

Building instructions

Pober Pixie

RC model aircraft
Order No. 1357/00



Specification

Wingspan	1650 mm
Length	1050 mm
Wing area	41.9 dm ²
All-up weight	2000 - 2250 g
Wing loading max.	approx. 54.4 g/dm ²

Guarantee claims will be refuted in the case of damage caused by failure to heed the instructions. We accept no liability for consequent damage which results from such mis-use. It is essential to keep strictly to the building instructions when completing and operating the model. The instructions include a section which covers the safe operation of the model.
This model is by no means a plaything for children.

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Our model of the Pober Pixie represents a semi-scale version of the amateur design which was drawn up by Paul Poberezny (founder and president of the EAA - Experimental Aircraft Association). The full-size Pober Pixie is intended for anyone who wishes to own a low-priced machine which is simple to handle. The design emphasises good flying characteristics as well as low costs.

The full-size machine is powered by engines rated at around 60 BHP (Continental A-64, fuel consumption approximately three gallons per hour).

Today these aircraft are built and flown in the USA and other countries; every year the members of the “Pober Pixie Association” meet up at the flying event at Oshkosh, USA.

Our model retains all the good qualities of the full-size machine, and its large wing area and powerful ailerons offer good manoeuvrability and excellent flying characteristics even at low airspeeds. The Pober Pixie represents an excellent choice for the beginner to flying.

The kit contains a GRP fuselage and ready-built, uncovered wing panels, tailplane and fin. The model can therefore be completed ready for flying in a very short time, or alternatively can be fitted out to good “scale” standards if the builder prefers.

The model was designed from the outset for electric power - the building instructions include suggestions for recommended power systems.

Accessories required to build the model:

Balsa knife, steel straight edge, ruler, white glue, screwdriver, 5-minute epoxy, thixotropic filler for thickening epoxy (optional), cyano-acrylate glue (“cyano”), abrasive paper, modelling pins, covering material (Oracover, Solarfilm), general modelling tools.

Items required to fly the model:

Motor, propeller, propeller driver, speed controller, connecting leads, connector system, RC equipment, four servos (special high-power or digital servos are not required).

Introductory notes

Please handle all the balsa components with care.

The fuselage structure is adequately strong and resistant to vibration. Nevertheless it is important to install the individual components in the fuselage in approximately the positions shown.

Sand the internal surfaces of the GRP fuselage moulding with abrasive paper (150-grit to 180-grit) to provide a “key” for the adhesive before gluing any component to it.

Trial-fit and trim all parts carefully before reaching for the glue bottle.

Epoxy is heavy; when using this adhesive for glued joints take care to use the absolute minimum. It is sometimes advisable to thicken the resin with micro-balloons. Read the instructions supplied by the adhesive manufacturer.

Avoid sharp corners and edges when cutting out the openings in the fuselage. Reinforce cut edges by gluing glass rovings or pieces of plywood on the inside.

Save weight wherever possible, especially at the tail end (tailplane and fin).

As an alternative to epoxy you can use PU (polyurethane) adhesive such as ISOLEMFI 3300 (made by EMFI) or Sikaflex 252 to glue components to the GRP parts. PU glues are very simple to use because they are thixotropic (do not run) and harden without problem. PU foaming adhesives can also be used.

Before painting the fuselage it is essential to de-grease the surfaces and carefully rub down the joint lines using 400-grit wet-and-dry paper, used wet.

Fuselage

Wing strut supports

- Prepare the openings for the laminated wing strut supports as shown in the fuselage drawing. A recess is moulded into the fuselage at the support location - drill through the fuselage at the support position and cut the opening to final size using a milling cutter or a file. Check that the openings are the same size and in the same position on both sides.
- The laminated strut supports are supplied with accurate holes for clevis-type strut ends. All you need to do is clean up the edges and round off the ends.
- Centre the strut supports relative to the fuselage centreline, and tack them in place lightly using cyano. They are eventually glued in place permanently using epoxy, but not until the undercarriage mounting has been installed.

Tip: apply the cyano glue in the centre of the fuselage to avoid the adhesive running onto the outside surface of the fuselage and spoiling its appearance. If this should happen, wipe off the excess using cyano cleaner.

