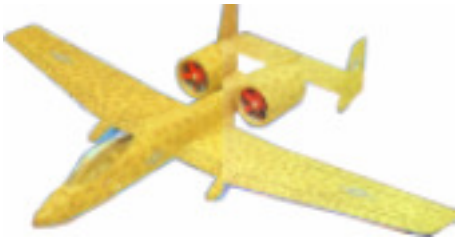
Building Guidance

Fairchild A-10 Thunderbolt II

RC-Electric Flight Aircraft
Order No. 1334/00



Technical data:

Span approx.	1310 mm
length approx.	1005 mm
Wing Area approx.	24, 76 dm ^{2}
Surface Area approx.	5.12 dm ^{2}
Flying weight with 8-9 cells	approx. 1500 -1650 g
total area load approx.	50,-55 g/dm ^{2}
Propeller Version	
Recommended drive:	2 x Race 400 Plus with stator ring
Flight Nicad	8 to 9 cells 2000mAh
Propeller	6 x 5 " / 155 x 125 mm or 6.5 x 4 " / 165 x 100 mm
Electric Ducted fan Version	For Details see Epoxy GfK Fuselage & Nascelle Additional Instructions
Recommended drive:	2 x Mabuchi 540BBVZ or Ultra 930.6
Flight Nicad	16-20 cells 1200mAh-2400mAh
Propeller	2 x Turbo 1000 Impeller
Fan Nascelles	Nascelles Part No 7249.52

RC Functions : elevator, aileron, rudder, electronic speed controller

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General:

The " Thunderbolt II " is a wonderfully unusual model for the fastidious RC pilot. Appropriate experience, both with building and with flight must be available however for this is no beginner's model. The model can be built in three variations - the decision can be made before beginning construction! The hand launch version omits the undercarraige chassis and controllable rudders, this achieves a lower flight weight around 120-130 g. The ground take-off version is worthwhile for those who have a hard runway, or an ideal short-grass runway available. Controllable rudders are only needed for a straight takeoff run when starting - they are unnecessary during flight. There is yet another third variation - a hand launch version with the chassis, but without controllable rudders (weight savings). Here however ground starts are not possible (due to missing lateral control). All propeller versions can be operated with an 8 to 9-cells flight nicad, whereby the 9-cell is the better selection. The take-off weight varies over each version and number of cells - between approx. 1500 and 1650 g, surface loading approx. 50-55 g/qdm.

The following table gives information over the necessary, or engines and accessories intended:

	Part number.	**Designation**	**Quantity**
	7000/40	motor Race 400 plus	2 pieces
	7124/26	stator ring 38 mm	2 pieces
	7120/94	motor-mount 28 mm	2 pieces of
	7124/16	boss 2.3/6 (with M2 in front)	2 pieces
	7253/30	spinner 30 mm white	2 pieces
or	7253/31	spinner 30 mm red	2 pieces
or	7253/32	spinner 30 mm black	2 pieces
	7228/14	propellers 6,5x4 " / 165x1 00	2 pieces
or	7228/11	propellers 6x5 " / 155x125	2 pieces
	7019/60	speed controller Micro MOS mc 200	
	7442/78	Flight nicad 8-cells	
or	7442/79	Flight nicad 9-cells	

We urge you to keep it light! You can stick to the rule of electrical flight, by consistently depending on our notes. Some components can be lightened still more at your own discretion, depending on your modelling experience.

Adhesives:

Some weight can be saved by selection of the correct adhesive. Use Cyanoacrylate (from here on referred as cyano) where possible, thin or thick viscosity. The thin viscosity penetrates into the wood structure and substantially reinforces it. Balsa may be pressed (laminated) together, or stuck edge to edge. A supply of humid or damp air (e.g. breathing air) accelerates the adhesion.
Caution: Cyanoacrylate superglues are dangerous! Do not inhale vapour - ensure sufficient ventilation! Note the instructions on the packing!

Sanding:

While the fuselage is epoxy the rest of the " Thunderbolt II " is created from balsa wood, therefore sanding has special importance. Even (level) sanding-blocks fitted with fresh sandpaper are necessary for accurate building of the model! Two sandings are required with (280 x 50 x 20mm and 230 x 25 x 20 mm), please check that they are done absolutely level. If necessary, while working on a corner or bend sandpaper it twice. Stick the sandpaper strips to the bar with thin, double-sided tape (e.g. tape for carpets. A sheet with a middle (approx. 100 to 150 grade) is recommended, together with another more fine (approx. 240) grit sheet.
Sand sections made from thinner balsa wood more gradually (e.g. the trailing edge part no 75,94) press down on the building board and chamfer for grain. Substantial sections or parts structures (vertical stabiliser fin, horizontal stabilizer) may also be sanded freehand. A more exact finish is achieved from the sanding bar in almost in all situations. With the sanding bar, the small building inaccuracies present are removed by continuously smoothing to a flat or evenly curved finish.
These are available in most model shops; many types have self-adhesive paper strip of different grits. Advantages are a very sharp abrasive with long life span; dust does not clog them. They sand evenly and quickly and are also good for use with harder woods.
ABS parts:

Many vac-formed ABS plastic parts are included in this kit. Here some tipsso they can be prepared faster and more exactly. Small, curved scissors are most useful. Cut out sections precisely, so that the markings out still remain visible. Make final adjustment with a sharp file. Rub against the edges and moved back and forth parallel to the edge. This reduces "bending and wobbling" of the plastic parts being prepared, to achieve suitable problem-free edges to the parts.

Building preparations:

Prepunched balsa and plywood sheet parts are shown reduced on page 10-11 of the instructions. Write the part numbers on the components with a soft pencil using these illustrations. Then separate the balsa parts with a scalpel from the prepunched sheet. The remainders are still partly used, so don't throw them away yet! Cut out the plywood sections. Sand, chamfer to fit, or prepare all component sections before installation in the model. Use a level (flat) building board for construction.
Deviations from the assembly sequence set out in these instructions can be made on own discretion, bet exercise care in this case!
Follow this building guidance and the structural drawing. Use building instructions for constant reference, together with building stage photo illustrations, parts list, plans showing engine with gearbox, servos, receiver, speed controller, and intended flight nicad packs.
The building stage photos were taken with our building prototypes. The three model variation exists however (Flight nicad size/location in the fuselage and optional rudder control), therefore your model does not have to exactly match with figs. 1, 5 and 16!

