important that the student is made aware that electrical failure could occur while attempting to start the engine in flight - for example a discharged battery or failed starter motor. This exercise demonstrates the procedure for windmill starting the engine in flight.

Demonstration. Having addressed the airmanship considerations, including an agreed start attempt 'height floor', fly the aircraft at best glide speed and close to the airfield. Having noted any pre-starting requirements, carry out a windmill start as recommended in the flight manual or pilots notes. If the type has no recommended procedure for a windmill start but the type is approved for a windmill start, the following procedure may be appropriate:

- Fuel 'On'
- Throttle 'Set as for a ground start'
- Choke 'As Required'
- Ignition 'On'
- Radio 'Off'
- Propeller 'Unfeather'
- Accelerate to windmill the propeller (speed is type specific)
- When engine starts, reduce the airspeed
- Adjust the power setting as required
- Choke 'Off'
- Radio 'On'

Summary: *The windmilling action of the slipstream can be utilised to start the engine in the event of a failure of the aircraft normal engine starting system. Care must be taken to avoid over-speeding the engine and propeller during the post start recovery. A windmill start attempt will invariably use a significant amount of height.*

Section 6 –Advice to Instructors

Operational experience of training in Self Launching Motor Gliders within the British Gliding Association has developed the following advice to instructors additional to that contained within the available PPL Flying Instructors Manuals and the Flying Manual for the NPPL:

Gliding Airfields. NPPL (SLMG) flight training may take place alongside winch launched gliding operations. Instructors should ensure that they and their students are fully conversant with the site procedures for ensuring adequate launching separation.

Performance. Some SLMG aircraft types have limited climb performance when compared to other powered aircraft. Instructors should ensure that their students are fully aware of the precautions required in the event of precipitation before take-off, and that they are fully aware of the many factors that can affect take-off and climb performance.

Airbrakes or Spoilers. In many SLMG aircraft types, in the event of a 'go around' or baulked landing it is necessary to move the left hand from the airbrake (or spoiler) lever to the stick and the right hand from the stick to the throttle. All instructors and their students should be fully briefed on the required procedure to change from the approach or landing with airbrake (or spoiler) to the take-off or climb under power. For example:

- Close and lock the airbrake (or spoiler) and adopt the appropriate attitude
- Move the left hand to the control column and then the right hand to the throttle
- Apply power

Carburettor Icing. All pilots should be made aware of carburettor icing during the course of their theoretical and flight training. However, some SLMG aircraft types are less prone to carburettor icing because of design features such as carburettor position and/or air inlet position. It is likely that this has influenced some instructors and students to become complacent about use of carburettor hot air in flight. Instructors should ensure that their students use carburettor hot air on all occasions appropriate to the engine and aircraft type, and are reminded of the primacy aspects of the student noting the use of carburettor heat during the first and every subsequent flight.

Self Launching Sailplanes. It is unlikely that any retractable engine self-launching sailplane will be appropriate for training for the NPPL (SLMG). Advice on operating this type of SLMG and on appropriate differences training can be obtained from the NPPL (SLMG) Instructing and Examining Panel.

CONDUCT OF THE NPPL SLMG NAVIGATIONAL SKILLS TEST

Examiners should note that the Navigation Skills Test (NST) is a qualifying requirement for the grant of the NPPL SLMG and should be carried out prior to the General Skills Test (GST). The aim of the NST is to provide an independent check of the student pilot ability to apply visual navigation techniques; to continue to navigate safely when forced by weather or other constraints to vary the planned flight profile; to execute an in-flight diversion; and to liaise with Air Traffic Control. To pass the test, the student pilot must have received dual navigation training on a recognised PPL course.

