Detailed index for the Tally Ho videos on Youtube

"She will have her original lead ballast keel, some planking, other re-used original timber, and various bits of hardware, as well as the continuity of looking like the same boat in any one given day. According to Lloyds, the Greeks (see ship of Theseus), the wooden-boat community, and myself, it will be the same boat! But, people are free to disagree and call it what they want."

episode	published	Title episode	Topic(s)
001	2017-06-15	Visiting Tally Ho - Rebuilding Tally Ho EP1	Visit and inspection TH in Brookings Oregon Preparing the site in Sequim
002	2017-07-12	Moving Tally Ho - Rebuiding Tally Ho EP2	TH arrives and is unloaded in the yard
003	2017-07-31	Building HUGE boatshed ALONE - Rebuilding Tally Ho EP3	Building a boatshed Introduction Pancho (is present nearly every episode) Motorcycle Surroundings (The coast) Introduction of the workshop
004	2017-08-30	AMAZING WORKSHOP TRANSFORMATION - Rebuilding Tally Ho EP4	Sorting and organising the workshop Building a mezzanine First volunteer (Cosi)
005	2017-09-19	Sailing on HUGE 3-masted Schooner / Maine - Rebuilding Tally Ho EP5	Daydreaming The other job: relief bosun on Adix Sailing the Incredible Classic Yacht Adix moving in to the workshop making a lofting table/editing stand/living space
006	2017-09-29	The Rebuild Begins - Rebuilding Tally Ho EP6	clearing out TH organising the wood stack removing garboards
007	2017-10-15	The Keel Timber & The Building Inspector - Rebuilding Tally Ho EP7	removing concrete in the bilge removing interior structures short trip into the mountains with Megan removing prop shaft/engine bed removing keel bolts visit building inspector drawing plans for the shed Introduction Saylor (dog)
008	2017-10-28	Removing her Keel (& the return of the building inspector) - Rebuilding Tally Ho EP8	removing the keel bolts removing the lead keel Second visit of the building inspector Wood boring worms Lifting TH to separate the boat from the lead keel
009	2017-11-08	A Stiff Breeze to Bermuda - Rebuilding Tally Ho EP9	Moving Adix to Bermuda Meeting the Adix crew
010	2017-11-26	Deck hatches & Rollerskates (& why I have this amazing workshop) - Rebuilding Tally Ho EP10	Dog poo fence scaffolding preparing to remove the deck How Leo got the use of the workshop/workspace for TH (Raul and Darlene) Francesca (Cecca) arrives Sailing schooner Martha The schooner Martha foundation

			Dumping fridges at recycling centre and roller-skates remove hatches Pancho is aggressive/jealous Finding the ships official numbers Removing the windlass Volunteer Tim Removing the cockpit Removing other hardware
011	2017-12-05	Demolishing the deck / Reasons to Rebuild - Rebuilding Tally Ho EP11	a bit of lead for the internal ballast removing deck planks and documenting construction details volunteers Rob and Andrew discussing floors with Andrew building a new boat versus rebuilding/restoring removing other hardware removing the covering boards measuring the deck structure first idea of what needs to be replaced review of the work with Cecca setting up a Patreon page ?
012	2017-12-20	Chainplates & Knees / Live Oak & Bronze - Rebuilding Tally Ho EP12	removing the last deck beams volunteer Tim removing fastenings and knees Patreon account created trip to Port Townsend for timber, visit boatbuilders and foundry Haven boatworks (live oak) Haven Boatworks Maritime Centre (chat with Robert d'Arcy) discussion about renewing parts of a boat during it's life time Port Townsend Foundry Port Townsend Foundry talk with Pete about the knees (reuse or new in bonze) Friends from England Max and Tom (volunteering) removing the chain plates
013	2018-01-06	Stringers & Breast Hooks / Replace the Keel Timber ?! - Rebuilding Tally Ho EP13	removing the stringers eggs for breakfast removing the lower breast hook bronze bars that stiffen the deck structure around the main hatch Cecca leaves Trying to save the keel timber making a list for needed framing stock etc and stem and deadwood volunteer Logan removing the top breast hook removing part of the floors dilemma: replacing the keel timber ?
014A	2018-01-20	Buying a New Keel Timber / Chainsaw Modification - Rebuilding Tally Ho EP14.PART1	2nd Visit to Robert d'Arcy boatbuilder Selecting purple heart for the keel timber in Port Townsend delivery of the purple heart at the yard planning the scarph in the keel timber making a template for the scarph modification of a new chainsaw rough cut of the scarph with Logan
014B	2018-01-27	Cutting and Fitting a Keel Timber Scarph Joint - Rebuilding Tally Ho EP14.PART2	making the scarph joints What are the specs of purple heart

			volunteer Bram new power plane first fit of the keel timber parts Pancho takes possession of the keel timber second fit of the keel timber parts the keel timber parts fit + cost in wood
015	2018-02-10	Building a New, Traditional Boat in Cornwall - Rebuilding Tally Ho EP 15	Back to England (for a bit) making wooden floors in Penpol, Cornwall (at Butler and Co) a interior view of a classic wooden yacht (how TH's could be constructed) a bit of Leo's boatbuilding history
016	2018-02-24	Laminating timbers into an old yacht / Cornish Projects - Rebuilding Tally Ho EP16	laminating floors for an old yacht using epoxy for the laminate cutting limber holes making and applying bedding putty with linseed oil and red lead powder visiting another project converting an fishing boat into a cruising restaurant the youngest apprentice replacing bottom frames
017	2018-03-10	Massive New Pilot Cutter Build / Ferry Planks - Rebuilding Tally Ho EP17	visit to Luke Powell and the Pilot cutter Pellew The Falmouth Cutter A peek into Agnes interior, Luke Powell's own pilot cutter making and mounting shutter planks (at Butler & Co)
018	2018-03-24	The History of the Yacht Tally Ho / Pilot Cutters / Going South - Rebuilding Tally Ho EP18	Tally Ho's history Meeting with the grandson of TH's skipper Visit RB Boatbuilding, Underfall yard, Bristol RB Boatbuilding Talk with John, Leo's first "employer" who explains how the pilots worked in the Bristol Channel Talk with John about Pilot cutters, the advantages of wooden boats versus steel or fiberglass Travel back to the USA, to Boston to pick up a donated truck Driving to South Georgia to select an mill live oak flitches for the new frames Meeting Steve Cross from Cross sawmill Cross Sawmill
019	2018-04-08	Milling Live Oak in the Deep South - Rebuilding Tally Ho EP19	selecting live oak flitches at Cross sawmill The unique sawmill On tour in live oak country with Steve Live oak specifications The biggest live oak tree in the US (World ?) selecting and rating flitches Special saw blades for live oak milling live oak
020	2018-04-21	Removing HUGE Keel Timber from 20ton historic yacht, ALONE! TALLY HO EP20	Traveling from South Georgia to Sequim Bolting the scarph on the new keel timber Making the bolts in Port Townsend Bedding the scarph Live oak delivered from South Georgia Public request for a (cheap) forklift to move all the wood around construction of a framework inside the hull before the old keel can be removed New volunteer Lifting of the boat up in preparation to the removing the keel cutting the keel free from the frames and floors removing the old keel
021	2018-05-05	Chainsawing & fitting huge new Keel Timber in a 1910 sailboat - Rebuilding Tally Ho EP21	making a template from the old keel timber planing top and bottom of the new keel timber custom made chainsaw jig

			cutting and planing the new keel timber putting in a graving piece bend the lead keel a bit new volunteer Tom sliding the new keel timber under the boat
022	2018-05-19	Restoring a HUGE vintage Ship Saw / Bandsaw - Rebuilding TALLY HO EP22	straightening the hull taking the old floor timbers out and putting in temporary clamps to the bottom of the frames a forklift on loan the story of the vintage ship saw Uspatent shipsaw ? volunteers Eric and Logan, both from the Northwestern School of Wooden Boatbuilding Northwestern School of Wooden Boatbuilding help from neighbour Andrea, digging some deep holes around the ship saw
023	2018-06-02	The Wreck and the Rescue - Rebuilding Tally Ho EP23	stickering the live oak flitches detailed measuring of the boat discussing the errors made in Rarotonga when repairing the boat discussing possible corrections made in Rarotonga removing planks on the starboard side of the hull Pancho becomes supervisor of the works History revealed how and why TH ran on a reef in Rorotonga first idea how to build the new frames correcting the mismatches on both sides or relofting the complete hull
024	2018-06-16	Lofting the Lines; Part 1 - Rebuilding Tally Ho EP24	More measurements on both sides of the hull Picking up an old friend at the airport : Celia conclusion: the boat is not fair (the lines are not smooth) solution: loft the complete boat out clearing the workshop and making a lofting floor making long battens 15:12 to 18:19 technical explanations of the drawing Drawing waterlines, sheer line, … request to find a transport for the missing live oak still in Southern Georgia
025	2018-06-30	Lofting the Lines; Part 2 - Rebuilding Tally Ho EP25	Measuring the lead ballast keel to incorporate it into the lofting plan drawing the body plan: buttock lines and diagonals Cecca is back Making marking staffs transfer the sheer line to the body plan using the measurements from the lofting floor transfer the half-bred widths to the body plan solving problems with missing details on the paper plan bringing in the buttock lines and the diagonals into the body plan adding the measurements of the buttock lines and the diagonals to the table of offsets fairing all the points from the different lines a first time correcting errors going through the same process on the other half of the body plan new volunteer Marc giving the body plan a once over with corrected measurements
026	2018-07-14	The Kindness of Strangers - Rebuilding Tally Ho EP26	new volunteer Riley Makes a guard for the top wheel of ship saw new volunteer Matheus, auto mechanic he gives the forklift a detailed service (adjusting valves, lubricating all the moving parts, …) deepening the pit to be able to mount a second guard around the bottom ship saw wheel Kevin (and friends) brings a few things: a sign for the shop, welding equipment and table and gives a few quick welding lessons On the lofting floor Leo draws the intermediate frames (which are not on the paper plan) to make the templates for the frames he has to subtract the thickness of the planks

