OXYGEN SYSTEMS

AEROX HIGH-DURATION AVIATION OXYGEN SYSTEMS
Add to your flying comfort by using oxygen at altitudes as low as 5000 ft. AEROX Oxygen Systems include lightweight aluminum cylinders, regulators, all hardware, flow meters, and nasal cannulas (masks available as option). Oxy Sawyer oxygen saving cannulas & AEROX Flow Control Regulators increase the duration of oxygen supply about 4 times, and prevent nasal irritation and dryness. Complete brochure available on request.

500 SERIES REGULATOR – AN AIRCRAFT SPRUCE EXCLUSIVE!
1. Low profile
2. Standard Aircraft filler for easy filling
3. Convenient top mounted ON/OFF valve
4. Equipped with standard plug sockets
5. Over pressure safety valve
6. Built in cylinder pressure gauge

AEROX 2D system
AEROX 4M system

AEROX PRO-O2 EMERGENCY HANDHELD OXYGEN SYSTEMS
In the event that the primary oxygen system fails, the Pro-O2 provides oxygen until the aircraft can reach a lower altitude. And because Pro-O2 is refillable, there is no need to purchase replacement O2 cartridges. During short flights at altitudes between 12,500 ft. MSL and 14,000 ft. MSL when maneuvering over mountains or turbulent weather is necessary, the Pro-O2 emergency hand-held oxygen system provides oxygen to extend these brief legs. Included with the refillable Pro-O2 is a regulator with gauge, and a refillable cylinder.

AEROX SILICON MASKS
Upgrade from a Scott mask with dynamic or carbon mic with these lightweight (4 oz.) silicon, quick donning masks. Very comfortable and includes 5 ft. of tubing and mic plug. Specify small, medium, or large. Effective up to 25,000 ft.

<table>
<thead>
<tr>
<th>Description</th>
<th>Part No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small w/Mic</td>
<td>13-01020</td>
<td>.</td>
</tr>
<tr>
<td>Medium w/Mic</td>
<td>13-01019</td>
<td>.</td>
</tr>
<tr>
<td>Large w/Mic</td>
<td>13-01018</td>
<td>.</td>
</tr>
</tbody>
</table>

AEROX 4110-712 SERIES OXYGEN MASK WITH MICROPHONE
The 4110-712 Series continuous flow oxygen mask with microphone is intended for crew and passengers in the general aviation industry at a maximum altitude of 25,000 ft. MSL. Available in 3 parts: Oxygen systems. Includes standard fittings for connection to portable and built-in oxygen systems.

<table>
<thead>
<tr>
<th>Description</th>
<th>Aerox No.</th>
<th>Part No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small Without Microphone</td>
<td>4110-711-1</td>
<td>13-06652</td>
<td>.</td>
</tr>
<tr>
<td>Medium Without Microphone</td>
<td>4110-711-2</td>
<td>13-06653</td>
<td>.</td>
</tr>
<tr>
<td>Large Without Microphone</td>
<td>4110-711-3</td>
<td>13-06655</td>
<td>.</td>
</tr>
</tbody>
</table>

AEROX SMOKE GOGGLES
Aerox has introduced Smoke Goggles with face forming elastomer seals to keep smoke out. Aerox Smoke Goggles are very comfortable and includes 5 ft. of tubing and mic plug. Specify small, medium, or large.

<table>
<thead>
<tr>
<th>Description</th>
<th>Part No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Soft Case</td>
<td>13-00413</td>
<td>13-04964</td>
</tr>
<tr>
<td>Large w/Mic</td>
<td>13-01019</td>
<td>.</td>
</tr>
<tr>
<td>Medium w/Mic</td>
<td>13-01018</td>
<td>.</td>
</tr>
<tr>
<td>Large w/Mic</td>
<td>13-01017</td>
<td>.</td>
</tr>
</tbody>
</table>

AEROX 4110-712 SERIES OXYGEN SYSTEMS
The 4110-712 Series continues flow oxygen mask with microphone is intended for crew and passengers in the general aviation industry at a maximum altitude of 25,000 ft. MSL. Optional 13-04964 includes industry standard fittings for connection to portable and built-in oxygen systems.

<table>
<thead>
<tr>
<th>Description</th>
<th>Part No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small</td>
<td>4110-712-1</td>
<td>13-06656</td>
</tr>
<tr>
<td>Medium</td>
<td>4110-712-2</td>
<td>13-06656</td>
</tr>
<tr>
<td>Large</td>
<td>4110-712-3</td>
<td>13-06657</td>
</tr>
</tbody>
</table>

AEROX FBO-1 FILLING STATION
Whether making money or saving it, the AEROX FBO-1 Cascade Filling System makes it easy to fill all types of aviation systems, from portables to jets. The FBO-1 comes complete with 2 CGA 540 cylinder connectors, 6 high-pressure (3000 psi) braided stainless filler line, contents gauge, flow restrictor and adapters to fit Puritan-Bennett, Scott, and CGA 540 filler ports. P/N 13-04534

AEROX 540 SINGLE CYLINDER FILLING STATION - Transfills between cylinders quickly and easily. 6 braided stainless line, gauge, restrictor, and CGA 540 fillers. P/N 13-04535

AEROX CGA-540 SINGLE CYLINDER FILLING STATION - Transfills between cylinders quickly and easily. 6 braided stainless line, gauge, restrictor, and CGA 540 fillers. P/N 13-04535

OPTIONAL BUILT-IN ADAPTORS

AEROX GLOW IN THE DARK FLOWMETER AND GAUGE
AEROX’S PATENTED GLO-TEC FLOWMETER - Precision Adjustable. Direct inline oxygen flow indicator with photoluminescent technology for extended night-time visibility. PN 13-05251

AEROX’S PATENTED GLO-TEC PRESSURE GAUGE - Pressure Gauge. 0-3000 PSI, Rear Mount, with photoluminescent technology for extended night-time visibility. PN 13-05250

PRECISE
WP
ME
HA
BV
TO
AV
CS
LG
PS
EL
IN

668
AEROXIMETER
Developed at the request of one of the major aviation manufacturers, this new product protects you from the 2 major physical dangers of flight: Lack of oxygen and carbon monoxide poisoning. The system uses an electronic light to measure the oxygen saturation in your blood. It easily slides on your finger and gives continuous updates on the pilot and copilot’s blood oxygen levels and heart rates. This system also constantly measures the amount of carbon monoxide in the cockpit and displays 3 levels. Carbon Monoxide is an odorless and tasteless gas. Without a proper electronic warning system, it can very quickly cause drowsiness and unconsciousness.

CO/Low Oxygen 1-PL
Size: 1-3/8” thick x 5” w x 2-5/8” h.

FIGHT STAT PULSE OXIMETER
Know the symptoms of low oxygen hypoxia and evaluate your pulse rate and blood oxygen saturation with the FightStat’s Pulse Oximeter. FightStat provides an easy and accurate way to check for in-flight hypoxia instantly - providing crucial data before it’s too late. P/N 13-03248

THE OWL AVIATION OXIMETER
Can detect blood oxygen concentration through the use of a small sensor placed on the tip of a finger or in a headband. The oximeter will determine if the oxygen concentration of the blood becomes too low and the pilot of potential hypoxia conditions. At an oxygen saturation of 90%, the OWL will alert the pilot through standard aviation headphones with an audible “caution” message. If the saturation should drop below 85%, the OWL will sound a “warning” message. As an added feature, the OWL will give saturation readings on demand - at the push of a button. Will also alert the user if the batteries become low by an audible “caution” and a visual indication with a red LED. Will “speak” to the user to alert for low blood oxygen saturation. This enables the pilot to concentrate on flying the aircraft instead of requiring the constant monitoring of a display. This can be important when flying IFR, where a pilot must focus on the aircraft instruments. The OWL is also the only oximeter with a sensor intended for continuous monitoring. P/N 13-04204

EDS-2IP BUILT-IN PULSE DEMAND OXYGEN SYSTEM
Complete kits automatically operate from a 12 or 24 Volt system at a mere 250 ma. of current. Therefore, if not specified, during your order the IPR will come with a 12 volt valve and the schematics will instruct that it be powered from the control head, via pin-19. The most preferred configuration. Otherwise the valve for the IPR must be specified for either 12 or 24 volt operation if you decide to power the IPR valve through system power and not from a battery.

EDS-2IP ........................................ P/N 13-05745
EDS-4IP (Shown) ......................... P/N 13-05746

CHECK MATE II WRISTWATCH OXIMETER
The Check Mate II™ features a small sensor placed on the patient’s wrist for maximum convenience and flexibility.

P/N 13-05673

CHECK MATE PULSE OXIMETER
Easy Spot Check Monitoring of Your Vitals!
SPO Medical’s Check Mate™ offers the features of a conventional pulse oximeter in a compact, user-friendly configuration.

Check Mate™ alarm system continuously monitors blood oxygen saturation levels and heart rate pulse. Pilots love Check Mate™ because it allows them to quickly assess their SpO2 while flying at high altitudes. Hypoxia can be a pilot’s worst enemy, and Check Mate™ is a low-cost product which gives pilots peace of mind. Carbon Monoxide is the pilot’s worst enemy, and Check Mate™ is an affordable, easy to use, lightweight, quick check-in-the-box unit that will give pilots comfort while flying at high altitudes. Check Mate™ is a product that every pilot should own.

P/N 13-03520

MOUNTAIN HIGH PORTABLE OXYGEN SYSTEMS FOR CESSNAS
“MH FDS O2D2 Pulse Demand FADOC Oxygen Delivery System” is designed for Cessna pilots. The MH O2D2 is the only single unit, portable, two-place, carry-on Pulse Demand oxygen system currently available.

The MH EDS O2D2, with the patented digital electronic “Pulse Demand” FADOC oxygen delivery system, enables the pilot and passenger/crew to fly at pressure altitudes up to 25,000 feet with safety and comfort. The O2D2 digital pulse demand system reduces oxygen consumption dramatically. Derived from “standard” flow systems, the O2D2 pulse demand system wastes no oxygen during the breathing cycle. Studies show that 90% of the oxygen supplied by the O2D2 is transferred to the blood.

The average user will enjoy a conservative consumption drop of four times compared to constant flow systems. The system operates, with two people, for up to 50 hours on three AA alkaline batteries.

Easy to use, the two-person O2D2 reduces oxygen system workload to an absolute minimum. There are no oxygen flow indicators to check, no flow indicators to keep track of, no indicators to calibrate. The O2D2 digital pulse demand system delivers oxygen based on the required supplemental oxygen in each altitude.

The complete standard system includes an aluminum oxygen cylinder, two face masks, a 1.5 meter oxygen tubing and a water measuring bottle. The total unit weighs a mere 1.75kg.

System w/ 3 Refills .......................... P/N 13-06617
Refills w/ 4 Powder Charges .............. P/N 13-06618

MH FDS O2D2 PULSE DEMAND FADOC OXYGEN DELIVERY SYSTEM

MOUNTAIN HIGH ALPS FACE MASK
FAA-CAMI tested with the EDS-ip system, the MH ALPS FaceMask and the MH ALPS-M (for microphone) FaceMask. Outfitted with an electronic “Clear-Speak” ambient noise-canceling microphone and is compatible with most aircraft systems. Easy to put on and exceptionally comfortable as it does not require a polyvinyl bag. The ALPS or the ALPS-M FaceMask can be used with any of the MH oxygen systems. Available in small, medium and large.

Description Part No. Price
Facemask Med. 13-05134 $99
Facemask Small 13-05135 $99
Facemask Large 13-05137 $99
Facemask w/ Mic Med. 13-05134 $179
Facemask w/ Mic Large 13-05137 $179

EMOX EMERGENCY OXYGEN GENERATOR
Emox is a dependable lightweight, portable, powdered emergency oxygen system which is not presurized and has no oxygen cylinders on board; it is also not a source for service or maintenance. Both powders are environmentally accepted, have an indefinite shelf life and have no fire hazard and are non-explosive and are supplied in hermetically sealed containers. Unit consists of a nylon carry bag, a specially designed plastic cylinder with operating instructions and a built-in humidifier. 3 x 15 minute white powder applications plus 3 activator catalysts, a face mask with a 1.5 meter tubing and a water measuring bottle. The total unit weighs a mere 1.75kg.

System w/ 3 Refills .......................... P/N 13-06617
Refills w/ 4 Powder Charges .............. P/N 13-06618

FINGER PULSE OXIMETER
Designed for use by doctors, nurses, athletes, pilots, etc. This spot-check measurement of function oxygen saturation of arterial hemoglobin (SpO2). It can be used with adult and pediatric and widely used in family, clinic and hospital. Features: SpO2%, PR are displayed on screen. - Simple and user convenient operation - Light, compact (the weight is 50g including batteries) Low power consumption, two AAA batteries can be continuously Operated for 30 hours - Indication of low power consumption.

P/N 13-03920

OXIMETERS - FACE MASKS

OXIMETERS - FACE MASKS

OXIMETERS - FACE MASKS

OXIMETERS - FACE MASKS

OXIMETERS - FACE MASKS

OXIMETERS - FACE MASKS

OXIMETERS - FACE MASKS

OXIMETERS - FACE MASKS
**OXYGEN SYSTEMS**

**MOUNTAIN HIGH XCP SYSTEMS**

The XCP is a low-cost, high-duration multi-place oxygen system. With the A3 and Oxymizer cannula each person will use at most 1.0 liter/min. at 18,000 ft. This makes it easy to calculate your cylinder life time. Example: If you have 415 liters and four persons and are to cruise at 18,000 ft. you would divide 415 by 4 which equals 103 minutes per person. The flow rate at 18,000 ft. is typically only 3/4 (0.750) liter/minute with the Oxymizer cannula. However, 1.0 liter/minute is used as a worst-case scenario and for calculation convenience. The XCP delivery system consists of: 1 ea. XCP quad-port regulator with self-sealing outlets, 4 ea. XCP face masks (for use with the A4 flowmeter or nasal cannula with XCR regulator), 3 ea. Nelson A3 flowmeters/regulators with 3' (three feet) of high quality tubing with CPC connectors and 4 Oxymizer® type “M” nasal cannulas, 1 ea. Oxygen cylinder (AL-415 or AL-682), 1 ea. Tuff-Pack padded fabric cylinder/strapping case for cylinder and equipment. The XCP system comes with the A3 flowmeter/regulator. It has an altitude/flow scale calibrated for the unique Oxymizer oxygen-conserving cannula. The scale is marked in 2,000 ft. increments for VFR flight levels up to 18,000 ft. You can operate the XCP in IFR flight levels with the optional A4 flowmeter/regulator and associated flowmeters. This will, however, use much more oxygen. All systems are shipped empty.

### XCP carry-on systems man-hour service time with the Nelson A3 flowmeter and Oxymizer cannula

<table>
<thead>
<tr>
<th>Persons</th>
<th>10,000 ft. MSL</th>
<th>14,000 ft. MSL</th>
<th>18,000 ft. MSL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>10:00</td>
<td>23:00</td>
<td>57:53</td>
</tr>
<tr>
<td>2</td>
<td>24:43</td>
<td>57:47</td>
<td>91:46</td>
</tr>
<tr>
<td>4</td>
<td>02:00</td>
<td>05:45</td>
<td>09:45</td>
</tr>
</tbody>
</table>

**MOUNTAIN HIGH HANDHELD OXYGEN SYSTEM**

The Co-Pilot is an affordable, handheld oxygen system designed for supplemental breathing at high altitudes. This system is especially useful for pilots who only occasionally fly at altitudes requiring oxygen and, therefore, do not need a full-featured oxygen system for their aircraft. Unlike similar systems, the Co-Pilot’s oxygen regulator has an on/off and volume control knob that is adjustable from off to 2 L/min. The face mask is removable and can be replaced with an Oxymizer cannula for continuous “hands-off” use for more than 30 minutes of duration per cylinder, at 15,000ft. At a glance, the built-in pressure gauge will allow you to see how much oxygen is available at all times. The Co-Pilot system can be shut off and stored with a cylinder installed for more than a year without any noticeable leakage. The basic Co-Pilot kit comes with regulator and gauge, face mask, two 18-liter non-refillable replacement cylinders, and an instruction manual. Options include additional cylinders, Oxymizer cannula, and holster pack.

**MOUNTAIN HIGH EDS OXYGEN SYSTEMS**

The EDS (Electronic Delivery System) is the first supplemental breathing system specifically designed for aviation to employ the tested and well founded pulse-demand method of oxygen delivery. This reduces the amount of oxygen wasted by as much as ten times over constant-flow systems, while providing over 90% blood saturation levels at and well above pressure altitudes of 25,000 ft. The EDS senses and synchronizes itself with your breathing to provide a pulse of oxygen when you benefit from it the most; at the very beginning of your inhalation cycle and not while exhaling, pausing or talking. Measurements show that up to 90% of the oxygen delivered is absorbed directly into the blood stream. A built-in density altitude barometer responds to altitude changes automatically, adjusting the oxygen amount as needed for each breath. The EDS has been hailed by several flight surgeons & physiologists as the most significant development in supplemental breathing devices since the advent of high altitude flying. Mountain High’s current digital version, EDS-D1, is about the size of a cigarette pack, and it offers 1 pl. operation. All systems shipped fully assembled:
- TR-95 Transfilling unit w/ variable flow transfer, fitting bleed valve and pressure/contents gauge.
- TR-75 Transfilling unit w/ “O” ring fittings and bleed valve
- TR-55 Transfilling unit with hand grip knob

**Man-hour service time with cylinder @ 1,800 psig. with EDS unit(s) using cannula’s or face mask(s)**

<table>
<thead>
<tr>
<th>Persons</th>
<th>10,000 ft. MSL</th>
<th>15,000 ft. MSL</th>
<th>18,000 ft. MSL</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>31:06</td>
<td>62:18</td>
<td>113:12</td>
</tr>
<tr>
<td>2</td>
<td>15:33</td>
<td>31:09</td>
<td>56:36</td>
</tr>
<tr>
<td>3</td>
<td>10:37</td>
<td>20:45</td>
<td>37:44</td>
</tr>
<tr>
<td>4</td>
<td>07:45</td>
<td>15:34</td>
<td>28:18</td>
</tr>
</tbody>
</table>

**EDS-022-FP:** Kevlar fiber-wound cylinder, EDS unit, XCR regulator, cannula, face mask, Full-Pack & tote bag

**EDS-011-FP:** Kevlar fiber-wound cylinder, EDS unit, XCR regulator, cannula, face mask, Full-Pack & tote bag

**EDS-480-FP:** Glass fiber-wound cylinder, EDS unit, XCR regulator, cannula, face mask, Full-Pack & tote bag

**EDS-180-FP:** Aluminum cylinder, EDS unit, XCR regulator, cannula, face mask, Full-Pack & tote bag

**EDS-040-2P-TF:** Kevlar fiber-wound cyl., 2 EDS units, XCR regulator, cannula, face mask, Tuff-Pack & tote bag

**EDS-022-2P-FP:** Kevlar fiber-wound cyl., 2 EDS units, XCR regulator, cannula, face mask, Full-Pack & tote bag

**EDS-415-2P-FP:** Nylon fiber-wound cylinder, 2 EDS units, XCR regulator, cannula, face mask, Full-Pack & tote bag

**EDS-480-2P-FP:** Glass fiber-wound, 2 EDS units, XCR regulator, cannula, face mask, Full-Pack & tote bag

**EDS-D1:** Unit only, (less regulator)

**EDS-D1:** Kit with XCR regulator

**EDS-D1:** Kit with XCR gauged regulator

**EDS-D1:** Kit with XCR-DIN regulator

**EDS-D1:** System with CPF-480 cylinder (1 place)

**EDS-D1:** System with CPF-480 cylinder (2 place)
GROUND SUPPORT TOW BARS

CESSNA - This two piece telescoping tow bar fits all Cessnas with 5/8" lugs on nosegear. Overall length 42.5", collapsed 24". P/N 13-01800.

MOONEY - A simple "T" handle design for the Mooney axle. Overall length 33.5". P/N 13-02000.

CHEROKEE - This one piece tow bar has a retractable locking mechanism that gives a positive lock when installed. Overall length 31". P/N 13-01600.

BEECHCRAFT - The compact design of this tow bar makes it very popular among Beech owners. Overall length 38", collapsed 21.5". P/N 13-01900.

ARROW - This offset "T" handle design fits into the Arrow axle making it a simple and easy design to use. Overall length 33". P/N 13-01700.

TWIN CESSNA - The extra length provides extra nose clearance and leverage for Twin Cessnas and remains very compact. Overall length 55", collapsed 34". P/N 13-01850.

TWIN PIPER - The same as our P/N HH-007 except one piece construction. Overall length 33". P/N 13-01778.

COMANCHE - The same as our P/N HH-007 except one piece construction. Overall length 33". P/N 13-02100.

DELUXE CESSNA - The deluxe Cessna towbar is very popular and designed for those who demand the ultimate in convenience and durability. Spring loaded forks allow easy one handed engagement without getting on your hands and knees. Length 45.5" extended, 26" collapsed. Wt. 3.75 lbs. Ideal for Cessna RGs including 210 series. P/N 13-01540.

UTCHES/PIPER - Fits Dutchess and Piper nose gear axle. Telescoping design provides extra nose gear clearance. Overall length 48", collapsed 28". P/N 13-02210.

DELUXE PIPER - The deluxe Piper towbar offers all the features of a standard Piper towbar plus the convenience of a two-piece design. When extended, this model provides additional propeller clearance and leverage. Length: 42" extended, 23" collapsed. Wt. 3.5 lbs. P/N 13-01550.

UNIVERSAL TOW BARS

CESSNA/ BEECH/ MOONEY - This universal tow bar is excellent for use with tug, tractor, or by hand. It fits most Cessnas singles and twins with 5/8" lugs. Beech singles and twins with 1/4" lugs, all Mooneys, Twin Commanders, Lake and Commanche. Slide lock quickly adjusts & holds firmly. P/N 13-02350.

PIPER - Same design as the universal tow bar above, this towbar fits Piper single fork design, Arrow, Malibu, Lance, Seneca, and Seminole. Slide lock quickly adjusts and holds firmly. P/N 13-02351.

SCOTT TAILWHEEL - A tow bar designed for aircraft using a Scott 3000 series tailwheel. Overall length 48", collapsed 28". P/N 13-02205.

BEECHCRAFT AXLE - This two piece tow bar is designed for use in Beechcraft axles. Overall length 48", collapsed 27". P/N 13-02215.

CHEETAH/TIGER - This tow bar is designed to fit Grumman aircraft. Its collapsible design makes it easy to fit in the baggage area. Overall length 43", collapsed 26". P/N 13-02200.

ERCOUPE - Specially designed for Ercoupes. This tow bar has a spring loaded lever action for ease of operation. Overall length 46.5", collapsed 28.5". P/N 13-01580.

1-1/8" AXLE - This is a universal tow bar designed for aircraft with 1-1/8" axles such as Cessna Skymaster and Piper Seneca. Overall length 56", collapsed 33". P/N 13-02110.

COMMANDER - This model fits Rockwell 112 and 114. Spring loaded forks for ease of operation. Overall length 46.5", collapsed 28.5". P/N 13-01570.


UNIVERSAL - For the FBO this is an ideal hand held universal tow bar. Fits Cessna, Beech, Piper, Scott Tailwheel and many others. Overall length 57", collapsed 34". P/N 13-02250.

VIKING - Designed especially for Bellanca Viking axle. Collapsible design and spring loaded fork. Overall length 46.5", collapsed 28.5". P/N 13-02220.

DELUXE BEECHCRAFT - Spring loaded forks for ease of operation. Overall length 47", collapsed 28". P/N 13-01905.

FBO UNIVERSAL TOW BAR This heavy duty universal tow bar is standard equipment for FBO's. It fits Piper, Cessna, Beech, Mooney, AeroCommander, and many others. The adjustable fork allows you to extend the fork assembly from 3' to 10'. This tow bar is extra long at 7 ft. 6". P/N 13-02355.

AIRCRAFT WINCH & MOUNTING KIT

AIRCRAFT WINCH - Hook cable to tail tie-down ring and press button. Easily moves aircraft up to 3,000 lbs. rolling weight. Includes wall mount. If floor mount is desired P/N 13-06124. Order bracket separately. Comes with 100' of cable and 75' of control cord and a heavy duty winch. P/N 13-01905.

HEAVY DUTY AIRCRAFT WINCH - Winch includes metal wind up drum, 100' of cable 125' of control cord. Moves aircraft up to 6,000lbs. Includes a wall mount. If floor mount is desired P/N 13-06124 must be ordered. Code 7. P/N 13-06125.

AIRCRAFT WINCH MOUNTING KIT - Aircraft Winch Mounting Kit Everything you need to secure the winch to the floor. Mounting kit only. Can be used with P/N 13-01764 and 13-06125 in a floor mount is desired. P/N 13-06124.
BOGERT TOW BARS (BOGI-BARS)

Light enough to stow. Built from a combination of steel for maximum durability comfort grips on the handle and spreader bar chip resistant red bar will look great for years. Operation: extend the handle easily with high shear wick release pin apply forward pressure on the spreader bar to open the wishbone jays. Line up the Bogi-Bar attachment at the tow points or axle depending on model. Release the tension on the spreader bar and you are locked on! The tow bar will not slip off the plane. Reverse for removal.

TAIL WHEEL AIRCRAFT

<table>
<thead>
<tr>
<th>Model</th>
<th>Fits</th>
<th>Extended Length</th>
<th>P/N</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-API</td>
<td>Aircraft Products Tailwheel</td>
<td>48&quot;</td>
<td>12-02097</td>
<td></td>
</tr>
<tr>
<td>4-ABI</td>
<td>Alaskan Bushwheel</td>
<td>48&quot;</td>
<td>13-06106</td>
<td></td>
</tr>
<tr>
<td>04M-XP</td>
<td>Cessna XP Modification</td>
<td>48&quot;</td>
<td>13-06107</td>
<td></td>
</tr>
<tr>
<td>4-TDG</td>
<td>Scott 3200 &amp; 3400</td>
<td>48&quot;</td>
<td>13-10000</td>
<td></td>
</tr>
<tr>
<td>4-F24</td>
<td>Fairchild 24, Beech Stagger Wing</td>
<td>48&quot;</td>
<td>13-02410</td>
<td></td>
</tr>
<tr>
<td>4-RV</td>
<td>Vans RV3, RV4, RV6 &amp; RV8</td>
<td>48&quot;</td>
<td>13-02408</td>
<td></td>
</tr>
</tbody>
</table>

NOSE WHEEL AIRCRAFT

<table>
<thead>
<tr>
<th>Model</th>
<th>Fits</th>
<th>Extended Length</th>
<th>P/N</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>4-35</td>
<td>Beechcraft- Bonanza, Debonair, Duchess, Duke &amp; Skipper</td>
<td>49&quot;</td>
<td>13-10030</td>
<td></td>
</tr>
<tr>
<td>4-19/23B</td>
<td>Beechcraft-Muskeeter, Sport, Super, Sierra &amp; King Air</td>
<td>48&quot;</td>
<td>13-01808</td>
<td></td>
</tr>
<tr>
<td>4-17/30</td>
<td>Bellanca-Viking Series</td>
<td>48&quot;</td>
<td>13-01809</td>
<td></td>
</tr>
<tr>
<td>4-172</td>
<td>Cessna 150, 152, 172, 175, 177, 182, 310R, RV-4</td>
<td>48&quot;</td>
<td>13-10040</td>
<td></td>
</tr>
<tr>
<td>4-206</td>
<td>Cessna 205, 206 &amp; 207</td>
<td>48&quot;</td>
<td>13-10060</td>
<td></td>
</tr>
<tr>
<td>4-210</td>
<td>Cessna 172RG, 177RG, 182RG &amp; 210 Series</td>
<td>48&quot;</td>
<td>13-10050</td>
<td></td>
</tr>
<tr>
<td>4-SR</td>
<td>Cirrus SR 20 &amp; 22</td>
<td>48&quot;</td>
<td>13-06108</td>
<td></td>
</tr>
<tr>
<td>4-AA</td>
<td>Gulfstream American AA1 &amp; AA5</td>
<td>48&quot;</td>
<td>13-02407</td>
<td></td>
</tr>
<tr>
<td>4-Lake</td>
<td>Lake Amphibian</td>
<td>48&quot;</td>
<td>13-02411</td>
<td></td>
</tr>
<tr>
<td>4-Moon</td>
<td>Mooney Aircraft</td>
<td>49&quot;</td>
<td>13-01810</td>
<td></td>
</tr>
<tr>
<td>4-24/30</td>
<td>Piper Comanche PA-24, PA-30 &amp; PA-39 Also the Cherokee Six</td>
<td>48&quot;</td>
<td>13-10010</td>
<td></td>
</tr>
<tr>
<td>4-22/28</td>
<td>Piper PA-22, &amp; PA-28 Series (Not PA-28R)</td>
<td>48&quot;</td>
<td>13-10020</td>
<td></td>
</tr>
<tr>
<td>4-28R</td>
<td>Piper PA-28R Series - Hand Pull for dog-leg style</td>
<td>49&quot;</td>
<td>13-02098</td>
<td></td>
</tr>
<tr>
<td>4-34</td>
<td>Piper Seneca PA34, 200,220,220T, and Aerostar 601P &quot;handle extends to 78&quot;</td>
<td>78&quot;</td>
<td>13-01812</td>
<td></td>
</tr>
<tr>
<td>4-PA46</td>
<td>Piper Malibu &amp; Mirage- Vehicle Pull</td>
<td>72&quot;</td>
<td>13-06112</td>
<td></td>
</tr>
<tr>
<td>4-RVA</td>
<td>Vans - RV6A, RV7A, RV8A, &amp; RV9A</td>
<td>48&quot;</td>
<td>13-01811</td>
<td></td>
</tr>
<tr>
<td>4-LANCE</td>
<td>Lance Towbar</td>
<td>48&quot;</td>
<td>12-02099</td>
<td></td>
</tr>
<tr>
<td>4-20</td>
<td>Diamond DA20</td>
<td>--</td>
<td>13-06111</td>
<td></td>
</tr>
<tr>
<td>4-DA40</td>
<td>Diamond DA40</td>
<td>--</td>
<td>13-06110</td>
<td></td>
</tr>
<tr>
<td>4-DA42</td>
<td>Diamond DA42</td>
<td>--</td>
<td>13-06109</td>
<td></td>
</tr>
<tr>
<td>4-RV10</td>
<td>Vans - RV10</td>
<td>48&quot;</td>
<td>13-04282</td>
<td></td>
</tr>
<tr>
<td>4-Socata</td>
<td>Socata Style Bogi Bar</td>
<td>49&quot;</td>
<td>13-06113</td>
<td></td>
</tr>
<tr>
<td>Agusta</td>
<td>Agusta Helicopter, Handle extends to 70&quot;</td>
<td>70&quot;</td>
<td>13-01813</td>
<td></td>
</tr>
</tbody>
</table>

BRACKETT AIRCRAFT TOW BARS

MODEL TH-5

The TH-5 is a scaled down version of the TR-3 tractor towbar. Excellent for operators and tee hangar owners who need a towbar which is light-weight (14 lbs.), has good large pulling handles, and is sturdy enough for towing Cessna 150’s to 310’s. Size: 74”L; Wt: 14 lbs.

MODEL TR-6

Excellent for towing aircraft such as the T-6, P-51, Stearman, Staggerwing Beech, or any aircraft with 3/4” or larger eye bolts. Length: 12’ Spread: 12 ft. Weight: 62 lbs.

MODEL TR-34

The TR-34 has the light weight of the TR-3, and the strength of the TR-4. It has the same universal features that fit most aircraft from C-150 through aircraft up to 14,500 lbs. Wt: 35lbs. Available in 3 hitch styles.

MODEL TH-53

Features a tow bar length of 80” to 94” (extended). Wt: 22 lbs., Max. aircraft Wt: 7,000 lbs.

MODEL TR-71, 72, & 73


CUSTOM TOWBARS & OPTIONS FOR UNIVERSAL TOW BARS

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Part No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>TWA-10</td>
<td>Scott Tail Wheel Adapter (2 pcs. req.)</td>
<td>13-10089</td>
<td></td>
</tr>
<tr>
<td>T-MU2-10</td>
<td>Kit-Crank &amp; head assembly for converting TR-34 to TR-44</td>
<td>13-01890</td>
<td></td>
</tr>
<tr>
<td>T-WA-11</td>
<td>Tail Wheel Adapter for DGA-Staggerwing (2 pcs. req)</td>
<td>13-01891</td>
<td></td>
</tr>
<tr>
<td>T-4W</td>
<td>Wheel Set (Set of 2) for TR-34</td>
<td>13-01892</td>
<td></td>
</tr>
<tr>
<td>T-375</td>
<td>Adapter .375” for Aerospatiale-Trinidad, Tabago (2 pcs.)</td>
<td>13-01893</td>
<td></td>
</tr>
<tr>
<td>T-475</td>
<td>Adapter .475” Outer Diameter (2 pcs. req)</td>
<td>13-01894</td>
<td></td>
</tr>
<tr>
<td>T-625</td>
<td>Adapter .625” for Augusta 109 &amp; Others (2 pcs. req)</td>
<td>13-01895</td>
<td></td>
</tr>
<tr>
<td>T-750</td>
<td>Adapter .750” for Commander 114, S-76 &amp; Other</td>
<td>13-01896</td>
<td></td>
</tr>
<tr>
<td>T-MAE</td>
<td>Adapter for Maule Tail Spring (1 pc. req)</td>
<td>13-01897</td>
<td></td>
</tr>
<tr>
<td>T-34-04</td>
<td>Shock Absorbing Ring Hitch (1 pc. req)</td>
<td>13-01899</td>
<td></td>
</tr>
<tr>
<td>TR-PC</td>
<td>Towbar: Pilatus PC-12, 3 pcs., 30 lbs</td>
<td>13-01686</td>
<td></td>
</tr>
<tr>
<td>TR-PCS</td>
<td>Towbar: Pilatus PC-12., 1 pc., 19 lbs</td>
<td>13-01903</td>
<td></td>
</tr>
<tr>
<td>TR-S2</td>
<td>Towbar: Ayes, 3 pcs., 18 lbs</td>
<td>13-01755</td>
<td></td>
</tr>
</tbody>
</table>
THE TAIL-DRAGGER DRAGGER

This manual tow bar has heavy-duty solid rubber 8-inch wide tread wheels and will move most tail-draggers up to 2,000 lbs. and tail wheel tires up to 10 inches in diameter. Options Available: Hitch Arms for towing, 3rd Wheel for heavier ships, and RV tail wheel lift pin.

Tail-Dragger Dragger™

Features:
- 5 Second Loading & Unloading
- Will fit Almost Any Aircraft
- Tail Wheel Stays In Trailing Position
- Lifting Pins Grip & Lift Tail Wheel
- Maneuver In Any Direction
- Operator Has Good View Of Wingtips

TOW BARS

<table>
<thead>
<tr>
<th>Description</th>
<th>Part No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Standard tail Dragger</td>
<td>13-01510</td>
<td>.</td>
</tr>
<tr>
<td>Tail Dragger Towbar Hand/Pin Hitch</td>
<td>13-01520</td>
<td>.</td>
</tr>
<tr>
<td>Tail Dragger Towbar Hand/Ball Hitch</td>
<td>13-01530</td>
<td>.</td>
</tr>
<tr>
<td>Tail Dragger Dragger Electric RV</td>
<td>13-01823</td>
<td>.</td>
</tr>
<tr>
<td>24V Electric Tail Dragger Dragger</td>
<td>13-03736</td>
<td>.</td>
</tr>
<tr>
<td>Tail Dragger Dragger Gas</td>
<td>13-01824</td>
<td>.</td>
</tr>
</tbody>
</table>

ACCESSORIES

<table>
<thead>
<tr>
<th>Description</th>
<th>Part No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Towing Hitch Arm - 1-7/8&quot; ball</td>
<td>13-04927</td>
<td>.</td>
</tr>
<tr>
<td>Towing Hitch Arm - 2&quot; ball</td>
<td>13-04928</td>
<td>.</td>
</tr>
<tr>
<td>Towing Hitch Arm - Pin / Clevis</td>
<td>13-04929</td>
<td>.</td>
</tr>
<tr>
<td>Towing Hitch Arm - Ring</td>
<td>13-04930</td>
<td>.</td>
</tr>
<tr>
<td>3rd Wheel Assembly</td>
<td>13-04931</td>
<td>.</td>
</tr>
<tr>
<td>RV Tail Wheel Lift Pin</td>
<td>13-04936</td>
<td>.</td>
</tr>
<tr>
<td>12v Electric Gel Battery</td>
<td>13-06221</td>
<td>.</td>
</tr>
<tr>
<td>Dual wheel traction assembly SA-1</td>
<td>13-06222</td>
<td>.</td>
</tr>
</tbody>
</table>

NOSE WHEEL DRAGGER DRAGGER

The Nose-Dragger Dragger features a swing gate front roller (for easy loading), 10 ball bearing rollers (which push and guide the nose wheel), and does not require the use of adapters, winches, or hydraulics. Effortless ground handling is accomplished by its lightweight design and slow walking speed. The Nose-Dragger Dragger accepts nose wheels up to 600 x 6 (with or without wheel fairings), and no metal-to-metal or metal-to-fiberglass contact. Available in gas or electric power models. The 12V electric powered Nose-Dragger Dragger will accept aircraft up to 3,000 lbs. The Nose-Dragger Dragger Gas powered model accepts aircraft up to 6,000 lbs. Please call 1-877-477-7823 for freight quote. Gas Powered, 6.5HP (up to 12,000 lbs) P/N 13-05103 .

Electric Powered, 12V (up to 3,500 lbs) P/N 13-05105 .
Electric Powered, 24V (up to 6,000 lbs) P/N 13-05404 .
Electric Powered, 24V (up to 6,000 lbs) P/N 13-03205 .

ACCESSORIES

Battery Charger - 12V . P/N 13-04934 .
Mag-Light / Head Lamp . P/N 13-04935 .

EXTRA HEAVY DUTY 6HP GAS TAIL-DRAGGER DRAGGER

This powerful gas tug has an extra heavy-duty frame, an extra center bearing for the axle, a longer handle for better leverage, heavy duty 12-inch air wheels and will move most tail-draggers up to approx. 7,500 lbs. and tail wheels up to 16 inches in diameter. This is nice for aircraft like Beech-18, Most Ag planes, BT-13, SNJ, T-6, Beaver, Howard, Reliant, heavy Cessna’s C-195, C-185, 450 Stearman’s, and many other tail draggers. P/N 13-04390 .

HEAVY DUTY TOW BUDDY CORDLESS POWERBAR

Features:
- No Flammable gasoline needed in hangar
- Easy To Use
- Infinite Speed Control
- Versatile Applications
- Push button forward and reverse controls
- Nose gear quick attach
- Easy To Use
- Infinite Speed Control

User benefits: All tow bars and heads are interchangeable with other popular tow bar systems such as truar® warrant on all materials and workmanship money saving alternative to multiple tow bars.

BRACKETT AIRCRAFT’S MULTI-LINK TOW BAR LINE

CONSISTS OF TOW BARS THAT UTILIZE CHANGEABLE HEADS WHICH ALLOW YOU TO TOW A LARGE VARIETY OF TURBO PROP AND JET AIRCRAFT. THE TYGA LINE OFFERS A STANDARD MULTI-LINK SYSTEM FOR AIRCRAFT WITH MAXIMUM TOW WEIGHTS OF UP TO 125,000 POUNDS. ALL HEADS AND TOW BARS ARE INTERCHANGEABLE WITH MANY WIDELY USED MULTI-HEAD TOW BAR SYSTEMS. YOU NOW HAVE A HIGH QUALITY AND COMPETITIVE SOURCE FOR TOW BARS, CHANGEABLE HEADS, AND ACCESSORIES.

<table>
<thead>
<tr>
<th>Description</th>
<th>Part No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>TY-TB12% Multi-Link Towbar</td>
<td>13-04157</td>
<td>.</td>
</tr>
<tr>
<td>TY-TB75 Multi-Link Towbar</td>
<td>13-04158</td>
<td>.</td>
</tr>
<tr>
<td>TY-TB-FTD Flat Tire Dolly T&amp;B</td>
<td>13-04159</td>
<td>.</td>
</tr>
</tbody>
</table>

POCKET TOW TAILWHEEL LEASH

Pocket tow makes tail wheel aircraft maneuvering easy. Made with one-inch heavy-duty nylon webbing, the lightweight tow bar alternative is small enough to fit in your pocket and works on tail wheel aircraft with a 360-degree full-swivel tail wheel assemblies. The small end loops around the tail wheel leaf spring and cinches up tightly to pull and steer the aircraft backwards without pushing or pulling on any flight surfaces. Tailwheel leash - Black . P/N 13-04681 .
Tailwheel leash - Red . P/N 13-04682 .
### Aircraft Spruce is pleased to offer the new all weather Millennium model Robotow.

It is lightweight (under 30 lbs.) and portable, making it ideal for carrying onboard your aircraft. When the Robotow’s heavy duty all weather knurled drive drum is held against the nose wheel, the aircraft is easily moved. A trigger on the handle controls the speed while a switch reverses direction on command. Powerful, portable, and dependable, Robotow is an ideal motorized towbar for the aircraft listed below. Order axle adapters separately.

<table>
<thead>
<tr>
<th>Description</th>
<th>Parts #</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Robotow 6302 18V Towbar Cordless, with Samp Robopak (moves plane 400ft. on a single charge)</td>
<td>13-03896</td>
<td></td>
</tr>
<tr>
<td>Robotow 6356 18V TOWBAR CORDLS</td>
<td>13-04222</td>
<td></td>
</tr>
<tr>
<td>Robotow corded 120V, with 80ft. extension cord</td>
<td>13-03897</td>
<td></td>
</tr>
</tbody>
</table>

### ACCESSORIES

<table>
<thead>
<tr>
<th>Description</th>
<th>Parts #</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Robotow 5 Amp 18 Volt Robopak Battery</td>
<td>13-03898</td>
<td></td>
</tr>
<tr>
<td>Robotow 18 Volt Charger</td>
<td>13-03899</td>
<td></td>
</tr>
<tr>
<td>Robotow 18 foot Extension Cord</td>
<td>13-03901</td>
<td></td>
</tr>
<tr>
<td>Robotow GFI</td>
<td>13-03902</td>
<td></td>
</tr>
</tbody>
</table>

### AIRPLANE ADAPTERS (SOLD SEPARATELY)

<table>
<thead>
<tr>
<th>Description</th>
<th>Parts #</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Robotow Adapter Aero Commander</td>
<td>13-03904</td>
<td></td>
</tr>
<tr>
<td>Robotow Adapter Beech 1 / Baron / Bonanza / Debonair Duke</td>
<td>13-03905</td>
<td></td>
</tr>
<tr>
<td>Robotow Adapter Beech 2 / Queen Air / Twin Bonanza / Trigear 18</td>
<td>13-03906</td>
<td></td>
</tr>
<tr>
<td>Robotow Adapter Cessna 1 / 150, 172, 182, 310, 340</td>
<td>13-03907</td>
<td></td>
</tr>
<tr>
<td>Robotow Adapter Cessna 2 / 310R, 401, 414, 421</td>
<td>13-03908</td>
<td></td>
</tr>
<tr>
<td>Robotow Adapter Cessna 3 / 182RG (Pre-1962), 206, 210 (Pre-1962)</td>
<td>13-03909</td>
<td></td>
</tr>
<tr>
<td>Robotow Adapter Cessna 4 / 357, 363</td>
<td>13-03910</td>
<td></td>
</tr>
<tr>
<td>Robotow Adapter Cessna 5 / 182RG and 210 (1962-1986)</td>
<td>13-03911</td>
<td></td>
</tr>
<tr>
<td>Robotow Adapter Piper 1 / Appache, Comanche, Aztec, Navajo, Twin Comanche, Bellanca</td>
<td>13-03912</td>
<td></td>
</tr>
<tr>
<td>Robotow Adapter Piper 2 / Colt, Cherokee, Tri-pacer</td>
<td>13-03913</td>
<td></td>
</tr>
<tr>
<td>Robotow Adapter T28 Trainer</td>
<td>13-03914</td>
<td></td>
</tr>
<tr>
<td>Robotow Adapter Navion</td>
<td>13-03915</td>
<td></td>
</tr>
<tr>
<td>Robotow Adapter Commander 114B</td>
<td>13-03916</td>
<td></td>
</tr>
<tr>
<td>Robotow Adapter Cessna Caravan</td>
<td>13-03917</td>
<td></td>
</tr>
<tr>
<td>Robotow Adapter Trinidad</td>
<td>13-03918</td>
<td></td>
</tr>
</tbody>
</table>

### CESSNA TOWBAR EXTENSION

The "QUICK-FOLD COMPACT TOWBAR" also known as the "QFC-Towbar-TM". This new to the market design was patented with you in mind...No more back breaking, bend over towing...Simply attach the QFC-TowbarTM extension to your already existent Cessna tow bar and stand up straight -away from under the propeller-for an added extension of 33". The QFC-TowbarTM has a unique compact design allowing for secure storage. It simply folds flat and is stowed securely along side the factory tow bar in the luggage compartment.

P/N 13-06722

### DELUXE TAILWHEEL TOWBAR

The new Deluxe Tail wheel Towbar uses a positive locking control cable to attach to the wheel from a straight-on position. No extra maneuvering or lifting is required, and it can be adjusted for various tail wheel sizes. Towbar Weight: 26 lbs.

**Note:** Maximum weight to lift is 1,200 to 1,500 lbs. P/N 13-04916

### ROLLING TOWBAR FOR TAIL DRAGGERS

Designed by an aircraft mechanic for easy ground handling of his Aeronca, this new tow bar is ideal for all types of tailwheel equipped aircraft. Just place the tail wheel in holding bracket, lift up, and tow bar wheels allow aircraft to be wheeled anywhere with ease. Bracket fits all standard aircraft tailwheels.

P/N 13-04277

### GLIDER & BANNER TOW BAR

GLIDER & BANNER TOW HOOKS RELEASE

Bolt-on tow hook with bumper is designed to be directly bolted to a custom mounting bracket. The bumper is designed to reduce the kick-back that occurs when releasing a banner. The polyethylene bumper absorbs the force of the release and your tow hook release will last longer.

P/N 13-06281

GLIDER & BANNER TOW HOOKS RELEASE

Bolt-on tow hook is designed to be directly bolted to a custom mounting bracket.

P/N 13-04975

GLIDER & BANNER TOW HOOKS RELEASE

Weld-on tow hook designed to be directly welded to a custom mounting bracket. This hook is similar in design to the Schweizer manufactured hook that is no longer available. Design improvements were made to increase emergency release capability at all towing loads and angles. A common glider towing hazard occurs when the glider becomes extremely high or low compared to the tow plane. This applies a load to the tow hook at an angle that significantly increases the force required to release the tow rope. This new hook has greater release arm leverage and a unique hardened roller release design to reduce release force at all tow angles. Additionally, the geometry of the tow hook housing was improved to keep the tow ring in the optimum position to minimize release force. The tow hook is not to be used on gliders. FAA approval can be obtained for the complete tow hook and release system by following the guidelines in FAA Advisory Circular 43.13-2B, Chapter 8, titled, "Glider and Banner Tow-Hitch Installations" and the included tow hook installation instructions. Tow hook release in not STC or PMA approved.

P/N 13-04974
**REDLINE TOW BARS**

**REDLINE SIDEWINDER POWER DRIVER**

Powerful and portable, the Sidewinder will forever change the way you move your aircraft. Powered by Milwaukee’s top of the line 28V power unit with a long-lasting, lithium ion battery pack, Sidewinder weighs less than 22 pounds, collapses to 27” and stows easily in your baggage compartment. Made in the USA using 4130 Chromoly material.

**BEECHCRAFT BAR FITS:** Bonanza, Baron, Travel Air, T-34

**CESSNA SINGLE ENGINE BAR FITS:** 172RG, 177RG, 182RG, 210, P210

15 inch Extension Tube is required on all models except 177RG.

**CESSNA TWIN ENGINE BAR FITS:** C-310, C-320, C-340, C-414, C-421

**PIPER BAR MODELS:** Arrow, Lance, Saratoga (RG), Malibu, Matrix, Meridian, Seminole.

Lance, Saratoga (RG), Malibu, Matrix, Seminole models require use of the 15 inch Extension Tube. Meridian requires the 30” Extension Tube.

**MOONEY BAR FITS:** All Mooney Models

**ECLIPSE BAR FITS:** All Eclipse Models

15 inch Extension Tube is required.

---

**REDLINE BE-3/BE-3XL TOWBARS**

**BE-3:** 2-piece design for hand or powered use. Extends to 43.5”, collapses to 24.5” and weighs 4 pounds. For attachment to a golf cart, tractor or other powered vehicle, please use the S-3 Vehicle Adaptor. Made in the USA using 4130 Chromoly material.

**BE-3XL:** 2-piece design for hand or powered use. For attachment to a golf cart, tractor or other powered vehicle, please use the S-3 Vehicle Adaptor. Made in the USA using 4130 Chromoly material.

**Application** | **Part No.** | **Price**
--- | --- | ---
BE-3 Beechcraft - Fits Bonanza, Baron, Travel Air, T-34 | 13-06841 |
BE-3XL Cessna - Fits 172RG, 177RG, 182RG, 210, P210 | 13-06843 |
BE-3XL Mooney - Fits All | 13-06845 |
BE-3 Piper - Fits Arrow, Lance, Saratoga (RG) | 13-06844 |
BE-3XL Piper - Fits Arrow, Lance, Saratoga (RG), Malibu, Matrix | 13-06845 |
S-3 Vehicle Adaptor | 13-01918 |

---

**REDLINE BE-4 TOWBARS**

2-piece design for hand or powered use for heavier airplanes. Extends to 61.5” and collapses to 33” and weighs 5 pounds. For attachment to a golf cart, tractor or other powered vehicle, please use the ST-1 Vehicle Adaptor. Made in the USA using 4130 Chromoly material.

**Application** | **Part No.** | **Price**
--- | --- | ---
BE-4 Beechcraft - Fits Bonanza, Baron, Travel Air, T-34, Duchess | 13-06849 |
BE-4 Cessna - Fits 172RG, 177RG, 182RG, 210, P210 | 13-06850 |
BE-4 Piper - Arrow, Lance, Saratoga (RG), Malibu, Matrix, Meridian, Seminole | 13-06851 |
BE-4 Eclipse - Fits All | 13-06852 |
ST-1 Vehicle Adaptor | 13-04066 |

---

**REDLINE ST-1 TOWBARS**

If you own models 33, 35 or 55, the ST-1 is the least expensive, most versatile option for hand or vehicle towing. With an overall length of 38.5” and 3 pound 8 ounce weight, it fits neatly on the floor of your baggage compartment. This is our recommended tow bar for the STIFFY. For attachment to a golf cart, tractor or other powered vehicle, please use the ST-1 Vehicle Adaptor. Length is 38.5” and weighs 3 pounds 8 ounces. Made in the USA using 4130 Chromoly material. **FITS THESE BEECHCRAFT MODELS:** Bonanza, Baron, Travel Air, T-34

**Application** | **Part No.** | **Price**
--- | --- | ---
Beechcraft - Bonanza, Baron, Travel Air, T-34 | 13-04064 |
Cessna - Fits 172RG, 177RG, 182RG, 210, P210 | 13-04068 |
Piper - Arrow, Lance, Saratoga (RG), Malibu, Matrix, Meridian, Seminole | 13-04067 |

---

**REDLINE PH-1 FOR ECLIPSE**

Main gear axle adapter allow the use of floor jack or bottle jack for tire maintenance. Made in the USA using 4130 Chromoly material. **FITS ALL ECLIPSE AIRCRAFT.**

P/N 13-06853

---

**REDLINE UL/UL-XT TOWBARS**

**UL:** Very light weight, 2-piece design for hand towing only. Extends to 43.5” and stows to 25.5” and weighs 3 pounds 4 ounces. Made in the USA using 4130 Chromoly material.

**UL-XT:** CESSNA Very light weight, 2-piece design for hand towing only. Extends to 48.5”, collapses to 31.5” and weighs 3 pounds 6 ounces. Made in the USA using 4130 Chromoly material.

**U.L. XL: MOONEY** 2-piece design for hand or powered use for heavier airplanes. Extends to 61.5” and collapses to 33” and weighs 5 pounds. Made in the USA using 4130 Chromoly material.

**Application** | **Part No.** | **Price**
--- | --- | ---
UL - Beechcraft - Fits Bonanza, Baron, Travel Air, T-34 | 13-01914 |
UL-XT - Cessna - Fits 172RG, 177RG, 182RG, 210, P210 | 13-01917 |
UL-XT Mooney - Fits All | 13-06847 |
UL - Piper - Fits Arrow, Lance, Saratoga (RG) | 13-01915 |

---

**REDLINE UL-XT TOWBARS**

**UL:** Very light weight, 2-piece design for hand towing only. Extends to 43.5” and stows to 25.5” and weighs 3 pounds 4 ounces. Made in the USA using 4130 Chromoly material.

**UL-XT:** MOONEY Very light weight, 2-piece design for hand towing only. Extends to 48.5”, collapses to 31.5” and weighs 3 pounds 6 ounces. Made in the USA using 4130 Chromoly material.

**Application** | **Part No.** | **Price**
--- | --- | ---
UL - Beechcraft - Fits Bonanza, Baron, Travel Air, T-34 | 13-01914 |
UL-XT - Cessna - Fits 172RG, 177RG, 182RG, 210, P210 | 13-01917 |
UL-XT Mooney - Fits All | 13-06847 |
UL - Piper - Fits Arrow, Lance, Saratoga (RG) | 13-01915 |

---

**REDLINE WEDGE-LOC LINK**

Provides a solid “link” between your airplane and other brands of tow bars or power tugs that were designed to connect to either your axle or tow pins. With the WLL, nothing touches any exterior surface of your plane – the result is no scratching or other damage! Made in the USA using 4130 Chromoly material. **FITS THESE BEECHCRAFT MODELS:** Bonanza, Baron, Travel Air, T-34

**Application** | **Part No.** | **Price**
--- | --- | ---
Beechcraft - Bonanza, Baron, Travel Air, T-34 | 13-01913 |
Cessna - Fits 172RG, 177RG, 182RG, 210, P210 | 13-04068 |
Piper - Arrow, Lance, Saratoga (RG), Malibu, Matrix, Meridian, Seminole | 13-04067 |

---

**REDLINE SLIDER FOR ECLIPSE**

The Slider adapter inserts into the front axle and tightens securely. It provides a short “stub” on each side for any universal type tow bar attachment. With the Slider in place, nothing touches any exterior surface of the nose gear, avoiding scratching and other damage. Made in the USA using 4130 Chromoly material. **FITS ALL ECLIPSE AIRCRAFT.**

P/N 13-06854
The iTowBot’s loading sequence is as easy as driving the unit directly under the nosewheel of your aircraft. The iTowBot is engineered so that when the aircraft loads, the weight of the loaded aircraft does not inhibit its zero-turn capability. This allows the operator to articulate the aircraft in a manner that places it ahead of all other towing equipment. Releasing the aircraft is just as easy. A foot-operated release allows the operator to unlock the swivel carriage and merely back out from beneath the nosewheel. Now the operator can simply drive the unit back to its spot in the hangar....no tugging, pushing or rolling up extension cords required!

iTowBot can tow in any direction Tulsa TowBots offers a precision, ruggedly built towing machine that will allow the user to position aircraft in close quarters with ease. The iTowBot has the ability to rotate the aircraft inside of its own wingspan. With its hybrid zero-turn capability and fully-articulating self-locking carriage, turn limits of the aircraft nose wheel cannot be exceeded. The powerful 24VDC motors are regulated for smooth starts and stops while delivering the power you need to position your aircraft asset out on the ramp or back in the hangar.

The iTowBot was specifically designed to provide adequate distance for the operator to tow an aircraft while stepping back to visually clear the areas around the aircraft. The operator should exercise caution in selecting the vantage point from which to operate the iTowBot. Damage caused by conventional tugs This is a picture of the nosewheel strut damage caused by exceeding the turn limits with a conventional tug. This cannot happen with the iTowBot, since the front wheel remains stationary while the iTowBot is free to turn through 360°. With its hybrid zero-turn capability and fully-articulating self-locking carriage, turn limits of the aircraft nose wheel cannot be exceeded.

The DX2.0 transmitter is designed to provide bulletproof 2.4 GHz spread spectrum radio link. With the DX2.0 DSM system there are no worries of frequency clip or radio interference from noisy motors or no reason to be concerned that someone may turn on a radio on your channel. The unit is user-friendly and offers many features and functions that the operator may desire. The receiver is bound to the transmitter at our facility prior to shipment so that the receiver will only recognize its specific transmitter that comes with your iTowBot. During the binding process, the motor fail safe positions are also set to further provide another level of safety.

**Specifications**

- Measures 38’ Wide x 46’ Long x 12” High
- Rugged Steel Construction
- Virtually Zero Maintenance
- Max Towing Speed 1.7 Feet Per Second
- Tows Aircraft up to 15,000+ Pounds Gross Weight
- Solid State Heavy Duty Fully Articulating Motor Control
- Hybrid Zero Turn Capability about Stationary Nosewheel
- Also available with built-in 24V Auxiliary Power Plug (APU) & Power Cord
- Powerful Reversible 24 Volt DC Motors
- Powder-Coated Frame
- Easy Ergonomic Remote Control Handset
- Overvoltage Thermally Protected
- Trouble Free Cast Iron Rims with Non-Marking Moldon Wheels
- Equipped with Solid State Battery Charger/Maintainer

**LITTLE STAR VTHRUST**

Vthurst aircraft mover from Littlestar Products makes quick and easy work of moving your single-engine airplane, using an off-the-shelf 18V or 24V drill/screwdriver* as its power source. The drill’s sealed mechanism means that there are no belts or chains to snag, and no adjustments to make. Most applicable drills have two or even three speed ranges for precise control of the Vthurst, and supply an applicable drill/screwdriver has two or even three speed ranges for precise control of the Vthurst, and supply an applicable drill/screwdriver has two or even three speed ranges for precise control of the Vthurst, and supply an applicable drive system.

Operation is simple and safe. The internal worm-gear drive mechanism means that there are no belts or chains to snag, and no adjustments to make. Most applicable drill/screwdrivers have two or even three speed ranges for precise control of the Vthurst, and supply an applicable drill’s sealed mechanism means that there are no belts or chains to snag, and no adjustments to make. Most applicable drill/screwdrivers have two or even three speed ranges for precise control of the Vthurst, and supply an applicable drive system.

The Vthurst aircraft mover from Littlestar Products makes quick and easy work of moving your single-engine airplane, using an off-the-shelf 18V or 24V drill/screwdriver* as its power source. The drill’s sealed mechanism means that there are no belts or chains to snag, and no adjustments to make. Most applicable drill/screwdrivers have two or even three speed ranges for precise control of the Vthurst, and supply an applicable drive system.

**DESCRIPTION**

<table>
<thead>
<tr>
<th>Description</th>
<th>Part No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>M-770-N Standard Tugger, Non-Steerable</td>
<td>13-06097</td>
<td></td>
</tr>
<tr>
<td>M-778-S Deluxe Tugger, Steerable</td>
<td>13-06098</td>
<td></td>
</tr>
<tr>
<td>Accessories</td>
<td>Part No.</td>
<td>Price</td>
</tr>
<tr>
<td>Hangar Ramps (Set of 3)</td>
<td>13-06091</td>
<td></td>
</tr>
<tr>
<td>Beechcraft Adapter</td>
<td>13-06092</td>
<td></td>
</tr>
<tr>
<td>Diamond DA-40 Adapter (Set of 2)</td>
<td>13-06093</td>
<td></td>
</tr>
<tr>
<td>Diamond DA-42 Adapter (Set of 2)</td>
<td>13-06094</td>
<td></td>
</tr>
<tr>
<td>Diamond DA-42 Adapter (Set of 2)</td>
<td>13-06095</td>
<td></td>
</tr>
<tr>
<td>18V Dewalt 1/2” Drill Driver (2 18V Batteries included)</td>
<td>13-06096</td>
<td></td>
</tr>
</tbody>
</table>

---

* Also available with built-in 24V Auxiliary Power Plug (APU) & Power Cord
* Hybrid Zero Turn Capability about Stationary Nosewheel
* Equipped with Solid State Battery Charger/Maintainer
* Easy Ergonomic Remote Control Handset
* Overvoltage Thermally Protected
* Trouble Free Cast Iron Rims with Non-Marking Moldon Wheels
* Equipped with Solid State Battery Charger/Maintainer
* Easy Ergonomic Remote Control Handset
* Overvoltage Thermally Protected
* Trouble Free Cast Iron Rims with Non-Marking Moldon Wheels
**TIE-DOWNS**

---

**THE CLAW TIE-DOWN SYSTEM**

Advanced Aircraft Anchoring System – The Claw® Aircraft Tiedown kit comes complete with three ear anchors, rope, spikes, hammer and canvas carry bag. The Harder You Pull, The More It Grips The Earth. Features: Easy installation...Easy removal. No more struggling with screw-in anchors The “Claw®” is designed exclusively for aircraft. The “Claw®” system has a 3600 lb. combined capacity. The last tie-down you will ever have to buy - Lifetime Warranty. Tremendous holding strength. The harder you pull, the more The “Claw®” grips. Ideal for all aircraft, Works in hard clay, sandy soil or anything in between. Large foot print spreads the load over a larger area for maximum holding power. Low profile will not puncture tires. Complete System weighs only 8 lbs. (Including Hammer), Light-weight aircraft aluminum with hardened corrosion resistant die cast zinc plated steel spikes 25 ft 3/8" dia. solid braid polyester rope. Anchoring System hammer doubles as removal tool The “Claw®” includes: Bag that is easy to carry and store that contains: 3 Anchors; 9 spikes; 1 hammer; 25-ft rope Wt: 3.8 lbs.

P/N 13-02448

---

**JEB’S REMOTE TIE-DOWN KIT**

Remote Release System - This new safety device will be appreciated by anyone who hands their plane, Release and retrieve without leaving the cockpit - get off to a safe start.

P/N 13-04787

---

**THE COMPLETE TIE-DOWN KIT**

Includes: (9) Anchor Rods; (3) Wheel Chocks; (3) Tie-Down Straps; (1) Storage Bag

This kit includes everything needed to tie your plane down when you must park on the grass. You can tie down both wings and the tail, and the kit includes a convenient storage bag. You can use the wheel chock as a chock when parked on pavement, and the strap can be used to secure the plane on a tarmac with built-in tie downs. When parking overnight on grass, simply drive the 3 anchor rods through the holes in the wheel chock to create a tie down and clip your tie down strap to the wheel chock & wing.