Undercarriage

Main undercarriage

- The main undercarriage unit is made of dural and features pre-drilled mounting holes. Section **A-A** shows the method of attaching the undercarriage - it is held in place by two M5 screws fitted from the outside.
- Trim the plywood undercarriage support #1 to fit snugly in the fuselage. Cut lightening holes in the support, but take care to avoid the area of the holes for the retaining nuts. Glue the plywood support in place.
- Place the undercarriage unit on the fuselage, align it carefully relative to the fuselage centreline and drill the 5 mm Ø holes through the fuselage. Remove the undercarriage again.
- Glue the reinforcing plates #3 (3 mm plywood, 15 x 15 mm) to the undercarriage support over the screw holes.
- Allow the glue to harden, then drill 8 mm Ø holes in the plates and epoxy the plastic nuts in the holes.
Tip: screw the undercarriage to the fuselage while the epoxy is still soft, so that the screws hold the plastic nuts in the correct position.
- De-grease the undercarriage unit and sand the central area. Place the balsa block #10 on the undercarriage, mark the position of the holes and drill them. Note: the balsa block is tapered so that it fits accurately in the prepared channel; it will only fit one way round.
- Enlarge the holes in the balsa in-fill piece so that the heads of the M5 retaining screws rest on the metal itself.
- Glue the balsa block #10 to the central part of the cleaned and sanded undercarriage unit.
- Place this assembly on the fuselage. Apply masking tape to the fuselage to prevent it picking up scratches, then sand the balsa block so that it follows the lines of the fuselage.

Tip: apply sanding sealer and primer to the balsa parts before painting the model.

Wheel spats

The wheel spats are supplied as vacuum-moulded ABS parts; see drawing (DET. 5).

- Cut out the spat components along the marked lines, sand the cut edges carefully and trim the parts to fit together accurately - you will find the material is easy to cut and sand.
- Cut out the opening for the wheel in each wheel spat and check that the wheel spigots fit.
- Assemble the wheels and spigots as shown in the drawing (DET. 5), place them in the spats and glue the trimmed outer spat shell in place with cyano.
- The method of attaching the wheel spats is shown in the drawing (DET. 5).
- The spat assemblies can easily be fitted and screwed to the undercarriage unit after they have been filled and painted.

Tailwheel unit

- Sand the tailwheel support #4 (channeled part) to follow the shape of the fuselage as shown in the drawing, and glue it in place.
- Cut through the fuselage using a razor blade to expose the channel, and fit the tailwheel unit in the slot.
- Drill two 2 mm Ø holes at the marked points in the tailwheel unit to accept the 2.5 x 12 mm woodscrews.
- The tailwheel unit can be glued and screwed in place permanently once the final finish has been applied.
- We recommend that you install a steerable tailwheel as shown in the drawing (DET. 1): make up the guide (wire loop) and install it in the rudder after it has been covered.
- Cut the steerable tailwheel "snake" to length and run it through the prepared guide (loop).

Tailplane and fin

Horizontal stabiliser - tailplane and elevators

The tailplane is made of balsa and can now be prepared for installation. The same applies to the elevators, which are attached using film hinges.

- Assemble the tailplane and elevators on a flat surface and place the joiner in position.
- Drill holes for the elevator joiner in the elevators, taking care to space the holes to match the exact length of the joiner - see drawing (DET. 2).
- Sand the tailplane / elevator panels lightly overall, wipe off all dust and cover them with iron-on film.
- If you wish to use the covering film as the elevator hinge (see DET. 3), this is the procedure:
 - Prepare a strip of film slightly longer than the tailplane and elevators.
 - Cover the top surface of the tailplane and elevators.
 - Lay the tailplane on the workbench and fold the elevators up and over onto the tailplane.
 - Iron the strip of film to the underside of the elevators (position the elevators carefully beforehand - align them with the outside edge of the tailplane).
 - Cut off the film at the ends using a very sharp knife (use a steel straight edge).
 - Turn the tailplane and elevators over and cover the underside.
 - Again cut off the film accurately at the ends, leaving it overhanging by about 5 mm. Carefully iron down the edges.
- Carefully pierce the film at the joiner hole positions and glue the steel joiner in both elevators.
- Alternative elevator control linkage: prepare two steel rods with a 90° bend (see DET. 4) and fit them in the elevators with the angled rods located inside the fuselage. Solder the rods together and attach a linkage ball to accept the elevator ball-link.
- This option is rather tricky, and should only be attempted if you are a competent, accurate builder.
- Place the tailplane on the fuselage and position it accurately, i.e. "square" to the fuselage centreline and lateral axis, as shown in the drawing.