			Meanwhile the volunteers remove more planks to get the hull ready to receive the new frames
027	2018-07-28	From Lofting to Re-Framing / Removing Planks - Rebuilding Tally Ho EP27	new volunteer Rees still lofting figuring out the bevels of the frames a baby crow gets the Cecca treatment Logan is back (for a third time) placing the boat level before framing can begin Zoli is back Making the first template selecting flitches for a frame rough sawing of frame parts flattening the frame parts (= futtocks) thickening the futtocks drawing the futtocks from the template marking the waterlines etc, and the bevel of the futtocks new volunteer: David makes extra shelves for the wood stacks and helps out with a few other things as well
028	2018-08-11	Building Boat Frames using Traditional Tree-Nails - Rebuilding Tally Ho EP28	selecting, cutting out, marking the bevels of the futtocks and sawing them with the bevel laying the futtocks on each other together to see if they fit establishing the centre line new volunteer Ruben loosening the planks cutting a second frame (sister frame of the first one) a handle to move the bevel of the ship saw manually making adjustable sawhorses applying red led primer (and some roofing tar where needed) on the futtocks clamping the futtocks into a frame making treenails (treenails) boring the holes for the treenails installing a tree nail finishing the first frames Cecca convinces Leo to take a short brake and go camping
029	2018-08-25	Installing New Oak Frames into a 1910 Wooden Boat - Rebuilding Tally Ho EP29	cutting out the next pair of frames Pancho the pencil destroyer Cecca learns to drive the forklift How to calculate rolling bevels (7:00 to 13:00) making templates for the next set of frames modified marking gauge using a compass plane new volunteer Kirt makes jigs and other helpful parts to increase the speed of making frames Jim, the trucker that brought the live oak delivers the remaining flitches new volunteer John putting in the first frames It is now very clear how much the hull has changed shape and the difference at either side loosening the planks to make room for the frame cutting the notch in the keel for the frame making a brace to clamp both frames together at two feet above the waterline marking the place of the centreline on the brace new volunteer Courtrand
030	2018-09-02	Surface Power Planing Jig / Framing Tools - Rebuilding Tally Ho EP30	Kirt comes up with a series of great ideas to speed up the work making the power planing jig Kirt's dog Diego is also taking part in the fun, befriends Saylor

			Construction of an assembling table volunteering from Chris and Mike Leo gives a round up of the species of wood that are being used in the frames and how the frames are assembled: lead primer and no glue, held together by treenails Pancho steals the show again
031	2018-09-15	Bedding Wooden Boat Frames / Packing Up Shop! - Rebuilding Tally Ho EP31	Raw cutting frames Visit from Youtuber James Wright (Wood by Wright) James has the opportunity to use all the gear/jigs Wood by Wright TH episode Wood by wright making mallets fot TH Placing the frames with the aid of a laser at the exact location Using a jig to finish the heels of the frame Cutting the notch in the keel Bedding the notches in the keel Servicing the ship saw Solving the problem with the uneven table of the ship saw Painting the new installed frames with raw linseed oil Shoring up TH safely before travelling to the UK and tidying up the yard
032	2018-09-29	The largest new wooden boat in the country! - Replica Pilot Cutter PELLEW Update (Tally Ho EP32)	Revisit Pellew, chat with Luke Powell Luke Powell's hair joke The Falmouth Cutter
033	2018-10-06	Meeting a Master Boatbuilder / 1905 Pilot Cutter - Rebuilding Tally Ho EP33	Rebuild of the 1905 Bristol Pilot Cutter Hetty View inside the Pilot boat Chat with Chris Rees History of Hetty: Pilot Cutter, Cruising yacht, Fishing boat, Cruising Yacht How to become a boatbuilder The Cremyll ferry
034	2018-10-13	Two AMAZING projects / Old Boats given New Lives	Revisiting Tethra, the restaurant cruise boat Blue Rriver Table Visit Gweek where Leo rebuild his folkboat visits Steve who is making a 110 year old sailboat ready to go on cleaning coastal waters and coasts Clean Ocean Sailing Possible engine for TH ?
035	2018-10-27	Rebuilding Tally Ho! Back to work!	Back in de USA, Leo gives a tour of the workshop, yard, the boat and the works so far Change volunteers that stays longer than a week or so, preferable 6 weeks or so Building a next frame Cleaning and repairing the shower changes in the way the frames are assembled first use of the mallets James Wright made Announcement of the creation of a new Facebook group "Sampson Boat Co Friends" Sampson Boat Co Friends
036	2018-11-10	Developing A Wooden Boat-building Team! –Tally Ho EP36	The tarp of the shed has teared up and gets replaced Cecca is back Likes Saylor the Labrador more than Pancho, Pancho is a bit jealous towards Cecca Housekeeping job, building a simple (!) set of shelves for the kitchen in a few hours time new volunteer Steve new frames get installed The shed gets an extension above the planing and assemble tables Sharpening the planer blades Cooking with woodworking tools (a mallet to be precise) New volunteer Ben
037	2018-11-24	The Mind of a Boat Builder - Presented by SV Seeker (Tally Ho EP37)	Chat with Dough from SV Seeker, about Leo's life, career, etc

038	2018-12-08	I CHOPPED off the end of my FINGER! - Boatbuilding & Woodwork (TH EP38)	Still more frames are cut out, flattened, planed, bevel cut and assembled At first sight making frames becomes a routine The "tea horn" that announces breaks Installing a pump in the sawmill pit installing the roof above the plaining and assembling tables accident: Leo chopped a piece of a finger Steve an Ben leave finalising and testing the new roof New volunteer Brad, comes every week up from Oregon the frame braces are secured to the workshop The burgee (small flag) next to the ship saw is from the Albert Strange Association Albert Strange Association
039	2018-12-23	Replacing more 108-year old Frames / Wooden Boatbuilding (Tally Ho EP39)	Water in the ship saw pit (forgot to activate the pump) New volunteer Hunter futtocks, futtocks, futtocks, … Jig to make the wedges for the treenails assemble the futtocks into a frame making the temporary top beam (brace) to hold the frames in place on the right position installing the first set of intermediate frames a gale blows, power cut for 6-8 hours, but the main roof of the shed is fine a sensor in the truck malfunctions, and is replaced by Leo himself update in the bunkroom; a couch, a little desk, and a world map Volunteers can place a pin where they come from on the map Friends bought Cecca and Leo a Christmas tree Despite that, the work goes, more futtocks that become frames placing a frame precisely on the body plan with a jig to transfer the waterlines, etc While Leo tries to explain the procedure, Pancho interferes… Who is the boss anyway ? A brand new track saw (from the Amazon wish list)
040	2019-01-05	Buying BIG Centreline Timbers! - Rebuilding Tally Ho EP40	Bought a helical cutter head for the planer installs and calibrates the planer tests it, much quieter than the traditional rotating blades Detailed explanation how the futtocks are fit in to the rest of the frame using the track saw to saw a long straight side on the top temporary top beam Preparing to construct the stem (the stern follows later) changes the construction design to avoid to have to buy extra large pieces of wood Heads of to Port Townsend to look at the timbers for the stem and stern (= the centreline) On the way to Edensaw drops by the rebuild of the "Western Flyer" Western Flyer foundation Western Flyer on Youtube checks massive pieces of Purple Heart for the construction of the centreline The intermediate frames are single sawn frames on the plans but in reality most of them were also build as double sawn frames except for the top part
041	2019-01-26	New team, new VISA, new timber! (Boatbuilding/Tally Ho EP41)	Continuing to cut futtocks Leaving to Vancouver for an interview to obtain a better visa (for Leo) and have a little holiday for Cecca's birthday, Leo's visa was approved Cecca has to leave (visa expires) for the UK New volunteer: Finn Birch a qualified tree surgeon The return of volunteer Kirt (and Diego, his dog) New volunteer Nicola While cutting a futtock they found a bullet (cut in two by the saw) The timbers for the centreline arrive by truck Nearly all the frames from the midsection of TH are replaced Before the front section can be installed, the Front centreline part has to be constructed

			finger update, it is healing well
042	2019-02-09	Cutting the Stern Post – and some BIG plans! (Rebuilding Tally Ho EP42)	While the crew continues making frames Leo prepares to make the stern assembly Hunter leaves, Kirt seals the planing table Nicola leaves, Finn stays longer than planned Leo makes the patterns for the stern assembly Kirt and Tim (a neighbour) service the ship saw removing some bearing play Leo finishes the templates for the Stern assembly and marks the waterlines, station lines, etc A local donates 8 high power LED lamps Tim installs the lamps around and above TH Leo starts flattening the purple heart centrepieces Finds a big shake in one of the pieces Announcement of a frame raising party, extra volunteers are needed for 2 to 3 weeks an idea from Kirt who takes up the task to organise the event Leo transfers the template for the sternpost and starts to cut it out with a chainsaw jig Later that night, Leo tests (only 2) of the installed LED Lights: lots of light
043	2019-02-23	Big Joinery – Building the Stern Assembly (Tally Ho EP43)	Lots of snow clearing before the flattening of the sternpost cut can start Trying a router sled Fynn removes the old stern assembly (the transom will be removed much later) When the stern assembly is removed, Finn helps out with the cutting of stern assembly parts When Leo explains the why and how he adapted the Stern knee, Pancho gets very annoying first dry fit of the stern assembly, discovers that the templates have expanded a bit over time errors are corrected until everything fits precisely Stern assembly is put vertical to check on all sides, it fits perfect
044	2019-03-09	Timber Boat Building - Installing Stern Assembly /EP44	Removing the last remaining hardware from the back part of the hull New volunteer Thom flattening the after part of the wooden keel cutting out the notch for the sternpost making the mortice for the sternpost new volunteer Arnaud The stern knee has to be adapted for the prop shaft and needed a lot of thought because at this time one has to decide what engine, what prop will be used, etc Dry fit of the stern assembly in the boat Refurbished perch for Pancho by Finn Thom has made a series of jigs for the production of treenails Finn trains the volunteers in making frames correcting some pieces so that fit perfectly in the assembly mounted on the keel Trip the Port Townsend Shipwrights Co-op to make the bolts for the stern assembly Port Townsend Shipwrights Co-op Last corrections to the individual parts of the stern assembly, place the felt between all he parts
045	2019-03-23	Bolting the Stern Timbers - Wood Boat Rebuild (TALLY HO EP45)	Drilling the holes for the bolts, the longest one is 4 feet long A visit by Dan McGuire, he brings with him a few presents: Pizza and Tally Ho in a bottle Dan McGuire Last hole to drill is the pilot hole for the prop shaft, This happens in 4 parts The holes are counterbored so that the washers and bolt can be capped with a plug bedding all the joints with tar and bolting the complete stern assembly making a reamer to widen some of the holes slightly A short introduction to the Frame raising party
046	2019-04-07	Frame-Raising Party! (Pt1) / EP46 / Wooden Boatbuilding	introducing team members: Max, Robert, Pat (Adams), Glenda and Bill Also in the team, Kirt, Thom, Arnaud, Finn, … "Mass" producing/installing frames begins Leo explains how the team(and the tasks in detail) are organised Old frames are removed, prior to installing the new ones, more planks come off also On average, one frame per day is produced and installed. Six frames are already installed