P/N 13-03148

---

**TIE DOWN STRAP**

15 feet long, long enough for most high wing aircraft • 2’300 Lb ultimate strap strength • Snap buckle on each end • Safety yellow color Snap buckles cannot release by itself. Adjustable to 100”. Tensile strength of the poly-propylene rope exceeds 4000 lbs. Hooks are cadmium plated. Rope is resistant to water, oil and gas. Wt: 19 oz. P/N 13-00663

---

**BAGGAGE TIE-DOWN**

A very strong, light weight, and quick way to secure your baggage. The photo shows two units. One with the clamp/ring installed in the base and one with the clamp/ring removed to show more detail. The unit parts are made of anodized 6061 T-6 aluminum with a stainless steel rods are 3/8” x 14” for deeper penetration into harder ground. Cumulative load capacity is 3,600 lbs. Kit includes 5 ea. Delrin hubs, 9 ea. steel rods, 3 ea. 3/8” x 12’ ropes, easy-out extraction tool, and rugged compact canvas tote bag. Complete kit weighs only 6 lbs. (less than 1 gal of Avgas) and has a lifetime warranty.

LESS 10% for 3 or more. Price shown is for one unit.

---

**NELSON AIRCRAFT TIE-DOWNS**

- Three 15” welded (not bent) steel anchors with sharp tips for easy installation
- Three 15’ nylon ropes- Cordura, Int'l. Orange, 8”x15” case
- Wt: 4 lbs.

P/N 13-02750

---

**SECURIT TIE-DOWN**

Super-strong and simple to use, Securit has a unique braid lock that provides holding action automatically, even when the one is slack. It releases quickly and easily, but positively will not release by itself. Adjustable to 100”. Tensile strength of the polypropylene rope exceeds 4000 lbs. Hooks are cadmium plated. Rope is resistant to water, oil and gas. Wt: 19 oz. P/N 13-22751

---

**FLY TIES TIE DOWNS**

FlyTies Tie Downs Rated “Top Choice” by Aviation Consumer

FlyTies® unique design allows quick insertion and quick removal using the easy-out extraction tool provided. Rugged, die-cast steel rods are 3/8” x 14” for deeper penetration into harder ground. Cumulative load capacity is 3,600 lbs. Kit includes 5 ea. Delrin hubs, 9 ea. steel rods, 3 ea. 3/8” x 12’ ropes, easy-out extraction tool, and rugged compact canvas tote bag. Complete kit weighs only 6 lbs. (less than 1 gal of Avgas) and has a lifetime warranty.

P/N 13-22751

---

**NYLON TIE-DOWN ROPE**

American-made 100% duPont filament fiber nylon rope. Over twice the strength of manila. Highly resistant to sunlight, rot & mildew. Don’t be fooled by foreign imitations. 3/8” Rope (4000 lb. test)....P/N 13-05400 1/2” Rope (6250 lb. test)....P/N 13-05500

15% Discount on 100 ft.

---

**HOOK-N-PULL TIE DOWNS**

Hook-N-Pull Tie downs feature closed end “a” hooks made from high quality steel with heavy plating, and tie down bards are made from high grade aluminum, hardened for strength and ball burnished and anodized. Furnished with 3/8” diameter nylon rope. High wing......P/N 13-00448 Low wing or tail.......P/N 13-00449

---

**AIRCRAFT TIE-DOWNS**

Three 17”x 3/8” plated steel cork screw stakes. Three 10”x 3/8” polypropylene ropes. Cloth draw string bag.

P/N 13-06634

---

**GENUINE VELCRO**

5819 Genuine Velcro Two 4 1/2” pressure sensitive hook and loop strips.

P/N 13-06404

---

**TOUGHMAN TIE-DOWN**

The Toughman™ Tie-Down is a new and unique multi-use rope based tie-down system. The Toughman™ Tie-Down incorporates the patented protected Toughman™ Rope Clamp which has only two moving parts and is manufactured from high performance engineered nylon resin. It is very easy to use, extremely lightweight, high strength and permanently corrosion proof. The Toughman™ Tie-Down product package includes one rope clamp, ten or fifteen feet of rope and one corrosion resistant steel hook. Military Tough: The Toughman™ Rope Clamp has undergone rigorous testing by the US Army Soldier Systems Center, ‘Natick’ test labs and has been approved for use on cargo nets and rope support lines on military tents.

3/8” Camo 10’.................P/N 13-05115...
1/2” Red & Yellow 15.............P/N 13-05116...
3/8” Red & Yellow 10...........P/N 13-06142....

---

**SECURENET AIRCRAFT TIE DOWNS**

<table>
<thead>
<tr>
<th>Aircraft Type</th>
<th>Net</th>
<th>Size</th>
<th>Anchors</th>
<th>Frame</th>
<th>Ratchets</th>
<th>Tie Down</th>
<th>Foam</th>
<th>Part No</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low Wing</td>
<td>3.5 x 12</td>
<td>10</td>
<td>4</td>
<td>12</td>
<td>15</td>
<td>13-06781</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>High Wing</td>
<td>5.5 x 18</td>
<td>10</td>
<td>4</td>
<td>12</td>
<td>15</td>
<td>13-06782</td>
<td>-</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Amphibian</td>
<td>5.5 x 18</td>
<td>10</td>
<td>16</td>
<td>0</td>
<td>15</td>
<td>13-06783</td>
<td>-</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

---

**STUBAI CARIBINERS**

Incredible strength, 1400 lb capacity, quick release. Order teal or black. 3.25 in (8 cm) x 2.5 in (6 cm) x .375 in (1 cm)

<table>
<thead>
<tr>
<th>Type</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Teal</td>
<td>P/N 10-03736</td>
</tr>
<tr>
<td>Black</td>
<td>P/N 10-03737</td>
</tr>
</tbody>
</table>

---

**JEB’S REMOTE TIE-DOWN KIT**

Remote Release System - This new safety device will be appreciated by anyone who hands their plane, Release and retrieve without leaving the cockpit - get off to a safe start.

P/N 13-04787

---

**THE COMPLETE TIE-DOWN KIT**

Includes: (9) Anchor Rods; (3) Wheel Chocks; (3) Tie-Down Straps; (1) Storage Bag

This kit includes everything needed to tie your plane down when you must park on the grass. You can tie down both wings and the tail, and the kit includes a convenient storage bag. You can use the wheel chock as a chock when parked on pavement, and the strap can be used to secure the plane on a tarmac with built-in tie downs. When parking overnight on grass, simply drive the 3 anchor rods through the holes in the wheel chock to create a tie down and clip your tie down strap to the wheel chock & wing.

P/N 13-03148

---

**TIE DOWN STRAP**

15 feet long, long enough for most high wing aircraft • 2’300 Lb ultimate strap strength • Snap buckle on each end • Safety yellow color Snap buckles cannot fall off of aircraft when loose or in gusty winds

P/N 13-03149

---

**BAGGAGE TIE-DOWN**

A very strong, light weight, and quick way to secure your baggage. The photo shows two units. One with the clamp/ring installed in the base and one with the clamp/ring removed to show more detail. The unit parts are made of anodized 6061 T-6 aluminum with a stainless steel rings, 2 rivnuts and 2 countersunk 10-32 cad-plated screws are furnished with each complete unit. Extra bases can be purchased individually, and include rivnuts and screws. Note: Use rivnuts to attach to surfaces with no rear access - simply drill a .25” hole and install rivnut. By installing additional bases you can tailor your baggage tie-down options to suit your current needs.

P/N 13-01729

---

**E-Z LOCK TIE DOWNS**

EZ-Lock Tie Downs feature a braid slip lock which provides excellent tie-down security without the need to tie any knots.

P/N 13-00159

---

**STUBAI CARIBINERS**

Incredible strength, 1400 lb capacity, quick release. Order teal or black. 3.25 in (8 cm) x 2.5 in (6 cm) x .375 in (1 cm) approx. Weighs 1.5 ounce (45 gm)
### TIE-DOWNS – CHOCKS

#### TIE-DOWN EYE BOLT
For non-structural applications. The 7/16” dia. threaded shaft is 7 3/4” long. Hole is 5/8” dia. Overall length 2-1/2”. Furnished with AN365-720 elastic stop nut and wide-area AN970-7 washer.

P/N 13-04303

#### AIRCRAFT TIE-DOWNS
These Aircraft Tie-Downs offer strong, durable, and easy to use tie downs for any weather condition. These tie downs are rated up to 3,000lbs. and tighten up with one quick pull. A sliding cap protects the buckle from freezing during cold weather and keeps grit out during windy field conditions. Each kit comes with: 3” Three foot long tie down straps. Choice of tie down strap colors: black, red, or royal blue. A Dupont Cordura carrying bag with choice of colors: black, forest green, red, royal blue or navy. Embroidery is available for an additional $5. Choose from Silver, Royal, Navy, or Black.

<table>
<thead>
<tr>
<th>Description</th>
<th>Part No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black-Royal</td>
<td>13-06326</td>
<td></td>
</tr>
<tr>
<td>Black-Red</td>
<td>13-06325</td>
<td></td>
</tr>
<tr>
<td>Black-Redalloy</td>
<td>13-06330</td>
<td></td>
</tr>
<tr>
<td>Black-Red</td>
<td>13-06327</td>
<td></td>
</tr>
<tr>
<td>Black-Royal</td>
<td>13-06328</td>
<td></td>
</tr>
</tbody>
</table>

#### AIRCRAFT TIE-DOWN STRAPS
Monogramming available (max 10 letters or numbers). Monogrammed items are noncancellable and nonreturnable.


<table>
<thead>
<tr>
<th>Description</th>
<th>Part No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black-Black</td>
<td>13-06224</td>
<td></td>
</tr>
<tr>
<td>Black-Red</td>
<td>13-06225</td>
<td></td>
</tr>
<tr>
<td>Red-Black</td>
<td>13-06227</td>
<td></td>
</tr>
<tr>
<td>Red-Red</td>
<td>13-06228</td>
<td></td>
</tr>
</tbody>
</table>

#### AEROSPOILER KIT, AERO- SPOILER EXTENSION KIT
A lift reduction device used for storm protection on aircraft parked outside during adverse weather conditions. The Aero Spoiler kit contains 10 cup/ receiver assemblies and 8 30"x30" inch blade assemblies. Each kit contains 20” of wing coverage.

The Aero Spoiler will reduce the lift producing capability of your aircraft wing by as much as 96% on the area of wing covered by the Spoiler. Extension kits are available for aircraft requiring more than 20” of wing coverage.

P/N 13-06050

Extension Kit: P/N 13-06056

#### ASA WHEEL CHOCKS
Mandatory equipment for all aircraft. These tire stops are for keeping aircraft securely parked. A pair of black molded plastic wheel stops are connected with 22” bright yellow and black braided nylon rope that won’t rot or retain water. The bottom cleats keep aircraft securely parked.

Lightweight, 7 3/4” x 2 1/2” x 4 1/2”; concave design fits any aircraft tire. One pair is needed for each wheel.

P/N 13-05752

#### FOLD DOWN MINI CHOCKS
These mini chocks are so small and light you can take them with you. They work perfectly on both hard and dirt surfaces. Anodized aluminum, each wheel pair folds down to 3.75” x 2.5” & weighs just 4 oz. A 14” lanyard is attached.

P/N 5229

#### TRAVEL CHOCKS
Travel Chocks are a very light weight wheel chock designed for airplanes and other vehicles. Compact and easily stored, Travel Chocks are popular with pilots across the country. Powder coated in durable red, blue, or yellow finish. Available in 3 sizes. Chock set is for one wheel only.

<table>
<thead>
<tr>
<th>Description</th>
<th>Part No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small: 1 1/2” x 6” x 1/8” Thick Heat Treated Alum.</td>
<td>13-01120-A</td>
<td></td>
</tr>
<tr>
<td>Medium: 2” x 2” x 8”/1/8” Thick Angle Heat Treated Alum.</td>
<td>13-01120-B</td>
<td></td>
</tr>
<tr>
<td>Large: 3 1/2” x 3 1/2” x 8” Thick Heat Treated 3/16” Thick Alum.</td>
<td>13-01120-C</td>
<td></td>
</tr>
</tbody>
</table>

#### WOOD WHEEL CHOCKS
These chocks feature heavy duty wood construction and are finished in bright safety yellow. Connected with 18” of braided nylon rope.

Std chocks: P/N 13-01765

Chocks w/ your N# or company name: P/N 13-01766

#### RUBBER WHEEL CHOCKS
These mini rubber wheel chocks measure 4”x4”x8” and have reflective tape on all three sides. Connected with nylon rope. Very popular with corporate operations & FBOs.

P/N 13-07676

#### AIRGIZMOS WHEEL CHOCKS
These chocks are unique because they are stackable. This feature really cuts down on the amount of space required to carry them in the plane. The durable plastic sides are lightweight, but are made to take a lot of abuse. There is space on the sides to put your airplane’s n-number (you supply the vinyl lettering). The edges of these chocks are made of non-skid material, so they stay where you put them. They also won’t damage anything else in your baggage compartment.

P/N 13-04298

#### HANDY CHOCKS
Design - Unique but simple one-piece design consists of two chocks for airplanes and other vehicles. Compacted and easily stored, Travel Chocks are popular with pilots across the country. Powder coated in durable red, blue, or yellow finish. Available in 3 sizes. Chock set is for one wheel only.

<table>
<thead>
<tr>
<th>Description</th>
<th>Part No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>5904 “Handy Chocks** Light Weight - 8 oz” Powder Coated Aluminum Chock</td>
<td>1 Pair per Package Red</td>
<td>P/N 13-06405</td>
</tr>
<tr>
<td>5905 “Handy Chocks** Light Weight - 8 oz” Powder Coated Aluminum Chock</td>
<td>1 Pair per Package Yellow</td>
<td>P/N 13-06406</td>
</tr>
</tbody>
</table>

#### QUICK CHOCK
Design – Unique but simple one-piece design consists of two chocks for airplanes and other vehicles. Compacted and easily stored, Travel Chocks are popular with pilots across the country. Powder coated in durable red, blue, or yellow finish. Available in 3 sizes. Chock set is for one wheel only.

<table>
<thead>
<tr>
<th>Description</th>
<th>Part No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>5904 “Handy Chocks** Light Weight - 8 oz” Powder Coated Aluminum Chock</td>
<td>1 Pair per Package Red</td>
<td>P/N 13-06405</td>
</tr>
<tr>
<td>5905 “Handy Chocks** Light Weight - 8 oz” Powder Coated Aluminum Chock</td>
<td>1 Pair per Package Yellow</td>
<td>P/N 13-06406</td>
</tr>
</tbody>
</table>
SCOTT’S WINDSOCKS

SCOTT’S windsocks are manufactured of long-life polyester fabric that is treated to resist the effects of wind and weather. All seams are double stitched with polyester thread for strength. The windsock throat is reinforced and has solid brass grommets for easy attachment and corrosion resistance. Nylon ties are included with each windsock to attach it to the frame. Windsocks are available in high visibility orange, white or alternate orange and white stripes. Fully extended at 20 MPH or 15 Knots.

<table>
<thead>
<tr>
<th>Throat Dia.</th>
<th>Length</th>
<th>Part No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>8”</td>
<td>3 feet</td>
<td>13-20203</td>
<td></td>
</tr>
<tr>
<td>10”</td>
<td>4 feet</td>
<td>13-20205</td>
<td></td>
</tr>
<tr>
<td>13”</td>
<td>5 feet</td>
<td>13-20207</td>
<td></td>
</tr>
<tr>
<td>18”</td>
<td>6 feet</td>
<td>13-20209</td>
<td></td>
</tr>
</tbody>
</table>

INTENSE WHITE

<table>
<thead>
<tr>
<th>Throat Dia.</th>
<th>Length</th>
<th>Part No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>18”</td>
<td>5 feet</td>
<td>13-20211</td>
<td></td>
</tr>
<tr>
<td>18”</td>
<td>6 feet</td>
<td>13-20212</td>
<td></td>
</tr>
<tr>
<td>24”</td>
<td>8 feet</td>
<td>13-20214</td>
<td></td>
</tr>
</tbody>
</table>

WHITE/ORANGE STRIPE

<table>
<thead>
<tr>
<th>Throat Dia.</th>
<th>Length</th>
<th>Part No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>18”</td>
<td>5 feet</td>
<td>13-20220</td>
<td></td>
</tr>
<tr>
<td>18”</td>
<td>6 feet</td>
<td>13-20222</td>
<td></td>
</tr>
<tr>
<td>24”</td>
<td>8 feet</td>
<td>13-20224</td>
<td></td>
</tr>
<tr>
<td>24”</td>
<td>7 feet</td>
<td>13-20225</td>
<td></td>
</tr>
<tr>
<td>36”</td>
<td>10 feet</td>
<td>13-20226</td>
<td></td>
</tr>
<tr>
<td>36”</td>
<td>12 feet</td>
<td>13-20228</td>
<td></td>
</tr>
</tbody>
</table>

SCOTT’S STANDARD WINDSOCK FRAMES

These very popular frames are constructed of welded steel for strength & durability. They have 2 ball bearings for easy swiveling and are painted for corrosion resistance. The frame is mounted to a 1-inch diameter support pipe threaded to fit a 3/4" size pipe or conduit. Order windsocks separately.

<table>
<thead>
<tr>
<th>Throat Dia.</th>
<th>Length</th>
<th>Part No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>8”</td>
<td>20 ft.</td>
<td>P/N 13-20110</td>
<td></td>
</tr>
<tr>
<td>10”</td>
<td>20 ft.</td>
<td>P/N 13-20112</td>
<td></td>
</tr>
<tr>
<td>13”</td>
<td>20 ft.</td>
<td>P/N 13-20114</td>
<td></td>
</tr>
<tr>
<td>18”</td>
<td>20 ft.</td>
<td>P/N 13-20116</td>
<td></td>
</tr>
<tr>
<td>24”</td>
<td>20 ft.</td>
<td>P/N 13-20118</td>
<td></td>
</tr>
<tr>
<td>36”</td>
<td>20 ft.</td>
<td>P/N 13-20120</td>
<td></td>
</tr>
</tbody>
</table>

INTERNALLY LIGHTED EXTENDED FRAMES

An internally lighted windsock with extended frame makes the windsock “glow in the dark” for maximum visibility. The lamp operates on regular 120Vac current. The 18-inch diameter frame has a GE 8,000 hour lamp that lasts about 2 years. The 24-inch and 36-inch frames have reflector flood lamps. Designed to swivel without twisting the wires. The frame is constructed of all welded steel for strength and is painted to resist corrosion. The electrical connection for the lamps may be wired permanently or temporarily connected with an extension cord. The frame is mounted to a 1-inch diameter support pipe threaded to fit a 3/4-inch size pipe or conduit.

<table>
<thead>
<tr>
<th>Throat Dia.</th>
<th>Length</th>
<th>Part No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>13”</td>
<td>20 ft.</td>
<td>P/N 13-20247</td>
<td></td>
</tr>
<tr>
<td>18”</td>
<td>20 ft.</td>
<td>P/N 13-20249</td>
<td></td>
</tr>
</tbody>
</table>

MINIATURE 15” WIND SOCK

For home office, hangar or workshop. The 15" long wind cone of Flame-Orange sailcloth material swivels on 23" high steel shaft. Wind directionals are cast aluminum with flat black finish. Furnished with mounting hardware and Complete Kit, P/N 13-03747. ReplacementSock....P/N 13-03748.

7” VINYL WINDSOCK

Features 27” long x 6-1/2” diameter fluorescent orange vinyl sock. Aluminum mast adjusts from 33” to 54” and up to 12 ft. with extension kit. Perfect for private strip, helicopters, or runway threshold. Complete Windsock w/frame......P/N 13-20015. Replacement Sock..............P/N 13-20025.

8 FOOT VINYL WINDSOCK

18” diameter sock is double stitched, durable, fluorescent orange vinyl coated nylon. Ball bearings let sock turn easily even in light winds. Aluminum frame holds mouth open. Mount on appropriate pipe. Order frame and sock separately. 8 Foot sock only....P/N 13-20035.

NYLON WINDSOCKS

These socks are windtunnel tested and designed for conditions in which safety and wind direction are of greatest importance. They are constructed of nylon oxford cloth for strength and flyability and dyed a bright orange for higher visibility. The throat and tail bands are stitched with multiple rows of tough synthetic thread. The throat band is finished with #1 brass grommets and nylon ties are included. Unlike canvas or vinyl, these Socks fly in the slightest breeze.

<table>
<thead>
<tr>
<th>Throat Dia.</th>
<th>Length</th>
<th>Part No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>13-20040</td>
<td>10”</td>
<td>13-20045</td>
<td>35”</td>
</tr>
<tr>
<td>13-20050</td>
<td>13”</td>
<td>13-20055</td>
<td>55”</td>
</tr>
<tr>
<td>13-20060</td>
<td>36”</td>
<td>13-20070</td>
<td>60”</td>
</tr>
</tbody>
</table>

AVIATION WINDSOCKS

All Aviation Windsocks are made of heavy-weight cross-woven Aviation blend material having special Rip-Stop characteristics, flexible, chemically resistant treated, Polyurethane Coated for bonding strength and water repellency, Ultra-violet dyed, with Nylon Web support and brass grommets. Color: Colorfast International Orange. Estimated 50% longer life and color retention. Aviation sized windsocks. FAA approved sizes per FAA Advisory Circular 150/5345-27C dated 07/85. Estimated wind speeds: Fully extended shape for all sizes listed below, (wind tunnel tested) to be special cut Specification of 15 knots = 16.5 mph. 18" - 28" diameter windsocks 96” in length, 36” diameter 144” in length. 18” dia. ... P/N 13-02038 ... 20” dia. ... P/N 13-02039 ...

EXTRA LONG LIFE WINDSOCKS

"Extra Long Life" is a heavy-duty cross-woven Aviation blend Poly.Nylon material with special Rip-Stop characteristics, Medium-weight for more flexibility, chemically resistant treated, and Polyurethane coated for bonding strength and water repellency. Ultra-violet dyed for best retention. Nylon support webbing on intake opening with brass grommets. Colorfast International Bright Orange in color. "Extra Long Life" windsocks have an estimate 50% longer life and color retention.

<table>
<thead>
<tr>
<th>Size</th>
<th>Part No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>6”X18</td>
<td>13-20110</td>
<td>15X55</td>
</tr>
<tr>
<td>9”X30</td>
<td>13-20111</td>
<td>20X96</td>
</tr>
<tr>
<td>10X36</td>
<td>13-20112</td>
<td>15X55</td>
</tr>
<tr>
<td>13X48</td>
<td>13-20113</td>
<td>24X96</td>
</tr>
<tr>
<td>18X60</td>
<td>13-20114</td>
<td>28X96</td>
</tr>
<tr>
<td>20X80</td>
<td>13-20115</td>
<td>36X144</td>
</tr>
<tr>
<td>12X48</td>
<td>13-04316</td>
<td>20X96</td>
</tr>
</tbody>
</table>
**WINDSOCKS**

**AIRPORT WINDSOCKS**

What makes these aviation windsocks different?

Two major things make a windsock, its material and its construction. Starting off with a premium nylon fabric that is made right here in the USA to exact standards. Nylon offers unparalleled windsock durability to the elements and will not become rigid in cold weather, keeping these windsocks responsive in even the slightest of wind. From there it gets urethane coated and UV protected, giving the windsock superior fade resistance and color retention. The material is subjected to a variety of tests by an independent lab to verify its structural integrity and UV resistance. This superior material is then cut and sewn. Our reinforced frames are a rugged design constructed of a welded steel construction and then a powder coated finish for corrosion protection. They incorporate the same high quality windsock ties, pole, and tripod. They are a stand alone unit for mounting on a flat horizontal or peaked roof surface or they can be installed right onto an existing 3/4" pipe thread pole.

**VERTICAL SOCK KITS**

These complete kits include our standard frame, windsock, windsock ties, pole, and brackets. They are a stand alone unit for mounting on a flat vertical surface or they can be installed right onto an existing 3/4" pipe thread pole.

**TRIPOD MOUNT WINDSOCK KIT**

These complete kits include our standard frame, windsock, windsock ties, pole, and tripod. They are a stand alone unit for mounting on a flat horizontal or peaked roof surface or they can be installed right onto an existing 3/4" pipe thread pole.

**PORTABLE WINDSOCK KIT**

Our portable windsock kit is a popular choice for remote locations where knowing the wind speed and direction is vital. This rugged, stand alone unit comes complete with the pole, frame, windsock and windsock ties. These units are manufactured right here in our facility reassuring only the best in quality and performance. This free standing system measures over 7' tall in its assembled configuration. It features an extremely rugged design that incorporates a pole with a foot lug and handle for easy installation and removal. The two part pole disassembles for easy transportation.

* The frame conveniently screws onto the top of the pole. Its aluminum hoop and ball pivot on a stainless steel shaft for years of reliable and responsive action.

**AVIATION LIGHTED WINDSOCK FRAMES**

Internally lighted, heavy duty ball-bearing frame, with 1-75 to 300W lamp, extended to 30" double hoop frameworks. (3/8" round metal frameworks) FAA approved sizes per FAA Advisory Circular AC150/5345-27C dated 07/19/85. Furnished complete with windsocks.

<table>
<thead>
<tr>
<th>Size</th>
<th>Part No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>18&quot; dia</td>
<td>P/N 13-02043</td>
<td></td>
</tr>
<tr>
<td>20&quot; dia</td>
<td>P/N 13-05729</td>
<td></td>
</tr>
<tr>
<td>24&quot; dia</td>
<td>P/N 13-05730</td>
<td></td>
</tr>
<tr>
<td>36&quot; dia</td>
<td>P/N 13-05731</td>
<td></td>
</tr>
</tbody>
</table>

**WINDSOCK FRAMES**

Totally enclosed housing protects heavy duty ball-bearing from lock-ups, corrosion, and excessive premature wear. Bearings are grease packed, metal shielded. Self contained unit easily attaches with 3/4" standard thread pipe.

<table>
<thead>
<tr>
<th>Size</th>
<th>Part No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>6&quot;</td>
<td>P/N 13-20122</td>
<td></td>
</tr>
<tr>
<td>9&quot;</td>
<td>P/N 13-20121</td>
<td></td>
</tr>
<tr>
<td>10&quot;</td>
<td>P/N 13-20122</td>
<td></td>
</tr>
</tbody>
</table>

**BALL BEARING FRAMES**

The ball bearing windsock frames are a rugged design constructed of a welded steel construction and then a powder coated finish for corrosion protection. They incorporate a two bearing pivoting design for effortless pivoting. These frames are ready to be mounted on a 1/4" female pipe thread for the 8", 13", 18" and 24" and a 1" pipe thread for the 36".

<table>
<thead>
<tr>
<th>Description</th>
<th>Size</th>
<th>Part No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Ball Bearing Frames</td>
<td>8&quot;</td>
<td>13-06481</td>
<td></td>
</tr>
<tr>
<td>Ball Bearing Frames</td>
<td>13&quot;</td>
<td>13-06482</td>
<td></td>
</tr>
<tr>
<td>Ball Bearing Frames</td>
<td>18&quot;</td>
<td>13-06483</td>
<td></td>
</tr>
<tr>
<td>Ball Bearing Frames</td>
<td>24&quot;</td>
<td>13-06484</td>
<td></td>
</tr>
<tr>
<td>Ball Bearing Frames 36&quot; Non Collapsible</td>
<td>13-06485</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**EXTENDED BALL BEARING FRAMES**

These windsock ball bearing extended frames are a rugged design constructed of a welded steel construction and then a powder coated finish for corrosion protection. They incorporate the same high quality construction as our standard ball bearing frames with the added performance of an extended frame. They incorporate a two bearing pivoting design for effortless pivoting to be mounted on a 1/4" female pipe thread for the 13"and 18" frames. Use 1" female pipe thread for mounting the 24" and 36" frames.

<table>
<thead>
<tr>
<th>Description</th>
<th>Size</th>
<th>Part No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Extended Ball Bearing Frames</td>
<td>13&quot;</td>
<td>13-06487</td>
<td></td>
</tr>
<tr>
<td>Extended Ball Bearing Frames</td>
<td>18&quot;</td>
<td>13-06487</td>
<td></td>
</tr>
<tr>
<td>Extended Ball Bearing Frames</td>
<td>24&quot;</td>
<td>13-06489</td>
<td></td>
</tr>
<tr>
<td>Extended Ball Bearing Frames 36&quot;</td>
<td>13-06490</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**ORANGE WINDSOCKS**

Orange & White Windsocks 18" x 96" 13-06468
Orange & White Windsocks 18" x 72" 13-06467
Orange & White Windsocks 18" x 60" 13-06466
Orange & White Windsocks 13" x 54" 13-06465
Orange & White Windsocks 10" x 36" 13-06389
Orange & White Windsocks 8" x 36" 13-06388
Orange & White Windsocks 6" x 24" 13-06387
Orange & White Windsocks 4" x 15" 13-06386

**ORANGE AND WHITE WINDSOCKS**

Orange & White Windsock 20" x 96" 13-06469
Orange & White Windsock 18" x 96" 13-06468
Orange & White Windsock 18" x 72" 13-06467
Orange & White Windsock 18" x 60" 13-06466
Orange & White Windsock 13" x 54" 13-06465
Orange & White Windsock 10" x 36" 13-06389
Orange & White Windsock 8" x 36" 13-06388
Orange & White Windsock 6" x 24" 13-06387
Orange & White Windsock 4" x 15" 13-06386

**PORTABLE WINDSOCK KIT**

Part No.

**Price**
MONTAGUE FOLDING BICYCLES

MONTAGUE CX COMFORT BIKE
The Montague CX features 26” standard wheels, 21-speed Shimano gearing and a brushed blue aluminum / chromoly frame. Folds to 36” x 28” x 12” in under 30 seconds without use of tools, and fits easily into light aircraft, car trunk, or boats. Extra cushioned saddle and wide tires offer a smooth ride on paved road and a good grip on light off-road terrain. Excellent for cruising city streets or boardwalks.

16” Frame P/N 13-02468
18” Frame P/N 13-00386
20” Frame P/N 13-01050

MONTAGUE - DX GRAND CANYON BIKE
The DX Grand Canyon® Crossover Bike is a great all-around bike for anyone looking for a comfortable ride at an unbeatable price. Perfect for cruising through the city or countryside, this 18-speed bike comes equipped with Shimano gears. Gripshift shifters, slightly raised handle bars, and a super soft gel saddle for your ultimate comfort. At the end of your ride, just fold up the lightweight DX and stow it in your car trunk, city apartment or anywhere in-between. Think of it as an all-around bike for the all-around rider. The DX Crossover Bike uses all standard Mountain Bike wheels and components serviceable at any bike shop.

16” DX Crossover Bike P/N 13-01945
18” DX Crossover Bike P/N 13-03272
20” Crossover Bike P/N 13-02458

MONTAGUE PARATROOPER™
A 24-speed mountain bike which folds simply, without the use of tools. By turning one quick release lever, Paratrooper™ compacts in less than 30 seconds into a 3 x 3” pack for easy portability & storage.

18” P/N 13-01068
20” P/N 13-01069

VATAVIO FOLDING BIKE
Vatavio Up to 18 Miles per Charge and 20 MPH the Vatavio is the BEST FOLDING BIKE in its class! The EcoBike Vatavio Folding Electric Bike is the most advanced folding electric bike on the market. Its lightweight aluminum frame design (48lbs) and folding capability makes it a very versatile to store when space is an issue, car trunk(no rack req.), train commuting, RV or Camper. Boat, or even the closet! The Vatavio is the ONLY folding electric bike with standard 8ah Lithium Ion Manganese battery, SHIMANO 6-speed w/Revoshift, 290 watt motor with Zero Start Feature and adjustable speed controller. Additionally, it sports K-Shield puncture resistant 20” tires, giving it maximum power and torque to get you up almost any hill with ease! Features: • Frame Style: Folding (35” x 17” x 29” folded) • Frame Size: Fits 4’11”-6’4” • Color: Raw Aluminum • Frame: 6061 Hi-Strength Aluminum • Rim: 20” Double Wall Aluminum • Tire: Kenda K-Shield 1.75” Thorn-Resistant Tubes/Puncture-Resist Liners • Charger: AC 110V
P/N 13-05709

MONTAGUE FOLDING PEDALS
These pedals reduce the width of the folded bike by 4 inches. While not ideal for high performance riding, they do serve a purpose for those with tight space constraints.
P/N 13-03745

MONTAGUE MX MOUNTAIN BIKE
The Montague MX is a full size, high performance mountain bike with 26” standard wheels. Excellent for off-road use, it features a brushed aluminum color or an aluminum/chromoly frame, and 24 speed Shimano gearing. Folds to 36” x 28” x 12” in less than 30 seconds without tools and stores easily in light aircraft, car trunk, or boat.

18” Frame P/N 13-00384
20” Frame P/N 13-02936

MONTAGUE ACCESSORIES • Carrying Case P/N 13-08406

SWISS LX 24 SPEED MOUNTAIN BIKE
The SwissBike® LX Mountain Bike is tough, rugged, and ready for anything. Experienced riders will enjoy this mountain bike whether dealing with mountain terrain or city pot holes, the SwissBike® LX is prepared for action. The speed of unfolding this bike for riding will blow you away. No tools required to fold and stash away. The SwissBike® LX comes equipped with front suspension, 24-speed EZ Fire Plus® shifters, and a front disc brake to tackle the roughest terrain. The SwissBike® LX Mountain Bike uses all standard mountain bike wheels and components serviceable at any bike shop.

18” LX 24 P/N 13-04702
20” LX 24 P/N 13-04703

SWISS XO 27 SPEED MOUNTAIN BIKE
The SwissBike® XO Mountain Bike is an aggressive hard tail that can be ridden anywhere. This bike is designed for urban assaults of big hit riding and is ideal for anyone who likes to take their bike with them wherever they go. This 27 speed bike comes equipped with a hand welded custom drawn aluminum frame, Sram® X-0 Trigger Shifters, hydraulic front disc brake and Rockshox® Recon front fork. Mountains, desert, single track, city streets - bring it on! The SwissBike XO Bike uses all standard Mountain Bike wheels and components serviceable at any bike shop.

18” XO 27 P/N 13-04704
20” XO 27 P/N 13-04705

SWISS TX 21 SPEED MOUNTAIN BIKE
The SwissBike® TX Mountain Bike is a great all-around bike for anyone looking for a great ride at an unbeatable price. Perfect for cruising through the city or countryside, this 21-speed bike comes equipped with Shimano gears, Gripshift shifters for your ultimate ride. At the end of your ride, just fold up the lightweight SwissBike TX and stow it in your car trunk, city apartment or anywhere in-between. Think of it as an all-around bike for the all-around rider. The SwissBike TX Bike uses all standard Mountain Bike wheels and components serviceable at any bike shop.

18” TX 21 P/N 13-04699
20” TX 21 P/N 13-04701
DAHON FOLDING BICYCLES

20” DAHON SPEED FOLDING BICYCLE
The Speed folding bicycle from Dahon features the latest in frame design with gearing provided by a 8-speed Shimano SIS derailleur. Frame is custom drawn 4130 lite-chromoly steel and the wheels are 20”x1-3/8” with stainless steel spokes and lite-alloy rims. The folded size of the bike is 10”x22”x32”, Wt: 26.5 lbs., and folding time is only 10 seconds. Color: Black P/N 13-00043

26” DAHON MATRIX FOLDING BIKE
Featured in AOPA Pilot and Flying magazines, the new Matrix 26” folding bicycle features 24-speed central gears with grip shift, all aluminum lightweight frame with suspension fork, Pro-Max brakes, alloy rims, and an all aluminum finish. Folded size: 13” x 28” x 38”. Wt.: 28.5 lbs. A very lightweight high performance bike for the serious rider in a folded size that stows easily in an aircraft baggage compartment or a car trunk. Color: Black P/N 13-00040

OTHER DAHON FOLDING BIKES

<table>
<thead>
<tr>
<th>Model</th>
<th>Color</th>
<th>Wheels</th>
<th>Speed</th>
<th>Fold Size</th>
<th>Wt</th>
<th>P/N</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Boardwalk-1</td>
<td>Burgundy</td>
<td>20”</td>
<td>1</td>
<td>10”x20”x32”</td>
<td>32</td>
<td>13-00042</td>
<td></td>
</tr>
<tr>
<td>Mariner</td>
<td>Ocean Blue</td>
<td>20”</td>
<td>6</td>
<td>12”x22”x32”</td>
<td>30</td>
<td>13-00037</td>
<td></td>
</tr>
<tr>
<td>Helios P8</td>
<td>Aluminum</td>
<td>20”</td>
<td>8</td>
<td>11”x23”x33”</td>
<td>33</td>
<td>13-00789</td>
<td></td>
</tr>
<tr>
<td>Mariner</td>
<td>Ocean Blue</td>
<td>20”</td>
<td>6</td>
<td>11”x23”x33”</td>
<td>33</td>
<td>13-00037</td>
<td></td>
</tr>
<tr>
<td>Speed P8</td>
<td>Steel Blue</td>
<td>20”</td>
<td>8</td>
<td>14”x23”x33”</td>
<td>33</td>
<td>13-00043</td>
<td></td>
</tr>
<tr>
<td>Espresso</td>
<td>Dk. Cherry</td>
<td>20”</td>
<td>21</td>
<td>14”x27”x38”</td>
<td>36</td>
<td>13-00791</td>
<td></td>
</tr>
<tr>
<td>Curve D3</td>
<td>Fire Red</td>
<td>16”</td>
<td>3</td>
<td>-</td>
<td>-</td>
<td>13-05786</td>
<td></td>
</tr>
<tr>
<td>Speed</td>
<td>Fire Red</td>
<td>20”</td>
<td>8</td>
<td>-</td>
<td>-</td>
<td>13-00043</td>
<td></td>
</tr>
<tr>
<td>Ciao! P8</td>
<td>Charcoal</td>
<td>20”</td>
<td>8</td>
<td>-</td>
<td>-</td>
<td>13-05781</td>
<td></td>
</tr>
<tr>
<td>Glide P8</td>
<td>Carmel</td>
<td>24”</td>
<td>8</td>
<td>-</td>
<td>-</td>
<td>13-05782</td>
<td></td>
</tr>
</tbody>
</table>

DAHON ACCESSORIES

<table>
<thead>
<tr>
<th>Description</th>
<th>P/N</th>
<th>Price</th>
<th>Description</th>
<th>P/N</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Kickstand</td>
<td>13-08310</td>
<td>90</td>
<td>Rear Rack</td>
<td>13-08340</td>
<td>115</td>
</tr>
<tr>
<td>Carry Bag 20”</td>
<td>13-08360</td>
<td>45</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
SOFTIE EMERGENCY PARACHUTES

**MINI-SOFTIE**
An extremely comfortable State-of-the-art lightweight emergency parachute system designed to fit into the restricted cockpits of today's aircraft. The steerable conical canopy is designed for a 240# maximum suspended weight. System size and weight 2’x15” w. 23” long. 13 lbs.

P/N 13-03505-X

**MICRO-SOFTIE**
A narrower version of the Mini-Softie with a 13” wide harness designed to stay secure over the shoulders of slightly built people. The steerable conical canopy is designed for 180# maximum suspended weight. System size and weight 2’x13” w. 22” long. 13 lbs.

P/N 13-03515-X

**LONG-SOFTIE**
Specifically designed for today's high-tech soaring machines with little or no cockpit room. The Long-Softie comes complete with a steerable conical canopy designed for 240# maximum suspended weight. System size and weight 2’x13” w. 23” long. 13 lbs.

P/N 13-03520-X

**OXYGEN POCKET**
A zippered pocket that your oxygen tank can fit in. Special order.

**CAPWEFF RISER RELEASES**
N/C required. Comes with TT adapters or two B12 snaps. Quick ejector snaps available (special order).

**NATIONAL EMERGENCY PARACHUTES**
National parachutes are built with the finest U.S. materials in accordance with TSO C23b in the Standard Category. Constructed with 1.1 oz. ripstop nylon. High visibility colors. The parachute system design allows greater movement in and around the aircraft. Highly recommended by Aerobatic Champions Leo Loudenslager and Patty Wagstaff.

**NATIONAL'S BACKPACK**
- developed with the pilot in mind
- and the most popular model. The teardrop shape provides flexibility and maximum comfort even in the tightest cockpits.

**NATIONAL'S SEAT PACK**
- Especially desirable when the cockpit has more vertical space than horizontal. For added comfort, the seat pad has 1 inch of "Astronaut Foam" above the parachute (accessible to remove or add foam/padding as required).

**NATIONAL'S CHAIR**
- Designed for pilots whose aircraft has little cockpit space and to accommodate pilots who prefer a wrap around pack. The parachute is packed through the entire container length to maintain full flexibility and the slimmest profile throughout the container.

**NATIONAL FLAT PARACHUTE**
The flat pack is slightly wider and more rectangular but much flatter than our original back parachute's "teardrop" shape. The National FLAT is thinner and even more supple than before. The "Flat-Pack" parachute container provides two choices in packing configuration: 1. More canopy in the upper container for the absolute thinnest belltime thickness (Taper Pack). 2. Canopy spread evenly to be one thickness (thinness!) top to bottom (Fully Flat Pack).

**PARA-CUSHION EMERGENCY PARACHUTES**
Each Para-Cushion system features the patented Pop-Top type container with the externally mounted pop-chute which provides a flat profile while worn and gives a quick and positive send off when released. The canopy risers are neatly hidden in built-in channels contoured into the container. Each container is padded with a luxurious 1/2’ (1cm) layer of Confor™ foam, covered with rich silver grey velour fabric. The harness utilizes a light weight fixed-dimension main lift web with individual leg strap design for ease of walking and maximum cockpit movement while saving weight and space. Fully adjustable. Deployment is ripcord actuated with the handle located at the front left side of the harness. Each system is assembled with the popular 25 ft diameter MID-LITE canopy freshly packed by an FAA licensed parachute rigger. System is delivered in a matching carrying bag with the complete service manual, ready for flight.

**PARA-CUSHION BACK™**
- The Model 305 is truly a chair-parachute, covering the back of the body from shoulders to just above the knees. The patented chair-type container conforms to the curve of your back. It is especially popular among sailplane pilots flying for hours in the supine position, it is literally a “parachute-cushion” beneath the pilot. It is 42” (105 cm) long by 16” (40 cm) wide and varies from 2.5” to less than 1” (6.5 to 2.5 cm) thick, designed specifically for use where space is minimal. The complete system weighs approximately 16.5 lbs. (7.5 kg.).

P/N 13-03442

**PARA-CUSHION SEAT™**
- The Model 304 parachute assembly is designed specifically for emergency use by sport aviators flying aircraft utilizing a seat pan. The parachute container is a seat cushion 12”x16” (30cmx40 cm) and less than 3” (7 cm) thick. Because the backpad is only a half inch (1 cm) thick, the system is also especially suited to aircraft with restricted stick or rudder travel, or when head room is not restricted, such as Stearman, Great Lakes and Citabria. The complete system weighs approximately 15 lbs. (6.5 lbs. (6.5 kg.). A zip on 3” (7 cm) Confor™ padded Travel Cushion is an optional accessory.

P/N13-03444

**OXYGEN POCKET**
- Zipper pocket that your oxygen tank can fit in. Available for the 303 & 305.

P/N 13-04921

**OPTIONS**
- Aerobatic Harness Option
- Quick ejector snaps
- Capweff riser releases
- Quick ejector snaps
- Oxygen pocket
- Aerobolics
- Sheepskin backpad
- Monogram personalization.
SURECHECK CHECKLISTS
These versatile checklists cover all aspects of preflight, standard operation procedures, emergency procedures, V-speeds, ATC light signals, and include a TCA and sectional scale. Easy to read large, black on white type.

SURECHECK ACCESSORIES
ATISPAD - Sticky posting pads for obtaining ATIS, ASOS, AWOS. Shrink wrapped in pads of (50) 3-3/4" x 4" P/N 13-09753

CLEARANCE PAD - Posting pads for obtaining IFR Clearances by pilots. Provides in-flight writing for Altitude, Heading, Frequency. Shrink wrapped in pads of 50 "CRAFT" style 5-1/2" x 8-1/4" P/N 13-09754

FSSPAD - Bonded legal pad for obtaining weather briefings from FSS Shrink wrapped in pads of 50 sheet 5-1/2 x 6-1/4. P/N 13-09755

APPROACHPAD - Spiral Bound IFR approach chart holder. Holds up to 10 approach charts in transparent plastic. Easy Access with visible chart name in right corner. Fits on yoke clips or kneeboards for easy in-flight use. P/N 13-09756


PREFLITEPAD - All the information you need for weight and balance and V-speeds. Calculate center of gravity and keep other vital information at your fingertips. You’ll wonder how you got through preflight without it! 4.25" x 7" Pad of 40 P/N 13-09854

CHECKRIDE CHECKLISTS - Unique to the SureCheck brand. Incorporates FAA PTS standards for new ratings. Also serves as a handy reference during all phases of training. Packed with a wealth of information not found anywhere else in such a complete configuration. Perfect for students and seasoned pilots to renew rating certs. Include the updates from the FAA (effective August 2002). New redesigned format with increased size to make them even easier to read. Private pilot P/N 13-00051 Instrument........................................................................ P/N 13-00052 Commercial ........................................................................ P/N 13-00053

SURECHECK CHECKLISTS – MUTT MUFFS
MUTT MUFFS
• Over-the-Head Hearing Protector for Animals.
• Specially Designed Wide Foam Filled Ear Seals for Maximum Comfort.
• Engineered specifically to properly meet the contour of a dog’s head
• Comfortable and Lightweight
• Adjustable Straps for Optimum Fit.
• Inner sound-deadening foam is the same density found in pilot’s high-end headsets
• Made entirely in the United States of America
• Patent Pending

SIZE CHART - The overall circumference measurement of your dog’s noggin at the largest point is the best determination of size, because if you choose a size too large, the muffs won’t seal well against his head, and you lose all the sound-reducing properties you were shooting for. Your dog’s weight is also a good indicator of which size to choose.

CO-PILOT - TRIANGLE BANDANA FOR DOGS
The proper uniform for the distinguished canine aviator. Sewn on all three sides. Finished Sizes: Large 21.5" x 21.5" x 29’, Small: 14” x 14” x 20’. Large............. P/N 13-05547 Small................ P/N 13-05548

HYDRO-BOWL FOR DOGS
Next time your pooch is pantin’ for a drink, pull out the convenient, collapsible Hydro Bowl. Waterproof and made of a high-tech, durable plastic can-vas, the Hydro Bowl folds up and snaps closed into a compact triangle for storage. Attach it to a leash, backpack, bicycle, or a variety of other places for easy storage. Hold 5 cups. P/N 13-05546

DOG IS MY CO-PILOT - BUMPERSTICKER
“Dog Is My Co-Pilot” is the trademarked motto of Bark magazine - accept no substitute. As seen on dog-friendly cars from coast to coast! P/N 13-05545

E.S.P. CHECKMATE™
E.S.P. CheckMate™ is a 1st for Aviation, and the only product of its kind available. Our new “Emergency Substitute Pilot™” could save the lives of you and your passengers by providing the most basic and simplest of terms and procedures to the NON-PILOT, in the unfortunate event the real pilot becomes incapacitated. E.S.P. CheckMate™ assists the NON-PILOT in controlling the aircraft, reaching help on the radio, and if necessary, landing the aircraft. The graphical format makes it easy and comfortable to follow. E.S.P. CheckMate™ can easily be the difference in the outcome of this most serious type of emergency. For safety and readability, we are publishing only in 7.5" x 10" size. P/N 13-01834

CUSTOM COLORS - “David Clare® has their signature “Green” and there’s the ever-classic “Mutt Muffs® Gray”. But now, Mutt Muffs® are available in three additional colors! Red! Blue! and Pink! P/N 13-05541
### CHECKMATE CHECKLISTS

Checkmate is the only checklist that contains virtually all data desired by pilots to fly the airplane without the extraneous information which leads to inefficiency, confusion and even refusal to use. They eliminate the tedious and cluttered 15-page flip-book that pilots quickly become discouraged from using.

Checkmate contains the most comprehensive V-speed section in the industry. V-speeds are listed in knots and mph. Checkmate not only makes a dramatic difference in everyday use, but also in critical situations. Emergency procedures are right there! Every time! With most of the emergencies there is no time to flip pages looking for the correct procedures.

Available for over 300 single and twin engine aircraft. All follow a standard format. Used by some of the best flight schools in the country. Checkmate checklists come in standard 6.5” x 9” size.

### CHECKMATE IFR

In the IFR environment organization and management lead to smoother, stress-free and safer outcomes. Checkmate IFR will assist you keep the flight business orderly and functional. It is precise & specific to the different phases of those sometimes precarious flights. You will be reminded when to prepare and look ahead to each phase. A quick review of CheckMate IFR flight planning will help you understand the aircraft preparedness and legalities, how to give those greatly appreciated pilot reports on icing and turbulence, and what ATC expects you to do after radio failure: Professional information in a concise and orderly manner. Standard (6” x 9.5”) P/N 13-08805...

Compact (5” x 7”) P/N 13-08810...

### CHECKBOOK CHECKLISTS

Aviation Checkbook is a high quality, multi-page laminated checklist utilizing factory type information for FAA Part 141 and 61 schools. Designed as a primary checklist giving all details and responses needed by new students or pilots wanting a multi-page checklist without the usual bulk. Shirt pocket size with mark and erase surface for notes. The various checkbooks for your aircraft are stacked and color tabs allow you to locate the checklist you need.

### FLYWRITE COCKPIT WRITING PAD

FlyWrite™ is not another “flight planning” layout. It is FlyWrite™ is not another “flight planning” layout. It is designed to give you a dedicated place for all the information that flies with the aircraft. Convenient top-bound writing pad. Each pad contains 50 5” x 8” sheets and can be used with or without standard junior legal vinyl binders. IFR clearances. ATIS, AWOS, frequencies, flight times, habbits times, taxi, information, frequency changes, hand-offs, altitude changes, weather, etc. have a home. There is also an area for random information or diagrams. FlyWrite™ also contains a handy vertical scale which measures mileage for WAC, SEC, TAC, NOS, JEPP, & ELA charts, eliminating the need for that ruler you can never find.

### MOUNTAIN FLYING CHECKMATE

CheckMate Aviation’s new Mountain Flying CheckMate™ is a full color, plastic card that is a compilation of the special knowledge required for mountain flying. Competent flying in mountainous terrain requires knowledge far beyond what is taught in standard flight courses; and as most pilots discover, sooner or later, flying in mountainous terrain is inevitable.

CheckMate Aviation’s Mountain Flying CheckMate™ covers both the rules and common sense of flying that are critical when in this aspect of flight. Available in 3 sizes. Each carries CheckMate’s usual lifetime guarantee.
PROPILOT CHECKLISTS

Step up to professional quality with ProPilot Checklist! These handsome booklets are fully laminated and wire-bound for durability and long life, and are perfect for VFR and IFR pilots of all skill levels. All Preflight, Normal, and Emergency procedures are included. IFR checklist items are integrated into phase of flight, and IFR Approach and Departure Briefing sections are also provided.

Flight planning is simplified by the inclusion of aircraft-specific performance data (V-speeds, takeoff distance, climb performance, cruise power settings, true airspeed, fuel burn, and landing distance), as well as weight and balance graphs. No more digging through a bulky POH for critical performance numbers! Additionally, a wealth of other useful information is included, such as VFR communications and weather requirements, METAR & TAF codes, IFR Holding Procedures, illustrated Airport Signs & Markings, Light Gun Signals, and Intercept Procedures.

Conveniently sized at 6” wide by 9" high, ProPilot Checklist fits easily on your kneeboard. It’s truly “The Last Checklist You’ll Need!”

THE PRECIFLIGHT CHECKLIST

More than just a checklist, PRECIFLIGHT® will actually help pilot along all phases of flight: from preparation to tie-down and through emergencies. It is a brightly colored 18 pages booklet at is logically divided to minimize page flipping. Once used to it, it is a natural as good landings.

It regroups important information such as light gun signals, VFR minimums, weather symbols and all that with easy to interpret drawings. Even better, it has features that pilots have to look for in other publications and equipment like a built-in 1/500 000 ruler, frequently used aviation phone numbers and equipment like a built-in 1/500 000 ruler, frequently used aviation phone numbers and Internet sites and more.

PRECIFLIGHT® was also designed for convenience: it will fit in your shirt pocket or clip on the aircraft yoke where it will be available to use with one hand. Made of a sturdy waterproof paper, it will last a lifetime. It is designed to conform to FAA and Transport Canada regulations by a team of flight instructors and airline pilots.

### CHECKLISTS

#### PROPILOT CHECKLISTS

<table>
<thead>
<tr>
<th>Description</th>
<th>Part No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>ProPilot Checklist Cessna 150M</td>
<td>13-06103</td>
<td></td>
</tr>
<tr>
<td>ProPilot Checklist Cessna 152</td>
<td>11-05187</td>
<td></td>
</tr>
<tr>
<td>ProPilot Checklist Cessna 172P</td>
<td>11-05188</td>
<td></td>
</tr>
<tr>
<td>ProPilot Checklist Cessna 172R</td>
<td>11-05189</td>
<td></td>
</tr>
<tr>
<td>ProPilot Checklist Cessna 172RG</td>
<td>11-05192</td>
<td></td>
</tr>
<tr>
<td>ProPilot Checklist Cessna 172S/SP</td>
<td>11-05190</td>
<td></td>
</tr>
<tr>
<td>ProPilot Checklist Cessna 172S/SP NAV</td>
<td>11-05191</td>
<td></td>
</tr>
<tr>
<td>ProPilot Checklist Cessna 172M</td>
<td>13-05121</td>
<td></td>
</tr>
<tr>
<td>ProPilot Checklist Cessna 182R</td>
<td>13-05122</td>
<td></td>
</tr>
<tr>
<td>ProPilot Checklist Cessna 182S</td>
<td>13-05123</td>
<td></td>
</tr>
<tr>
<td>ProPilot Checklist Cessna 182T</td>
<td>13-05124</td>
<td></td>
</tr>
<tr>
<td>ProPilot Checklist Cessna 182T NAV III</td>
<td>11-05193</td>
<td></td>
</tr>
<tr>
<td>ProPilot Checklist Cessna R182RG</td>
<td>13-05125</td>
<td></td>
</tr>
<tr>
<td>ProPilot Checklist Cessna TR182RG</td>
<td>13-05126</td>
<td></td>
</tr>
<tr>
<td>ProPilot Checklist Cessna Turbo T182</td>
<td>11-05194</td>
<td></td>
</tr>
<tr>
<td>ProPilot Checklist Cessna 172N</td>
<td>13-04940</td>
<td></td>
</tr>
<tr>
<td>ProPilot Checklist Cessna 206 NAV III</td>
<td>13-04941</td>
<td></td>
</tr>
<tr>
<td>ProPilot Checklist Cessna Turbo T206H</td>
<td>13-04942</td>
<td></td>
</tr>
<tr>
<td>ProPilot Checklist Cessna Turbo T206H NAV III</td>
<td>13-04943</td>
<td></td>
</tr>
<tr>
<td>ProPilot Checklist Cessna A36-927 up</td>
<td>13-05127</td>
<td></td>
</tr>
<tr>
<td>ProPilot Checklist Diamond DA20-C1</td>
<td>11-05195</td>
<td></td>
</tr>
<tr>
<td>ProPilot Checklist Diamond DA40-180</td>
<td>11-05196</td>
<td></td>
</tr>
<tr>
<td>ProPilot Checklist Piper PA28-161</td>
<td>13-04792</td>
<td></td>
</tr>
<tr>
<td>ProPilot Checklist Piper PA28-181</td>
<td>11-05197</td>
<td></td>
</tr>
<tr>
<td>ProPilot Checklist Piper PA28R-201</td>
<td>13-04794</td>
<td></td>
</tr>
<tr>
<td>ProPilot Checklist Piper PA28-161 Warrior II</td>
<td>13-04944</td>
<td></td>
</tr>
<tr>
<td>ProPilot Checklist Piper PA28R-201 Arrow</td>
<td>13-04945</td>
<td></td>
</tr>
<tr>
<td>ProPilot Checklist Piper PA34-200T Seneca II</td>
<td>13-04946</td>
<td></td>
</tr>
</tbody>
</table>

#### CHAPPS CHECKLISTS

Chapp’s Checker provides aircraft-specific, POH-accurate checklists for a number of airplanes. Made of heavy, plastic-laminated paper, the Checkers are top spiral bound and measure about 3 x 6.5 inches. Tabbed indexing of each page makes selecting the needed checklist a 2-second operation.

The checklists are presented in order of use during a normal flight. Emergency procedure checklists are boldly marked for quick access. In addition, there is a page on which you can write your local radio frequencies.

The POH checklists comprise just 85 percent of each Chapp’s Checker. The remaining 15 percent is composed of good piloting procedures, such as when to contact ground control or the tower. A separate page lists all of the aircraft’s V-speeds. The back cover provides general information about the aircraft in question, such as gross takeoff/landing weight, engine type, fuel capacity, and true airspeed, power settings, and fuel consumption (in gallons per hour) at different altitudes.

<table>
<thead>
<tr>
<th>Cessna Checklists</th>
<th>Part No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>C-150 (1959-1977)</td>
<td>13-03390</td>
<td></td>
</tr>
<tr>
<td>C-152 (1978-1985)</td>
<td>13-03391</td>
<td></td>
</tr>
<tr>
<td>C-172H (1967)</td>
<td>13-03392</td>
<td></td>
</tr>
<tr>
<td>C-172M (1973-1976)</td>
<td>13-03393</td>
<td></td>
</tr>
<tr>
<td>C-172N (1977-1980)</td>
<td>13-03394</td>
<td></td>
</tr>
<tr>
<td>C-172P (1981-1986)</td>
<td>13-03395</td>
<td></td>
</tr>
<tr>
<td>C-172Q (1983-1985)</td>
<td>13-03396</td>
<td></td>
</tr>
<tr>
<td>C-172R New (1996-)</td>
<td>13-03397</td>
<td></td>
</tr>
<tr>
<td>C-172S New (1997-)</td>
<td>13-03398</td>
<td></td>
</tr>
<tr>
<td>C-172RG (1980-1985)</td>
<td>13-03431</td>
<td></td>
</tr>
<tr>
<td>C-177B (1970-1978)</td>
<td>13-03399</td>
<td></td>
</tr>
<tr>
<td>C-182Q (1980-1986)</td>
<td>13-03401</td>
<td></td>
</tr>
<tr>
<td>C-182S New (1997-)</td>
<td>13-03402</td>
<td></td>
</tr>
<tr>
<td>C-182RG (1978-1986)</td>
<td>13-03403</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Piper Checklists</th>
<th>Part No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tomahawk (1978-1982)</td>
<td>13-03404</td>
<td></td>
</tr>
<tr>
<td>Cherokee 140 (1964-1977)</td>
<td>13-03405</td>
<td></td>
</tr>
<tr>
<td>Cherokee 180 (1963-1975)</td>
<td>13-03406</td>
<td></td>
</tr>
<tr>
<td>Warrior 151 (1974-1977)</td>
<td>13-03407</td>
<td></td>
</tr>
<tr>
<td>Warrior 161 (1997-1990)</td>
<td>13-03408</td>
<td></td>
</tr>
<tr>
<td>Archer II 180 (1976-1990)</td>
<td>13-03409</td>
<td></td>
</tr>
<tr>
<td>Arrow 180 (1967-1971)</td>
<td>13-03415</td>
<td></td>
</tr>
<tr>
<td>Arrow II (1973-1978)</td>
<td>13-03410</td>
<td></td>
</tr>
<tr>
<td>Arrow III 201(1977-1990)</td>
<td>13-03414</td>
<td></td>
</tr>
</tbody>
</table>
FLIGHT COMPUTERS

E6B METAL FLIGHT COMPUTER - The best slide-rule-style flight computer on the market, with solid aluminum construction and easy-to-read lettering. ASA's E6-B features a wind component grid and comprehensive cross-wind correction chart, and on the other side the slide computes time, speed, distance, altitude, true airspeed, and density altitude problems as well as conversions. Nautical and statute scales are included.

P/N 13-00813

E6B PAPER FLIGHT COMPUTER - Made from solid, heavyweight fiberboard, an economical version of the aluminum model described above including all its solving features.

P/N 13-02298

MICRO E6-B - This pocket-sized, brushed aluminum E6-B is a full function aviation computer. Popular among military pilots, it features a high-speed and low-speed wind correction slide, high-speed compressibility table, and instruction manual. Micro E6-B performs all the standard manual flight computer functions, and it conveniently fits in a shirt pocket or glove box.

P/N 13-02299

E6-B HIGH SPEED SLIDE - A companion product, this slide picks up where the traditional metal flight computer leaves off (ASA-E6B), providing calculations for the high-speed realm of flight (in the range of 220-700 knots or miles per hour). Pilots simply replace their current slide with this one, which then continues to use the circular computer from traditional E6-Bs. The slide also includes compressibility correction chart, ICAO Standard Atmosphere reference table, worldwide time conversion table, speed limits for the United States, and most frequently-used weight & balance formulas. All of the pertinent formulas & information required for high-altitude, high-speed operations. Meets both FAR & JAR (international) requirements.

P/N 13-02301

FOLDING LAP BOARD

This 9” x 16” flying desk has 2 large clips to hold in-flight necessities such as charts, flightlogs, and approach plates. Lost communications procedures for both VFR and IFR, light gun signals, position reports, frequencys, and transponder codes are silk-screened on the brushed aluminum lapboard for quick reference during emergencies. It folds in half when less space is needed and for convenient storage. Foam strips on the back keep the lapboard comfortably in place.

P/N 13-02314

TRI-FOLD KNEEBOARD

For the pilot who has a little more to juggle, the Tri-Fold Kneeboard uses the expertly styled VFR Kneeboard in a 3-panel jacket. The high-quality construction features durable material & double-sewn seams where extra stress takes place. The color is jet black with a logo attractively embroidered in silver on the front. The left panel has ample room for small books, papers and unusually shaped items. The center panel holds the kneeboard under clear plastic. Either side of the center includes a pen/pencil holder and buttonholes that allow the pilot to fold back one or both panels of the kneeboard with the legband. This is ideal when operating a cyclic or stick. The right-hand side contains a clear pocket for easy map viewing. The elastic legband has velcro closures and will comfortably fit any leg size. Try the kneeboard that puts everything at your fingertips.

P/N 13-06950

PLOTTERS

Durable Lexan® resin won’t melt, warp or break in extreme temperatures - guaranteed! Each plotter features 8 scales to meet the needs of all VFR aeronautical charts - nautical on one side, statute on the flip. Nautical-Statute conversion scale also included. Made in USA.

ULTIMATE ROTATING PLOTTER - 13-1/4” long. Rotating azimuth eases flight planning with direct readout of course. Made in USA.

P/N 13-02302

ULTIMATE FIXED PLOTTER - 13-1/4” long. Quick scale reference is provided for both statute and nautical miles. Made in USA.