Tip: use a length of thread to check that it is square relative to the fuselage centreline - attach one end to the centre of the cabane; the distance to both tailplane tips should be identical.
- Use a soft pencil to draw a light mark on the underside of the tailplane where it meets the fuselage. Remove the tailplane, slit the film with a sharp knife and peel it away about 5 mm from the edge of the fuselage, so that the joint surface is bare wood; the film should overhang the joint area by about 5 mm. This ensures a strong, resilient glued joint.

- Slit and peel off a strip of film about 10 - 15 mm wide in the centre of the top surface in the same manner (for attaching the fin and strake).
- Cyano glue can also be applied directly to the film. In this case it is important to sand the joint line carefully and to apply the glue very accurately, because cyano behaves differently to epoxy, and the glued joint may fail after a shock.
- Carefully replace the tailplane on the fuselage and epoxy the parts together.

Vertical stabiliser - fin and rudder

- The fin and strake are made of balsa and sanded. They are prepared for installation, including two slots for hinges. The strake consists of two parts.
- Offer up the strake to the tailplane (attached to the fuselage) and sand it to fit accurately. Glue the strake to the fin. Sand this assembly smooth, taking care to shape the leading edge as shown.
- Check that the assembly fits neatly on the fuselage, then cover the fin and strake with film.
- Be sure to leave a strip of bare wood about 5 mm wide at the bottom of the fin on both sides.
- Glue the covered fin assembly in place, taking care to set it exactly vertical relative to the tailplane, and in line with the fuselage centreline.
- Cut the 8 x 8 mm triangular bracing strips to length (DET. 6) and trim them to fit. Cover the outside surface of the strips, and glue them in the joints between the tailplane and the fin.
- Attach the hinges to the fin and tailplane and prepare the recess for the steerable tailwheel control rod.

Installing the servos and “snakes”

- Cut out the openings in the servo plate (plywood part #6) to match the actual size of your servos.
 - Prepare the servo plate for installation in the fuselage as shown in the drawing (DET. 7).
 - Sand the servo plate and trim it to fit in the fuselage. Glue the spruce strips on the underside and trim this assembly to fit in the fuselage. Apply epoxy to the hardwood strips and glue the servo plate in the fuselage.
 - Preparing the linkages: these are based on the 8 x 8 mm balsa pushrods supplied. Attach an M2 metal clevis to one end - see drawing (DET. 8): bend the final 5 mm of the metal rod at 90°, push the angled end into the balsa pushrod, wrap thread round it and secure the joint with cyano or white glue. Cut the pushrod to the required length to suit the exact position of the servo and the control surface hinge line, then attach a metal clevis to the other end.
 - Cut the pushrod exit slots in the tail end of the fuselage - to avoid unnecessary slop in the control system, the run of the pushrod should be as straight as possible, and the metal rod should be bent as little as possible. We recommend that you provide support for the pushrod across the fuselage as shown in the drawing. This is necessary because the exit slots in the fuselage for the elevator and rudder pushrods must be at different levels to avoid the pushrods fouling each other.
- Tip:** this task is much easier if you cut an access opening in the tailplane support surface.
- The pushrods must be installed in such a way that lost motion (play) in the control system is minimised, that the fore-and-aft travel of the pushrod is unrestricted, that the pushrods cannot touch each other, and that the end-pieces are well secured, e.g. using a locknut and cyano.
 - The aileron pushrods should be cut to correct length after they are installed. Each pushrod consists of an M2-threaded steel rod.
 - Prepare the servos and control surface horns.
 - Screw a metal M2 clevis to one end; at the other end the clevis should be soldered to the rod.

Wings

The wings are supplied as bare, ready-made, built-up structures. The leading edge section is a strong torsion box, and all reinforcing and joiner components are factory-fitted (see plan).

This construction has clear benefits when you are flying the model, but it also offers the advantage that the panels are straightforward to cover. The wing consists of three panels: a permanently mounted centre section and two removable outboard panels.

The centre section features pre-drilled and prepared mounting holes, plus holes for the retaining screws.

