DAILY WORK ACCOMPLISHED by Dan Beltrami on NWAAC Taylorcraft

	Log for N43387/SN-7046
	November 2007
11/11/07	Pick up Airplane Fuselage and assorted parts
11/15/07	Mount Control Column – Do SB2007-002 Inspection
11/16/07	Inventory & install some pulleys.
11/17/07	Make cardboard pattern – fwd. Floorboard.
11/18/07	Make cardboard pattern – aft floorboard Mount instrument panel
11/19/07	Made after floorboard from plywood. Mounted & Drilled Instrument Panel.
11/22/07	Work on Floor Boards.
11/25/07	Word on Floor Boards. Go through boxes to find anything I can use now. Evaluate Condition of Lower Cowling. (Bad)
	December 2007
12/02/07	.Two coats varnish on floorboards
12/03/07	Made holes in instrument panel, airspeed, tachometer, altimeter
12/07/07	Painted last coat varnish on floorboards, cut-out for glove box in instrument panel. Did logbook entry on Wing Strut Attachment Service Bulletin 2007-002.
12/09/07	Make glove box for instrument panel.
12/10/07	Filled out A/C Registration and Bill of Sale. Jim Breuer signed for the Northwest Antique Airplane Club.
12/11/07	Mailed A/C Registration and title forms to FAA.
12/17/07	Cut out oil temp, oil pressure gauge holes in instrument panel. Made and installed glove box to instrument panel. Cut out hole for ignition switch. Installed control wheel shaft bushings.
12/18/07	Final fitting of all instruments into the panel. Installed glove box latch. Primer painted instrument panel. Permanently installed control yoke.
12/19/07	Made template for instrument panel placards.
12/24/07	Painted primer coat on rudder pedals. Final color painting of instrument panel and rudder pedals.
	January 2008
01/01/08	Worked on wheels and brake problems.
01/03/08	Worked on wheels and brake problems.
01/04/08	Determined how to fix the stripped holes in the left brake assembly.
01/07/08	Installed instrument panel in airplane.
01/08/08	Install left side aileron sprocket to control wheel. Get steel for rudder pedal clamps.
01/09/08	Manufactured outboard rudder pedal hold down pivot blocks.
01/10/08	Installed Heli-coil inserts into stripped holes on left brake holes. Rudder pedal installation.
01/11/08	Shim brake pedal pivot cross tube with 9/16” washers. Manufacture special forming

	tool to make rudder pedal hold-down brackets.
01/14/08	Rudder pedal installation.
01/17/08	Rudder pedal installation.
01/18/08	Rudder pedal installation.
01/20/08	Installed instrument panel placard. Cleaned, inspected, tested, and installed engine tachometer; oil pressure and temperature gauges.
01/22/08	Manufactured bushings for aileron chain and aileron pullies.
01/22/08	Manufactured bushings for aileron chain and aileron pullies.
01/30/08	Aileron pulley control system.
01/31/08	Went to PCC and manufactured a new aileron control pulley. Manufactured 3 aileron system links. (Cabin overhead links).
	February 2008
02/01/08	Pulley installation in cabin area
02/04/08	Pulley installation in cabin area
02/05/08	Completed pulley installation in cabin area.
02/06/08	Started fitting control wheels to control yoke. Paint and install control wheels. Started making brake system pulley brackets.
02/08/08	Manufactured pulley brackets for the brake system.
02/11/08	Manufactured pulley brackets for the brake system.
02/13/08	Tack-welded brake system pulley brackets.
02/14/08	Finished welding brake system pulley brackets.
02/19/08	Installed aileron cables behind the instrument panel.
02/25/08	Completed aileron cable installation. Synchronized control wheels.
02/28/08	Tack-welded center brake pulley brackets to the fuselage cross-tube.
	March 2008
03/04/08	Welded left side brake pulley bracket.
03/05/08	Completed and mailed form 337 for fabric cover job.
03/06/08	Installed altimeter.
03/07/08	Welded right side brake pulley bracket in place. Burnt a big hole in the fabric!
03/13/08	Went to FAA. Asked the question! May we use the form 337 that approved the C-85 installation as approved data to allow us to re-install the C-85 onto this airframe? (See Attachment "A".)
03/14/08	Final hook up of left brake cables.
03/17/08	Final hook up of right brake cables.
03/18/08	More work on right brake system.
03/18/08	Install rudder pedal return spring.
03/24/08	Made and installed right and left rudder cables. Ordered new airspeed indicator from Chief Aircraft. Installed rudder pedal cabe fairleads.
03/25/08	Cleaned and installed fuel tank on/off valve. Leak tested with 3 gallons gas.
03/26/08	Placarded airspeed indicator with $V_{RC,}$ caution range, and normal operating range arcs. Installed throttle.
03/27/08	Installed airspeed indicator in instrument panel.
03/28/08	Manufactured & installed fuel valve shut off clip in accordance with AD51-09-03.
03/31/08	Test fit boot cowl to fuselage. Check doors for fit.