Fuselage:

Check fuselage side sections (1), they must be absolutely identical! Resand if necessary as required. With the help of the strips and stick these with somewhat diluted wood glue on (1) determine (2) and (3) the exact position of reinforcement (4). Strips (2) and (3) stick drop by drop with cyano. The middle strips (3-hinterer fuselage section) and (19-der front) form at the same time the meant middle fuselage level. The position of the (19) in front by the plan transferred, check at the frame! In the center the (3) and (19) encounter the strips the reinforcement (4), here are diagonal to suitably sand (4). Align dead-straight carefully and stick drop by drop with cyano. Cut 19) approx. 160 mm length from the strip (and create the bypass of (3) and (19 already stuck). Mark position of reinforcement (5) in every detail and stick with thick cyano. Bond reinforcement (6) with thick cyano. The lower edge of (6) is somewhat over refer to fuselage side view and cross-section cut S-S.

The upper edge of (1) now receives a reinforcement from strip (19). Within the area of the engine arms a approx. 155 mm long piece of (19) is added.
The position of the engine arms (transferred between frames (16) and (17) in every detail to the fuselage side sections. This area is left blank already now as support for the arms. The cross section cuts rear spar and J-J give exact information, how to measure this. The support must run parallel to the middle (3), i.e. also to the support for the horizontal tail unit!

Now the fuselage frames can be prepared for the fuselage assembly: Frame (8) shows here the cut B-B, how to fasten the nose gear. Stick frame (12) together with reinforcement (13). Drill ∅ 4 mm hole for peg (91). Drill out frames (16) up to (18) in marked places for the bowden cables∅ 2 mm.
The fuselage sides are parallel in the area of the frames (8) to (14). Put these four frames into the side part, align right-angled and cyano in place. Attach second side part (check symmetry of the frames), glue. When all it ok add some diluted wood glue. The side parts remain still flat (the frames are only down, up to the middle strip, with which side parts sticks together)!

Now that can be bonded front frame (7), be noted afterwards the lower strip (3) Auf the symmetry! Look from the strips (3) hardest out they up for the Flight nicadfuehrungen and a reinforcement of the servo mount (20) use. In this building phase only two lower Batteryfuehrungen (3) are built!
Fuselage frames (15) to (18), align, glue. The upper, middle strip (2) provisionally use, with pins protect. Now the symmetry is judged and adjusted. It can be judged by a view from the rear now whether the frames form an evenly curved edition for the ob~re fuselage sheeting . By tiny shifting after frames above or down much can be corrected! Everything tunes, the frames (again only within the lower area) with the side parts is stuck together. Also already thoroughly stuck wing mounting plates (21) and servo carrier (20) can be inserted.

The structure is rigid only now enough, in order to be able to bend the side parts in the upper area on the frames. It can occur that the cross-beam accommodations in the frames something must be done over again. Operate gradually, frame for frame. Stick best directly with cyano and hold, until the cyano is hardened. The half frame (42) bond.
Bowden cable interior pipe (27) divide and into the frames already pre-drilled contrive. Servos with linkage links (30) equip (the M2-nuts with screw lock with varnish). Divide 0.8 mm steel wire of (28), slide into (27). Determine position of the servos on the tray with the help of the steel wires (28) and bolt servos on. Run in one drop cyano runs in into each drilling in the carrier (20) and let harden.

With the installation of the bell crank (29) you have the possibility turn the direction of travel of the rudders (in the plan broken dargestellt)1 first the two-piece mounting plate (22 + 23) with cyano to stick, for the screw M3x15 drill out. The bell crank (29) with linkage links (30) provided (to the servo down, to which rudders see to fuselage side opinion and cut S-s above). The (29) for the accommodation of (30) with drill out (/ 1 2 mm. The nuts/washers M2 sichernl the screw M3x15 into the (29) put, with a nut/mother M3 protect. The assembly on the mounting plate (22 + 23) is unique. The bell crank must be able to be moved in its storage freely! This unit into the fuselage see built only now plan. The height of the installation must be so co-ordinated that the upper Gest. - Link (30) the support for the HS towered above (it wiro itself later in the interior of the horizontal stabilizer (30) move n) now can the steel wire (/ to 1,0.8 mm of (28) into the link (30) to be contrived and finally tightened see also fig. 2. The block (31) fit in, for the end of the M3-Screw and the rudder horn (39) leave blank, bond.

Engine arm is shown on the plan, sheet 2. The structure takes place directly on a cyano in (32). The space between strips (33) and (19) serves for the guidance of the cables. The upper cyano in (32) with wood glue stick, thoroughly press in slightly. The structure is drying, in which divide center. Here the halves are right-angled done over again on a length by 155 mm. If the length is correct, 15'schraeg is done over again. The upper cyano in according to plan for the cable run leave blank. Mark the axles of the engine pods, make recesses for engine accommodation. Fig. 4 shows, like the accommodation of the arms in the fuselage, or which are to be made determination of the position of the guidance (24,25) and (40,41). With the help of the " V"-template (s) " the V"-form is stopped, from down the (24) and (25) pressed in slightly and with cyano with frames stuck. Likewise the sections of (40) and (41). helpful with aligning is one straight, more solid strip in the wing area, which simulates the bearing area (the roll attitude). Into the (40) train (for the cables) an opening after frame (16). Arms remove, which use and stick upper, middle strip together (2). Now frnpf the Antenne should be shifted in the fuselage. The two sheetings of the fuselage back (43) to adapt see plan. Fuselage frames and the strip (2) with a sanding bardo, the frames over again must for the (43) a continuous edition offer. So that the fuselage back does not indicate " embossments ", and which sheeting (43) sits on all frames fully, are evtl. Minus deviations from frames with bit Balsa up-fed and adapted (= into the correct outline verschlifen) become. The (43) are stuck together first blunt with one of the supernatant side parts (1). Check before sticking for the seat, possibly regrind. The gluing is to take place gap-free. Use UHU hard Adhesive. Fix with pins, dry leave thoroughly without thorough dampening of the (43) runs nichtsl with one e.g. tissue dampen repeatedly, let the water time to penetrate into the balsa wood. It can last possibly 10 to 15 min.-long, until the (43) flexibly enough is laid on with a angespitzten strip now wood glue on the frames. Bending, or pressing in slightly takes place from down. The sheeting with auxiliary strips 5x5 mm (2 St.liegen with) continuous press in slightly, with pins protect. The sheeting presses second, or third " floor " of the auxiliary strips on the strip 2 above sees cross section cut E-E. on after approximately 1-1.5 hr. the highest auxiliary strip removing and with the help of a ruler the remainder which is over the center of the strip (2) from (43) to separate. The remainders of the adhesive remove. Again press the auxiliary strip in slightly, protect with pins or clothes pegs, thoroughly through-dry leave! The sheeting of the second page is done exactly the same. Due to drying the sheeting between the frames draws in itself something. This can be balanced however with a sanding bar(granulation 100-150).