			Kirt, who had the idea from the frame raising party and organised it, has to return home because Diego, his dog is (critically) sick It is hard work for everybody, but it is a lot of fun, with practical jokes etc... and some recreation: a small dinghy which resides in the shop get's cleaned and taken to the bay, put into the water and sailed by team members
047	2019-04-27	Finishing the Stern Frames! (TALLY HO EP47)	reintroducing Pancho The production/installing of the frames continue Maintenance: change the blade of the ship saw Leo explains why and how he made pockets in de stern assembly The last frame gets constructed… and installed Leo rounds up the frame raising party and then it is time for a party in the workshop and a little regatta Several members deliver their verdict: good crew, lots of fun and hard work One Leo's remarks while honouring the absent Kirt: Diego, his dog passed away The origins of little dinghy remains a mystery: a rumour says that it was a test in laminating for the "Spruce Goose" the biggest flying boat that ever existed Thom's last "Acorn to Arabella" prank Glenda and Bill say goodbye, with lot of fine memories Cleaning up the yard with Arnaud and Robert before leaving for the UK
048A	2019-05-18	History of Tally Ho (RORC presentation / Ep.48(Pt1)	Presentation at the "Royal Ocean Racing Club" (RORC) the organiser of the Fastnet Race RORC Fastnet Race Introduction by Eddie Warden Owen History of TH and Albert Strange
048B	2019-05-25	Leo's Story (RORC/ TALLY HO EP48-Pt2)	Leo's story …
049	2019-06-08	Removing Tally Ho's stem & bow! (EP49)	Holliday with family and friends on a yacht in Turkey After the holiday Leo has a small operation on his face Leo flies back to TH, Girlfriend Cecca arrives a few days later New volunteers Jack and Joe They start with making templates for the bow section frames Redesign the bow assembly Lofting the bow assembly 4 parts, originally there were 3 The stem is removed Springing (opening up) the planks at the bow to make room to remove the bow assembly In between the kitchen gets a few improvements: drawers for more (dust free) storage They got some new chicks , They get the Cecca treatment, She names them: Nina (Simone), Tina (Turner), Joni (Mitchell), Janis (Joplin), Stevie (Nicks) and Dolly (Parton)
050	2019-06-22	Cutting the Bow timbers! - TALLY HO EP50	Making the patterns for the stem/bow assembly Problems with the ship saw : part of the moving gear moves in it's bearing Cecca wants a stand for a mirror, Leo "whips it up" in no time The bow assembly patterns are transferred to the Purple heart timbers and cut out One of the parts serves as a lunch/diner table Sorting masses of bolts, screws, etc by Jack and Joe, 7 hours later and the end is (not quite) in sight 3 Different compass planes: a traditional hand plane and two powered ones Some of the gear are needing repairs: a chainsaw and a power planer Camera accident: blown over by the wind, filter damaged, removing it is not simple rods bought to make the bolts for the bow assembly and some of the floor bolts
051	2019-07-06	Assembling the Bow Timbers! (TALLY HO 51)	Removing the transom The bearing of the ship saw is temporary repaired with a few shims Transferring the lines onto the bow assembly parts The mast step needs some pockets cut out so that the already installed frames could slot into New volunteer Renaud The mast step is dry fitted and trimmed where necessary

			The young chickens are transferred to the chicken coop Dry fit of the complete bow assembly New volunteer Rowan The bow assembly is ready to be fitted (there is only a graving piece to be fitted)
052	2019-07-20	Replacing the bow on a vintage wooden boat / Rebuilding Tally Ho EP52	repairing a shake with a graving piece Meanwhile Rowan and Renaud start processing old planks The frames of the centre section are getting screwed into the keel Cutting slots into the scarph joints and made wedges the fit into these slots Fitting the bow assembly with felt between the parts At last Pancho befriends Cecca When the bow section is dry fitted for the last time, a measurement is taken between the front of the stem and the back of the sternpost, The same measurement on the lofting floor and gives a difference of less than an eight of an inch (less than 3,2 mm) Drilling the holes for the bolts in the bow assembly Counterboring the holes in the bow assembly The bow assembly is taken apart, a layer of tar is applied and piece by piece installed and when possible bolted immediately. Finally the bow assembly is finished,
053	2019-08-03	Rebuilding Tally Ho - Frame-Raising 2.0 (meeting the crew!) EP53	Some of the crew are returning for this frame raising party. Leo gets help from a friend videographer New futtocks are cut, to explain the team members how the processes work Treenails are mass produced Team members are Rowan, Finn, Pat (Adams), Jordan, Joe, Nadine, Julian, Matthew ASA has set up a crowdfunding page for Finn's travel expenses The first frames are installed, speed is slow but will pick up Briefing at the end of the first week, it started slow but speeded up considerably
054	2019-08-17	The Life of a Futtock! Reframing 1910 yacht (Tally HO EP54)	1-Templating 2-Rough cutting 3-Planing and ticknessing Interlude: Cecca discovers that one of the chickens, Janis is a boy (Rooster) Cecca has to leave mid Frame raising party 4-Marking the futtocks 5-Bevel cutting 6-Assembling Interlude Nadine makes and serves a meal 7-Cleaning up and marking the waterlines 8-Installing Cutting the heel of the frame Trimming the heel and establishing the geometry of the frame Dry fit the frame Mark and cut the pocket in the keel Drilling the holes for the screws that hold the heel of the frame in their place Applying Red Lead paint and Dolphinite mixed with pine tar Securing the frame in it's place
055	2019-09-07	Finished Framing! / Planking Timber (TALLY HO EP55)	Cutting the last frame it has extreme bevels Leo is working out the "fashion piece", it's the frame that holds the transom in it's place Running out of useable wood Trip to Port Townsend for extra live oak Mark up those pieces and raw cut them out Those slabs are to thick, they have to be resawn to fit the rest of pieces Time for a break, the whole team goes sailing on the schooner Martha The Schooner Martha foundation The fashion pieces are assembled and will be installed after the frame raising party ends As in the first frame raising party a regatta in small boats is organised

			Leo ordered a lot of timber from a mill in Suriname, that timber arrives at Edensaw in a container It contains "Wana" (for the planking), internal carpentry and cabinetry "Angelique" for the stringers, beamshelves (Clamps), sheer strake and the broads Edensaw helps with the unloading of the timber which Leo didn't buy trough them To say thanks, Leo makes a donation for the Edensaw Cancer foundation Edensaw Cancer Foundation Edensaw also helps with putting the wood in a kiln The kiln is build within a container, but thanks to the isolation, the kiln is to short Finn came up with a god idea: build an isolated extension to the kiln Back at TH the last frame is dry fitted, "Shut up Janis !" The last frame is installed, the whole crew is present For the first time, you can see the completed set of frames in one go The crew evaluates the working party, good memories everywhere Finn has bought a boat, is setting up a Youtube channel ! KnotFINNishedYet
056	2019-09-21	56. Roughing out the stem / Timber decisions	check if the centreline is plum, level and true, put more props in to make it impossible to move sourcing the timber for the deck beams marking the rabbet on the stem, keel and stern Marking the cutwater bringing the stem to it's exact width The turnbuckle that hold stem and stern in place failed and is replaced by something stronger cutting half an inch deep on the rabbet line marking and shaping the stem (cutwater) Pancho knows the where the camera is and is loves being in the picture
057	2019-10-06	WOODEN BOAT REBUILD - Shaping the Cutwater / More Timber! (EP57)	Continuing cutting the stem (shaping the cutwater) Planing the cutwater to the lines Trip to Bellingham to look at a boat who's deck beams are made from Oregon oak Schooner Zodiac Checking is the use of "green" Oregon oak has splits, shakes after recent deck beam replacements Roughing out the rabbet on the port side Making a cart to transport very long pieces of timber Pete and Cody, neighbours, come to help unload part of the timber that was drying in the kiln Angelique for the stringers and beamshelf and the timber that didn't fit in the kiln
058	2019-10-19	Ship of Theseus / Project Recap! (EP58)	Short review in pictures of the project so far while Leo poses the question "Is Tally Ho still Tally Ho" and gives his ideas about it
059	2019-11-02	Shaping the Keel / Adze work (EP59)	Roughing out the rabbet on the starboard side Before shaping the keel timber, Leo has to loft in the keel timber Drilling small holes to the exact depth to establish the definitive form of the keel at each station Cecca is back and jumps in on coating the blank wood with boat soup Leo explains the whole process in detail He tries out a lipped adze, a traditional shipbuilders tool Leo makes a little bookstand for his hosts He installs a small piece of Purpleheart to fill a small void between the stem and the forefoot Another small piece of Purpleheart is glued in a void where keel and forefoot meet and becomes a part of the rabbet
060	2019-11-16	BOATBUILDING / Carving Sternpost / Cutting Rabbet (EP60)	Continues shaping the keel timber, cutting the rabbet Rowan comes back for a week, he has been busy with building a "land yacht" Cecca sharps her knives on the Tomek Starting the cut of the stern assembly with a chainsaw then smoothing the shape of the sternpost/assembly with a power plane Using a batten to draw the rabbet on keel Starts cutting the rabbet