	April 2008
04/01/08	Permanently screwed forward door jams to fuselage. Removed fuel tank cross brace rods, cleaned, primed and and re-installed.
04/03/08	Cleaned boot cowl, removed really ugly repair section on bottom of cowl, manufactured patch for the left side of boot cowl.
04/04/08	Finish making left side boot cowl patch.
04/07/08	Manufacture & attach large panel on bottom of boot cowling with Clecos.
04/08/08	Riveted in the large repair panel on the boot cowl. Made right-side boot cowl patch
04/09/08	Finished repairs to boot cowling. Installed boot cowl to front of airplane.
04/11/08	Attach boot cowl to right door jamb.
04/16/08	Attach boot cowl to left door jamb.
04/17/08	Run rudder cables to rudder.
04/25/08	Cut out steel blanks for elevator links at elevator horns.
04/28/08	Installed right rudder stop on vertical stabilizer post.
04/27/08	Installed left rudder stop, rigged rudder.
04/28/08	Final swaging and rigging of rudder cables.
	May 2008
05/01/08	Test fit elevator, horizontal stabilizer, and rudder.
05/25/08	Do preliminary rigging of elevators
05/26/08	Did final rigging on elevators, cables, fitted right door to cabin.
05/31/08	Swaged elevator cable ends.
	June 2008
06/01/08	Elevator cables.
06/07/08	Elevator cables.
06/10/08	Left door hinge installation.
06/11/08	Left door installation.
06/18/08	Make form to bend the leading edge radius for trim tab. Attempted to form the trim tab skin. (Failed.)
06/19/08	Second try on bending trim tab. Using .020 2024-T3 aluminum alloy. (Successful)
06/20/08	Trim tab trimmed to final shape.
06/21/08	Design hinging system for trim tab. Make cardboard pattern for sheet metal cover over fuel tank.
06/22/08	Cut out and fitted sheet metal (.020) cover over fuel tank. Installed 9 nut plates to hold the fuel tank cover plate.
06/26/08	Manufactured rear pulley for trim tab, made 90-degree angles for instrument panel, manufactured hinge points for the elevator trim tab.
06/27/08	Riveted reinforcing stiffeners to fuel tank cover plate.
06/28/08	Riveted elevator trim tab, fitted it to the elevator.
06/29/08	“keyed” elevator trim pulley to elevator trim actuator.
	July 2008
07/01/08	Installed canvas pilots/passenger seat.

07/03/08	Work on trim adjusting mechanism in cockpit
07/04/08	Trim adjusting mechanism in cockpit. Manufacture elevator trim tab actuating rod at the elevator.
07/10/08	Made trim tab placards.
07/15/08	Manufacture trim cable to trim tension spring adjusting clamps.
07/18/08	Manufacture trim tab crank cover plate.
07/20/08	Test fit headliner using 1/8" steel bows, NG. Need to use 3/16" steel bows.
07/22/08	Manufactured headliner bows.
07/24/08	Work on headliner installation.
07/28/08	Final installation of trim tab crank cover plate. Headliner installation.
07/30/08	Work on headliner installation.
	August 2008
08/01/08	More #!!@*# headliner installation.
08/05/08	Headliner work.
08/06/08	Headliner work.
08/07/08	Work on headliner trim angles.
08/17/08	Work on headliner installation.
08/21/08	Painted sheet metal repair that I did on 09-08-2008 with primer.
08/26/08	Install new bolts that hold the landing gear in place on right side.
08/27/08	Install bolts that hold left landing gear on.
08/31/08	Remove both brake shoes. Determined that the ¾ inch wide brake shoes will **NOT** work. We need 1" brake shoe wheels.
	September 2008
09/02/08	Ordered two new shinn inboard main wheel halves from: Jim Greene, of Skybound Aircraft Atlanta, Georgia 770-446-6797
09/08/08	Installed new wheel half on the right landing gear.
09/10/08	Installed new wheel half on left landing gear.
09/11/08	Riveted reinforcing angles onto belly skin behind the fire wall.
09/24/08	Installed side post windshield retainer clips. Removed lower windshield retainer band.
09/25/08	Ordered new windshield from: Cee Baileys Aircraft Plastics 1-800-788-0618 Installed Rivnuts in lower windshield retainer band.
09/26/08	Finished installing Rivnuts on windshield lower strap.
09/26/08	Finished installing Rivnuts on windshield lower strap.
09/27/08	Prepared doors for painting.
09/29/08	Manufactured and installed left side door striker latch.
09/30/08	Manufactured and installed right side door striker latch.
	October 2008
10/03/08	New windshield arrived.