This function only after thorough inspection, with feeling and without much pressure! The outer parts of the fuselage are all 2.5 mm thick, i.e. elegant rounding off is easy. It is best done with a sanding bar(granulation 100-150).

Now the front fuselage surface (50) can be applied. Adapt first however the fuselage sides to fit the frame. During the execution with chassis it is favourable to apply the (50) in two sections. The division is to then take place in the area of the Frame (8). The roundnesses down are done over again later (only if the ABS

are installed). Within the area of the engine arms now the recesses are extended into the (43) and accommodated after plan assembled cable position in the fuselage.

Importantly! The plastic housing (link to the speed controller) on the gold contacts only in the fuselage are! Now the first engine arm is inserted. If you shift the cables out-looking from the fuselage into the channel available in the arm, then the arm into the fuselage. The same with the second arm execute. Fasten a cross rib for aligning the symmetry ("V"-form) again in the wing area. Both arms carefully align ("V"-form and a right-angled position to the longitudinal axis of the fuselage), also a few drop cyano attach. Bond after a final check with cyano. Make recesses for the air scoops (57). Now rear fuselage surface (53) can be installed. Carefully prepare fuselage lining with canopy (45) with shears, with a file the edges in approx. Press in slightly half frame (44) within the area of the cut of D-D. It must itself a approx. 1 mm broad edge devoted = material thickness of (45) sees cut of D-D. The edition for (45) with a broad sanding bar evenly sand, the first pass sample for the lining pends. The height of the lining (45) in the level of front frame (7) is determined by the fuselage nose (48). Its length is clearly recognizably, here it is flat done over again. The scope of frame (46) diagonally, suitably the (7) regrind, begin and with cyano stick together. The air intakes (47) are in a piece punched thus centrically divide. For transferring the outline to the fuselage nose best a template of more rigid paper o.ae is suitable. The marked scope with a series drillings ", 2mm provided and with a pointed balsa knife suitably for the (47) prepare, these with cyano or Stabilit express bond. Protect lining (45) with tape at the fuselage, the fuselage nose in slightly press. Everything fits already now, a miracle occurred. Normally now remachining, a tuning of the sections comes. The Ruml>fbug is conical. If it is over the lining (45), it must be shortened something in reverse - the front edge (45) is situated more highly, the pages of (45) is done over again! A third possibility is doing the side parts over again. Still no assembly! all o.k. is, must the structure of the fuselage around the half frame (11-2) and the upper two IFlight nicadfuehrungen (3) be completed. The double half frame (49) begun and per page with z\"Jei paragraph of (19) sees only now cut L-L and fuselage side view can become secured. The front position of the flight nicads is drawn in in the plan. It is limited by a block of shock-absorbing cell india rubber (in the model trade available). Allow for the fact that laterally the cooling air can flow the inside the fuselage! The lining (45) down provided with approx. 1.5-2 mm of Balsa (remainders of Stanzsheete.g.), with cyano lglue. The supernatant Balsa sand off, so that the (45) sit again gap-free. Protect in some places with tape and with cyano at the fuselage attach. Operate gradually. Let the wood (Part 1 and 43) few tenths a millimeter rather project! With cyano fully stick together only now. Regrinding; 1laesst the transition disappear completely! the fuselage nose (48) carefully at the fuselage align, again check whether all o.k. istl with tape protect and with cyano attach. Only then with cyano fully stick together. I the lower fuselage edges with a small plane and a sanding barround, the templates (S 1),! and (S2) are present as punching hurry. i it is favourable to cover the structure already now with a thin covering paper (ca.17g/qm). First with somewhat diluted primer surfacer treat the wood structure. The painting is thoroughly drying, consistently regrinds. Use again a sanding bar(granulation 240). For more with difficulty attainable places the sandpaper on self adhesive cell india rubber dicyano (in the model trade available), thickness approx. 5 mm, stick and on pieces approx. 50x100 mm divide. So prepared, this sharpening assistance adapts to the surface almost perfectly! The next painting is executed with somewhat diluted spannlack. Adapt yourselves two approx. 130 mm broad paper webs, them must the area center turning back to approx. 2/3 of the roundness down at the fuselage cover. Aussparrung for the engine arm measure, cut out and the first course at the fuselage place. With somewhat diluted spannlack (brush width approx.. 25 mm) the paper is festlackiert on the wood structure. The freshly painted surfaces with a tissue smooth-press. Above at the fuselage back small Faeltchen will form these with a fresh plane blade (right-angled to the fuselage length) to isolate and festlackieren. The paper approx. 5 mm the center to overlap above along blade and paper remainders let begin to cut take off, down likewise. Even if the second fuselage side is so far, the fuselage surface (in two sections) is covered. The engine arms yet do not cover! With a sanding bar(granulation 240 to 320) the paper overlaps n~chschleifen here the finish are already prepared! The whole covered surface with 320-er sandpaper cleanly sand anda second clamping lacquer job make, after which again sand a drying. Here relatively much of (future) the weight can be saved, by manufacturing a smooth, closed, thin layer! Now air outlet scoops (57) can be inserted

The horizontal stabilizer is structured directly on the lower cyano in (34), in addition no comment is necessarily, only one tip: Ensure for the fact that all strips right-angled (perpendicularly!) are fit in. Only like that a gap-free gluing is possible. The rudders headed for, already before bonding the i of individual parts the recesses for the control make. Still no drillings for the attachment! the vertical stabilizers! The elevator (37) is attached in full length. The link (38) diagonally do over again, centrically into the (37) let in and to the wedge form of (37) adapt. The front edge diagonally plane off and with the sanding barcleanly, evenly regrind. The plan view end of (37) hangs from the model version sees plan. The center to measure

exactly and the recess for the fuselage make see plan! It is vorzunehmenl now the recess for the bell crank (29), or the linkage link (30) is made diagonally. Check whether with provisionally fastened horizontal stabilizer of the bell cranks freely can move! All o.k. is, according to plan two approx. 90 mm long cuts of bowden cable interior pipe (27) contrives, afterwards the steel wire ", 0.6 mm, Part 114. Recesses as required do over again, stick the interior pipe together with the horizontal stabilizer structure. As preliminary work the shaping can be executed already now by Part (51). The horizontal stabilizer is 7.5 mm thickly cuts you to form strips approx. 6x7.5 mm and attaches themselves it on the HS edition around fuselage. Now balsa block (51) is attached on these with thick cyano. Transfer outlined now from end cone (52) with pencil on the end. The shaping is done with a ba!sa plane and a sanding bar, checked and diminished with (52) for seat