			Hilarious plug for Leo's Facebook and Instagram pages by Cecca Draws and cuts the rabbet on the sternpost
061	2019-12-01	Installing the Fashion Pieces (Rebuilding Tally Ho EP61)	Rowan starts with fairing the bottom of the frames on the inside in preparation for making the templates for the cast bronze floors Leo is cleaning up the fashion pieces Clamping a beam onto the sternpost to align the fashion pieces with the sternpost A notch will be cut into the sternpost to hold the heel of the fashion pieces Mistake ? Leo drilled a shallow hole outside the pocket Rowan has to leave, regrets it Rowan's Youtube channel One of the fashion pieces fell of the boat when Leo was away, It broke one of the treenails and that has to be repaired At last the fashion pieces are installed Leo attaches battens outside the hull at the line that will hold the stringers to check for fairness He has to work out a solution how to bring the stringers into the hull Cecca helps out with dismantling the frame that held the tarps that protected the table of the ship saw Next task is to install some big beams (beamshelves and bilge stringers) to connect the frames to each other, The beamshelf not only connects the frames but will support the deck beams Leo clamps a few battens the check the frames for fairness Some frames must be adjusted slightly to their exact position Pancho (again) takes possession of the boat, she loves the camera
062	2019-12-21	Boatbuilding - Making Beam Shelves (Tally Ho EP62)	Before installing the beamshelves and bilge stringers the frames must be faired and doublecheck the position of the frames and move them when necessary Inspecting the Angelique beams before scarping them together After selecting 4 beams Leo starts to draw and cut the scarph joints Performing a bend test to see how far these beams can take scribing the second part of the beamshelves Cecca let the chickens walk of the beams cutting both scarphs and shaving them so they fit exactly their counterpart Dry fitting the beams Bolting and shaving the beams have to wait, because Cecca and Leo leave for the Holidays
063	2020-01-05	Milling White Oak Timber in New England (EP63)	Leo and Cecca travel to New York for Christmas and go house sitting for friends While there he is hopefully going to mill white oak in Connecticut for the deck beams As always Pancho steals the attention by giving a of her shows After arriving in New York Leo travels to Connecticut to visit New England Naval Timbers New England Naval Timbers Duke explains that he lets the tree season for 2 to years he can see what the it is going to do On the property is cabin dedicated to author Henry Thoreau Leo has marked a series of logs and will go back to see them rough cut Leo and Cecca enjoy Christmas in New York Leo and Cecca are invited to visit the towboat company Mc Allister and go for a trip with one of the ships, Leo even board the containership that has to be towed Off course the engine room gets a visit On top of the Empire State building Leo returns to Connecticut to oversee the milling of the logs Leo feels that this is the only place he could find timbers close to the original plans of TH and seasoned enough to put in the boat pretty soon The challenge now is, how to move that timber across the country to Sequim Leo and Cecca return to the UK, to visit family and friends
064	2020-01-18	"TALLY HO's first voyage?" - and other questions (EP64)	Q&A from the UK
065	2020-02-08	The Pilot Cutter PELLEW (EP65)	While in the UK, Leo revisits Pellew, nearly ready to be launched

			Pellew launched on february 29 th 2020, this video is from august 2020, sailing Pellew is 68 ft long, 18 ft beam, 10 ft draft, weighs 74 tons, mainsail 1400 square ft, rig about 80 ft length over all 90 ft, oak on oak, bronze fastened, lead ballast Quite a big and revealing interview with Luke Powell Working sail The Falmouth Cutter Pellew
066	2020-02-22	East Coast Oak and a Pink Fireman (EP66)	Leo and Cecca return to the yard, a lot of clean-up and reinstalling the yard has to be done First task: finish the beamshelves, shaving to their definitive form and fastening He can't find the bronze bolts that he needs, but finds a old treading machine It is in need of a lot of cleaning and other work to get it going Leo get it working and thread the needed bolts to fasten the beamshelves The blades of new Makita power planer can be re sharpened The auger he will use to drill the holes for the scarph has a screw on he tip on hard wood that pulls the auger to fast. The screw has to be removed A retired firefighter, Marchall Moneymaker has contacted Leo to transport the white oak from Connecticut to Sequim. He runs a cancer support charity "For 3 Sisters" For 3 Sisters Cross country trip hauling white oak timber for Sampson Boat Co. and the Tally Ho. part 1 There are other TH related videos on Marchall's channel, but no part 2
067	2020-03-08	BoatBuilding - Installing Beamshelves / BIG plans! (EP67)	Leo is finishing the beamshelves Leo tests how far one can twist the beams. They have to twist about 25° between stern and midships Marshall stays for a few days and takes it upon himself to service the pipe threading machine When the machine was taken apart he found out that a part was broken Leo contacted Keith Rucker (another youtuber) and sends him the broken parts Removing Bronze Bushings & Brazing a Broken Casting for Leo at Sampson Boat Co. Turning Bronze Bushings and Pressing them in Place: Casting Repair for Leo at Sampson Boat Company For some time Leo tried to find a buyer for a Star sailboat and also tried to find a return load to the east coast for Marshall. The star is sold to somebody from Michigan and Marshall does the transport, Back to boatworks. Leo is going to try to lift the beamshelves into the boat After a good days work, the beamshelves are in rechecking and marking the sheer line on both sides of the hull Because the beamshelf sits under the sheer mark (They carry the deck beams on top) Leo marks on each frame where the beamshelf has to sit He give the beamshelves a slight curve on the outside (to fit into the curved frames Fairs the frames where the beamshelves have to sit Mocks up with some thin timbers , so that he can exactly work out where the scarphs have to land on the frames and cut the angle on beamshelves where the meet at the bow He bends with a tackle the beamshelves one by one in their place and secures them with clamps When both beamshelves are set, he can clamp them together so that the first frames in the bow are not pushed open, further aft he as to pull the beamshelves out. He also has to cut away a small piece on the top of the shelves so that they meet on the centreline Announcement the Leo is looking for a (payed) shipwright to speed things up
068	2020-03-21	BoatBuilding - Bending Beams / Pipe-threader Repair (EP68)	Trying (and succeeding) to push the beam shelves apart further aft with an hydraulic ram Putting the stern part of the beamshelves in place and twisting them Leo receives the box with the pipe threader back from Keith Rucker reinstalls the threader and runs a test. It runs ok, but there is slippage in the chuck. After sharpening the teeth of the dyes , there is no slippage anymore and delivers perfect threads, Leo bolts the front of the beamshelves together After that he works out a system to make bolts with heads to fix the beamshelves to all frames He makes a jig to hammer the heads on the bolts and with some heath it works fine He does not have a 3/8 dye to cut the threads onto the bolts

			And makes a threader with a regular dye Leo found a shipwright and he starts within a week
069	2020-04-04	BoatBuilding - Making Deck Beams / Hiring another Shipwright! (EP69)	Continuing to make the bolts for the beamshelves, about a 100 are needed New volunteer Patrick Kingshill, he starts out with threading bolts Cecca also threads bolts Enter the new shipwright: Pete Stein. Pete worked at the Western Flyer project for a long time First task: build a staircase to enter the boat Pete and Leo have been busy to set up everything to bolt the beamshelves to the frames The holes for the bolts are drilled and counter drilled at the outside Leo starts to make the deck beam, explains what the constant camber is and how to make a template for it Leo select the flitches for the deck beams The chickens and Pancho want their say in the procedure The deck beams are raw cut The beamshelves are bolted to the frames The raw cut deck beams are flattened and planed, Leo begins to mark the beams in their final shape Thee beams are cut with the ship saw in their final shape Leo adjusts and marks the sheer batten and check it for fairness Before fastening the beamshelves the frames are put precise on their station The outside of the frames are checked for imperfections and plugged Cecca thinks that nobody knows her A first deck beam is presented at the spot where it will sit
070	2020-04-18	BoatBuilding - Fitting Deck Beams! (Tally Ho EP70)	Leo explains the function of half dovetails Meanwhile Patrick shaves and sands the deck beams to their final form Pete is raw cutting the half beams and the carlings Cecca is at it again in her particular funny way to promote the YTchannel Leo explains the different type of beams in the deck structure Leo explains that he uses two sources to make and place de deck structure: the plans and his own documentation of measurements and photo's The shipwrights who build TH followed the plans but not everywhere The forward companionway is built further aft than the plans and why they did it Patrick gets his hands on cutting the dovetails and notches as well
071	2020-05-02	BoatBuilding - Building the Deck Structure! (EP71)	Continuing with making and installing deck beams, cutting the pockets for the carlings Start of a running joke "Pete, what are you doing" Patrick is sanding … but has his hands on the original butterfly hatch by cleaning it up Beautiful teak is visible again Cecca gives the keel a layer of "boat soup" Patrick fairs the bottom of the frames so that they can take the floors, They will be cast in bronze, but they have to make templates first Leo explains why bronze floors and explains how they make templates Cecca shows (one of) her craft(s): making jewellery Pete introduces his dog Backtrack After the full beams are finished they make the carlings the half beams and cut the pockets for he half beams in beam shelve and carlings As always, supervisor Pancho check if the work is of the highest quality There is an issue, a deck beam has a discoloration and when Leo cut the dovetail a vinegary smell was noticeable. Some time before Leo made a tool handle for a friend and that handle has broken, which isn't normal, Some research point to a bacteria in the wood Leo replaces the beam with one that hasn't any discoloration The dry fit of the deck structure is nearly finished, but why is the forward hatch not in the centre
072	2020-05-16	BoatBuilding - Bilge Stringers / Oak problems! (EP72)	Cleaning the yard before all the planking stock is delivered They unloaded the kiln and Edensaw brings it to the yard

			The planks are stacked in the yard. A box with ventilators is build around it The goal, drying the wood slowly further Problem, one log seems to be not white oak, Leo demonstrates what it does, it sucks water up As a result 18 half beams and one full beam have be replaced Pete (and Patrick) have started to make the stringers Cecca had to leave The crew starts to make the replacement beam The inside of the hull is faired to be ready for receiving the stringers The scarphs of the stringers are made and dry fitted, drilled and bolted "What are you doing Pete ?" cutting the dovetails in the replacement beams Patrick has learned a lot of boat terminology and demonstrates it He is now qualified from "Leo's dodgy boat school" Once all the faulty deck beams are replaced, the crew attempts to bring the stringer inside the hull Once in the hull the parts of the bilge stringers are bolted together and dry fitted on their line Patrick's time is up and has to leave The bilge stringers are in and can be bolted to the frames
073	2020-05-30	BoatBuilding - Finishing the Deck Structure! (EP73)	New volunteer Clark Pete fastens the bilge stringers to the frames Clark hammers heads on bolts Leo corrects the bend in the carlings When all the deck beams are predrilled, the whole deck structure is taken down Leo can now chop of the tops of the frames The top of the frames are cut with an angle so that penetrating water can flow away avoiding rot "What's going on Pete ?" chamfering a bevel into the bottom of the beams "What you are up to Clark ?" Sanding, wiping it down and take them in the workshop The beams get a few coats of sealer and the dovetails are painted with red lead primer The beam shelves also get a few coats of sealer and the joints a coat of red lead primer The deck structure is put in it's place and bolted to the beamshelves Carlings and half beams are screwed in Now all the cross boards can be taken out and for the first time full view of the inside of the hull is revealed The project is now completely funded by donations, patreon etc
074	2020-06-13	BoatBuilding - Restoring the Transom (EP74)	finishing the deck structure and routing a bead at the bottom of the beam shelves Leo starts working on the transom, he starts with parts of the original transom. Only the bottom half of the original transom survived and is made of teak and Leo want to reuse it He starts with cleaning up the boards, removing all sorts of things, shaving them and revealing beautiful wood underneath all the crap To repair all the holes he uses small parts of the original teak planking Only the two bottom boards remain and he has to source some other teak boards Visits Norm, who is an interesting character, 82 years old but very active Leo comes home with enough new "old" teak boards Clark checks the small cutters on the planer and changes them if they are blunt Leo want to varnish the transom and therefor he cannot use caulking. He uses splines The fashion piece and the stringers are faired in The teak boards are dry fitted and drilled and counterbored to hide the screws behind a plug
075	2020-06-27	BoatBuilding - Casting Bronze Floors (EP75)	The floors (brackets that hold the frames and the keel together) They will be cast out of bronze. To do that they have to make patterns "Pete what you're doing ?" Pete explains the whole process Leo explains why he chose bronze