	Started prepping windshield for installation.
10/05/08	Work on windshield installation.
10/07/08	Build wood shims for windshield installation.
10/09/08	Work on windshield installation.
10/10/08	Windshield installation.
10/22/08	Make paper pattern for baggage compartment.
10/23/08	Finish windshield installation, re-do paper pattern for baggage compartment.
10/24/08	Finish making paper pattern for baggage compartment.
	November 2008
11/04/08	Bought 1 ½ yards of 1402 cotton canvas for the baggage compartment.
11/05/08	Cut and trim clear plastic for the right door windows.
11/07/08	Went to PCC to make metal retaining strips for baggage compartment.
11/10/08	Finished making baggage compartment sack. Worked on left side door windows.
11/11/08	Work on left side windows.
11/13/08	Installation of baggage compartment.
11/14/08	Installed the data plate.
11/17/08	Finished installing windows on both doors.
11/18/08	Turned airplane over to NWAAC.
	End. This will probably be my last monthly report.
	December 2008
12/07/08	Started to design and build a holding fixture to manufacture an A-65 engine mount.
12/10/08	Worked on engine mount fixture.
12/17/08	Finished building engine mount holding fixture.
12/18/08	Made a steel engine mount to fuselage/engine attachment lugs.
12/19/08	Design and make cardboard templates for lower cowling patches.
12/20/08	Cut out aluminum patch for the lower cowling.
12/23/08	Continue fitting patches to lower cowling. Checked snow level on garage roof, 18 inches. Cannot get out of driveway. Snowed in. Running out of food. Ate my shoelaces today. When spring thaw occurs you can find me wrapped in T-Craft cowling with a rivet gun firmly clenched in my cold, frozen hand!
12/24/08	Continue fitting patches to lower cowling. Day before Christmas. Had to fight with angry squirrel for some pine cone seeds. Squirrel won!
12/25/08	Bonded and riveted two patches on the lower cowling.
	--MERRY CHRISTMAS--
12/26/08	Welded up support brackets on the engine mount fixture.
12/27/08	Mark out engine mount gussets and tubes.
12/28/08	Make more patches for lower cowling.
12/29/08	Make more patches for lower cowling.
12/30/08	Do more work on patching lower cowling.
	January 2009
01/02/09	More work on patching lower cowling.
01/05/09	Removed cowling latches
01/06/09	Cleaned, primed cowling latches – worked on engine mount attachment studs, cut

	out patches for cowling.
01/07/09	Repaired the fairing around the air intake so that I can make a duplicate fiaring of fiberglass.
01/08/09	Tack welded together the engine mount lugs that attach the engine mount to the engine & firewall.
01/09/09	Went to Scappoose to pick up the cowling nose bowl. Nose bowl and lower cowling have no Dzus fasteners. Attempted to mate the nose bowl, lower colwing, and air intake fairing to each other. Abandoned the project to a later date.
01/11/09	Started to manufacture the engine mount.
01/12/09	Continued tack welding engine mount.
01/13/09	Continued tack welding engine mount.
01/18/09	Work on patches on lower cowling.
01/20/09	Went to Scappoose to pick up T-Craft fuselage.
01/24/09	Work on spotting location of Dzus fasteners to nose bowl and lower cowling.
01/25/09	Made reinforcing plates for Dzus fastener springs. Temporarily bolted nose bowl, upper & lower cowlings in preparation for Dzus fastener installation.
01/26/09	Test fitted engine cowling onto fuselage.
01/27/09	Install Dzus fasteners on lower cowling.
01/28/09	Attach Dzus fastener springs to nose bowl.
01/29/09	Finish installing Dzus fasteners to cowling.
	February 2009
02/01/09	Made fiberglass cast of the cowling engine air intake on my T-craft.
02/03/09	Fit cowling engine air intake fairing to lower cowling.
02/04/09	Lay up last layer of fiberglass onto the cowling air intake fairing.
02/06/09	Painted nose bowl and ½ of upper cowling with primer.
02/08/09	Painted upper cowling with primer
02/09/09	Made and installed a reinforcing patch where the upper cowling attaches to the nose bowl. Painted lower cowling with primer.
02/14/09	Welded on the engine mount.
02/15/09	Welded on the engine mount.
02/16/09	Welded on the engine mount.
02/18/09	Painted engine mount with primer and top coat of epoxy paint.
	March 2009
03/29/09	I removed the starter motor from the engine. Removed cooling baffles, and the primer system from the engine. I did a boroscope inspection of the cylinders. I removed the spark plugs and found them to be sooted and oil soaked, which is about what I expected on a new engine. I removed the rocker box covers and inspected that area of the engine. I found NO corrosion or rust in any of the areas that I looked at. At first I was a little bit dismayed at the ugly dirty color and condition of the oil. I was expecting the engine parts to be nice and clean with a little bit of a honey color to them. I then realized that the engine had only 33 hours on it since major overhaul and had been run in with straight mineral oil, which has no cleaning ability to it. In order to confirm this, I wiped down some of the components and underneath that ugly black oil film was nice shiny metal. When I get the engine running I will use mineral oil for about another 25 hours, then shift over to a compounded oil such as Aeroshell W Plus. That should clean the engine out and get