P/N 13-02424

ULTIMATE MICRO PLOTTER - 8” long. Convenient for flight bag, shirt pocket, or airplane storage. Made in USA.

P/N 13-02303

INSTRUMENT PLOTTER - ASA’s instrument plotter features: 12 scales to accommodate both NOS & Jepp instrument charts, including a conversion scale for Nautical and Statute miles; holding patterns depicted for both Standard and Nonstandard entries; compass roses allowing quick course & bearing information; and professional layout enabling easy reading during en route spot checks.

P/N 13-02306

FIXED PLOTTER - Constructed of sturdy clear plastic with easy-to-read numbers and scales. It includes WAC, Sectional, and Terminal Area scales, and is checked and approved by the Weights and Measures Department. Quick scale reference is provided for both statute and nautical miles.

P/N 13-02304

ROTATING PLOTTER - Made from the same material and having the same features as the Fixed Plotter, but with the addition of a non-slip rotating azimuth to ease flight planning.

P/N 13-02307

ASA IFR & VFR KNEEBOARDS

These IFR and VFR Kneeboards are an attractive, light gray, brushed aluminum, instrument and visual information is clearly silkscreened on the boards so pilots can quickly reference rules at a glance when operating a cyclic or stick. All information on the Kneeboards match current Federal Aviation Regulations. The Kneeboards feature a comfortable 1.5” wide elastic legband that hugs the leg without binding. Velcro fasteners can be adjusted without removing the kneeboard and fits all leg sizes. A pencil/pen holder is designed into the leg for fast note taking. The Kneeboards also feature a 4-3/4” wide metal clip that is easy to lift and strong enough to hold NOS charts and other necessary papers. Paper-protector elbows secure material, yet papers won’t rip when pulled out.

VFR Kneeboards ........ P/N 13-06925
IFR Kneeboards ........ P/N 13-06930
ASA PILOT SUPPLIES

APPROACH PLANE BINDER
Made of durable black vinyl with a reinforced spine, it has easy-to-open, 1-1/2" steel rings that accommodate the drill pattern of the approach plates. ASA wings tastefully silver-foiled on the front cover. Choose from either 4-ring NACO or 7-Ring design.
NACO ...................... P/N 13-01066
7-Ring ...................... P/N 13-02316

FLIP BINDER
Perfect for Instrument Pilots who carry a smaller number of approach charts. One-inch rings are attached to a sturdy poly backing, with a loose poly cover. Scoring on front and back covers allows you to flip charts completely around the rings and display the one you want on top. Compact, convenient, and practical. P/N 13-02321

BINDER KIT
Contains 1 binder, 10 sheet protectors, 5 color side dividers and a sheet of area stickers. NOS kit also contains 3 color dividers which hang from the bottom.
NACO ...................... P/N 13-01065
7-Ring ...................... P/N 13-02322

ASA DELUXE RING BINDER
The Deluxe 2" 7-Ring Binder is made of richly-grained simulated leather with edge stitching. It’s bound for maximum durability and equipped with a ring system that will keep your approach plates securely organized and easily accessible. Convenient 8.5" x 9" size makes it easy to fit in almost any flight bag. ASA Deluxe 1" 7-Ring Binder ...................... P/N 13-05759
ASA Deluxe 2" 7-Ring Binder ...................... P/N 13-05760

ASA 1 INCH 7 RING TRIP BINDER
The 7-Ring Trip Binder is made of durable poly. It’s bound for maximum durability and equipped with a ring system that will keep your approach plates securely organized and easily accessible. The three rings are spaced to match the 7-hole approach plate drill pattern. Convenient 7" x 9" size makes it easy to fit in almost any flight bag. P/N 13-05825

SHEET PROTECTORS
Made of durable, translucent plastic to protect the most frequently used approach plates. Sold in packs of 10.
NACO Vinyl Pocket pk of 10 ...................... P/N 13-05820
7-Ring Vinyl Pocket pk of 10 ...................... P/N 13-02318
7-Ring Poly Pocket pk of 10 ...................... P/N 13-05821

5 COLOR DIVIDERS
For quick reference of various sections of both types of approach plate charts, these five distinctly-colored dividers extend out beyond the side of the charts. Set of 5.
7-Ring ................................ P/N 13-02323
4-Ring ................................ P/N 13-05826

ASA 4 RING NOTEPAD
Compact, convenient writing pad that fits in your approach plate binder. 100 sheets per pad. Weight 80lbs
7-Ring ................................ P/N 13-05823
4-Ring ................................ P/N 13-05822

CHART WALLETS
These chart wallets organize, hold, carry, and display standard FAA charts conveniently. All styles feature black covers, silver wings logo, and clear vinyl organizer pockets so you can easily find the correct chart in a busy or turbulent cockpit environment.

Accordion-Fold Chart Wallet - 10 map pockets plus front & back covers P/N 13-02334
Book-style Chart Wallet - 6 double-sided pockets holds up to 12 maps between the covers. P/N 13-02325
Large Book-style Chart Wallet - Pockets hold up to 22 charts between the covers. Riveted spine. P/N 13-00412

YOKE CLIP
ASA’s new yoke clip holds all the necessary flight paperwork right where pilots need it, leaving their hands free to fly. Simple to install, the black plastic I-Beam construction is strong enough to serve as a pilot’s third hand. The clip is higher than other yoke clips, holding sectional, approach plates, flight logs, checklists, flight computers, and pens in easy view. The unique, over-centering cam easily adjusts to fit all general aviation aircraft yokes without modification. P/N 13-01043

QUICK CHECK CARDS
A great reference tool for student pilots, pilots who fly more than one aircraft, or pilots flying at a new airport. Contains check-off pocket size pattern of the approach drills. Provides perfect access to aircraft V-speeds, weight and balance limitations, airport information, radio frequencies, and light gun signals. The durable plastic cards have room for pilots to write in their own data. Sold in packs of 5. P/N 13-02332

FLIGHT PLANNER SHEETS
Cross-country planning sheets contain a flight plan section, weight & balance calculation chart, special equipment suffix chart, fuel management, space for radio frequencies, & more. Sold in pads of 48. P/N 13-02331

STUDENT FLIGHT RECORDS
ASA Flight Record folders provide areas to record pertinent student information, stage checks passed, lesson content, lesson performance, flight hours, instructor notes & endorsements, solo endorsements or aircraft checkout records, and are current to both Part 61 & Part 141 program requirements. Sturdy vinyl construction, these flight records are available separately, as part of ASA’s pre-packaged training kits, or as part of an ASA PACK - Personalized Aviation Custom Kit.
SFR Private ...................... P/N 13-01548
SFR Commercial ...................... P/N 13-01549
SFR Instrument ...................... P/N 13-01551
SFR Helicopter ...................... P/N 13-01547

CERTIFICATES AVIATION ACHIEVEMENT AWARDS
Authentic, full-color certificates are perfect for framing yet sturdy enough to slip into the student’s flight record as a pleasant surprise to be discovered on their next visit to the airport. Mark progress with style, while further motivating students. 9”x12”. Sold in packs of 10.
Solo Flight Certificate ...................... P/N 13-02326
Private Ground School Certif. ...................... P/N 13-02327
Aviation Achievement Certif. ...................... P/N 13-02330
Helicopter Solo Flight Certif. ...................... P/N 13-02329

HOLDING PATTERN VISUALIZER
This useful tool shows a pilot which entry is appropriate given the assigned holding radial, making it a superb learning tool.
P/N 13-06940

LANDING PATTERN COMPUTER
Easily helps determine appropriate headings for each leg when landing or departing the airport - great teaching aid!
P/N 13-06935

HEADSET BAGS / FLIGHT BAGS

FLIGHT ATTACHE’
- Holds all the materials a student pilot needs. 15” long x 11” deep
P/N 13-02335

FLIGHT BAG
- 20 3/4” long x 7” deep
P/N 13-02336

SINGLE HEADSET BAG
- For those who like to fly with minimum baggage, this holds one headset, extra pockets, and all-around padding
P/N 13-02333

DOUBLE HEADSET BAG
- Double-sided, 1/4” padding everywhere; can hold two headsets
P/N 13-02334

ASA PILOT CAP
Pilot cap featuring comfort headband and classic wings logo. Stylish baseball cap. Black with classic grey trim neatly embroidered with white ASA wings. Adjustable headband for maximum comfort. No button to interfere with headset band. Long bill for sun protection. Perfect for cross-country flying, lounging with friends or on the tarmac hangar flying. Wear it proudly!
P/N 13-05841

688
AERO PRODUCTS RESEARCH CR COMPUTERS

CR computers are very popular with pleasure and professional pilots. They solve T/S/D and wind triangle problems for the light aircraft as well as those which approach Mach 2 speeds. Corrections for errors of compressibility and temperature rise are computed with ease. The wind solution is displayed graphically using the small back-side discs. Each computer comes with handsome vinyl case and fully illustrated manual.

CR-3 - 3-3/4" dia. shirt-pocket size (same as Jepp CR-5); vinyl
P/N 13-03499 ...........................

CR-4 - 4-1/4" dia. (same as Jepp CR-2); vinyl. Standard model used by the military.
P/N 13-03501 ...........................

CR-6 - 5-1/2" dia. Used by navigators for maximum readability (Same as Jepp CR-3); vinyl
P/N 13-03502 ...........................

AERO PRODUCTS RESEARCH FLIGHT DESK

Folded size 8" x 9" Extends to 16" x 9" Anodized aluminum. Versatile space-saver lap desk locks in open position; folds in half for drop-in storage in your flight case. Heavy-duty clips hold charts and flight plans. Important VFR and IFR information always visible when open. Foam strips on back keep lap desk from slipping...P/N13-03517 ...........................

AERO PRODUCTS RESEARCH TIME/ SPEED/ DISTANCE COMPUTER

P/N 13-01133 ...........................

THE ATIS WHEEL

Atis Wheel - Pilots and aircrew now have the ability to reduce their pre-landing and pre-takeoff workload through the use of the amazing new Atis Wheel™.

The Atis Wheel™ is a mechanical device designed to help the airplane pilot in recording all ATIS information while presenting the data as a graphic depiction. The Atis Wheel™ is presented on a 5.5" x 8.5" rectangular durable format with seven individual 1.5" wheels positioned around the perimeter of the device along with two, 3" concentric wheels positioned in the center. Each wheel's topic coincides with the sequential information reported in the airport terminal broadcast. Once the information is entered onto the Atis Wheel™, this displayed information is now available to the pilot for continued reference without the possibility of transcription error or forgetting the pertinent ATIS data. (It is recommended that the pilot listen to the pre-recorded ATIS information twice to verify that the correct information has been entered on the Atis Wheel™. The Atis Wheel™ information coincides with the sequential layout of the Atis Wheel™, providing the pilot with all of the ATIS information while presenting the data as a graphic depiction.

The Atis Wheel™ also displays clearly the visual relationship between the wind direction and the active runway, informing the pilot as to the pending cross wind takeoff and landing situation.

The Atis Wheel is 5-1/2" x 8-1/2" and fits nicely into a Jeppesen binder, This is a large format preferred by flight instructors and students. Atis Wheel Pro - Like the Atis Wheel, but smaller (approximately 3.5" x 5.5") for the professional pilot to conveniently fit in a shirt pocket for quick and easy reference. Note, the Atis Wheel Pro does not contain the "Wind Velocity", Visibility or RWY/Approach wheels like its big brother. APR Instrument Panel Placard Set...P/N 13-03522 ...........................

AERO PRODUCTS RESEARCH T/S/D COMPUTER KEYCHAIN

1-1/2" diameter. Identical to the real thing, this traditional usable Time-Speed/Distance keychain has a beautiful compact star with the back side display of all the pertinent flight information.

The computer keychain is calibrated meaning the ability to relate the key chain to the functions of the E5-B type Time-Speed/Distance computers. P/N 13-03555 ...........................

AERO PRODUCTS RESEARCH CR COMPUTERS

SIMPLIFY VFR OR IFR NAVIGATION WITH THESE HANDY LOGS WHICH PROVIDE FOR LISTING OF INTERSECTIONS, RADIALS, FREQUENCY, CLEARANCES AND COMPLETE FLYING PLAN.

EFL-100 Pad of 5-1/2" x 8-1/2" sheets; P/N 13-03522 ...............

EFL-200 Pad of 5-1/2" x 8-1/2" sheets; IFR Flight Logs
P/N 13-03525 ...........................

AERO PRODUCTS RESEARCH PLACARDS

Now you can customize your cockpit with APR’s easy-to-apply placards. Just cut out and press these stick-ons into place for that “factory-fresh” cockpit look. For all single and multi-engine aircraft systems, seaplanes, and gliders. APR’s placards includes most-used legends (on, off, open, close, etc.), common amperage, voltage values, arrows, numbers and blanks. 8-1/2" x 10-1/2" aircraft panel placard set; over 250 aluminum placards.

AERIAL PRODUCTS CR COMPUTER KEYCHAIN

Now you need a quick ATIS recall. P/N 13-04920 ...........................

EXPERIMENTAL AIRCRAFT CERTIFICATION KIT

A new amateur-built aircraft certification kit created by the Experimental Aircraft Association (EAA) gives builders a simplified way to complete the required FAA paperwork for their new projects. The Amateur-Built Aircraft Certification Kit includes everything you need to register and certify a new experimental amateur-built aircraft in the United States. The 15-page, step-by-step guide walks you through the entire process from getting an N-number to the aircraft inspection, and provides samples to help complete each required form. The kit includes all FAA forms, Experimental sticker (in black), data plate, and a convenient placard decal sheet.

P/N 13-04244 ...........................

SPORT PILOT PRE-PRINTED LOGBOOK ENDORSEMENTS

The Instructors Endorsement Pack contains 14 sheets of labels. Each sheet of labels contains 10 copies of a specific endorsement. Each 2" x 4" endorsement label is identified by title and FAR number, has the exact wording as required by the regulations, and has data-prompted blanks for the students’ name, your name, CFI cert., Biennial Flight Review Certification 61.56(a).

P/N 13-01321 ...........................

Description                                           Part No.  Price
INSTRUCTOR ENDORSEMENT PK ENPAK                      09-01310  32.00
PRE-SOLO PERSONAL AERONAUTICAL KLN 61768             09-01311  5.00
PRE-SOLO FLIGHT TRAINING 61767                       09-01312  5.00
PRE-SOLO TRNG & 90 DAY BNL                            09-01313  7.00
SOLO AT ANOTHER AIRPORT 6193B                        09-01314  24.00
IST SOLO X-C 61.93(C)(1) 6193G                       09-01315  3.50
SOLO X-C 61.93(C) 6193G                               09-01316  6.00
REPEATED SOLO X-C<650NM6193B                          09-01317  5.00
SOLO IN CLASS B.C.D & 6144A                           09-01318  4.00
SOLO TO FROM CLASS B.C.D & O                       09-01319  4.00
TAKING KNOWLEDGE TEST 61305A                         09-01320  3.50
PROFICIENCY CHECK 61321                              09-01321  6.00
PASSING FLIGHT TEST 61309                            09-01322  6.00
TAKING SPORT PILOT PRCT 61313                        09-01323  6.00

SP - PS
FLIGHT COMPUTERS

CX-2 PATHFINDER ELECTRONIC FLIGHT COMPUTER
ASA’s new electronic flight computer is a price/performance breakthrough, resulting from advances in display and microcomputer technology. Aviators can calculate true airspeed, ground speed, mach number, altitudes, fuel headings and courses, time/speed/distance, winds, headwind/crosswind components, glide info and weight & balance.

P/N 13-01040..........................

JEPPSENE CIRCULAR COMPUTERS
Dial up the answers to your navigation problems, including polar grid navigation, pressure pattern flying, crosswind components, and wind solutions. These computers automatically compensate for the temperature and compressibility factors found at high speeds. Tough laminated plastic, with carrying CR-3 (6” diam.)....................... P/N 8434

PN-1 NAVIGATION PLOTTER
Allows easy identification of WAC and Sectional chart scales. Calibrated in statute & nautical miles. (Size: 12.25” x 4’) P/N 13-21724

PJ-1 ROTATING AZIMUTH
Measure the true course or to determine the magnetic course. Includes scales for sectional terminal area & WAC charts in statute & nautical miles. Size: 3.25 x 13’. 3-3/8” Dia. P/N 13-21726

PV-5 IFR ENROUTE PLOTTER
Folding Navigation Plotter (Size: 3-3/16 x 8-1/2”) Pocket sized, folded out to full size (15”). The course line extends the entire length to measure true course from line of latitude or longitude. Scales for WAC, Sectional and TCA charts are calibrated in nautical miles, statute miles and kilometers. Folded Size: 2-3/4” x 3-3/16” P/N 13-21722

AERO PRODUCTS RESEARCH E6-B UNIVERSAL FLIGHT COMPUTERS
The very latest in air navigation computers include not only T/S/D and Dead Reckoning calculations, they now incorporate “Universal” features for world-wide use. Most E6-B computers include the following:

★ Improved Speed and Distance Calculations
★ The back side of the wind slide features scales for Sectional and WAC charts and new graphic instructions on how to work the computer.
★ Formula Boxes - Designed to assist in solving problems. Enter the indicated details using a pen or pencil - then erase

★ Fully Graduated Scales
★ Wind Slides with speed ring lines representing values of one. This eliminates the need for interpolating between “every other” speed ring and reduces possibility of error.


P/N E6-82U..........................

E6-B8 - Budget student computer, plastic body, plasticized wind slide... P/N 13-03495

E6-88P - Budget student computer, plastic body, plasticized wind slide; includes an 8” Navigation Plotter...... P/N 13-03496

PILOT’S WIND VISUALIZER
The Wind Visualizer takes the guesswork out of crosswind takeoffs and landings. Simply put the pointer on the wind direction, the Landing Pointer on the Runway heading, and “see” the wind in relation to your direction of flight. Then read your crosswind component from the table on the back. Simple, and fast to use. Durably non-warping 3.75” diameter plastic. Includes full instructions.

P/N 13-19920..........................

RADIALMATE COMPASS ROSE
RadialMate™, a 3-5/8” diameter compass rose allows you to instantly read a desired course by placing the product over any sectional, chart, or graphic. There are no reciprocals to calculate. RadialMate™ comes with a hole in the middle, allowing additional use as a string compass. It is conveniently sized to fit in your pocket. RadialMate™ also contains Safe Flight’s vertical scale which measures mileage for WAC, SEC, TAC, NOS, JEPPE and ELA charts eliminating the need for that ruler you can never find.

P/N 13-06799..........................

PDQ COMPUTER
The PDQ Computer is a quick visual presentation of the traffic pattern at your airport of arrival. Easy to use and operate with one hand; the PDQ shows you the 45° entry, downwind, base and final approach to the active runway. Durable plastic construction. Instructions included. P/N 8319..........................

JEPPSENE STUDENT CSG COMPUTERS
This computer made of composite materials works just like an aluminum computer with all the same functions and features, but at a lower cost. Ideal for new students or as an extra to keep in your desk at home. Printed numbers are sharp, clear, and easy to read. Like all Jeppesen products, the quality is superior.

Plastic........................................ P/N 3866

Metal........................................ P/N 3867

EZ-VOR (A VOR TRAINING TOOL FOR STUDENT PILOTS)
Ever wish you could quickly determine where you are in relation to a VOR? I thought I was the only one! There are too many pilots that simply dial in a “TO” reading and fly to the VOR. Now you don’t have to! EZ-VOR is designed to allow anyone, pilot or not, to quickly and easily determine the relative direction to the VOR. Simply dial in your heading, your OBS setting and with a quick glance at your “TO - FROM” indicator and “Left & Right” needle deflection, your position relative to the VOR is amazingly apparent. Best of all, the directions are printed right on the back, no ten page manual to read! Small enough to fit on most kneeboards (5-1/2” in diameter) yet large enough to see clearly and accurately.

E-Z-VOR® P/N 13-04305

ASA E6B METAL FLIGHT COMPUTER
The best slide-rule-style flight computer on the market, with solid aluminum construction and easy-to-read lettering. ASA’s E6-B features a wind component grid and comprehensive crosswind correction chart, and on the other side the slide computes time, speed, distance, altitude, true airspeed, and density altitude problems as well as conversions. Nautical and statute scales are included.

Standard........................................ P/N 13-00813

Mini........................................ P/N 13-02299

VOR FLASH CARDS
Designed to show any pilot how to look at a VOR receiver and read it at a glance. There’s no time in the cockpit to spend slowly analyzing the CDI needle and To/From indicator! VOR-At-A-Glance flash cards will teach you:

★ The difference between VOR course and VOR radials
★ What the VOR does not show you
★ The best way to think about the course deviation indicator
★ Inbound vs. outbound course indications
★ How to instantly know your position relative to the VOR
★ Tricks for reading intersection courses right off the VOR

Pilots need to be able to look at a VOR and read the information off immediately. It’s just like when you first learned how to read. There is a big difference between the ability to sound the words out and the ability to look at a work and just read it. Pilots need to be able to “read” the VOR!

P/N 13-05773

690
**PLOTTERS - COMPUTERS**

**PLOT-RITE ALL METAL NAVIGATION PLOTTER**

The new Plot-Rite is an all metal navigational plotter for use with VFR sectional, terminal and WAC charts. The front has both sectional and terminal area scales and the rear has WAC and sectional scales. The top edge has the familiar 180° compass rose and the open center enables you to find longitude lines easily. Outside edges have full east and west routes, inside edges have north and south. Plot-Rite is all metal and will never break, warp, crack, shrink or distort in any way if left in the sun. Measures 2.5” x 12”. Plot-Rite (Nautical Scale)

P/N 13-30300

**THE AIRMILER TAPE MEASURE FOR CHARTS**

An essential tool for every flight planning kit. A durable metal tape measure for measuring miles on aeronautical charts. Sectional Scale (1:500,000) on one side, and WAC scale (1:1,000,000) on the other side. Kilometers, statute and nautical miles are shown on both sides.

P/N 8536

**APR POWER WHEEL HORSEPOWER COMPUTER**

Only device that we know of which can calculate your aircraft engine’s power based on so many important factors. Using the RPM, manifold pressure, altitude and outside air temp, the pilot can use the Power wheel to calculate horsepower (as a % of max rated hp) very quickly and easily. Its calculations are based on years of work done by the engine experts at Advanced Pilot Seminars and GAMI. Their calculations have proven their accuracy and worth to the pilot over years of use. Beyond the immediate answer to the question “How much power is my engine producing?” the information is useful in the pilot over years of use. Beyond the immediate answer to the question “How much power is my engine producing?” the information is useful in

**APR PLOTTERS**

Scales on white background for easy readability set on see-through “clear vision” vinyl. Statute and nautical scales are parallel, making conversion easy. One side scaled for WAC charts, one for Sectional charts. “How-to-Use” instructions printed on plotter. Includes illustrated practice problems.

<table>
<thead>
<tr>
<th>Description</th>
<th>Part No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>8” Plotter NP-7 Standard for WAC and Sectional Charts</td>
<td>13-19908</td>
<td>.</td>
</tr>
<tr>
<td>13” Plotter NP-13 S standard for WAC and Sectional Charts</td>
<td>13-19913</td>
<td>.</td>
</tr>
<tr>
<td>13” Plotter WSNP-13 WAC and Sectional Charts (Lexan) Lifetime Guarantee</td>
<td>13-03509</td>
<td>.</td>
</tr>
<tr>
<td>13” Plotter NPR-13 Rotatable Azimuth WAC and Sectional Charts</td>
<td>13-03511</td>
<td>.</td>
</tr>
<tr>
<td>13” Plotter WSNPR-13 Lifetime Guarantee Rotatable AzimuthWAC and Sectional Charts (Lexan)</td>
<td>13-03512</td>
<td>.</td>
</tr>
<tr>
<td>Universal IFR Plotter UVP-V (Same as Jeppesen PV-5) Jepp/NOS Charts Holding Pattern Entry Vinyl</td>
<td>13-03514</td>
<td>.</td>
</tr>
<tr>
<td>Universal IFR Plotter RFC-1 Jepp/NOS Holding Pattern Prompter Decal 3-1/2 x 8”</td>
<td>13-03513</td>
<td>.</td>
</tr>
<tr>
<td>13” Plotter FAA-170 Military WAC and Sectional Charts</td>
<td>13-03516</td>
<td>.</td>
</tr>
</tbody>
</table>

**INTERNATIONAL NAVIGATION PLOTTERS**

<table>
<thead>
<tr>
<th>Description</th>
<th>Part No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Plotter/Protractor CPP-5 Douglas International Combination Plotter/Protractor</td>
<td>13-03506</td>
<td>.</td>
</tr>
<tr>
<td>13” ICAO Plotter IPP-13 Rotatable Azimuth, Nautical Kilometer Scales</td>
<td>13-03508</td>
<td>.</td>
</tr>
</tbody>
</table>

**PLOTS AND SLIDE COMPUTERS**

These are specially-designed for easy use. The APR plotter has parallel statute and nautical scales and one side scales for WAC charts and the other for sectional. Made of clean white heat-resistant hi-flex vinyl. Operating instructions are included. The slide computer is printed with speed ring lines representing values of one speed unit. Includes formula boxes added to the plate below the azimuth ring.

8” APR Plotter
P/N 13-19908

13” APR Plotter
P/N 13-19913

E6-B4 Aluminum
P/N 13-03960

**E6-B HIGH SPEED SLIDE**

This picks up where the ASA-E6B metal flight computer leaves off, providing calculations for the high-speed realm of flight (in the range of 220-700 knots or mph). Pilots simply replace their current slide with this one, which then continues to use the circular computer from traditional E6-Bs. The slide also includes a compressibility correction chart, ICAO Standard Atmosphere reference table, a worldwide time conversion table, speed limits for the U.S., and the most frequently used weight and balance formulas; all of the pertinent formulas and information required for high-altitude, high-speed operations. Comes with easy-to-follow instructions.

E6-B High Speed Slide
P/N 13-02301

E6-B Flight Computer
P/N 13-00813

**WHIZ WHEEL HOLDING PATTERN COMPUTER**

For instrument pilots, entering a holding pattern can sometimes be a challenge. The Instrument Pilots Whiz Wheel Can alleviate this challenge by presenting pilots with pictorial views of both left-hand and right-hand holding patterns, and entry arcs for direct, parallel, and teardrop holding pattern entries. Made of sturdy plastic, the Whiz Wheel works for VOR, NDB (non-directional beacon), and localized facilities. Intercept angles are at the pilot’s fingertips, and procedure turn information can readily be obtained by following the “prompts” on the device and aligning these prompts with the Whiz Wheel’s compass marking. Intersection holding patterns can be pictured and coordinated using both VOR radials and cardinal headings.

P/N 13-30210

**DIRECTIONAL GYRO HOLDING PATTERN PROMPTER DECAL**

Install this decal upon the face of your directional gyro and instantly determine entry procedures for both left-hand and right-hand holding patterns. Also includes prompts for headings used in teardrop procedures and procedure turns. Tota. transparent, Impasse instruc-

**PILOT’S “TIME MACHINE”**

Convert the 12 hour clock to the twenty-four hour clock and vice versa. Universal Coordinated Time (UTC). Time zone calculations, fuel duration calculation can be determined with this new instrument. Use it to file accurate flight plans and to give position reports.

P/N 13-30252

**TRAFFIC PATTERN ORIENTER & SPEED COMPUTER**

Graphically displays the headings required for standard or non-standard traffic patterns. Time, speed, distance computations, fuel consumption, true airspeed, mach and true altitude conversions.

P/N 13-01133

**JEPPSESEN PV-5 IFR ENROUTE PLOTTER**

Size 3-3/16” x 8-1/2”

P/N 13-21718

**APR FCL-12 & 24 FLIGHT CHECKLIST HOLDER**

Used by private, corporate, and military pilots. Adjustable lighting and viewing angle, color band isolates each item being checked. Mounts for right or left hand use. 84” parchment scroll lets you customize your specific checklists for review in flight. Designed to U.S. Military Pilots specification. 5” x 4” x 1-1/2” NSN 1680-00-489-1313

APR FCL-12 Flight Checklist Holder
P/N 13-06714

APR FCL-24 Flight Checklist Holder
P/N 13-06715
**AERO PRODUCTS RESEARCH PRODUCTS**

**APR PLOTTERS & KNEEBOARDS**

**PROTRACTOR PLOTTER PCP-202 T/S/D** - APR has designed the first combination T/S/D pocket computer combined with rotatable plotter cursors. Align the aircraft’s rate of climb and minimum-required takeoff distance. PVC plastic discs. 3-3/4" dia. Anodized aluminum. 4-7/8" x 8-7/8".

**T/S/D PROTRACTOR PLOTTER PCA-302** - APR has designed the first combination T/S/D pocket computer combined with rotatable plotter cursor. Align the airplane’s rate of climb and minimum-required takeoff distance. PVC plastic discs. 3-3/4" dia. Anodized aluminum. 4-1/2" x 9-1/2".

**TRAFFIC PATTERN ORIENTATOR TPA-303** - The TPA-303 Traffic Pattern Orientator graphically displays all headings for left (standard) and right (non-standard) traffic patterns when the runway heading is aligned with the compass rose. Light signal “acknowledging” instructions are also shown. PVC Plastic discs. 3-3/4" dia. Cursor 4-1/4".

**DENSITY ALTITUDE PERFORMANCE COMPUTER DAP-204** - The Density Altitude Performance computer shows the aircraft’s rate of climb and minimum-required takeoff distance. PVC plastic discs. 3-3/4" dia. Anodized aluminum. 4-1/2" x 8-3/4".

**DENSITY ALTITUDE PERFORMANCE COMPUTER DAA-304** - The Density Altitude Performance computer shows the aircraft’s rate of climb and minimum-required takeoff distance. Anodized aluminum discs. 3-3/4" dia. Importantly, this computer does not supplement or replace the manufacturer’s performance data. Not applicable to turbocharged aircraft. PVC Plastic discs. 3-3/4" dia. Anodized aluminum. 4-7/8" x 8-7/8".

**DNP-13** - 13" Deluxe Navigation Plotter with nautical and statute scales, sawtooth graduated color-coded scales for Sectional, WAC, and Terminal Charts. PVC plastic 13-5/16" x 4". Anodized aluminum. 4-7/8" x 11-1/8".

**DNP-8** - 8" Deluxe Pocket Navigation Plotter with sawtooth graduated color-coded, nautical, statute, and terminal area scales for Sectional, WAC, and Terminal Charts. PVC plastic 8-3/4" x 3-1/4". Anodized aluminum. 4-7/8" x 11-1/8".

**DNP-13** - 13" Deluxe Navigation Plotter with nautical and statute scales, sawtooth graduated color-coded scales for Sectional, WAC, and Terminal Charts. PVC plastic 13-5/16" x 4". Anodized aluminum. 4-7/8" x 11-1/8".

**P-IFR** - Professional Pilot’s Deluxe IFR Flight Kneeboard. Essential IFR flight information printed on top of kneeboard, large clip opens to 1" for approach book, adjustable strap. Board will manually rotate to best writing angle. Anodized aluminum, 9-1/2" x 9-3/8".

**P-VFR** - Professional Pilot’s Deluxe VFR Flight Kneeboard. Essential VFR flight information printed on top of kneeboard, large clip opens to 1" for approach book, adjustable strap. Board will manually rotate to best writing angle. Anodized aluminum, 9-1/2" x 6-3/8".

**LOW & HIGH SPEED SLIDES**

- **LOW & HIGH SPEED SLIDES**
- **E6-B2 D** with High Speed Wind Slide of 0 to 900 knots at pressure altitudes of 10,000 to 50,000 feet. Crosswind grid shows method to calculate crosswind and headwind components. Anodized aluminum computer. 4-7/8" x 11-1/8".
- **E6-B5** - Universal Standard Wind Triangle & T/S/D Large anodized aluminum computer. Calculates all necessary flight planning and enroute navigation requirements. Easy to learn and use with the instructions printed on the computer. 4-1/2" x 8-3/4".
- **JNP** - Enroute IFR Radio Facility Chart Plotter for NACO and Jeppesen Radio Facility Charts, 12 high visibility scales, displays entry diagrams of standard and non-standard holding pattern, compass rose plotter, km to nm and nm to km conversion scales. PVC plastic 8-3/4" x 3-1/4".
- **DJNP** - Deluxe Enroute IFR Radio Facility Chart Plotter for NACO and Jeppesen Radio Facility Charts, 12 high visibility scales, displays entry diagrams of standard and non-standard holding pattern, compass rose plotter, km to nm and nm to km conversion scales. Lifetime guarantee, LEXAN® 8-3/4" x 3-1/4".
- **P-VFR** - Professional Pilot’s Deluxe VFR Flight Kneeboard. Essential VFR flight information printed on top of kneeboard, large clip opens to 1" for approach book, adjustable strap. Board will manually rotate to best writing angle. Anodized aluminum, 9-1/2" x 6-3/8".
- **P-IFR** - Professional Pilot’s Deluxe IFR Flight Kneeboard. Essential IFR flight information printed on top of kneeboard, large clip opens to 1" for approach book, adjustable strap. Board will manually rotate to best writing angle. Anodized aluminum, 9-1/2" x 9-3/8".
ON COURSE AVIATION PRODUCTS CHART MARKS

Customize your charts with these highly visible, self-sticking, removable accents, outlines, & notes. A compass rose provides ample space for navigation, time, distance, altitude, & weather details. A great tool for developing a pilot's holding techniques, especially for issued, nonpublished holds.

- No need to pick up a plotter or scale to determine distance along your course line. Removable after flight or repositionable in flight for diversion to an alternate airport.
- Easily estimated distances along your flight path. 60 NM (10") for cockpit use. Order both.
- Course line is graduated in nautical miles with distinctive 5 & 10 mile “Tick” marks.
- Holdup until you try it. P/N 13-03365

HOLD UP HOLDING SITUATION INDICATOR

The Holdup is so easy to use that directions are provided on the device only because rust can occur. Top on a pilot's holding techniques, especially for issued, nonpublished holds. They remind you how to set up intersection holds and station holds. If you forget. There's also a built-in way to set up station holds in a single step. Then, in both cases, you just find your heading to the fix on the compass dial, and read the entry in the zone directly above it. In a typical intersection, there are 8 (eight) possible holds that can be assigned. "Hold south of OR-VIL intersection on the 340° radial, left turns?" You won't believe how easy this is with The Holdup until you try it. P/N 13-03365

HOLDING PATTERN AID

How would you like to increase the chances of passing your instrument rating? Did you know that area that instrument applicants fail their check ride is Holding Patterns? It is not the hold itself, but the ENTRY procedure that causes the applicant to fail. Try the Pattern Aid with this simple to use static cling overlay. Simply place the arrow on the radial that you are instructed to hold on, and the holding pattern is overlaid on top of your heading indicator. The HPA helps you visualize the pattern quickly and easily, while increasing necessary situational awareness. No need to shuffle in your bag for a piece of cardboard or draw a picture on your knee board, the HPA will stick to your aircraft window and you need it. One when you need it. It has a built in magnifying lens to clearly enlarge the line print on sectional charts. Made of heavy duty, extra strong, cast acrylic, printed in two colors with holding patterns and intersection marks. Available in 2 sizes, 80 NM (16") for flight planning, 60 NM (10") for cockpit use. Order both.

VOR/ADF MAGNETIC TRAINER

A great tool for demonstrating VOR and ADF navigation, the Magnetic Trainer includes an Instrument Board and a Wind Correction Position Board, as well as an Accessory Kit with movable instrument indicators, rotating compass cards, a TO/FROM indicator, RMI designator sign, wind direction indicators, and miniature airplanes. This replacement accessory kit for the VOR/ADF Magnetic Trainer includes movable instrument indicators, rotating compass cards, a TO/ FROM indicator, RMI designator sign, wind direction indicators, and miniature airplanes in various colors. P/N 13-05878

UNBREAKABLE SUPER PLOTTER

Here’s a special flight planning tool we really like. A colorful little plotter with a rotating azimuth that makes it easy to plot a course line. Place the compass rose over your departure point and rotate the straight edge towards destination. Presto... an instant readout of your course! Reades distance in statute miles or nautical miles for both sectional and VFR charts. Made of bullet proof Lexan. Won’t crack, break, or warp in extreme hot or cold weather.

FLIGHT FORMS

Pilot designed for pilot use – convenient knee-brace size (5.5"x8.5"). Color coded for instant recognition. Indispensable and easy to read! Every flight-form comes with an FAA Flight Plan form. Each COMM-AID form also includes a three leg En-Route NAV-Log.

VFR CROSSTRACK FLIGHT PLANNING FORM – With step-by-step instructions, Folds to kneeboard size (5.5"x8.5") yet leaves all En-Route and destination information exposed for orderly display of in-flight information. Includes sections for weight and balance, fuel management, course marks, flight plans, and aircraft diagrams.

EN-ROUTE NAV-LOG – For the more advanced VFR pilot, a lineleg En-Route NAV-log provides ample space for navigation data, time, distance, altitude, & weather details. A great tool for developing a pilot’s holding techniques.

WX-BRIEF FORMS – WX-BRIEF forms take the mystery out of talking to briefers or controllers. Logical arrangement in correct briefing sequence eliminates confusion. The WX-Brief form is arranged in briefing format to simplify note taking and increase understanding. Simply fill in the blanks as the FSS specialist gives a standard briefing.

IN-BOUND OR OUT-BOUND COMM-AIDS – Inbound or outbound Comm-Aids organize your communications before takeoff. Know what to say and when to say it sections for ATIS, Clearance, Ground, Tower, Departure, & Approach.

For use in class B, C, & D airspace (25/pad)

In-Bound... P/N 13-30117

Out-Bound... P/N 13-30118

FOR USE IN CLASS B, C, & D AIRSPACE (25/PAD)

FROM Indicator, RMI designator sign, wind direction indicators, and miniature airplanes. This replacement accessory kit for the VOR/ADF Magnetic Trainer includes movable instrument indicators, rotating compass cards, a TO/FROM indicator, RMI designator sign, wind direction indicators, and miniature airplanes in various colors. P/N 13-05878

FLITE-TAPE

NAVPRO specifically designed the Flite-Tape for aeronautical use. It is available for either Sectional (1:500,000) or WAC (1:1,000,000) charts and is graduated in nautical miles. The Sectional Flite-Tape measures up to 500 n.m. and the WAC Flite-Tape measures up to 1,000 n.m.  This practical product offers you many advantages, for instance: • Measure the distance between any two points on a chart with out “stepping off” (a typical Sectional Chart measures 375 n.m., a corner to corner) • Establishes an instant course between distance points in an instant. • Flexible tape is ideal for cockpit use and on pilots lap. The Flite-Tape is pocket size (2” x 1-3/4” x 1/2”). Steel tape is housed in a high impact plastic case. The locking mechanism means you extend only as much of the Flite-Tape you need. The Flite-Tape’s unique end-piece is easy to position over a check point. Flight-Tape is a quality product and comes in a vinyl storage pouch.

FLITE-TAPE Sectional Charts... P/N 13-01038............................$8.50

FLITE-TAPE WAC Charts...... P/N 13-06001............................$7.95

FLITE-TRAC

Flite-Trac is specifically designed for aeronautical use. It simplifies measuring headings from aeronautical charts by reading naturally. Flite-Trac uses a complete 360° compass rose, and avoids any confusion in determining heading. Its square shape, aided by parallel grid lines, aligns easily with the lines of latitude and longitude on the chart. This logical protractor offers you several advantages in the cockpit: • It is less awkward than a typical plotter, yet shows the complete compass rose on a larger scale. • Measures short distances in flight. Its grid is to a 5 n.m. scale on a Sectional chart and has a short distance scale for quick in cockpit use. • Magnetic variation formula is printed directly on a Flite-Trac to give you confidence in giving the best heading. Flite-Trac avoids the necessity to slide a plotter to a map grid line or the need to use parallel rules. Flite-Trac is a quality product made of lexan in the USA. It will not warp in a hot aircraft.

P/N 13-01039

CUSTOMIZABLE FLIGHT PLOTS

COURSE LINE

End the confusion of multiple pen or pencil lines on your sectional chart. This transparent tape, brightly printed in a highly visible color, is graduated in nautical miles with distinctive 5 & 10 mile "Tick" marks. No need to pick up a plotter or scale to determine distance along your course line. Removable after flight or repositionable in flight for diversion to an alternate airport. 1/2"x 2050 nautical miles (sectional scale) w/ dispenser...

P/N 13-30114
KNEEBOARDS

**VFR/IFR NAVBOARD & CHARTSAVER**

Hold charts between two clear plexiglass surfaces for inflight reference. Visible from both sides, so you can use two charts. One facing in each direction. Mark plexiglass with grease pencil without defacing chart. Pilot course lines, destinations, checkpoints, headings, vectors, etc., directory on surface. Revisions can be made during flight, easy to erase after flight. Charts stay fresh and reusable many times. Measures 12” x 10”.
P/N 8154

**SOFT-G PLUS KNEEBOARD**

This kneeboard is originally designed for high performance fighter & attack aircraft. Standard features include: reversible clip board which allows pocket and document loops to be reversed right or left side, 1-1/2” wide adjustable plastic strap, clear plastic information pocket, removable document loops, 4 elastic pen/pencil slots, side release buckle, durable wire clip, and NEG-G strap.

The performance package includes: information cards, clear document protectors, removable document protectors, and releasable cable ties (holds document protectors securely to kneeboard).
P/N 13-12656

**TRIFORM KNEEBOARD**

The standard features include: right and left light pockets that double as pen/pencil pockets, 1-5/8” wide adjustable plastic strap, 4 clear plastic information pocket, right & left document loops, side release buckle, durable wire clip, and padded backing.

The performance package includes: information cards, clear document protectors, flex light with fixed or adjustable beam, and releasable cable ties (holds document protectors securely to kneeboard) optional.
P/N 13-12660

**9-G PLUS KNEEBOARD**

This kneeboard is originally designed for high performance fighter and attack aircraft. The standard features include: right and left light pockets that double as pen/pencil pockets, 1-5/8” wide adjustable plastic strap, 3 clear plastic information pocket, right and left removable document loops, side release buckle, easy access pocket, durable wire clip, and padded backing.

The performance package includes: information cards, clear document protectors, removable document protectors, and releasable cable ties (holds document protectors securely to kneeboard).
P/N 13-12651

**MINI TRIFORM KNEEBOARD**

This mini trifold kneeboard measures 8” x 16-1/2”. The standard features include: reversible clip board which allows pocket and document loops to be reversed right or left side, 1-1/2” wide adjustable plastic strap, clear plastic information pocket, removable document loops, 4 elastic pen/pencil slots, side release buckle, durable wire clip, and NEG-G strap.

The performance package includes: information cards, clear document protectors, removable document protectors, and releasable cable ties (holds document protectors securely to kneeboard).
P/N 13-12666

**JEPPSENE IFR THREE-RING TRIFOLD**

The Jeppesen three ring trifold is great for holding approach charts and features three approach chart pockets, collapsible rings, elastic pen / pencil / penlight holders, and valuable IFR flight information on the clip board. Includes free U.S. Low altitude planning chart. Size: 10” x 20” open.

Kneeboard/Clipboard P/N 13-06956
IFR Clipboard only with leg strap P/N 13-06956-1

**VFR KNEEBOARD**

This kneeboard places information at your fingertips. It holds charts, flight computers and much more. An elastic leg strap holds this unit comfortably in place with a velcro closure. The metal clipboard (also available separately) contains valuable information for your VFR flight needs. An additional strap is included allowing you to use your clip board independent of the kneeboard. You are really getting two products in one.

Kneeboard/Clipboard P/N 13-06955
IFR Clipboard only with leg strap P/N 13-06955-1

**AERO PRODUCTS RESEARCH KNEEBOARDS**

5-3/4” X 10” X 2-1/2” Deluxe kneeboard. Official Air Force and Navy models with quick-release buckles and non-slip foam strips to keep the unit in place. Each model includes 2 heavy-duty paper clamps, pen/holder. This is the unlighted version of MUX-183/C. Anodized aluminum. Meets all military specs.

MK-2A/C P/N 13-03521

5-3/4” X 10” X 2-1/2” Contoured base, non-slip kneeboard. 3” positive ext. clip for approach plates, etc. Pencil holder, comfortable leg strap, sturdy, lightweight. Black, non-glare aluminum.

MK-9 P/N 13-03520

6” X 8-3/4” VFR kneeboard lists flight plan sequence, tower light signals, time zones, visibility and distance-from-cloud requirements plus much more. Anodized aluminum. Includes flight logs.

0-100 P/N 13-03518
0-150 P/N 13-03519

6” X 8-3/4” IFR kneeboard lists flight plan sequence, alternate flight planning and distance-from-cloud requirements, IFR required reports, plus much more. Anodized aluminum. Includes flight logs.

**NAV-DATA VFR KNEEBOARD**

NAV-DATA Featherweight Kneeboard. This weighs approximately 10 ounces. This board is similar to a clipboard but is much sturdier than a standard clipboard and much less cumbersome in the cockpit (dimensions are 7”x10”). It includes A VFR reminder table that includes conversions, light gun signals, flight plan info, etc. Both boards are outfitted with our comfortable form-fitting knee saddle and velcro strap assembly to ensure the board stays securely in place.
P/N 13-06086

**NAV-DATA IFR KNEEBOARD**

Once you own a Nav-Data IFR kneeboard, you can customize it’s contents with your personalized data by simply filling in the blank 5 1/2 x 8 1/2 forms which include:
* aircraft checklist
* local area NAV and Com frequencies
* navigation logs
* flight plan forms
* clearance copying pad

By placing these pre-recorded forms, approach plates, charts, etc., into our 3-ring transparent vinyl pocket page system (8 vinyl pockets included), you will have quick access to all of your important data. Note the retractable slider tab supporting the cover (Chart board) when open.
P/N 13-06085
KNEEBOARDS

FLIGHT DESK TRI-FOLD KNEEBOARD
The Flight Desk Kneeboard greatly improves cockpit organization of charts and accessories. Unlike some other kneeboards with limited utility, our Flight Desk Kneeboard will hold sectional charts, a large E6B type computer, and has 2 elastic loops on either side of the clipboard to hold a goose-neck type flashlight. If the middle loop is not needed for a computer, it can be used to hold a handheld transceiver. Made of durable black cordura. Size 19.25” x 9.5” unfolded. Clipboard size: 6” x 9.5”. P/N 13-03474....

NAV-DATA KNEEBOARD
The Nav-Data Kneeboard is the most well-organized kneeboard you’ll ever own. It’s like having a flight desk strapped to your leg. The Nav-Data Kneeboard is a unique cockpit tool which combines all the function and features of a lap desk and clipboard and ‘IFR/IFR’ chart holder giving it a solid reputation as the ‘CHAIRMAN OF BOARDS’. The Nav-Data Kneeboard was designed, handmade and then flight tested by experienced pilots for more than ten years. It is manufactured using durable high-tech composite laminate and anodized aircraft grade aluminum. P/N 13-06005 .........

ORG-GO KNEEBOARDS
ORG-GO KNEEBOARDS are extremely versatile, organizer/kneeboards providing a standard 7-ring binder on a very stable platform with built-in pencil sharpener, combo magnifying/fiber holder and many other unique features. Stiff content, stowage, rugged materials and powder coat finish, add even more to their high feature set. Use for VFR or IFR flight, using NOS or Jepp charts and away from this normal field of view is recognized as being a hazard of reading at night. · LED lasts 100,000 hours / included batteries last 100 hours.

THE HEADS UP FLIGHT DESK
The Heads Up Flight Desk was developed by a certified flight instructor and honors student at Embry-Riddle Aeronautical University. While studying human factors in aviation safety, he noted that on every airline flight deck you would find a yoke mounted chart desk. The reason for the board being mounted there is to keep important information in the normal field of view for the pilot. Having to look down and away from this normal field of view is recognized as being a hazard to flight, because it takes the pilots eyes away from scanning either the instruments or outside the aircraft for conflicting traffic. This innovative product is a great safety enhancer. Convenient for keeping important documents in view, such as instrument approach plates, airport diagrams and flight logs. As an additional safety enhancer, we imprinted important safety briefing items on the surface of the desk. Included are a passenger briefing, crew briefing, engine failure during takeoff briefing, engine failure in flight memory items, and a pre-landing checklist. FEATURES: · Aircraft quality aluminum clipboard for durability. · Low-profile spring steel clip holds documents in place. Velcro® included for attachment to yoke. · Heavy-duty steel spacer and spring steel clamps. · Unique design allows the versatility of converting between a bi-fold and tri-fold. · 3 large chart pockets · 2 pen/pencil pockets · 1 flashlight pocket · Detachable 6” x 9” aluminum clipboard. · 1-1/2” wide nylon/elastic strap (holds charts open) · 2 elastic pen/pencil holders. · Size 19.25” x 11” open, 7.5” x 11” closed. Features: · Bi-fold design available in both right- & left-hand models · 3-ring binder (includes 10 8-1/2” x 5-1/2” clear page protectors) · 2 chart pockets · 1 small computer pocket · Detachable 6” x 9” aluminum clipboard. · 1-1/2” wide nylon/elastic straps (holds charts open) · 2 elastic pen/pencil holders. · Size 19.25” x 11” open, 7.5” x 11” closed. · Used as a simple clipboard for preflight checks when closed (includes 3 chart pockets).

SINGLE PANEL FL-100 KNEEBOARD
The Aeroboard FL100 has a large pocket behind the clipboard to keep these items organized. The detachable clipboard can be removed and placed inside the pocket creating a platform for a GPS. 7.5” x 11”, 1 chart pocket behind the clipboard. Detachable 6”x9” aluminum clipboard. 1-1/2” wide nylon/elastic leg strap with Velcro® fastener. FL100 Black .........P/N 13-03703 FL100 Navy .........P/N 13-03704 FL100 R (RIGHT) Black .........P/N 13-03705 FL200R (LEFT) Black .........P/N 13-03706 "CHAIRMAN OF BOARDS" The Nav-Data Kneeboard was designed, hand-made and then flight tested by experienced pilots for more than ten years. It is manufactured using durable high-tech composite laminate and anodized aircraft grade aluminum. P/N 13-06005 .........

BI-FOLD FL-200 KNEEBOARD
The Aeroboard FL200 has many outstanding features which makes it one of the most advanced organizational tools a pilot can have. The FL200 has a bi-fold design with 3-ring center binder, available in both Flight & IFR/IFR, left-hand, 10 clear page protectors/great for organizing checklists, emergency procedures, reminders, etc.), and 2 handy large storage pockets (for charts & other items of similar size). The Aeroboard FL200 has what you’ve been looking for. 15” x 11” open, 7.5” x 11” closed. Features: · Bi-fold design available in both right- & left-hand models · 3-ring binder (includes 10 8-1/2” x 5-1/2” clear page protectors) · 2 chart pockets · 1 small computer pocket · Detachable 6” x 9” aluminum clipboard · 1-1/2” wide nylon/elastic straps (holds charts open) · 2 elastic pen/pencil holders. · Cover made of durable Cordura®. FL200R (RIGHT) Navy .........P/N 13-03699 FL200L (LEFT) NAVY .........P/N 13-03669

TRI-FOLD FL-300 KNEEBOARD
With its unique convertible tri-fold design and handy 3 large storage pockets (for charts, flight computers, Aerolight, etc.) the Aeroboard FL300 has what you’ve been looking for. Includes a 3-ring center binder, complete with 10 clear page protectors (great for organizing checklists, emergency procedures, etc.) 20” x 11” open, 7.5” x 11” closed. Detachable third section for more expanded in-flight use. It includes a 3-ring binder for pen/pencil, electronic flight computer, flashlight, and more! Features: · Unique design allows the versatility of converting between a bi-fold and tri-fold · 3-ring binder (includes 10 8-1/2” x 5-1/2” clear page protectors) · 3 large chart pockets · 2 pen/pencil pockets · 1 flashlight pocket · Detachable 6” x 9” aluminum clipboard · 1-1/2” wide nylon/elastic strap with Velcro® fastener · 2 elastic pen/pencil holders. · Size 19.5” x 11.5” (open), 11.5”x7” (closed) · Holds sm E6-B, stopwatch, pencils · Supplied w/pad of 50 flight logs · Aluminum board holds approach plates · Available in black, red, blue, gray.

Nelson Kneeboards
Nelson Kneeboards are a unique cockpit tool which combines all the function and features of a lap desk and clipboard and ‘IFR/IFR’ chart holder giving it a solid reputation as being a hazard of reading at night. · LED lasts 100,000 hours / included batteries last 100 hours.

Military Tri-Fold
· Size: 19.5” x 11.5” (open), 11.5”x7” (closed) · Holds sm E6-B, stopwatch, pencils · Supplied w/pad of 50 flight logs · Aluminum board holds approach plates · Available in black, red, blue, gray.

ARMBOARD
The ArmBoard provides anermical, space saving writing surface as natural to wear as a wrist watch. Regardless of how large or small the cockpit is, the ArmBoard truly frees up much needed space. The product was also tested by CFIs and found to be extremely useful. The detachable armboard can be used during flight lessons and jotting down student performance comments for follow up during ground school. A writing pad is included with a flight planer version sold separately along with various flight reference cards to be used on the inside flap of the ArmBoard. .....P/N 13-06021 .........

ACCESSORIES
Set of 3 blank pads for the armboard.....P/N 13-06025 Set of 3 mixed pads (Blank, Flight Planner & Ruled) for the armboard. P/N 13-06024
**FLY BOYS GEAR FOR PILOTS**

**FLY BOYS PUBS BAG**
Ideal for keeping things “co-located” while you’re flying and mission planning. Integrates perfectly with Fly Boys kneeboards. Top opening flap gives access to the main pockets. Additional smaller external pockets are located in the front, rear as well. Handy for smaller items or for sliding enroute charts and maps for quick access. Top, front and back are secured with sturdy Velcro™. Pocket on one side for a water bottle or sunglass case. Slots on the opposite side for 2 pens or pencils. The most popular choice of most fighter and trainer pilots no matter what the airframe. Also, an excellent option looking for a no frills - priced right bag. Measures 8 1/2" x 11" x 1" empty. Fully loaded it will expand out to 8 1/2" wide. Blue FB1020.........P/N 13-05565...............................Black FB1020........P/N 13-05566...............................Green FB1020.........P/N 13-05567............................... 

**FLY BOYS MISSION PUS - BAG**
Longer and wider than the FB1020 Regular PubsBag, but not as tall. Fits everything you will ever need for your mission plus some! Three main compartments comprise this model. Two large compartments and the third is divided in the middle. No external pockets on this model, however the internal capacity is awesome. Favorable by F-15E, B-1, B-2, and C-130 aircrew. It’s also popular in the USAF/USN pilot training environment. Outside dimensions are 9” x 11” x 1” empty, and fully loaded it will expand to 6 1/2" wide. Black..............P/N 13-05562...............................Blue..............P/N 13-05563...............................Green..............P/N 13-05564............................... 

**FLY BOYS CREW BAG**
Slightly smaller than Fly Boys Large Crew Bag but with all of the features you will need to get the mission accomplished, and lots of value. Double stitching and heavy duty zippers will make this bag last a long time. Removable shoulder strap with a rubberized pad which keeps this bag from slipping off of military flight jackets. Exterior Dimensions: 17” x 11” x 11”. Interior Compartment Dimensions: 13” x 7” x 9”. 

**FLYBOYS LARGE CREW BAG**
Lightweight but heavy duty bag at a fair price. Double stitching and reinforced seams are standard. Silent rubber zipper pulls. The awesome nylon zippers are self repairing and provide adequate water resistance. The removable shoulder strap has a pebbled shoulder pad unique only to Fly Boys. This keeps the bag from slipping off of slick nylon shell flight jackets. All new gray interior which provides high visibility for finding items inside the bag in low light conditions. Studly the moveable/removable interior dividers are built. New retention sleeve for flashlights has been incorporated. Super tough PVC armoring incorporated into the bottom of the bag. Virtually waterproof along the bottom and provides additional protection and structure to the unit. Exterior Dimensions: 22” x 14” x 12”. Main Compartment Dimensions: 16” x 11” x 11”. P/N 13-05565............................... 

**FLY BOYS HELMET BAG**
420 Denier Cordura nylon with 1/2” cloth polyfill to cushion your helmet. Heavy duty nylon zipper - resists snags. Two interior pockets WITH VELCRO CLOSURE that fit your DTC, VTR tapes, sunglasses or water bottle without having them fall into the main compartment when you put it down! This super tight knit nylon shell is extremely water resistant and provides superior protection for YOUR expensive equipment - and the interior lining is extremely soft. It won’t scratch your visor. Oversized from standard issue versions, it is superior for helmets with with NVG or HMS mounts! Two NEW EW pockets for smaller items. Comes with an exact color matched, adjustable shoulder strap fitted with a gripping contouring rubber shoulder pad for hands off carrying if necessary. It won’t slip off of your shoulder. Inside Dimensions (FLAT): 19 1/2’’ Wide 20 3/4” Tall. Blue....................P/N 13-05571...............................Black....................P/N 13-05572...............................Green....................P/N 13-05573............................... 

**FLY BOYS IFR/VFR KNEEBOARD**
Features seven eyelets for securing checklists, plastic checklist pages or your in-flight guide - every base has different spacing. Includes the new flexible plastic clipboard (FB1060). Eyelets also correspond to JEPPESEN approach plates and chart protectors!! Blue...............P/N 13-05568...............................Black..................P/N 13-05569...............................Green...................P/N 13-05570............................... 

**FLYBOYS MISSION PUBS - BAG**
These are the same construction as the regular, just bigger. Great in extreme temperatures and long lasting. Spacing on the holes matches up with the FlyBoys KneeBoard with Eyelets and Jeppecons. Sizes is 5 1/2” x 8 1/2” - really makes a difference. Sheet size: 8 1/2” x 5 1/2” P/N 13-05628............................... 

**FLYBOYS CHECKLIST PAGES**
Heavy duty plastic FlightCrew checklist pages. Sturdy construction equals long life. Easy to use, with thickness that resists getting brittle in cold environments. Pages are top loading and are excellent for protecting your local approaches or condensed aircraft checklist. 

*OVERSIZE CHECKLIST PAGES*
These are great if you are ready to start putting originals in the pages instead of shrunken copies! As you can see, a full size Jeppecon slide charts right in! Now your mission data cards fit, your target photos can get more detail in them, and your attack cards slide right in without making a trip to the copier to shrink or the paper cutter to trim! These are the same construction as the regular, just bigger. Great in extreme temperatures and long lasting. Spacing on the holes matches up with the FlyBoys KneeBoard with Eyelets and Jeppecons. Size is 5 1/2” x 8 1/2” - really makes a difference. 

*EXTRA TALL PAGES FOR BIG CHECKLIST*
Heavy duty plastic FlightCrew checklist pages. Sturdy construction leads to a long life. Easy to use but heavy enough to not get brittle or tear in extremely cold environments. Pages are top loading and are excellent for protecting your local approaches or condensed aircraft checklist. USABLE interior dimensions: 5” x 11”, overall width including checklist ring holes 5 7/8”. 

*OVER SIZED FLIP CHART PAGES*
Over sized top loading pages with three ring holes in the top for those checklists and situations that flow better than the normal “book format.” Dimensions: 9.25” x 6”. Sheet Size: 8” x 5” ........PN 13-05633..............Bulk Pack (25 Pk.)....P/N 13-05634............................... 

**FLYBOYS HARD PLASTIC COVER SET FOR EXTRA PAGES**
Durable, Unbreakable Multi-Purpose. Safe.Opaque nylon ring to hold your checklists and in-flight guides. Or use them for outdoor use where metal rings would rust or wear out. Patented ball-lock design to prevent FOD out on the flight line. The nylon ring is very low resistance as well. Once they are closed, they stay “closed”. When closed, they are a 2.5” diameter ring. Opened, they stretch to 5.25”. For most applications 4 rings is plenty for keeping your checklists or inflight guides secure. Pack includes 10 pieces. Color is clear/white. P/N 13-05621............................... 

**FLYBOYS PILOT LOGBOOK**
Represents a comprehensive look at your military flying career. Special considerations were made for this book that no other logbook will provide. If you are serious about keeping track of your flight time, and operate Army or USAF rotary aircraft - this is the book you need with no question. Record your own flying history of missions, upgrades, checkrides and awards right in this beautiful and durable logbook. This book will last at least 10 years worth of flight history. Dimensions: 9” tall x 7 7/8” wide x 1” thick. Airforce Pilots Logbook........PN 13-05625...............................Army Pilots logbook................PN 13-06410............................... 

**FLYBOYS REMOVE BEFORE FLIGHT KEY CHAIN**
This nylon strap streamer with the REMOVE BEFORE FLIGHT rubber patch is an instant reminder of the real warning flags that hang off of airplanes on the flight line. They’re supposed to be visible and easy to find during the walk-around inspection. Well, now you won’t have to “walk around” the plane or fish through your gym bag trying to find it!!! P/N 13-05626...............................
PILOTS LAP DESK
This top opening aluminum lap desk provides a solid smooth writing surface with a 3/8” bottom storage compartment for charts, computers, checklists, pens, etc. Can be used vertically or horizontally designed forms and is great for left or right handed use. Size: 9.5”x12”

FLY INFORMED KNEEBOARD/CALCULATOR
This bottom opening pilot clipboard measures 8-1/2” x 12” and features a bottom storage compartment (1-1/4” deep) for charts, computers, checklists, pens, etc. Great for vertical or horizontal forms. Heavy duty aluminum construction with solid smooth writing surface. Furnished with battery powered calculator clip for in-flight calculations. Flexible light available separately.

D & C AERO’S ADJUSTABLE IFR YOKE DESK (ID25, ID18, VF25)
Just fit on your control column and adjust the height for perfect placement. Now you can clip and hold your approach plates, enroute charts and sectionals right in front of you. Also, you can attach a timer to it with Velcro®. Made of aircraft anodized aluminum. Includes an important IFR placard with radio communications failure procedure, position report items, radar / non-radar reports and more. ID18 - Clip size 7.5” x 1.13” ID25 - Clip size 1” x 1.5”

ASA IFR TRI-FOLD KNEEBOARD
Strong aluminum tooling silkscreened with important IFR information fits into black 3-panel jacket. Has room for charts, books, flight computers, etc. This kneeboard uses the VFR Kneeboard in a three-panel jacket. The left panel has ample room for small books, flight computers, etc. The center panel holds the kneeboard under clear plastic with a pen/pencil holder and buttonholes on either side. The right-hand panel contains a clear pocket for easy map viewing, and the elastic leg band’s Velcro closure fits any leg size comfortably. Black nylon with embroidered silver wings logo. Kneeboard is 6-1/2” wide x 9-1/2” high.