			Pat Adams returns (was a member of both frame raising parties) Leo and Pat travel to Port Townsend foundry Port Townsend Foundry Pete Langley the owner of the foundry explains the process of bronze casting After some problems with the mould with a floor in ready to be cast The furnace is ignited , the bronze is melted and poured The second mould is successful and ready to be poured while the first floor cools down The furnace is ignited , the bronze is melted and poured The first floor has cooled enough and is removed from the mould After some cleaning up the first floor look beautiful A day later both floors are retrieved, brought to the yard and Clark starts to grind them down until they fit into the hull Clark even polishes them, there will be a lot of bling in the bilges
076	2020-07-11	BoatBuilding - Finishing the Transom (EP76)	Leo continues with the transom, taking it all apart, still plugging holes, sanding, etc Making the bolts to connect the transom with the sternpost The sternpost and fashion pieces get a coat of red lead primer and bedding, the splines only red lead primer Bronze bolts get a hammered head On top of that the teak boards get small depression pressed , filled with a strand of caulking cotton After drilling the through holes the transom is bolted permanently on the sternpost, and screwed to the fashion pieces Meanwhile Pete is cutting and fairing the rabbet Leo shows how he depresses the gain on the boards with a ball peen hammer Pat is been working on the floors in the Port Townsend foundry After some initial problems, casting happens much faster When all the bolts and screws are fastened, Leo glues in plugs to hide the holes Meanwhile Clark keeps grinding the floors until they fit and gives a polished shine, more bling What is Pete doing ? Fairing the frames so they can line and mount the planks later Pancho overseas all the work of course Leo is cutting and grinding the completed transom down to its definite form Wipes it down and applies a few coats of varnish With 3 of bronze floors dry fitted, Pancho can't wait to inspect them
077	2020-07-25	Basic Boatbuilding Terminology (Tally Ho EP77)	In this episode, Leo dives deep in the terminology of boatbuilding a detailed list of the terms is pinned to the top of the comment section Casting of the floors continues by Pete, Pat and Pat's son At the yard Bonny Adams, Pat's wife is grinding and polishing the floors She is a high school manufacturing teacher, she teaches metal, welding, etc Leo collects all the wrought iron knees Although the knees are in a reasonable condition Leo decides to cast them in bronze and starts making patterns, he explains how he is going to make those Meanwhile Clark continues to grind and fit the floors into the hull Making patterns for the knees continues Pete continues the fairing of all the frames His hilarious sense for humour shines when he says that he is building a mansion for Pancho but explains in detail what the goal of the fairing is Leo finishes a few knees patterns and announces that next week a new apprentice will join the crew This episode is dedicated to Dan McGuire who visited TH (episode 45) who passed away Dan McGuire
078	2020-08-08	Boatbuilding - Lining-out for Planking (EP78)	Lining of the planking means that it is time to determine the placing of the planks But first the new member of the team has to be presented: Rosie The staircase is move aft, Backtrack (Pete's dog) immediately decides that is his rest spot Some staging is set up for easier access to the higher parts of the hull Clark is back (he had to fulfil his normal job for a while) and continues to grind floors

			Rosie joins in on the grinding of the floors For the lining out Leo needs a series of very long battens Pete continues to fair the hull, he is now concentrating on the topsides Because Leo has to many things to do, making the videos becomes hard However help is at hand: Charlie will visit TH a few days a week to film the progress and gradually helping out with the editing as well A canvas maker from Australia has made a cover for the ship saw What is lining out, Leo explains Tim Lee, from the Townsend Shipwrights Co-op visits to give his advise Tim is lead boatbuilder on Western Flyer and has lined it out They determine the place of the tuck line They go through the original stock of planks and photo's to get some idea how it was done originally and use a plank scale to determine the width of the planks The staging is expanded around the complete hull
079	2020-08-22	Custom rivet press machine! - Wooden Boat Fastenings (EP79)	Pat and Clark are not present Making the patterns for the hanging knees, Leo explains what their task is Leo and Rosie make them 2 new volunteers: David and Matt How to fasten planks: TH was originally fastened with copper rivets Leo explains the different options and (as was original) choses for round copper rivets and how to make the rivet heads, If done manually it would be a time consuming labour but out of the blue a guy named geoff said he made a hydraulic press and dye to make rivet heads Leo unpacks the box, there is even a package of Macaw food in it He has enough copper bar stock to make all the rivets and tries out the press The machine delivers perfect rivets in no time and has a cutter to cut a rod to the exact length it takes 22 seconds to make a rivet Back to floors, when they fit into their station it is time to grinding the inside and polishing them The pattern making also continues A batch of new chickens has arrived they explore everywhere Pete is still fairing the frames and for and aft assemblies, however the end is in sight Is there a spy in the yard (at 22:46) Leo show why he can not use the old hanging knees (apart from the fact that they are made iron) There is a spy in the yard It's Alix from Acorn to Arabella
080	2020-09-05	Cutting for Propeller / Boring for Prop-Tube (Wooden Boat Rebuild / EP80)	Making patterns for the knees, casting, grinding and polishing bronze floors and knees, fairing of the stem and stern parts and rabbet continues Leo is making a template for the transom's final shape so it matches the rest of the hull Leo and Pete work close together to get everything right Did Pancho flee into the bushes because there are to much chicken present ? Leo is waiting at the airfield to pick up Charlie who commutes from Seattle He arrives in his own small aeroplane, a Cessna 170, built in 1949 It's named "Bessie", after his grandfathers cow was very reliable and very slow Leo installs battens so he can mark the position of every plank on the frames With the help of a (Dutch) ship engineer the research and decide which propeller, place and size of the prop aperture TH will have He draws the contour of the aperture onto the sternpost following the plan and drills a series of small holes trough the sternpost Designing a prop aperture is a complicated compromise It is going to be a feathering propeller, to minimize resistance when sailing, size about 22 inches and either a 3 or 4 bladed one After cutting out the aperture the void is grinded and shaved to the exact size Before finishing the aperture Leo wants to bore the hole for the stern tube with a boring bar The boring bar has itself quite a large dimension, so the first step needs to be drilled with an auger Then he uses a first boring bar to enlarge the hole further and does that from both sides of the post

			After that a second bigger boring bar is setup with a guide on each side of the stern assembly Looking trough the stern tube you can see the joint of the beamshelves at the stem of the boat The stern tube has to bored again at the time Leo receives the propeller tube and knows it's size
081	2020-09-19	Pouring Bronze / Fastening Floors - Wooden Boat Rebuild (EP81)	To cast the bigger floors, they had to make another flask To make the mould they have changed to a 3 pieces: Cope, Core and Drag The volunteers that helped with the casting had to leave, so new helpers had to instructed as well New volunteer Will The first mould they do fails: the cope had to be redone The second try is successful, but Pete Langley has to work very hard to separate the core Then it is time to don fireproof clothing, light up the fire, melt and pour Pete Langley gives a tour of Port Townsend Foundry Port Townsend Foundry After the casting has cooled it is taken out of the mould, the excess bronze (risers, etc) is cut away, transported to the yard grinded and polished (by Clark, mister polish) Meanwhile Pete is preparing to install the first series of floors by drilling holes trough the floors and wooden keel and counterbores the holes on the bottom of the keel He cuts some felt, paints the wooden parts (keel and frames) with a coat of red lead primer, lays the felt over the painted wood, places the bronze floor over it, drives bronze bolts trough floor and keel, mounts bronze washers and nuts and tightens them, The whole crew is intrigued ow to solve a wooden puzzle somebody sent In the end the puzzle get solved. Pancho, the supervisor, isn't happy about it: to much time lost Leo continues with making patterns for the lodging knees and the breast hooks Will was left out of solving the puzzle and nobody will tell him how to ... He gets frustrated and takes a drastic step … as a result Pancho has a new toy to destroy Back at the foundry, the first hanging knee gets casted In the comments of last video a lot of question were asked about a mysterious hole in the prop aperture, That hole is for one of the bolts to fix the stern assembly that couldn't be installed until now. Leo installs that bolt now.
082	2020-10-03	Fitting/Polishing Bronze Knees - Wooden Boat Rebuild (EP82)	The bronze works continues, at the yard and at the foundry, production has been speeded up. Leo explains the process of fitting the knees to deck beams and frames Everyone is busy with grinding and fitting knees and floors, or at the foundry, however Pete is drilling and bolting the floors to the wooden keel. Leo had to bend one of the knees al little bit After a few knee installs the process is changed a bit. First the inside of the kneei grinded and sanded Then the side were it touches the frames and deck beams are fitted including a little notch in the beam shelf to keep the rounded corner of the knee , avoiding a possible weak spot, Will is not present this week (he is NOT banned from yard when he cut the wooden puzzle ! That scene in previous video was a joke) but will be back shortly. The rest of the team is either at the foundry making mould and pouring bronze, or at the yard grinding, sanding, polishing, except Matt who tripped and hurt his hand. There is a one handed job Rowan is back and helps out with grinding etc. Pancho doesn't like him very much The work at the foundry continues… The rest of the team is either at the foundry making mould and pouring bronze, or at the yard grinding, sanding, polishing, except Matt who tripped and hurt his thumb. There is a one handed job available: making copper rivets, all 4000 of them. But first he gives the rabbet a coat of "boat soup" (Pine Tar, Turpentine, Boiled Linseed Oil and seasonings of choice as the caption states) Rosie explains and demonstrates the whole process of fitting a knee Meanwhile Pete is continuing to bolt the floors to the keel. However he last floor in the stern assembly cannot be bolted because the bolt interfere with the prop shaft. He has to fit Drifts or "Dumps" (= a sort of nail) to fix the floor to the keel. To finish the insides of the knees, after the grinding the knees are cleaned up with scotchbrite, sanding (from 800 to 3000 grid) and the polished with three different compounds.