	my nice golden honey color that I want.
03/30/09	Installed the magneto switch and its associated wiring in the instrument panel.
	April 2009
04/05/09	Wiped down engine and painted it Lycoming gray.
04/06/09	Finished installation of engine mounts. Finished painting rocker cover boxes.
04/07/09	Purchased ¼ inch aluminum plate to make the cover plate for where the starter was mounted on the engine.
04/08/09	Started to manufacture the cover for where the starter was mounted on the accessory section.
04/09/09	Continue working on the starter cover.
04/11/09	Installed engine onto the airframe. Determined that the oil tank was mounted 180 degrees out of its correct position. Oil tank filler support stud is installed on the wrong side of the engine. The carburetor heat air intake is bearing hard against the oil tank.
04/12/09	Removed the engine, rotated oil tank. Cut off the carburetor heat air intake to clear the oil tank.
04/15/09	More oil tank problems. Discovered that the oil tank that came with our engine will not work on the T-craft because our oil tank was the style tank used on an Ercoupe and has a short oil dip stick tube. The dip stick cannot be removed to check the oil in the engine without removing the exhaust system.
04/16/09	Bought a new (used) oil tank, which has a large dent in it. Straightened out the dent, painted with primer.
04/17/09	Finished painting oil tank with Lycoming Gray paint. Installed the oil tank.
04/19/09	Tried to install the oil temperature gage and found that the oil temperature probe is too long and will not fit into the engine.
04/24/09	Started to manufacture a bracket to hold the gascolator onto the engine mount.
04/25/09	Finished making the gascolator bracket.
04/26/09	Tested the lower cowling for fit around the carburetor air intake filter. Determined that the carburetor heat box will have to be lowered ¾ of an inch for it to align with the air intake hole.
04/27/09	Started to manufacture the carburetor heat box adapter to lower the carburetor heat box so that it will fit the cowling.
04/28/09	Finished making the carburetor heat box adapter.
04/29/09	Checked the carburetor heat box a second time for fit and determined that it will have to be rotated 5 degrees and moved back 1/8 of an inch in order to fit. Bernie installed the anti-chafe material around the cowling.
04/30/09	Finished installing the engine primer system.
	May 2009
05/04/09	Worked on adjusting the carburetor heat box to fit the cowling. Moved the engine rearward 1/16 inch by removing washers at the engine mount.
05/05/09	Did the final adjusting and fitting of the carbuerator heat box to the cowling. Added the “down tube” to carburetor heat box.
05/09/09	Final installation of carburetor heat box. Ordered tachometer drive cable from Aircraft Spruce. Installed throttle.
05/10/09	Manufactured mold to make spark plug fairings for the upper cowling.
05/11/09	Covered the seat cushion with fabric.