- Centre section - (DET. 9): slide the 5/4 mm Ø brass tubes into the prepared holes (wing joiner rod sleeves - see drawing).
- Slide the 4 mm Ø steel rods into the pre-drilled holes in the root ribs and assemble the outboard wing panels with the centre section on a flat workbench.
- The centre section ribs are angled at the correct dihedral (1 °) - pack up both wingtips by about 15 mm so that the ribs meet accurately.
- When the wing panels are prepared as described, remove the outboard panels and centre section and remove the steel joiner rods and brass tubes. Apply glue to the holes, fit the joiner rods and brass tubes again, and set up the wings as previously described (correct dihedral!).

Tip: place PVC film under the joiner rods to prevent them becoming glued in place. Apply a little PVC adhesive tape to the wing root rib (pierce and cut the holes for the steel joiner rods) to prevent the outboard panels sticking to the centre section. The “loose” ends of the rods which are fitted in the brass tube should be waxed to prevent them becoming stuck permanently.

Use epoxy resin for these joints.

- Prepare the servo plate #2 for the left and right wings to suit the servos you intend to fit. This assembly is shown in Section B-B.
- The suggested installation method provides easy access to the servos for installation and subsequent removal even after the wings have been covered.
- Cut the machined ailerons free from the wings, and sand the cut edges smooth.
- Cut a slot in each aileron for the GRP horns exactly in line with the aileron servo pushrod (see Section B-B for the location and orientation of the horns).
- The horns should be epoxied in their slots, but not until the wing has been film-covered.
- Epoxy the hooks in the root ribs for the wing joiner spring, as shown in the drawing.

Wing struts

The struts are fully functional and are essential; it is therefore important to adhere strictly to the building instructions. Note that the front and rear struts are different lengths.

- Glue the pre-shaped balsa block (strut support reinforcement) to the rear spar as shown in the drawing.
- The support blocks which are fitted to the front of the mainspar are supplied factory-prepared.
- The GRP strut supports should be epoxied in the prepared slots, but only after the wings have been film-covered.
- The profiled wing struts are supplied pre-cut to the correct length.
- Drill 2.2 mm Ø holes to a depth of about 25 mm in both ends of the struts, and epoxy an M2 threaded rod in each as shown in the drawing (DET. 12). The overall length of this assembly should be 455 mm for the front struts, and 465 mm for the rear ones. Secure the steel M2 clevis with a locknut. This construction provides excellent strength and makes it simple to assemble and disassemble the model.
- Take care to make the front and rear struts the correct length - they are not the same!
- We recommend that you cover the struts with film before painting them.

Wing centre section

All you have to do to complete the centre section is to glue in the brass tubes for fixing it to the cabane, which is already in place.

- Position the centre section carefully on the cabane (see drawing), locating the pre-drilled holes in the centre of the glued-in strip, and mark the position of the front hole on the cabane using a soft pencil or pin, working through the pre-cut holes.
- Drill the front hole 3 mm Ø.
- Glue the M3 captive nut in the prepared hole (DET. 13).

Tip: the wing centre section must be positioned accurately on the cabane: attach the outboard wing panels to the centre section and place the assembly on the cabane. Pack up the wingtips, set the fuselage horizontal and check using the thread method that the distance between fin and wingtips is the same on both sides.

- Working from the underside, glue the M3 captive nut in the front hole of the cabane, together with the brass spacer tube; the sleeve must end flush with the bottom surface of the film covering (DET. 13).

- Screw the centre section to the cabane, align it carefully and drill the rear holes 3 mm Ø.
- Glue M3 captive nuts in the rear holes in the cabane, and screw the centre section to the cabane while the epoxy is still soft - this pulls the nuts into place and secures them. Fit the screws with integral washers from the underside. Access to these screws is a little awkward, but they only have to be fitted once. Once the model has been assembled, the wing centre section stays attached to the cabane permanently.
Note: be sure to glue the captive nuts in place securely, using plenty of epoxy.
- Allow the glue to set hard, then remove the wing centre section and prepare it for covering.
- Prepare the hatch over the centre section access opening by rounding off the corners etc.
- The front of the hatch is secured using two woodscrews. Glue an obechi reinforcement in place at the screw position (cut the wood to the required length - the rest of the material is used for the cowl reinforcements).
- The rear part of the hatch is retained using the profiled strip supplied - cut it to length and glue it in place as shown in the drawing.