			After a few days Matts thumb has healed and he helps out with polishing one of the floors. He also explains that the "wings" of the floors will be fixed to the frames by rivets when the planks go on. At the end of this episode all of the floors are casted, as are 21 of 28 knees. The work at the foundry will come to an end very soon.
083	2020-10-17	Finishing Casting & Floors / Plank Stock (TALLY HO EP83)	The last knees are produced at the foundry: only 3 lodging knees left to do The crew : David, Rowan and Leo Leo's dream: "one day when I have a boatyard/workshop somewhere in the world I love to set up a facility to do castings on some scale" The last mould is formed and they prepare to cast the last two mouldings Daniel, an apprentice/employee of the Port Townsend Foundry will do the pour (his first ever) Port Townsend Foundry After the last pour and the casts are taken out of the moulds, the casting floor is cleaned up and the full crew assembles at sunset on the beach for a celebratory drink with (a few) bottles of Champagne. Only the grinding and polishing remains. Leo customizes a gig for rivet making. (Part of) the holes to rivet the knees are drilled and counter sunk in the bronze by Matt Rosie gets a crash course in driving/handling the forklift, the rest of the crew looks on she passes from "Leo's Dodgy Driving School" The Yard is reorganised to make place for the next big task: preparing the planks The planer/thicknesser is brought into the yard and planing the planks can start You might think that was the plan, not so, they needed a bigger lunch table, Pancho likes it Pete and Clark bolt the last 3 floors to the wooden keel The bolts are treaded, greased and hammered into the place and fastened, another major job done. Leo works out a system to fasten the lodging knees, there is very little room between the deck beams He succeeds and the first lodging knee is fastened to the deck beam and beam shelve
084	2020-10-31	Finished installing Knees and Breasthooks (TALLY HO EP84)	Work continues on installing all hanging and lodging knees But there is still a lot of grinding and polishing to do Rosie is drilling holes into the knees and countersinking them also Pete, Leo are hammering heads in bronze and copper bolts to fasten the knees to the deck beams, depending if they will be visible or not determines if they we be bolted or peened Leo explains: peened half inch copper rivets when both sides of the deck beam are visible half inch bronze bolts when only one side is visible (through deck beams, beam shelve The knees are countersunk, the bolts/rivets fill this space so they are stronger This is a centuries old technique used in shipbuilding Meanwhile, the planks are prepared for installing by shaving them flat Most of the planks are Wana, but there is series of Angelique planks as well These last ones will be used for the garboard, the broads, the sheer plank and maybe the second plank Pancho defeated, she cannot take a bite out of the plank wood While shaving the dust collector is attached to the planer/thicknesser, because a lot of saw dust is created and somebody collects it for use in his garden. And off course a Halloween scare has to be part of the video, organised by Pancho ? Pete explains why and how he anneals the top of the copper rivets Pete, Leo, Rosie and Rowan are installing the knees full time A few knees turned out to be to complicated to be poured in one piece, they were cast in two pieces and welded together by Pete Langley at Port Townsend foundry Port Townsend Foundry The two breast hooks are also installed, Pete explains their function There is still some lining out to do, Leo starts with this job
085	2020-11-14	Fitting the first new planks / Wooden Boatbuilding (TALLY HO EP85)	Leo and crew take a week of, after all the bronze is installed Apart from a lot of "admin" (emails etc) Leo goes out for a ride on a Honda CT90 and enjoys a flight in "Bessy" over the Olympic peninsula

			After a lot of fiddling with battens to define the master plank lines, they are scribed onto the frames When the master lines are marked the plank lines for the intermediate planks are also marked with the help of a plank scale and a divider When all the plank lines are marked on the frames, a template for the first plank is made Leo starts half way up the hull (at the turn of the bilge) so that in a later stage two crews can make and install plank in two separate sections of the hull. Meanwhile Rowan gives the frames a coat of "boat soup" The template is clamped on a plank and marked Making a template, transferring the template onto a board is a slow process, Pete, Matt an Rosie are transferring the plank lines from the starboard to port side of TH using a piece of string and a bubble level. Pete explains the process When the transferring of the master lines is done, the crew starts polishing the knees (and floors) one more time, and applying "renaissance wax" to keep the shine for a longer time David an Rowan have been matching a series of "butt blocks" that will be used to strengthen the "butt joint" where the ends of two planks meet, the joint between the planks happens between two frames most of the time. Each plank has a bevel between the planks plus an extra bevel for the caulking. Leo explains Also where the planks meet the stem rabbet have to be bevelled and the back side of the plank have to be hollowed out so they fit perfectly upon the frames Leo has made some templates and is modifying two planes (a power plane and a hand plane) by putting a curve on the blades After hollowing the back side, Leo paint the back side of the planks with a coat of "boat soup", but starts at the wrong side of the plank. Finally the first plank is clamped to the frame and adjusted After a few minor corrections at the stern end of the plank a coat of bedding compound is added and the two planks (that form the first strake) are ready to be installed permanently While making the first planks Leo discovered a small fault on of the planks and grafted another piece of wood into the plank Finally drilling the rivet holes and hammering the rivets in concludes this episode.
086	2020-11-28	Planking Tally Ho! (Wooden Boatbuilding / EP86)	Pete has cut out the first garboard plank but before the garboard can go on the stop waters have to be installed. Stop waters are installed where a joint from the centreline crosses the rabbet. A hole is drilled trough the keel timber along the joint and filled up with a soft wood dowel (Leo uses Cedar) to fill the hole When water trickles into the joints, the softwood will expand and closes any gaps While cutting the first plank the plank deformed quite a bit, but it could easily be bent back in shape. and straight, This helps a lot: Leo does not have to make a template for each plank: one side is straight and after measuring the plank he can cut the next plank and edge setting the plank afterwards To try out this procedure Leo has to make a very long straight edge After a (few) dry fits Pete is ready to install the first garboard: he paints the keel with red lead primer (to stop any bacterial growth and rot in the keel and frames), puts a layer of pure dolphinite on the garboard, fits the plank and screws it into the keel **note**: the garboard and second plank are made from Angelique which is much stronger than Wana that is used for the rest of the planks, Because the stem is not yet bolted to the breast hooks it sags a little bit over time because the big pole that holds up the stem is slowly sinking in the ground. Leo forgot to check for sagging when he made the first plank and has to correct that now before he screws/rivets the first plank **note**: planking happens in two parts: one from the bottom (the garboard) up and halfway up to the deck. Also planking happens at both sides (starboard and backboard) of the boat to keep the load evenly spreaded and prevent deforming the hull. The garboard is clamped down, checked for gaps and fastened by screws Leo adapts a circular saw so that it can saw rolling bevels. Because he uses a guide to cut the plank (the not straight edge that is) this cannot be done by the big ship saw.

			While Leo is adapting that circular saw, Pete and crew fit and install the second plank. At the stem the plank are "nibbed" (do not end at the rabbet) the next plank ("the first broad")fills down the gap between plank and rabbet because one can not fasten a plank that ends with a point With the planking getting faster, the crew (who is engaged long time) begins to rotate jobs, some spare time etc. This helps the moral of the group enormously. As a result the spirit within the group is very high, One of the tools that was made "dolley" (UK)/ "buck" (US), it is a heavy piece of metal tubing filled with lead and a piece of live oak and has a (hollow) tip at the end, The use of it: peening the rivets. It is held by a crew member to keep the rivets head into its place while another crew member "peens" (= hammers) the other end flat and fastens the plank to the frame. Rowan, the always funny one dresses up specially to take the first turn in holding up the dolley. He wares a self designed plastic diaper because he has to sit in the rain for hours Rosie peens the rivets : for a few months jokes about "Rosie the rivetter" in the comments become a reality. Most of the planks are rivetted, but there are places where that can not be done: fastening in the keel and dead woods. These fastenings have to be screwed by 3 inch long, bronze, screws. Leo has found a small company that makes those type of screws: Fairwind Fasteners Fairwind Fasterners After a first cut with the adapted circular saw with the correct level of bevelling, shaving it completely flat, he marks and shaves the caulking bevel seem into the plank and it is ready to be fitted, The individual planks are not long enough to cover the length of the boat. Somewhere the planks need to be joined, Leo uses "Butt Joints" instead of scarfing a joint. Leo explains why he prefers Butt Joints. The cost of the bronze : sales tax included the whole operation came down to +- 33000 Us dollar. or at +- 700 US dollar per item (knees, floors, breast hook) Pete explains his (slightly) different method of making planks. The main difference, he uses his own circular saw without a rolling bevel edger. He changes the setting when there is a need for. He only has to shave a little bit more to get the plank flat. Leo demonstrates the accuracy of a bevel cut with a bevel gauge, shaves the sawing marks off, checks for fairness, shaves the caulking seem and both and seems, a next plank is ready to be fitted. At the end of two weeks planking 12 planks are fastened on the boat out of 2x28 planks.
087	2020-12-12	Choosing the Engine (Rebuilding Tally Ho / EP87)	In this episode Leo explaines in three animated illustrations the reasons which enginesystem(s) he chosed. These sections are mixed with other scenes of the planking going on, the making of a second staircase, the making and installing of a butt block, etc. Planking scene 1: Leo and Pete cutting a series of planks, templates etc Engine section 1: Leo explains why TH will have an engine, what engine TH had in 1910 and the many engines it had in its life Planking scene 2 : David pulls out a rivet : it won't fit in a bronze floor, the hole is to small, Pete cuts another plank, Rosie makes and installs (with the help of Leo) a butt block Engine section 2 : Engine reliability, Weather (Luff) side, Lee side, an engine needs to "simple" with many options to repair it on the go, The simplest reliable, safest engine is a diesel engine, but there are drawbacks too. Planking scene 3 : Rowan and David make a second staircase for the front of the boat's scaffolding Engine section 3 : Various types of energy: Petrol, diesel, wind, electric. The electric option needs special ways to generate it: solar power or a (diesel) generator set plus batteries, A second redundant system is needed: on a small boat hat can be oars but on a large cruising boat that won't work. An engine needs to be easy to be maintained/repaired while out on the sea, Planking scene 4 :Planks are getting installed. Leo turns his attention to the bolts that tie the bow and the breast hooks together : He has ample tolerance to drill holes from the inside of the boat through the bow and make filler pieces to fit between the breast hooks, the stringers/beam shelves and the stem. Engine section 4 : A diesel engine, Leo's choice fell on a Beta Marine set, which has a simple Kubota engine. Also he considers the need for electricity in the boat: lights, appliances, bilge pump, etc. While