Wing center section is built on the completely joined sheeting . All I of sheeting sections of (74) and (75) have something oversize in the length. All right-angled on 400 mm shorten, thus remain 60 mm for each position remaining for later. Part 75 must be sanded first diagonally, precisely (trailing edge). Using soft pencil mark width of the strip to be sanded (approx. 11 mm), and with a broader sanding bar (granulation 100-150) for wood fiber direction, sand clean edge of the building board prints diagonally. The (75) and two (74) squeeze, the impact edges together continuous with a tape provided. Decrease from the board, which open impact edges (tape = hinges) and carefully wood glue lay on. Remove on the building board photolithographies, remove excess adhesive with tissue and pins the glued areas. After hardening remove tapes and sand level, evenly (granulation 100-150) With assistance of the main spar (76) determine the exact length of the sheeting and most thoroughly right-angled, cleanly adapt! Insert ribs into the cuts in the spar, align on the dicyano, so that necessarily for the LG mountings (84) -falls for the version marks recesses, or can be made. The edge ribs (83) possess dihedral the half " V"-form of the wing outer parts. For this the outside cuts in the main spar something must be done over again (toward fuselage axle!) Main spar with ribs on kompl. Sheeting exactly, align right-angled, the mounting plate (88) use, everything together stick drop by drop with cyano, correctly, gap-free on the sheeting prints. Use (83) template " WS " when aligning ribs. Cut auxiliary leading edge (77) to length, chamfer down easily and bond with cyano. Now ever appropriate reinforcement must be integrated into the structure after version. A tip: if the grip recesses (93) are inserted, it is recommendable to leave the lower sheeting blank already now partially. The (93) are to sit properly matching between ribs (78) and rib sections (86). The position of the (78) is certain by the cuts in the main spar (ribs parallel to each other!). Cut of D-D shows the situation. The first cut flush to the ribs (78) - approx. 50 mm long (except roundnesses), the width transferred by (93) that second cut. Insert the rib section (86) only now into the structure! The roundnesses are suitably left blank only later, before using the grip recesses. The filling blocks (area of the fixing bolts) of remainders of Part (33) or (35) make, bond. The upper position (75) align with zugeschliffener trailing edge, best (economically!) apply with laminating resin. The trailing edge against the building board press with an auxiliary strip, leave to harden. Adapt middle sheeting (74) in width in such a way that the front edge is situated approx. in the center of the main spar thickness. Glue on with wood glue, use auxiliary strips to hold. Link up aileron servos control lever with linkage (30) provided and with consideration the position the control (position 114, steel wire 0.6 mm) the servo insert.

Wing outer sections must be built directly on the structural drawing. The span is given (95) by the main spar and with the plan will hardly correspond (paper loss). The distortion of the diagonal outlines is however insignificant and can be used for aligning the main spar, or that trailing edge fully! The main spar must be supported with a cut 1.5 mm thickly (e.g. position 106). Final sheeting (94) (trailing edge cleanly sanded) at the plan, ribs for the bowden cable with ∅2 mm festheften bore, (justified to the lower edge of the main spar) Rib (96) diagonally align template " WS " The ribs first only to the final sheeting with cyano attach. With the help of the auxiliary leading edge (77) the height of the ribs is aligned in front, stuck together with cyano. Make the gluing main spar ribs with cyano only now. Part (110) and (111) are remainders of Stanzbrettchen. With cyano glue to and to the secondary rib adapt. Use (39) remainders of e.g. (33) for the attachment of the rudder horn. The upper final sheeting (94) economically with laminating resin apply, with auxiliary strip against the building board press in slightly. When gluing is hardened, remove off the building board and the auxiliary leading edge (77) adapts from down the ribs. Now the lower sheeting (106) is aligned and stuck with cyano. The belts (108) can be already attached from down. Range between the ribs (100) and (101) is fully sheeted remainder of Part (75), in front up to the half HCluptholmdicke sees plan. The full sheeting between ribs (96) and (97) comes later - fig. 11! The auxiliary leading edge (77) with small plane and a sanding barto the profile process adapt, surface again on the building board attach trailing edge with an auxiliary strip prints. Press a triangle strip (112) into the space between building board and auxiliary leading edge (77), or lower sheeting (106). The upper sheeting with wood glue apply again use auxiliary strips. Space between ribs (96) and (97) and both

sheetings with remainder of the (74) sheet, glue belts (108). The auxiliary leading edge (77) with supernatant position (106) and (107) evenly sand, glue leading edge to (89). After drying adapt the leading edge with plane and sanding bar carefully to the profile. The " V"-form of 7'entspricht of a document of 50 mm under the rib (105). Align at the building board, press in slightly (almost) finished center pieces, so that the fit of the connection plates (83) and (96) can be checked or corrected. Everything is correct, is now the links (113) at the series. Saw the rib (96) beside the main spar from down, the cuts clean. Thoroughly stick together the two (113) with wood glue with the main spar, squeeze together with clothes pegs. After drying only the area between ribs (96), (97), behind which cross-beam sheeted. The space before the spar remains still free (for contriving bowden cable interior pipe (27)! Now the outerwing is sanded cleanly (broader sanding bar, grit ca.150). Let the sanding bar for grain over the profile roundness slip diagonally, without out-practicing too much printing. Under too much printing the sheeting over the ribs is sanded off more strongly, it forms unpleasant waves between the ribs! Wing tip edge press in slightly (1091, with a soft pencil the profile record. Lower ones outlined after plan complete = lower edge of word ex tips. Wing tip edge with plane as exactly as possible do over again. The hollow area (down) best with a round sanding bar(granulation 100-150) prepare, glue to and suitably the outerwing sand. Ailerons from above on the sheeting record. With a pointed Balsa knife first remove the upper sheeting (6 mm of strips) (ribs stop!) and right-angled to the lower sheeting to these transfer (e.g. along pin). The strip under cut out, with a fine saw the ribs saw off and the aileron remove. The cross section cut F-F gives information, how the triangle strips (112) are to be glued to. For the assembly of the control the ailerons must be mobile fastened. Ailerons align, from above 3 pieces tape approx. 50 mm long apply. Ailerons tilt upward (cross section cut F-F) and again with 3 pieces tape on the opened " V"Spalt protect. Apply later finally the upper tape continuous. Position of the rudder horn (39), with ∅ 1 3 mm drill out, 1-2 drops cyano transfer to run in and harden let, with ∅ 1 3mm again pull through! Shorten control horn after cross section cut F-F, do not bond yet! NL:i-1 is contrived the bowden cable interior pipe into the surface (the break-through in the main spar only now) and the position of the opening in the sheeting (withdrawal from the surface) determines. Again this was only a preparation removes bowden cable. Fig. 12 shows, how the wing sections are joined. At the wing center piece, can thus the links (113) remove a section of sheeting behind the main spar to the spar with clothes pegs to be pressed in slightly. Ribs (83) from above for (113) saw in, make a test sample. The gluing with wood glue or epoxy adhesives makes (inclusive whole contact area of the wing sections). From down a tape, the wing end (rib 105) are 50 mm apply highly to be supported. If the bearing area is to be together-caused completely, the bowden cable interior pipe (27) is contrived and with cyano secured. The plan view (wing center piece) and cross section cut C-C give information, where the (27) end! Then the steel wire (114) leaves itself also into, the painted wing already covered contrives (from on the right!) The upper, front sheeting (74) fit in, leave blank for the servo and stick together. Do over again for the leading edge evenly and these glue to.