BLOCKALLS TRAINING GLASSES
Designed by pilots for pilots. Blockalls™ resolve problems with existing view limiting devices. Weighing in at just under 1oz, it’s easy to forget you are wearing them. Engineered to easily penetrate the seal of your helmet eliminating the hassle of having to remove it first. The velcro attachment straps, helmets, or hoods. Accepted by IFR examiners without further limiting visibility. Available Powers: 1.5, 2.0, 2.5

OLD FOGGIES™ IFR TRAINING GLASSES
IFR Glasses. Old Foggies™ brand view limiting device was developed in order to balance the training value of a view limiting device without further limiting the pilot from being able to read his/her charts. Old Foggies™blend of precision fogging and custom powered corrective lenses allows for the precise amount of the instrument panel viewing without any view of the horizon. Old Foggies™ are available in customizable powers with no need for a prescription. Available in Clear and Light Mirrored Tint (a reflective coating that eliminates glare without further limiting visibility). Available Powers: 1.5, 2.0, 2.5

CLOUD-EZIE™ IFR TRAINING GLASSES
IFR Glasses. Old Foggies™ brand view limiting device was developed in order to balance the training value of a view limiting device without further limiting the pilot from being able to read his/her charts. Old Foggies™blend of precision fogging and custom powered corrective lenses allows for the precise amount of the instrument panel viewing without any view of the horizon. Old Foggies™ are available in customizable powers with no need for a prescription. Available in Clear and Light Mirrored Tint (a reflective coating that eliminates glare without further limiting visibility). Available Powers: 1.5, 2.0, 2.5

JEPP SHADES
Replaces bulky, hard-to-use instrument training hoods. The improved design allows better student/instructor interaction. The Cockpit proven design works conveniently under headquarters and the universal adjusting strap reduces pressure on the ears and temple. The Velcro® straps fit comfortably and flip-up lens allows convenient IFR/VFR flight transition. The high quality polycarbonate lens is impact resistant.
P/N 13-40431

FOGGLERS
A creative solution to the problems caused by wearing a large hood on your head. Foggles fit and feel like glasses, but the opaque frosting on the top and sides let you see only the instrument panel. Your out the window view is always foggy. Wear them with headphones and microphone with no interference or discomfort. They come with a protective carrying case and weigh only two ounces.
P/N 13-05660

SUPER HOOD
This Super Hood is one of the safest, most comfortable and best made instrument training hoods we’ve found anywhere. Ideal for eye glass or RX, this top opening aluminum lap desk provides a solid smooth writing surface with a 3/8” bottom storage compartment for charts, computers, etc. Great for vertical or horizontal forms. Heavy duty aluminum construction with solid smooth writing surface. Furnished with battery powered calculator clip for in-flight calculations. Flexible light available separately.
P/N 13-02712

ASA HOODMARK IFR TRAINING HOOD
Unique design allows for the precise amount of the instrument panel viewing without any view of the horizon. Old Foggies™ are available in customizable powers with no need for a prescription. Available in Clear and Light Mirrored Tint (a reflective coating that eliminates glare without further limiting visibility). Available Powers: 1.5, 2.0, 2.5

JEPP SHADES
Replaces bulky, hard-to-use instrument training hoods. The improved design allows better student/instructor interaction. The Cockpit proven design works conveniently under headquarters and the universal adjusting strap reduces pressure on the ears and temple. The Velcro® straps fit comfortably and flip-up lens allows convenient IFR/VFR flight transition. The high quality polycarbonate lens is impact resistant.
P/N 13-40431

FOGGLERS
A creative solution to the problems caused by wearing a large hood on your head. Foggles fit and feel like glasses, but the opaque frosting on the top and sides let you see only the instrument panel. Your out the window view is always foggy. Wear them with headphones and microphone with no interference or discomfort. They come with a protective carrying case and weigh only two ounces.
P/N 13-05660

SUPER HOOD
This Super Hood is one of the safest, most comfortable and best made instrument training hoods we’ve found anywhere. Ideal for eye glass or RX, this top opening aluminum lap desk provides a solid smooth writing surface with a 3/8” bottom storage compartment for charts, computers, etc. Great for vertical or horizontal forms. Heavy duty aluminum construction with solid smooth writing surface. Furnished with battery powered calculator clip for in-flight calculations. Flexible light available separately.
P/N 13-02712

ASA HOODMARK IFR TRAINING HOOD
Unique design allows for the precise amount of the instrument panel viewing without any view of the horizon. Old Foggies™ are available in customizable powers with no need for a prescription. Available in Clear and Light Mirrored Tint (a reflective coating that eliminates glare without further limiting visibility). Available Powers: 1.5, 2.0, 2.5

CLOUD-EZIE™ IFR TRAINING GLASSES
IFR Glasses. Old Foggies™ brand view limiting device was developed in order to balance the training value of a view limiting device without further limiting the pilot from being able to read his/her charts. Old Foggies™blend of precision fogging and custom powered corrective lenses allows for the precise amount of the instrument panel viewing without any view of the horizon. Old Foggies™ are available in customizable powers with no need for a prescription. Available in Clear and Light Mirrored Tint (a reflective coating that eliminates glare without further limiting visibility). Available Powers: 1.5, 2.0, 2.5

Cloud-ezie Clear Lens........P/N 13-05015
Cloud-ezie Tint Lens........P/N 13-05016
AERO PRODUCTS AIRCRAFT LOGS
Permanent, hard cover, logs with leatherette cover printed in gold. Pages are updated to current FAA requirements. Generous line spacing. Size: 5.75” x 7.75”; 74 pgs; Green cover. Comprised of 9 sections: Aircraft Description, Installed Equipment, Major Alterations, Life Limited Parts or Overhaul Requirements, AD or Factory Bulletin Compliance Record, Altimeter and Static System Checks, Radio and Electronic Checks, Maintenance Record (FAA 43.9), Inspection Record (FAA 43.11-91.217), AF-S Hard Cover...............P/N 13-32386 .................... AL-12P Soft Cover...............P/N 13-04670 ....................

CUSTOM-BUILT AIRCRAFT
OWNERS & OPERATORS MANUAL
Contains spaces for listing of aircraft description, specifications, construction data, weight and balance calculations, operating limitations, operating instructions and servicing information. (L. Pazmany) P/N 13-20100

ASA AIRCRAFT LOG BOOKS
Designed to keep records of the entire aircraft in order: inspections, tests, repairs, alterations, ADs, service bulletins, and equipment additions, removals or exchanges. SA-1 soft cover-hunter green; 7.25” x 4”; 64 pgs P/N 13-32375 . SA-2 Hard cover-Hunter Green; 7.75” x 5-5/8”; 96 pgs P/N 13-32384.

ASA AIRCRAFT FLIGHT LOG/LOGBOOK (SP-FLT)
Spiral-bound and perfectly sized to fit in an aircraft glove box or chart pocket, this logbook is a quick reference to the recent history of the airplane so pilots have immediate access to the airplane’s records without needing to dig through logbooks usually kept in the maintenance hangar. The Flight Log fills a gap in aircraft records for pilots, and instantly allows them to know the status of the aircraft they are about to fly. P/N 13-01613

PLANEVIEW AIRCRAFT FLIGHT LOGS
There are several things that make this flight log useful to so many owners and operators. Its size is compact and can be easily stored in a glove box or side pocket. You only have to use the categories that are important to you. The owner of a Piper Cub would not use the logbook to the extent that a Piper Mirage owner/operator would, but it can easily accommodate the needs of both aircraft. Multiple pilots can use the book, so it can be used in an aircraft that is used in partnerships, flight schools, charter and many other operations where there are a number of different pilots flying the aircraft. A flight school or aircraft rental company could track how their aircraft is being utilized. Single engine log...............P/N 13-01946 . Multi-engine log...............P/N 13-01947

INTERNATIONAL PILOT LOGBOOK
The International Pilot Logbook is ideal for professional aviators, or those who fly frequently. Hardcover: 11”x6.5”, 276 pgs. Includes green summary pages. The International Pilot Logbook is a smaller version of the Master Logbook. Hardcover: 7.75”x4”, 68 pgs. P/N 13-02554 . P/N 13-02553

AIRCRAFT EXPENSE & USAGE JOURNAL
This product is a compact 32 page journal, measures 4 1/4” tall by 2 7/8” wide, is assembled with 2 staples, and can easily fit into an aircraft glove box or shirt pocket. Weight is approximately 1/2 oz. Printing is black on white cover of white 67 lb cover stock paper and on pages of white 20 lb paper. Journal covers a full one year period, contains spaces for 20 transactions per month, and includes a monthly/yearly summary. Expense Journal...............P/N 13-05058 Usage Journal...............P/N 13-05057

LOG BOOKS
AERO PRODUCTS AIRCRAFT LOGS
Permanent, hard cover, logs with leatherette cover printed in gold. Pages are updated to current FAA requirements. Generous line spacing. Overall dimensions: 5.75” x 7.75”; 74 pages; Red cover. Comprised of 8 sections: Engine Description, Installed Record, Life Limited Parts or Overhaul Requirements, AD or Factory Bulletin Compliance Record (propeller or rotor only), Repair and Inspection Record (propeller or rotor only). EF-5 Hard Cover...............P/N 13-32390 EL-13P Soft Cover...............P/N 13-03811

ASA ENGINE LOG BOOKS
Keep track of engine inspections, tests, repairs and alterations, airworthiness directives, manufacturers’ mandatory service bulletins & equipment removal or exchange. Color: Burgundy Hard Cover (7.75” x 5-5/8”) 96 pages...............P/N 13-32382 Soft Cover (7.25” x 4”), 64 pages...............P/N 13-32380

ASA AIRCRAFT FLIGHT LOG
The ASA Flight Log is the perfect tool for aircraft owners and aircraft flown by multiple pilots to keep track of the care and use of an individual aircraft. Spiral bound and perfectly sized to fit in an aircraft glove box or chart pocket. Logbook pilots will have quick reference to the recent history of the airplane without digging through those usually kept in the maintenance hangar. P/N 13-03163

ASA PROPELLER LOGBOOK
Record data for hub & blade inspections, repairs and alterations, airworthiness directives, & factory bulletins. Soft cover, Black, 7-1/4” x 4”, 20 pages. P/N 13-32370

ASA AVIONICS LOG BOOK
Includes entries for avionics equipment, VOR accuracy, transponder & ELT checks, AD & SB compliance, maintenance records. Soft cover, blue/grey, 7.25”x4”, 64 pgs. P/N 13-02315

ASA AMT LOG BOOK
Designed for Maintenance Technicians, IA-qualified mechanics, and students to log training and educational requirements, work performed, and experience for the purpose of tracking for future certification, recurrency, employment applications, school records, or insurance applications. Plastic coil binding stays open on current page. Soft cover, 6 1/2” x 11”, 192 pages. P/N 13-02313

FLIGHT SCHEDULE LOG
Essential to smooth dispatching, features include: a replaceable perpetual aircraft instructor entry panel; standby request section; and time in 15-minute blocks. Charcoal Gray binder is 17-1/4” x 13-5/8” with 15” x 12” pages for easy viewing. 80 pages included, refill packs available. P/N 13-02308

FLIGHT SCHEDULE REFILL PACK - Can be used over and over with this 60-day refill. P/N 13-02309

GLEIM PILOT LOGBOOK
The Gleim Pilot Logbook provides detailed entries for all flight information, sections for certificates, ratings, and operating privilege endorsement section, table of contents, room for up to 450 entries, and much more. High quality paper and hard cover binding. 112 pgs. 5”x9”. P/N 13-01822
PILOT LOG BOOKS

JEPPSENE PROFESSIONAL LOGBOOK
This professional log book from Jeppesen, measuring 6-1/2" x 11" is constructed of sturdy, easy-to-read letter paper & includes an elegant cover with a gold sticker in which you can write your name on.
P/N 13-21728

JEPPSENE PROFESSIONAL LOGBOOK
Complies with JAR 1.006 regulations for logging flight time in Europe. handles 10 years of data. Size: 17.1 x 28.6 cm
P/N 13-02212

JEPPSENE PILOT LOGBOOK
Our 96-page permanent record offers large flight time category spaces, arranged according to FAA regulations. Printed on "easy-eye" green pages that resist "bleed through". Size: 8-5/16" x 5-5/16" P/N 13-21732

LEATHER LOGBOOKS
Inside the cover is an inserted loose-leaf book that will allow replacement pages when required. The 6-ring binder is designed so it can be replaced if damaged. All metal parts of the book are 24K gold plated for endurance and lasting looks. The pages are made of special hand picked quality paper with follow through lines. Has memorandum pages, annual flight totals, flight summary pages, endorsement pages, vinyl document savers, and vinyl picture savers. The Old World Leather Logbook has naturally embossed lettering. The Premier Leather Logbook has gold lettering. Size: 10" x 7"
Old World Logbook (brown) P/N 13-21955
Old World Logbook (terra) P/N 13-21960
Premier Logbook (brown) P/N 13-21775

POWDER PUFF PINK LOGBOOK
The Powder Puff Pilot standard logbook has a pink, protective hard cover with the Powder Puff Pilot logo on the front. It's standard size (6-1/4 by 8-1/4 inches) with 52 pages of all the record keeping, endorsements, and flight log information that every pilot needs. Inspirational quotes from the famous pioneers of women aviation sprinkled throughout to keep you motivated, inspired, and flying high.
P/N 13-06342

CLASSIC BLUE AERLOG®
This is the original pocket sized, permanently sewn-bound book, much like a traditional Master Log book, only smaller. The Aerlog® Classic makes transcribing to another Master log book unnecessary. The Classic Blue Aerlog® has a separate "pay section" that is preferred by pilots who like to keep their pay time right next to their flight time.
P/N 13-20155

THE LITTLE MAROON AERLOG®
Designed for all pilots who record only their flying time and expenses. The Little Maroon Aerlog® has 224 loose pages that are simple to remove and save for future use. Also included are 28 stickers for maintenance and major overhauls. This logbook is bound in crew leather made from patent or genuine patent leather. Both are sewn into the hard cover and protect your logbook very effectively. The nylon cover has a pocket on the back for licenses, gas receipt, and other documents.

LIGHTER LOG
Plugs into your aircraft's lighter receptacle and tracks each flight effortlessly. Monitors the system voltage and warns of possible generator or electrical problems. Plug it in to any 12 or 24-volt system and forget it. Up to 500 flights may be recorded and stored in the internal memory for 10 years. Attach the LighterLog to any Windows 95/98/2000/Me personal computer using the included serial cable and download the flight records to the included LighterLog software. Optionally attach the LighterLog to any industry compatible GPS or LORAN digital port and the LighterLog will record departure and destination information. If no GPS/LORAN is available, the LighterLog software will list all airports within cruising range of the recorded flight time. Just point and click on the destination airport. Print familiar style logbooks from the computer whenever you like.
P/N 13-03299

STANDARD PILOT LOG BOOK BLACK
Hard cover, 6-5/8" x 11", 278 pages.
P/N 13-32392

PILOT LOGBOOK (ASA-SP-10)
This new introductory logbook is perfect for flight instructors and flight schools to start students out with an inexpensive logbook. With space for 16 separate flight entries, a ground instruction log, several endorsements, and a separate log for each type of aircraft flown, this logbook is great for introductory first flight lessons, promotional give-aways and more.
P/N 13-05670

PROFESSIONAL PILOT LEATHER LOGBOOKS
These Professional Pilot Logbooks are the highest quality logbooks we have seen, and we are proud to make them available to Aircraft Spruce customers. These logbooks are designed and made to last a lifetime. Available in aviation leather and brown leather which are styled to look like a log book dating back to the early days of aviation, as well as black leather which is standard in modern log books. Log book pages are bound from cloth over cardboard or from patent or genuine patent leather. Both are substitutes for what we're looking for. In fact, the genuine patent leathers are simply "paper" leather glued onto cardboard. This logbook is bound from true leather. The log pages are designed to keep traditional logging info but to provide more flexibility. It has customary Date, Aircraft, Pilots, Route & Remarks sections. Each page is 8-5/8" x 9" entries per page; 288 pages which allows for 2600 entries.

Aviation - Brown leather P/N 13-02139
Antique - Brown leather P/N 13-02141
Black leather P/N 13-02140

STANDARD PILOT LOG BLACK
Hard cover, 7.5" x 4", 100 pages.
P/N 13-32365

STANDARD PILOT LOG BURGUNDY
Hard cover, 8" x 4-1/2", 100 pages.
P/N 13-32360

STANDARD PILOT LOG NAVY BLUE
Hard cover, 5.5" x 8.5", 110 pages.
P/N 13-32355

FLIGHT CREW LOGBOOK
Created with the input of airline pilots & instructors, these shirt-pocket size logs are designed for long lasting and comprehensive recordkeeping on the road. Options are provided for tracking flight time, currency requirements, expenses, duty times, layovers, and much more. Soft cover. 108 pages.
P/N 13-05475

CREW FLIGHT LOG TIME & EXPENSE RECORD
With a durable high quality vinyl cover, this book is the world's most usable flight crew log. Including an upgraded calendar and unique guide to aviation info sources, Crew Flight Log meets both FAA & IRS record-keeping requirements.
P/N 13-04573

MASTER LOGBOOK CASE
Durable nylon logbook cover sized to hold master logbook, charts, and other aviation essentials. Loop for pen or pencil, hook and loop closure, clear pockets for license and medical certificate, 7.5"x12"; holds logbooks up to 6.5"x11.11". P/N 13-02203

LOGBOOK ENDORSEMENT STICKERS
Can be used for Flight Reviews and Instrument Proficiency Checks, and comply with FAR 61.56 and FAR 61.57 on PIC flight time and comprehensive recordkeeping on the road. Each sticker measures 2" H x 4" L. 10 stickers per sheet on white paper.
P/N 13-05685

LOG BOOK COVER
These nylon logbook covers are very light weight but cover and protect your logbook very effectively. The nylon material is extremely durable and is washable. The cover features a holder for two pens and a velcro pocket on the back for licenses, gas receipt, and other documents.

<table>
<thead>
<tr>
<th>Color</th>
<th>Size</th>
<th>Description</th>
<th>PN</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td>Medium</td>
<td>Jeppesen</td>
<td>13-04402</td>
<td>$699</td>
</tr>
<tr>
<td>Black</td>
<td>Medium</td>
<td>ASA</td>
<td>13-04403</td>
<td>$699</td>
</tr>
<tr>
<td>Black</td>
<td>Medium</td>
<td>Sporty's/Stafford</td>
<td>13-04404</td>
<td>$699</td>
</tr>
<tr>
<td>Blue</td>
<td>Medium</td>
<td>Jeppesen</td>
<td>13-04405</td>
<td>$699</td>
</tr>
<tr>
<td>Blue</td>
<td>Medium</td>
<td>ASA</td>
<td>13-04406</td>
<td>$699</td>
</tr>
<tr>
<td>Blue</td>
<td>Medium</td>
<td>Sporty's/Stafford</td>
<td>13-04407</td>
<td>$699</td>
</tr>
<tr>
<td>Red</td>
<td>Medium</td>
<td>Jeppesen</td>
<td>13-04408</td>
<td>$699</td>
</tr>
<tr>
<td>Red</td>
<td>Medium</td>
<td>ASA</td>
<td>13-04409</td>
<td>$699</td>
</tr>
<tr>
<td>Red</td>
<td>Medium</td>
<td>Sporty's/Stafford</td>
<td>13-04410</td>
<td>$699</td>
</tr>
<tr>
<td>Black</td>
<td>Large</td>
<td>Jeppesen</td>
<td>13-04411</td>
<td>$699</td>
</tr>
<tr>
<td>Blue</td>
<td>Large</td>
<td>Jeppesen</td>
<td>13-04412</td>
<td>$699</td>
</tr>
<tr>
<td>Blue</td>
<td>Large</td>
<td>ASA</td>
<td>13-04413</td>
<td>$699</td>
</tr>
<tr>
<td>Black</td>
<td>Large</td>
<td>Sporty's/Stafford</td>
<td>13-04414</td>
<td>$699</td>
</tr>
<tr>
<td>Red</td>
<td>Large</td>
<td>Jeppesen</td>
<td>13-04415</td>
<td>$699</td>
</tr>
<tr>
<td>Red</td>
<td>Large</td>
<td>ASA</td>
<td>13-04416</td>
<td>$699</td>
</tr>
<tr>
<td>Red</td>
<td>Large</td>
<td>Sporty's/Stafford</td>
<td>13-04417</td>
<td>$699</td>
</tr>
</tbody>
</table>

699
It all started back in California in 1957 when Bob Scott ("Scotty") began making saddles. Many of his saddles are on display at the Cowboy Hall of Fame and many more are still being ridden by world champion cowboys. Then in 1967, Scotty became a pilot with Northwest Airlines. He retired from Northwest after 30 years, but Scotty still enjoys flying his Cessna 310. He made his first flight bag in 1977. The next year saw Scotty selling 2 or 3 flight bags a month to fellow pilots. Scott Leather has continually grown since those early times, but the workmanship, quality and guarantee of each bag remains the best in the business.

EMBOSS ANY SCOTT FLIGHT BAG WITH 3 INITIALS (SPECIFY)........$9.95

JUMBO FLIGHT BAG
The newest kit bag and now the #1 seller! Designed to be carried on your roller suitcase. Scott has incorporated the BEST of both style bags into one. Sturdy straps support the entire case from the bottom. Brass combination locks and feet, 2 inside panel pockets. Grade A saddle leather, features Scott's famous 1-piece construction.
6.5"d inside - big enough for the largest Jeppesen airline at no extra charge. Both covers. Personalized with your name & Quick Tabs, see below.
- Black $13-02533
- 2" ring-Black $13-02535
- 1" ring-Brown $13-02534
- 2" ring-Brown $13-02536

CERTIFICATE HOLDER
Handmade from the same Grade A saddle leather as Scott's flight bags. Guaranteed to last a lifetime. Black........P/N 13-02530
Brown........P/N 13-02531

OUTSIDE POCKET
Optional 6" x 9" end pocket w/ snap closure can be added to either or both ends of any kit bag. Designed to hold enroute charts, etc.
- Black........P/N 13-02524
- Brown.........P/N 13-02525

LEATHER AIRWAY MANUALS
Handmade from the same Grade A saddle leather as Scott's flight bags. Guaranteed to last a lifetime. High quality 4 ring push tab mechanism. Handy pocket on inside front cover. Rings measure 1.5" dia. You can add
- 1" ring-Black $13-02537
- 2" ring-Black $13-02539
- 1" ring-Brown $13-02538
- 2" ring-Brown $13-02540

LEATHER HEADSET CASE
2-sided and center divided pouch helps organize your bag. Headsets on one side, pencils and glasses on the other. Keep them separated & protected. Approximate size: 13"L x 6.5"T. 2 Zippers. Available in black only.

LEATHER AIRWAY MANUALS
Handmade from the same Grade A saddle leather as Scott's flight bags. Guaranteed to last a lifetime. High quality 7 ring push tab mechanism. Handy pocket on inside front cover. Rings measure 1.5" dia. You can add
- 1" ring-Black $13-02541
- 2" ring-Black $13-02543
- 1" ring-Brown $13-02542
- 2" ring-Brown $13-02544

ROUND TOP FLIGHT BAG
Hand crafted from the finest Grade A saddle leather. Famous 1-piece body construction. Leather straps wrap around the entire bag for extra heavy support. All stress points are riveted. 2 inside pockets. Brass feet & hardware. 18"L x 8"w x 12"h
- Black $13-02518
- 8"Black $13-02519
- 7"Black $13-02520
- 7"Brown $13-02521

INSIDE POUCH
Optional 5" x 12" zippered pouch attaches with velcro to top inside flap. Large enough for sunglassess, mini maglite, screwdriver, gum, etc. Stitched on the outside of pouch are 2 pen loops plus a larger highlighter loop. Black. P/N 13-02523

DELUXE PILOT CADDY
Handmade from the finest Grade A saddle leather. Keep charts, pens, pencils, computers, sunglasses, etc. right where you need them. Divided into 3 sections. 2 large sections measure 8.5"L x 4.25"W x 6.5"d inside - big enough for the largest Jeppesen binders or even a headset. Black.
- P/N 13-02528

QUICK TABS
Before a trip, insert 1 of 5 different colored tabs to mark airports most used. Eliminates time spent looking for pages. Package of 5.
- P/N 13-02532

NOS BINDERS
Handmade from the same Grade A saddle leather as Scott's flight bags. Guaranteed to last a lifetime. High Quality 7 ring push tab mechanism. Available in 2" ring size and hard to find 1" ring size. Handy pockets on inside of both covers. Personalized with your name & airline at no extra charge.
- Black........P/N 13-02537
- Brown.........P/N 13-02538

LEATHER HEADSET CASE
Handmade from the same Grade A saddle leather as Scott’s flight bags. Guaranteed to last a lifetime. Handmade from the same Grade A saddle leather, this case also has 1-piece body construction.

SQUARE TOP FLIGHT BAG
Made of the same fine heavy Grade A saddle leather. This case also has 1-piece body construction. All stress points are riveted. A handsome briefcase style with brass combination locks and feet, 2 inside panel pockets. Made of the same fine heavy Grade A saddle leather. Famous 1-piece body construction.

WHEELED SQUARE TOP FLIGHT BAG
The Square Top Bag is now available with an Inline Skate Wheel System and a Three Position Telescopic Handle. The wheel and handle systems are attached to the outside of the bag so you do not lose any capacity on the inside. The lid stays open with simple snap closure. Optional accessories can be added at additional cost. size: 18"L x 10"W x 16"H
- Black $13-02522
- Brown $13-02526

BLACK ......P/N 13-02528
- 8"-Brown $13-02511
- 7"-Black $13-02512
- 7"-Brown $13-02513
- 8"-Black $13-02510
- 8"-Brown $13-02511
- 7"-Black $13-02512
- 7"-Brown $13-02513
- 8"-Black $13-02514
- 8"-Brown $13-02515
- 7"-Black $13-02516
- 7"-Brown $13-02517
- 8"-Black $13-02518
- 8"-Brown $13-02519
- 7"-Black $13-02520
- 7"-Brown $13-02521
- Black $13-02530
- Black $13-02531
- 2" ring-Brown $13-02536
- 1" ring-Brown $13-02534
- 2" ring-Brown $13-02535
- 1" ring-Black $13-02533
- 2" ring-Black $13-02535
- 1" ring-Black $13-02534
- 2" ring-Black $13-02536
- 1" ring-Brown $13-02534
- 2" ring-Black $13-02535
**SCHUYDEN TRAVEL BAGS**
The bags can be custom embroidered and are available in Navy, Red, Hunter Green, Khaki, Grey, Black and Metallic Mocha for an additional fee.

Add the appropriate dash number after the part number for the color of your choice: Navy (-1), Red (-2), Hunter Green (-3), Khaki (-4), Grey, (-5), Black (-6), Mocha (-7)

**PIGGYBACK2**
The most functional carry-on bag ever made. One section converts to a day/ backpack and features a patented high-impact wheel base and telescoping retractable handle. Slip the Club Glove Shoulder Bag over the handle for the ultimate airline carry-on set. Weight: 10lbs. P/N 13-04278

**SHOULDER BAG**
Designed with access on both sides, this Shoulder Bag maintains the strength and features of the Club Glove line. Carries a laptop, documents, or use as an overnight bag. Included is a dual shoulder strap (patents pending) that distributes the weight evenly and comfortably. (makes a great flight bag) Weight: 2.2lbs P/N 13-04280

**ENSEMBLE**
The Piggy Back II, Shoulder Bag and Travel Kit! Weight: 12.7lbs. P/N 13-04279

**BISON MOUNTAIN RV FLIGHT BAG**
A practical solution to organizing the cargo area of your RV-6, RV-7 or RV-9. Also makes a great overnight bag! Our RV Flight Bag was designed to fit behind the pilots and co-pilots seat of the RV-6/7/9. It fits over the flap actuator bar and makes maximum use of the area behind your seat. This keeps the CG as far forward as possible and maximizes remaining cargo space. The RV Flight Bag is 18 inches high and 12.5 inches wide. It has a very large main cargo area easily accessible with a large zipper flap. There are two side pockets, one 10 x 4" and a 7" x 5.5" map pocket. The rear side of the bag has a pencil / flashlight/fuel tester pocket, a 10 inch x 7 inch headset pocket, and a 6" x 5 ¼" pocket for small tools. The material and zippers are heavy duty and will last a long time. The bag is made of durable Cordura and is resistant to liquids. It has a nice carrying handle and comes with two straps that can be attached to your seat back to clip the bag to your seat to minimize movement. It also comes with a removable shoulder strap.

<table>
<thead>
<tr>
<th>Description</th>
<th>Color</th>
<th>Part No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>RV FLIGHT BAG</td>
<td>BLACK CORDURA</td>
<td>13-05321</td>
<td></td>
</tr>
<tr>
<td>RV FLIGHT BAG</td>
<td>GREY CORDURA</td>
<td>13-05322</td>
<td></td>
</tr>
<tr>
<td>RV FLIGHT BAG</td>
<td>BLACK LEATHER</td>
<td>13-05324</td>
<td></td>
</tr>
<tr>
<td>RV FLIGHT BAG</td>
<td>GREY LEATHER</td>
<td>13-05326</td>
<td></td>
</tr>
<tr>
<td>RV FLIGHT BAG</td>
<td>BROWN LEATHER</td>
<td>13-05328</td>
<td></td>
</tr>
</tbody>
</table>

**FLIGHTLINE FLIGHT BAGS**

**LARGE DELUXE FLIGHT BAG**
The top of the line Flight Bag by Flightline boasts an incredible array of features for the price. This heavy-duty bag is double stitched and ideal for large loads. 12"H x 7-1/4"W x 14-1/2" L. P/N 13-04255

**MEDIUM DELUXE FLIGHT BAG**
This Flight Bag is ideal for pilots who have a lot to carry but not a lot of space to put the bag. It is currently any pilot’s favorite flight gear! 10"H x 6-3/4"W x 12-1/2" L. P/N 13-04256

**DELUXE HEADSET BAG**
It is the perfect bag to protect and organize any fragile and expensive equipment. Not only will this bag hold a headset, but other necessary items as well! 10"H x 4-1/4"W x 10 " L. P/N 13-01416

**TOP GRAIN LEATHER FLIGHT BAG**

- Dimension: 18" length x 10" wide x16" height
- Designed to carry six binders
- Padded compartment for lap top computers or GPS
- 3 position telescopic handles
- 3 brass combination locks

P/N 13-04229

**BISON MOUNTAIN ULTIMATE FLIGHT BAG**
This is the Ultimate Flight Bag for all your flying needs. Taller than most bags, makes more use of the vertical room in your narrow baggage compartment or cockpit. At 19.5 inches long, 9 inches wide, and 14 inches tall you can pack everything you need to fly with and there is enough room left over for a couple days worth of clothes. The interior compartment is 14 inches long, 7.5 inches wide, and 14 inches tall. A removable interior divider velcros in place to increase storage options. There are nine exterior pockets. Exterior pockets include a padded headset pocket, padded pocket specifically for Garmin 496 or similar GPS’s (or handheld radios), cellphone pocket, pocket for magazines or newspapers, water bottle pocket, chart pocket. 8.5 inch by 7 inch pocket for logbooks or aircraft manuals and pen, pencil, flashlight holder. Large padded laptop compartment that measures 14 inches long, 12 inches high, and 1.5 inches wide.A clear plastic identification card holder. There is a place for military or civilian wings that attach with velcro. It comes with sturdy carrying handles that velcro together and a removable carrying strap.

<table>
<thead>
<tr>
<th>Color</th>
<th>Part No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black Cordura</td>
<td>13-05329</td>
<td></td>
</tr>
<tr>
<td>Grey Cordura</td>
<td>13-05331</td>
<td></td>
</tr>
<tr>
<td>Black Leather</td>
<td>13-05333</td>
<td></td>
</tr>
<tr>
<td>Grey Leather</td>
<td>13-05334</td>
<td></td>
</tr>
<tr>
<td>Brown Leather</td>
<td>13-05336</td>
<td></td>
</tr>
</tbody>
</table>
SKY HIGH & NORAL FLIGHT BAGS

SKY HIGH GEAR Flight Bag Systems are integrated with cutting edge STYLE for today’s pilots. Each bag is loaded with patent pending design work to maximize packing UTILITY for all activities. Designed by Pilots for Pilots.

APOLLO FLIGHT ATTACHE

The Apollo messenger bag was designed for the business pilot who does not want to carry multiple bags as they visit on and off field customers. Their integrated file dividers will hold file folders, note pads, brochures, catalogs, forms, and more. They have also integrated our CoPilot feature which allows the document and map section of the bag to lay open on the seat next to you for easy access to your important nav charts, approach plates, markers, flashlight, batteries, etc.

DISCOVERY DUFFLE BAG

The Discovery flight duffle is a fully padded duffle designed to protect all of your important gear. The Discovery is designed with full sized compartment flaps to allow easy access to all of your gear, before, during and after flight. The spacious end compartments and innovative closure flaps make putting away or getting out your ANR headsets and other gear a breeze. The center compartment has a double zipper opening with a padded divider to segment the compartment for easy access and storage.

FREEDOM VII DAY DUFFLE BAG

Freedom VII is the flight bag for those who want to pack light for a short day flight or a CFI who needs just the minimum requirements for a lesson. This flight bag comes with their patent pending CoPilot feature. This allows you to organize 4 sectionals, extra batteries and other miscellaneous equipment. The main compartment has plenty of room for a headset or two 2” Jepp Chart binders with a pocket on the back for your kneeboard, A/FD or other materials. If you need a small flight bag this is the bag for you.

VOYAGER FLIGHT ATTACHE

The Voyager Attaché flight bag gives you the ability and convenience of being able to carry charts, sectionals (5-3/4” wide) and all the necessities without carrying around a larger flight bag. The CoPilot feature allows you to organize up to 6 sectionals and essential equipment. The main compartment can hold a single headset, Jepp chart binders and Air Charts. A kneeboard pocket is on the back for added convenience.

The Voyager is made of ballistic nylon for extra durability.

EXPLORE PRE FLIGHT POUCH

Our preflight pouch is made of durable 600D Polyester. It is designed to organize and hold your basic items for your preflight – Mini Mag size flashlight, fuel tester, pen/pencil, tire pressure gauge, and pliers or wrench. We have also included a grommet on the corner so you can attach a towel for wiping your hands clean. The Explorer will fit easily into any bag and has a Velcro strap to attach to your waist belt for convenience during the preflight.

NORAL AIRCRAFT DOCUMENT HOLDER

This durable document holder is made of strong fabric with two clear pockets to hold your aircraft document secure and visible. It comes with two inches of velcro to be placed anywhere that velcro can be applied to....P/N 13-01134.......

NORAL SINGLE HEADSET BAG

This bag is ideal for the pilot that wants to carry a passenger headset or his own, separate from his flying bag. It is constructed with our DuPont® Cordura® 1000 Denier, water resistant, fully padded with a 1/4” foam and backed with a layer of tricot. Features separate zipped compartment along with an extra side pocket.

Red.....P/N 13-00281.............Navy Blue.....P/N 13-00592
Grey.....P/N 13-00286.............Black........P/N 13-00288

NORAL STUDENT PILOT BAG

The Student Pilot Bag has plenty of room for everything a student pilot needs to carry and more at a price unmatched by any other brand. It has 2 extra large zippered front pockets plus another zippered section to store pens, flashlight, fuel tester, E6B computer and more! Access to the main compartment is through a double zipper flap with a pull cord. In addition to the carrying handles, a detachable padded shoulder strap is included.

Navy Blue.....P/N 13-00291.............Grey.....P/N 13-00294
Navy Blue.....P/N 13-00296.............Black........P/N 13-00297

NORAL PRIVATE PILOT BAG

NORAL MACH 1 FLIGHT BAG

The Mach 1 flight bag is compact yet roomy. The bag features a wide 5” double zippered access flap with a pen and pencil holder. There are two end compartments 6”x10”. On the front, a zippered 11"x 6" compartment. On the back is a 4”x 8”x 8” headset compartment which will accommodate the largest of headsets. The Mach 1 is made of US Made Nylon with 1/4” Foam Padded, 1000 Denier and is water resistant. It comes equipped with a GPS/Transceiver Pouch that can be worn on your belt. Also included is a shoulder strap and carry handle. Dimensions: 15”x11”x10” 1/2H.

Blue.....P/N 13-04088.............Navy Blue.....P/N 13-04091
Grey.....P/N 13-04092.............Red........P/N 13-04093

NORAL ADVANCED PILOT BAG

The Advanced Pilot Bag has extra large access (5-3/4” wide) and all the necessities! Featuring two huge headset bags, one on each end, it can hold more than just a headset. It has a detachable shoulder strap and carrying handles and are padded for extra comfort. It also has a zippered compartment for pens, flashlight, fuel tester and more! The main compartment’s loose semi-rigid divider is made of a very strong, but extremely lightweight hollow polypropylene. Covered with black fabric, it can be adjusted to your needs. It also contains a GPS or transceiver pouch to help protect equipment from damage due to accidental banging on hard surfaces while also keeping it out of sight from theft. Size: 11”x10.5”x 1/8 H.

Black.....P/N 13-00072

SMART CHART ORGANIZER

Made of US Made Nylon 1000 Denier with 1/4” Foam Padded. It features 6 card holders in the bottom and a compartment for chart. It secures the document by a zipper closer. Available in Black, Navy Blue, Red & Gray. Dimensions 6”W X 14”. The 6” Wide will be 12” in open position. Embroidery is available for $11.95 (16 Char. Max).

<table>
<thead>
<tr>
<th>Description</th>
<th>Part No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Noral Smart Chart Organizer Black</td>
<td>13-04456-B</td>
<td></td>
</tr>
<tr>
<td>Noral Smart Chart Organizer Navy</td>
<td>13-04456-N</td>
<td></td>
</tr>
<tr>
<td>Noral Smart Chart Organizer Blue</td>
<td>13-04456-BLU</td>
<td></td>
</tr>
<tr>
<td>Noral Smart Chart Organizer Red</td>
<td>13-04456-RED</td>
<td></td>
</tr>
<tr>
<td>Noral Smart Chart Organizer Grey</td>
<td>13-04456-G</td>
<td></td>
</tr>
<tr>
<td>Noral Smart Chart Organizer Camo</td>
<td>13-04456-C</td>
<td></td>
</tr>
</tbody>
</table>

702
ASA AIRCLASSICS FLIGHT BAG
ASA has brought pilot gear to a new level with the AirClassics series of pilot bags. Focusing on a clean, sophisticated and professional look, they have been designed and engineered to be supremely functional.

- Padded 600D nylon for superior durability.
- Comfort Grip connectable handles.
- Non-slip detachable carry strap.
- Reinforcing straps around bag for strength. #10 zippers for easy handling.
- Headset pockets on both ends. Large single-pull, zippered & dividable main compartment.

Dimensions: 19” wide x 8” tall x 12 1/2” deep

P/N 13-02336 ................................

ASA AVIATOR FLIGHT BAGS
The Pilot Flight Bag and the Trip Bag, are made of fully padded nylon for extreme durability. They feature wraparound carry straps for strength, a non-slip detachable shoulder strap, and high-quality zippers on the main compartments.

- Padded exterior pockets and side pocket for smaller items
- Padded interior divider panels with many compartments
- Exterior ID pocket
- Flashlight and pen holster
- Multiple storage compartments
- Protective plastic plate

Outside dimensions 18 x 13 x 8 inches.

P/N 13-06105 ................................

ASA TECH FLIGHT BAG
ASA pilot gear bags are well known for their supreme functionality, rugged construction and professional style. The Tech Bag is ideal for the computer-toting pilot. It includes a padded laptop sleeve for safe storage of your computer or favorite EFB (up to 15” x 11”) and has plenty of pockets for carrying everything from headsets to sticky notes. It’s a mobile office-flight planning room in a bag! Count on your ASA Tech Bag to bring you many years of utility and pride.

- Made of 600D polyester with PVC backing for extreme durability
- Non-slip removable shoulder strap
- Molded carry handle for strength and comfort
- Rugged zippers
- Outside ID pocket
- Padded interior divider panels with numerous compartments
- Padded interior laptop/EFB sleeve

Dimensions: 19’’ wide x 12 1/2’’ tall x 9’’ deep

P/N 13-06260 ................................

ASA CRM FLIGHT BAG
This “copilot in a bag” not only keeps your gear organized on the go, but in the cockpit as well. Its functional design serves double duty as a great storage apparatus and ultimate cockpit organizer. Numerous compartments and pockets keep everything secure and easily accessible in flight. There are even “hideaway” stretch mesh side pockets for water bottles. It’s large enough to hold everything you need yet compact enough to easily bring along on shorter excursions. Count on your ASA CRM Bag to bring you many years of utility and pride.

- Made of 600D polyester with PVC backing for extreme durability
- Non-slip removable shoulder strap
- Padded carry handle
- Rugged zippers
- Interior organizer with multiple pockets
- Large interior mesh pocket with toggle closure
- Side zippered pocket with stretch mesh for water bottle

Dimensions: 14” wide x 12 1/2” tall x 9” deep

P/N 13-06298 ................................

AEROCOAST FLIGHT CASES
PRO I FLIGHT CASE - This professional grade flight case includes many added features not present on today’s flight cases. Features such as multi access folders, flashlight holder, multiple pockets, business card sleeve, and a protective base plate.

- Multi access folder compartments
- Multiple storage compartments
- Flashlight holder
- Leather wrapped handle
- Side pocket compartment
- Name card holder with clear cover
- Embroidered gold logo
- Added Velcro to both inside flaps

Outside dimensions 18 x 13 x 8 inches.

P/N 13-06041 ................................

PRO II FLIGHT CASE - The Pro II flight case offers the same features as the Pro I. However the primary differences you will notice with the Pro II is the sturdy saddle style. The Pro II features a true handle belts and the absence of the front pocket access.

- Protective plastic plate
- Inside access folder compartments
- Multiple storage compartments
- Flashlight holder
- Leather wrapped handle
- Side pocket compartment
- Name card holder with clear cover
- Embroidered gold logo
- Added Velcro to both inside flaps

Outside dimensions 18 x 13 x 8 inches.

P/N 13-06042 ................................

PRO III FLIGHT CASE - This professional grade flight case includes many added features not present on today’s flight cases. The visible differences between the Pro I and the Pro III is the absence of the front compartment lock. Features such as:

- Waterproof ballistic material
- Matched stitching for added strength
- Metal piano hinge for added strength
- Matched stitching for added strength
- Waterproof ballistic material
- Metal piano hinge for added strength

Outside dimensions 8 x 13 x 8 inches.

P/N 13-06105 ................................

ASA CARGO FLIGHT BAG
ASA pilot gear bags are well known for their supreme functionality, rugged construction and professional style. The Cargo Bag is a true hauler. Its widemouth opening provides unrestricted access to a large interior suited to carrying just about anything and everything you need, and then some. The widemouth opening has a built-in metal rod frame for strength and rigidity where it’s needed most. Includes a padded headet pocket accompanied by an abundance of compartments and an adjustable hook and loop divider which allows for customization of the main inside pocket. Count on your ASA Cargo Bag to bring you many years of utility and pride.

- Made of 600D polyester with PVC backing for extreme durability
- Widemouth opening for unrestricted interior access
- Non-slip removable shoulder strap
- Padded carry handle
- Rugged zippers
- Exterior ID pocket
- Padded interior divider panels with many compartments
- Padded exterior pockets and side pocket for smaller items

Dimensions: 16 1/2” wide x 8” tall x 12” deep

P/N 13-06259 ................................
**JEPPESEN CASES & FLIGHT BAGS**

**AIRWAY MANUAL CARRYING BAG**
Developed at the request of corporate flight departments. Carries up to eight 2" binders for these extended trips. High-quality cordura fabric. (Size: 24" x 11" x 9")
P/N 13-621200 ..........................................

**FLIGHT CASES**
Top Grain leather flight cases rugged Samsonite brown or black, top-grain flight cases offer the ultimate in convenience and utility. Matched stitching and leather covered handle enhance the looks and carrying comfort. Includes removable binder dividers. Available in 3 sizes:
- **FC-106 holds 6 binders (12"x9"x18")**
  - Black ......................... P/N 13-01198 ..........................................
- **FC-104 Holds 4 Binders (12"x8"x18")**
  - Black ......................... P/N 13-00116 ..........................................

**BRIGHTLINE PILOT FLIGHT BAG**
P/N 13-06040 ..........................................

**NAV-DATA FLIGHT BAG**
Finally, an affordable flight bag with compartments for all your flight gear and then some. Made of durable 600D nylon canvas for years of use. Overall dimensions: * 20" x 10" x 13". Low profile prevents tipping. * Two headset pockets. * Front expandable VHF and electronics pockets. * Large main compartment for kneeboard, charts, facility directory, etc. * Adjustable shoulder strap
P/N 13-06090 ..........................................

**SINGLE HEADSET BAG**
For those who like to fly with minimum baggage, this holds one headset, has extra pockets, and all around padding
P/N 13-02333 ..........................................

**FLIGHT ATTACHE**
Holds all the materials a student pilot needs. 15" long x 11" deep
P/N 13-02335 ..........................................

**TUFF NUFF HEADSET CASE**
A rugged built case with "clamshell" design for easy access. Your headset is well protected by a soft foam lining and tough Cordura outer shell. Fits all popular makes and models, with extra room for small accessories. Measures 9-1/2" x 10-1/2" x 3", and weighs 7 oz.
P/N 4002 .............................................

**JEPPSENE STYLE FLIGHT BAG**
Student/Book Bag: Same great bag Jeppesen uses for its training kits. The bag is made from heavy-duty 600D nylon for superior strength and with a PVC coating on one side for added water resistance. Includes outside pockets, removable shoulder strap, reinforced bottom. Size 10" x 5.5" x 17"
P/N 13-06280 ..........................................

**THE CAPTAIN FLIGHT BAG**
The most versatile bag available. Headset bags can be removed and attached together to form a dual headset bag. Removable transceiver/GPS bag can be worn on your belt. 4-way interior custom divider can hold four Jeppesen binders. One large multi-use exterior zippered pocket. Two zippered storage pockets for glasses, charts, pilot operating handbooks and other miscellaneous accessories. Wide cushioned shoulder strap. (12" x 22-1/2" x 8"
P/N 13-621214 ..........................................

**THE AVIATOR BAG**
Slightly smaller than the Navigator Bag, but still spacious enough for all your flight materials. Includes 1 exterior front pocket as well as detachable headset & transceiver cases. Constructed with durable PVC backed with 600 denier poly. 13" x 6.5" x 12" (black only)
P/N 13-00998 ..........................................

**THE NAVIGATOR BAG**
The ultimate choice for convenience and flexibility. Each Navigator Bag includes all of the features and benefits of the Captain Bag, except the removable transceiver/ GPS bag and the two zippered exterior storage pockets. Instead it includes two exterior storage pockets for easy access to Section Charts. 12" x 22 1/2" x 8" P/N 13-00995 ..........................................

**THE STUDENT PILOT**
A great first bag for the student pilot. Numerous outside pockets organize charts, flight computer, fuel tester, plotter, pens and pencils, flashlight and much more. Comfortable, wide removable shoulder strap; double zipper opening for easy access. Reinforced bottom. Constructed with durable PVC backed 600 denier poly. 10" x 5.5" x 17" (black only)
P/N 13-00997 ..........................................

**THE PROTECTOR HEADSET BAGS**
Each Jeppesen Headset Bag is fully padded and made from Dupont's heavy duty 600D-Denier Cordura® polyester with a PVC coating on one side for added water resistance, designed for superior strength, abrasion resistance, and durability. Each includes a leather snap-on handle grip. Size: 12"H x 8"W x 2.75"D

- Single Headset Bag
  - P/N 13-00999 ..........................................
- Dual Headset Bag
  - P/N 13-01004 ..........................................

704
CHART CLIPS - TOOL BAGS

PUT-IT SUCTION CLIP
This clip is strong enough to hold an approach plate, chart, or checklist. Attaches by a suction cup to the instrument panel, yoke or any other nonporous surface. P/N 8197

NO CLUTTER CLIPS
No Clutter Clips * Holds checklists, approach plates, charts, etc. * Stick on most slick surfaces * UV Resistant
1 Small Clip per Package P/N 13-06636
2 Small Clips per Package P/N 13-06408
1 Large Clip per Package P/N 13-06409

WATCH-IT ACCESSORY HOLDER
“World’s most versatile holding device”. Lets you mount time pieces and calculators exactly where you want-on the wheel, the yoke tube of clipboard. An ingenious bracket, an adjustable holding loop, and a little Velcro is all it takes. Once positioned, can be mounted & removed repeatedly. Non-reflecting, black materials, weighs less than 1oz. P/N 8265

YOKE CHART CLIP
When you want the chart or approach plate right in front of you - this clip will hold it on the yoke. Adjustable band wraps around the yoke and holds the clip firmly. Fits all general aviation aircraft controls. Non-reflective black finish. P/N 8135

IFR CHART CLIP
Make IFR flying simpler by keeping vital instrument approach plates and charts in place. Attached to the yoke rather than in your lap or on the floor, this chart clip comes in various models designed to install easily on the yoke of your aircraft. Insures that your navigational charts stay in front of your eyes when you need them most. Handy for VFR charts as well. We’ll be happy to assist you in determining what model chart clip will best fit your aircraft.
1.5” Post Standard Clamp P/N 8131
1.5” Post Wide Clamp P/N 8487
2” Post Standard Clamp P/N 8690
2” Post Wide Clamp P/N 8822
3” Post Standard Clamp P/N 8674
3” Post Wide Clamp P/N 8915

HOLD-IT CHART HOLDER
Simple and effective, this handy stainless steel clip holds charts right where you need them. Elastic strap attaches securely to leg, aircraft yoke, or visor. P/N 13-017591

CARRY-IT CORDURA TOTE CASE
This multi-functional tote case is made from black Cordura fabric and features 8 pockets and velcro closures. Holds radios, flashlights, pens, pocket PC, maps, charts & more. P/N 13-017571

AVIATOR’S NYLON HELMET BAG

NELSON FLIGHT SEAT POUCH
- End cockpit clutter * Made of durable Cordura
- Stores flashlight, fuel tester, flight guides, approach plates, charts, plotter, E6-B, sunglasses and more.
- Available in black, AF blue, red, gray & olive drab
Black P/N 13-31871
Blue P/N 13-03005
Gray P/N 13-31872
Olive drab P/N 13-03006

NELSON AIRCRAFT DOCUMENT CASE
- Made of Cordura
- Two compartments
- Available in blue, gray, olive drab, orange & red.
Orange P/N 13-03013
Blue P/N 13-02932
Gray P/N 13-02933

NELSON AIRCRAFT DOCUMENT CASE
- Made of Cordura
- Two compartments
- Available in blue, gray, olive drab, orange & red.
Orange P/N 13-03013
Blue P/N 13-02932
Gray P/N 13-02933

23 POCKET BIGMOUTH BAG
17 Multi-use pockets inside and 6 outside organize tools and accessories. Opens wide for easy access to bag’s contents. Padded reinforced web carrying handles. 12”L x 8 1/2”W x 8”H. P/N 12-00329

12 POCKET TRAYTOTE BAG
This bag has 2 pockets inside and 10 pockets outside with a 11”x6” multi-compartment tray which slides securely into bottom of bag. Opens wide for easy access to contents and has reinforced web carrying handles. 12”L x 8”W x 12”H. P/N 12-00163

14 POCKET TRAYTOTE BAG
This bag features 2 pockets inside, 12 pockets outside, with a 13.5” x 6” multi-compartment plastic tray slides securely into bottom of bag. Opens wide for easy access. 16”L x 9”W x 12”H. P/N 12-00164

MILITARY STYLE TOOL BAGS
These tool bags are made of heavy-duty military-type tough 18oz./sq.yd. cotton duck with a water repellent mildew-resistant treatment. The mechanics Tool Bags have compartmentalized side pockets with flaps. Hardboard bottoms are completely sewn into each bag and are unexposed. All stitching is of heavy duty nylon thread and the handles are made from heavy military spec webbing. All inside seams are bound to eliminate raveling of the fabric. Long-tab, self-locking slider. Color: O.D. Green. Available in 2 sizes:
O.D. Green Small: 6” x 6” x 12” Bag P/N 13-02500
O.D. Green Large: 9” x 9” x 16” Bag P/N 13-02600

TOOL WRAP
These tool wraps allow the builder or pilot to carry an assortment of small hand tools in a convenient roll-up tool bag. Available in small 9-pocket or large 15-pocket size. Color is normally dark blue or off-white depending on available material, but colors can vary. Small Tool Wrap P/N 13-01746
Large Tool Wrap P/N 13-01747

UNIVERSAL BEVERAGE HOLDER
This Universal Beverage Holder made of billet aluminum installs easily in any thickness dash or instrument panel. Available in two styles, with square or oval face-polished surfaces, its compact design permits vast installation possibilities.
Oval Face P/N 13-03792
Square Face P/N 13-03793

SINGLE HEADSET BAG
Safe and convenient way to protect a single headset. Features foam padded single zipper compartment with convenient webbing handle. Made in USA. Size: 7”L x 4”W x 9”H. Color: Black. P/N 13-55010

AIRCRAFT DOCUMENT CASE
This durable, flexible blue cordura pouch is an ideal way to keep aircraft registration, insurance, log books, operating manuals, and other important documents all in one safe location. Measures 18”W x 12”H. Features top quality zipper along front side for easy access and location to mark your aircraft number on front P/N 13-20065

LICENSE HOLDERS
Black leatherette with clear plastic window to display ownership certificates. P/N 13-07900 only includes eyelet holes for mounting and metal plates to keep corners from fraying.
4-7/8” X 6-7/8” P/N 13-07900
7-1/2” X 8” P/N 13-17904
5” X 7” P/N 13-17905
5” X 14” Double Pocket P/N 13-17906
PILOT SUPPLIES

NELSON FIRST AID KITS
International Orange Case. Velcro hold-downs 10 FA Unit. Kit Contents:
- Blistex Burn Cream
- 1"x3" adhesive bandages
- First Aid Instruction Book
- 1/2" adhesive tape (2 rls)
- 24"x72" gauze compress
- Scissors
- Thermometer & compass
- Wire Splints
- 4" Bandage Compress
- PVP iodine wipes
- 2 Triangular Bandages
- Ammonia inhalants

First Aid Kit #1 P/N 13-02944
First Aid Kit #2 P/N 13-02945

NELSON AILER-LOCKS
- 2 Sizes
- 13" RBF streamer
- Locks flaps, ailerons, elevators, or rudder

Ailer-Lock standard (4.25") P/N 13-02829
Ailer-Lock Large (10") P/N 13-22705

NELSON “CESSNA” STYLE TAIL SKID
This easy-to-install tail (3 minutes) skid is designed to save the tail feathers on most single engine Cessnas. Made from 4130 aircraft steel, this tail skid fits Cessna 150, 152, 172, 177, and 182. P/N 13-17010

CONVENIENCE BAG
Disposable urine & vomit bag • Wide mouth • No spill, cleanup, or odor • One-hand use
P/N 13-02821

KEY CHAINS
Choice of:
- “I’d Rather Be Flying” P/N 13-02949
- “I’d Rather Be Flying” P/N 13-02950

REMOVE BEFORE FLIGHT KEYCHAIN
Red, “REMOVE BEFORE FLIGHT” is 11-1/2” in length. Great for your keys, ID, or badge. The “REMOVE BEFORE FLIGHT” is silk screened in white on red nylon. P/N 13-03822

AIRCRAFT FOR SALE BANNERS
Designed specifically for aircraft use, these banners slip right over your prop blades, moving in the breeze to attract attention—but will not rub against painted surfaces. Each banner is 9” x 23”, made of heavyweight rubberized Nylon that is weather-repellent and resists tearing. Sold as a set of 2. P/N 5412

PROPELLER MOUNTED BANNERS
Two 28” x 8”, white printing on red reinforced vinyl with business card pouch. Yellow, blue and white pennants, slides over prop, fastens with velcro.
For Sale P/N 13-06402
For Rent P/N 13-06635

FOR SALE PROP BANNER
Consists of three pieces. Each prop banner is 11” high X 22” long when mounted. Made of RED vinylized polyester with BOLD WHITE lettering. Unlike prop banners that are a sleeve which must be slipped over the prop blade only, these banners are split at the bottom and are held together with velcro. This allows the banner to be opened up and then wrapped around virtually ANY structural member of the aircraft. P/N 13-06914

PILOTS FREQUENCY REMINDERS
This little prompter is designed to allow the pilot (especially students) to pre-plan which frequencies will be used during a flight and hang this handy item close at hand in the cockpit. This is ideal when operating in a high density airport area. Helps eliminate cockpit clutter and searching for often used frequencies. P/N 13-04391

YOKE CLIPS
Clip this yoke on your aircraft so it does not interfere with movement of controls. Spring may be adjusted for smaller diameter shafts by pinching with pliers. Larger … P/N 13-04392
Smaller … P/N 13-04393

FLYING/SAFETY GLASSES
- Meets or exceeds ANSI requirements • Provides 99.9% protection against harmful UV radiation • High impact scratch resistant polycarbonate lens • Adjustable temples for greater fit & comfort • Replacement lenses

Gray … P/N 13-02823
Amber … P/N 13-02825

COCKPIT EMERGENCY LIGHT
- Uses super power LED • 20,000 hrs “always on”
- 200 hrs low power or strobe • 20 hrs high beam
- Uses standard 9V battery • Available in 3 LED beam colors

Green … P/N 13-02751
Red … P/N 13-02928
White … P/N 13-02929

APPROACH PLATE HOLDER
- 10 leaf • Flip-over (not accordion) • Size: 6” x 9” • Vinyl

P/N 13-02772

STROBE / FLASHLIGHT
- Uses D battery • Red lens available
- Waterproof • USCG approved • Operates up to 60 hours

P/N 13-02811

EMERGENCY LIGHT
- Uses standard 9V battery • Available in 3 LED beam colors

P/N 13-04397

STROBE
- 200 hrs high beam • 1 mile visibility • Waterproof to 100m • Flashes more than 45 times per min. for up to 10 hours • Powered by (2) AA batteries (not incl.) • Xenon bulb • Red lens included for flashlight end • International orange case • ABS plastic body • P/N 13-02899

FUEL VENT COVER
The fuel vent cover is designed to fit most fuel vents, and will not pressurize the fuel system. The ribbon is nylon with a vinyl coating and silkscreened letters.

P/N 13-02817

AIRCRAFT PARKING WANDS
- Fluorescent coated diffuser enhances red light output • Used by US Air force • Up to 400 hours operation • 17” long • Uses (2) D batteries (not incl.) • Waterproof

P/N 13-08959

EMERGENCY PLANE LIGHTING
- 200 hrs low power or strobe • 20 hrs high beam
- Uses standard 9V battery • Available in 3 LED beam colors

P/N 13-04397

“REMOVE BEFORE FLIGHT” PITOT COVERS
Universal cover … P/N 13-04396
Piper blade cover … P/N 13-02946
3/4 pitot cover … P/N 13-04395
5/8 pitot cover … P/N 13-04384
Sm RBF streamer … P/N 13-02818
Lrg RBF streamer … P/N 13-02819
Nelson RBF Streamer … P/N 13-04397

STROBE / FLASHLIGHT
- Uses D battery • Red lens available
- Waterproof to 100m • Flashes more than 45 times per min. for up to 10 hours • Powered by (2) AA batteries (not incl.) • Xenon bulb • Red lens included for flashlight end • International orange case • ABS plastic body • P/N 13-02899
**BACKSAVER FOAM**

Backsaver foam is temperature sensitive, softening when it comes in contact with a warm surface; thus, in a seat cushion, the foam softens and conforms to the person's body. This provides even pressure distribution and unconstrained blood circulation, significantly reducing discomfort, even over long periods. In addition, Backsaver foam has excellent energy absorption properties, which have made it extremely useful for the U.S. space shuttle program and in military aircraft and helicopters. Pilots find that Backsaver cushions reduce their discomfort and fatigue, even on missions of 8 hours or more. Aircraft Spruce now makes Backsaver foam available to the homebuilt and general aviation market.

**CONFOR FOAM SEAT CUSHION**

Temperfoam is the conforming foam cushion that was developed for the *Astronaut's Couch* back in the Apollo space program. Seat foam has the capability of absorbing a tremendous amount of impact shock compared to common polyfoam and it is flame resistant. It is an excellent product that will give your seats enduring comfort that you never thought possible. It is not a soft seat, but it adapts to you for pressure- point-free comfort that is really incredible. The best universal cushion for aircraft use is a 3” T/38/T41/T47 laminate. Temperfoam is not currently FAA approved for certification.

**SKWOOSH PILOT SEAT**

Fly with SKWOOSH™ and say goodbye to numbness in your legs and rear. TekPad® gel technology delivers pressure relief for long flight comfort. The compact SKWOOSH™ Pilot's seat is designed specifically for flight personnel. It folds to fit in a chart case, carry on or just hang it from a roll-on. It has a durable 300 denier top fabric for comfort and convenient attached cord loops for hanging. The non-skid bottom makes SKWOOSH™ stay put, insuring no movement during use, while its low profile allows you to maintain normal seat position. So when you have to sit for a long time, in the cockpit or passenger cabin, count on SKWOOSH™ for comfort.

Specifications:  
- Model#: P5S44  
- Weight: 8 oz.  
- Open Dimensions: 15” x 10½” x 6”  
- Folded Dimensions: 7½” x 10¼” x 1”  
- Color: Black  
- Non-Skid bottom  
- Convenient cord loops for hanging  
- Made in USA  
- Guaranteed Performance and Guaranteed Workmanship.

**NELSON BOOSTER SEAT**

Sit higher, and sit softer on 2 or 3 inches of high-density foam covered with durable, “breathable” Cordura. Made of USAP specifications with segmented backrest. Really makes a difference on a long flight. Also available: 3 or 4-inch thick child’s cushion that finally lets kids see outside, keeps them interested as well as comfortable during long trips. Both seat and cushion are available in either Air Force blue or red. Add B (blue), or R (red) after part number to indicate color.

Dimensions for all Nelson Seats: Back: Width - 16” Height - 17” Seat: Width - 15” Depth - 12”

**NORAL SEATS**

This cushion is made with the finest materials available. It features a high back with a Lumbar Support for added comfort. The foam inside meets FAA FAR regarding fire materials. A strap is present for easy carrying and securing the cushion to the back of the seat when installed. Available in 2 sizes marked Type ‘A’ & Type ‘B’. Label ‘A’ fits Cessnas 172/182/172 Cutlass /210 and other larger seats. Label ‘B’ fits Cessnas 150/152, Piper, Archer, Warrior, Cherokee, and similar seats.

**BLACK MAX COMFORTLITE SEAT**

- * 18” Wide X 19” Deep x 26” High  
- 6061-T6 Aluminum Base and tubing.  
- Assembled with AN Hardware.  
- Material made from durable Cordura nylon  
- Includes a large storage pocket in the back  
- Additional storage between pan and seat  
- Pivots down to make it easier to get in behind the seat on a tandem.  