Covering the wings

- Sand the balsa surfaces and remove all sanding dust; the panels are now ready for covering.
- Cover the wing panels using Oracover or tissue, following the instructions and recommendations provided by the manufacturer.
- The wing structure is adequately rigid and no special measures are required to prevent wing warps, provided that you use standard covering materials such as Oracover, Solarfilm or Model-span tissue.
- Using the covering film as aileron hinges is perfectly adequate. The fuselage can be painted directly using most types of colour paint.
- If you are installing a glow motor it is essential to apply a coat of fuel-proof lacquer to protect the whole model from the effects of fuel. We recommend aero-naut polycarbonate spray paint for this, as it is highly resistant to methanol, nitro-methane, and fuels containing these substances.

Cowl

The cowl is a vacuum-moulded ABS item, and is fixed to the fuselage using four woodscrews with integral washers.

- Cut out the cowl along the marked lines and carefully trim it to final size - you will find the material easy to sand.
- Install the motor bracket, motor mount and propeller driver (recommended spinner diameter 42 mm - aero-naut Order No. 7252/15), and cut a central hole in the front of the cowl for the propeller shaft.
- Place the cowl on the fuselage and drill 2 mm Ø holes through both parts in the positions shown in the drawing.
- Cut hardwood reinforcements from the tapered obechi strip supplied and glue them on the inside of the fuselage at the cowl screw positions.
- Prepare the battery supports as shown in the drawing (electric version) and glue them in the fuselage. Cut holes in the front face of the cowl to provide an adequate flow of cooling air to the power system.

Installing the motor

Electric version

- Glue together the side and front motor mount parts - see drawing (DET. 14).
- Check that all parts are square. Use the balsa spacer block supplied when gluing the inner spacer piece in place.
- If you are installing a high-performance motor we recommend that you glue an extra piece of plywood over the top, as this considerably increases the torsional rigidity of the assembly.
- Allow the glue to set hard, then attach the motor mount assembly to the front face of the fuselage (see drawing for exact position) and mark the position of the slots for the motor mount side pieces. Important: the motor mount must be fitted centrally relative to the cowl opening.
- This is the procedure: mark a line on the front face of the fuselage at the position stated in the drawing - lay a straight edge in position and draw a vertical line using a soft pencil or felt-tip pen.

Measure off and mark the centre of the channels, and mark the width of the channels to match the motor mount sides which you have already prepared.

- Cut slots in the GRP moulding to accept the motor mount side pieces.
- Fit the motor mount into the slots and glue the joints securely, inside and outside. Take care to keep the bulkhead square; the balsa spacer block is a useful aid for this.
- Glue triangular strips to the inside and outside of the glued joints to reinforce them.
- Prepare the battery holder as shown in the drawing and glue it in place.
- Refer to the drawing before cutting the holes in the bulkhead for the motor mount - spacer washers can easily be fitted later to adjust the thrust-line of the motor if test-flying shows a need for adjustment.

Glow motor version

- We recommend a glowplug motor in the range 5.5 - 7.5 cc (.32 - .46 cu. in.).
- Sand the motor bulkhead to suit the length of the motor and trial-fit it in the fuselage.
- Cut holes for the throttle linkage to suit the motor you are using.
- Glue the motor bulkhead in the fuselage using epoxy. Glue the motor bracket in place to suit the motor you have selected (note the length of the cowl!).
- Glue the fueltank support to the motor bulkhead as shown.
- Install the fueltank (recommended capacity approx. 200 - 350 cc, according to motor type).
- The tank must be fixed securely in the fuselage - fill the space round the tank with polystyrene foam or a small quantity of PU foam.
- Seal the motor compartment thoroughly with fuel-proof lacquer to prevent fuel and oil absorption. We recommend aero-naut polycarbonate spray paint for this, as it is highly resistant to methanol, nitro-methane, and fuels containing these substances.
- Install the motor mount.

Recommended power set:

Motor	Prop	Cells	Description
Race 650 + 2.85:1 gearbox Order No. 7120/13	12 x 8" CAMcarbon Order No. 7234/50	10 / 2400 mAh	Standard
SPEED 700 / 9.6 V and 2.7:1 gearbox	14 x 9.5"	10 / 2400 m Ah	Standard
actro C8 Order No. 7002/38	13 x 8" CAMcarbon Order No. 7234/57	8 / 2400 m Ah	Sport
actro CL6 Order No. 7001/06	13 x 8" CAMcarbon Order No. 7234/57	10 / 2400 mAh	Sport - aerobatics
Phasor 30-3	12 x 8" CAMcarbon Order No. 7234/50	8 / 2400 mAh	Aerobatics
Phasor 30-3	10.5 x 7" E-Prop Order No. 7228/56	10 / 2400 mAh	Aerobatics
Ultra 930/7	10 x 6" E-Prop Order No. 7228/48	10 / 2400 mAh	Aerobatics
Ultra 300/3/2	12 x 8" rigid	12 / 2400 mAh	High-speed flight

RC installation, finishing

Control surfaces

- Glue the hinges and horns in the prepared slots.