The position of the pegs (91) is given by the structure of surface (ribs 78). Cross section cut B-B shows you for instance, where the openings for the pegs are to be made. you leave caution blank with boring rather first the sheetings and leading edge with balsa knife . A more exact Anpassur g is with a rat tail file to make only then with ∅4 mm the drillings into the mounting plate (88) make. Cut pegs to length, in front easily round, into the surface insert. Now the fit with fuselage checked pegs into the drillings in the frame (12), check wings for seat with fuselage. The EWD (related to the HS edition) is to be checked meaningfully already now. Surface remove, which pegs stick in the mounting plate (88) with cyano. Again into the fuselage begin, in every detail align, press in slightly, pegs with cyano only attach! Finally stick together only if the surface is again removed.

Former (90) with ∅4 mm drill out, onto which pegs shift and which mark recess of the leading edge, or make. Check the agreement of the (90) with fuselage before sticking together! Lining (92) prepare and adapt. The sticking edges with Balsa 1, 5-2 mm provide (cut C-C), align at the wing (wing sits in the fuselage) and with cyano stick together.

Drillings for fixing bolts M4 first with ∅3.2 mm make to into the wing mounting plates cut (21). Tap M4 thread here. Run in 1-2 drops cyano, let harden, recut threads again again. Do the recesses over again in the lower sheeting.
Which use (93) with the help of the ABS of sections of (93) and which supernatant Beríche marks. Remachining, check the seat. The sections can be inserted with cyano. Lay thick cyano on the surface of the (93), into the surface press, to harden leave. Gluing with ribs (78) and (86) takes over cyano highly liquidly. Sand again cleanly after hardening.

Part (54) forms a base for the fuselage wing transition (56). Prepare, for seat check first the transitions (56) cleanly. Align and with wing to the fuselage edition with your assistance now press the Part (54) in slightly. Do as required fuselage side sections over again. The EWD on one evtl. Modification check! Attach (54) with some drops cyano to the fuselage, align transition (56), press in slightly, attach with cyano. The position (55) as required do over again, attach with cyano. With removed wing stick together the whole scope cleanly with cyano. Do not forget gluing of (54) with fuselage. It is favourable to cover of the wing in this stage. Treat wood structure with primer surfacer, sand clean (grit ca.240), afterwards with paint somewhat diluted spannlack. Cover wing center piece with paper of approx. 17 g/qm, grain parallel to the span! at the scope with spannlack to the structure stick (brush width ca.25 mm). both pages align the paper cut above and down. The spannlack drying is, with a wet cloth the paper easily to dampen and dries leaves. The paper puts flat, fully on the structure (after hardening). It is so far, treats with spannlack, smoothes soft tissue paper. Cover wing outer parts exactly the same, however with somewhat heavier paper (approx. 21 g/qm).lm area of the wing tip edges the paper with an addition of approx. 5 mm cuts off and radially to the roundness cuts (distances depending upon radius in front ca.8 mm, in the back 15 to 20 mm). So developed strips can be applied problem-free with spannlack (and assistance of the fingers) on the wing tip edges.

Note! If the paper is strained after dampening with water, it is stuck first with spannlack on wood structures, i.e. also on the belts (108) and smooth-pressed with tissue (the freely which is situated paper remains drying!). Only the next painting covers the whole covered surface. Between the painting sand (the paper overlaps away-sand wing tip edges o.ae.)

Instal main landing gear, fasten with retaining wafers and ∅ 2,2x9,5 mm tapping screws. Into the groove to run in, is above all the end of the wire sitting in the wing is secured with epoxy. Warm up the epoxy with a hair dryer, it becomes more liquid and penetrates better.

Prepare landing gear nacelle from (115) and (117) join reinforcement (116) to (115) with cyano. (117) somewhat, (Inset Ansicht 1 illustrates) (117) sands accordingly to profile, complete the edges of (115) with 1, 5-2 mm balsa. Into (115) train the oval openings, so that the chassis can fit with springs. Determine the location at the wing to attach (116) lay on UHU hard and press in slightly on the wing. Stick all together with cyano. Carefully prepare (118), chamfer to correct profile. Stick together to fit with protruding (117) with Stabilit express. Resand with a file after hardening, possibly fill with polyester high-speed putty. Now the wing is finished for painting.
Thoroughly epoxy two-piece motor attachment (69). With the help of motor mount, part no. 7120/94 determine place of the three ∅ 2.5 mm drillings. With three nuts/washers, fasten the motor mount, fix the M2,5 nuts/washers to the mount with Stabilit express sleeves. Glue prepared (69) (with installed motor mount!) to that, already for the accommodation left blank engine arm, attach with cyano, then epoxy together. The (69) must be right andled to the arm aligned both vertically and horizontally! Part (58) determines the center, or the course of the curve those trailing edge of the Mot. arms. It goes through (59) completed from 4 mm balsa. The grain runs in the area of the curve sees plan diagonals. Use thick cyano. Right-angled, those sand the surface which can be stuck on the arm shaping in distinguished. To the fuselage do resting upon area over again, one aims at gap-free seat. Carefully align (arm is a symmetrical profile to form!), glue with cyano, sand. With the help of an engine nascelle bowl (72) the end over again of (59 + 58 + 59) mark, do. Leading edge of the arms (Part 60) cut to length, in round, with cyano glue to. Cuts N-N and O-O show the shaping of the arms. Cover arms with film. Nascelle inside paneling (70) cleanly prepare, make the recess for the arm. The (70) stabilized in front also the motor attachment (69). Chamfer as required. Glue (69)-(70), with Stabilit express otherwise with cyano. Keep cyano off styro parts!
Before the engine assembly (engine already screens!) the cables solder on, do not shorten! Only so the engine with carrier can be dismantled later!

Chamfer outside lining (71) (it is not situated in front on the motor case it remains a.2 mm gap - cross section cut P-P stick with cyano. Now colour the nascelle interior dark grey with an alcohol base lacquer (specialized trade).