			researching this Leo and his engineer came across a Beta Marine parallel hybrid system: it is equipped with two electric 20 Kw generators mounted on the prop shaft. Those generators are also electric motors and can use the batteries to drive the prop shaft. Beta 85T (85 hp @ 2,800 rpm) Twin Hybrid Motor (Beta 75 – Beta 150) Planking scene 5 : More planks are getting cut and Pancho at last Engine section 5 : Conclusion
088	2020-12-27	Christmas Planking Special! (EP88 / Tally Ho / Boatbuilding)	Planking continues. Two teams work simultaneously: one team from the bottom up, the other team from halfway up to the top of the hull. Pete is in charge of the "bottom team", Leo for the other half. Pete and Leo do all the cutting and finishing of the planks, Leo tries to explains the riveting process but is interrupted by Pancho who wants to take part of the action. Holes are drilled trough plans and frames The rivets made by Matt (see episode 82) are nailed a copper "clench ring" goes on top the rivet, it is cut to a certain length, and getting "peened" at the inside of the hull Clench rings are nowhere to be found: Leo even tried to make castings of them but that process is to slow an to costly. At the last moment he gets in contact with Karl Smith who offered his help in the past for machining stuff. His father has a business that runs a specialised CNC machine that can make those rings. Leo has already received 500 perfect clench rings and more are on their way to TH. RD Smith manufacturing After cutting a plank, it is shaved plat and gets a "caulking bevel". In a later stage the void between planks will be caulked with cotton and oakum. After a dry fit, some "boat soup" on the inside the plank gets fastened on the frames, bow and transom, Danny, Matts younger brother has joined the team, both love working with wood, camping etc. The Olympic peninsula is a favourite place do all this fun stuff. Meanwhile (and continuously) planks are being cut, shaved, dry fitted, corrected, getting caulking bevels, a coat of boat soup and fitted with copper rivets, Disaster: Danny's truck head gasket has blown and he has not enough money to get it repaired. Leo asked some advice from somebody he knew but David decided instead coming out, bring his twin brother Daniel with and do the repair themselves. Half a day later the truck is up and running again. There are some new tools around: the bucking bar gets new and better versions, even some clamps which makes the work easier and faster. Leo explains the different tools. Why no air hammers or mechanical riveters are applied, stays a mystery,,, Planking goes on … Rowan, chicken in his arm explains what he is doing in his spare time and his main tasks on the Project at the moment: together with Pete making bronze bolts and bolting the knees to the frames. Rosie makes butt blocks and fits them on the back side of the butt joints, she explains the full process (and what she's up to in her spare time) Speaking of Pete: When Leo wanted to ask him he had already disappeared, so Leo has to explain what Pete is doing. Leo explains why he changed the plan to rivet the hanging knees trough the planking frame and knee by bolting them instead. That happens on all hanging knees, except the 6 (2 x 3) knees where the chain plates will be installed. The chain plates are situated at the outside of the hull and are needed for the standing rigging that will support the mast. David cleans trims the felt paper between frames, knees and floors when they are fastened. "The Pancho show": Once again she demonstrates that she is the star of the show. She even tries to pick pocket her subjects. David's activities are painting, cabinetry. He even found a local job that he can combine with his volunteer work on TH While the weather changes from rain to snow, in a series of scenes all the different activities are shown. One of the chickens found a way to enter the boat. The episode concludes with Leo giving a short resume: 31 planks are installed, out of +-106 needed.

			Roughly 1/3rd of the planking is done.
089	2021-01-09	"Hey Pete, what are you doing?!" (Rebuilding Tally Ho / EP89)	TH is 111 years old now ! This episode concentrates most around Pete Stein, a professional shipwright who is working with Leo on TH. The crew have a few days off for New Year and were invited on Pete's boat in Port Townsend for a sail trip. Pete's boat is a "Truant" developed and build at the "Northwestern School of Wooden Boatbuilding" Northwestern School of Wooden Boatbuilding Pete's workshop is situated in Port Townsend, next to the "Port Townsend Shipwrights Co-Op" and actually the first building that they build on site. Port Townsend Shipwrights Co-Op Pete's Instagram He shares the building with two other companies: "Compass woodwork" and "Golden hour upholstery", At the Port Townsend Shipwrights Co-Op the restauration of the Western Flyer takes place, Leo pays a short visit and has a chat with Tim Lee about bedding the seems between planks Western Flyer on Youtube Planking continues Pete's story, second part: from the age of 17 for 5 years he travelled al over the USA as a Hobo Interruption, Matt Makes a series longer rivets, so they can be used to rivet the floors as well. Pete's story, second part: Pete's prank Pete's accident … General scenes of different activities at the yard And Pancho is present, she climbs the stairs Pete explains what he is doing, working on the "broads" the lower 7 planks and why he switched from Angelique to Wana. (it was planned that way) Leo tells the story about the shipwright tool chest from Jake Jacobson who passed away recently Michael (Jake) Jacobson Memorial Two members of the boatbuilding community in the Northwest collected his tools and put them in a big toolchest and loaned to aspirant shipwrights Rosie is selected as the first recipient of the chest.
090	2021-01-30	The Rig & Sailplan (Rebuilding Tally Ho / EP90)	In this episode Leo goes over (nearly) all types of sailing boats, sail configurations and discusses the sail plan for Tally-Ho. Basic rigs are described with two or three words (list follows) **1-Type of sail** Bermudan (or Marconi) Gaff Lug Gunter Crab claw Lateen Sprit Swing Freedom **2a- number of sails: single mast** Sloop (1 main, 1 head sail) Masthead Sloop Fractional Sloop Cutter (1 main, more head sails) **2b- number of sails: multiple mast (first mast is higher than the second (mizzen) mast)** Ketch Yawl Two masted Lugger **3a- A look at Tally Ho's sail plan** Drawn in 1909 by Albert Strange

			Albert Strange wiki TH is clearly a Gaff Cutter **3b- Rig components** Boom Gaff Mainsail Throat halyard Peak halyard TH has 5 Headsails, only 2 will be flown at the same time Foresail/ Staysail can be exchanged to a Reaching Foresail/ Staysail 3 jib sails depending on wind conditions Mainsail sheet Headsail sheets **3c- Names of the sail sides** Foot Luff Leech Head (for a Gaff sail) **3d- Names of the sail corners** Tack Clew Head (triangular sail) Throat (Gaff sail) Peak (Gaff sail) Topsail Jackyard Topsail (Topsail with spars) **3e- Mast and standing rig** Pole mast Shrouds Chain plates Spreaders Stem Bowsprit Traveller (moveable ring to which the tack of a jib is connected on the bowsprit) Topping lifts **4a- Sean Rankins (NW Sails & Canvas Inc)** North West Sails & Canvas Inc World wide Consulting to recreate TH's adapted sail plan for the Fastnet Race ASA newsletter excerpt Mast replaced ? Same (shortened) mast with fitted topmast plus a new Jackyard topsail and a new Flying Jib **4b- Marine Architect Jim Franken** Jim Franken Design Detailed plans for the individual sails, cloth needed, hardware needed, detailed rigging, etc So that all the parts of rigging, hardware and sails are produced they will fit together Leo concludes this episode with a (detailed review)review of the new drawn sail plan, its possibilities for light and heavy weather (including a big Spinnaker) The top mast can be brought down, to reduce the height of the rig added the running backstays (were not shown on the original sail plan) Why drawing up the plans now ? To be able to order the sail cloth, so the sailmakers can begin make the sails between other work (estimated cost § 10,000 imported from Europe) and probably distributed between several lofts.
091-1	2021-02-13	Planking the Hull - Part 1 (Rebuilding Tally Ho / EP91.1)	The crew is becoming very fast in riveting the planks that some of them now are trained to cut planks too.

			106 planks in total are needed, 38 are installed at the begin of the video Planks are installed in 2 groups: bottom to half way up an halfway up to the top. This happens on both sides of the boat switching sides after every "strake" to keep the load on the frames equal General views of planking activities Leo carries out some tests with a single rivet until it breaks First a sheer test with 770 lbs (350 Kg), 900 lbs (408 Kg) and 1200 lbs (544 Kg) The rivet takes it Only if Leo stops a drop of the weight abruptly the wood splits, the rivet itself holds Next test: a rivet in tension with 770 lbs (350 Kg), 900 lbs (408 Kg) and 1200 lbs (544 Kg) The rivet even survives the drop test Because these test were unscientific Leo visits a test bank for slings near the yard They carried out several test on multiple rivets These test delivered a lowest result that a rivet broke was at 2425 lbs (1100 Kg), most of them broke at at 4000 lbs (1815 Kg) Planks are cut to size, shaved top and bottom, hollowed on the backside. The top side of the plank gets a bevel to make room for the caulking (corking) after all the planks are installed The video gives the process in full The last thing that happens before the plank is installed is tracing a line 1 inch from the edge of the plank where to drill and install the rivets Before the planks go on, fairing of the planks one more time is carried out Leo explains why he hollows to the planks and not flatten the frames He also explains why he uses narrow planks Last minute repair on a frame: to remove some sap wood and a bark inclusion a block is glued and clamped in place Also shown in the video is the detailed work that goes on to the joint of two planks Rosie cuts her first plank Pancho, as usual, inspects the work from every angle, even from the top of the roof of the work shop Matt fills and glues screw holes with small pieces of wood on the frames so that water cannot get in Pete in his unique style explains how and why caulking (corking) bevels are made Because all the caulking (corking) bevels are the same, a router jig in developed
091-2	2021-02-14	Planking the Hull - Part 2 (Rebuilding Tally Ho / EP91.2)	Planking continues with several activities: cutting a plank, 1st fitting, marking and correcting the fit of the plank into the rabbet The happens on both sections (top and bottom part) by the two planking crews. Leads are Pete for the bottom half and Leo for the top half. Holes are drilled for the rivets, rivets are hammered into place, TH get its plank symmetrically on both sides of the hull A few scenes during a lunch break, with Pancho prominent in the picture A caulking (corking) bevel is cut When the weather allows it, lunch happens outside with a planking stock as a table One of the chickens decided to do inspection of the works herself in a "parkour style" Leo explains why the planking happens in two sections (bottom ant top half of the hull) One disadvantage with this method is that you need "shutter planks" that closes the gap between sections, they are a bit harder to cut and clamp One advantage with shutter planks is the fact that you can compensate for the crimping of the other planks (by drying out) during the works. More planks go on, the gap between the two sections is getting smaller by the day Most of the planks are fastened with coper rivets, but on places that cannot be rivetted the use bronze screws (behind hanging knees , the beam shelve, the stem rabbet, the transom, etc) Each strake exists of at least two planks, the joint between them is strengthened with a "butt block" Before a plank goes on, if necessary a last minute fairing of the frames is carried out. The last shutter plank on the boat is called the whisky plank, when it is installed the crew takes (a) shot(s) of whisky to celebrate the work done. Some planking crews make every plank a whisky plank. A special jig is constructed to simplify the clamping of butt blocks to ease the peening of the rivets Winter sets in, the crew undergoes a first snow dusting and it becomes very cold, The planks are not steamed, there are a few reasons for it: 1st the planking wood is "Wana" (Red Louro)