P/N 13-05554

---

**Cushion Color/Part No.**

<table>
<thead>
<tr>
<th>Color</th>
<th>Part No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td>13-00326</td>
<td>2” Seat Cushion - Type A</td>
</tr>
<tr>
<td>Blue</td>
<td>13-00327</td>
<td>2” Seat Cushion - Type A</td>
</tr>
<tr>
<td>Grey</td>
<td>13-00328</td>
<td>2” Seat Cushion - Type A</td>
</tr>
<tr>
<td>Black</td>
<td>13-00329</td>
<td>3” Seat Cushion - Type A</td>
</tr>
<tr>
<td>Blue</td>
<td>13-00330</td>
<td>3” Seat Cushion - Type A</td>
</tr>
<tr>
<td>Grey</td>
<td>13-00331</td>
<td>3” Seat Cushion - Type A</td>
</tr>
<tr>
<td>Black</td>
<td>13-00332</td>
<td>4” Seat Cushion - Type A</td>
</tr>
<tr>
<td>Blue</td>
<td>13-00333</td>
<td>4” Seat Cushion - Type A</td>
</tr>
<tr>
<td>Grey</td>
<td>13-00334</td>
<td>4” Seat Cushion - Type A</td>
</tr>
<tr>
<td>Black</td>
<td>13-00335</td>
<td>3’ Seat Cushion only</td>
</tr>
<tr>
<td>Blue</td>
<td>13-00336</td>
<td>3’ Seat Cushion only</td>
</tr>
<tr>
<td>Grey</td>
<td>13-00337</td>
<td>3’ Seat Cushion only</td>
</tr>
<tr>
<td>Black</td>
<td>13-00338</td>
<td>4’ Seat Cushion only</td>
</tr>
<tr>
<td>Blue</td>
<td>13-00339</td>
<td>4’ Seat Cushion only</td>
</tr>
<tr>
<td>Grey</td>
<td>13-00340</td>
<td>4’ Seat Cushion only</td>
</tr>
</tbody>
</table>

---

**Model#:** P5S44  
**Weight:** 8 oz.  
**Open Dimensions:** 15” x 10½” x 6”  
**Folded Dimensions:** 7½” x 10¼” x 1”  
**Color:** Black  
**Non-Skid bottom**  
**Convenient cord loops for hanging**  
**Made in USA**  
**Guaranteed Performance and Guaranteed Workmanship.

P/N 13-05827
AEROSHEEP AUSTRALIAN SHEEPSKIN SEAT COVERS

Aerosheep seat covers are manufactured from genuine Australian Merino sheepskins. Each cover is hand tailored to fit the particular aircraft seat and comes with a 5 yr warranty. The dense 1” fleece will not shed on clothing, and the snug fit allows for no slippage. Aerosheep seat covers are cool in the summer and warm in the winter, and protect seats from sun and wear. Fully lined, they are attractive, durable, and very comfortable. Easy to install without removing the seat. Available in tan, pearl, regal, silver, bone, smoke, navy, and burgundy; free color swatches available on request. Furnished with FAA form 8110-3 (flammability compliance certification) and shipped Fed-Ex 3-day service from the factory within one week (Add $15.00 for shipping). To order, specify aircraft year, make, model, and color choice. For reupholstered or non-standard seats, request special order form to shipping). To order, specify aircraft year, make, model, and color choice. Fed-Ex 3-day service from the factory within one week (Add $15.00 for shipping).


Specify year, make model and color choice when ordering. Car seat covers also available in same colors. Call for a price. Blue Ribbon Sheepskin Seat Covers (pair) …… P/N 7736………….

Sheepskins Samples - Order a sample then return it for a full credit after you have selected a color and ordered your seat cover. P/N 13-05584………….

COLORS AVAILABLE

<table>
<thead>
<tr>
<th>Color</th>
<th>Price</th>
<th>Size</th>
</tr>
</thead>
<tbody>
<tr>
<td>Black</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Oyster</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Navy</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Natural</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Charcoal</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Bamboo</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Mushroom</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Metallic</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Beige</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Creme</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

BLUE RIBBON SHEEPSKIN SEAT COVERS: NATURES OWN THERMOSTAT

The magic of 100% genuine sheepskin is quite simply that it will keep you cool in summer and warm in winter. No other natural or man-made fiber possesses the qualities of sheepskin. Whatever the temperature in your cockpit, sheepskin covers remain almost the identical temperature. Additionally, each hollow fiber absorbs up to 30% of its own weight in moisture. It keeps you dry, yet never feels wet itself. You avoid the heat and clamminess of vinyl, or even leather, because there’s free flow of air between you and seat. Every cover is hand-made by master craftsmen from the finest chrome-tanned pelts, in colors to match or coordinate with any interior. Sold in pairs only, in 11 colors (request color samples when ordering). PFA Approved.


Specify year, make model and color choice when ordering. Car seat covers also available in same colors. Call for a price.

AIRCRAFT SPRUCE POLO SHIRT

SPRUCE POLO SHIRT - These are the same high quality polo shirts worn by the Aircraft Spruce Staff at Oshkosh, Sun ‘N Fun and other airshows. Made from Dry-Excel™ close-hole Micromesh, polyester knit, with a fine gauge rib-trim collar. Three button front, open hem sleeves, and split side welts make these polos great for everyone. These polos feature the Aircraft Spruce logo on the left chest. Machine washable.

<table>
<thead>
<tr>
<th>Size</th>
<th>Part No.</th>
<th>Price</th>
<th>Size</th>
<th>Part No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small</td>
<td>13-04729</td>
<td></td>
<td>Small</td>
<td>13-05607</td>
<td></td>
</tr>
<tr>
<td>Med.</td>
<td>13-04731</td>
<td></td>
<td>Med.</td>
<td>13-05608</td>
<td></td>
</tr>
<tr>
<td>Large</td>
<td>13-04732</td>
<td></td>
<td>Large</td>
<td>13-05609</td>
<td></td>
</tr>
<tr>
<td>X-LRG</td>
<td>13-04733</td>
<td></td>
<td>X-LRG</td>
<td>13-05610</td>
<td></td>
</tr>
<tr>
<td>2XLG</td>
<td>13-04734</td>
<td></td>
<td>2XLG</td>
<td>13-05611</td>
<td></td>
</tr>
</tbody>
</table>

AIRCRAFT SPRUCE WINDBREAKER

These high quality, golf style pullover windbreakers are perfect for those chilly days on the course or at the airport. Color: Navy blue w/Khaki trim and “Aircraft Spruce & Specialty Co” on left chest.

<table>
<thead>
<tr>
<th>Size</th>
<th>Part No.</th>
<th>Price</th>
<th>Size</th>
<th>Part No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Medium</td>
<td>13-01987</td>
<td></td>
<td>Large</td>
<td>13-01988</td>
<td></td>
</tr>
<tr>
<td>X-Large</td>
<td>13-01989</td>
<td></td>
<td>2XL</td>
<td>13-01990</td>
<td></td>
</tr>
</tbody>
</table>

AIRCRAFT SPRUCE T-SHIRT

Top quality 100% cotton shirt available in white or navy blue. These shirts feature Aircraft Spruce logo on the back and a small Aircraft Spruce Logo on the front left chest. A great looking shirt that will last for years. Order size by part no.:

<table>
<thead>
<tr>
<th>Size</th>
<th>Part No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small</td>
<td>13-02810</td>
<td></td>
</tr>
<tr>
<td>Med.</td>
<td>13-02910</td>
<td></td>
</tr>
<tr>
<td>Large</td>
<td>13-03010</td>
<td></td>
</tr>
<tr>
<td>XL</td>
<td>13-03110</td>
<td></td>
</tr>
<tr>
<td>XXL</td>
<td>13-03120</td>
<td></td>
</tr>
</tbody>
</table>

AIRCRAFT SPRUCE CAP

Our heavyweight 100% brushed cotton hat is perfect for aviators. Unlike other caps, ours features a no-button construction for comfort while wearing your headwear. Low profile cap has aircraft design on front panel and Aircraft Spruce logo on back. A great looking top quality cap Stretch fit, one size fits all. P/N 13-03895…………….ea.
ROSENFELD SUN VISOR SYSTEM

Don't fly blind! Give yourself and your passengers that extra margin of safety. These transparent sun visors rotate and extend to offer complete cockpit protection from the sun. The oversize, tinted lens filters out 95% of the ultraviolet rays, reduces glare by 94% and heat by 86%. Distortion free. Fully STC'd and PMA'd. The system, which includes pilot and copilot visors, installs in minutes. (Exceptions: C-210 non-pressurized requires 1.5 hrs, C-152 requires rivnut installation by an A&P, C-177 req. 6-8 hrs.). Available for these aircraft. Visit or website for specs., installation and application data.

BEECH - Bonanza/Baron, standard........P/N 7568
Bonanza/Baron,3rd Axis option...........P/N 7311
Duke ........................................P/N 7738
1900D ........................................P/N 13-01926
King Air .....................................P/N 13-01927
MOONEY - 1968 and later models original visors mounted on sight or left side (not on center post) ........................................P/N 7762 ...................................
Rosen Sun Visor - Bonanza/Baron........P/N 13-04014 ..................................
PIPER
Comanche, All models, standard ........P/N 7809
Comanche, Third Axis option ..........P/N 7924
Cherokee, Center mount .................P/N 13-01315
Cherokee, swivel stud ....................P/N 13-01316
Seneca .......................................P/N 13-01317
CESSNA
1980 and later - 170's to 206's (except 177's) Center Mount 
All 150's and 152's. Prior to 1980 - 170's - 206's (except 177's) Side Mount 
P/N 7006 ........................................
Cessna 180 3rd axis (1980 & earlier) ........................................P/N 13-03173
Cessna 180 3rd axis (1981 & later) ....P/N 13-03174
210's w/o air cond. (Older 210's, see above) .............P/N 7152 ........................................
P210's and 210's w/air conditioning ..........P/N 7426 ........................................
177's ........................................P/N 7582 ........................................
T303 ........................................P/N 13-01928
310's and 340's, special order to replace units with ball-joint cover style 
visor only (shown) ..........P/N 7687 ........................................
337 ........................................P/N 13-01308
330 ........................................P/N 13-01311
350/400 .....................................P/N 13-06044
400 ........................................P/N 13-01312
4120 ........................................P/N 13-05180
GRUMMAN - Cheetah .......................P/N 13-01313
R4-10 
Rosen Sun Visor Set - RV-10 .............P/N 13-05695 ........................................
Piper Sun Visor - Pilot Side ................P/N 13-05696 ........................................
Rosen Sun Visor Set - Copilot Side .....P/N 13-05697 ........................................
MAULE 
Rockwell Commander 114 ..............P/N 13-03328 ........................................
OTHERS*
Cirrus SR22 / SR22 .......................P/N 13-03258 ........................................
Lancar IV ..................................P/N 13-01934 ........................................
Pilatus P12 ..................................P/N 13-01936 ........................................
Homebuilders Universal surface mount .P/N 13-03175 ........................................
Homebuilders Universal nose tube mount .....P/N 13-03176 ........................................
Homebuilders Universal systems are specific order & built to your specs
ROSENFELD THIRD AXIS UPDATE KIT - This update kit will fit any Rosen system that does not come standard with third axis option (Piper systems, for examples, come with third axis standard).
P/N 13-04014 ..............................

ROSENFELD SUNSHADES

A highly effective solution to excessive heat build-up in the cockpit, CrewShade is easily fixed to the side windows with (2) attached suction cups. Suction release tabs make repositioning quick and simple. The CrewShade folds and stores in the included 6" diameter carrying pouch when not in use. Shade dimensions: 14 1/2" x 17 1/2" P/N 13-06271 .........

TINTED VISORS FOR CESSNA, BEECH, & PIPER

These tinted visors shade the sun and enable easier scan for traffic. They replace the stock visor and install in minutes using easy to follow instructions. Visors actually enhance visibility. Made in USA. Sold in sets of 2. FAA approved.

Visors for Cessna 150/152, 177, 210, 337, P/N 13-14250 ........................................
Visors for Cessna 172/182,180,185,205, 206 ................................P/N 13-14255 ........................................

DIM-IT MOVEABLE VISOR

You can keep moving your head to stay in the shade of your visor, or you can get a DIM-IT visor and move it to where you want it. It's a 6" x 5" sheet of tinted Lexan that can be positioned on any window in the cockpit by means of the attached vinyl suction cup. (An optional self-adhesive adapter plate lets you attach it to porous surfaces as well.) Completely transparent and distortion-free.

- P/N 7172 ..............................
- P/N 13-01713 ..............................
- P/N 13-01758 ..............................

MINI DIM-IT

Diminishes the intensity of direct sunlight, glare, and reflections. This little visor is made of high strength tinted Lexan that is distortion-free. Place the suction cup on a window/windshield and press. P/N 13-01758 ..............................

ADJUSTVISOR

The Adjustable, a clip-on unit that virtually doubles the effective range of stock visors, adds contrast, and reduces glare and fatigue. Available with yellow or smoke polycarbonate lens with UV protection. There's also a suction cup model for aircraft with canopies. The cups are strong enough and the visor assemblies light enough that they stay attached to any window through most any maneuver. Size: 3.5" x 12". Clip-on (yellow) ... P/N 13-03264 ........................................
- P/N 13-03263 ..............................
- P/N 13-03262 ..............................
- P/N 13-03261 ..............................

PILOT TUBE COVERS

Spruce's own pilot covers feature an authentic, soft, bright red vinyl - will not fade, mildew resistant, made to MIL-C-20696. Remove Before Flight streamer. The durable leather-like bootie attaches simply with a Velcro strap and offers optimum protection from insects and weather, slip-fits over 5/8" or 11/16" dia. pilot tubes. P/N 15210 ..............................

SLIP ON PITOT COVER - This high quality pitot tube cover also features the "Remove Before Flight" bright red streamer, but slip-fits over 1/4" or 1/2" dia. pilot tubes. Great looks & great protection! P/N 15220 ..............................

ROUND CESSNA PITOT COVER - This yellow urethane pitot cover fits round, high-wing Cessna pitot tubes. Grooved fitting releases air pressure as the barometer changes. P/N 5139 ..............................

PIPER PITOT COVER - This pilot cover is designed to fit the blade style pitot commonly found on Piper aircraft. Small vent hole prevents pressurizing system. P/N 5740 ..............................

REMOVE BEFORE FLIGHT RIBBON

This 24" bright orange streamer is sewn with black letters features a grommet for a C ring to attach to anywhere on the aircraft. High visibility, fire resistant material. P/N 51500 ..............................

DO NOT TOW STREAMER

17" Streamer, attach with Velcro, Color international orange. P/N 13-02004 ..............................

ASA PITOT TUBE COVERS

Fit snugly over standard aircraft pitot tubes, and are vented to avoid pressurizing the pitot static system. Critical to safe operations, the cover keeps dirt, contamination, and insects from entering the pitot tube. A "remove before flight" streamer hangs off the cover as a prominent preflight reminder to pilots. Molded in the United States, the cover uses a heavy duty plastic material. Pitot Tube Cover 5/8" (small) ... P/N 13-02578 ........................................
(Fits: Cessna 300/400 series, Citation & Conquest, Beech singles & twins, Piper Navajo & Cheyenne, Mooneys, Mitsubishi, Lear Jets & Cirrus) Pilot Tube Covers 3/4", 1" & 1 1/4" P/N 13-02577 (Fits: Cessna 150,152,172,177,182, 200 series, Skymaster & the Falcon Jet)

FUEL CAP COVER

The STAY SEALED cap is a patented fuel cap cover that locks onto the existing factory cap and seals to the surface of the wing. Designed and tested against heavy rains, strong winds, high temperatures, and extreme cold. It sealed out melting snow and ice, blowing rain and water from aircraft. It's "To be used anytime the aircraft is stored outside. The device MUST be REMOVED BEFORE FLIGHT."

Model SSCC fits the following: Cessna Series: 152, 172, 182, 206, 207, 210. Fitted with the raised metal fuel cap. P/N 05-03662 ..............................
Model SSCCP fits the following: Cessna 120,140,150,172 with recessed fuel cap. Fitted with the raised metal fuel cap. P/N 05-03669 ..............................
KENNON SUPER SUN SHIELDS

The most durable sun shield on the market has a clear polyester coating to protect the Plexiglass window. Heat can damage the interior and avionics in your aircraft. The secret is a material with two surfaces of aluminum separated by trapped air. This configuration reflects 97% of radiant heat, an insulation value of R-9 equivalent to two inches of fiberglass. Kennon Extra Fim shields fit snugly, and maintain their shape for a tight fit. They install in no time, and roll up for storage in compact, water-repellent bags. Weight is 1lb. Available for most aircraft, specify year, make and model. For custom shields, specify exact size of windshield & windows. Also available for cars. Fabric edging insures snug fit & durability. P/N 7672.

BONANZA/BARON

ADJUSTABLE SUN VISORS

Aerospace construction means they work flawlessly, plus they are very adjustable. Rotate them up and down, turn to cover the side windows and slide in and out for coverage where you want. P/N 05-03434.

KENNON COWL PLUGS

Kennon cowl plugs are constructed from red Aqualon tow 2” thick foam and feature a binding around the edges of the plug. So there is a tight seal which fits snugly in the cowl. This lip prevents the plugs from slipping inside the opening. A safety strap goes around the prop so if by chance you forget to remove the plugs the prop will remove the plug for you. These cowl plugs install easily and comes with their own storage bag. Specify aircraft make, model & year when ordering. Include aircraft registration number when ordering. There is an additional cost for the microfiber lining, and the cost varies based on aircraft. P/N 13-06212.

KENNON HEATED COWL PLUGS

Kennon builds an electric heater attachment into its engine cowl plugs to provide the heat you need on those cold winter nights. Simply install the cowl plugs and plug in the heaters then bundle up your cowling and plug in the heaters, and your engine will stay toasty until you are ready to fly again. The 50W heaters are energy efficient. Plus, you can remove the heater(s) and use the cowl plugs year-round to keep your air intakes clean and bird free. Keeps the air intakes clean and preheated. As with any preheat system, emers are energy efficient. Plus, you can remove the heater(s) and use for the specific year, make and model of aircraft. You will be asked for aircraft year, make, model, and registration number when ordering this item. There is an additional cost for the microfiber lining, and the cost varies based on the type of aircraft. P/N 13-14111.

CUSTOM FIT COWL PLUGS

These cowl plugs are tailored to fit popular Cessna and Beech single engine aircraft. High visibility yellow closed cell foam will not retain moisture. P/N 13-03371. The plug is "Remove Before Starting Engine", and the other is blank for the N#. They are joined by a nylon strap with a fluorescent orange Remove Before Flight flag. Please use according to part no’s, to specify aircraft. C-150 (2 Hole Only)........P/N 13-062600.............
C-172 (1965+)........P/N 13-062625.............
C-127 (1925 - 1989)........P/N 13-063240.............
C-182 (1952 - 1964)........P/N 13-063257.............

Universal kit w/square inlets (Sqr blocks you cut to fit)........P/N 13-062645.............

KENNON WIND SPOILERS

Kennon Wind Spokers are a strip of soft fiber filled tubes that attach to the wing to slow airflow over the top and to prevent lift. An airplane was built to fly, slow airflow over the top and to prevent lift. An airplane was built to fly, and the wind spoilers are the leading edge of the wings but not the tips, and most are about 14.5 ft long (per wing). Specify aircraft make, model, year when ordering. P/N 13-14180.

LANCAIR & ZENAIR CANOPY COVERS

These custom designed covers for the Lancair 235/320 and the Zenaix Zodiac canopy are made of acrylic “Sunbrella” fabric and are available in black, gray, or white. The 100% acrylic fabric won’t shrink, fade, or rot. Nylon webbing straps assure secure fit while snap together buckles permit fast adjustment, fastening, and release. Side adjustment provides tight fit. These covers will protect your avionics and interior from sunlight and heat damage. Lancair Blue Canopy Cover.............P/N 13-14110.............
Lancair Zodiac Canopy Cover.............P/N 13-14140.............

ENGINE INTAKE COVER

Kennon’s Low Wing Cabin Cover covers the top of the cabin, the antennae and the entire windshield area. Kennon’s Low Wing Cover are made from Sunbrella which is designed to withstand the sun’s ultra violet rays. Sunbrella is the award winning UV resistant outdoor fabric. It is very soft and breathable so it can be used as a year round cover on any aircraft. It is a must for fabric covered wings and tails. Each cover is custom built for the specific year, make and model of aircraft. You will be asked for aircraft year, make, model, and registration number when ordering. Kennon provides a sun block for the windshield. There is an additional cost for the microfiber lining, and the cost varies based on aircraft. Engine Intake Cover P/N 13-04047.

KENNON DUST COVERS

The Kennon Dust Covers keeps dust, birds, and bird droppings off aircraft stored in hangars. Made from 210 Denier Nylon, the cover is soft, lightweight, and machine washable. Will not scratch the aircraft. It is easy to put on, with the elastic hem fitting around the nose, wing, and tail. Stores in its own storage bag and weighs only 10lbs. Available in sizes to fit any aircraft from homebuilt to military. Specify year, make & model and year when ordering. Color: aircraft when ordering. Color: Black or Blue. Stock Color is Black. For Special order color (blue or red) add .

Small for aircraft up to 11 ft long, wingspan to 31 ft. P/N 13-14146.
Light Twin up to 35 ft long w/wingspan to 40 ft. P/N 13-14147.
Red or blue color covers P/N 13-06411.

Other aircraft - Custom Made - Call for price

KENNON SUN BLOCKER AIRCRAFT COVERS

Kennon's Standard canopy cover is constructed from Sunbrella, an acrylic woven canvas in your choice of colors. Off white or light gray are the best choices as they absorb less heat. Provide Kennon with antenna measurements and we will tailor the cover so it fits neatly around antenna, OAT boot and ADF wires at no additional charge. Kennon’s deluxe canopy cover is constructed from Sunbrella in your choice of colors and adds a satin lining to prevent sand and dirt from adhering to the fabric, which could later scratch your windows. Satin is superior to fleece and flannel liners because the satin is slippery and nothing sticks to it. Constructed from a woven acrylic canvas, Kennon Sun Blocker Aircraft Covers are guaranteed not to become unseivable due to loss of color, strength from normal conditions, including sunlight, mildew, rot, or atmospheric chemicals. These covers repel water yet breathe so that they don’t trap moisture. Specify aircraft make, model, and year and number of windows. Include aircraft registration number to be printed on cover at no extra charge.


LOW WING WITH 3 SIDE WINDOWS – Earlier than 1971 Piper Cherokee VI,Piper, PA28 181, 200, 235 incl. Arrow, Archer & Warrior, Dakota, Aerospatiale, Trinidad, Tobbago, Piper Commanche (Some but not all...ASK), Aztec, Apache, Cessna 310 (exception to 2 window rule)

Standards
P/N 13-14148-B...

LOW WING WITH 4 SIDE WINDOWS – Piper Cherokee VI, Lance, Saratoga, Malibu, Seneca, Aerostar, Beech Baron 58, Beech 33, 36, Beech King , Air (Cockpit), Lear 2500, 3500 (Cockpit).

Standards
P/N 13-14149-B...

Deluxe
P/N 13-14149-D...

LOW WING WITH 5 SIDE WINDOWS – Piper Navajo Chiefton, Cheyenne, Cessna 337, 402, 414, 425, 441-D, Beech Duke.

Standards
P/N 13-14150-B...

Deluxe
P/N 13-14150-D...

SUN SPOTS

Front & Side Windows, Passenger side Windows. Also place onto Existing Transparent Sun Visors for increased coverage & darker shade "D" Two 5-1/2 dia. disks, easy handling & storage * Suction cup attachment, lightweight, 4 mills thick * Disk rotate for total of a 360 degree * 2 disks overlap for double shade strength "A" * Separate Blue or Red. Single shade strength "B" Split disks for half & half shade strength "C".
P/N 13-06774.

SUN SHIELDS – CANOPY COVERS

Kennon's Low Wing Cabin Cover covers the top of the cabin, the antennae and the entire windshield area. Kennon’s Low Wing Cover are made from Sunbrella which is designed to withstand the sun’s ultra violet rays. Sunbrella is the award winning UV resistant outdoor fabric. It is very soft and breathable so it can be used as a year round cover on any aircraft. It is a must for fabric covered wings and tails. Each cover is custom built for the specific year, make and model of aircraft. You will be asked for aircraft year, make, model, and registration number when ordering. There is an additional cost for the microfiber lining, and the cost varies based on aircraft.
COWL PLUGS - AIRCRAFT COVERS

COWL PLUGS
Cowl plugs with attached “remove before flight” streamer for general aviation aircraft. Prevents bird and foreign objects from entering the cowl. Comes complete with a linking lanyard and remove before flight streamer. Heavy duty cross linked construction and durable nylon hand sewn stitching complete the set. Please specify aircraft make, model, & serial number when ordering. Single engine plugs are furnished with free embroidery and order. Twin cowl plugs, which only the cowl plug and embroidery are available for an additional $10.00

Single engine ............... P/N 13-01742
Twin engine .................. P/N 13-01743

PROPELLER SLINGS EXHAUST COVERS
Propeller Slings & Exhaust Covers keep your propeller secure and in place, eliminating any bearing damage caused by a free-spinning propeller with no protective cover. The exhaust covers protect the costly turbine wheel from debris & birds. Simple, quick one man operation. Please specify aircraft make, model, serial no. when ordering.

P/N 13-01744

INLET PLUGS
These protect your engine form foreign object damage, blowing dust and sand, birds and debris. Complete with remove before flight flag and easy pull handle for insertion and removal. Please specify aircraft make, model, & serial no. when ordering.

P/N 05-04077 ............... CALL FOR QUOTE

JET ENGINE COVERS
Made of extremely durable, water-proof and fire resistant Hercule, our covers are guaranteed for 10 yrs. Each set is hand crafted and sewn to order. Complete with storage bag and remove before flight flags. Please specify aircraft make, model, & serial no. when ordering.

ENGINE INTAKE COVER
Protect your engine from natural hazards which could cause serious in-flight problems. This economical design fits practically every single or twin, even homebuilts. The lightweight, fire retardant mesh fabric will not blister or melt. After simple one-time installation of mounting hardware, cover snaps into place and secured with Velcro. Folds for easy storage. Complete with mounting hardware & “Remove Before Starting Engine” streamers. Also available: Bib that allows you to cover the cockpit when beam engines are not in use. Made of extremely durable, water-proof and fire resistant Hercule, our covers are guaranteed for 10 yrs. Each set is hand crafted and sewn to order. Complete with storage bag and remove before flight flags. Please specify aircraft make, model, & serial no. when ordering.

Engine Intake Cover ......... P/N 7148
Intake Cover Bib ............. P/N 7133

KUVR**IT WHEEL COVERS
The KUVR**IT II Wheel Cover is designed to cover that precious investment, “your tires”, on your airplane. The fabric is a vinyl-coated polyester that is fade resistant and California State Fire Marshall approved (#F-2310). The weave and breathes well and provides 85% shade factor from the sun’s damaging ultra violet rays. It is easy to care for. Simply machine wash and just hang it to dry. The KUVR**IT II Wheel Cover is easy to use. Simply place the cover over your tires and adjust the strap to the desired tightness and lock into place. There are 3 sizes for your convenience:

- Small fits tire size: 5.00 – 5/15 x 00-6 ......... P/N 13-03158
- Medium fits tire size: 6.00 - 6/7.00-6 ......... P/N 13-03159
- Large fits tire size: 8.00 - 8/9.00-6 ......... P/N 13-03160

REDWING TRAILING EDGE PROTECTIVE FOAM
RedWing helps prevent aircraft damage and head injuries. Just slide the foam onto the trailing edges of ailerons, elevators, rudders or flaps to protect these surfaces while tied down or in the hangar. RedWing is also ideal for protecting landing gear doors, avionics antennas, and winglets. The bright red color reminds the pilot to remove the product before flight, and RedWing is reusable and unaffected by UV, water, or oils. Furnished in 3ft. sections which can be easily cut to smaller sections.

P/N 13-02668

BRUCE S CUSTOM COVERS
Bruce’s Custom Covers orders Package...

Cowl Plugs protect the glass, upholstery, and avionics from the elements, stop leaky seals and keep the cabin cool. Cowl Plugs also prevent vandalism and theft. Bruce’s Custom Covers makes cowl/cabin, engine, empen, propeller, wing and pitot covers as well as engine inlet plugs for virtually every model jet, airplane and helicopter. Covers generally cost $350 - $425, are 100% lined, and can be imprinted with your aircraft tail number. Each cover is custom made to order and lead time is generally three weeks.

For a complete technical sheet including prices, photos and information about our covers for your aircraft, please call us at 1-877-477-7823.

KOGER SUNSHADES
The Koger Sunshade was developed to provide protection from the sun while flying an airplane that has a large bubble plastic canopy like the RV-6, RV-7, RV-8, RV-9 and many other types of aircraft.

Key Benefits
- Retractable to front or rear
- Lightweight (9oz. for side by side RV models)
- Install in 1/2 to 1-1/2 hours depending on the model
- Makes instruments more visible, and the cockpit more comfortable.

<table>
<thead>
<tr>
<th>Fitting</th>
<th>Description</th>
<th>Par</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>RV-8</td>
<td>Size of shade: 15’ wide by 16’ long</td>
<td>13-05657</td>
<td>.</td>
</tr>
<tr>
<td>RV-6, 6A, 7A, 9A</td>
<td>Standard SLIDER model Size of shade: 30’ wide by 25’ long</td>
<td>13-05659</td>
<td>.</td>
</tr>
<tr>
<td>Zodiac 600XL, Legacy, Cirrus, SRS, Falco, Sport Cruiser, EuroStar, Sting, Europa, etc.</td>
<td>LARGE TIP-UP model for larger bubble canopies</td>
<td>13-05660</td>
<td>.</td>
</tr>
<tr>
<td>Built to Order</td>
<td>LARGE SLIDER model with top center structure canopies are built to order. Size of shade: 34’ wide by 35’ long</td>
<td>13-05661</td>
<td>.</td>
</tr>
</tbody>
</table>

TRISOFT WINGTIP/PROP TIP COVERS
- Avoid Accidents  * Protect Employees and Aircraft  * Reduce Insurance Claims  * Remain in Compliance Trisoft Aircraft Covers Can Be Used As A Safety and Warning Device on Prop Tips The prop tips of an aircraft have proven to be a very dangerous area for aircraft personnel. Just place the aircraft covers on the prop tips to warn and protect personnel working or walking around an aircraft. Trisoft is a simple foam triangular cover that slips onto the corners of the prop tips, gear doors, wing flaps (in the lowered position), wing tips, and dorsal antennas, protecting aircraft personnel and aircraft during maintenance, pre-flight checks, cleaning, etc. Trisoft can be used on personal aircraft, corporate aircraft, commercial aircraft, military aircraft and helicpoters.

<table>
<thead>
<tr>
<th>Sliding</th>
<th>Description</th>
<th>Par</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>2 Blade</td>
<td>.............</td>
<td>P/N 13-03594</td>
<td>.</td>
</tr>
<tr>
<td>3 Blade</td>
<td>.............</td>
<td>P/N 13-03595</td>
<td>.</td>
</tr>
</tbody>
</table>

SAFETY PROP TIPS
Reduce the risk of injury from a stationary aircraft prop by covering the tips with the Safe Prop Tip. This new safety device is made of thick form covered in a bright red fabric. While the bright red color calls attention to the prop to help prevent an accident bump, the thick padding adds protection in case someone does walk into the prop. Reflective tape on the front of the guard improves awareness at night, and an elastic pull handle for insertion and removal. A perfect place to hang the “Remove Before Starting Engine” streamer.

1 Blade...... P/N 13-03593
2 Blade...... P/N 13-03594
3 Blade...... P/N 13-03595
4 Blade...... P/N 13-03596
5 Blade...... P/N 13-03597
6 Blade...... P/N 13-03598
7 Blade...... P/N 13-03599
8 Blade...... P/N 13-03600
9 Blade...... P/N 13-03601
10 Blade..... P/N 13-03602
11 Blade..... P/N 13-03603
12 Blade..... P/N 13-03604
13 Blade..... P/N 13-03605
14 Blade..... P/N 13-03606
15 Blade..... P/N 13-03607
16 Blade..... P/N 13-03608
17 Blade..... P/N 13-03609
18 Blade..... P/N 13-03610
19 Blade..... P/N 13-03611
20 Blade..... P/N 13-03612

BRUCE'S CUSTOM COVERS
Bruce's Custom Covers ordering Package ... P/N 13-04693

For a complete technical sheet including prices, photos and information about covers for your aircraft, please call us at 1-877-477-7823.
PLANE SIGHTS REMOVE BEFORE FLIGHT

STATIC WICK COVERS (SMALL ID X7") - Aircraft Type: Jet. Installed and removed in seconds, Static Wick Covers help prevent delays and inconvenience due to hangar rash. Extremely versatile and very durable Static Wick Covers make these vulnerable parts highly visible by day or night. Slide these round style covers on for a tight, weather resistant fit on your Bombardier (Challenger & Global Express) or Hawker/Beechcraft and many other jets. If necessary cut with scissors to desired length. Weight: 0.20 kg Fits over static wick covers. P/N 13-06770. Fits Bombardier, Hawker/Beechcraft and others.

UNIVERSAL AIRCRAFT MARKER - Aircraft Type: Piston Powered Plane. Highly reflective markers make vulnerable wing and elevator tips clearly visible under all conditions, and their projecting “proximity fuses” warn that something is too close before damage occurs. Fit all aircraft from Airplanes to light sport aircraft, including models with static wicks and strobe lights, or aircraft with enclosed tip tanks, or aircraft with enclosed tip tanks. Weight: 0.06 kg PreJPac package Square Poly. 0.75"x0.25"x 3.50" Long. (in stock) also available by special request. 5.25" length sleeves. Standard two year warranty applies. *Shock cord lanyard not included

LARGE FLIGHT MARKER - Aircraft Type: Piston Powered Plane. Featuring light reactive trims and tapes, these highly reflective Prop Markers are ideal to improve visibility of your prop and aircraft door, hence preventing the unexpected depreciation of your plane. Easily installed and removed in just seconds, adding virtually no additional time to your walk around. Made from UV resistant Sunbrella, custom bonded with a soft, non-abrasive inner fabric. Quick and easy storage without tangling. Weight: 0.56 kg Medium Cone P/N 13-05607. Large Cone P/N 13-05608. Square Cone P/N 13-05609.

TURBO PROP TIE - Aircraft Type: Turboprop. Fits most Turbo Props including Caravans, Beech 1900s, King Airs and others. A versatile, heavy duty ½" shock cord and metal hook allows the versatile design to work on so many turbo prop aircraft. Also allows our Prop Tie to Integrate with existing cowl plugs and exhauster covers. For any Turbo-Prop up to 10" wide blade. Comes with 36’ of HD 1/2" size adjustable shock cord and two stainless clips.

REMOVAL BEFORE FLIGHT STREAMER - Aircraft Type: Piston Powered Plane. WARNING: CHECK WITH YOUR AME AND CONSULT YOUR OWNER’S MANUAL BEFORE USING A FUEL VENT PLUG. P/N 13-06020.

PLANE SIGHTS AIRCRAFT MARKERS & STATIC WICK COVERS

PROPER PLUG 2 BLADE - Aircraft Type: Piston Powered Plane. Featuring light reactive trims and tapes, these highly reflective Prop Markers are ideal to improve visibility of your prop and aircraft door, hence preventing the unexpected depreciation of your plane. Easily installed and removed in just seconds, adding virtually no additional time to your walk around. Made from UV resistant Sunbrella, custom bonded with a soft, non-abrasive inner fabric. Quick and easy storage without tangling. Weight: 0.56 kg Medium Small P/N 13-05605. Medium Large P/N 13-05606. Large P/N 13-05608.

DIAMOND STALL WARNING PLUG - Aircraft Type: Powered Plane. Diamond recommends that operators of their DA40 and DA20 aircraft plug the stall warning air inlet holes on these aircraft to avoid the hazards of hangar rash. Extremely obvious and very durable Static Wick Covers make these vulnerable parts highly visible by day or night. Slide these round style covers on for a tight, weather resistant fit on your Bombardier (Challenger & Global Express) or Hawker/Beechcraft and many other jets. If necessary cut with scissors to desired length. Weight: 0.20 kg Fits over static wick covers. P/N 13-06770. Fits Bombardier, Hawker/Beechcraft and others.

DIAMOND STALL WARNING PLUG - Aircraft Type: Piston Powered Plane. Diamond recommends that operators of their DA40 and DA20 aircraft plug the stall warning air inlet holes on these aircraft to avoid the hazards of hangar rash. Extremely obvious and very durable Static Wick Covers make these vulnerable parts highly visible by day or night. Slide these round style covers on for a tight, weather resistant fit on your Bombardier (Challenger & Global Express) or Hawker/Beechcraft and many other jets. If necessary cut with scissors to desired length. Weight: 0.20 kg Fits over static wick covers. P/N 13-06770. Fits Bombardier, Hawker/Beechcraft and others.

LIGHT SPORT PLUG PLUG KIT - Aircraft Type: Piston Powered Plane. Light Sport/Homebuilt Plug Kit provides a perfect fit for many homebuilt pitot tubes, light sport pitot tubes, and aircraft fuel vents. The kit includes several vented plugs so it even works with double-tube systems and is guaranteed not to pressurize your pitot static system. ANSI-compliant and weather-resistant reflective streamer stands out equally well in daylight or darkness under all weather conditions. Weight: 0.04 kg P/N 13-05603.

ANGLED PITOT TUBE COVER - Aircraft Type: Piston Powered Plane.ins and weather-resistant reflective streamer stands out in daylight or darkness under all weather conditions, so it can’t be missed. Large size home built 1/2” tubes up to 7/8” jet probes. The versatile hook/loop Velcro strap with sewn-in rubberized trim allows the cover to be quickly and securely fastened to the pitot tube. Weight: 0.00 kg The inside diameter of the cover is 7/8” Guaranteed to work on any Cessna, Beechcraft, Citrus, Diamond, Grumman or Mooney aircraft, as well as most Piper and many light sport aircraft. P/N 13-05610.

BLADE PITOT COVER - Aircraft Type: Piston Powered Plane. Forgetting to remove a faded, dull and worn-out pitot tube cover can jeopardize the safety of you and your passengers. And when cold weather prevents you from installing your pitching and insert style blade pitot cover, ice and snow can contaminate your pitot system. Some blade pitot covers also cause damage to the pitot tube when forced on and off. The highly conspicuous and very durable Plane Sights Blade Pitot Cover is a perfect fit for any aircraft with a blade-type pitot tube or pipe gear extension mast. PreJPac installed, its guaranteed not to blow off, fade in the sun or wear out for at least two years. Fits Piper, Katana, some Rockwell, late Grumman, Lake 250, and all other aircraft with a blade-type pitot tube. (As seen on the 2008 AOPA “Get Your Glass” sweeps aircraft) Weight: 0.15 kg Fits Piper, Kataena, some Rockwell, late Grumman, Lake 250, and most other aircraft with a blade type of pitot tube. P/N 13-06016.

PILOT TUBE PLUG (5/8") - Aircraft Type: Piston Powered Plane 5/8” inside diameter vented plug comes with its unmistakable conspicuous Remove-before-Flight Streamer. ANSI-compliant and weather-resistant reflective streamer stands out equally well in daylight or darkness under all weather conditions. The plug is attached to the streamer’s rugged black oxide coated zinc grommet with a galvanized steel ring, and is vented to prevent pressurization damage. This 5/8” Plug fits Amp Commander, Twin Beach, Bonanza, Cessna 300/400/500, Conquest Series, Grumman, Lear, Mooney, Piper Cheyenne and Navajo aircraft. Weight: 0.04 kg P/N 5/8”0.625” (15.875mm) ID x 1.85” (46.00mm) P/N 13-06019.

PILOT TUBE PLUG (3/4") - Aircraft Type: Piston Powered Plane 3/4” inside diameter vented plug comes with its unmistakable conspicuous Remove-before-Flight Streamer. Provides a perfect easy-on, easy-off solution. ANSI-compliant and weather-resistant reflective streamer stands out equally well in daylight or darkness under all weather conditions. The poly plug is attached to the streamer’s rugged black oxide coated zinc grommet with a standard steel ring. This 3/4” plug fits Cessna 150, 152, 172, 177, 182, 200 series, and 337 models. Weight: 0.04 kg P/N 3/4”0.75” (19.05mm) ID x 2” (50.80mm) useable length.

LARGE FLIGHT MARKER - Aircraft Type: Piston Powered Plane. Large Flight/Homebuilt Plug the stall warning air inlet holes on these aircraft to avoid the hazards of hangar rash. Extremely obvious and very durable Static Wick Covers make these vulnerable parts highly visible by day or night. Slide these round style covers on for a tight, weather resistant fit on your Bombardier (Challenger & Global Express) or Hawker/Beechcraft and many other jets. If necessary cut with scissors to desired length. Weight: 0.21 kg Includes three (3) Static Wick Covers per package Square Poly. 0.75”x0.25”x 3.50” Long. (in stock) also available by special request. 5.25” length sleeves. Standard two year warranty applies. *Shock cord lanyard not included

UNIVERSAL PITOT TUBE COVER - Aircraft Type: Piston Powered Plane. This durable, weather-resistant orange and yellow reflective cover fits virtually any size pitot tube. It stands out in daylight or darkness under all weather conditions, so it can’t be missed. Large size home built 1/2” tubes up to 7/8” jet probes. The versatile hook/loop Velcro strap with sewn-in rubberized trim allows the cover to be quickly and securely fastened to the pitot tube. Weight: 0.14 kg If length of the tube exceeds 6.75” and the diameter exceeds 7/8”, then the Universal Pitot tube cover would be a better choice. As seen on the 2008 AOPA’s “Let’s Go Flying!” Citrus SR22. P/N 13-05611.

PLANE SIGHTS PITOT TUBE COVERS

Prevent hangar rash and broken static wicks

STATIC WICK COVER SET (TUBE STYLE 7") - Aircraft Type: Jet. A lower priced alternative to Static Wick Markers. They protect static wicks from damage on the ground and make wing/levator tips more obvious, preventing hangar rash. Slide these round style covers on for a tight, weather resistant fit on Citations and other jets. Weight: 0.04 kg Round tubular poly cover, 0.310” x 0.450” long. *Shock cord lanyard not included. P/N 13-06775.

712
AIRCRAFT COVERS - AIRCRAFT LOCKS

**UNIVERSAL STATIC PORT COVERS**

The SPC101 and SPC102 are essentially the same product, built on the same platform. The SPC102 has two protective covers in line rather than one, for applications where redundant static ports are installed in line. Features: * An inexpensive, yet very effective alternative to other covers and plugs * Universal design to fit most aircraft * Lightweight entire assembly weighs less than ½ pound * Attaches with heavy duty lever cups designed to lift 40 lbs. each * No fuselage modification required * Prevents the possibility of any damage to static ports by being an externally mounted cover * Malleable light gauge aluminum easily conforms to virtually any surface contour * Adjustable to allow for attaching lever cups on or around decals and pin stripping * Installed at temperatures from -20ºF to 110ºF * TESTED AND APPROVED!

**P/N 13-06395**

The Wind-Lock is designed to attach to an aircraft’s controls inside the cockpit. The one-sided mechanism keeps tension on the Elevators, holding them in the full down position. This position also allows moisture to drain from inside the control surface. It also holds the Ailerons in a streamlined position. As the wind gusts, resistance is applied. The harder the wind blows, the more resistance is applied to the controls. When the wind dies down, the Wind-Lock allows the Ailerons to return to their normal position. As the load is reduced, the tensioning mechanism reduces pressure on the control yoke.

**P/N 05-04044**

**AMC AIRPLANE CONTROL LOCK**

Rather than tying your seat belt to your controls, try AMC’s new Airplane Control Lock. This lightweight control lock will stop your control surfaces from moving with the winds and will also prevent damage to your controls such as bending. This new Control Lock is lightweight and easily stored.

**P/N 13-02851**

**KENNON GUST LOCKS**

Locks flaps, ailerons, elevator or rudder securely. Made from special weather resistant, high density, closed cell foam with a nylon eyebolt! Won’t scratch.

**P/N 07-01329**

**PAD-LOK CONTROL SURFACE LOCK**

Like it says, a padded lock. Effectively locks control surfaces while the padding compresses to the proper configuration and protects the surface finish. Padding won’t absorb water. Hard-to-miss Dayglo color, plus yarn streamers. WT. 10 oz.

**P/N 13-27700**

**SAF-T-STOP**

Saf-T-Stop is an auxiliary seat stop mechanism approved by the FAA for use with Cessna seat track A.D. #87-20-03. Installs easily, sliding over seat track. Approved for: Cessna 150, 152, 172, R172, 175, 180, 182, 185, 190, 205, 206, 207, 210, 303, 337. Not a seat lock, Saf-T-Stop is designed to restrict rearward motion if the seat lock fails.

**P/N 13-18510**

**SAFETY FOOT STOP SEAT RESTRAINT FOR CESSNAS**

Safety Foot Stop provides extra insurance against loss of aircraft control due to a sudden aft movement of the seat due to excessive wear of the seatail holes. Should the pin not engage in the rail hole, Safety Foot Stop will still prevent the seat from moving aft. Can be owner installed without a form 337 or STC in single engine Cessnas. Comes complete with all hardware and detailed instructions, and installation time is one hour per seat.

**P/N 05-03190**
**AIRCRAFT LOCKS**

**PROP LOCK CHAIN**

The THEX50 is a "T-HEX" maximum security chain 5 ft in length with hardened 10mm hexagon shaped links. Hexagon shaped case hardened trip heated super chain. This heavy duty Prop Lock Chain is the perfect way to insure the security of your aircraft, particularly at remote or foreign airports. The hexagon shaped, heat treated heavy duty chain can endure over 10 tons of cutting force, insuring your aircraft against theft. A black nylon cover over the chain protects your aircraft from the chain when in place. The Prop Lock Chain is 5 feet long and weighs 12 lbs.

**WHEEL CHOCK LOCK**

This innovative aircraft security device clamps to the wheel which prevents theft of the aircraft, while the built-in chock prevents the wheel from rolling forward when parked. The lock and chock are yellow, while the red rubber coated arms protect the finish of the wheel. Fits any type of wheel up to 12" wide. Lifetime warranty. P/N 13-06141

**YORK GUST-LOK™**

The York Gust Loks the ultimate protection for your plane from wind and theft. It locks the control surfaces in a neutral position and prevents damage to control surfaces and tail caused by wind gust loads. It is welded steel, fully adjustable, is lightweight, and features a powder coat finish. The York Gust LOK is compact for easy storage and is quick and easy to use.

**CONTROL WHEEL AIRCRAFT**

<table>
<thead>
<tr>
<th>Aircraft</th>
<th>Part No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Commander 122 114</td>
<td></td>
<td>13-32730</td>
</tr>
<tr>
<td>Mooney, Grumman Goose, Mauve (Tricycle gear &amp; Seaplane) PA-23, &amp; Grumman American, Myers 200 &amp; Commander 200</td>
<td></td>
<td>13-00863</td>
</tr>
<tr>
<td>Cessna Single engine 150 172's, Heliok, Commander 505-395</td>
<td></td>
<td>13-00864</td>
</tr>
<tr>
<td>Cessna Single engine 180, 206 &amp; 210's fixed &amp; retract gear &amp; Cessna 337</td>
<td></td>
<td>13-00865</td>
</tr>
<tr>
<td>Aerostar, Commander 500, Beech Baron, Bonanza</td>
<td></td>
<td>13-32790</td>
</tr>
<tr>
<td>Duke 18 &amp; 45, Lake L-A-4 (except Renegade)</td>
<td></td>
<td>13-00867</td>
</tr>
<tr>
<td>Cessna Tailwheel, Stinson, Beech Staggerwing</td>
<td></td>
<td>13-32800</td>
</tr>
<tr>
<td>Lake Amphibian</td>
<td></td>
<td>13-32920</td>
</tr>
<tr>
<td>Beech King Air</td>
<td></td>
<td>13-32930</td>
</tr>
<tr>
<td>Cessna 310's</td>
<td></td>
<td>13-32940</td>
</tr>
<tr>
<td>Aeronca Chief 508, Taylorcraft BC 12-D, Stinson 108 &amp; 108-1</td>
<td></td>
<td>13-32850</td>
</tr>
<tr>
<td>PA-38</td>
<td></td>
<td>13-32860</td>
</tr>
<tr>
<td>Maule (Tailwheel)</td>
<td></td>
<td>13-32870</td>
</tr>
<tr>
<td>Piper PA-21, Chieftain, Navajo, Chyenne</td>
<td></td>
<td>13-32880</td>
</tr>
<tr>
<td>Socata (Trigadin), Grumman Widgean</td>
<td></td>
<td>13-32890</td>
</tr>
<tr>
<td>Seawind</td>
<td></td>
<td>13-32895</td>
</tr>
<tr>
<td>De Havilland Beaver</td>
<td></td>
<td>13-00866</td>
</tr>
<tr>
<td>Piper Twins (except 337 &amp; 310)</td>
<td></td>
<td>13-00867</td>
</tr>
<tr>
<td>Piper Mallard</td>
<td></td>
<td>13-00868</td>
</tr>
</tbody>
</table>

**STICK CONTROL AIRCRAFT**

<table>
<thead>
<tr>
<th>Aircraft</th>
<th>Part No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>J3 w/Shin</td>
<td>13-00871</td>
<td></td>
</tr>
<tr>
<td>Koocker Tubes</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Piper PA-12</td>
<td>13-00872</td>
<td></td>
</tr>
<tr>
<td>Piper PA-18</td>
<td>13-00873</td>
<td></td>
</tr>
<tr>
<td>Piper PA-11</td>
<td>13-00874</td>
<td></td>
</tr>
<tr>
<td>Piper PA-14</td>
<td>13-00875</td>
<td></td>
</tr>
<tr>
<td>Piper PA-15/17</td>
<td>13-00876</td>
<td></td>
</tr>
<tr>
<td>Piper PA-18 &amp; JS JS Shin knuckles</td>
<td>13-00877</td>
<td></td>
</tr>
<tr>
<td>Piper PA-20</td>
<td>13-00878</td>
<td></td>
</tr>
<tr>
<td>Champ &amp; Cribi</td>
<td>13-00879</td>
<td></td>
</tr>
</tbody>
</table>

**AIRGIZMOS UNIVERSAL GUST LOCK**

If you fly for very long you will quickly realize the importance of looking your control surfaces when leaving the airplane outdoors. Finally we have a solution. The AirGizmos Gust Locks are designed to quickly lock virtually any control surface securely. Its bright color and integrated flag reminds you to remove before flight. The rubber cushions ensure that your finish will be protected. They are lightweight and portable. Perfect for carrying in the plane wherever you go. P/N 13-06139

**AVIATION PROP LOCK**

The Prop Club® inhibits flight by creating an out-of-balance condition. Made of tempered steel, The Prop Club® is an anti-theft device that locks securely onto the propeller at the hub via a four-digit combination. The small Prop Club® has a compressed opening range of 1/16" to 5/12" (2.4 lbs) and the large Prop Club® has a compressed opening range of 6" to 12" (2.8 lbs). As long as the Prop Club® can attach to the base of the prop within this range, and the closed dimensions are smaller than the widest part of the prop, The Prop Club® will remain securely attached to the propeller hub. It will not work on props that maintain the same width from base to tip.

**THE ALPHA WHEEL LOCK 2000**

The Alpha Lock 2000 adjusts to virtually any wheel size in seconds and completely immobilizes the aircraft or vehicle wheel from rotating or turning. The lock is pick and drill resistant and cannot be frozen with freon. Soft, coated arms will not mar or scratch wheels and rims. Furnished in bright red color to warn thieves, weather resistant, and carries a 2-year warranty. Excellent for locking aircraft, autos, trucks, trailers, boat trail- ers, motorcycles, RV's, etc. Locks anything on wheels! Wt: 8 lbs. P/N 13-00436

**THE PLANE LOCK**

For Cessna C-172-210, except for the C-177. Prevents the wind from popping your doors open and provides an added measure of security against break-ins. No tools or STC required. From inside the aircraft, the door is locked by reaching through the window ( prior to closing it) and pushing down the door safety handle. Then, slip the Plane Lock over the window sill and lock the window shut. P/N 13-03386

**AIRCRAFT THROTTLE LOCK**

Protect your aircraft from theft! This throttle lock is recommended by the International Aviation Theft Bureau, AOPA, Avemco Insurance Co., AOPA and other insurance companies. Available for vernier or non-vernier throttles. Verner Lock P/N 13-08000. Non-Verner Lock P/N 13-08100

**SKYLOCK**

Skylock is an inexpensive throttle lock for aircraft with Cessna type push-pull throttles. The device will accept shafts up to .375" diameter, and is made of heavy-gauge cadmium plated steel. Skylock affords great peace of mind to aircraft owners at very little cost. Just put it in place after every flight, secure with your own favorite padlock, and your throttle cannot be moved! Simple, but it works. P/N 13-18500

**ANTI-THEFT LOCK FOR BONANZAS**

Built for those incomparable Beechcraft. All have FAA STC/PMAs as applicable. The device is light and easy to use. WT: 2.2 lbs. The key lock combines forces with hardened steel pins em- bedded in the lock body that roll to defeat cutting. Bright red color, easy to use, installs in just seconds. Patent Pending. P/N 05-03439

**PIPER THROTTLE LOCKS**

Don’t damage your aircraft by using a propeller lock. It happens more often than you think. Someone accidentally turns the key with a propeller lock installed. Usually it something innocent like taxiing the plane to the maintenance hangar or to the wash down area. The owner or lineman jumps in the plane without knowing a pre-flight, after all you’re not planning on flying, you just want to move the plane...but all it takes is a turn of the key to damage a propeller, cowling or bent the crankshaft on the engine.FEATURES: •Prevents unauthorized use of your aircraft •Locks the throttle, mixture & propeller controls •You cannot start or operate the engine & propeller with the lock installed •Key lock, includes two keys •Installs and removes in seconds •No holes to drill, no modifications to aircraft •Sturdy, locksmith quality •Safety yellow color •Available in three sizes for Piper aircraft •Fits aircraft having a throttle quadrant with a tubular horizontal throttle knob (does not fit aircraft having a round throttle knob).

<table>
<thead>
<tr>
<th>Description</th>
<th>Part No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Model 7700 Fits four seat, single engine Piper aircraft with a throttle quadrant</td>
<td>13-04240</td>
<td></td>
</tr>
<tr>
<td>Model 7710 Fits six seat, single engine Piper aircraft with a throttle quadrant. Does not fit all Malibu aircraft</td>
<td>13-04241</td>
<td></td>
</tr>
<tr>
<td>Model 7720 Fits Piper Seneca &amp; Seminole twin engine aircraft</td>
<td>13-04242</td>
<td></td>
</tr>
</tbody>
</table>

**YORK ACCESSORIES**

Do not throw away warning flag (included with each Gust-Lok™, but also sold separately) P/N 13-00869

**ANTI-THEFT LOCK FOR BONANZAS**

Built for those incomparable Beechcraft. All have FAA STC/PMAs as applicable. The device is light and easy to use. WT: 2.2 lbs. The key lock combines forces with hardened steel pins em- bedded in the lock body that roll to defeat cutting. Bright red color, easy to use, installs in just seconds. Patent Pending. P/N 05-03439

**PIPER THROTTLE LOCKS**

Don’t damage your aircraft by using a propeller lock. It happens more often than you think. Someone accidentally turns the key with a propeller lock installed. Usually it something innocent like taxiing the plane to the maintenance hangar or to the wash down area. The owner or lineman jumps in the plane without knowing a pre-flight, after all you’re not planning on flying, you just want to move the plane...but all it takes is a turn of the key to damage a propeller, cowling or bent the crankshaft on the engine.FEATURES: •Prevents unauthorized use of your aircraft •Locks the throttle, mixture & propeller controls •You cannot start or operate the engine & propeller with the lock installed •Key lock, includes two keys •Installs and removes in seconds •No holes to drill, no modifications to aircraft •Sturdy, locksmith quality •Safety yellow color •Available in three sizes for Piper aircraft •Fits aircraft having a throttle quadrant with a tubular horizontal throttle knob (does not fit aircraft having a round throttle knob).
FIRE EXTINGUISHERS – RESCUE EQUIPMENT

H3R AVIATION FIRE EXTINGUISHERS

The FAA recommends and/or requires Halon fire extinguishers on aircraft. H3R's Halon fire extinguishers are the extinguishers of choice for the aviation industry. They cause no mess or damage, and do not require a plane out of service for clean-up; a costly process for both the aircraft owner and insurance carrier. The heat-seeking quality of the Halon gas makes it a superior fire fighting agent.

DISPOSABLE, LOW-MAINTENANCE HALON 1211-1301 BLEND
- Contain a proprietary blend of the "liquid streaming agent," Halon 1211, and the gaseous "total flooding agent," Halon 1301. The blend's power lies in the Halon 1301, which is both a fighting agent and a propellant. Low maintenance and non-rechargeable. Lightweight aluminum canister Disposable. Tested to ANSI/UL 711 and UL 1093. Meets DOT requirements. Meets the requirements in Advisory Circular 20-42C, "Hand Held Extinguishers for Aircraft" and/or NFPA 408, "Standard for Aircraft Portable Fire Extinguishers" 12-year shelf life.

RECHARGEABLE, STURDY INDUSTRY-STANDARD HALON 1211
- Required on commercial transport aircraft. Although classified a "liquid streaming agent," Halon 1211 also performs remarkably well as a "total flooding agent," seeking out and extinguishing fires in inaccessible places. 6-year maintenance and 12-year hydrostatic test are required. Rugged steel cylinder. Pressure gauge enables easy confirmation of charge. Tested to ANSI/UL 711 and UL 1093. Meets DOT requirements. Meets the requirements in Advisory Circular 20-42C, "Hand Held Extinguishers for Aircraft" and/or NFPA 408, "Standard for Aircraft Hand Portable Fire Extinguishers" 12-year shelf life.

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Range</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>B371 - 19.9 lb. (UL rating 2A:40B:C)</td>
<td>13-02558</td>
<td>12-18 ft.</td>
</tr>
<tr>
<td>B355T - 5.0 lb. (UL Rating 10B:C)</td>
<td>13-02545</td>
<td>9-15 ft.</td>
</tr>
<tr>
<td>B250T - 2.5 lb. (UL Rating 5B:C)</td>
<td>13-02548</td>
<td>7-9 ft.</td>
</tr>
<tr>
<td>B150 - 3.5 lb. (UL Rating 5A:10B:C)</td>
<td>13-02436</td>
<td>7-9 ft.</td>
</tr>
<tr>
<td>B317 - 14.9 lb. (UL rating 2A:20B:C)</td>
<td>13-02553</td>
<td>12-18 ft.</td>
</tr>
</tbody>
</table>

C-STROBE LIGHT
The C-Strobe Light is a life preserver signaling emergency strobe which attaches to a life jacket or life vest with a steel pin or Velcro strap. The strobe features a slim, lightweight, waterproof case and operates more than 8 hours continuously. Operates on 2 AA alkaline batteries (not included). P/N 13-54020

C LIGHT
The C Light is a life preserver signaling emergency light which attaches easily to a life vest or jacket with a stainless steel pin or Velcro strap. The intense incandescent strobe light is visible up to 2 miles depending on conditions. The lens intensifies light 20 times brighter than comparable products. Operates on 2 AA alkaline batteries (not included). Operates more than 8 hours continuously. P/N13-54030

RAPID FIRE VEST LIGHT
RapidFire Vest Light is a self-contained emergency rescue lamp. It’s small, compact, rugged, and water-proof and attaches to a standard life vest. It automatically lights when vest is inflated or on manual pull-pin activation. Provides 8 hours continuous light output once activated. Single use light. P/N 13-54040

MINI B 300 PERSONAL RESCUE TRANSMITTER
- In-line speaker emits audio warble to confirm activation and transmission of distress signal or to notify of accidental activation • Exclusive ACR audio indication of transmission allows effective self-test • User-rechargeable battery • unit uses inexpensive, easy-to-obtain common lithium camera battery, Duracell DL223A (or equivalent) • Frequency stability exceeds ETS 300 152 standard • meets rules for satellite detection • Perfect for use as Crew-Overboard system when combined with Yacht2™ Direction Finder • Floats if dropped overboard • 121.5 MHz (SAR frequency) provides pinpoint homing • Antenna maximizes peak effective radiating power when fully extended. Compact size with antenna folded; durable double-braded antenna resists distortion when packed for extended periods • LED indicator confirms transmission • Battery installation instructions included. Operating life: 24 hours @ -20°C (-4°F) P/N 13-02416

FIRELY PLUS FLASHLIGHT/STROBE
The Firefly Plus is a flashlight/emergency locator strobe which is visible for over one mile. The operating life of the strobe is 1 hour (continuous). In a moment of activation the system closed circuit switch collapses sending a signal informing of fire. For experimental aircraft only. For status of pending STCs P/N 13-03266

RESCUE LASER FLARE MAGNUM™
A handheld nighttime laser signaling device that provides a convenient, effective way to signal a rescue party up to 20 miles (32 km) away, depending on atmospheric conditions. It’s ease of operation, long life and waterproof design makes it the perfect survival signaling device. Unlike conventional pyrotechnic flares, the Rescue Laser Flare™ is non-flammable, non-hazardous and can operate continuously for 72 hours on two replaceable AA batteries. 72 Hour... P/N 13-01924
15 Hour... P/N 13-01923

ACTIVE EXTINGUISHING LINE
Active Extinguishing Line is totally independent, 1kg, fire extinguishing system from any power source. Its main secret lies in the heat detector in a form of a line made out of special laser prefiller polymer, which will react instantly to any source of heat or fire. This line (heat detector) is connected to the reservoir containing fire-extinguishing agent: hexafluoropropane FE-36. Inside of the protected device (equipment) a loop is made out of the heat detector breakers, creating a mini sprinkler, directly over source of fire or heat, extinguishing it instantly. In a moment of activation the system closed circuit switch collapses sending a signal informing of fire. For experimental aircraft only. For status of pending STCs P/N 13-03266
**SMOKE HOODS - LIFE VESTS**

**PARAT C EMERGENCY SMOKE HOOD**
The PARAT C is a lightweight, portable easy to don smoke escape hood designed for self-rescue in the event of a fire. The PARAT C protects the wearer for a minimum of 15 minutes from smoke, carbon monoxide and toxic gases normally present during a fire. It is ideal for a personal escape device which can be used in emergency situations occurring in homes, office or apartment buildings, schools, hospitals, plant facilities and hotels.