05/12/09	Put fuel in the fuel tank to test primer and gascolator for leaks. Gascolator leaks, it needs a new "curtis" valve.
05/13/09	Plackarded tachometer, oil pressure gauge. Installed new Curtis Valve, fixed Gascolator leak.
05/18/09	Remember back in March 2008 when I was welding near the landing gear legs and caught them on fire? Well today I did a fabric patch repair on the burnt fabric. I also sprayed the seat cushions with fire retardent to comply with FAR 23 requirements.
05/20/09	Went to Portland Community College to their machine shop. It seems as though the propeller that I borrowed from them will not work on our C-85 engine. I had to counterbore the propeller bolt holes in order for them to fit over the crankshaft flange ddrive bushings. I had to modify the 3/8" propeller attach bolts to get the correct "grip" length for attaching the propeller. By the way, all of the work mentioned here is totally Unauthorized and Un-Airworthy. **The above installation is for doing a test run on the engine and everything that I did should be removed and replaced with airworthy components. = $ $ $!**
05/21/09	Installed propeller on engine.
05/22/09	Prelubricated engine – got 40 PSI.
05/24/09	Bernie Sutton, Larry Charnesky, and I ran the T-Craft engine for the first time. The compression was excellent, oil pressure was at its high limits, magneto switch worked as it was supposed to, there were no oil leaks around the accessory section. **The dramatic engine first run may be seen in a 20 second video on our NWAAC website.**
	June 2009
06/02/09	Manufactured permanent airworthy fuel tank to carburetor fuel lines using Aeroquip 303 hose & Aeroquip 491 fittings.
06/03/09	Me: "Houston we have a problem." Houston: "Again!?!?" I hooked up the tachometer drive cable to the tachometer and of course it did not work. After going to the A-65 overhaul manual I determined that the A-65 engine tach drive rotates counter clockwise and the C-85 tach drive (our engine) rotates clockwise. So - - what to do?
06/09/09	Bought a used tachometer from Columbia Airmotive. Installed it and ran the engine. It checks out OK. Manufactured Aeroquip 303 hoses for the oili pressure gauge and installed them.
06/16/09	Installed the firewall grommet for the throttle cable. This is a ball type grommet capable of swiveling 50 degrees.
06/17/09	Removed the carburetor, heat box, and engine air induction tubes so that I can install the lower engine cooling baffles. Dale Krum gave me ½ of the cooling baffles. I manufactured the other half.
06/18/09	Installed the lower engine cooling baffles, re-installed the carburetor, heat box, and engine air induction system.
06/12/09	Today I went to Ashland, (647 miles round trip) to meet with Arnold Meades. It turns out that Arnold has a lot of Wally Olson's old T-craft stock. I bought a set of tail brace wires, a left entry step, and a set of non-airworthy engine baffles.
06/27-09	Made cardboard patterns for engine cooling baffles for the right and left sides.
06/28/09	Made the aluminum engine cooling baffles for the right side of the engine.
	July 2009

07/01/09	Made the aluminum engine cooling baffles for the left side of the engine.
07/04/09	More engine air cooling baffle work.
	Dan spent a good portion of the month visiting in Ohio, so most of this month's work was his conversations with the folks at the T-Craft gathering there.
	August 2009
08/03/09	Painted the glare shield over the instrument panel flat black. Trimmed the left and right side engine cooling baffles to fit the lower cowling.
08/04/09	Finished fitting left and right engine cooling baffles to lower cowling.
08/05/09	Started to make the right side forward air baffle just behind the engine air intake behind the nose bowl.
08/06/09	Finished making the right side forward air baffle behind the nose bowl.
08/07/09	Did some adjusting for the fit of the right side of the baffle behind the nose bowl. Made cardboard pattern for the left side engine baffle behind nose bowl.
08/09/09	Cut out and formed the left side engine baffle behind the nose bowl using 2024 T-3 aluminum alloy.
08/20/09	Removed the starter cover plate on the accessory section and replaced it with a Continental manufactured cover plate. Finished the left side engine baffle behind the nose bowl.
08/24/09	Began manufacturing the upper cowling hinge retaining clip.
08/25/09	Attempted to install the upper cowling hinge retaining clip. Met with failure. Will have to re-design cowling retaining clip.
08/26/09	Second attempt at manufacturing upper cowling retaining clip was successful. Removed all blue colored rubber baffling material. Removed left forward air intake baffling. Upper cowling now fits! I will have to modify the forward air intake bafflilng so that things will fit OK. Brought the airplane back to my house so it will be more convenient to work on.
08/27/09	Finally got the top cowling, bottom cowling and nose bowl to all fit together.
08/28/09	Started t install the sparkplug streamline fiarings on the upper cowling.
	September 2009
09/06/09	Trimmed and re-riveted left side forward air intake baffling. Manufactured right and left side rear engine baffling.
09/07/09	Did final cutting and fitting of left and right rear engine baffling.
09/08/09	Finished all of the engine internal air cooling baffles.
09/11/09	Started to fit the spark plug streamline fairings on the top cowling.

From Dan Beltrami's handwritten shop notes, typed by Vanessa Jump Nelson