Struts

- Assemble the struts as described earlier, referring to the drawing, and attach them to the model. The struts absorb flight loads, so they must be assembled and fitted without slop, and be securely mounted.
- Screw the wing centre section to the cabane (it is installed permanently), fit the outboard wings on the joiner rods, and install the wing struts. Caution: check that the wing dihedral is the same on both sides! Fit the retaining spring between the wing panels in the channel in the centre section. Fit the hatch over the access opening to complete assembly of the model.

RC equipment

- Place the batteries and speed controller in the fuselage and connect them to the receiver.
- Switch on the RC system and set all control surfaces to neutral (centre). Check the control surface travels, and carry out any adjustments required to the clevises and horns; alternatively make corrections using the trims on the transmitter.

Cockpit

- Cut out the cockpit along the marked lines. Cut out the decals (instrument panel, joystick) and apply them as shown.
- Fix the cockpit in the fuselage using the hooks and a rubber band (glue a balsa block in place for the hook).

Recommended control surface travels

Rudder	+35 / -35 mm	Ailerons	+12 / -8 mm
Elevator	+15 / -8 mm	Aileron - rudder mixer (the mixer is optional)	50%

Balancing

- You should be able to balance the model correctly by adjusting the position of the flight battery. If lead ballast is required, be sure to glue it in place securely to prevent it shifting in flight. Don't forget to balance the model laterally (tip to tip). The CG is marked in the drawing; it should be in the range 70 - 74 mm aft of the wing root leading edge.
- The optimum CG position can only be determined during test-flying.
- Test each function of the radio control system in turn, and check in particular that the controls work in the correct "sense" (direction). The model is now ready for test-flying.

Test-flying

- The model's handling and flight performance are heavily influenced by the Centre of Gravity, which must be set correctly.
- The model's balance point must therefore be checked with great care.
- Support the model on both index fingers at the stated CG position. Adjust the position of the batteries (and/or add lead ballast) until the model balances level, with the nose inclined slightly down, i.e. a normal gliding attitude.
- If you are not satisfied with the model's performance during test-flying, the CG can be moved forward in small increments (more lift, higher drag, lower basic airspeed, better thermalling characteristics) or back (lower drag, less lift, better glide angle and higher basic airspeed). The characteristics can be selected to suit the pilot's personal preference, or the way in which the model is most likely to be flown.
- Test-flying should be carried out on a completely calm day after checking all the control functions (rudder, elevator, ailerons) one last time, including direction of travel.
- If problems arise during the first flight (incorrect CG, unwanted turning tendency etc.) land the model immediately and sort out the problem.
- Always adjust the mechanical linkages to correct a problem permanently; don't just adjust the transmitter trims.
- It is important that the model should fly straight and level with the control surfaces at neutral (centre).

Dangers and hazards

Model flying, especially under radio control, is a fascinating pastime.

When you are operating your model we recommend that you make a point of observing the following basic rules, to avoid annoying or injuring other model flyers and anybody else.

When you are operating a model aircraft you bear sole responsibility for your behaviour and for any consequences of your behaviour. For this reason it is essential that you take out a private third-party insurance policy or a special model flying policy. Ask your local model shop for details, or contact your regional or national model flying association (BMFA in U.K.). You may need to register your radio control system (varies from country to country) before using it. Once again, your local model shop will gladly give you information on this.

Build your model carefully, checking every procedure, and be sure that everything is safely secured. Check that the entire model is safe to fly before each flight.

Only fly your model at an approved location, e.g. a model flying site, at which your activity will not cause a nuisance or hazard to other modellers or anybody else in the vicinity. Gliders and electric-powered models are far less critical in these respects.

Glow motors should only be operated with the recommended silencer fitted. Read the safety recommendations supplied by the motor manufacturer.

Never fly directly towards or over spectators, and don't be tempted to carry out flashy, high-risk manoeuvres.

Don't switch on your transmitter until you have ensured that no other radio control system in the vicinity is operating on the same frequency.