Parat C Smoke Hood....................... P/N 13-04232
Parat C Wall Holder..................... P/N 13-06642

**FEATURES**
- Hood made from flame-retardant, selfextinguishing PVC material. Bright orange hood with high visibility and excellent reflective properties. One universal size. Can be worn with glasses, long hair and beards. Large visor treated with anti-misting agent provides wide range of vision for quick escape. Elastic collar makes hood easy to don and adjust. Comfortable, soft, inner mask allows wearer to breath normally through nose or mouth. Perfect for frequent travelers.
- Material. Bright orange hood with high visibility and excellent reflective properties. One universal size. Can be worn with glasses, long hair and beards. Large visor treated with anti-misting agent provides wide range of vision for quick escape. Elastic collar makes hood easy to don and adjust. Comfortable, soft, inner mask allows wearer to breath normally through nose or mouth. Perfect for frequent travelers.
- SMOKE HOODS
- Peace of Mind hood are emergency respira-
- to evacuate any area where toxic fumes or smoke could indispose a victim. Also provides protection for eyes, hair, & face against flames, toxic fumes, dust, and sparks. In their vacuum-sealed package, the Peace of Mind hoods are lightweight (3.5 oz) and compact (7.5" x 4.5" x 0.75"). In a few easy steps, you can slip on the hood and evacuate. Assures peripheral vision, hands free usage & unimpeded communication. You can hear, see and talk while wearing the Peace of Mind Hood. Its use of filters instead of a mouthpiece and/or breathing apparatus makes Peace of Mind much easier to use than other devices. Just pull it over your head and evacuate. Excellent for use in general aviation aircraft as well as for travel on commercial airlines. The transparent wall case holds two hoods and two light sticks for use in home or office. The 6-inch light stick diffuses 30 minutes of intense light without heat or flame. Non-toxic and easy to use.

Parat C Smoke Hood....................... P/N 13-04232
Parat C Wall Holder..................... P/N 13-06642

**PEACE OF MIND SMOKE HOODS**

- Designed to evacuate toxic fumes in an emergency to protect the wearer for a minimum of 15 minutes from smoke, carbon monoxide and toxic gases normally present during a fire. Ideal as a personal escape device which can be used in emergency situations occurring in homes, office or apartment buildings, schools, hospitals, plant facilities and hotels. It provides protection for eyes, hair, & face against flames, toxic fumes, dust, and sparks. In their vacuum-sealed package, the Peace of Mind hoods are lightweight (3.5 oz) and compact (7.5" x 4.5" x 0.75"). In a few easy steps, you can slip on the hood and evacuate. Assures peripheral vision, hands free usage & unimpeded communication. You can hear, see and talk while wearing the Peace of Mind Hood. Its use of filters instead of a mouthpiece and/or breathing apparatus makes Peace of Mind much easier to use than other devices. Just pull it over your head and evacuate. Excellent for use in general aviation aircraft as well as for travel on commercial airlines. The transparent wall case holds two hoods and two light sticks for use in home or office. The 6-inch light stick diffuses 30 minutes of intense light without heat or flame. Non-toxic and easy to use.

**COMFORT MAX INFLATABLE LIFE-VEST**

- Features: •USCG approved for persons at least 16 years of age weighing 80 lbs. and above with a chest size between 30- and 52" •Dual waist belt stainless steel adjusters. Provides for easy adjustment with both hands and a more custom fit •Exterior inflation system access flap. Allows for clear, direct access to the CO2 cylinder, designed to keep the wearer upright even unconscious or incapacitated. Can be reinflated by blowing into a special mouth tube. Folds to 2.5" x 6.5" and weighs only 1.4 lbs. Flame resistant Urethane coated nylon for added durability. Meets TSO C13e for flights within 50 miles of land. Bright international yellow for easy identification. It fits outside and every square inch has added durability. Meets TSO C13e for flights within 50 miles of land. Bright international yellow for easy identification. It fits outside and every square inch has

**REVERE COASTAL COMPACT RAFT**

- Double 200 lb. SuperRev™ ballast pockets, it enhances stabili-
- ty in rough sea conditions. Its light weight allows for easy deployment and the compact size makes stow-
- age easy in the smallest of spaces. Operation is easy. Just open the red flag on the valve and extend the painterline. Give a hard pull and the raft inflates automatically in less than 30 seconds. Coastal Compact Raft is not recommended for off-
- shore use.

<table>
<thead>
<tr>
<th>Raft</th>
<th>Part No.</th>
<th>Price</th>
<th>With Canopy</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>2</td>
<td>11-07471</td>
<td>.</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>4</td>
<td>11-07472</td>
<td>.</td>
<td>11-07473</td>
<td>.</td>
</tr>
<tr>
<td>6</td>
<td>11-07474</td>
<td>.</td>
<td>11-07475</td>
<td>.</td>
</tr>
</tbody>
</table>

**SMILEVIEW MIRROR™**

- With the introduction of the SmileView Mirrorm, a major drawback of high wing tandem seat aircraft has been solved! Even with an intercom, in flight communication has been frustrated by loss of voice communication. You can hear, see and talk with a friend need to see the face of their passenger to gauge what they are feeling.

- The SmileView Mirrorm has a 4" x 4" acrylic mirror that mounts securely to avoid vibration, giving a great view. Total weight is 7 oz. and it clamps onto the overhead structural tubing with a socket wrench. It's easily removed if necessary.

- Which of the two versions you choose depends on whether your aircraft has a short tube running from the V structure in the windscreen to the wing root or not. The American Champion family of aircraft has this short tube and uses the Rear Mount version. Cubbs and many LSA use the End Mount as they have the V structure, alone.

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Price</th>
<th>With Canopy</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>13-05707</td>
<td>Universal End Mount</td>
<td>.</td>
<td></td>
</tr>
</tbody>
</table>

**AIRLINE TYPE LIFE VEST**

- This self inflating airline type life vest is inflated by a tug on the cord which releases carbon dioxide from a recharge-
- able cylinder, designed to keep the wearer upright even unconscious or incapacitated. Can be reinflated by blowing into a special mouth tube. Folds to 2.5" x 6.5" and weighs only 1.4 lbs. Flame resistant Urethane coated nylon for added durability. Meets TSO C13e for flights within 50 miles of land. Bright international yellow for easy identification. It fits adults & children. New surplus, overhauled, & certified. HAZMAT. Shelf Life: 2 Years. Price

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>13-31640</td>
<td>.</td>
</tr>
</tbody>
</table>
MUSTANG INFLATABLE LIFE PRESERVERS

CLASSIC INFLATABLE PFD (MANUAL ACTIVATION) - A perfect choice for any boater interested in a lightweight design with high mobility, the Mustang Survival MD3003 Classic Inflatable PFD can be easily worn over a t-shirt in warm weather or over a jacket in colder conditions. The single-chamber construction makes it easy to wear and maintain, the durable nylon shell makes it suitable for a variety of activities and the inflated cell features a safety whistle and SOLAS reflective tape for high visibility.

P/N 13-06382 (RED) ........................................
P/N 13-06371 (BLUE) .................................

DELUXE INFLATABLE PFD (MANUAL ACTIVATION) - The Deluxe Inflatable PFDs combine the advanced safety of inflatable technology with product enhancements such as comfort-improvement features and a safety inspection window to easily tell users if the inflator is ready for use. The Velcro(TM) closure makes it easy to wear and maintain while closing to the outside to reduce chaffing around the neck and chest; the neoprene Comfort Collar(TM) eliminates neck irritation. Made for recreational enthusiasts and professionals alike, the MD3085 sports a manual inflation system and is lightweight and close-fitting to ensure it doesn't interfere with daily activities.

P/N 13-06373 (BLUE) ...................................
P/N 13-06381 (RED) ..................................

TWIN CHAMBER AVIATION PASSENGER LIFE PRESERVER - The MD1127 Twin Chamber Inflatable is a constant pressure life jacket that provides flotation protection for aircrew flying over water in the event of emergency landings. The MD1127 features an inflatable reserve chamber in the event that the primary chamber becomes damaged. Federal Aviation Administration (FAA) approved, the MD1127 is lightweight and designed for constant wear and comfort. The unit is manually inflated and delivers 37lbs of buoyancy and is made with a fire-resistant cover.

P/N 13-06379 .............................................


For model numbers: MD3085 - Deluxe PFDs 3F Manual - USA, MD3087 - Deluxe PFDs 3F Manual with Harness - USA
MD3091 - Deluxe PFDs 3F Manual - Canada
MD3052 - Deluxe PFDs 3F Manual with Harness - Canada
Use only Mustang Survival re-arm kits. Use of other re-arm kits may result in improper operation or failure to operate and will void the product’s warranty.

P/N 13-06374 .............................................


For model numbers: MD1166, MD3000, MD3003, MD3004, MD3020, MD3025, MD3091 Use only Mustang Survival Re-arm kits. Use of other re-arm kits may result in improper operation or failure to operate and will void the product’s warranty.

P/N 13-06375 .............................................

CLOS ED C ELL NEOPRENE HOOD

BREATHABLE CONSTANT WEAR AVIATION COVERALL - The MAC10 is a close fitting, anti-exposure suit for pilots and passengers flying over marine environments. Designed to replace multiple garments used to protect aircrew from individual operational hazards, the integrated three layer suit offers protection from fire and its radiant heat, cold exposure, cold water immersion and drowning. A durable, flame resistant Nomex® anti-static outer layer provides protection for the inherently buoyant, thermal protective wetsuit. An inner layer of Nomex® provides further fire protection and comfort. Even after being significantly marred by fire or puncture, the suit maintains its flotation and hypothermia protection. Rugged leather abrasion panels are integrated into the knees and seat offering protection from petroleum, fuel oils and soiling. Multiple pockets provide storage for notepads, pens and survival equipment. An insulated thermal protective hood, stored in the right leg pocket, minimizes heat loss and provides additional fire protection for the head.

Sizes: 13, 10, 7, 4, 1, 15, 12, 9, 6, 3, 14, 11, 8, 5, 2, 12A, 9A
Colors: ORANGE, ROYAL BLUE, SAGE GREEN

P/N 13-06378 .............................................

BREATHABLE CONSTANT WEAR AVIATION COVERALL - The MAC100 is a breathable flight coverall that provides anti-exposure protection without sacrificing comfort during prolonged missions. Engineered for maximum mobility during marine aircraft operations, this three layer integrated suit provides protection against fire, radiant heat, cold weather, cold-water immersion and drowning. The inflatable foam liner features a moisture permeable membrane that allows excess moisture to escape while providing a thermal barrier against the dangers of outside elements. Durable, flame-resistant Nomex® aramid, anti-static fabric provides external protection for the inherently buoyant, flame resistant, thermally protective, integral wetsuit. Even after being significantly marred by fire or puncture, the suit maintains its flotation and hypothermia protection. Rugged leather abrasion panels are integrated into the knees and seat offering protection from petroleum, fuel oils and soiling. Multiple pockets provide storage for notepads, pens and survival equipment. An insulated thermal protective hood and inflatable mitts are stored in the ankle pockets. Sizes: 7, 6, 5, 4, 3, 2, 1, 15, 12, 10, 9A, 9, 8, 7, 6, 5, 4, 3, 15, 12, 10, 9A, 9, 8, 7, 6, 5, 4, 3, 14, 13, 12, 10, 9, 8, 7, 6, 5, 4, 3, 14, 13, 12, 10
Colors: ORANGE, ROYAL BLUE, SAGE GREEN

P/N 13-06377 .............................................

AVIATION DRY SUIT

CONSTANT WEAR AVIATION DRY SUIT SYSTEM (2 LAYER) - The MFS300 is a two-layer Airex Dry Suit that combines the performance of the 3 layer MAC300 into two layers allowing greater mobility with reduced bulk and lower thermal burden. The outer shell uses a blended Gore-Tex® @NOMEX® fabric that is waterproof, breathable, flame-retardant and anti-static. High-wear areas are strategically reinforced to enhance the suit’s durability and prevent abrasion damage that could compromise the suit’s integrity. The breathable thermal liner provides both insulation and emergency flotation and features Mustang’s aerated closed-cell foam quilted with axially oriented anti-static fabric that pulls excess moisture away from the body. An adjustable neck seal using Mustang’s patented Closed Comfort System (CCS™) can be worn loose to provide comfort out of the water and can quickly be drawn tight to keep excess water out and trim the neoprene wrist seals properly to maintain tight integrity. The thermal liner can be easily removed from the outer shell to reduce thermal protection where not operationally required. An ergonomically designed rear entry allows for self donning and doffing. Integral pockets are designed for a variety of uses and facilitate access even when wearing a survival vest over the suit. The MFS300 comes ready to wear with included universally sized dry socks, trim to fit wrist seals and CCS™ adjustable neck seal.

Sizes: XXL, XXXL, M, S, SX, L, XL
Colors: ORANGE, SAGE GREEN

P/N 13-06376 .............................................
MOTION EAZE

Motion Eaze is the most effective motion sickness treatment on the market today. Whether you want to prevent occasional motion sickness or relieve its symptoms, after motion sickness poses a problem, Motion Eaze really works. Contains no drugs, artificial additives, or stimulants of any kind. Only the freshest, highest quality, natural oils are used in its production. Motion Eaze is an oil that is applied to, and absorbed through, the skin, just behind the ear. Relief arrives in minutes and lasts for hours. It’s perfect for children that have trouble taking pills. Motion Eaze is safe, having known side effects.

P/N 13-02732

Motion Eaze

Motion Eaze

Relieve nausea. P/N 13-05700

ACUPRESSURE WRIST BAND

Fast, effective motion sickness control without drugs, drowsiness, or other side effects. Can be used by adults or children. Exerts a carefully-controlled pressure on acupressure point of both wrists. Takes 2 to 5 minutes to become effective. Used successfully by physicians & the military.

P/N 9411

MOTION SICKNESS RELIEF BAND

Take the ReliefBand® Medical Device along to help relieve the awful feeling of nausea caused by motion sickness. It’s drug-free, non-invasive, comfortable to wear and easy-to-use. Worn similar to a sports watch, but placed on the underside of your wrist, the ReliefBand® Medical Device works using gentle electric signals to stimulate nerves in the wrist. A tingling sensation lets you know the ReliefBand® Medical Device is working. Helps to normalize stomach rhythm, helping to relieve nausea.

P/N 13-05700

SIC-SAC™

Use these for air sickness emergencies. Moisture proof and tear resistant even under extreme temperature changes. 10 sacks, individually packaged, each with attached tie band. Pack of 10 P/N 9296

PUMA METHOD FOR PREVENTION OF MOTION SICKNESS

The Puma Method is a series of simple conditioning exercises, taught on VHS or interactive DVD, that effectively prevents the nausea, vomiting, lightheadedness and other unpleasant symptoms experienced by over 50% of the population while traveling. Sam C. Puma, MD, president of Puma Applied Science and former Air Force Flight Surgeon at NASA, developed these revolutionary new exercises to totally eliminate carsickness. The Puma Method is unique in that it uses the body’s own mechanism to actually master motion sickness, so there is never a need for drugs, devices or herbs. This means no unexpected or unpleasant side effects. The mild head, neck and upper body exercises take only about 15 minutes a day to do.

DVD P/N 13-03675

VHS P/N 13-03676

ACR SIGNAL MIRROR

Sighted signaling mirror with float and whistle. Designed to provide optimum sighting “spot” with holographic red dot viewing window. When target image, mirror & sun are in proper alignment, red dot on target ensures mirror reflection is on target. Telescopic quality second generation high reflective mirror is bright, provides focused image. Buoyant float for easy recovery if dropped overboard. Patented whistle (meets USCG) for audible alerting in low visibility conditions. Signal Mirror has lanyard for seat belt. Size: 4.25x2.75x0.19 in. (10.8x7x0.5cm); Wt: 1.8 oz (51 g)

P/N 13-03177

SURVIVAL BLANKET

Often called the “space blanket.” NASA thought of everything when they came up with this metal-coated nylon design. Waterproof and windproof, it retains 80% of body heat. It’s colored to be seen from more than 4 miles away (although it measures just 4’ x 7’). It’s radar-reflective, and it folds down into a water-proof pouch 8.5”x9”.

P/N 9145

LAND/SHARK INSTANT SURVIVAL SHELTER LS-1300

Stored in its water, vapor and grease-proof vacuum sealed pouch, it measures only 6” x 8” x 1” and weighs a mere 18 oz. (0.5 kg). When needed, it opens to a roomy, waterproof, heat-retaining roomy 36” x 84” (91.4 cm x 213.4 cm) thermal cocoon that provides full body coverage, even over heavy outerwear and boots. It then protects you from exposure and helps you maintain a life-sustaining core body temperature until help arrives. In the open water, the waterproof bag serves to slow the drain of vital body heat and provides protection from chilling sea spray and breaking waves. The aluminized (International Orange) material is radar reflective for search aircraft and high speed vessels moving at night. In warmer waters where the sun is a danger to exposed skin above the water, the bag can be configured to provide for shade and ventilation.

P/N 13-05691

LIGHTED LINEMAN WANDS

Used by US Air force • Up to 400 hours operation • 21” long • Waterproof • Uses 2 D batteries (not incl.) • Fluorescent coated diffuser enhances red light output.

P/N 13-08959

PELTOR FIRST AID KIT

This 90 piece first aid kit from Peltor was designed for aviation use and includes bandages, iodine pads, butterfly wound closures, alcohol prep pads, adhesive pads, sting relief pads, latex gloves, eye pads, tape, splint, eyewash, tweezers, scissors, cold pack, first aid handbook, and more. In plastic case with gasket.

P/N 13-94535

AIRCRAFT EMERGENCY SURVIVAL KIT

An ideal emergency support kit for plane, boat, home, office or school. This kit will sustain a person for 3 days. Includes: 2400 calories of ready-to-eat US Coast Guard approved food, sterile Coast Guard approved water, a lightweight (34’ x 48”) durable, waterproof blanket, & assorted first aid supplies, matches etc.

P/N 9641

3M™ ULTRATHON INSECT REPELLENT

Unique, time-release technology allows you to exercise outdoors longer. Provides lasting protection — up to eight hours against mosquitoes, gnats, chiggers, biting flies and ticks. Helps reduce the risk of contracting West Nile Virus and Lyme Disease.

2 oz. Lotion P/N 09-01723

6 oz. Aerosol P/N 09-01724

PS

SURVIVAL KITS - FIRST AID KITS

TWO-MAN V.I.P. SURVIVAL PACK

It’s staggering just how much useful equipment comes out of this 10’h x 11’w x 4’d backpack. Everything arranged logically and available the way you’d want it. Organized into 6 major divisions: medical/first aid, food & water, shelter & protection, fire & cooking, signals & lights, & "emergency devices," Wt: 20 lbs

P/N 9217

NYLON CASE FIRST AID KITS

Be sure to carry a first aid kit on all flights, particularly over desolate terrain.

Model A: First Aid Kit - Packed in a nylon case for easy storage. The same type used on commercial air carriers with contents in small quantities. Ideal for general aviation. Includes all basic necessities in a compact lightweight package.

P/N 13-02944

Model B: First Aid Kit - In addition to all of the first aid products in the Model A kit, Model B also includes a strobe light to aid searches in locating downed aircraft and survival blanket.

P/N 13-02945

MODEL B: FIRST AID KIT

ACU PRESSURE WRIST BAND

Fast, effective motion sickness control without drugs, drowsiness, or other side effects. Can be used by adults or children. Exerts a carefully-controlled pressure on acupressure point of both wrists. Takes 2 to 5 minutes to become effective. Used successfully by physicians & the military.

P/N 9411

ACU PRESSURE WRIST BAND

Fast, effective motion sickness control without drugs, drowsiness, or other side effects. Can be used by adults or children. Exerts a carefully-controlled pressure on acupressure point of both wrists. Takes 2 to 5 minutes to become effective. Used successfully by physicians & the military.

P/N 9411

SIC-SAC™

Use these for air sickness emergencies. Moisture proof and tear resistant even under extreme temperature changes. 10 sacks, individually packaged, each with attached tie band. Pack of 10 P/N 9296

PUMA METHOD FOR PREVENTION OF MOTION SICKNESS

The Puma Method is a series of simple conditioning exercises, taught on VHS or interactive DVD, that effectively prevents the nausea, vomiting, lightheadedness and other unpleasant symptoms experienced by over 50% of the population while traveling. Sam C. Puma, MD, president of Puma Applied Science and former Air Force Flight Surgeon at NASA, developed these revolutionary new exercises to totally eliminate carsickness. The Puma Method is unique in that it uses the body’s own mechanism to actually master motion sickness, so there is never a need for drugs, devices or herbs. This means no unexpected or unpleasant side effects. The mild head, neck and upper body exercises take only about 15 minutes a day to do.

DVD P/N 13-03675

VHS P/N 13-03676

PUMA METHOD FOR PREVENTION OF MOTION SICKNESS

The Puma Method is a series of simple conditioning exercises, taught on VHS or interactive DVD, that effectively prevents the nausea, vomiting, lightheadedness and other unpleasant symptoms experienced by over 50% of the population while traveling. Sam C. Puma, MD, president of Puma Applied Science and former Air Force Flight Surgeon at NASA, developed these revolutionary new exercises to totally eliminate carsickness. The Puma Method is unique in that it uses the body’s own mechanism to actually master motion sickness, so there is never a need for drugs, devices or herbs. This means no unexpected or unpleasant side effects. The mild head, neck and upper body exercises take only about 15 minutes a day to do.

DVD P/N 13-03675

VHS P/N 13-03676

SIC-SAC™

Use these for air sickness emergencies. Moisture proof and tear resistant even under extreme temperature changes. 10 sacks, individually packaged, each with attached tie band. Pack of 10 P/N 9296

PUMA METHOD FOR PREVENTION OF MOTION SICKNESS

The Puma Method is a series of simple conditioning exercises, taught on VHS or interactive DVD, that effectively prevents the nausea, vomiting, lightheadedness and other unpleasant symptoms experienced by over 50% of the population while traveling. Sam C. Puma, MD, president of Puma Applied Science and former Air Force Flight Surgeon at NASA, developed these revolutionary new exercises to totally eliminate carsickness. The Puma Method is unique in that it uses the body’s own mechanism to actually master motion sickness, so there is never a need for drugs, devices or herbs. This means no unexpected or unpleasant side effects. The mild head, neck and upper body exercises take only about 15 minutes a day to do.

DVD P/N 13-03675

VHS P/N 13-03676

SIC-SAC™
**SURVIVAL KITS – FIRST AID KITS**

**CANADIAN-ALASKAN SURVIVOR PAK**

Originally designed for pilots flying within Alaskan and Canadian airspace, the CA-20 offers protection against harsh climates in the event of an emergency. It contains over 150 medical and general supply items to help sustain two people for up to 14 days. The space-siving design combined with its ample supply of food and water makes the CA-20 a popular choice on board fixed wing, rotor craft, and corporate jets. It's also used extensively by Search & Rescue units! P/N 13-03596

**EMERGENCY SURVIVAL KIT**

Specially designed by a focus group, the ESK-02 makes it easy to be prepared for life’s little surprises. Each kit contains over 40 medical and general supply items including a guidebook that offers survival tips and basic information. Designed to support one person for up to three days, it contains over 50 support items in a custom nylon carrying bag with reinforced straps. “The Traveler” is ready to go anywhere.

P/N 13-03606

**THE TRAVELER KIT**

The Traveler Kit - Personal Care Package is appreciated by everyone from busy executives to sports enthusiasts. It’s the perfect addition to any car as the “other glove” to have on hand for life’s unexpected moments. Designed to support one person for up to three days, it contains over 50 support items in a custom nylon carrying bag with reinforced straps. “The Traveler” is ready to go anywhere.

P/N 13-03607

**2-PERSON EMERGENCY SURVIVAL KIT**

This deluxe 2 PERSON EMERGENCY SURVIVOR KIT could mean the difference between disaster and survival in an emergency situation. It contains a complete 3-day supply of food, water, medical & other emergency supplies for 2 people.

Over 60 Emergency Items! • Emergency Drinking Water Metallic Sachets • 2400 Calorie Emergency Food Rations • Instant Hot & Cold Meals • Medications and Bandages • First Aid Kit • Survival Guidebook

Cold Pack • Medical Kit • Disposable Flashlights • Thermal Blankets • AM/FM Portable Radio w/ Batteries • The Wallace Emergency Guidebook

P/N 13-03608

**EMERGENCY BLANKET**

This Emergency Blanket (52" x 82.5", 1.5 oz.) provides personal protection from rain, wind, heat, and cold. It’s manufactured from extremely lightweight, flexible, space-age material, and retains up to 90% body heat in cold weather. It even deflects heat in hot climates and can be used to offset hypothermic reactions. The Emergency Blanket is waterproof, reusable, and portable. It’s perfect for camping trips and sporting events in addition to emergencies. Keep several on hand for the unexpected!

P/N 13-03604

**SNOW BROOM**

The SNO BRuM offers pilots a way to quickly sweep snow off aircraft wings and away from the user. Great for high wing aircraft. The durable molded polyethylene foam head has been lab-tested for non-abrasiveness, freeze resistance, center load stress and durability to achieve the highest ratings in all tests. The oversized head (6” x 17”) is the largest snow remover available. The high-impact plastic face plate is recessed into the foam to prevent contact with the aircraft. The aluminum telescoping handle has special cold resistant nylon threads and extends from 27” to 46”. Also great for cars, trucks, SUVS, and awnings.

P/N13-04055

**FIRST AID ‘N TRAVEL KIT**

Finally—a compact, complete travel unit for the person on the go! This kit fits perfectly in a purse, briefcase or glove compartment, and is ready when you need it in first aid situations. This kit is very special because it’s the only one of its kind to include a 4 oz. sterile water packet with a five-year shelf life. Ask us about using this kit for fundraisers or corporate promotions! We can customize the kit to include your company’s logo.

P/N 13-03605

**COCOON SLEEPING BAG**

The All Weather Pocket Size Sleeping Bag The Cocoon Sleeping Bag (84" x 36") provides personal protection against rain, wind, heat, and cold. It’s manufactured from extremely lightweight, flexible, space-age material, and retains up to 90% body heat in cold weather. It even deflects heat in hot climates and can be used to offset hypothermic reactions. The Cocoon is waterproof, reusable, and portable. Keep several on hand for the unexpected!

P/N 13-03603

**EMERGENCY FOOD RATIONS**

**MAINSTAY™ FOOD PACK**

- PACK: The Eskimo 02 (ESK-02) has emerged as a food product unlike any other. Before it came into the picture, emergency food bars were only being made for short-term use. Survivor Industries changed all that when it created a great-tasting, non-thirst provoking product with an extraordinary five-year shelf life. Mainstay™ is specially formulated for hard-based high stress situations. Each package contains 9 pre-measured 400 calorie meals, which allows a person to get their full nutrition in a challenging situation. Mainstay™ is Kosher and it meets the dictates for Halal.

- MAINSTAY™ FOOD PACK 8000 P/N 13-03598

- MAINSTAY™ FOOD PACK 2400 P/N 13-03601

- MAINSTAY™ FOOD PACK 1200 P/N 13-03602

**EMERGENCY WATER PACKETS**

Mainstay™ Water Packets - All water is not created equal! Here at Survivor Industries we have spent years perfecting our Mainstay™ Water Packets. The final result is a portable product with a 5-year shelf life. Other Key Benefits: • U.S. Coast Guard approved • No Oxygen Transfer (in other words, no chance of bacterial contamination) • Pre-Measured Packets make the water easy to dispense, and potential for loss is minimized. If a packet is destroyed, only 4.224 ounces (125 ml) would be lost. • Easy to Transport - just 18 lbs. (8.17 kg) per case of 60 packets. • No special storage required - it can withstand temperatures from (-40°F to 210°F) (-40°C to 99°C) • Very Low Cost. • No Cups Needed!

P/N 13-03598

**THE WALLACE GUIDEBOOK**

For Emergency Care & Survival - When you’re faced with a disaster, you can often face physical and psychological strain. It’s often hard to remember what to do in an emergency situation, and this is exactly why we’ve written the Wallace Guidebook. This book is specifically designed to present the basics of survival in an extremely easy-to-understand manner. This book discusses the following topics, plus many more: Choking, Heart Attack, CPR, Shock, Burns, Emotional Trauma, Bleeding, Fainting, Wounds, Broken Bones, Fractured Bones, Back Injury, Childbirth, Auto Breakdown, Temperature Extremes, and the 1st and 2nd Rules of Survival. It’s not fun to be in one of these situations, but having a book like this nearby gives you a better chance of a happy ending.

P/N 13-03597

**CANOPY BREAKER TOOL**

The Piranha Canopy Breaker Tool is a robust device with a sharp edge on one end. The tool is secured inside the aircraft cockpit to a frame member or seat frame, within easy reach of the pilot. A plastic cover is over the blade end for tactile and visual identification and protects the pilot from the blade end. In an emergency situation the pilot locates the Canopy Breaker Tool, removes the safety pin / lanyard which secures the tool to the aircraft and places the other hand underneath the tool, then positions the blade parallel to the canopy side frame, near the frame and uses very strong upward thrusts aiming one of the blade points at the Plexiglas. The unit is made from industrial strength aluminum, weighs 10 oz and the lanyard has a 35# break strength.

P/N 12-02269
CRASHKIT PERSONAL AND PROFESSIONAL FLIGHT LINE SERIES aviation survival kits are quickly becoming an industry leader in top quality aviation survival kits. Numerous kits are available to suit your piloting and survival needs.

**CRASHKIT ALPHA SURVIVAL KIT**

The ‘Alpha’ personal aviation survival kit is designed for the pilot with general knowledge of survival techniques. This kit includes 24 of the most essential items packed into the smallest kit practical. Weighing in at only 1.54lbs, the general kit is small enough to fit in any tiny bag, purse, glove compartment, map pocket or cargo pocket. Every item included in this kit has been thoroughly tested and approved to ensure its performance flawlessly when needed (we’ve even sharpened the knife!) and meets or exceeds Transport Canada’s Canadian Aviation Regulations to facilitate survival and rescue. Dimensions : 6.37” x 4.75” x 2.12”(16.9 x 12.06 x 5.4 cm) Weight : 1.54 lbs Contents : 24 items covering food, fire, water, shelter, and first aid Case : Pelican 1020 case - yellow - tough, watertight, polycarbonate case Optional Acc’s : Parachute deployment system; Aircraft Mounting Bracket Warranty : Lifetime. P/N 13-04684

**CRASHKIT BRAVO SURVIVAL KIT**

The ‘Bravo’ personal aviation survival kit is designed for the pilot with some basic knowledge of survival techniques. Containing 51 of the most essential items, this kit remains small and lightweight. At only 2.20lbs, it is compact enough to fit in any tiny bag, purse, glove compartment, map pocket or cargo pocket. Each item in this kit has been thoroughly tested and approved to ensure flawless performance when needed, and meets or exceeds Transport Canada’s Canadian Aviation Regulations to facilitate survival and rescue. Dimensions : 7.50” x 5.00” x 3.13”(19.05 x 12.86 x 7.94 cm) Weight : 2.20 lbs Contents : 51 items covering food, fire, water, shelter, and first aid Case : Pelican 1050 case - tough, watertight, polycarbonate case Optional Acc’s : Parachute deployment system; Aircraft Mounting Bracket Warranty : Lifetime. P/N 13-04685

**CRASHKIT CHARLIE SURVIVAL KIT**

The ‘Charlie’ personal aviation survival kit is designed for the pilot with minimal knowledge of survival techniques. Including 71 of the most essential items, this kit is extensive in its coverage of necessary tools and supplies. Packaged in a Pelican 1120 case, ‘Charlie’ is still compact and lightweight enough for easy transport and storage. Every item in this kit has been thoroughly tested and approved to ensure its performance flawlessly when needed, as well as to ensure the ease of use for each individual piece. This kit meets or exceeds Transport Canada’s Canadian Aviation Regulations to facilitate survival and rescue. Dimensions : 8.12” x 6.56” x 3.56”(20.9 x 16.6 x 9.0 cm) Weight : 2.81 lbs Contents : 71 items covering food, fire, water, shelter, and first aid Case : Pelican 1120 case - tough, watertight, polycarbonate case Optional Acc’s : Parachute deployment system; Aircraft Mounting Bracket Warranty : Lifetime. P/N 13-04686

**CRASHKIT 2-7 SURVIVAL KIT**

Designed for use in typical GA light aircraft, specifically those used in flight schools or clubs, this crashkit has the items necessary to sustain a pilot and four other people for seven days in the event of a crash. Redundancy in the items within the kit allows for multiple options for food, fire, and shelter; for example, in addition to the flight packaged food, a fishing kit and equipment are also included. This kit contains 165 of the most essential items needed in a survival situation, packed in a Pelican 1200 case, and remains lightweight and compact for easy transport and storage on a craft. Every item included in this kit has been thoroughly tested and approved to ensure it performs flawlessly when needed, and meets or exceeds Transport Canada’s Canadian Aviation Regulations to facilitate survival and rescue. Dimensions : 10.63” x 9.69” x 4.88” (20.9 x 16.6 x 9.0 cm) Weight : 7.15 lbs Contents : 165 items covering food, fire, water, shelter, and first aid Case : Pelican 1200 case - tough, watertight, polycarbonate case Kit Coverage : 2 people for 7 days (or longer dependent on situation) Optional Acc’s : Parachute deployment system; Aircraft Mounting Bracket Warranty : Lifetime. P/N 13-04690

**CRASHKIT 4-7 SURVIVAL KIT**

The Crashkit 4-7, designed for use in typical GA light aircraft and commercial aircraft, contains the materials necessary to sustain four people for seven days in the event of a crash. The edition of items within the kit allows for multiple options for food, fire, water and shelter; for example, in addition to the flight packaged food, a fishing kit and equipment are also included. This kit contains 232 of the most essential items needed in a survival situation, packed in an indestructible Pelican 1400 case. Every item included in this kit has been thoroughly tested and approved to ensure its performance flawlessly when needed, and meets or exceeds Transport Canada’s Canadian Aviation Regulations to facilitate survival and rescue. Dimensions : 13.37” x 11.62” x 6.00” (34 x 29.5 x 15.2 cm) Weight : 17.55lbs Contents : 232 items covering food, fire, water, shelter, and first aid Case : Pelican 1400 case Kit Coverage : 4 people for 7 days (or longer dependent on situation) Optional Acc’s : Parachute deployment system; aircraft mounting bracket Warranty : Lifetime. P/N 13-04691

**CRASHKIT 6-7 SURVIVAL KIT**

Intended for commercial aircrafts, our Crashkit 6-7 has enough materials to sustain six people for seven days in the event of a crash. Various means of food, fire, water and shelter allow for multiple options; for example, this kit includes not only Mainstay water, but adds the option for purification, as well as hot chocolate or tea. Within each case, two fishing kits and equipment are also included. This kit contains 361 of the most essential items needed in a survival situation are packed and ready for easy use. Every item included in this kit has been thoroughly tested and approved to ensure it performs flawlessly when needed, and meets or exceeds Transport Canada’s Canadian Aviation Regulations to facilitate survival and rescue. Dimensions : 16” x 13” x 6.88” (40.6 x 33 x 17.5 cm) Weight : 22.80lbs Contents : 361 items covering food, fire, water, shelter, and first aid Case : Pelican 1450 case - tough, watertight, polycarbonate case Kit Coverage : 6 people for 7 days (or longer dependent on situation) Optional Acc’s : Parachute deployment system; aircraft mounting bracket Warranty : Lifetime. P/N 13-04692

**MILITARY PILOT SURVIVAL KITS**

**SURVIVAL TOOL KIT**

- Total weight is 3 lbs. Custom designed, adjustable carrier pouch holds equipment. Can be worn around waist, used as tourniquet or with wooden dowels as splint. Dowels help with fire-starter. Custom designed Multi-Tool in Strike Force™ Fire Starting System. Custom designed Harsey Air Ranger II Folding Knife • Nexus™ 26DNL Compass  • LED Task Light™ Flashlight • Sunscreen Packets • Vacuum sealed Balaclava • Rescue One knife prevents injury, cuts seat tourniquet or with wooden dowels as splint. Dowels help with fire-starter. Black-tipped M513P Flare Gun • Gerber® Hook, sharpener, assorted screwdrivers. P/N 13-05678

**MILITARY PILOT SURVIVAL KIT**

- Designed by Oregon Aero for the U.S. Navy. The durable carry pouch is hand sewn by Oregon Aero with pockets for each item. Knife, fire starter and flashlight lanyards attach to carry pouch. Special zippered permits access to folding knife without opening the carrying case. 6.5” high, 5.5” wide, 2” thick. This kit includes : • Gerber® Multi-Tool ® designed especially for our kits by Gerber and Oregon Aero • Gerber® Harsey Air Ranger II Folding Knife • Nexus™ 26DNL Compass • LED Task Light™ Flashlight • Sunscreen Packets • Vacuum sealed Balaclava • Strike Force Fire Starting System. Custom designed Multi-Tool includes : • Pliers, wire cutter, file, awl, serrated sheep’s foot blade, knife/tissue hook sharpener, assorted screwdrivers. P/N 13-05679

720
**EAR PLUGS - PORTABLE RESTROOMS**

**PILOT RELIEF TUBES**

**HORN** - Black molded plastic horn fits into horizontal or vertical brackets. Measures 2-3/8” diameter and weighs 1.3 oz.

P/N 13-04168

**HORIZONTAL BRACKET** - Black molded plastic bracket for unterseat installation.

P/N 13-04169

**VERTICAL BRACKET** - Black molded plastic bracket for vertical installation.

P/N 13-04170

**VENTURI** - Black molded plastic venturi mounts on fuselage bottom and produces a jet, top to horn and outlet tubes for fluid ejection.

P/N 13-04171

**AIRSOFT REUSABLE EARPLUGS**

AirSoft earplugs feature a shell of soft attenuating material around a pocket of air that is the highest rated reusable earplug available with a noise reduction rating NRR 27.

P/N 13-02194

**ULTRA FIT E-A-R PLUGS**

You get the best noise protection possible with a premolded ear plug. Triple flange design gives you a perfect fit and a noise reduction rating of 27 db. Conversations can still be heard while harmful noises are reduced to a safe level. Comes with carrying case and chain for hanging in a convenient place.

One Pair

P/N 9821

**E-A-R NOISE FILTERS**

Soft polymer foam fits inside ear canal and expands to block sound and filter out damaging noises. Provides up to 35 db noise reduction. Washable and reusable.

P/N 9134

**PELTOR 30 CALIBER EAR PLUGS (CASE OF 10)**

The unique shape of the Peltor 30 Caliber Plugs is concave at the base to help wearers achieve easy, deep insertions for optimum protection. The Easy-Grip Handles on each plug allows for quick and easy removal. The Peltor 30 Caliber plugs are packaged in a 10 pair ammo case like actual bullets.

P/N 13-04287

**LITTLE JOHN**

Positively the least expensive accessory you can buy to extend your range. One authenticated case reports a Piper Malibu’s range extended by 500 miles. Durable plastic, won’t crack under any normal handling and temperature conditions. A tight screw-on cap makes it spill proof. Standard issue in hospitals for years.

P/N 9741

**LADY J ADAPTER**

The anatomically designed tunnel snaps in and out of the little John. It can be used sitting or even standing. Clean white plastic.

P/N 8745

**G FUNNEL ADAPTER**

The G-Funnel is a portable urinal adapter which simply screws on to any plastic pop or water bottle that will be uses as a container for those situations where a washroom facility is not available. The appeal to this adapter is that it can be attached and used together with any sized plastic pop or water bottle that most people have on hand. The plastic pop or water bottle is to be used as liquid container and then can later be emptied for reuse or just thrown in the trash when available. We think you’ll agree that this is a very useful relief device for those emergency situations.

P/N 13-01974

**RESTOP DISPOSABLE URINAL**

The anatomically designed Restop is the disposable urine bag that combines a unique blend of polymers, enzymes, & deodorizer to turn urine into an odorless gel on contact. The funnel design prevents accidental spills. Restop is sanitary, non-toxic, spillproof & odorless, safe and convenient, trash container safe, and small enough to fit in pocket. Easy to use by men & women. 2 pack.

P/N 13-00794

**TRAVEL JOHN**

Absorbent pouch turns urine into gel instantly while destroying bacteria and odor. Specially designed collar works for men women and children; spill guard prevents back guard using. Convenient, sanitary and compact, TraveJohn is easy to use while sitting or standing. Will not leak or spill, even if punctured. Holds 28 fl. oz. Includes antiseptic hand wipe. 3-pack

P/N 13-00894

**IPEE - DISPOSABLE URINE COLLECTION DEVICE**

The SuperSlab 100® device is biodegrade and disposable urine collection device designed for men & women. Every SuperSlab 100 device includes a female adapter which enables women to urinate easily while standing. The SuperSlab 100® converts the liquid urine into a solid in less than one minute with an absorbent. The absorbent ITBX5®, is a biodegradable, 100% organic compound. After the SuperSlab 100® transforms the liquid into a solid, the device is easily stored for proper disposal at a later time.

P/N 13-05577

6 Pack

P/N 13-05578

**RESCUE STREAMER™ DISTRESS SIGNAL**

This bright orange streamer, visible from 1.3 miles away at 1,500 ft. altitude, leads Search & Rescue teams right to you. The patented high-strength polyethylene Streamer design is tested and used by the U.S. Military and Coast Guard, is marked with the international distress symbol. Features sealed air-filled struts that keep it aloft on water and open on land to pinpoint your exact location to rescuers. RescueStreamers™ start at the size of a cell phone when stored and unroll in seconds. Always ready for use anywhere; land, water, and snow. Does not require chemicals, batteries, or electronics to signal continuously. Patented design approved for US Military & Coast Guard use. Furnished in a mesh bag for storage in a 1-2 person raft. Weight: 6.7 oz. Display size: 6" x 40 ft.

P/N 13-03767

**PORTABLE RESTROOMS**

**Restop is sanitary, non-toxic, spillproof & odorless, safe and convenient, trash container safe, and small enough to fit in pocket. Easy to use by men & women. 2 pack.**

P/N 13-00794

**TRAVEL JOHN**

Absorbent pouch turns urine into gel instantly while destroying bacteria and odor. Specially designed collar works for men women and children; spill guard prevents back guard using. Convenient, sanitary and compact, TraveJohn is easy to use while sitting or standing. Will not leak or spill, even if punctured. Holds 28 fl. oz. Includes antiseptic hand wipe. 3-pack

P/N 13-00894

**IPEE - DISPOSABLE URINE COLLECTION DEVICE**

The SuperSlab 100® device is biodegrade and disposable urine collection device designed for men & women. Every SuperSlab 100 device includes a female adapter which enables women to urinate easily while standing. The SuperSlab 100® converts the liquid urine into a solid in less than one minute with an absorbent. The absorbent ITBX5®, is a biodegradable, 100% organic compound. After the SuperSlab 100® transforms the liquid into a solid, the device is easily stored for proper disposal at a later time.

P/N 13-05577

6 Pack

P/N 13-05578

**RESCUE STREAMER™ DISTRESS SIGNAL**

This bright orange streamer, visible from 1.3 miles away at 1,500 ft. altitude, leads Search & Rescue teams right to you. The patented high-strength polyethylene Streamer design is tested and used by the U.S. Military and Coast Guard, is marked with the international distress symbol. Features sealed air-filled struts that keep it aloft on water and open on land to pinpoint your exact location to rescuers. RescueStreamers™ start at the size of a cell phone when stored and unroll in seconds. Always ready for use anywhere; land, water, and snow. Does not require chemicals, batteries, or electronics to signal continuously. Patented design approved for US Military & Coast Guard use. Furnished in a mesh bag for storage in a 1-2 person raft. Weight: 6.7 oz. Display size: 6" x 40 ft.

P/N 13-03767

**PORTABLE RESTROOMS**

**Restop is sanitary, non-toxic, spillproof & odorless, safe and convenient, trash container safe, and small enough to fit in pocket. Easy to use by men & women. 2 pack.**

P/N 13-00794

**TRAVEL JOHN**

Absorbent pouch turns urine into gel instantly while destroying bacteria and odor. Specially designed collar works for men women and children; spill guard prevents back guard using. Convenient, sanitary and compact, TraveJohn is easy to use while sitting or standing. Will not leak or spill, even if punctured. Holds 28 fl. oz. Includes antiseptic hand wipe. 3-pack

P/N 13-00894

**IPEE - DISPOSABLE URINE COLLECTION DEVICE**

The SuperSlab 100® device is biodegrade and disposable urine collection device designed for men & women. Every SuperSlab 100 device includes a female adapter which enables women to urinate easily while standing. The SuperSlab 100® converts the liquid urine into a solid in less than one minute with an absorbent. The absorbent ITBX5®, is a biodegradable, 100% organic compound. After the SuperSlab 100® transforms the liquid into a solid, the device is easily stored for proper disposal at a later time.

P/N 13-05577

6 Pack

P/N 13-05578

**RESCUE STREAMER™ DISTRESS SIGNAL**

This bright orange streamer, visible from 1.3 miles away at 1,500 ft. altitude, leads Search & Rescue teams right to you. The patented high-strength polyethylene Streamer design is tested and used by the U.S. Military and Coast Guard, is marked with the international distress symbol. Features sealed air-filled struts that keep it aloft on water and open on land to pinpoint your exact location to rescuers. RescueStreamers™ start at the size of a cell phone when stored and unroll in seconds. Always ready for use anywhere; land, water, and snow. Does not require chemicals, batteries, or electronics to signal continuously. Patented design approved for US Military & Coast Guard use. Furnished in a mesh bag for storage in a 1-2 person raft. Weight: 6.7 oz. Display size: 6" x 40 ft.

P/N 13-03767
CO GUARDIAN

Carbon Monoxide Detectors

CO GUARDIAN uses a patented pending technology to compensate for changes in an airplane due to temperature and humidity. The detector has three (3) warning systems: audio, digital, and red LED lights, and numerical readouts for escalating or dangerous levels of carbon monoxide in the cabin. CO GUARDIAN can also be used in vehicles, motor homes, emergency vehicles, etc., as it plugs into any 12/24V adapter. All models have a 3 year Limited Warranty.

**MODEL AERO-152A**
- **Features:** Max power consumption = Less than 1W
- **Weight:** approx. 2.5 oz
- **Works from 10V to 30V sys.**
- **Product shielded to prevent RMI (Radio Magnetic Interference)**
- **With Aircraft systems:** Audible alarm with varying pitch at 85dB - Digital CO Level Reader
- **Pressure density altitude reading for takeoff.**
- **Sensor tested to 13500 ft.**
- **Built in Temperature compensating circuit.**
- **Built in Humidity compensating circuit.**

**MODEL AERO-152WD**
- **Features:** Max power consumption = Less than 1W
- **Weight:** approx. 2.5 oz
- **Works from 10V to 30V sys.**
- **Product shielded to prevent RMI (Radio Magnetic Interference)**
- **With Aircraft systems:** Audible alarm with varying pitch depending at 85dB
- **Front panel lighting (Green, Amber and Red).**
- **CO Sensor tested to 13,500ft.**
- **Built in temperature circuit.**
- **Built in Humidity compensating circuit.**

**MODEL AERO-353**
- **CO GUARDIAN upgrades its best selling model 352 to the 353.**
- **Model 353 has a brand new sensor that can detect CO as low as 1 Part Per Million (PPM) to 999 PPM.**
- **This unit now comes standard for interfacing CO levels display on the G1000, GNS480 and other Multi-function displays.**
- **The 353 now has a built in pressure sensor that compensates for altitude.**
- **These units can be mounted on the panel or remotely.**
- **The 353P now has a built in pressure sensor which compensates for altitude up to 25,000 feet.**
- **Similar to hypoxia, this becomes more critical as altitude increases and the body’s tolerance to CO decreases.**

**MODEL AERO 552 -** This unit is a replacement for the 2 3/4” clock and provides the latest CO protection that displays 30 to 999 ppm in the cockpit, as well as aircraft high and low voltage alarms. The 552 is lightweight and makes a great alert for taking carbon monoxide alerts to remind you to go on oxygen. An RS232 output that allows the parameters for CO level, cabin pressure and temperature to be displayed on the UPS AT CNX80.

**CO DETECTORS**

**HONEYWELL LUMIDOR MINIMAX XT, XP**
- **The LUMIDOR MINIMAX XT -** Personal detector is able to monitor a single gas from a range of oxygen and toxic gases. Utilizing cell output delay compensation, in conjunction with patented sensor technology the Minimax XP ensure accuracy and reliability while providing a cost effective instrument.
- **User flexibility is achieved with built-in menus, and the on/off operation of the instrument provides up to 3 years of battery life under typical use.**
- **All LUMIDOR Minimax XP instruments provide 2 levels of instantaneous alarm, STEL and TWA alarms, and have audible, visual and vibrating as standard.**
- **All LUMIDOR Minimax XP instruments are supplied with a case clip, test adaptor, manual and an optional interactive product guide CD is available.**
- **Designed to meet IP54 water ingress protection.**

**ACCESSORIES & SPARES FOR XT**

**CO DETECTORS**

**DIGITAL CO2 DETECTOR**
- **Super large 3-1/2 digital LCD display with backlight.**
- **Pocket-sized and easy to use.**
- **Fast sampling time.**
- **Max hold and data hold.**
- **Audible beep from 35 to 200 ppm.**
- **Continuous beep after 200 ppm.**
- **Auto power off - 15 min inactive.**
- **Airflow compensation for boot Simpson.**
- **Range: 0 to 1000 ppm.**
- **Resolution: 1 ppm.**
- **Battery life: 200 hours when the backlight is off and 35 hours with the backlight on.**

**DIGITAL CO2 DETECTOR**
- **Extremely affordable DCO 1001 has a measuring range of 0-1000 ppm and comes complete with a soft case, a wrist strap, 3 "AAA" batteries and an instruction manual.**
- **Features: Adjustable co warning level.**
- **LCD digital dual display.**
- **Brightness backlight.**
- **Self test.**
- **Low battery indication.**
- **5 or 10 ppm power.**
- **Source power: (1) 9 volt battery.**
- **Dimensions: 6.3” x 2.2” x 1.6”**

**LONG LIFE CARBON MONOXIDE DETECTOR**
- **No longer do you have to replace that Carbon Monoxide Detector every 28 days, the new Quantum Eye Carbon monoxide detector offers a minimum 18 months of sensor life.**

**STANDARD CARBON MONOIDE DETECTOR**
- **Carbon monoxide is odorous and colorless, but this economical little stick-up pad gives you a visible warning if it’s present in the cockpit (or car or garage). A little graying of the color spot means a little gas; if it turns black, the concentration is dangerous. Adhesive backed. Spot returns to normal color after being exposed to fresh air.**

**ASA CARBON MONOXIDE DETECTOR**
- **Carbon monoxide (CO) is a toxic, odorless, and tasteless gas produced by the incomplete combustion of gasoline, kerosene, natural gas, butane, propane, fuel oil, wood, coal, and other fossil fuels. Dangerous levels of CO can be produced by internal combustion engines or from any poorly vented or improperly adjusted fuel-burning appliance. Exposure to CO may cause sickness, headaches, or even death.**

**CO GUARDIAN**

**CARBON MONOXIDE DETECTORS**

**SENSOR tested to 13,500 ft.**
- **Built in temperature compensating circuit.**
- **Depends at 85DB.**
- **Front panel lighting (Green, Amber and Red).**

**P/N 13-06640**
- **Price: 5 or more.**

**P/N 09-35601**
- **Price: 5 or more.**

**P/N 10-05764**
- **Price: 5 or more.**

**P/N 11-05756**
- **Price: 5 or more.**

**P/N 11-05758**
- **Price: 5 or more.**

**P/N 11-05759**
- **Price: 5 or more.**

**P/N 11-05760**
- **Price: 5 or more.**

**P/N 11-05762**
- **Price: 5 or more.**

**P/N 11-05767**
- **Price: 5 or more.**

**P/N 13-05640**
- **Price: 5 or more.**

**P/N 13-05659**
- **Price: 5 or more.**

**P/N 13-05753**
- **Price: 5 or more.**

**COGUARDIAN P/N 13-06640..........................
**

**COGUARDIAN P/N 13-02569..........................
**

**COGUARDIAN P/N 13-01642..........................
**

**COGUARDIAN P/N 13-05733..........................
**

**COGUARDIAN P/N 13-01895..........................
**

**COGUARDIAN P/N 13-06165..........................
**

**COGUARDIAN P/N 13-05766..........................
**

**COGUARDIAN P/N 13-01642..........................
**

**COGUARDIAN P/N 13-00639..........................
**

**COGUARDIAN P/N 13-00640..........................
**
Carring Case ............................................... P/N 13-02202............................

be displayed in U.S. or metric units of measure. Wind speed displayed.

blades. Exposed Sensors for instant readingsP/N 13-04757 ..................

selected intervals, when unit is on only. Bright LED Light: • operates on

- 122°F (10° to 50°C)

50 g)  One button operation, EL Backlight  Completely sealed; internal

of the way in the folding handle. Constructed of high impact plastic and

corrosion resistant metals. It comes with leather-like carrying case. No

(1 m) * Great gift item Specifications * Size: 3.6" x 1.6" x .6" O.D., 1.8 oz

Lithium battery * 4 year warranty * Battery Range: 0 to 99.99 * Resolution:

U.S. military specifications • Auto shutoff • Comes with adjustable lan

: * Windspeed accuracy +/- 3% from .8-89Mph

in both U.S. and metric units,

the current wind speed, the

Wind vane assures you are on the wind’s axis • Tripod

WINDLINQ WIND METER

- 122°F (10° to 50°C)

Accuracy +/- 2° * Temp/Windchill accuracy +/- 1.8°F * Optional Units:

Most compact electronic anemometer available. Features:

speed functions and includes a severe weather audio

WM-100 WINDMETER 100 - Current, Average (5,10,13

- 122°F (10° to 50°C)

Index™ gives the effect of temp, relative humidity, wind speed, & sun

 call for special pricing!

WEATHER WIZARD III WEATHER STATIONS

includes all of the most requested features of a profession-

includes a high visibility case.  Average wind speed over 5, 10,

WINDSCRIBE HANDHELD WIND METER

Water Resistant to 3 feet (1 m) * F or C * Avg wind speed over 10

0.1 mm, ft/min, m/s, BF (Beaufort) * F or C * Avg wind speed over 10

SM-19 SKYMATE PLUS WIND METER

- 122°F (10° to 50°C)

WEATHERMETERS - WEATHER STATIONS
WEATHER STATIONS – FLASHLIGHTS

WIRELESS VANTAGE PRO2 WEATHER STATION
Uses frequency hopping spread spectrum radio technology to transmit data wirelessly up to 1000’ (300 m). Console, integrated sensor suite, and mounting hardware. Integrated sensor suite includes rain collector, temperature and humidity sensors, anemometer, 40’ (12 m) anemometer cable, and solar panel. Sensor suite is solar powered. AC-power adapter included for console, or use with three C batteries (not included). Wireless range is up to 1000’ outdoors, line of sight. Typical range through walls 200’ to 400’. Add wireless repeaters for distances up to 1.7 miles. Vantage Pro2 Plus with UV & Solar Radiation. P/N 13-05586 Mounting Tripod P/N 13-04569.

FLIGHTLIGHT™ - PILOT FLASHLIGHT
This AirClassics™ flashlight has both white and red lenses for preflight and night flying, extra Krypton bulb stored within, is water-tight, contains a red LED that creates a clicking ON/OFF for maximum battery life. Focuses from spot to flood light. Black machined aluminum with ASA wings logo. Two AA batteries and PR-1 bulb included. Flashlight: P/N 13-01067. Bulb: P/N 13-02320.

FLIGHT LIGHT PEN
See what you write—even at night! Saves pilots from using an overhead light when writing in low-light situations, and the green LED light will maintain a pilot’s night vision – LED lasts a lifetime! The flashlight cap enables pilots to look for items nearby, serving as a temporary illuminant. The clip on the cap allows for easy storage. Includes 2 LED lights, and 2 button cell batteries. 5 1/4” x 3/4”.

SAFE-LIGHT SUPER BRIGHT FLASHLIGHTS
PILOT FLASHLIGHTS

SUREFIRE AVIATION FLASHLIGHTS

Long known as a major supplier of quality flashlights to law enforcement and the military, Surefire has just made available a new flashlight built for aviators that combines two widely different light sources in a single compact illumination tool providing dual power and variable output. Surefire flashlights feature the finest beams, reflectors, switches and powerful tungsten lamps available on the market today. They are not inexpensive but for the pilot looking for a truly unique, high quality, reliable flashlight, Surefire is the answer. Surefire flashlights carry a lifetime warranty (excluding batteries and lamps).

The A2 Aviator features a high-output incandescent lamp producing 50 lumens surrounded by 35mm LED’s set in a specially designed parabolic reflector. The Aviator’s digitally controlled two-stage switch allows the pilot to choose LED’s for soft light illumination in the cockpit or high output lamp for bright illumination during preflight inspection of your aircraft. The high beam on the A2 Aviator can illuminate the tail of a 747 from the ground. That’s over 63 ft. further than a typical flashlight that measures only 5.6” in length and weighs only 4 oz. The A2 Aviator comes standard with a gray-green super-tough Type III hard anodized aluminum body to military specifications, because it is the best and strongest, corrosion-proof, and non-conductive. Depress the tailcap on the A2 for momentary illumination or rotate fully inward for constant-on illumination. Length: 4.9”

The G2 Nitrolon is Surefire’s most economical flashlight, and uses 2 lithium batteries to produce 65 lumens of diamond bright light for 60 minutes. The G2 is constructed of Black Nitrolon, a polymer compound that is lightweight, corrosion-proof, and non-conductive. Depress the tailcap on the G2 for momentary illumination or rotate fully inward for constant-on illumination. Length: 4.9”

The E2d Defender is constructed from aerospace-grade aluminum coated in a super rugged military-specific finish, the pocket-size E2 Defender also features an optically-coated Pyrex® lens; high-energy, ten-year shelf-life lithium batteries; a stainless steel pocket clip, and lay enforcement-style click-on/off momentary switching for blinding flashes or emergency signaling.

A2 Aviator with green LEDs ........................................P/N 13-02017 .....................
A2 Aviator with white LEDs ........................................P/N 13-02018 .....................
L1 Lumamax with white LED ........................................P/N 13-02019 .....................
L1 Lumamax with green LED ........................................P/N 13-02020 .....................
G2 Nitrolon flashlight (Plastic Body) .........................P/N 13-02021 .....................
E2d Defender flashlight ...............................................P/N 13-02024 .....................

SUREFIRE ULTRA U2 FLASHLIGHT

Compact (palm size) high-intensity variable-output LED flashlight for tactical, duty, and general use. Uses a virtually indestructible light-emitting diode (LED) to provide six output levels, from a long-running low beam to a brilliant white tactical-level high beam almost seven times the light of a big two D-cell flashlight. Ring selector provides instant output control. Electronic current regulation maintains a more consistent level of light output for the useable life of the batteries. Variable output, compact size, extended-runtime low beam and high-output power. A standard 10-year battery shelf life also make it perfect for backpacking or camping and for disaster preparedness kits.

123 Lithium Battery for the U2 Ultra ...........................P/N 13-04710 .....................
Versabrite mounting clips (1 top, 1 side mount) ....P/N 13-04711 .....................

SUREFIRE REPLACEMENT BULB MA02

The MA02 lamp assembly fits A2 Aviator flashlights and produces 50 lumens of light for 1 hour. P/N 13-04438 .....................

STREAMLIGHT FLEXIBLE FLASHLIGHT

Streamlight has a 6.21” flexible, insulated cable extension allows 14 inches for hard-to-reach areas. Made of silver aircraft aluminum casing and a tough PVC shielded cable. Unbreakable, 100,000-hour wide LED that never needs replacing. It has a runtime of up to 60 hours. (4) AAA batteries included. Wt: 1.1 oz. P/N 13-03142 .....................

MYGRIPLIGHT (LED)

Multi purpose product that performs as an organizational tool as well as a multi purpose light. The organization-al tool organizes writing instruments, cell phones, eyeglasses, flight charts and other documents by means of a patented polyester snap-in-lock structure to secure these items. The patented multi purpose light is connected to the organizational tool by means of a flex-arm. The light has 360 degree rotation and can be removed from the organizer to act as an independent lighting instrument. The light offers both white and red light illumination on demand. MyGripLight “goes where other flashlights never go.”
**FLASHLIGHTS**

**XEVISION PERSONAL LED FLASHLIGHTS**

The compact LED flashlights are so small that they fit in the palm of a hand comfortably. They are so bright, even die-hard HID Xenon lighting technology purists can not resist.

Super-bright white light from one small but powerful LED

Our LED flashlights feature the latest commercial Cree LED 7090 XR-E, which delivers unprecedented levels of bright white light. The luminous flux of 100 lm min. @ 350 mA, and a luminous efficacy up to 75 lumens/watt.

Xevision personal LED flashlight models

The compact LED flashlights are so small that they fit in the palm of a hand comfortably. They are so bright, even die-hard HID Xenon lighting technology purists can not resist.

**XV-C1C**

- Is their most compact LED flashlight using one long-lasting 3 VDC Lithium CR123A battery. The XV-C1C features six settings, 4 of them being output levels. This flexibility only allows the user to select the best compromise between brightness and runtime for any given task but also has the ability to aid in an emergency. The XV-C1C offers a remarkably compact size and is extremely solid and reliable with its digitally regulated brightness. Two 3 VDC CR123A batteries (Lithium), not rechargeable.

**XV-C2C**

- Features six settings, 4 of them being output levels. This flexibility only allows the user to select the best compromise between brightness and runtime for any given task but also has the ability to aid in an emergency. The XV-C2C offers a remarkably compact size and is extremely solid and reliable with its digitally regulated brightness. Two 3 VDC CR123A batteries (Lithium), not rechargeable.

**XV-C2A**

- Features six settings, 4 of them being output levels. This flexibility not only allows the user to select the best compromise between brightness and runtime for any given task but also has the ability to aid in an emergency. The XV-C2A offers a compact size and is extremely solid and reliable with its digitally regulated brightness. Two 3 VDC AA (Alkaline, Lithium) or 1.2 V NiMH batteries.

**ACCESSORIES**

<table>
<thead>
<tr>
<th>Model</th>
<th>Description</th>
<th>Part No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>WF-138C</td>
<td>Charger for XEVISION XV-C2C</td>
<td>13-05141</td>
<td></td>
</tr>
<tr>
<td>WF-138P</td>
<td>Charger Only</td>
<td>13-05140</td>
<td></td>
</tr>
<tr>
<td>ICR123</td>
<td>Rechargeable Lithium Batteries</td>
<td>13-05139</td>
<td></td>
</tr>
<tr>
<td>CR123A</td>
<td>Single Cell Lithium Technology</td>
<td>13-05142</td>
<td></td>
</tr>
<tr>
<td>CR123A2X</td>
<td>Twin Cell Lithium Batteries</td>
<td>13-05143</td>
<td></td>
</tr>
</tbody>
</table>

**PILOTS 2 COLOR FLASHLIGHT**

20 Bright White LEDs and 6 Red LEDs in an inexpensive aluminum flashlight - Ideal for pilots and flight crews

- Anodized aluminum housing with 26 LEDs
- 20 Super-bright White color LEDs for normal use
- 6 Bright Red color LEDs for use when pre-serving night vision
- Water resistant push-button switch selects White-Off-Red-Off
- Uses 3 common AAAA cells (included) for over 20 hours of operation
- LEDs rated over 100,000 hours

**LED CAP LIGHT**

5 Bright White LED Cap Light - Perfect for hand-free illumination during maintenance or trouble-shooting

- Lightweight, compact 5 LED hat light clips onto baseball caps
- Great for hands-free light during maintenance or troubleshooting
- Uses two (2) lithium coin cells for up to 96 hours of illumination
- Blister packaged with batteries
- Five extra-bright White LEDs with a life of over 100,000 hours

**THE LIGHTED PILOT PEN**

Professional LED Writing Instrument for Pilots, Flight crews, Law Enforcement and Military Use. Features: Aircraft aluminum housing with on/off LED lighting and rotating top cap ink cartridge retraction. Works as either a standard pen or for writing in low light or dark conditions. Uses one common AAA cell for up to 20 hours of illumination + gift box packaged with an extra ink cartridge and extra AAA cell. Two extra-bright White LEDs with a life of over 100,000 hours.