The following are requirements of the NST:

- The student must not have practised the proposed NST route (dual or solo) and the route should not be made available to the student earlier than 2 hours prior to the test.
- The flight is to be non-stop, without intermediate landings.
- The route may penetrate controlled airspace, but radar navigation assistance may not be provided.
- The planned route is to be triangular A-B-C-A.
- Leg A-B is to be at least 30 nm.
- The track change at point B is to be between 60 and 150 degrees. The 'low' section on the leg B-C should commence after 5 minutes and continue for 5-10 minutes. During this 'low' section, the examiner should engineer a situation where the aircraft is 5 nm off track and check the candidates ability to re-establish position by map reading. The candidate should then be tested on ability to regain track or to steer to destination and to revise the ETA.
- Leg B-C should be planned to be at least 40 nm.
- The diversion track is not to parallel or nearly parallel to any of the pre-planned legs and need not be back to A.
- The NPPL SLMG NST form is to be signed & dated immediately following completion of the test.
- The entry in the student logbook is to indicate that the flight was the NST and the planned route should be entered in the remarks column, together with details of the diversion point and destination.
- The student navigation plan and in-flight log is to be retained at the conclusion of the test and forwarded with the licence application.

Section 7 – Record of Flight Training (Phases 1-4)

Students Name:

Students Address:

Students Phone Number & E-Mail Address:

Flying Training School/Club:

Phase 1

| Phase 1 Exercise | Description | Date Completed | Instructors Signature |
|------------------|---------------------------------------|----------------|-----------------------|
| 1 | Aircraft Familiarisation | | |
| 1E | Emergency Drills | | |
| 2 | Preparation for & Action after Flight | | |
| 3 | Air Experience | | |
| 4 | Effects of Controls | | |
| 5 | Taxying | | |
| 6 | Straight & Level Flight | | |
| 7 | Climbing | | |
| 8 | Descending | | |
| 9 | Medium Turns | | |
| 10A | Slow Flight | | |
| 10B | Stalling | | |
| 11A | Spin Avoidance | | |

Phase 1 Flying Exercises Taught - Student Signature:

Phase 2

| Phase 2 Exercise | Description | Date Completed | Instructors Signature |
|------------------|---------------------------------|----------------|-----------------------|
| 12 | Takeoff & Climb | | |
| 13 | The Circuit, Approach & Landing | | |
| 12E/13E | Emergency Procedures | | |
| 14 | First Solo | | |

Phase 2 Flying Exercises Taught – Student Signature:

Phase 3

| Phase3 Exercise | Description | Date Completed | Instructors Signature |
|-----------------|------------------------------------|----------------|-----------------------|
| 12/13 | Consolidation of Exercises 12 & 13 | | |
| 14B | Consolidation of Exercise 14 | | |

Phase 3 Flying Exercises Taught – Students Signature:

Phase 4

| Phase 4 Exercise | Description | Date Completed | Instructors Signature |
|------------------|------------------------------|----------------|-----------------------|
| 15 | Advanced Turning | | |
| 16 | Forced Landing without Power | | |
| 17 | Precautionary Landing | | |
| 18A | Pilot Navigation | | |
| 18B | Navigation at Lower Levels | | |
| 18E | Navigation Emergencies | | |
| 19 | Instrument Appreciation | | |

Phase 4 Flying Exercises Taught – Students Signature:

| Date Flight Training Syllabus Completed | Examiner Signature | Student Signature |
|---|--------------------|-------------------|
| | | |

23 Feb 2004

Section 8 – Examining Record

The NPPL SLMG flight tests comprise of the Navigational Skills Test (NST) and the General Skills Test (GST). The following documents are designed for use by the examiner during the testing process. The completed forms should be forwarded with the licence application.