The engine nascelles:

(72) (each in two halves) is of polystyrene so don't use adhesives or paints on Nitro base or you will damage the styro. Test all preparations before use here.

checking you first the fit one page must for arm (trailing edge) subsequently left blank Iwerden (with a fresh plane blade) The internal surface has unevenness caused by production. These can be filled up with light " Dufix " putty (smooth with fingers).
Align (72) at the arm, stick with wood glue or 5-Min.epoxy. Ensure that both nascelles run parallel to the fuselage axle (i.e. also to each other)! With wood glue you have more time for checking, or make a correction!

Align upper (72) glue, fix with tape. Cover these with paper for a better protection of the nascelle surface.
A cut plan for the covering paper is present here to hgive you dimensions. Fix covering with Glutofix! With a brush (20-25 mm wide) paint approx. 50 mm broad strips, align, to the nascelle press the paper in slightly at the arm. Stick the paper further to approx. 50% overall firmly on the cylindrical part (center) of the nascelle. Then in front and in the back cut strips in sequence, press on the nascelle, insert in front into the opening of the nascelle. In this manner cover the whole surface with paper, smooth with fingers, leave thoroughly dry.
Once dry, carefully eliminate overlaps with a sanding bar(granulation 240-320). Again paint the whole with Glutofix.
Sand the surface clean aft
er drying.
The assembly of the vertical stabilizers is straightforward! It is important that the individual parts are right-angled fit as a prerequisite for a gap-free seat!

A tip: So that the entire form of the VS can be sanded cleanly and correctly, attach the rudders with 3-4 drops cyano thickly to the fin. Then you know the whole VS problem-free after plan (= shaping!) do over again. This applies to the Ausf. with controlled rudders. Sand the fin, rudders, separates and the front edge resand diagonally (15-20.).

Axle of the horizontal stabilizer mark, transfer position of the drillings. Version without controllable rudders (i.e. without chassis) sees removable VS here ago can from time to time a repair be necessary. The VS are screwed by means of two countersunk screws M4x20, Part (67) onto the HS. Bore thus first with ∅3.2 mm!
The drillings accurately to the HS transferred, with < 1 > 3.2 mm bore. A few drop cyano to run in, threads M4 let cut. During this execution specially mounting plates (66) at the VS are intended.
Into the rudders one drilling each ∅6 mm make, here flow the rudder horn (39). Caution! The cross hole in (39) of the direction of steel wire (114) adapt, only then the (39) with cyano carefully bond. I

Assembly of the A-10:

First all parts of the tail unit with light (vertical stabilizers with middle) paper I cover those horizontal stabilizer remain unbespannt from above! Fit the wings, the model at the decyano align, support, so that the EWD can be measured. Put horizontal tail unit on, check EWD incidence angle. Sand the H-S support again. The EWD must amount to + 0.5 to 1°! When incidence angle EWD is correct, align and stick fin thoroughly on the fuselage. If it is not right-angled aligned to the fuselage axle, the vertical stabilizers become " squinting "! Follows the last check angle elevation ice (29)! From the steel wire < 1 > 0.6 mm (Part 114) 450 mm cut to length, contrive guidance into the horizontal stabilizer, firmly tighten in adjustable servo connector (29). Now cover the fin from above! Attach the elevator control horn to the control, tighten with a shortened M2-Screw. Stick the prefabricated (51) with cyano on the HS, afterwards the final cone (52). Into the VS already covered the pegs (91) press, with cyano stick together. Outstanding pegs with wood glue provided into the horizontal stabilizer press, put the steel wire (114) into the control horns. Adjust rudders, which (114) with servo in neutral position tighten M2x25 with screws.

The structure is finished, only now can already rather exactly the position of the Flight nicad's be determined. When found, provide for its locking. Our suggestion is represented in the plan. A " tongue " from cell india rubber (in the model specialized trade available), which is held on the wing center piece by a shut-off position from remainders of the 3 mm plywood. Velcro (hook & loop) is most useful here.
A few words for painting: if you adhered to our instructions, your model possesses a closed, smooth surface. There it the " Thunderbolt II " as fighter-bombers only in well covering; must is here a bright, additional painting with a coat none gives camouflage colours. I best is suitable a lacquer on alcohol base (in the model specialized trade available), which one (something Iverduennt) can lay on well with brush.

However keep the ABS of sections of your model and above all the engine nascelle away from cellulose nitrate paints!

Balancing and flying:

The emphasis must be situated in the boundaries indicated on the plan, the EWD likewise. A distortion-free wing or control unit is a matter of course!

Control deflections: Elevator + / - approx. 6 mm of
ailerons + approx. 8 mm
automatically by rudder horn position reduces.
Rudder as much as possible

the range check without and with running engines (it should be additionally screened for safety's sake!) is for it model vital! If everything is correct, the model can be started. When surface starting the direction with rudder correct, at sufficient rate easily pull up -the model takes off from alone. By force (= strong pull) of the surface do not away-tear! After taking off, easily rising or in the horizontal flight take up travel, rise only then work up. Hand start is completely simple. With start strongly, horizontally, against the wind throw (rather your experienced aid!). Directly do not pull up to accelerate leave. Once in air, the optical impression inclusive airspeed is very true to nature. With feeling flown looping, a role of or the like are easily possible. Do not forget that to original are a ground combat aircraft, a " weapon transporter " (span 17.53 m, max. Takeoff weight over 22,5 t)!

landing in time initiates (engine correction in the approach should be available!), the model at ground level bricyanoly brake, roll attitude monitor. It puts from alone. Two propellers are available. The 6,5x4"/165x100 mm, part number. 7228/14 develop more static thrust, thus hand starts are thereby safer. The 6x5 " / 155x125 mm, part number. 7228/11 go also for a hand start, the airspeed are higher however. As Flight nicad is suitable for this model kind 8 to 9 cellular of Battery luggage Panasonic talks in the best way Amp plus with a usable capacity about 1,8 ah. With them flying times until approx. 7 minutes are achieveable (however depends strongly on flight style!).

We wish you many satisfying flights with the A-10 Thunderbolt II and good landings!