**PILOT'S COCKPIT UTILITY & EMERGENCY LIGHT**

See all your panel control settings, maps, charts, compass, and log books. Choose red light for night vision, or bright white light. Designed to travel anywhere, the Navigation Light can be clipped to most surfaces or used free-standing. Uses: * Aviation * Marine * Automotive * Trucking * RV * Emergency Response Vehicles Features: * Four different light level options * Two red LEDs in one head and two white LEDs in a second allow for lighting versatility * Dual flexible arms provide infinite maneuverability * Sensor switches on each lighting head require just a tap to turn on one or both LEDs * Optical grade lens provides evenly distributed light with no hot spots * Easily bends to compact position for storage * Offers 20 hours of continuous use on 3 AAA batteries * Extra strong clip grips almost anything * Uses 3 AAA batteries (included) or available AC Adapter (110-240 Volts) (not included)

**ASA PILOT'S FLASHLIGHT**

This AirClassics Aviation flashlight has both white and red lenses for preflight and night flying, and MIL spec blue-green lens for map reading. This Pilot flashlight is water-tight, corrosion resistant, has an extra Krypton bulb stored within, and features a clicking ON/OFF for maximum battery life. Focuses from spot to flood light. This aviation flashlight is black machined aluminum with ASA wings logo. Two AA batteries and PR-1 bulb included.

**ASA TRI-LITE NAVIGATOR**

The Tri-Lite flashlight is equipped with red, green, and white LEDs providing maximum flexibility and everything the pilot needs to maintain night vision while also providing the true-color options necessary for accurate chart, fuel, and oil color interpretation. Hands-free operation is made possible by 3 Velcro-like (3M Dual Lock) mounting strips. The light can be snapped onto headsets, kneeboards or other flat surfaces, and can be quickly removed and re-attached. When attached to a headset, a focused beam of light is directed wherever the pilot looks.
PETZL HEADLAMPS

PETZL HEADLAMPS

In 1972, when Petzl invented the first headlamp, the idea of attaching a light and its battery case to a headband was quite innovative. A hands free light source that can be directed where needed, allows the user to perform almost any activity. Headlamps have now become an important factor in safety and efficiency. Thought provokingly inventive of technology (LED’s and current regulators), impact resistant of headlamp that can be used in many situations...from the simplest tasks to the most demanding work and rescue applications. All headlamps include batteries.

**TIKKA PLUS HEAD LAMP/TILT/MOD**

4 LED headlamp with 3 lighting levels. Lighting level can be adjusted to help conserve battery life. 10 LED produces flood beam lighting with a long burn time.

- 3 lighting levels (maximum, optimum, economic).
- Single compartment contains LED and batteries
- 78 g including batteries
- Beam can be easily aimed where needed
- Comfortable and adjustable elastic headband
- Certification - CE

**P/N 11-06771**

**P/N 11-06772**

**P/N 11-06774**

**E47PM Yellow and Black Camo**

**E47PS blue and Black Splatter**

**E47P Green and Black Splatter**

**E47PBY Black and Grey Stripe**

**TACTIKKA PLUS/FLIP FILTER RED (E49P)**

Tactikka Plus 4 LED headlamp with Red or White Light. 3 Power Settings & Flash, Alternates easily between white and red light simply by moving the pivoting filter over the reflector. Features: 3 Power Settings & Flash - Tilting Focus - Long battery life up to 110 hours - Lightweight and comfortable to wear: ergonomically designed elastic headband - Water-resistant for all-weather use - Operates with three AAA LR03 batteries (supplied) - Weights 78g - Includes Batteries.

**P/N 11-05096**

**MYO HEADLAMP 3 BLACK 3 LED 1 HALOGEN E27PN**

Features: 4 hour burn time Xenon bulb - 180 hour burn time for the 3 LEDs - Lightweight, compact, and extremely versatile this one light can do it all. - Switch lock mechanism prevents the light from draining your batteries when stored - Tilting head mechanism allows you aim the light where it is needed most - Spare Xenon Halogen bulb included with headlamp. Water resistant - won’t short out even if submerged

**P/N 11-05099**

**DUO 5 HEADLAMP PETZL LIGHTS E69**

The DUO lamps are ideal for use in wet environments, but are not designed for pro-longed submersion (i.e. diving). Features: • Waterproof with dual light source: focussable halogen bulb and an LED module. • Switching on & off, brightness selection. • Tilting head. The DUO lamps allow the light to be optimized (distance, duration) according to your needs. Note: the beam is not collimated, and that the two bulbs are not polarized. - Simultaneous use of both halogens

**P/N 11-04999**

**PILOT LED HEADLAMP**

The Pilot LED Headlamp is designed specifically for pilots operating in nighttime conditions, and offers reliable, convenient, hands-free illumination. The triple 10,000+ hr LED bulbs and 50 to 160+ hr battery life (vs. approx. 6 hours for a Mini Mag-Lite) promise reliability far in excess of normal flashlights, and practically eliminate burned-out bulbs and dead batteries. The Pilot is a compact, ultralightweight, waterproof, hands-free lighting system that can be used to attach lamp to the head, the wrist, wrapped around a pipe, etc. Features: • Very lightweight - 3.3 oz. - Three lighting levels (maximum, optimum, economy) and a blinking mode. • Long light duration up to 150 hours. • Water-resistant for all-weather use.

**P/N 11-04989**

**ZIPKA PLUS/PUSH BUTTON SWITCH E48P**

Ultraportable 4 LED headlamp with 3 lighting levels and retractable cord. Retractable cord can be used to attach lamp to the head, the wrist, wrapped around a pipe, etc. Features: • VERY lightweight. • Long light duration (maximum, optimum, economy) and a blinking mode. • Long light duration up to 150 hours. • Water-resistant for all-weather use.

**P/N 11-04989**

**BELT BATTERY PACK MYO 5 E33P**

Belt Mounted Battery Pack for MYOSBS. Features: • Maximum level: ideal for climbing or moving quickly on technical ground - Economy level: ideal for reading maps, setting up a tent

**P/N 11-04991**
**Flashlight Holders - Arm Rests**

**Astro Arm Flashlight Holders - Mercury Magnetic**
Astro Arm is the perfect device when you need your flashlight directed precisely while having both hands available to perform a task. These holders are great for aviation, marine, automotive, racing, and emergency lifesaving applications. Available in Mercury models for smaller flashlights and Gemini models for larger flashlights.

P/N 13-04006

**Astro Arm Flashlight Holders - Gemini**
Astro Arm is the perfect device when you need your flashlight directed precisely while having both hands available to perform a task. These holders are great for aviation, marine, automotive, racing, and emergency lifesaving applications. Available in Mercury models for smaller flashlights and Gemini models for larger flashlights.

P/N 13-04007

**Clipstick**
The Clipstick features a flexible Loc-line that provides sturdy support, allowing a product to be positioned in numerous angles while maintaining its shape. With 3" oversized spring-loaded clips fastened to each end of the connector, the Clipstick firmly holds many of the standard items a pilot will utilize during a flight.

P/N 13-03430

**The Snake Clip**
Introducing the SnakeClip™, a unique aviation cradle which holds a variety of personal electronic items such as cell phones, PDA's and iPads. Attaching and detaching in seconds, the portable SnakeClip™ can be transferred between planes and automobiles for maximum utility. Like its predecessor, the ClipStick, it can be attached to multiple surfaces in the cockpit and won’t sag or lose its surface grip over time. No installation necessary - simply clamp the SnakeClip™ onto a suitable surface and it's ready to "bite" The padded adjustable arm on the cradle expands to hold items up to 2.5" wide, and features a quick-release button for easy device removal. Clip under cradle can hold items up to 2.5" wide, and features a quick-release button for easy device removal. Clip under cradle can hold items up to 2.5" wide, and features a quick-release button for easy device removal. The SnakeClip™ measures 12" fully extended. One-year warranty.

P/N 13-05549

**The Portable Armrest for Pilots**
Introducing the 100% portable center armrest for airplanes that makes flying comfortable. An ongoing problem for general aviation Pilots is the lack of armrests on the seat. The Portable Armrest has finally solved this problem. Other armrest products are airplane specific and require drilling, bolting, and mounting hardware. Professional pilots, renters, and student pilots can now own an affordable armrest that they can take with them on every flight, even when they change planes. * Fits all aircraft * Fits flat or bucket seats * Ready to use in 1 second * Adjustable * Fits in flight bag

Lightweight aluminum

P/N 13-03154

**Sidestick Control Arm Rests**
The side stick control arm rests will steady the hand, which improves flying and reduces wrist and arm fatigue. The arm rests were designed by an orthopedic specialist to reduce wrist and hand carpel tunnel syndrome. They can also be used for throttle rests. Color: Black. ABS plastic. Furnished as right/left set.

P/N 13-03725

**Cockpit Companion Organizers**
The Cockpit Companion provides a convenient organizer for the loose items pilots shuffle in the cockpit. It is easily installed with Velcro between the front seats and features clean out windows at bottom of the storage areas. Handmade in the USA. These holders come in three sizes to store your maps, checklists and log books. They are thermofomed from ABS plastic, and come in either black or gray.

**Map/Checklist 9"x10"x 5/8" Black 13-03085**
**Map/Checklist 9"x10"x 5/8" Gray 13-03088**
**Aircraft Log 4-1/2"x7"x1/4" Gray 13-03089**
**Engine Log 6-1/2"x7"x1/2" Black 13-03087**

**Sidestick Control Arm Rests**

**Cockpit Companion Organizers**

**Map Checklist & Log Book Holders**
These holders come in three sizes to store your maps, checklists and log books. They are thermofomed from ABS plastic, and come in either black or gray.

**Description**
**Si e** | **Price**
--- | ---
Map/Checklist 9"x10"x 5/8" Black | 13-03085
Map/Checklist 9"x10"x 5/8" Gray | 13-03088
Aircraft Log 4-1/2"x7"x1/4" Black | 13-03086
Aircraft Log 4-1/2"x7"x1/4" Gray | 13-03087
Engine Log 6-1/2"x7"x1/2" Black | 13-03089
Engine Log 6-1/2"x7"x1/2" Gray | 13-03090

**Uncle Mike’s Seat Organizer**
Designed to keep paperless charts, notebooks, pens, pads, radios, phones, water bottles, thermos bottles, pens and pencils in reach and in place and not sliding around the cabin or rolling around on the floor, the sturdy, water repellent 1200 Denier nylon fabric Seat Organizer is loaded with compartments and pouches and secures to the passenger seat headrest with a dual purpose strap designed to be used as a shoulder strap when outside of the aircraft or vehicle.

P/N 13-04034

**Plane Pockets**
Nine pockets protect and organize your cockpit and keep your equipment like new. Three large pockets with drawstrings hold POH Charts, Approach Plates, Sectionals. An additional three more pockets designed to hold your handheld radio, cameras, manuals, batteries, oxygen mask, and many other items. Top pockets will hold paper, sunglasses, water, flashlights and cables. Lightweight, rip-stop nylon, easy to install. Your headrest must be able to be removed to install pockets. Must supply number of inches between the centers of headrest post. With Headrest... P/N 13-04160

W/O Headrest... P/N 13-04161
LEATHERMAN POCKET TOOLS

LEATHERMAN POCKET TOOLS

LEATHERMAN POCKET TOOLS

LEATHERMAN POCKET TOOLS

SQUIRT® P4
Features: • Needlenose Pliers • Straight Knife • Wire Cutters • Extra Small Screwdriver • Medium Screwdriver • Phillips Screwdriver • Large Screwdriver • Wood/Metal File • Serrated Knife • Bottle Opener • Hex Bit Driver
Available Colors: Storm (gray), Glacier (blue), Inferno (red), Powder (pink)
PN 13-05556

SQUIRT® E4
Features: • Scissors • Straight Knife • Tweezers • Extra Small Screwdriver • Medium Screwdriver • Small Flat Phillips Screwdriver • Nail File/Cleaner • Opener • Lanyard Attachment• Ruler
Specifications: Length: 2.25”/5.5cm closed, Weight: 2 ounces / 57 grams, Materials: Stainless steel with anodized aluminum scales
Available Colors: Storm (gray), Glacier (blue), Inferno (red), Powder (pink)
PN 13-05557

JUICE® S2
Features: • Needlenose Pliers • Straight Knife • Wire Cutters • Hard-Wire Cutters • Extra-Small Screwdriver • Small Screwdriver • Med/Lrg Screwdriver • Phillips Screwdriver • Lanyard Attachment • Can/Bottle Opener
Specifications: Length: 3.25”/8.25cm closed, Weight: 4.3 ounces / 122 grams, Materials: Stainless steel with anodized aluminum scales Available Colors: Storm (gray), Inferno (red)
PN 13-05559

JUICE® C2
Features: • Needlenose Pliers • Straight Knife • Wire Cutters • Hard-Wire Cutters • Extra-Small Screwdriver • Small Screwdriver • Med/Lrg Screwdriver • Phillips Screwdriver • Lanyard Attachment • Can/Bottle Opener • Scissors
Specifications: Length: 3.25”/8.25cm closed, Weight: 4.3 ounces / 122 grams, Materials: Stainless steel with anodized aluminum scales Available Colors: Storm (gray), Glacier (blue)
PN 13-05560

JUICE® CS4
Features: • Needlenose Pliers • Straight Knife • Wire Cutters • Hard-Wire Cutters • Extra-Small Screwdriver • Small Screwdriver • Med/Lrg Screwdriver • Phillips Screwdriver • Lanyard Attachment • Can/Bottle Opener • Corkscrew with Assist • Scissors • Saw • Awl
Specifications: Length: 3.25”/8.25cm closed, Weight: 5.5 ounces / 156 grams, Materials: Stainless steel with anodized aluminum scales Available Colors: Storm (gray), Glacier (blue)
PN 13-05561

JUICE® E
Features: • Needlenose Pliers • Straight Knife • Wire Cutters • Hard-Wire Cutters • Extra-Small Screwdriver • Small Screwdriver • Med/Lrg Screwdriver • Phillips Screwdriver • Lanyard Attachment • Can/Bottle Opener • Corkscrew with Assist • Scissors • Saw • Awl • Serrated Knife • Diamond File
Specifications: Length: 3.2”/8.25cm closed, Weight: 6.8 ounces / 190 grams, Materials: Stainless steel with anodized aluminum scales Available Colors: Storm (gray), Thunder (purple)
PN 13-05562

TOOL ADAPTERS
3 Locking Positions, Lanyard Hole Tool Adapters make your favorite Leatherman tool even more versatile by quickly converting it to a “hex drive.” Standard Tool Adapter fits PST, PST II, Super Tool 200, Sidekick, Charge, and Pulse. Wave Tool Adapter fits Wave only. Sold as a kit with six hex bits and case. Also available in a combination sheath with PST, PST II, Super Tool 200 and Wave.
PN13-02723

CRUNCH TOOL
Locking Pliers, Wire Cutters, Hard-Wire Pliers, Line/Hot Wire, Ruler (Inch/Metric), Bottle Opener, Small Screwdriver, Medium Screwdriver, Large Screwdriver, Phillips Screwdriver (#1/#2), Hex Bit Driver, Wire Stripper, Lanyard Attachment
PN 13-02727

WAVE TOOL
Needlenose Pliers, Regular Pliers, Wire Cutters, Hard-Wire Cutters, Wood/Metal File, Clip-Point Knife, Serrated Knife, Wood/Metal File, Diamond-Coated File, Large Bit Driver, Small Bit Driver, Large Screwdriver, Ruler (8 inch/19 cm), BottleCan Opener, Wire Stripper, Lanyard Attachment, Two Double-Ended Bit
PN 13-03289

BLAST
Needlenose Pliers, Regular Pliers, Wire Cutters, Hard-Wire Pliers, Wood/Metal File, Small Screwdriver, Phillips Screwdriver Small Bit Driver, Ruler (8 inch/19 cm) BottleCan Opener, Wire Stripper, Lanyard Attachment One Double-Ended Bit
PN 13-03286

FUSE
Needlenose Pliers, Regular Pliers Wire Cutters, Hard-Wire Pliers, Clip Point Knife, Scissors, Large Screwdriver, Small Screwdriver, Phillips Screwdriver, Phillips Screwdriver, Ruler (8 inch/19 cm) BottleCan Opener, Wire Stripper, Lanyard Attachment
PN 13-03287

CHARGE TTI
The Charge TTI features a cutting hook, scissors, outside-accessible blades, bit drivers, crimpers and more. But we had to give the TTI its own claim to fame. That’s where the compressible, self-contained titanium handles and the S30V stainless steel clip-point knife come in. Grab a hold of one today, you’ll quickly see why the Charge models are the pinnacle of our multi-tool collection.
PN 13-04514

CHARGE AL
Charge® AL includes scalpels that slice through just about anything with bev- eled edges that allow them to get close to whatever your cutting, for a clean trim every time. Bit drivers for versatility, diamond-coated files for fine-point work and a 154CM clip-point knife are all housed in 6061-T6, hard-anodized aluminum alloy handles. Rounded edges for grip comfort and a stainless steel badge make this a Leatherman that’s really earned its name.
PN 13-04045

CHARGE ALX
Take the Charge AL and replace the scal- pels with an aggres- sive cutting hook that back of the serrat- ed blade and you’ve got the Charge® ALX. Rip through tough materials like seatbelts, linoleum and leather with no problem. Get your hands around the same unbeatable ergonomic grip, outside-accessible blades and premium materials like 154CM and 6061-T6, heat-treated, alloy aluminum.
PN 13-04523
PILOT WATCHES

T2 TORGOEN TITANIUM BLACK
The Flight Computer Watches can be used to calculate time, distance and speed equations. It also can perform a variety of calculations from currency conversions to multiplication and division problems. With the watch you can calculate any conversion of linear nature with a constant ratio such as ounces to grams, kilograms to pounds, miles to kilometers etc.

P/N 13-05053


P/N 13-02489

T5 TORGOEN WATCHES - T4 Zulu Time watches provide Dual-time zone function using a 24-hour hand - it makes 1 revolution every 24 hours, instead of 12. The 24-hour hand can be positioned to show the time in a second time zone. Large numbers and superior luminance make these watches easily readable at a glance, day or night. Swiss-made movement, stainless steel case. Water resistant to 100 meters. Leather or stainless steel band models available. Model shown: Black dial/black leather band.

P/N 13-02502

T7 TORGOEN FLIGHT COMPUTER WATCHES
Torqgun's line of Flight Computer Watches can be used to calculate time, distance and speed equations. It also can perform a variety of calculations from currency conversions to multiplication and division problems. With the watch you can calculate any conversion of linear nature with a constant ratio such as ounces to grams, kilograms to pounds, miles to kilometers etc.

P/N 13-05045

Description | Part No. | Price
--- | --- | ---
Stainless Steel Black Dial, Band is Black PU, Water Resistance 100 meters | 13-05044 | .
Stainless Steel Black Dial, Stainless Steel Band, Water Resistance 100 meters | 13-05047 | .
Stainless Steel Yellow Dial, Band is Black PU, Water Resistance 100 meters | 13-05045 | .
Stainless Steel Yellow Dial, Stainless Steel Band, Water Resistance 100 meters | 13-05048 | .
Stainless Steel Green Dial, Band is Black PU, Water Resistance 100 meters | 13-05046 | .
Stainless Steel Green Dial, Stainless Steel Band, Water Resistance 100 meters | 13-05049 | .

T8 TORGOEN ZULU TIME WATCHES
• 3 time zones - 12 hour format
• High Grade Stainless Steel case
• Screwed Down Stainless Steel Back
• Mineral K1 hardened crystal
• Solid Links Stainless Steel Bracelet or PU Strap
• Swiss Quartz with 12 hours Dual Time hand Movement by Ronda.
• Water Resistant for 10 ATM (330 feet).
• Non Radioactive long lasting Luminesence Dial
• Weight - 7.4 oz. (210 gm)

P/N 13-05051

Description | Part No. | Price
--- | --- | ---
Stainless Steel Black Dial, Band is Black PU, Water Resistance 100 meters | 13-05028 | .
Stainless Steel Black Dial, Stainless Steel Band, Water Resistance 100 meters | 13-05027 | .
Stainless Steel Yellow Dial, Band is Black PU, Water Resistance 100 meters | 13-05051 | .
Stainless Steel Yellow Dial, Stainless Steel Band, Water Resistance 100 meters | 13-05050 | .

VIBRALITE3 VIBRATION WATCHES
Great for Private and Confidential Reminders! Has auto-reset countdown timer. The vibration on your wrist from VIBRALITE3 will remind you to do any important thing without annoying others. What's really great is that you don't have to hear the alarm to know that it's signalling.

This watch is especially nice for pilots, students (taking exams), and of course the deaf and hard of hearing. Since the watch also features an Auto Reload Countdown Timer, it can be ideal for those who need reminding of times to take medicine, scheduled daily activities and more. With stainless steel band. P/N 13-02541

With leather band. P/N 13-02542

Description | Part No. | Price
--- | --- | ---
MODEL VL32-LL - Genuine black leather band . EIGHT VIBRATION ALARMS for variable reminders up to 8 alarms can be preset
COUNTDOWN TIMER with Auto Repeat Feature for interval reminders, set when wanting the same alarm time to repeat automatically each time the countdown timer reaches zero.
USER ALARM OPTIONS: Vibration, Sound, and Hourly Alert ON or OFF choices are set and Secure in separate Option Mode.
EL LIGHT: turns on by a twist of the wrist or the push of a button. Light stays on while any button is pushed, for settings in the dark.
3 TIME ZONES can be set for reference
STOPWATCH counts up to 23 hours, 59 minutes, and 59.99 seconds
12 OR 24 Hour CLOCK SELECTION
• One Year Warranty P/N 13-04892

MODEL VL38-LL - Stainless Steel Band with genuine gold trim.
EIGHT VIBRATION ALARMS for variable reminders up to 8 alarms can be preset
COUNTDOWN TIMER with Auto Repeat Feature for interval reminders, set when wanting the same alarm time to repeat automatically each time the countdown timer reaches zero.
USER ALARM OPTIONS: Vibration, Sound, and Hourly Alert ON or OFF choices are set and Secure in separate Option Mode.
EL LIGHT: turns on by a twist of the wrist or the push of a button. Light stays on while any button is pushed, for settings in the dark.
3 TIME ZONES can be set for reference
STOPWATCH counts up to 23 hours, 59 minutes, and 59.99 seconds
12 OR 24 Hour CLOCK SELECTION P/N 13-04947

AIRCRAFT SPRUCE WALL CLOCK
Aircraft Spruce wall clock with a black frame. The quality quartz movement is made in the USA and comes with a lifetime guarantee. Imprint size: approximately 4-1/2" diameter. Attractive presentation box included.

P/N 13-08209
PILOT WATCHES

SUUNTO WATCHES

Suunto watches are world-renowned for their high quality construction and design. The Suunto brand name means precision and durability - so whatever you use your Suunto watch for, you’ll have the peace of mind that comes with wearing an accurate instrument that you can trust under any circumstances. The timeless design of Suunto’s watches make them wearable in any casual situation, and because of their moderate size, they are perfectly suitable for both men and women.

SUUNTO VECTOR WATCHES

An instrument that you cannot leave home when planning any kind of outdoor activity. Features: * Altimeter, Altitude, vertical speed, altitude alarm, logbook, logbook, vertical distance measurement, automatic 24h altitude memory, temperature compensation. Logbook capacity 8 kb, recording intervals 20 m, 1 m, 10 m and 60 m, with respective times 10h, 12h, 7 days and 10 days * Barometer: Sea level pressure, absolute pressure, pressure difference, pressure trend indicator, 4-day barometric memory, temperature * Compass: Cardinal bearing, North-South arrow, bearing tracking, declination setting * Chronograph: Stopwatch, countdown timer, calendar, three daily alarms * Water resistant to 30 m (100 ft) * Temperature resolution 1°C/1°F * Weather memory 4 days * Temperature range -20°C - +60°C/-5°F - +140°F * Water resistant 30m/100ft * Storage temperature -30°C - +60°C/-22°F - +140°F

Black/Black

P/N 10-19332

Black/Black with Negative Face

P/N 13-04420

Yellow/Black with Negative Face

P/N SUNBK90Y

Khaki

P/N SUNBK90R

Foliage Green

P/N SUNBK90G

SUUNTO X-LANDER WATCHES

An accurate altimeter, a complete barometer, a precise electronic compass and a multifunctional sports watch in one elegant package. Extremely user-friendly and has easy-to-use logic, a large display with big numerals, and an electro-luminescent backlight for dimly lit conditions. Non-allergenic aluminum casing, carbon fiber back, a durable mineral crystal glass, and a water resistant fabric strap.

Stainless Case and Negative Face

P/N 13-06558

Stainless Case and Military Black Face

P/N 13-06559

BLUE ANGELS SKYHAWK

Atomic Timekeeping with Radio-Controlled Accuracy

* World Time in 43 Cities * 2 Alarms * 99 Minute Countdown Timer * Perpetual Calendar * Atomic Timekeeping with Radio-Controlled Accuracy

Stainless Steel band

P/N 13-06461

P/N 13-06461

Titanium band

P/N 13-06461

CITIZEN SKYHAWK FLIGHT CHRONOGRAPH


Stainless Steel band

P/N 13-01418

P/N 13-03587

Titanium band

P/N 13-03587

CITIZEN NIGHTHAWK WATCHES

* Pilot’s Slide Rule Dial Ring Operated by Crown at 8 O’Clock Position * Large Luminous Markers for Easy Readability * Non-Reflective Crystal * Dual Time

Stainless Steel Band

P/N 13-03581

SS1 Black Ion Plating

P/N 13-03582

CITIZEN SKYHAWK A-T WATCHES

Atomic Timekeeping with Radio-Controlled Accuracy

* World Time in 43 Cities * 99 Minute Countdown Timer * Perpetual Calendar * Digital Display Light * Greenwich Mean Time Display * Rotating Slide Rule Bezel * Power Reserve Indicator

Stainless Steel Band

P/N 13-05587

SS2 Black Ion Plating

P/N 13-06458

Polyurethane Band

P/N 13-05587

Titanium Band

P/N 13-05588

BLUE ANGELS SKYHAWK

The Blue Angels Skyhawk Flight Chronograph commemorates the highly skilled flying team. * Time and Calendar in 22 Time Zones (30 Cities) * Three World Time Alarms * 1/100 Second Chronograph Measures up to 24 Hours

Stainless Steel Band

P/N 13-05591

Titanium Band

P/N 13-05592

BLACK EAGLE SKYHAWK

Designed to soar with unbridled stealth and precision

Polyurethane Band

P/N 13-05595

SS1 Black Ion Plating

P/N 13-05596

SUUNTO OBSERVER WATCHES

Features: * Altimeter: Altitude, vertical speed, logbook function with quick-access button, memory capacity 99 logs, history memory, altitude bar, lock, temperature compensation * Barometer: Sea level pressure, absolute pressure, wind trend indicator, temperature, automatic 4-day barometric memory, altitude lock * Compass: Bearing, cardinal bearing, bearing tracking, North-South arrow, declination setting * Chronograph: Calendar, 3 alarms, dual time, stopwatch with 99 split times * Water resistant 30m/100ft * Storage temperature -20°C - +60°C/-5°F - +140°F * Weight 54 g * Operating temperature -20°C - +60°C/-5°F - +140°F

Observer SR Black

P/N 13-06555

Observer ST Black

P/N 13-06556

Observer FT

P/N 13-06552

Observer ST

P/N 13-04418

Observer SR

P/N 13-06554

SUUNTO CORE WATCHES

Suunto Core keeps you informed with an accurate altimeter, barometer, digital thermometer, Weather Trend Indicator, 4-day barometric memory, and a multifunctional sports watch that will fit in any style. Suunto Core is designed to fit into your life, whether you are going for a traditional use, or a one-touch function that allows you to keep an eye on your environment. Daily functions include dual time, date, alarm, sports chronograph and predicted times for sunrise and sunset. * Standard strap style is pictured.

Core Standard Strap Steel

P/N 13-06610

Core Standard Strap Alum./Brown Leather

P/N 13-06599

Core Standard Strap Black/Orange

P/N 13-06611

Core Light strap Black/Yellow

P/N 13-06601

Core Light strap Black/Green

P/N 13-06608

Core Light strap Black/Black

P/N 13-06609

SUUNTO ACCESSORIES

Suunto Battery Kit SS0547000000

P/N SUNBATT

Suunto Bike Mount

P/N SUNBIKE

Suunto Core Aluminum Strap

P/N 13-06613

Suunto Core Leather Black Strap

P/N 13-06614

Suunto Core Flat Black Strap

P/N 13-06615

Suunto Core Flat Orange Strap

P/N 13-06616

REVUE THOMMEN WATCHES

At the beginning of the 20th century, the company Revue Thommen started manufacturing aircraft instruments. It is for this reason that it has more familiar with special needs of pilots than any other watch manufacturer. The Airspeed Classic self-winding wrist-watches and chronographs were inspired by the instrument panels of commercial and military aircraft that are equipped with Revue Thommen precision instruments. These instruments are characterized by clear, easy-to-read numerals, hands and displays and are fitted with a self-winding mechanical movement or with a quartz movement. The casing is made from stainless steel or titanium, a material favored by the aerospace industry.

REVUE THOMMEN SWISS A/S WATCH - Airspeed Line

Classic. Calibre ETA 2836-2 (automatic watch with date band). All stainless steel case, screw-in steel case back, anti-reflective double-faced sapphire crystal, water-resistant to 100 m / 330 feet. Assorted dials. Diameter 37.5 mm / 32.5 mm.

P/N 13-05158

REVUE THOMMEN SWISS A/S QUARTZ - Airspeed Line

Classic. Calibre ETA 251.262 Chronograph Quartz. Titanium case, stainless steel case back, anti-reflective double-faced sapphire crystal, water-resistant to 100 m / 330 feet. Assorted dials Diameter 37.5 mm / 32.5 mm.

P/N 13-05159

REVUE THOMMEN SWISS WATCH X-L - Airspeed Line

Xlarge. CalibreDD 2624-A2 Chronograph (automatic watch with date indication). All stainless steel case, screw-in steel case back, anti-reflective double-faced sapphire crystal, water-resistant to 50m/160 feet. Assorted dials. Diameter 41mm.

P/N 13-05160

731
High-Definition Lens Technology (HDL-3C™), built into new sunglasses offer improved sight definition for pilots, using color, clarity and comfort. These lenses filter the visible spectrum to improve color contrasts; decentered lenses increase visibility and eliminate distortion; visual health is improved and eye fatigue is reduced thanks to lightweight frames. Visibility is said to be increased through tristimulus color contrast enhancing techniques; other color tinting techniques improve color simulation but only improves one basic color type in the color spectrum.

These non-polarized (important for pilots!) lenses come in two lens types: rose (for low light conditions), and smoke (for bright light conditions). The sunglasses are very lightweight and comfortable. We offer a 30-day money back guarantee if you're not satisfied. Several choices for frames are available.

### VEDALOH™ PERFORMANCE SUNGLASSES

**Style** | **Frame Color** | **Lens Color** | **PN** | **Price** |
---|---|---|---|---|
RB 3221 | GUNMETAL | G-15 XLT | 13-04987 | . |
RB 3221 | MATTE BLACK | G-15 XLT | 13-04996 | . |

**Style** | **Frame Color** | **Lens Color** | **PN** | **Price** |
---|---|---|---|---|
RB 3209 | ARISTA | G-15 XLT | 13-04998 | . |

**Style** | **Frame Color** | **Lens Color** | **PN** | **Price** |
---|---|---|---|---|
RB 3030 | ARISTA | G-15 XLT | 13-04994 | . |
RB 3030 | BLACK | G-15 XLT | 13-04995 | . |

**Style** | **Frame Color** | **Lens Color** | **PN** | **Price** |
---|---|---|---|---|
RB 3339 | MATTE BLACK | G-15 XLT | 13-05001 | . |
**SUNGLASSES**

**AVIATOR** - Standard issue for military pilots worldwide. (MIL.SPEC. 25948). These lenses sharpen detail and show colors evenly, making them ideal for flying. Bayonet temples provide optimum fit for use with a headset or helmet.

<table>
<thead>
<tr>
<th>Size</th>
<th>Lens</th>
<th>Part No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>52mm</td>
<td>Tan</td>
<td>13-05775</td>
<td></td>
</tr>
<tr>
<td>52mm</td>
<td>Gray</td>
<td>13-00679</td>
<td></td>
</tr>
<tr>
<td>52mm</td>
<td>Grey/Green</td>
<td>13-00680</td>
<td></td>
</tr>
<tr>
<td>55mm</td>
<td>Gray</td>
<td>13-00681</td>
<td></td>
</tr>
<tr>
<td>55mm</td>
<td>Tan</td>
<td>13-00682</td>
<td></td>
</tr>
<tr>
<td>55mm</td>
<td>Grey/Green</td>
<td>13-00683</td>
<td></td>
</tr>
<tr>
<td>58mm</td>
<td>Gray</td>
<td>13-00684</td>
<td></td>
</tr>
<tr>
<td>58mm</td>
<td>Tan</td>
<td>13-00685</td>
<td></td>
</tr>
</tbody>
</table>

**CONCORDE** - The Concorde features the world famous tear drop aviator lens design, monoblock hinge design, skull temple bars, and non-slip silicone nose pads. A very popular sunglass style with lenses that are lightweight, flexible hypoallergenic nylon and has the best lens replacement warranty in the eyewear industry. The patented designs utilize a flexible hypoallergenic nylon framework.

<table>
<thead>
<tr>
<th>Frame</th>
<th>Color</th>
<th>Part No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avalon</td>
<td>Titanium</td>
<td>13-01524</td>
<td></td>
</tr>
<tr>
<td>Avalon</td>
<td>Neutral</td>
<td>13-04268</td>
<td></td>
</tr>
<tr>
<td>El Capitan</td>
<td>Titanium</td>
<td>13-01574</td>
<td></td>
</tr>
<tr>
<td>El Capitan</td>
<td>Neutral</td>
<td>13-04266</td>
<td></td>
</tr>
<tr>
<td>Sonoma</td>
<td>Gun Metal</td>
<td>13-01521</td>
<td></td>
</tr>
<tr>
<td>Sonoma</td>
<td>Titanium</td>
<td>13-01558</td>
<td></td>
</tr>
<tr>
<td>Sonoma</td>
<td>Neutral</td>
<td>13-04270</td>
<td></td>
</tr>
</tbody>
</table>

**Crew Chief** - An updated version of traditional Randolph sunglasses. Crew Chief sunglasses all have the features of the American Pilot above in a slightly more tear drop shape lens design. Excellent for flying & driving. ......... P/N 13-00698 .........

**POLAR EYES PREMIUM POLARI ED SUNWEAR**

**SCHIEYDEN FLIP-UP SUNGLASSES**

Scheidany Precision Eyewear is simply Avation’s Finest Eyewear. With the Scheidany patented flip system & locking mechanism, pilots can instantly adapt to constantly changing light conditions with the flip of a finger. This unique function puts an end to fumbling around with glasses and headsets forever. Effortlessly FlipUp in twilights conditions and FlipDown when the sun is bright.

The frames are fabricated in Titanium for incredible strength while weighing mere ounces. The manufacturing tolerances are extremely strict, rivaling those of the aerospace industry. Most importantly, all Scheidany Precision Eyewear offers 100% UVA and UVB protection for your most valuable resource - your eyes. Lenses are available in High Contrast Bronze and Neutral Gray.

**CrewChief Frames** - The Crew Chief FlipUp is constructed from lightweight yet extremely strong materials. All parts are produced from durable molded Ultrahigh Molecular Weight Polyethylene (UHMWPE) for incredible strength while weighing mere ounces. The manufacturing tolerances are extremely strict, rivaling those of the aerospace industry. Most importantly, all Scheidany Precision Eyewear offers 100% UVA and UVB protection for your most valuable resource - your eyes. Lenses are available in High Contrast Bronze and Neutral Gray.

**SCHIEYDEN DUAL RX FLIP-UPS**

Scheidany Dual Rx frames combine the ability to instantly adapt to changing light conditions while always keeping your prescription lenses in place. These frames are supplied with a lens template which is all you local optician needs to fabricate your prescription lenses. All frames are Titanium.

<table>
<thead>
<tr>
<th>Model</th>
<th>Color</th>
<th>Part No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>RX EL Captain Bronze</td>
<td>Neutral Gray</td>
<td>13-04275</td>
<td></td>
</tr>
<tr>
<td>RX Avalon Bronze</td>
<td>Neutral Gray</td>
<td>13-04276</td>
<td></td>
</tr>
<tr>
<td>RX Avalon Neutral Gray</td>
<td>Neutral Gray</td>
<td>13-04274</td>
<td></td>
</tr>
<tr>
<td>RX Sonoma Bronze</td>
<td>Neutral Gray</td>
<td>13-04273</td>
<td></td>
</tr>
<tr>
<td>RX Sonoma Neutral Gray</td>
<td>Neutral Gray</td>
<td>13-04272</td>
<td></td>
</tr>
</tbody>
</table>

**SCHIEYDEN PREMIUM SUNWEAR**

PolarEyes® Sport Collection - PolarEyes sport sunglass provides Advanced UV Protection™. The patented designs utilize flexible hypoallergenic nylon frames. Frames™ (average weight 21 grams) paired with PolarPC polarized lenses to give the wearer not only maximum protection from glare and damaging ultra-violet light, but also an unsurpassed fit that is both comfortable and secure. Developed from 25 years of polarized sunglass manufacturing experiences, PolarEyes offer protection like no other sunglasses. Thermal ports eliminate moisture build up on the lens surface.

**CASE AND CLOTH** - All PolarEyes® sunglasses include a case and a large micro-fiber lens cloth.

**POLARPC® Lens System** - All Frames feature polarized UV 400 PolarPC lenses that completely protect the eyes from damaging UV light and eliminate harsh surface glare. Made from impact-resistant polycarbonate with a bonded hardcoat to resist scratching. Lenses are available in gray or copper tints.

**SCHIEYDEN FLIP-UP SUNGLASSES**

Scheidany Precision Eyewear is simply Avation’s Finest Eyewear. With the Scheidany patented flip system & locking mechanism, pilots can instantly adapt to constantly changing light conditions with the flip of a finger. This unique function puts an end to fumbling around with glasses and headsets forever. Effortlessly FlipUp in twilights conditions and FlipDown when the sun is bright.

The frames are fabricated in Titanium for incredible strength while weighing mere ounces. The manufacturing tolerances are extremely strict, rivaling those of the aerospace industry. Most importantly, all Scheidany Precision Eyewear offers 100% UVA and UVB protection for your most valuable resource - your eyes. Lenses are available in High Contrast Bronze and Neutral Gray.

Dual Rx options enable pilots to lighten their load to one eyeglass frame for all cockpit vision requirements.

All Scheidany Eyewear comes packaged in a luxurious Bubinga Rosewood case which can be custom engraved with your name, tail number and/or company logo.

Scheidany Precision Eyewear offers a Lifetime Warranty on their frames and has the best lens replacement warranty in the eyewear industry.

**Demand Precision. Demand Scheidany.**

**SCHEYDEN FLIP-UP SUNGLASSES**

<table>
<thead>
<tr>
<th>Style</th>
<th>Color</th>
<th>Part No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Avalon</td>
<td>Titanium</td>
<td>13-01524</td>
<td></td>
</tr>
<tr>
<td>Avalon</td>
<td>Neutral</td>
<td>13-04268</td>
<td></td>
</tr>
<tr>
<td>El Capitan</td>
<td>Titanium</td>
<td>13-01574</td>
<td></td>
</tr>
<tr>
<td>El Capitan</td>
<td>Neutral</td>
<td>13-04266</td>
<td></td>
</tr>
<tr>
<td>Sonoma</td>
<td>Gun Metal</td>
<td>13-01521</td>
<td></td>
</tr>
<tr>
<td>Sonoma</td>
<td>Titanium</td>
<td>13-01558</td>
<td></td>
</tr>
<tr>
<td>Sonoma</td>
<td>Neutral</td>
<td>13-04270</td>
<td></td>
</tr>
</tbody>
</table>

**SCHEYDEN COBBLE HILL SUNGLASSES**

Fixed Gear Sunglasses (non flip up). Titanium Frame sunglasses with classic, timeless styling and incredibly crisp Mineral Glass lenses are available in the same styles at $199.00 ea. Call for part numbers.
Cocoons are

SUNGLASSES

SERENGETI AVIATOR SUNGLASSES

Serengeti Aviators protect your vision while eliminating glare and sharpening details better than other sunglasses. Cloud boundaries are more easily delineated and oncoming traffic is more visible. Unique photochromic spectral controls improve your ability to see in marginal VFR and IFR conditions. In bright sunlight, you’ll see the instruments better and ghost images will be eliminated from the cockpit. Wear them late in the day or at sunset to preserve your night vision.

- LARGE AVIATOR - Base Curve: 6; Temple Length: 140mm; Lens Size: 61.75 x 55.5 x 68mm, Dbl 10.5mm Black P/N 2121
- MEDIUM AVIATOR - Base Curve: 6; Temple Length: 140mm; Lens Size: 59.3 x 51.57 x 67.02mm, Dbl 12.5mm Matte Black P/N 13-03136
- MEDIUM AVIATOR - Base Curve: 6; Temple Length: 140mm; Lens Size: 59.3 x 51.57 x 67.02mm, Dbl 12.5mm P/N 13-03138
- VELOCITY - Frame Color: Gunmetal; Lens Color: 55:55 Size Information: Base Curve: 8 Rx Temple Length: 130mm; Spring Hinges Lens Size: 60 x 39 x 62mm Dbl 16mm P/N 13-03139

AMERICAN OPTICAL SUNGLASSES

Performance-tested sunglasses with classic aviator styling. The Original Pilot Sunglass® has been a favorite of US military pilots for more than 40 years. Engineered to rigid military specifications and issued to millions of US soldiers, sailors, marines and airmen since 1958. The rugged and sturdy structure and high quality finishing of the steel alloy frame coupled with distortion free, toughened and polished True Color® glass lens have made the AO Flight Gear® Collection the standard bearer of all fine military sunglasses.

- ORIGINAL PILOT
- GENERAL

BELT LOOP EYE GLASS CASE

Safe and secure way to make sure your glasses, cell phones and other items are always available. The case has a pen pocket and accessory strap to attach a pager, a small flashlight or clip item. 1000 derriere cordura exterior, soft padded durable lining. Black color. P/N 13-00699

- OPTX 20/20 HYDROTAC STICK-ON READING LENSES

These stick-on lenses instantly turn any brand of sunglasses into sharp, clear reading glasses! They can be cut to the shape of any sunglass lens, and are removable & reusable; they adhere to the sunglass lenses by molecular attraction. Excellent for pilots using Ray Ban, Serengeti, Randolph and other aviation sun glasses, as well as outdoorsmen and anyone needing progressive corrected sunglasses. Available from 1.25 to 3.00 diopters in .25 diopter increments. Please specify magnification at time of order.

<table>
<thead>
<tr>
<th>Description</th>
<th>P/N</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Optx 2020 1.25</td>
<td>13-06301</td>
<td>.</td>
</tr>
<tr>
<td>Optx 2020 1.50</td>
<td>13-06302</td>
<td>.</td>
</tr>
<tr>
<td>Optx 2020 1.75</td>
<td>13-06303</td>
<td>.</td>
</tr>
<tr>
<td>Optx 2020 2.00</td>
<td>13-06304</td>
<td>.</td>
</tr>
<tr>
<td>Optx 2020 2.50</td>
<td>13-06305</td>
<td>.</td>
</tr>
<tr>
<td>Optx 2020 3.00</td>
<td>13-06308</td>
<td>.</td>
</tr>
</tbody>
</table>

LIVE EYEWEAR COCOONS SUNGLASSES

Cocoons were designed to fit over glasses; however our smaller styles make them extremely popular as solo sunglasses. Cocoons feature PolaRx® polarized lenses to eliminate harsh glare, allowing your eyes to remain focused on the task at hand. The optical grade lenses and side shields precisely regulate light transmission, reducing eye fatigue and strain. They block 100% of damaging UV A&B light, providing 40% more protection than conventional sunglasses. Cocoons offer a virtually unbreakable frame with soft touch finish, adjustable temples, lifetime warranty, 3 contemporary shapes and sizes, and are accessorized with floating neoprene case and lens cloth. Color: Black. P/N 13-02967

SIZING GUIDE: Measure the width (w) and height (h) of your prescription eyewear to determine which Cocoons sunglasses will fit best.

SLIMLINE (MEDIUM)

- PILOT (LARGE)
- AVIATOR (EXTRA LARGE)
- WIDELINE (MEDIUM LARGE)
- MINI SLIM (MEDIUM SMALL)
- STREAM LINE (SMALL)
- COCOONS OVER X
- VISTANA OVER X

COCOONS QUALITY IN A FLIP-UP

World renowned Cocoons quality is now available in the Cocoons Flip-Up sunglass collection. The Polaré lens system delivers enhanced visual acuity with a choice of polarized gray, amber or copper. Each clip includes a protective case and is backed by the Live Eyewear limited lifetime warranty. P/N 13-03552
FLIGHT JACKETS - FLYING GOGGLES

Classic. Authentic. Quality. Established in 1959 as a defense contractor for the US Government, Alpha Industries remains one of the largest manufacturers of cold weather outerwear. For over 35 years, Alpha Industries has continuously supplied the US Government and military forces throughout the world. Alpha is now recognized as the original and leading manufacturer of authentic military-inspired outerwear. Some jackets are made in the USA and some are imported.

TO ORDER FLIGHT JACKETS: Choose jacket style and color desired and order by basic part number shown. Complete the part number with size by adding -1 (Small), -2 (Medium), -3 (Large), -4 (X Large), or -5 (XX Large).

MA-1 INTERMEDIATE FLIGHT JACKET
The most popular flying jacket in the world, supplied by Alpha Industries to the U.S. Military for over 40 years. 100% nylon flight satin outer shell with nylon flight lining and polyester batting interlining for warmth. Front closure storm flap. Knit collar, waistband and cuffs. Combination utility pocket on sleeve. Pilot’s front pocket reverses to high visibility Indian Orange for use in emergencies. Colors: Black, Navy, Sage Replica Gray, Titanium, Stratos.

LEATHER MA-1 FLIGHT JACKET

MA-1 FLIGHT JACKET
Only a company with over 40 years of manufacturing military Spec clothing for the most demanding of clients can claim to reproduce the originals with absolute authenticity. Each Alpha Replica Series product is exact to the last detail, using original or accurately reproduced components and fabrications to replicate the real thing.

LEATHER B-3 SHERPA FLYING JACKET
Traditionally the right stuff for pilots from the very first days of military aviation, the sheepskin flyer jacket remains a rugged supremely warm item of apparel. Made from the finest sheepskin hides with full sherpa lining throughout, this classic style is popular with both men and women. Genuine cowhide leather accents and re-inforcements on seams. Dual collar adjusters and side buckle straps. Front slash pockets. Antiquated brass front zipper. Color: Brown.

AIR FORCE WHITE SCARF W/USAF EMBLEM - POLY COPY OF OLD ISSUE AF SCARF
P/N 13-03611

G.I. OD WOOL SCARF ISSUE - 100% WOOLEN INTERNATIONAL ISSUE 52" LONG WOVEN IN TUBE SHAPE. ISSUE FOR ARMY AND MARINES
P/N 13-03610

NYLON FLYER KIT BAG
Carries almost as much as a duffle bag. Made of cordura waterproof nylon, with zipper and snap closure. Storm flap cover over zipper. Size 21.5" x 21" x 10" wgt 2.0# Has double nylon web handle. P/N 13-03612

BARMITT S FOR YOUR TRIKE
Extend your flying season and enjoy it more with these barmitts. The sides zip open to fit around the bar. The cozy insulation and wind-proof exterior keep your hands comfortable in the coldest wind. Sized to fit over your gloves.

Bar Mitts Pair - Red P/N NW002R
Bar Mitts Pair - White P/N NW002W
Bar Mitts Pair - Reflective Green P/N NW002G

LEATHER CUW-45/P FLIGHT JACKET

MARK 4 SILVER CROSS GOGGLES
All leather face mask, colour matched head bands, Split lenses, bright polished and chrome plated frames, Sliding Nose Bridge Adjustment. P/N 13-06100

Replacement Lenses for Silver Cross Goggles
Clear, set of 2 P/N 13-06200
Smoke, Set of 2 P/N 13-06210

WORLD WAR II RAF FLYING GOGGLES
A faithful Replica incorporating dark brown soft leather face mask stitched to the RAF blue painted solid brass frames. The traditional Split Lenses

VINTAGE AVIATOR GOGGLES
Soft Brown or Black Leather face Mask, Hand Stitched to silver or black painted solid brass frames. Screw adjustment on nose bridge. P/N 13-06310

HAND SEWN EPAULETS
These tapered, hand sewn epaulets are produced by the finest tailors using the highest quality material. Available with Gold or Silver Stripes.

NOMEX AVIATOR’S SUMMER FLYING GLOVES

<table>
<thead>
<tr>
<th>Size</th>
<th>Part No.</th>
<th>Price</th>
<th>Size</th>
<th>Part No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>13-03621</td>
<td></td>
<td>7</td>
<td>13-03621</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>13-03622</td>
<td></td>
<td>8</td>
<td>13-03622</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>13-03623</td>
<td></td>
<td>9</td>
<td>13-03623</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>13-03624</td>
<td></td>
<td>10</td>
<td>13-03624</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td></td>
<td>11</td>
<td>13-03625</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Size</th>
<th>Part No.</th>
<th>Price</th>
<th>Size</th>
<th>Part No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>8</td>
<td>13-03615</td>
<td></td>
<td>7</td>
<td>13-03615</td>
<td></td>
</tr>
<tr>
<td>9</td>
<td>13-03616</td>
<td></td>
<td>8</td>
<td>13-03616</td>
<td></td>
</tr>
<tr>
<td>10</td>
<td>13-03617</td>
<td></td>
<td>9</td>
<td>13-03617</td>
<td></td>
</tr>
<tr>
<td>11</td>
<td>13-03618</td>
<td></td>
<td>10</td>
<td>13-03618</td>
<td></td>
</tr>
<tr>
<td>12</td>
<td>13-03619</td>
<td></td>
<td>11</td>
<td>13-03619</td>
<td></td>
</tr>
<tr>
<td></td>
<td>13-03620</td>
<td></td>
<td></td>
<td>13-03620</td>
<td></td>
</tr>
</tbody>
</table>
APPAREL

Aircraft Spruce is pleased to be an official distributor for EAA merchandise. Order these EAA caps, shirts, and jackets direct from Aircraft Spruce and support the Experimental Aircraft Association.

**EAA TWILL CAPS**

This unstructured cap is made of 100% cotton twill with an adjustable self-fabric tuck in back strap.

- Off White/Navy: P/N 13-04749
- Navy/Off White: P/N 13-04750
- Gray/Navy: P/N 13-04751
- Gray/Gray: P/N 13-04752
- Gray/Black: P/N 13-04753
- Gray/Light Gray: P/N 13-04754
- Gray/X-Large: P/N 13-04755
- Gray/XL: P/N 13-04756
- Gray/XL: P/N 13-04761
- Gray/Large: P/N 13-04762
- Gray/XL: P/N 13-04763
- Gray/XL: P/N 13-04764
- Gray/Large: P/N 13-04765
- Gray/XL: P/N 13-04766
- Gray/Large: P/N 13-04767
- Gray/XL: P/N 13-04768
- Gray/Large: P/N 13-04769
- Gray/XL: P/N 13-04770
- Gray/Large: P/N 13-04771
- Gray/XL: P/N 13-04772
- Gray/Large: P/N 13-04773
- Gray/XL: P/N 13-04774
- Gray/Large: P/N 13-04775
- Gray/XL: P/N 13-04776
- Gray/Large: P/N 13-04777
- Gray/XL: P/N 13-04778
- Gray/Large: P/N 13-04779
- Gray/XL: P/N 13-04780

**EAA POCKET T-SHIRTS**

EAA logo above pocket. 100% Cotton. Limited quantities and sizes.

<table>
<thead>
<tr>
<th>Color</th>
<th>Size</th>
<th>Part No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Navy</td>
<td>S</td>
<td>13-04777</td>
<td></td>
</tr>
<tr>
<td>Navy</td>
<td>M</td>
<td>13-04778</td>
<td></td>
</tr>
<tr>
<td>Navy</td>
<td>L</td>
<td>13-04779</td>
<td></td>
</tr>
<tr>
<td>Navy</td>
<td>XL</td>
<td>13-04780</td>
<td></td>
</tr>
<tr>
<td>Navy</td>
<td>XXL</td>
<td>13-04781</td>
<td></td>
</tr>
<tr>
<td>Navy</td>
<td>XXXL</td>
<td>13-04782</td>
<td></td>
</tr>
<tr>
<td>Navy</td>
<td>4XL</td>
<td>13-04783</td>
<td></td>
</tr>
<tr>
<td>Navy</td>
<td>5XL</td>
<td>13-04784</td>
<td></td>
</tr>
<tr>
<td>Navy</td>
<td>6XL</td>
<td>13-04785</td>
<td></td>
</tr>
<tr>
<td>Navy</td>
<td>7XL</td>
<td>13-04786</td>
<td></td>
</tr>
<tr>
<td>Navy</td>
<td>8XL</td>
<td>13-04787</td>
<td></td>
</tr>
<tr>
<td>Navy</td>
<td>9XL</td>
<td>13-04788</td>
<td></td>
</tr>
<tr>
<td>Navy</td>
<td>10XL</td>
<td>13-04789</td>
<td></td>
</tr>
<tr>
<td>Navy</td>
<td>11XL</td>
<td>13-04790</td>
<td></td>
</tr>
<tr>
<td>Navy</td>
<td>12XL</td>
<td>13-04791</td>
<td></td>
</tr>
<tr>
<td>Navy</td>
<td>13XL</td>
<td>13-04792</td>
<td></td>
</tr>
<tr>
<td>Navy</td>
<td>14XL</td>
<td>13-04793</td>
<td></td>
</tr>
<tr>
<td>Navy</td>
<td>15XL</td>
<td>13-04794</td>
<td></td>
</tr>
<tr>
<td>Navy</td>
<td>16XL</td>
<td>13-04795</td>
<td></td>
</tr>
</tbody>
</table>

**EAA GOLF SHIRTS**

Port Authority, 100% cotton pique, knit golf shirt in ivory and navy.

<table>
<thead>
<tr>
<th>Color</th>
<th>Size</th>
<th>Part No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Navy</td>
<td>S</td>
<td>13-04753</td>
<td></td>
</tr>
<tr>
<td>Navy</td>
<td>M</td>
<td>13-04754</td>
<td></td>
</tr>
<tr>
<td>Navy</td>
<td>L</td>
<td>13-04755</td>
<td></td>
</tr>
<tr>
<td>Navy</td>
<td>XL</td>
<td>13-04756</td>
<td></td>
</tr>
<tr>
<td>Navy</td>
<td>XXL</td>
<td>13-04757</td>
<td></td>
</tr>
<tr>
<td>Navy</td>
<td>XXXL</td>
<td>13-04758</td>
<td></td>
</tr>
</tbody>
</table>

**EAA CREWNECK SWEATSHIRTS**

Sueded finish, crewneck sweatshirt in navy.

<table>
<thead>
<tr>
<th>Color</th>
<th>Size</th>
<th>Part No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Navy</td>
<td>S</td>
<td>13-04755</td>
<td></td>
</tr>
<tr>
<td>Navy</td>
<td>M</td>
<td>13-04756</td>
<td></td>
</tr>
<tr>
<td>Navy</td>
<td>L</td>
<td>13-04757</td>
<td></td>
</tr>
<tr>
<td>Navy</td>
<td>XL</td>
<td>13-04758</td>
<td></td>
</tr>
<tr>
<td>Navy</td>
<td>XXL</td>
<td>13-04759</td>
<td></td>
</tr>
<tr>
<td>Navy</td>
<td>XXXL</td>
<td>13-04760</td>
<td></td>
</tr>
</tbody>
</table>

**EAA MICROFIBER JACKET**

Water repellent, two tone, micro fiber jacket in navy/sand.

<table>
<thead>
<tr>
<th>Color</th>
<th>Size</th>
<th>Part No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Navy</td>
<td>S</td>
<td>13-04777</td>
<td></td>
</tr>
<tr>
<td>Navy</td>
<td>M</td>
<td>13-04778</td>
<td></td>
</tr>
<tr>
<td>Navy</td>
<td>L</td>
<td>13-04779</td>
<td></td>
</tr>
<tr>
<td>Navy</td>
<td>XL</td>
<td>13-04780</td>
<td></td>
</tr>
</tbody>
</table>

**EAA NYLON JACKETS**

Water repellent, fleece lined, two tone nylon jacket in navy/putty.

<table>
<thead>
<tr>
<th>Color</th>
<th>Size</th>
<th>Part No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Navy/Off White</td>
<td>S</td>
<td>13-04781</td>
<td></td>
</tr>
<tr>
<td>Navy/Off White</td>
<td>M</td>
<td>13-04782</td>
<td></td>
</tr>
<tr>
<td>Navy/Off White</td>
<td>L</td>
<td>13-04783</td>
<td></td>
</tr>
<tr>
<td>Navy/Off White</td>
<td>XL</td>
<td>13-04784</td>
<td></td>
</tr>
<tr>
<td>Navy/Off White</td>
<td>XXL</td>
<td>13-04785</td>
<td></td>
</tr>
</tbody>
</table>

**WHY WOMEN PREFER AIRPLANES T-SHIRT**

You may have seen the “Why Men Prefer Airplanes” T-shirt; well turn-about is fair play! From the front, this 100% preshrunk cotton T looks like just another mild-mannered Powder Puff Pilot product. But from the back, it tells the world ten reasons why airplanes are better than men. It’s available in white with fuchsia trim, in M (4-6), L (8-10), XL (12-14), and XXL (16-18).

<table>
<thead>
<tr>
<th>Description</th>
<th>Part Number</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Med. T-Shirt</td>
<td>13-06345</td>
<td></td>
</tr>
<tr>
<td>Large T-Shirt</td>
<td>13-06462</td>
<td></td>
</tr>
<tr>
<td>X-Large T-Shirt</td>
<td>13-06463</td>
<td></td>
</tr>
<tr>
<td>XX-Large T-Shirt</td>
<td>13-06464</td>
<td></td>
</tr>
</tbody>
</table>

**CHILDREN’S JACETS**

**CHILDREN'S MA-1 JACKETS WITH PATCH-ES** - This is a well made reproduction of the famous MA-1 green nylon quilted. Same patches as our childrens bomber jacket.

<table>
<thead>
<tr>
<th>Description</th>
<th>Part No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>MA1 Toddler</td>
<td>13-06443</td>
<td></td>
</tr>
<tr>
<td>MA1 Toddler</td>
<td>13-06442</td>
<td></td>
</tr>
<tr>
<td>MA1 Toddler</td>
<td>13-06444</td>
<td></td>
</tr>
<tr>
<td>MA1 Youth</td>
<td>13-06437</td>
<td></td>
</tr>
<tr>
<td>MA1 Youth</td>
<td>13-06436</td>
<td></td>
</tr>
<tr>
<td>MA1 Youth</td>
<td>13-06440</td>
<td></td>
</tr>
<tr>
<td>MA1 Boys</td>
<td>13-06438</td>
<td></td>
</tr>
<tr>
<td>MA1 Boys</td>
<td>13-06439</td>
<td></td>
</tr>
<tr>
<td>MA1 Boys</td>
<td>13-06441</td>
<td></td>
</tr>
</tbody>
</table>

**YOUTH BOMBER JACKETS** - These are a flightline original. They're a reproduction of a classic bomber, complete with simulated fleece collar. They are sturdily made with many special touches that make it unique, such as an airplane zipper pull, authentic aviation patches & colorful graphic map liner.

<table>
<thead>
<tr>
<th>Description</th>
<th>Part Number</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bomber Toddler</td>
<td>13-06432</td>
<td></td>
</tr>
<tr>
<td>Bomber Toddler</td>
<td>13-06433</td>
<td></td>
</tr>
<tr>
<td>Bomber Youth</td>
<td>13-06431</td>
<td></td>
</tr>
<tr>
<td>Bomber Youth</td>
<td>13-06432</td>
<td></td>
</tr>
<tr>
<td>Bomber Boys</td>
<td>13-06429</td>
<td></td>
</tr>
<tr>
<td>Bomber Boys</td>
<td>13-06430</td>
<td></td>
</tr>
<tr>
<td>Bomber Boys</td>
<td>13-06435</td>
<td></td>
</tr>
</tbody>
</table>

**CHILDRENS MA-1 JACKETS WITH PATCH-ES AND A HOOD** - This is a well made reproduction of the famous MA-1 green nylon quilted childrens jackets with patches and a hood. Same as our childrens bomber jacket but with faux fur trimmed hood and a velcro closure at top.

<table>
<thead>
<tr>
<th>Description</th>
<th>Part No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>MA1 Toddler</td>
<td>13-06447</td>
<td></td>
</tr>
<tr>
<td>MA1 Toddler</td>
<td>13-06446</td>
<td></td>
</tr>
<tr>
<td>MA1 Toddler</td>
<td>13-06445</td>
<td></td>
</tr>
<tr>
<td>MA1 Youth</td>
<td>13-06451</td>
<td></td>
</tr>
<tr>
<td>MA1 Youth</td>
<td>13-06452</td>
<td></td>
</tr>
<tr>
<td>MA1 Boy</td>
<td>13-06445</td>
<td></td>
</tr>
<tr>
<td>MA1 Boy</td>
<td>13-06446</td>
<td></td>
</tr>
<tr>
<td>MA1 Boy</td>
<td>13-06449</td>
<td></td>
</tr>
</tbody>
</table>
**RED CANOE APPAREL**

**RED CANOE CAPS**
The classic and unparalleled fit is the cornerstone of every Red Canoe cap. Perfect vintage colours and applique techniques make each design a potential heirloom (as long as one of your friends doesn’t ‘borrow it for a little while’). We recommend buying two!