- NPPL SLMG NST Examining Record
- NPPL SLMG GST Examining Record

NPPL SLMG GENERAL SKILLS TEST EXAMINING RECORD

Note. It is not essential that the whole test be completed in one flight provided the date on which the candidate was found proficient is inserted against each item of the test. The whole test must be completed within 28 days.

| Applicants Name | | | For official use. CAA Reference : | U | K | N | P | | | | | | |
|--|---------------|----------------|--------------------------------------|--|---|---|---|------|--|--|--|--|--|
| Aircraft type: | Registration: | Place of test: | | | | | | | | | | | |
| | | | | | | | | | | | | | |
| PREPARATION FOR FLIGHT: | | | Date | FORCED LANDINGS WITHOUT POWER: | | | | Date | | | | | |
| Weather suitability | | | | Checks | | | | | | | | | |
| Aeroplane documents check | | | | Procedure | | | | | | | | | |
| Personal equipment check | | | | Judgement | | | | | | | | | |
| Weight, balance & performance – calculate | | | | INSTRUMENT FLIGHT BY SOLE REFERENCE TO INSTRUMENTS: | | | | | | | | | |
| Pre-flight inspection | | | | | | | | | | | | | |
| Booking out | | | | Straight & level | | | | | | | | | |
| Passenger briefing | | | | Descending & descending turning | | | | | | | | | |
| STARTING, TAXIING & POWER CHECKS: | | | | Turns onto specified headings | | | | | | | | | |
| Pre & post start checks | | | | Recovery to straight & level flight from climbing/descending turns | | | | | | | | | |
| Taxiing technique | | | | NAVIGATION & ORIENTATION: | | | | | | | | | |
| Power checks | | | | | | | | | | | | | |
| TAKE-OFF: | | | | Recognition of features | | | | | | | | | |
| Pre-take-off checks (vital actions) | | | | Assessment of heading | | | | | | | | | |
| Assessment of crosswind component | | | | AIRFIELD APPROACH PROCEDURES | | | | | | | | | |
| | | | | | | | | | | | | | |
| Checks during & after take-off | | | | CIRCUIT PROCEDURE: | | | | | | | | | |
| Normal take-off | | | | Powered circuit | | | | | | | | | |
| Crosswind take-off | | | | Gliding circuit | | | | | | | | | |
| Crosswind take-off | | | | Bad weather circuit | | | | | | | | | |
| AERODROME DEPARTURE PROCEDURES | | | | APPROACH & LANDING: | | | | | | | | | |
| CLIMBING | | | | | | | | | | | | | |
| STRAIGHT & LEVEL | | | | Pre-landing checks (vital actions) | | | | | | | | | |
| DESCENDING WITH POWER | | | | Powered approach | | | | | | | | | |
| TURNING: | | | | Glide approach | | | | | | | | | |
| Level | | | | Flapless approach | | | | | | | | | |
| Climbing | | | | Shortfield landing | | | | | | | | | |
| Descending | | | | Crosswind landing | | | | | | | | | |
| At steep angle of bank | | | | Assessment of crosswind component | | | | | | | | | |
| STALLING/UNUSUAL ATTITUDES: | | | | Missed approach procedure | | | | | | | | | |
| Knowledge of aircraft manoeuvre limitations & speed limitations | | | | Checks after landing | | | | | | | | | |
| Checks before stalling | | | | SIMULATED EMERGENCIES | | | | | | | | | |
| Flight at 1g clean stall speed + 5kts and flight at 1g airbrake/spoiler deployed stall speed + 5 kts – level, climbing, descending & turning | | | | | | | | | | | | | |
| Recognition of incipient stall | | | | Engine fire in the air/on the ground | | | | | | | | | |
| Recovery from incipient stall | | | | Cabin fire in the air/on the ground | | | | | | | | | |
| Recovery from a developed stall: | | | | Engine failure after take-off | | | | | | | | | |
| Straight | | | | ENGINE & SYSTEMS HANDLING | | | | | | | | | |
| Turning | | | | USE OF CARBURETTOR HEAT | | | | | | | | | |
| In approach configuration | | | | AIRMANSHIP – AWARENESS: | | | | | | | | | |
| Recognition of incipient spin | | | | | | | | | | | | | |
| Recovery from an incipient spin: | | | | ACTION AFTER FLIGHT: | | | | | | | | | |
| Gliding | | | | | | | | | | | | | |
| At climb power | | | | Engine shut-down | | | | | | | | | |
| In approach configuration | | | | Parking & securing aircraft | | | | | | | | | |
| | | | | Recording of flight details | | | | | | | | | |