“aero-naut” Modellbau

Parts list Fairchild A-10 " Thunderbolt II "

Part	Designation	Material	dimension in mm
1	fuselage side section of	Balsa	2.5 mm; Ready-cut
2	strip	Balsa	5x7 mm; n.Z.
3	strip	Balsa	5x5 mm; n.Z.
4	reinforcement 1 2	plywood	3 mm; Ready-cut
5	reinforcement 2 2	plywood	3 mm; Ready-cut
6	reinforcement 3 2	plywood	3 mm; Ready-cut
7	front fuselage frame 1	plywood	3 mm; Ready-cut
8	fuselage frame 1	plywood	3 mm; Ready-cut
9	nose gear 1	steel	wire finished unit
10	nose gear edition 1	plywood	1.5 mm; Ready-cut
11-1	fuselage frame 1	plywood	3 mm; Ready-cut
11-2	half frame 1	plywood	3 mm; Ready-cut
12	fuselage frame 1	plywood	3 mm; Ready-cut
13	reinforcement 1	plywood	1.5 mm; Ready-cut
14-18	fuselage frame ever 1	plywood	3 mm; Ready-cut
19	strip	Balsa	3x5 mm; n.Z
20	servo carriers 2	plywood	3 mm; Ready-cut
21	wing mounting plate 4	plywood	1.5 mm; Ready-cut
22	mounting plate 1 1	plywood	3 mm; Ready-cut
23	mounting plate 2 1	plywood	3 mm; Ready-cut
24	edition in front 1	plywood	3 mm; Ready-cut
25	edition in the back 1	plywood	3 mm; Ready-cut
26	nose gear support 3	plywood	3 mm; Ready-cut
27	bowden cable interior pipe	plastic	Ø 2.0/1.0 mm; n.Z.
28	steel wire	steel	Ø 0.8 mm; n.Z.
29	bell cranks 1	plastic	finished unit v.7492/10
30	linkage link 5	brass	finished unit
31	block 1	Balsa	90x34x8 mm
32	sheeting engine carriers 2	Balsa	315x90x1.5 mm
33	strip	Balsa	5x8 mm, n.Z.
34	sheeting HS 1	Balsa	410x85x1,5 mm of
35	strip	Balsa	6x15 mm; n.Z.
36	strip	Balsa	6x6 mm; n.Z.
37	elevators 1	Balsa	400x38x7/1 mm
38	links 1	lime tree	130x8x8 mm
39	rudder horn 5	brass	finished unit
40	barrier 1 1	plywood	3 mm; Ready-cut
41	barrier 2 1	plywood	3 mm; Ready-cut
42	half frame 1	plywood	3 mm; Ready-cut
43	sheeting (fuselage above) 2	Balsa	560x50x2,5 mm
44	half frame 1	plywood	3 mm; Ready-cut
45	Rumpfverkl.m. Cab 1	plastic	stamping
46	former 1	plywood	3 mm; Ready-cut
47	air intake 2	plastic	stamping
48	fuselage nose 1	plastic	stamping
49	half frame 2	plywood	3 mm; Ready-cut
50	fuselage surface in front 1	Balsa	310x80x2,5 mm
51	block 1	Balsa	85x32x 18 mm
52	fuselage final cone 1	plastic	stamping
53	fuselage surface in the back 1	Balsa	275x75x2,5 mm
54	wing edition 2	plywood	0.8 mm; Ready-cut
55	transition discharge 2	plywood	0.8 mm; Ready-cut
56	transition 2	plastic	stamping
57	air outlet 2	plastic	stamping
58	guidance 2	plywood	0.8 mm; Ready-cut

59	sheet1	Balsa	310x45x4 mm
60	strip	Balsa	8x8 mm; n.Z.
61	sheet1	Balsa	130x40x8 mm
62	strip	Balsa	8x15 mm; n.Z.
63	of wing tip edge LW 4	Balsa	2 mm; Ready-cut
64	reinforcement 2	plywood	3 mm; Ready-cut
65	rudders 2	Balsa	180x45 / 25x8
66	mounting plate 2	plywood	3 mm; Ready-cut
67	nylon screw (countersunk head) 4	plastic	M 4x20 mm; 7769/24
68	landekufe 1	plastic	stamping
69	motor attachment 4	plywood	1.5 mm; Ready-cut
70	inside paneling (down) 2	plastic	stamping
71	Nascelles (above) 2	plastic	stamping
72	engine nascelle 4	polystyrene	finished unit
73	balloon wheel 1	rubber (plastic)	Ø 45 mm; 7352/02
74	sheeting 1 4	Balsa	460x80x1,5 mm
75	sheeting 2 2	Balsa	460x60x1,5 mm
76	main spar inner wing 1	Balsa	412x18,5x5 mm
77	auxiliary leading edge	Balsa	3x8 mm; n.Z.
78	rib 2	Balsa	2 mm; Ready-cut
79	reinforcement 2	plywood	3 mm; Ready-cut
80	rib 2	Balsa	2 mm; Ready-cut
81	rib 4	Balsa	2 mm; Ready-cut
82	reinforcement 4	plywood	3 mm; Ready-cut
83	rib 2	Balsa	2 mm; Ready-cut
84	LG mountings	Abachi	8x20 mm; n.Z.
85	strip	lime tree	3x7 mm; n.Z.
86	rib section 2	Balsa	2 mm; Ready-cut
87	reinforcement 1	plywood	3 mm; Ready-cut
88	mounting plate 1	plywood	3 mm; Ready-cut
89	leading edge	Balsa	6x8,5 mm; n.Z.
90	former 1	plywood	3 mm; Ready-cut
91	round timber	beech	Ø 4 mm; n.Z.
92	lining 1	plastic	stamping
93	grip recess 2	plastic	stamping
94	sheeting 1 4	Balsa	445x60 / 50x1.5 mm
95	main spar outerwing 2	Balsa	445x18,5 / 10x5 mm
96-105	rib ever 2	Balsa	2 mm; Ready-cut
106	sheeting 2 2	Balsa	445x30 / 20x1.5 mm
107	sheeting 3 2	Balsa	445x80 / 45x1.5 mm
108	belt	Balsa	2x5 mm; n.Z.
109	wing tip edge 2	Balsa	135x35x20 mm
110	rib section 2	Balsa	2 mm, Balsa
111	rib section 2	Balsa	2 mm; Balsa
112	triangular strip	Balsa	3x10 mm; n.Z.
113	links 4	plywood	0.8 mm; Ready-cut
114	steel wire	steel	Ø 0,6mm; n.Z.
115	landing gear nacelle down 2	plastic	stamping
116	reinforcement 1 2	plywood	3 mm; Ready-cut
117	reinforcement 2 2	plywood	3 mm; Ready-cut
118	landing gear nacelle above 2	plastic	stamping
119	wheel mockup 2	plastic	stamping
120	main landing gear 2	steel wire	finished unit
121	nylon screw 2	plastic	M 4x25 mm; 7769/04
122	balloon wheel 2	rubber / plastic	Ø 50 mm; 7352/03
S,s 1,s2	templates ever 1	plywood	3 mm; Ready-cut

Small material without Part. No..