We hope you have many hours of fun and pleasure with your Pober Pixie. Happy landings!

aero-naut Modellbau

Parts List

No.	Part	Description	No. off
1	GRP fuselage	White GRP fuselage, factory-fitted cabane	1
2	Cowl	Ready made, vac. moulded ABS	1
3	Port outboard wing panel	Built-up balsa structure, ready made	1
4	Starboard outboard wing panel	Built-up balsa structure, ready made	1
5	Wing centre section	Built-up balsa structure, ready made	1
6	Tailplane	Balsa, ready made	1
7	Left elevator	Balsa, ready made	1
8	Right elevator	Balsa, ready made	1
9	Fin	Balsa, ready made	1
10	Fin strake (front fairing)	Balsa, ready made	1
11	Rudder	Balsa, ready made	1
12	Balsa block for undercarriage	Balsa, ready made, 20 x 122 x 50 mm	1
13	Strut support	Profiled hardwood strip, ready made	1
14	Undercarriage support	Plywood, 3 x 49.5 x 118	1
15	Undercarriage retaining nut support	Plywood, 3 x 15 x 15	2
16	Battery support	Plywood, 3 x 45 x 220	1
17	Servo plate – wing	Plywood, 3 x 68 x 68	2
18	Servo plate – fuselage	Plywood, 3 x 80 x 135	1
19	Servo plate support – wing	Spruce, 4 x 12 x 68	4
20	Servo plate support – fuselage	Spruce, 5 x 5 x 80	4
21	Slotted tailwheel support	Obechi, 10 x 17 x 30, ready made	1
22	Upper hatch latch	Profiled balsa strip	2
23	Strut support, fuselage	GRP, ready made, 2 x 10 x 140	2
24	Strut support	GRP, ready made, 2 x 10 x 35 + 22	4

25	Access hatch	ABS	1
27	Reinforcing strip – tailplane / fin	Balsa triangular strip, 8 x 8 x 120	2
28	Reinforcement	Obechi, 10 x 10 x 150, overlength	1
29	Cockpit reinforcement	Balsa, 19 x 19 x 30	1
30	Motor mount – side panel	Plywood, ready made	2
31	Motor mount – front part	Plywood, ready made	1
32	Motor mount reinforcement – front part	Spruce triangular strip, ready made	1
33	Motor mount – fuselage reinforcement	Balsa triangular strip, ready made	1
34	Motor mount top reinforcement	Plywood	2
35	Balsa block	For motor mount installation	1
36	Screw-hook – for cockpit	Metal - ready made	2
37	M2 ball-link	Ready made	1
38	M2 ball-link ball	Ready made	1
39	Tension spring	Ready made	1
40	Threaded rod	Ready made, M2 x 330, overlength	1
41	Elevator joiner	Ready made, steel 2 mm	1
42	Metal M2 clevis	Ready made	16
43	M2 threaded rod, 200 long	Ready made	7
44	M2 nut	Ready made	18
45	Rudder / elevator horn, 18 mm	Ready made	2
46	GRP aileron horn	Ready made	2
47	Self-tapping screw, 2.5 x 13	Ready made	12
48	Nylon M5 screw for undercarriage	Ready made	2
49	M3 captive nut	Ready made	3
50	Steel screw with integral washer, M3 x 12	Ready made	2
51	Steel screw with integral washer, M3 x 25	Ready made	1
52	Brass tube	Ready made, 5/4 x 108 mm	2
53	Steel rod	Ready made, 4 x 40 mm	4
54	Self-tapping screw with integral washer	Ready made	7
55	Brass tube	Ready made, 4/3 x 17 mm	1
56	Nylon M5 nut for undercarriage	Ready made	2
57	Rudder hinge	Ready made	2
58	Wing joiner hook	Steel - ready made	2
59	Main undercarriage unit	Ready made	1
60	Profiled strip – wing strut	Ready made, obechi, 480 mm	4
61	Wheel spat	Vac. moulded ABS	1
62	Pushrod	Balsa, 8 x 8 x 700 mm	2
63	Wheel	Ready made, 60/19 mm	2
64	M4 nut	Undercarriage	4
65	Steel screw, M4 x 35	Undercarriage - wheel axle	2
66	M4 self-locking nut	Undercarriage - wheel nut	2
67	Tailwheel unit	Complete set	1
68	Cockpit	Ready made	1
69	Building instructions		1
70	Plan		1
71	Decal sheet	Ready made	2