

AVIATION VIDEOS & DVDS

INSTRUCTIONAL VIDEO TAPES



BUILDING THE RUTAN COMPOSITES - This step-by-step instructional program features Burt Rutan and Mike Melvill proceeding through the complete foam-epoxy-fiberglass composite construction procedure as used on the VariEze, Long-EZ, Quickie, Q2, Dragonfly, Sea Hawk, Polliwagen and other composite aircraft. Also included is a formation flight by the Long-EZ, Defiant and VariViggen. A must for all composite aircraft builders. 1hr, 36 mins. DVDP/N 13-04809



FIBERGLASS 101 - This tape shows aircraft builders how to make molds, fairings, and parts from fiberglass. It takes you step by step through the phases of glass work so that you can build parts yourself. Produced by fiberglass expert Sam James. 2 hrs. P/N 13-40368



BASIC AIRCRAFT SHEET METAL TECHNIQUES & TOOLS

- George Orndorff, a noted aircraft builder, demonstrates 13 sheet metal techniques and offers many helpful hints to save time and help motivate the homebuilder. Segments include shop organization and safety, cutting, polishing, deburring, drilling, dimpling, countersinking, riveting, fluting, bending, circle cutting, and more. A sample control surface is constructed using these techniques. 58 minutes. VHS P/N 13-15120



MIKE ARNOLD'S AR-5 WORLD RECORD AIRCRAFT DVDS

DVD 1, "Why it goes so fast" - Documents the efficient AR-5's record runs and clearly explains the simple drag reduction concepts used to achieve its surprising performance on such low power. With comments by aerodynamicist, Bruce Carmichael. P/N 13-15130

DVD 2, "How it's made" - Details the engine installation and the airframe's structural design, and completely demonstrates the easy moldless, hot-wired, foam and fiberglass construction process used on the fuselage, wing and tail services. Almost 2 hours. P/N 13-15135

DVD 3, "Moldless, low drag wheelpants" - Details the engine installation and the airframe's structural design, and completely demonstrates the easy moldless, hot-wired, foam and fiberglass construction process used on the fuselage, wing and tail services. Almost 2 hours. P/N 13-06277

DVD 4, "Making Fiberglass Molds" - This DVD chronicles development of a beautiful six piece, modded fiberglass aircraft cargo pod to show the simple design and fabrication techniques used to produce low cost, professional quality, production molds. From first sketches, through master patterns, to finished parts. Over an hour. P/N 13-06278



MIKE ARNOLD'S MOLDLESS LOW DRAG WHEELPANTS

- "Moldless, low drag wheelpants", a close-up study of the design and fabrication of the AR-5's Custom Fiberglass Landing Gear Fairings. Every step is shown, from initial research, through foam carving, to final paint and installation. Over an hour. P/N 13-15124



MIKE ARNOLD'S MAKING FIBERGLASS MOLDS - "Making fiberglass mold", chronicles the design and fabrication techniques used to produce Low Cost, Professional Quality, Production Molds. From first sketches, through master patterns, to finished parts. Over an hour. P/N 13-15125

COMPOSITE MATERIALS VIDEOS



A STEP-BY-STEP GUIDE TO MOLDING FIBERGLASS - From construction of the plug, to building the mold and pulling the finished part, this 7-step guide offers guidelines and tips to make even your first molding experience a success! 35 minutes. P/N 13-40350



THE BASICS OF FIBERGLASS - For beginners in fiberglass, this video describes resins, reinforcements, tools, supplies and terminology. 20 minutes. P/N 13-40355



FIBERGLASS REPAIRS MADE EASY, VOL. II/HOW TO REPAIR GELCOAT - Learn how to mix your own matching color gelcoat, fill scratches & voids on gelcoat surface and spray gelcoat. 43 min. P/N 13-40365



ADVANCE MOLD MAKING AND PLUG CONSTRUCTION - See a complete demonstration of plug design, construction, and the finishing process as well as the complete process of building a large polyester mold. P/N 13-40340



VACUUM BAGGING AND SANDWICH CORE CONSTRUCTION - See the complete process of scheduling and laying up the graphite layers, the honeycomb sandwich core, and the vacuum bagging process. P/N 13-40345

"TIN MAN" METAL WORKING VIDEOS

These videos provide excellent instruction for the aircraft builder. Ken White, The Tin Man, is a master craftsman and instructor for the Experimental Aircraft Associations metal working workshops at Oshkosh.



BASIC DAMAGE REPAIR ON ALUMINUM - Take an axe and drive it through the nose of an RSK Porsche. Now we're ready to begin by bumping, smoothing, gas welding, planishing, and metal finishing. All work completed on camera. Complete and very detailed. Color, 63 min. DVD..... P/N 13-04377



EDGE THOSE PANELS - Learn to make flanges, hems wired edges, and flares. With just a hammer, dolly, and some simple tools you can make, you'll be able to easily edge lots of panels. Wing rib construction is also shown. Then a rotary machine (bead roller) is used to do really fancy artwork! Color, 126 min. DVD..... P/N 13-04378



AN AMERICAN'S VIEW OF THE ENGLISH WHEEL - Shrink on the wheel? You bet! Analyze frame design, tracking patterns, layering, pressure measurement, rapid high crown development, nearly flat panels, and much more. Last segment shows air hammer shaping and shrinking on the Pullmax. Color, 126 minutes. DVD..... P/N 13-40302



SHRINKING MAGIC - The art of shrinking (crimping or compression) is demonstrated using both the Lancaster machine and the torch and hammer method. Hot work demonstrations include steel, aluminum, copper, stainless, titanium, and magnesium. An excellent segment on form block work is shown as well. Color, 84 minutes. DVD..... P/N 13-04381



SHAPING ALUMINUM WHEEL PANTS-WITH 7 SIMPLE HAND TOOLS - Using a torch, mallet, stump, forming bag, slapper, dolly, and clamp you can make a really nice pair of pants (fenders or tank). This video includes buck development, pattern work, and hot shrinking. Air hammer shaping and Pullmax shrinking segment at the end. Color, 125 minutes. DVD..... P/N 13-04380



HOW TO GAS WELD ALUMINUM - Learn the professional methods of setting the torch, regulator pressures, and secrets of the flux. Filmed with two cameras through the finest eye-wear available to show tacking, distortion control, flat and vertical welds. Many 30-year veteran welders have benefited from this video. Color, 105 minutes. DVD..... P/N 13-04379



4130 CHROMOLY AIRFRAME CONSTRUCTION - This video is highly recommended for anyone considering a steel tube fuselage aircraft. It covers the whole process: Workflow, welding rod selection, jiggling, fitting, and welding. (Note: The discussions and advice are almost exclusively about oxyacetylene welding. TIG, GTAW, is mentioned only in passing.) VHS..... P/N 13-00389



BASIC AIRCRAFT PAINTING - Join a professional paint crew as they show you the detailed steps and techniques involved in painting an all-metal aircraft (60 min.). P/N 13-40775



BASIC AIRCRAFT WOODWORKING - Woodworking knowledge is essential to any homebuilding project. Power tool safety is also discussed. A great starter tape (30 min.). P/N 13-23355



BUILDING YOUR OWN AIRPLANE: HOW TO GET STARTED

This is the first of a series of videos that will give you insight into the exciting world of homebuilding. Topics of discussion include selecting the right kit for you; the definition of an experimental aircraft; Federal Aviation Regulations (FARs); insurance; how to set a realistic budget; FAA inspections and many other topics (45 min). P/N 13-40535

BV