Screw	6	brass	M 2x12 mm of
screw	5	brass	M 2x25 mm of

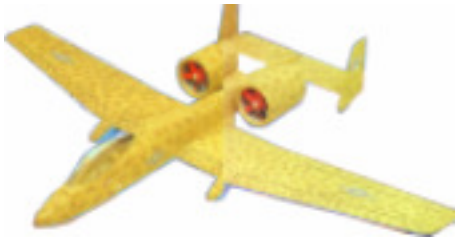
nut/washer	11		brass	M 2
u-dicyano	6		brass	∅2.2 / 5,5xO,5 mm of
screw	1		steel	M 3x15 mm of
nut/washer	2		brass	M 3
u-dicyano	2		brass	∅3.2/7, OxO, 5 mm
Steel ring	3		brass	∅3.0 / 6, Ox5, 0 mm
grubscrew	8		steel	M 3x3 mm of
retaining plates	4		plastic	ca.20x9x1.5 mm of
tapping screw	8		steel	∅2,2x9,5 mm
aluminum sheet metal	1		aluminum	8x1, 5x60 mm of
copper braid (red + black)		1 + 1	7457/21	1.5 qmm; 2x200 mm of
copper braid (red + black)		1 + 1	7457/20	0.75 qmm, 2x400 mm
schiebebild				
structural drawing				
building guidance				

For the building of the model the following items are required, these are not contained in the kit.

	part number.
Ponal express	7638/09
UHU hard	7631/02
Stabilit express	7646/01
Pattex Cyano	7639/21
Pattex Cyano gel	7639/25
Aerofix Porenfuller	7666/02
aero covering laquer	7670/05
aero diluter	7675/05
Glutofix	7660/00
Dufix Light Spachtel Filler	7638/35
hinge strip	

n.Z. = after drawing. Appropriate mass are the structural drawing to infer or the model. L=Length

Supplemental Assembly Guide for
Fairchild A-10 Thunderbolt II
Epoxy Fuselage Version



RC-Electric Flight Aircraft
Order No. 1334/01

This abridged building guide for the epoxy fuselage version of our A-10 gives completing notes for this variation only. It includes tips for the assembly of the fuselage and a few alterations in the construction of the wing and horizontal tail unit. The additional plan sheet gives new information, so please study it thoroughly!
The wing structure remains as described in the main kit instructions. Only the two balsa filling blocks (wing-fuselage fixing bolts) have a new position - shown in structural drawing. The aileron control arrangement is new. Our improvement ensures differential aileron, with just one servo. Assembly of the servo control with two adjustable links (see detail "S" on plan 3) for aileron control is a new requirement. (Axis of rotation is thus appropriate for up lower surface of the wing) see cross section cut F-F (compare it with cut F-F in the earlier wing" structural drawing).

Regarding the structure of the wing outer sections please note the supplement note considering sweep.
Horizontal stabilizer remains same as for the original model, the center must be from full balsa!
Link (38) individually escape, rudders be headed for. When the assembling with the fuselage drove here a plastic bolt M4 is handy. Part no (64) is not punched any longer. Prepare from 4 settled balsa sheet (old part 50).

Rudder control is not necessary for the A-10. If you wish to have working rudder, install it at your own discretion.

Since the entire model is to be painted, it can be sanded with a wet 400 grit sandpaper. The resultant matt surface ensures a good paint adhesion.
Pre-drill air inlets and outlets and re-file with 2 mm drills, deburring fuselage edges clean.
The fuselage has a relatively thin wall! Carefully fit in all frames, do not press onto the fuselage with bad fitting frames inside! Otherwise there will be ugly raised bulges on the outside! Frames should touch the fuselage evenly. The position of the frames is in the fuselage, a few drops thin cyano reinforces. Final gluing can take place after, using thixotropiermittel thickened laminating resin.

When the model is equipped with undercarraige chassis, reinforce frame (E) with (F). Exact information is shown in cross section cut A-A. Without chassis you can choose the flight nicad pack location in the fuselage. The horizontal position of the nicads (nicad secured by velcro) is most practical. It also offers the advantage that more space is available the cockpit area. Whether you insert the fuselage frame or not, is up to you. It increases the strength of the fuselage. In ready finished GfK the fuselage guidance are for integrated engine arms before bonding the arms however the surface (inside) should be roughened up with sandpaper. Carefully fit in frame (L) as in cut E-E. It must be because of the face of the arm guidance! Sand to fit here! Additional 4 mm drillings facilitate a bonding of (L). Here that frame can be attached to the guidance with thin cyano. Glue with thin laminating resin, filleting later with thickened resin. The arms are only inserted later! In the Orginal instructions is described exactly the preparation of form block (51). Thus you save for much annoyance! " Our " (51) gets additionally two slots fur the running out ferrules of the control. Cut F-F shows, where the exit hole is to be bored 2 mm in the GfK edge. The adjustment of the horizontal stabilizer with (51) is final, sections of fuselage again removes, thus the arms to be built into the fuselage -without disturbing horizontal tail unit! Before that to bond the surface at the fuselage is to be installed, so that correct aligning is possible. Re-tool the arm by form-giving sections as well as installation of all engine cowlings, or engine nascelle takes place ~ horizontal stabilizer! Fuselage side view shows how the canopy is secured, and detail " X ", for the tongue of the section of " D " must the fuselage bowl be left blank accordingly.

A tip for painting: The Humbrol company makes outstanding suitable colours for camouflage painting! A prerequisite fur perfect surface is however a handling of paper-covered sections with final coat, in the following sanded,

We wish you many satisfying flights with the A-10 Thunderbolt II and good landings!

"aero naut" Modellbau

addition parts list Fairchild A-10 " Thunderbolt " GfK fuselage

Part	Designation	Material	dimension in mm
A	fuselage 1	GfK	finished unit
B	canopy 1	plastic	finished unit,
C	half frame 1	plywood	3 mm; CNC-Cut.
D	half frame 1	plywood	3 mm; CNC-Cut
E	frame 1	plywood	3 mm; CNC-Cut
F	frame reinforcement 1	plywood	1.5 mm CNC-Cut
G	frame 1	plywood	3 mm; cnC-Cut
H	half frame 1	plywood	3 mm; cnC-Cut
J	half frame 1	plywood	3 mm; cnC-Cut '
K	servo carrier 1	plywood.	3 mm; cnC-Cut
L	half frame 1	plywood	3 mm; cnC-Cut
M	HS attachment 1	plywood	3 mm; cnC-Cut
N	strip	Balsa	6x6 mm; n.Z.
O	surface attachment 4	plywood	1.5 mm; cnC-Cut
P	frame 1	plywood	3 mm; cnC-Cut
R	half frame 1	plywood	3 mm; cnC-Cut
S	linkage link 2	steel	finished unit
T	interlock 1	brass	finished unit
U	round timber	beech	3 mm; n.Z.