I certify that:

- a) I have examined the applicants training record and logbook.
- b) I am satisfied that the applicant has reached the standards of flying required to pass the NPPL SLMG GST.
- c) I have retained a copy of this completed document.

| | | | |
|-----------------------|-----------------|------------------------|-------|
| Examiner's Signature: | Examiners Name: | CAA Authority No: X | Date: |
|-----------------------|-----------------|------------------------|-------|

NPPL SLMG NAVIGATION SKILLS TEST EXAMINING RECORD

Note. The test must be completed in one flight.

| Applicants Name | | | For official use. CAA Reference: | U | K | N | P | | | | | | |
|--|----------------------|-----------------------|-------------------------------------|---|---|---|---|---|--|--|--|--------------|--|
| <i>Aircraft type:</i> | <i>Registration:</i> | <i>Place of test:</i> | | | | | | | | | | | |
| | | | | | | | | <i>Duration of test:</i> | | | | <i>Date:</i> | |
| | | | <i>Date</i> | | | | | | | | | <i>Date</i> | |
| PRE FLIGHT PLANNING | | | | | | | | | | | | | |
| Weather suitability | | | | | | | | Assessment of position | | | | | |
| Navigation Warnings, inc. Royal Flights | | | | | | | | Correction of track error | | | | | |
| NOTAMS | | | | | | | | Revision of ETA's | | | | | |
| Flight Information (MATZ, ATZ, RTF, etc) | | | | | | | | Re-establishment of position following deviation | | | | | |
| Navigation flight plan | | | | | | | | LOW LEVEL NAVIGATION | | | | | |
| Safety Altitudes | | | | | | | | Maintenance of track | | | | | |
| Diversions | | | | | | | | Map reading technique | | | | | |
| Chart preparation | | | | | | | | Maintenance of height | | | | | |
| Fuel planning | | | | | | | | Aircraft configuration (low safe cruise) | | | | | |
| Aircraft loading | | | | | | | | | | | | | |
| Booking out / filing flight plan | | | | | | | | DIVERSION | | | | | |
| | | | | | | | | Selection of diversion airfield | | | | | |
| AIRCRAFT HANDLING | | | | | | | | Heading | | | | | |
| Maintenance of course, height & speed | | | | | | | | ETA | | | | | |
| Systems management (inc. fuel) | | | | | | | | ATC liaison and compliance | | | | | |
| Altimeter setting procedures | | | | | | | | | | | | | |
| | | | | | | | | IN FLIGHT RECORDING | | | | | |
| DR NAVIGATION | | | | | | | | | | | | | |
| Departure procedure | | | | | | | | RADIO NAVIGATION AIDS IF USED (for diversion only) | | | | | |
| Course setting technique | | | | | | | | Choice of aids | | | | | |
| Synchronisation of DI & compass | | | | | | | | Use of radio navigation aids | | | | | |
| Map reading technique | | | | | | | | | | | | | |
| Identification of features | | | | | | | | | | | | | |

I certify that:

- a) I have carried out the navigation skills test during which this applicant has demonstrated the ability to perform satisfactory the items listed above.
- b) I am satisfied that the applicant has reached the standards of flying required to pass the NPPL SLMG NST.
- c) I have retained a copy of this completed document.
- d) I have examined the applicants training record and logbook.

| | | | |
|------------------------------|------------------------|-------------------------------|--------------|
| <i>Examiner's Signature:</i> | <i>Examiners Name:</i> | <i>CAA Authority No:</i> X | <i>Date:</i> |
|------------------------------|------------------------|-------------------------------|--------------|