			and is very "bendy" in itself ,2nd TH shape has a easy hull shape . When Leo received the planks they were very green, put is a kiln to dry slowly The planks are not equal in thickness, most are of the same size, but some are what thinner. The thinner ones are placed on sections that have less curve, the thicker ones need a bit more fairing when the planking is done to get a smooth hull. Planking goes well, at the end of the video only 36 planks (18 strakes) are left to fit.
092	2021-02-28	Can the County shut down TALLY HO?! / Sheer Planks (Rebuilding Tally Ho / EP92)	A snow storm hot the yard, there snow in TH's hull At the end of the previous episode there were 70 planks fitted an 36 to go Leo is going to prepare for installing the sheer plank (top plank) Meanwhile planking goes on and the gaps between the two sections becomes smaller by the day Backtrack (Pete's dog) wants to be in the action Pancho inspects a plank and takes two bytes out of the (softer) Wana plank. Leo intervenes Leo spends days in fairing the tops of the frames to obtain a fine sheer line Pancho, as always, wants his part of the show and shows some of her tricks At the bow of the boat there will be a lot going on: the bowsprit will sit on the left side ad on the other a lot of other things will happen: a lot of boats have a "knight head" installed: TH had not TH had some very special formed blocks to support the bowsprit and the bow roller. After careful measuring, Leo cuts the blocks, fits them and starts to drill 4 four holes for the bolts. He applies a thick coat of Dolphinite to the surfaces of the block and the beam shelf and bolts the blocks to the hull, fairs them in and finishes the rabbet to the exact height. Meanwhile planking goes on, Pete discovers an error in measurements of a plank. After a lot of discussion and confusion the plank can go on, Leo makes templates for the Sheer strakes, the most important planks of the boat because it defines the sheer of the boat. The plank will be cut out of Angelique a much stronger wood than Wana. However The stock is in short supply. That is why he changes the dimension at the last minute (he makes them smaller than originally planned and will fill the gap with higher Wana planks) Behind the sheer planks a lot of bolts are installed to hold the beam shelve in its place. Just before the sheer plank is installed those bolts are tightened and the threads are disrupted so they con not come loose. Leo receives a large envelope from the local county. There is a big problem that could jeopardise the whole project: The yard could be shut down by the local authorities. Leo goes in to detail what that letter says. We skip that part of the video to avoid any repercussion it could have on the TH project. In the last part of the video, one of the two shear planks is fitted, there was not enough time left to install the second one before video had to be published.
093	2021-03-13	County Problem Solved?! / Goodbye Rosie (Rebuilding Tally Ho / EP93)	The episode starts with Leo thanking everyone for the support and suggestions for a solution for the issues with the county (see episode 92) and some awesome news about Rosie. Planking continues, with Leo, Pete, Matt, David, Rowan and Rosie. Leo starts with cutting the Shear plank for the port side of the hull. This plank is made of Angelique and there very little left. After a lot of puzzling, Leo succeeds in making the two shear strakes out of Angelique, Rosie explains what is going to happen with the hull after fairing the planks : both sides will be painted on the outside it will be(white) paint because that is stronger than varnish. It protect the planks against UV light and needs less maintenance. On the inside it will be oil (boat soup) There is no problem drilling through trunnels for rivets or screws, Lots of scenes cutting, shaving planks and ultimately installing them. Pete explains why there are "nibs" on the lower planks at the stem of boat. Simply because the sweep of the forefoot is to shallow and there is not wood material enough to screw the plank to it, Rosie is offered a full time job at the Port Townsend Shipwrights Coop and leaves the project. Port Townsend Shipwrights Co-op She going to work on the "Western Flyer" restoration project that is also on Youtube. Western Flyer Foundation Channel Planking continues, the gaps in the hull are becoming smaller Pete explains why the planks are installed tightly , because when in the water they will absorb water

			and swell cross grain tightening up the hull even more (caulking/corking helps this even more. Planks do not swell lunitidal so there is no problem of causing damage to the stem or stern rabbet Plot change: the team builds a chicken coop because there was an intruder who killed one of the chickens. As always Rowan makes a bit fun of it. Why are the sheer planks made of Angelique: This wood is stronger the Wana, That plank will touch walls, berths, etc. and will suffer the most. On top of that, there will be lots of fastenings etc installed on that plank. Leo explains the compromise that has been reached with the county: TH has to moved from the property 6 months time. With the help of two lawyers : DILLE LAW, Olymplia WA (Trust and Estate Planning and Probate, Business Law, Real Estate, and Municipal Law) DILLE LAW, Olymplia WA SCHWABE, WILLIAMSON & WYATT (Nationwide Law Firm) SCHWABE, WILLIAMSON & WYATT All the details are in the video (starts at about 26:30), In the TH section of this website you will find two newspaper articles about the issue. Leo explain how the planks will be trimmed at the transom, this exposes the end grain of the planks but will be painted white with the rest of the planks to protect the wood. This is the traditional way to do it. Riveting and screwing planks continues. Finally Rosie leaves after 8 months at the project. But we will see her again in Port Townsend. "Inspector" Pancho takes her task very seriously and is featured several times in the video.
094a	2021-03-27	Finished planking! / Final “Whisky Plank” (Wooden Boat Rebuild / EP94)	In this episode the crew will be installing the "shutter planks", the last one being the famous "Whisky plank" Shutter planks fill the gaps between several already planked sections. Leo starts cutting them After months of being a valuable team member Matt has to leave. Because there is no room left to put in clamps riveting and screwing becomes a little bit trickier new systems are being tested and used, amongst them a levering system. The planks themselves will be hammered in place by brute force. The rain cover of the side shed has been taken down, from the road the beauty of the hull is now completely visible. Another technique to bucking up a rivet is with a rope to sit on so the body weight delivers the needed force. Rowan demonstrates it perfectly The front shutter planks are relatively straight, so no pattern is required; however the aft shutter planks need a pattern because they vary verry much in width. These planks are mostly screwed because on the inside of the hull there to much hardware that makes riveting mostly impossible. rounding the inside of a shutter planks helps also with the hammering in explains Pete. One by one the gaps close and the hull nears the finish While Pete is shaping and fastening the last shutter plank, Leo starts with cutting the planks at the transom to their ultimate dimension. Then it is time for the last plank: the Whisky Plank, which calls for a celebration after it is installed: The crew drinks a shot of whisky. (The installation was live streamed on YT, but is also presented in this episode) But first David rivets the last rivet in place. Rosie has been given a day of on her new job to be able to take part in installing and celebrating the Whisky Plank. And then it is time to celebrate ! (At hits point in time +15000 viewers on the live stream joined in the celebration and most of them took also a shot of Whisky or another beverage.) epilogue: a small recap in video: Leo inside the boat in 2017 and in 2021 . Again: "Inspector" Pancho takes her task very seriously and is featured several times in the video.
094b	2021-04-03	Boatbuilding Time-lapse / Planking TALLY HO in 3 minutes. (EP94.5)	Bonus video: a time lapse of the planking of TH
094c	2021-03-25	Live stream of the Whisky Plank installation	Deleted video
095	2021-04-10	Fairing the Hull / next steps (Wooden Boat Rebuild / EP95)	Why fairing: The outside of the planks are not smooth and fair. It needs to be both because when

			the hull is painted every high or low spot will show up, Also the smoother the hull the faster the boat will sail. Fairing happens in several phases: A first round will take out the biggest part of the errors, about 80% The rivet and screw holes in the hull are not yet "bunged" up. This allows to correct the embedding Bungs will be put into the holes after the first round of fairing. Also, is it the right time to start caulking/corking the boat. Sometimes a plank will move slightly and that needs to be faired again. Then a first coat of primer will be painted on the hull and that will show al the faults clearly Meanwhile Rowan makes the bungs needed to glue on top of the rivet- and screwheads. +- 4000 are needed. He shows the technique he uses to do this very efficiently, and produces a series of bung jokes. Leo wants the boat faired, caulk/cork the gaps between the planks and install the bungs as quickly as possible so the planks can be painted with a primer to seal them. Also on the inside the planks will be saturated with oil (or boat soup). This will prevent the planks to dry out to quickly. Caulking/Corking will strengthen the hull considerable, strength that is needed for the boat to be moved to it's new yard. Pancho is testing the strength of wood today, luckily she test the stage and not the boat. Pete explains the whole fairing process: it sucks ! It is a tedious job but things are looking good David is rounding the inside of the frames to remove the sharp edges. Fairing continues, the hull is much smoother now. After two weeks the first phase of fairing is finished, the caulking/corking and bunging can begin. For the first stage power tools are mostly used, the second phase will be done by hand tools such as longboards. For the caulking/corking a few specialist guys from Port Townsend will lend a hand to speed things up.
096	2021-04-24	Caulking (Corking?!) a wooden boat (Tally Ho / EP96)	This episode starts with Leo explaining the word "Caulking" and the controversy around how it is pronounced Caulking/Caulking/Corking Leo also explains what Caulking is: filling up the seams between planks and making a boat watertight. In Port Townsend Leo has a chat with Brad Seamens: he offered to lend a hand with a few other caulkers to caulk TH for a day. So he and Paul Stauffer (?) both from the Port Townsend Coop and Jordan Bard, an independent shipwright arrive on a Saturday for a days work. Caulking begins, first a coat of Linseed oil is painted into the gap and the hammering begins Brad explains the procedure: first a strand of cotton is hammered in the back of the gap between planks and then, if necessary one or more strands of Oakum (hemp) are hammered in. Because TH planks are relatively thin only cotton will be used. Pete and Leo join the fun also. After one day of caulking more than a third of TH's hull has been caulked even with a break of Pizza and Beer ! The rest of the jog is up to Pete and Leo during the following days. Pete explains the procedures used to caulk a seam and the different gears they use: first a strand of cotton is "tucked" into the seam, then it is "rolled" into the back of the seam and lastly they "make" the strand of cotton with a broader iron to compact it in the back of the seam. Pete also describes and shows different sorts of caulking irons and their use. When a series of seams is caulked a layer of red lead primer is painted into gap. Rowan and Dave take on this job. Leo explains the strange looking mallet that is used to caulk a boat: it is a heavy big strange mallet But it is very effective and the result of hundreds of years of evolution. Lastly a quick run with a torch burns the few strands of cotton that left sticking on the outside of the planks. Tally Ho is caulked and ready for the next phase. As always Pancho is the supervisor of the project and keeps a close look at the work.
097			