100% brushed cotton with fully adjustable velcro closure.

**AMERICAN AIRLINES SO CAP** - From a melting pot of fledgling carriers in the early 1930’s American Airlines has become a global leader in Air Transportation. Our AA Vintage Reissue Licensed Products feature the historic icons, colours and logo application techniques like layered cut felt. 

- **Size:** One Size
- **Colour:** Burnt Yellow
- **PN:** 13-05344

---

**BELL HELICOPTER** - Larry Bell jump-started his company’s foray into helicopters when he hired Arthur M. Young, a talented inventor, to provide expertise for helicopter research and development. It was the foundation for what Bell hoped would be a broader economic base for his company that between 1936 and 1945 as military contracts. Bell Aircraft Corporation had originally only produced airplanes, including the famous Bell X-1. The Bell Model 47 became the first helicopter rated by a civil aviation authority in the world and would become a civilian and military success.

- **Size:** One Size
- **Colour:** Burnt Yellow
- **PN:** 13-05344

---

**CESSNA CHEVRON CAP** - When Clyde Cessna taught himself to fly in 1911 it was the start of a unique relationship between man and machine. To thousands of air men and women today the name “Cessna” has come to symbolize flying itself. Our CESSNA Vintage Reissue Licensed Products are a salute to this legendary icon of aviation.

- **Size:** One Size
- **Colour:** Stone
- **PN:** 13-05345

---

**CESSNA PLANE CAP** - When Clyde Cessna taught himself to fly in 1911 it was the start of a unique relationship between man and machine. To thousands of air men and women today the name “Cessna” has come to symbolize flying itself. Our CESSNA Vintage Reissue Licensed Products are a salute to this legendary icon of aviation.

- **Size:** One Size
- **Colour:** Heritage Red
- **PN:** 13-05346

---

**STEARMAN C CAP** - The Boeing Stearman model 75 seaplane was built between 1927 and 1945 as military trainers. 8500 of these classic, lusty biplane warriors were produced between 1936 and 1945 as military contracts. Bell Aircraft Corporation had originally only produced airplanes, including the famous Bell X-1. The Bell Model 47 became the first helicopter rated by a civil aviation authority in the world and would become a civilian and military success.

- **Size:** One Size
- **Colour:** Heritage Red
- **PN:** 13-05347

---

**US AIR SERVICE** - As a pilot you have joined the ranks of those less bound by conventional limits on time, distance and personal freedom. The US Air Service logo signifies this and reminds us that with this ‘gift of flight’ comes a responsibility to serve others should an emergency we can help with.

- **Size:** One Size
- **Colour:** Tan
- **PN:** 13-05348

---

**UNITED STATES ROUNDEL** - As a pilot you have joined the ranks of those less bound by conventional limits on time, distance and personal freedom. The US Air Service logo signifies this and reminds us that with this ‘gift of flight’ comes a responsibility to serve others should an emergency we can help with.

- **Size:** One Size
- **Colour:** Stone
- **PN:** 13-05349

---

**CESSNA FULL IP JACKET**

<table>
<thead>
<tr>
<th>Size</th>
<th>Part No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>S</td>
<td>13-05338</td>
<td></td>
</tr>
<tr>
<td>M</td>
<td>13-05339</td>
<td></td>
</tr>
<tr>
<td>L</td>
<td>13-05340</td>
<td></td>
</tr>
<tr>
<td>XL</td>
<td>13-05341</td>
<td></td>
</tr>
<tr>
<td>XXL</td>
<td>13-05342</td>
<td></td>
</tr>
</tbody>
</table>

**RED CANOE T-SHIRTS**

These 100% "Ungeneric" Cotton T-shirts are specially made to fit your fit, colour and quality specifications. All shirts are washed after printing - eliminating shrinkage and adding vintage appeal. Some customers save the shirts for special occasions so they’ll last a lifetime! We recommend acquiring spares!

**AMERICAN AIRLINES 50** - AA Vintage Reissue Licensed Products feature the historic icons, colours and logo application techniques like layered cut felt. 

---

**AMERICAN AIRLINES 50** - AA Vintage Reissue Licensed Products feature the historic icons, colours and logo application techniques like layered cut felt. 

---

**STEARMAN C** - After WWII hundreds of Stearmans were sold as surplus for between $200 and $500 each. The steerman remains an enduring icon of US aviation heritage.

---

**US AIR SERVICE** - The US Air Service logo signifies this and reminds us that with this ‘gift of flight’ comes a responsibility to serve others should an emergency we can help with.

---


---

**FOR MORE RED CANOE APPAREL AND ACCESSORIES PLEASE VISIT OUR WEBSITE AT:**

www.aircraftspruce.com
TRINTEC WALL CLOCKS & THERMOMETERS

These 6.5”x 6.5” aviator wall clocks and thermometers are accurate oversized reproductions of typical aircraft instruments. The final touch to your office or study decor. The clocks feature an accurate quartz movement and the thermometer reads air temp. in both Fahrenheit and Centigrade. All operate on AA batteries (not included).

- Directional Gyro Wall Clock (pictured) ........P/N 13-00529 ....................
- Artificial Horizon Wall Clock ...................... P/N 13-00531 ....................
- VOR Wall Clock .................................. P/N 13-09064 ....................
- Airspeed Indicator Thermometer .............. P/N 13-32130 ....................
- Altimeter/Airspeed Thermometer ..............P/N 13-02198 ....................

TRINTEC DESK ALARM CLOCKS

These Desk model alarm clocks measure 3.5”x 3.5” and are a unique addition to any office or den. They feature an accurate quartz movement and are excellent reproductions of typical aircraft instruments. A great gift for any pilot of aviation enthusiast.

- Altimeter Desk Model Alarm Clock......... P/N 13-09070 ....................
- Directional Gyro Desk Alarm Clock ........ P/N 13-09075 ....................
- Horizon Desk Model Alarm Clock ............ P/N 13-09085 ....................
- VOR Desk Model Alarm Clock ............... P/N 13-09080 ....................

TRINTEC ALARM CLOCK/DESK PEN SETS

Alarm clock: 3.5”x3.5” – Pen set base: 2-1/8” x 7.25”

- Altimeter ........................................ P/N 13-02091 .........................
- Directional Gyro ................................ P/N 13-02092 .........................
- VOR ............................................. P/N 13-02094 .........................
- Horizon ........................................ P/N 13-02093 .........................

TRINTEC AVIATOR KEY CHAINS

Plastic frame: 1.5” x 1.5”

- Altimeter ........................................ P/N 13-02103 .........................
- Airspeed ....................................... P/N 13-02104 .........................
- Directional Gyro ............................... P/N 13-02106 .........................
- VOR ............................................ P/N 13-02107 .........................
- HSI ............................................. P/N 13-02108 .........................
- HSI ............................................. P/N 13-02109 .........................
- Horizon ......................................... P/N 13-02111 .........................
- Horizon ......................................... P/N 13-02106 .........................

TRINTEC AVIATOR FRIDGE MAGNETS

- Altimeter ........................................ P/N 13-02112 .........................
- Airspeed ....................................... P/N 13-02113 .........................
- Directional Gyro ............................... P/N 13-02114 .........................
- VOR ............................................ P/N 13-02117 .........................
- HSI ............................................. P/N 13-04798 .........................
- Airspeed ....................................... P/N 13-04799 .........................
- Horizon ......................................... P/N 13-04801 .........................
- Horizon ......................................... P/N 13-04802 .........................

DISPATCH WALL CLOCKS

Two separate hour hands can be set independently. The 12 hour hand indicates local time. The (red) 24 hour hand can be set to indicate local 24 hour time, Zulu, GMT or UTC time.

- Dual Time 12/24 Black .........................P/N 13-02098 .........................
- Dual Time 12/24 White .........................P/N 13-02099 .........................
- Dual Time 12/24 Wht Inner ...................P/N 13-02101 .........................
- Dual Time 12/24 Black Inner .................P/N 13-02102 .........................

DELTA AIR LINES BOEING 777 JIGSAW PUZZLE

Both puzzle and box use textured linen paper. There are 513 pieces (bagged) and it measures 21.25”x 15” assembled. Superior quality with images that will make them highly collectible. The puzzles are manufactured with a low-dust process and from some of the thickest puzzle board in the industry.  

P/N 13-04056 .................................
On December 17, 1903, Orville Wright flew for only twelve seconds. But in those brief moments, he and his brother Wilbur accomplished what man had dreamed of for centuries.

CLOCKS - These 10" diameter wall Clocks and Thermometers feature images capturing the First Flight in History and are equipped with a durable plastic frame and lens. The Accurate US made quartz clock movement requires one (1) AA size battery (not included).

COASTER SET - This Coaster Set features four vibrant images depicting scenes of the First Flight in history. The coasters are made of tough and scratch resistant acrylic and have non-slip rubber feet that will help to protect the surface of your furniture. P/N 13-02148

MOUSE PADS - These 9”x7.5” Mouse Pads feature high resolution images capturing the First Flight in History and are equipped with a black no-slip base. P/N 13-02149

TRINTEC 10” AIRCRAFT WALL CLOCKS
10” diameter wall clock Popular aircraft designs by Labusch Skywear Designs. Quartz Clock Movement. Requires one AA size battery. ALL CLOCKS

<table>
<thead>
<tr>
<th>Model</th>
<th>Part No.</th>
<th>Model</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Vulcan</td>
<td>13-02154</td>
<td>FW190 Focke-Wulf/</td>
<td>13-02152</td>
</tr>
<tr>
<td>F-16 Thunderbird</td>
<td>13-02155</td>
<td>P-51 Mustang</td>
<td>13-02169</td>
</tr>
<tr>
<td>Halifax</td>
<td>13-02158</td>
<td>SR71 Blackbird</td>
<td>13-02166</td>
</tr>
<tr>
<td>deHavilland Beaver</td>
<td>13-02159</td>
<td>Douglas DC-3</td>
<td>13-02167</td>
</tr>
<tr>
<td>F-4 Phantom</td>
<td>13-02160</td>
<td>F-14 Tomcat</td>
<td>13-02168</td>
</tr>
<tr>
<td>F4J Corsair</td>
<td>13-02161</td>
<td>F6F Hellcat</td>
<td>13-02169</td>
</tr>
<tr>
<td>F-16 Falcon</td>
<td>13-02164</td>
<td>CF105 Arrow</td>
<td>13-02170</td>
</tr>
<tr>
<td>BF109 Messerschmitt</td>
<td>13-02165</td>
<td>P-40 Warhawk</td>
<td>13-02171</td>
</tr>
<tr>
<td>B-17 Flying Fortress</td>
<td>13-02166</td>
<td>Mosquito</td>
<td>13-02172</td>
</tr>
<tr>
<td>A-10 Thunderbolt</td>
<td>13-02167</td>
<td>Corsair</td>
<td>13-02173</td>
</tr>
<tr>
<td>T-3 Piper Club</td>
<td>13-02168</td>
<td>Blue Angels</td>
<td>13-02174</td>
</tr>
<tr>
<td>Lancaster</td>
<td>13-02153</td>
<td>Strike Eagle</td>
<td>13-02175</td>
</tr>
<tr>
<td>F15E Strike Eagle</td>
<td>13-04850</td>
<td>Spitfire</td>
<td>13-02176</td>
</tr>
<tr>
<td>B29/X10</td>
<td>13-04852</td>
<td>English Electric Lighting</td>
<td>13-04853</td>
</tr>
<tr>
<td>N. Amer. Harvard</td>
<td>13-04854</td>
<td>F18 Hornet</td>
<td>13-04855</td>
</tr>
<tr>
<td>deHavilland Otter</td>
<td>13-04856</td>
<td>Norseman</td>
<td>13-04856</td>
</tr>
<tr>
<td>B-25 Mitchell</td>
<td>13-04858</td>
<td>B-24 Liberator</td>
<td>13-04857</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Spitfire</td>
<td>13-04858</td>
</tr>
</tbody>
</table>

TRINTEC FIRST IN FLIGHT LICENSE PLATES
These plates were issued by the state of North Carolina and are no longer available. “First in Flight” license plates illustrate the Wright Brothers first flight in North Carolina. P/N 13-03203
TRINTEC AVIATION GIFTS

**TRINTEC 14” AIRCRAFT WALL CLOCKS**

14” diameter Wall Clocks provide an elegant display of your collection. These clocks feature a map of the world with the 24 major time zones that rotates all day along with the Earth. The clock’s hour and minute hands point to the outer time scale providing your local time while the inner time scale lets you know the time almost anywhere in the World.

<table>
<thead>
<tr>
<th>Model</th>
<th>Part No.</th>
<th>Model</th>
<th>Part No.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1960 Piper Cub</td>
<td>13-04819</td>
<td>dettyland Beaver</td>
<td>13-04820</td>
</tr>
<tr>
<td>Lancaster</td>
<td>13-04821</td>
<td>Norseman</td>
<td>13-04822</td>
</tr>
<tr>
<td>Spitfire</td>
<td>13-04823</td>
<td>First Flight</td>
<td>13-04824</td>
</tr>
</tbody>
</table>

**TRINTEC ULU TIME CLOCKS**

Zulu Time Clocks provide a 12 hour time scale as well as a 24 hour time scale.

<table>
<thead>
<tr>
<th>Description</th>
<th>Part No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Zulu Time 24 Hour wall clock, 14” frame, white face</td>
<td>13-04860</td>
<td></td>
</tr>
<tr>
<td>Zulu Time wall clock, 14” frame, black face</td>
<td>13-04861</td>
<td></td>
</tr>
<tr>
<td>Zulu Time wall clock, 14” frame, white face</td>
<td>13-04862</td>
<td></td>
</tr>
<tr>
<td>Zulu Time wall clock, 10” plastic frame, black</td>
<td>13-04863</td>
<td></td>
</tr>
<tr>
<td>Zulu Time wall clock, 10” plastic frame, white face</td>
<td>13-04864</td>
<td></td>
</tr>
<tr>
<td>Zulu Time wall clock, 10” plastic frame, black face</td>
<td>13-04865</td>
<td></td>
</tr>
<tr>
<td>Zulu Time wall clock, 10” plastic frame, white face</td>
<td>13-04866</td>
<td></td>
</tr>
</tbody>
</table>

**WORLD TIME CLOCK**

14” Diameter Metal Frame with Antique Brass Finish. Whether you need to know the time on the other side of the country or the other side of the World, this is the clock for you. This unique wall clock features a map of the world with the 24 major time zones that rotates all day along with the Earth. The clock’s hour and minute hands point to the outer time scale providing your local time while the inner time scale lets you know the time almost anywhere in the World.

14” World Clock... P/N 13-05706 ...
10” Diameter Black Plastic Frame with Clear Plastic Lens. Its like having 24 clocks in one. Whether you need to know the time on the other side of the country or the other side of the World, this is the clock for you. This unique wall clock features a map of the world with the 24 major time zones that rotates all day along with the Earth. The inner time scale lets you know the time in any major time zone. The outer time scale provides your local time while the inner time scale provides the time almost anywhere in the World.

<table>
<thead>
<tr>
<th>Description</th>
<th>Part No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>TRINTEC AVIATOR WALL CONSOLE</td>
<td>P/N 13-04870</td>
<td></td>
</tr>
<tr>
<td>TRINTEC ULU TIME CLOCKS</td>
<td>P/N 13-04872</td>
<td></td>
</tr>
</tbody>
</table>

**TRINTEC CESSNA PRODUCTS**

Recreate your airplane into a beautifully detailed desktop replica. Our premium custom made models are built to your exact specifications – no detail will be spared. You can have ANY aircraft recreated into a museum quality desktop model with your paint scheme, logos, registration number or any other details and markings. Complete your model with a fully customized stand including your choice of logo and a personalized inscription plaque. We offer over 3,000 different models – both military and civilian. Our desktop models are a maximum of 17” in either wingspan or length. Please allow approximately 6-8 weeks for delivery. 100% satisfaction guaranteed. When ordering please provide: aircraft specifications, propeller description, aircraft colors, and registration information. You will also need to specify the logo and inscription plate text.

<table>
<thead>
<tr>
<th>Description</th>
<th>Part No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Cessna Altimeter Wall Clock</td>
<td>13-04827</td>
<td></td>
</tr>
<tr>
<td>Cessna Altimeter Alarm Clock</td>
<td>13-04828</td>
<td></td>
</tr>
<tr>
<td>Cessna Altimeter Desk Pen Set</td>
<td>13-04829</td>
<td></td>
</tr>
<tr>
<td>Cessna Classic Instrument Coaster Set</td>
<td>13-04830</td>
<td></td>
</tr>
<tr>
<td>Cessna Round Acrylic Coaster Set</td>
<td>13-04831</td>
<td></td>
</tr>
<tr>
<td>Skyhawk 172 Mousepad</td>
<td>13-04832</td>
<td></td>
</tr>
<tr>
<td>Skylane TC 182 Mousepad</td>
<td>13-04833</td>
<td></td>
</tr>
<tr>
<td>Cessna Citation CJ3 Mousepad</td>
<td>13-04834</td>
<td></td>
</tr>
<tr>
<td>Cessna Citation X Mousepad</td>
<td>13-04835</td>
<td></td>
</tr>
<tr>
<td>Cessna Citation Sovereign Mousepad</td>
<td>13-04836</td>
<td></td>
</tr>
<tr>
<td>Cessna 26” Propeller Clock</td>
<td>13-04837</td>
<td></td>
</tr>
<tr>
<td>Citation Sovereign T-Shirt - Black (L)</td>
<td>13-04839</td>
<td></td>
</tr>
<tr>
<td>Citation Sovereign T-Shirt - Black (XL)</td>
<td>13-04838</td>
<td></td>
</tr>
<tr>
<td>Citation X T-Shirt - Black (L)</td>
<td>13-04840</td>
<td></td>
</tr>
<tr>
<td>Citation X T-Shirt - Black (XL)</td>
<td>13-04841</td>
<td></td>
</tr>
<tr>
<td>Citation CJ3 T-Shirt - Black (L)</td>
<td>13-04842</td>
<td></td>
</tr>
<tr>
<td>Citation CJ3 T-Shirt - Black (XL)</td>
<td>13-04843</td>
<td></td>
</tr>
<tr>
<td>Cessna Skyhawk T-Shirt - Black (L)</td>
<td>13-04844</td>
<td></td>
</tr>
<tr>
<td>Cessna Skyhawk T-Shirt - Black (XL)</td>
<td>13-04845</td>
<td></td>
</tr>
<tr>
<td>Cessna Skyline TC T-Shirt - Black (L)</td>
<td>13-04846</td>
<td></td>
</tr>
<tr>
<td>Cessna T-Shirt Raised Loop - Black (L)</td>
<td>13-04848</td>
<td></td>
</tr>
<tr>
<td>Cessna T-Shirt Raised Loop - Black (XL)</td>
<td>13-04849</td>
<td></td>
</tr>
</tbody>
</table>

**CUSTOM AIRCRAFT MODELS**

Any airplane, any paint scheme. Any airplane, any paint scheme.

Any personalized inscription.

Any Logo. Any personalized inscription.

Any Logo.

TRINTEC BEER MUGS

<table>
<thead>
<tr>
<th>Description</th>
<th>Part No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bad Attitude Beer Mug</td>
<td>13-04815</td>
<td></td>
</tr>
<tr>
<td>Watch Your Attitude Beer Mug</td>
<td>13-02124</td>
<td></td>
</tr>
<tr>
<td>Do It Inverted Beer Mug</td>
<td>13-02125</td>
<td></td>
</tr>
<tr>
<td>Mile High Beer Mug</td>
<td>13-02126</td>
<td></td>
</tr>
</tbody>
</table>

Any personalized inscription.

Any Logo.

Any Logo.
These large 14" all metal collector wall clocks are produced using a revolutionary new technology that permanently imbeds the image right onto the surface of the metal dial. A perfect blend of that nostalgic 40's style look with today's high quality graphic standards. For added authenticity, the clock face is set into an aluminum riveted case with dome polished crystal. 1yr warranty. (Requires 1 AA battery, not included.)

<table>
<thead>
<tr>
<th>Model</th>
<th>P/N</th>
</tr>
</thead>
<tbody>
<tr>
<td>PT-17 Kaydet</td>
<td>13-02576</td>
</tr>
<tr>
<td>B-17 Flying Fortress</td>
<td>13-02577</td>
</tr>
<tr>
<td>P-51 Mustang</td>
<td>13-02578</td>
</tr>
<tr>
<td>C-47 Skytrain</td>
<td>13-02579</td>
</tr>
<tr>
<td>F-4 Phantom</td>
<td>13-02580</td>
</tr>
<tr>
<td>AH-64 Apache</td>
<td>13-02581</td>
</tr>
<tr>
<td>FA-18 Hornet</td>
<td>13-02582</td>
</tr>
<tr>
<td>307 Stratoliner</td>
<td>13-02583</td>
</tr>
<tr>
<td>707 Jettliner</td>
<td>13-02584</td>
</tr>
<tr>
<td>747 Jettliner</td>
<td>13-02585</td>
</tr>
<tr>
<td>DC-10 Jettliner</td>
<td>13-02586</td>
</tr>
<tr>
<td>777 Jettliner</td>
<td>13-02587</td>
</tr>
<tr>
<td>P-38 Lightning</td>
<td>13-02590</td>
</tr>
<tr>
<td>Beautiful View</td>
<td>13-02591</td>
</tr>
<tr>
<td>PBY Catalina</td>
<td>13-02592</td>
</tr>
<tr>
<td>Memphis Belle</td>
<td>13-02593</td>
</tr>
<tr>
<td>Flying Fortress</td>
<td>13-02595</td>
</tr>
<tr>
<td>P-40 Warhawk</td>
<td>13-02596</td>
</tr>
<tr>
<td>Ready To Ride</td>
<td>13-02597</td>
</tr>
<tr>
<td>Bombs Away Baby</td>
<td>13-02598</td>
</tr>
<tr>
<td>B-25 Bomber</td>
<td>13-02599</td>
</tr>
<tr>
<td>Eye Candy</td>
<td>13-02601</td>
</tr>
<tr>
<td>Come Home Soon</td>
<td>13-02602</td>
</tr>
<tr>
<td>P-38 Gold</td>
<td>13-02604</td>
</tr>
<tr>
<td>Wings for Victory</td>
<td>13-02605</td>
</tr>
<tr>
<td>F-14 Tomcat</td>
<td>13-02606</td>
</tr>
<tr>
<td>P-51 8th</td>
<td>13-02607</td>
</tr>
<tr>
<td>F4U Corsair</td>
<td>13-02608</td>
</tr>
<tr>
<td>B-24 Liberator</td>
<td>13-02609</td>
</tr>
<tr>
<td>P-38 Lightning</td>
<td>13-02611</td>
</tr>
<tr>
<td>Uncle Sam</td>
<td>13-02612</td>
</tr>
<tr>
<td>Rosie the Riveter</td>
<td>13-02613</td>
</tr>
<tr>
<td>Semper Fidelis</td>
<td>13-02614</td>
</tr>
<tr>
<td>Stearman</td>
<td>13-02615</td>
</tr>
<tr>
<td>Black Widow</td>
<td>13-02618</td>
</tr>
<tr>
<td>B-17 Flying</td>
<td>13-02619</td>
</tr>
<tr>
<td>B-25 Mitchell</td>
<td>13-02621</td>
</tr>
<tr>
<td>B-29 Super Fortress</td>
<td>13-02622</td>
</tr>
<tr>
<td>C-47 Skytrain</td>
<td>13-02623</td>
</tr>
<tr>
<td>P-51 Mustang</td>
<td>13-02624</td>
</tr>
<tr>
<td>SBD Dauntless</td>
<td>13-02626</td>
</tr>
<tr>
<td>SNJ-5</td>
<td>13-02627</td>
</tr>
<tr>
<td>F-66 Sabre Jet</td>
<td>13-02628</td>
</tr>
<tr>
<td>U.S. Army</td>
<td>13-02631</td>
</tr>
<tr>
<td>U.S. Navy</td>
<td>13-02632</td>
</tr>
<tr>
<td>U.S. Air Force</td>
<td>13-02633</td>
</tr>
<tr>
<td>U.S. Marines</td>
<td>13-02634</td>
</tr>
<tr>
<td>Spitfire MK</td>
<td>13-02636</td>
</tr>
<tr>
<td>Mosquito MK II</td>
<td>13-02638</td>
</tr>
<tr>
<td>Junkers Ju 88A-4</td>
<td>13-02641</td>
</tr>
<tr>
<td>Me 262A-2a</td>
<td>13-02642</td>
</tr>
<tr>
<td>Me 109</td>
<td>13-02643</td>
</tr>
<tr>
<td>Ju88A-2 Stuka</td>
<td>13-02644</td>
</tr>
<tr>
<td>Zero A6M</td>
<td>13-02646</td>
</tr>
<tr>
<td>Fokker Dr1</td>
<td>13-02647</td>
</tr>
<tr>
<td>Bristol F2B</td>
<td>13-02639</td>
</tr>
</tbody>
</table>
Looking for truly unique awards that document and display your noteworthy aviation accomplishments – or those of someone you know? Whether it is a gift for a pilot to proudly display his/her achievements or a service award to recognize an air traffic controller, these plaques are the perfect choice.

To place your order, simply select your plaque below and provide us the pertinent customizing data. We'll process your request with care and contact you with any questions. In approximately two weeks your order will arrive.

**PILOT LICENSE PLAQUES**

| Model: ME-W8-2 Size: 8” x 10” | P/N 13-06143 | .............................. |
| Model: NEV-2 Size: 8” x 10” | P/N 13-06148 | .............................. |
| Model: DPLT028L-2 Size: 8” x 10” | P/N 13-06152 | .............................. |
| Model: FP810 Size: 8” x 10” | P/N 13-06156 | .............................. |
| Model: ME-W8-3 Size: 8” x 10” | P/N 13-06144 | .............................. |
| Model: NEV-3 Size: 8” x 10” | P/N 13-06149 | .............................. |
| Model: DPLT028L-3 Size: 8” x 10” | P/N 13-06153 | .............................. |
| Model: ML912-3 Size: 9” x 12” | P/N 13-06157 | .............................. |
| Model: CRM-8-2 Size: 8” x 10” | P/N 13-06146 | .............................. |
| Model: CH810-2 Size: 8” x 10” | P/N 13-06150 | .............................. |
| Model: FT4860M-2 Size: 8” x 10” | P/N 13-06154 | .............................. |
| Model: AV-B07 Size: 7” x 9” | P/N 13-06158 | .............................. |
| Model: CRM-8-3 Size: 8” x 10” | P/N 13-06147 | .............................. |
| Model: CH810-3 Size: 8” x 10” | P/N 13-06151 | .............................. |
| Model: FT4860M-3 Size: 8” x 10” | P/N 13-06155 | .............................. |

**PILOT LICENSE WALL PLAQUES**

These are custom Pilot License Wall Plaques made out of fine wood and can be hung on your home or office wall. Show others that you are a proud licensed pilot.

To order: Make a clear photo copy of front and back of license. Sign a blank sheet of paper. After selecting the size of your wall plaque, please select what type of metal: silver or gold.

<table>
<thead>
<tr>
<th>Description</th>
<th>Part Number</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>5 X 7 SOLID WALNUT - LICENSE WALL PLAQUE</td>
<td>13-06046</td>
<td>.</td>
</tr>
<tr>
<td>5 X 7 DELUXE ELLIPTICAL SOLID WALNUT LICENSE WALL PLAQUE</td>
<td>13-06047</td>
<td>.</td>
</tr>
<tr>
<td>7 X 9 SOLID WALNUT - LICENSE WALL PLAQUE</td>
<td>13-06048</td>
<td>.</td>
</tr>
<tr>
<td>7 X 9 DELUXE FLOATING - LICENSE WALL PLAQUE</td>
<td>13-06049</td>
<td>.</td>
</tr>
</tbody>
</table>
COCKPIT COOLERS - LICENSE PLATE FRAMES

COCKPIT COOLERS

Heat getting you down? Have you been wishing there were a way to efficiently and quickly cool your airplane’s cabin? If you answered “yes” to either of those questions, then you need the Cockpit Cooler to make your trips comfortable!

MODEL AP - 100 14V/28V

For the cooling process, the unit creates ice-chilled air, followed by evaporated water, drawn through a saturated media filter. The high-volume, high-velocity air is drawn in through and around the ice. As the ice melts, it absorbs heat and creates chilled water. The chilled water evaporates and absorbs heat further. The cool air is circulated in the cabin by the high-volume blower at 250 cfm.

* The model is small. It cools with a high-volume blower at 250 cfm.
* 7.5” by 16.5” by 18.5” and is a mere 9.5lbs
* Provides plenty of cool time for most general aviation aircraft at taxi, takeoff and landing.
* In arid climates, there was a measured drop of nearly 18 degrees inside the cabin.
* Being so small, there is still plenty of cargo space and useful load.

MODEL AP - 200 14V/28V

The model AP 200 utilizes the same ice chilled refrigerated air conditioning system as used in many commercial buildings, only on a micro scale. Stored coolant pumps through a high efficiency heat exchanger. A high-volume blower moves air throughout the cabin. Condensation of moisture from cabin air on the exchanger coils is retained in the unit reservoir. This unit reduces moisture levels since it relies on refrigerated air conditioning instead of evaporative cooling.

* The model cools with a high-volume blower at 250 cfm for a comfortable dry chilled flow.
* 7.5” by 16.5” by 18.5” and is a mere 10.2lbs
* Provides even more cool air time than Model 100 due to its more efficient use of air conditioning
* A larger reservoir may be purchased to increase cooling time by several hours.
* Being so small, there is still plenty of cargo space and useful load.

POL-AIR B310 PORTABLE AIR CHILLER SYSTEM

Four years of research by Pol-Air has resulted in the patented proprietary turbine pump for the B310 and is the heart of the new technology. This pump is powered by an ultra-efficient high speed DC brushless motor and can produce up to 3.5 inches of water pressure at 14.3 CFM in the 12vDC units, and 4.5 inches of water pressure at 20.5 CFM in the 24vDC units. This pressure delivers cool dry airflow through 1.25” diameter featherweight EPE hoses to the front edge of passenger seats or directly under your shirt, making microenvironmental cooling possible for up to four people.

Why you get 70° F (or cooler) dry air with half the humidity of outside air? We draw air through ice alone (no water). When you draw air through ice you lower humidity. When you blow air through water, like a swamp cooler, you increase humidity. This is not a swamp cooler. Water is eliminated from the system.

As humid air passes through ice, water vapor will condense and plate out on the ice and drips out of the system through the drain with the liquid ice melt. Thus the air produced has usually half (or less) of the humidity of the ambient air. Instinctively, you know this, as the driest place on earth is Antarctica. Water vapor there can only exist as ice crystals in the air. Humidity is usually 0.5% to 1.5%.

12V ........ P/N 13-05074 ..............
24V ........ P/N 13-05075 ..............

LICENSE PLATE FRAMES AND LICENSE PLATES

High quality metal frame. Chrome with blue & white enamel. P/N 13-06227 ..............
High quality metal frame. Chrome with blue & white enamel. P/N 13-06228 ..............
High quality metal frame. Chrome with blue & white enamel. P/N 13-06229 ..............
High quality metal frame. Chrome with blue & white enamel. P/N 13-06231 ..............
High quality metal frame. Chrome with white & blue enamel. P/N 13-06232 ..............
High quality molded on Black plastic frame with white lettering. P/N 13-06233 ..............
High quality stamped aluminum plate white and blue enamel P/N 13-06235 ..............
FLY design. High quality stamped aluminum plate white and black enamel P/N 13-06236 ..............
FUEL GAUGES - BIRD DETERREnts

DIRECT FUEL LEVEL INDICATORS
These Direct Fuel Level Indicators are quality made of acrylic PVC tube with an aluminum scale. They are available calibrated to individual tanks or incalibrated for custom calibration to home built tanks. These indicators allow you an accurate check on board fuel level indicators and eliminate the guess work.

<table>
<thead>
<tr>
<th>Description</th>
<th>Part No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Fuel Level Indicator C-150/C-152</td>
<td>12-21200</td>
<td>-</td>
</tr>
<tr>
<td>Fuel Level Indicator C-150 LONG</td>
<td>12-21205</td>
<td>-</td>
</tr>
<tr>
<td>Fuel Level Indicator C-170/C-172</td>
<td>12-21210</td>
<td>-</td>
</tr>
<tr>
<td>Fuel Level Indicator C-172 34G</td>
<td>12-21215</td>
<td>-</td>
</tr>
<tr>
<td>Fuel Level Indicator C-182 + C182 32 GAL</td>
<td>12-21225</td>
<td>-</td>
</tr>
<tr>
<td>Fuel Level Indicator C-182 42G</td>
<td>12-21220</td>
<td>-</td>
</tr>
<tr>
<td>Fuel Level Indicator C-210 45G</td>
<td>12-21240</td>
<td>-</td>
</tr>
<tr>
<td>Fuel Level Indicator PA-24 30G</td>
<td>12-21245</td>
<td>-</td>
</tr>
<tr>
<td>Fuel Level Indicator 7KCAB</td>
<td>12-21250</td>
<td>-</td>
</tr>
<tr>
<td>Fuel Level Indicator PA-28</td>
<td>12-21255</td>
<td>-</td>
</tr>
</tbody>
</table>

FUEL HAWK FUEL GAUGES
The Fuelhawk is just 11" long, clear lightweight and unbreakable. It's easy to use and gives an instant readout in gallons usable. No more guessing. These handy devices offer the answers to these very important questions: 1. How many gallons of usable fuel are remaining in the tank? 2. How much fuel can be added without going over gross weight? 3. Are the aircraft fuel gauges working & accurate?

<table>
<thead>
<tr>
<th>Part No.</th>
<th>Application</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>13-00443</td>
<td>Cessna 152 (standard 12 gal. tanks)</td>
<td>13-00057</td>
</tr>
<tr>
<td>13-00442</td>
<td>Cessna 172 (standard 19 gal. tanks)</td>
<td>13-00058</td>
</tr>
<tr>
<td>13-01468</td>
<td>New Cessna 172 Skyhawk (26.6 gal.)</td>
<td>13-00059</td>
</tr>
<tr>
<td>13-01469</td>
<td>New Cessna 182 Skylane (43.5 gal.)</td>
<td>13-00060</td>
</tr>
<tr>
<td>13-00441</td>
<td>Cessna 182L/R (42 gal. Long range tanks)</td>
<td>13-00061</td>
</tr>
<tr>
<td>13-00439</td>
<td>Universal for any aircraft, wiregraph &amp; calibration chart</td>
<td>13-00062</td>
</tr>
<tr>
<td>13-00438</td>
<td>Universal XL Fuel Gauge (15&quot; long)</td>
<td>13-00063</td>
</tr>
</tbody>
</table>

WIRE MARKERS
Tana Wire Markers are large fiberglass balls which can be attached to power lines to warn aircraft of the location of the wires. They meet FAA specifications, feature easy installation and universal attachment, withstand the elements for over 10 years, require no maintenance, do not slip, chafe, or cause electroliyse or vibration. Stocked in 9", 12", and 24" sizes. Larger sizes available on request. Color: international orange. Stocked in Tana marker style J X

<table>
<thead>
<tr>
<th>Diameter</th>
<th>Tape Diameter</th>
<th>P/N</th>
</tr>
</thead>
<tbody>
<tr>
<td>12&quot;</td>
<td>2&quot;</td>
<td>13-0057</td>
</tr>
<tr>
<td>20&quot;</td>
<td>4&quot;</td>
<td>13-0058</td>
</tr>
<tr>
<td>24&quot;</td>
<td>6&quot;</td>
<td>13-0059</td>
</tr>
<tr>
<td>12&quot; w/o Tape</td>
<td>13-0054</td>
<td></td>
</tr>
<tr>
<td>20&quot; w/o Tape</td>
<td>13-0055</td>
<td></td>
</tr>
<tr>
<td>24&quot; w/o Tape</td>
<td>13-0056</td>
<td></td>
</tr>
</tbody>
</table>

CPS-S STANDARD MOUNTING MARKER - The Standard power line Marker is made of ABS plastic & fits wires up to 1" using two neoprene bushings

CSP-EZ RECESSED MOUNTING AREA & CSP-EZ RECESSED MOUNTING AREA W/ CLAMP - The EZ line of Markers is made of ABS plastic & is new & improved with a larger recessed area around the four bolts making it easier to install with incrometer bars. The EZ-S still uses two neoprene bushings & fits wires up to 1". The CSP-EZ comes with an aluminum clamp with stainless steel bolts & fits wires up to 1". Both of these styles use 1/4" nuts.

<table>
<thead>
<tr>
<th>Dia</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>9 inch</td>
<td>13-06725</td>
</tr>
<tr>
<td>12 inch</td>
<td>13-06727</td>
</tr>
<tr>
<td>20 inch</td>
<td>13-06731</td>
</tr>
<tr>
<td>24 inch</td>
<td>13-06737</td>
</tr>
<tr>
<td>30 inch</td>
<td>13-06738</td>
</tr>
<tr>
<td>36 inch</td>
<td>13-06739</td>
</tr>
</tbody>
</table>

FOLDING AIRCRAFT STEP STOOL
This sturdy step stool is made of oak veneer over hardwood and provides a spacious 11" x 11" square standing area. The stool is 16" high and features nonskid strips on the standing area. The precision crafted stool opens and closes easily and measures only 20" x 12" x 19" when folded for storage in baggage compartment or under the seat of your aircraft. Weighs only 4 lbs. Light-weight, compact, and very strong, this stool is idea for use around general aviation aircraft.

<table>
<thead>
<tr>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>13-00428</td>
</tr>
</tbody>
</table>

SUPERLITE FOLDING HAND TRUCK
The Superlite Folding hand truck is great for use in general aviation aircraft, airline travel, office, sports, and more. It's push-of-a-button fold-up frame and aluminum construction allows for easy storage and transportation. The large 19"W x 12"D nose and elastic straps allow for moving heavy and bulky objects. Strong enough to handle 175 lbs. Fits easily in an aircraft baggage compartment or a car trunk. Extended dims: 42" x 19" x 19". Folds to 29.5" x 19" x 2".

<table>
<thead>
<tr>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>13-00893</td>
</tr>
</tbody>
</table>

ARROWPROP DECORATOR PROP CLOCKS
Choose from:
- Quartz Clock (Q)
- Weather Station (W)

<table>
<thead>
<tr>
<th>Item</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>(Q) or Weather Station (W). Available in clear (C) or beautifully stained hardwood with clear finish, red tips and simulated brass tipping on the propeller blades. Quartz Clock (Q) or Weather Station (W).</td>
<td></td>
</tr>
</tbody>
</table>

PIPER CUB PROPELLERS
Laminated hardwood reproduction of the propeller used on the Piper Cub airplane. With a high gloss finish, red tips, and cub decals. Quartz Clock (Q) or Weather Station (W).

<table>
<thead>
<tr>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>13-00091</td>
</tr>
</tbody>
</table>

LINDBERG PROPELLER
Beautiful reproduction of an early day aircraft propeller like those used on the Piper Cub, Aerocna, Taylorcraft and others. Constructed of laminated hardwood with clear finish, red tips and simulated brass tipping on the propeller blades. Quartz Clock (Q) or Weather Station (W).

<table>
<thead>
<tr>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>13-00091</td>
</tr>
</tbody>
</table>

REPLICA PROPELLER LETTER OPENER
Own a bit of aviation history with our unique letter opener. A mini replica of the Hamilton Standard steel propeller used on Charles Lindbergs "Spirit of St. Louis" 9" long, it has a chromed hand polished handle, is cast to highest quality metal standards with authentic Hamilton Standard decals on the blade. Shipped in elegant gift box.

<table>
<thead>
<tr>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>13-00091</td>
</tr>
</tbody>
</table>
The RV-Sport is a miniature homebuilt airplane which is a great learning experience for parents and children and when completed is a unique pedal powered toy for kids. The Corsair Jr. is a miniature homebuilt airplane which is a great learning experience for parents and children and when completed is a unique pedal powered toy for kids. The Corsair Jr. is available in gloss white shop tools and is sure to be the hit with every kid on the block. The F4U-1 Corsair Jr. is available in gloss white shop tools and is sure to be the hit with every kid on the block.

The F4U-1 Corsair Jr. is a miniature homebuilt airplane which is a great learning experience for parents and children and when completed is a unique pedal powered toy for kids. The Corsair Jr. is built using basic shop tools and is sure to be the hit with every kid on the block. The F4U-1 Corsair Jr. is available in gloss white shop tools and is sure to be the hit with every kid on the block.

The RV-Sport is a miniature homebuilt airplane which is a great learning experience for parents and children and when completed is a unique pedal powered toy for kids. The Corsair Jr. is a miniature homebuilt airplane which is a great learning experience for parents and children and when completed is a unique pedal powered toy for kids. The Corsair Jr. is available in gloss white shop tools and is sure to be the hit with every kid on the block. The F4U-1 Corsair Jr. is available in gloss white shop tools and is sure to be the hit with every kid on the block.

The RV-Sport is a miniature homebuilt airplane which is a great learning experience for parents and children and when completed is a unique pedal powered toy for kids. The Corsair Jr. is a miniature homebuilt airplane which is a great learning experience for parents and children and when completed is a unique pedal powered toy for kids. The Corsair Jr. is available in gloss white shop tools and is sure to be the hit with every kid on the block. The F4U-1 Corsair Jr. is available in gloss white shop tools and is sure to be the hit with every kid on the block.

The RV-Sport is a miniature homebuilt airplane which is a great learning experience for parents and children and when completed is a unique pedal powered toy for kids. The Corsair Jr. is a miniature homebuilt airplane which is a great learning experience for parents and children and when completed is a unique pedal powered toy for kids. The Corsair Jr. is available in gloss white shop tools and is sure to be the hit with every kid on the block. The F4U-1 Corsair Jr. is available in gloss white shop tools and is sure to be the hit with every kid on the block.

The RV-Sport is a miniature homebuilt airplane which is a great learning experience for parents and children and when completed is a unique pedal powered toy for kids. The Corsair Jr. is a miniature homebuilt airplane which is a great learning experience for parents and children and when completed is a unique pedal powered toy for kids. The Corsair Jr. is available in gloss white shop tools and is sure to be the hit with every kid on the block. The F4U-1 Corsair Jr. is available in gloss white shop tools and is sure to be the hit with every kid on the block.

The RV-Sport is a miniature homebuilt airplane which is a great learning experience for parents and children and when completed is a unique pedal powered toy for kids. The Corsair Jr. is a miniature homebuilt airplane which is a great learning experience for parents and children and when completed is a unique pedal powered toy for kids. The Corsair Jr. is available in gloss white shop tools and is sure to be the hit with every kid on the block. The F4U-1 Corsair Jr. is available in gloss white shop tools and is sure to be the hit with every kid on the block.

The RV-Sport is a miniature homebuilt airplane which is a great learning experience for parents and children and when completed is a unique pedal powered toy for kids. The Corsair Jr. is a miniature homebuilt airplane which is a great learning experience for parents and children and when completed is a unique pedal powered toy for kids. The Corsair Jr. is available in gloss white shop tools and is sure to be the hit with every kid on the block. The F4U-1 Corsair Jr. is available in gloss white shop tools and is sure to be the hit with every kid on the block.

The RV-Sport is a miniature homebuilt airplane which is a great learning experience for parents and children and when completed is a unique pedal powered toy for kids. The Corsair Jr. is a miniature homebuilt airplane which is a great learning experience for parents and children and when completed is a unique pedal powered toy for kids. The Corsair Jr. is available in gloss white shop tools and is sure to be the hit with every kid on the block. The F4U-1 Corsair Jr. is available in gloss white shop tools and is sure to be the hit with every kid on the block.
CD-ROMS - SOFTWARE

“121.5” EMERGENCY DVD/VHS
Real life emergencies, actual ATC recordings! Hosted by TV personality and flight instructor MayCay Beeler, this DVD features real-life actual ATC recordings of pilot and ground communication in real emergencies, brought to life with stunning animation and graphics. Listen, learn, and live.

“121.5” VHS P/N 13-02854
“121.5” DVD P/N 13-02853

2009 PRO-FLIGHT LIBRARY CD
ASA provides the aviation community with the most accurate and reliable publication available. The 2009 Pro-Flight Library CD-ROM makes it even easier to access the world of aviation information with just the click of a mouse. This is the most comprehensive electronic aviation reference library available—all on a single CD-ROM—at a huge savings over the purchase of the individual books. The Pro-Flight Library CD lets aviators: *View the full text of all publications *Print text and graphics—from a single phrase to an entire publication *Find all newly-revised pages and view both the old and new text *Simultaneously search multiple publications *Find any combination of words or phrases *Place electronic bookmarks for instant reference *Mark and save personalized notes—just as you would in a paper book System Requirements: Windows 2000, NT, XP, Vista (Home Premium 32bit). P/N 13-01077

2008 PREPWARE v.10
ASA Knowledge Exam prep software. Version 10 includes the new FAA Knowledge Exams released June 25, 2007 although the automatic update feature will keep customers current as new tests are released.

Private Pilot.................P/N 13-01078
Instrument Rating........P/N 13-01079
Commercial Pilot..........P/N 13-01080
Certified Flight Instructor........P/N 13-01081
Flight Engineer............P/N 13-01082
Airline Transport Pilot.....P/N 13-02565
All 3 maintenance tests........P/N 13-01084

CD-POCKET Durable vinyl pocket holds 2 CD-ROMs, 7 hole punched for binder. Set of 10. P/N 13-62800

GPS TRAINING SOFTWARE FROM ASA
GPS Trainer Version 2 is a tutorial to help pilots master GPS from their desktop. For the renter confronted with one brand of GPS one day and another the next; for the instructor who teaches in multiple aircraft; for the aircraft owner who is trying to master the nuances of his favorite navigation tool; for the consumer wanting to search the options before making the buying decision; for fleet and Part 135 & 121 of operators who are required to provide GPS instruction to their pilots. GPS Trainer makes time spent in the aircraft more effective by providing the appropriate tools to learn the GPS receiver on the ground. • The most popular GPS units are included, pilot can learn the Bendix/King 890B/GPSMap 430, 295 or Apollo GXS50/60 all on a single CD • Manufacturers’ simulators and operating manuals included • 15 instructional sections • 125 original 3D graphics & animations • 40 minutes of onscreen instruction from NASA and the FAA. Contains: • 3 hrs of narrated instruction • 7 days of practice position finding, interception and tracking skills such as DME arcs & holding. Best of all you can create custom navigation scenarios by dragging the VORs, NDBs & airplane around the screen wherever you wish. Its all point & click!
P/N 13-00770

AIRCRAFT LOGS ONLINE PILOT LOGBOOK
AircraftLogs allows you to safeguard, organize, and simplify your maintenance logs, expense records and flight logs. You will have access to your records anywhere you have an Internet connection. You can also provide secure access to other pilots, your employees, your maintenance providers and others you authorize. A revolution in record keeping for managing flight logs, maintenance records and financial information is just a few clicks away. You have secure and instant access to your records from anywhere, any time. Provides the unique and powerful solution to managing aircraft that fits the needs of private aircraft owners. Note: Annual subscriptions include 2 years of logbook transcription

Description Part No. Price
Logbook only - Monthly 13-06132 $13.95
Logbook only - Annual 13-06135 $139.99
Piston Single Management pkg - Annual 13-06139 $199.99
Piston Twin Management pkg - Annual 13-06138 $399.99

THE NAVIGATION CD-ROM
The Navigation CD-ROM teaches you VOR Navigation, NDB Navigation, HSI & RMI, GPS Navigation, & Airspace. You’ll be prepared for action in the cockpit. Animation, sounds, quizzes and interactivity allow you to visualize navigation concepts while using simulations of actual aircraft equipment. To make learning easy, each tutorial features an easy-to-use, point-and-click environment. If you click on a mouse, you can use these tutorials. No computer experience necessary. During each tutorial, your prompted where to click, when to proceed and what information to provide during quizzes. If you need to master a concept, it is easy as reviewing the section at hand. This CD-ROM features clearly written lessons, logical progression, quizzes, interactive equipment simulation, colorful graphics and animation. Navigation CD-ROM includes: • 5 Interactive Multimedia Tutorials •10 Hours of Narrated Instruction • 37 Instructional sections • 250 Original Graphics & Animations •12 quizzes & answers...
P/N 13-00480

VOR/NDB SIMULATOR V2.0
Enables you to practice real time VOR & NDB navigation on your computer! You don’t have to worry about altitude control, radio communication, airspace, traffic or other major task as you would in real flight. Aircraft are expensive to operate and they make poor classrooms. With VOR/NDB Simulator, you’re able to learn navigation techniques in your convenience from your home and in an inexpensive non distracting environment. The screen consists of several components: An airplane flying across the screen, VOR and NDBs, navigation and flight instruments, and a reference map that enable you to review VOR and NDB concepts while practicing position finding, interception and tracking skills such as DME arcs & holding. Best of all you can create custom navigation scenarios by dragging the VORs, NDBs & airplane around the screen wherever you wish. Its all point & click!
P/N 13-01438

GETTING AROUND ON THE GROUND
Teaches types of airport markings, signage and lighting. Goes beyond simple technical knowledge by outlining hazards, safely tips & procedures that will help keep you aware, knowledgeable & safe on the ground. Features: • Full sound narration to make learning easy. Graphics that show the airport environment from ground view • Skills for prevent- ing runway incursions • Complete descriptions and visuals of airport markings, signs, and lighting • Methods of incorporating knowledge of markings, signs and lights in your flight operations • Ground proce- dures • Safety “Quick Tips” that you can use immediately • Case Studies of real-world runway incursion incidents and accidents • Printable docu- ments from NASA and the FAA. Contains: • 3 hrs of narrated instruction • 15 instructional sections • 125 original 3D graphics & animations • 40 quiz questions • 17 “Quick Tips”...
P/N 13-01438

FLIGHT OF VOYAGER CD (DICK RUTAN)
This is a recount of the heroic, heroic, & humorous moments of the Voyager project through the eyes of the pilot Dick Rutan. On Dec. 14, 1986 Voyager took off from Edwards Air Force Base in California and 9 days later landed at the Edwards Air Force Base, setting a first ever non-stop, unfueled world flight. This 3-CD set (3.5 hrs) includes a mini journal map of the flight, historic photos, fun facts, & more.
P/N 13-01163

MY KIT AIRPLANE SOFTWARE CD
Written for XP and VISTA This is a complete new program written with Microsoft Visual Studio. A Real Windows Program. Fully tested in XP and VISTA! Does require XP to have SP2 installed.

Consists of several modules for individual func- tions. These modules include the Main Menu, Project Entry, Primary Project Selection, Construction Information Entry, Expense Entry, Flight Information Entry, Maintenance Information Entry, and Weight & Balance Tool. Also included are forms for evaluating your flight performance and carrying Category Information. The unique Suppliers Information form contains fields for just about any information you wish to keep track of. There is also a very complete FAA page that contains all the FAA information necessary for you to build, certify, and get your FAA Airworthiness Certificate for your Experimental or Light Sport Aircraft. In addition there is a very compre- hensive file of information on Light Sport Aircraft and their construction and operation.

Mechanic’s TOOLBOX CD
Software for the mechanic to help make your job easier! Also includes the Engineering Manual Companion, Part number cross-references Torque Wrench Extension Calculations, Continental and Lycoming engine troubleshoot, Battery Tester, Slick magneto, Aircraft bolts, screws and rivets. P/N 13-03463

PS

746
With Audio, pilot adapters connect your computer to aviation correct radio announcements & responses in all flight settings. Vision Microsystems, Avidyne, Digifly, Skyforce, and many more; PLUS Garmin, IFR, II Morrow, UMA, Mitchell, Trimble, Arnav, S-Tek, Century, easy to install and use with its context-sensitive help to guide.

JPPESEN FLITESTAR FLIGHT PLANNING SOFTWARE
The current version of Flitestar calculates the optimum altitude based on total distance, winds aloft and your aircraft's performance. Experiment with different temperatures, power settings & altitudes and see their effects on performance. Comes with many popular aircraft already installed, including light piston, turbo-prop and jet aircraft. Do "what if" simulations, calculate weight & balance with graphic feedback. The only flight planner with the accuracy of a Jeppesen NavData database. You get every navigational chart at your fingertips. Zoom from continent-wide overviews down to half mile details. Roam across charts with a mouse, select waypoints by pointing and clicking. View airway avionics, VORs, NDBs, intersections, airports, and frequencies. Enter winds for each flight leg, or retrieve them over your modem from Jeppe sen. Do weight and balance, speeds, performance and fuel burn with graphic feedback. Easy flight engineer module lets you do "what if" aircraft performance analysis. Optional subscriptions database updates from Jeppe sen Sanderson. Change your route by "stretching" it to any other waypoints you want. Create user waypoints on the fly by just pointing at the area of the chart and holding Alt key. Find distance and radial from any point on chart to another point by simply pointing at any point on chart. Compute airway and VORs for any route manually or automatically. Find common airways between any VOR or intersection. Enter winds for each flight leg, or retrieve them over your modem from Jeppe sen.

COMM VFR/IFR RADIO SIMULATOR
The closest thing to being on the radio in the cockpit. Comm1 has over 6 linear hours of interactive communication training — but you can practice for days & weeks. Learn where to locate frequencies quickly. By mastering radio communication skills with Comm1, you'll always be one step ahead of the next radio call. Comm1's instructionally-sound curriculum takes you through progressively more complex airspace so that you can feel confident in any environment. Being prepared with what to say, when, and in what order, is half the battle when mastering radio communication skills. Practice selecting and saying the correct radio announcements & responses in all types of flight settings. With Audio pilot adapter, pilots can link their computer to an aviation headset to create a virtual cockpit. (9V battery)

MAX TRESCOTT'S G1000
CD-ROM COURSE
There is a revolution sweeping through general aviation. All new aircraft ship with advanced glass cockpits and pilots are responsible for responding to these new systems. The most popular system is the Garmin G1000, and now you can master the system yourself with this new CD-ROM set produced by the authors of the popular Max Trescott's G1000 Glass Cockpit Handbook. This course includes:

- More than six hours on two CD-ROM's, Large, full screen views of controls, movies screen captures of operating knobs, PDFs for the entire building, easy listening, and more.
- Searchable slides and transcripts, Optional quizzes to reinforce key points, 
- files that run on Windows, Macintosh and Linux.

GARMIN G1000 GLASS COCKPIT BOOK
Learn about all Garmin G1000 features & differences Get the single source of information that educates pilots about all of the features and benefits of flying the Garmin G1000, and how features vary among aircraft manufacturers. Whether you fly a Beechcraft, Cessna, Columbia, Diamond, or Mooney, you'll learn which Garmin G1000 features apply to your particular aircraft. Or, if you're planning to buy a new Very Light Jet (V L J) like the Cessna Mustang or Diamond D- jet, this book will help you prepare while you wait for delivery.

MAX TRESCOTT CD-ROM COURSE
provides it easy to learn all of the important flying with WAAS. Designed for the Garmin 430W, 530W, 480, 990X and G1000, the course leads you step-by-step through these approaches. Via the flightsimulator you can fly all of the radar approaches, and complete the flying of actual approaches, and software simulators let you practice loading and flying these approaches. The course is taught by Master CFI Max Trescott and Susan Parsons, who's writing can "tickle" the "right大脑" of even experienced GPS pilots.

KITSLOG PRO SOFTWARE
KitsLog Pro is an organizational tool that allows the builder of any type of aircraft to create, archive, maintain, and display their equipment list, and even prints actual-size hole-cut templates or scanned photographs. Whether your experimental aircraft is a plans-built EAA bi-plane, a Van's RV, a Glastar, or even a Lancair IV-P, KitsLog Pro is the most efficient way to ensure that you meet the requirements of a builder's log for the certification of your homebuilt aircraft.

MULTIMEDIA SOFTWARE FLITESCHOOL
In terms of speed, graphics, clarity, and learning value, file School from Jeppe sen Software is unequalled in its class. Much more than a series of "flash cards" that help you memorize the answers to FAA exams, file School provides programmed learning with hyper-text referencing that leads through a series of associated references to learn more, faster! file School's Dynamic Cybernetic Learning enhances your training by analyzing your responses and leading you to new subjects and new subject areas. You'll find studying with file School to be more interesting and more effective than other software programs and many video tapes. Material is organized into 20 categories and monitored by topic. The software takes you step-by-step through each subject area and returns to areas where you need more work. When you've mastered enough material to pass the FAA exam, you receive a graduation certificate for your instructor to sign off.

CHARTCASE ELECTRONIC SOFTWARE
When connected to the internet, Chartcase provides access to FlightPrep, the multifunctional graphical flight planning engine with approach charts and on-course overlays of TFRs, SUAs, NEXRAD weather shown in a single pass high speed web image. Chart Case brings new functionality and complete paperless cockpit data to general aviation pilots at a fraction of the cost of various products that would be needed. Chart Case offers the ability to purchase paperless cockpit data to general aviation pilots at a fraction of the cost of various products that would be needed. Chart Case offers the ability to purchase paperless cockpit data to general aviation pilots at a fraction of the cost of various products that would be needed. Chart Case offers the ability to purchase paperless cockpit data to general aviation pilots at a fraction of the cost of various products that would be needed.

Minimum Sys. Requirements: 486/66 MHz PC processor • 4x speed CD-ROM drive • 16MB RAM • Sound Blaster-compatible sound card • 8MB hard drive space • Mic & speakers (or headset) • 800x600 resolution display with 256 colors • Windows 95™
WINN BALANCE

This software was originally designed for the Ultralight / Experimental aircraft builder/designer. To assist in weight and balance calculations, it also works well on conventional aircraft. It is Great everyday flight planning as well. It will run on Win95/98/Me/2000/XP. The program’s main screen is designed so that the CG and weight of your aircraft is automatically calculated with a minimum of effort.

MAIN SCREEN - This main screen contains all calculation input and dynamically displays real-time results. Hint screens are also available for assistance on this screen.

HELP SCREEN - Help is never far away. This help screen gives you all the information you will need to perform an initial weight and balance. It describes the entire process of how to weigh your aircraft and some of the formulas to help you along the way.

SECONDARY INFORMATION SCREEN - This screen stores all your aircraft's installed equipment which forms a portion of your empty weight. This information is retained until you remove each item. It serves as a reminder as to what exactly was installed in the aircraft at the time of weighing.

P/N 13-05599

JEPPESEN AVIONICS KNOWLEDGE LIBRARY

Master your GPS unit with Jeppe sen’s interactive e-learning for Garmin® GPS systems and Lowrance® Handheld GPS Systems. Jeppe sen’s advanced, self-paced digital learning programs provide training on all operational aspects of your GPS unit. It enables you to become proficient in all advanced features and tasks required for IFR flight and greatly facilitates the transition to flying the Technically Advance Aircraft and the Garmin glass cockpit.

P/N 13-06663

ASA INSPECTION AUTHORIZATION PREPWARE

This software incorporates the material from the Inspection Authorization Test Prep by Dale Crane, and also includes a PDF of the Inspection Authorization Computer Testing Supplement (CT-8080-8D).

All Inspection Authorization candidates must take and pass the FAA’s IA Knowledge Exam. This IA Prepware provides all the information needed to prepare for the exam and knowledge test, and helps candidates become familiar with the privileges and limitations of this highest level of maintenance certification. Includes an overview of the Inspection Authori zation, inspection authorization test, inspection authorization process, oversight of an IA (the inspections, authorizations, and paperwork that accompany the privileges), and excerpts of the FAA documents IAs rely on in their work. Inspection Authorization Prepware has the same great features found in all Prepware titles. Numerous study, preparation, practice and evaluation tools are available to help applicants obtain a confident edge before taking the FAA Knowledge Exam. Prepware brings the accuracy and reliability of ASA’s industry-leading Test Prep books to your PC or Macintosh computer.

The software includes more than 400 example FAA questions and answer choices, supported with comprehensive explanations. The same reference material applicants will have access to during the actual test is included as a PDF (the “CT-8080-8D”). This way applicants can be familiar with content and learn how to glean the information they need to answer the questions, from such FAA publications as the Airworthiness Directives, Advisory Circulars, Type Certificate Data Sheets, FAA Order 8130.21D and FAA Form 8130-3.

System Requirements: Internet connection is required for product registration and updates.

IBM compatible PC with Pentium-class processor, Windows 2000, XP with Service Pack 2, or Vista. 128 MB RAM minimum for Windows 2000 and XP (512 MB for Vista). 50 MB available hard drive space, 1024 x 768 SVGA compatible display, CD-ROM drive, mouse or other compatible pointing device.

Macintosh computer with PowerPC G3, G4, G5, or Intel-Mac processor, OS X Tiger (10.4 or higher), 128 MB RAM minimum, 50 MB available hard drive space, 1024 x 768 SVGA compatible display, CD-ROM drive, mouse or other compatible pointing device.

For both Windows and Macintosh, Adobe Acrobat Reader is required.

P/N 13-06663
IP TRAINER VERSION 7.0

IP Trainer is the only IFR simulator with a foundation of artificial intelligence in the form of a virtual instrument flight controller (CFII), the only interactive courseware designed exclusively for instrument students, and the only program that can compare its knowledge of the Instrument Practical Test Standards against a student’s real-time flight simulation performance. Most importantly, while you’re using IP Trainer to build a solid foundation of instrument skills, you’ll also save money. IP Trainer users consistently attain their Instrument Rating with less dual time and with less expense than students who rely on traditional methods alone, saving an average of $1,000 in their total training costs for the rating. With a built-in, spoken ATC guidance, the comprehensive Instrument Flying textbook by Trevor Thom, and a full complement of IFR lessons, IP Trainer is the single best way to bring instrument training home.

ON TOP™ IFR PROFICIENCY SIMULATOR

Inside On Top, you’ll find five of the most popular personal aircraft ever built. There’s a Cessna C172, C182RG, and Piper’s Warrior and Arrow. Also included are the Lancair Columbia 300, the Mooney M20, and Beechcraft’s Bonanza V-35, Beechcraft Baron 58, and Beech’s 1900C twin-turboprop. Each model utilizes precise flight dynamics algorithms, right down to the daily assymetrical thrust you’ll experience if you lose an engine in the Baron. Now, you can test your skills against the reality of single-engine IMC in a light twin, or a twin-turbo. This and other aircraft setup parameters are available for all aircraft. Each aircraft panel is rendered with a next-generation graphics technology that makes every gauge, pointer, tick-mark and knob on your panel as true-to-life as a computer can create. Couple the “Photorealistic” graphics effect with On Top’s precise mimcry of real aircraft instrument panels, and you have a simulated flying experience that is as real as your actual flights. There’s realistic sound effects, like radio idiots, marker beacons, gear and flap extension, and tire sounds. You’ll find speed and altitude in your runway lighting and runway layout. You’ll even see the rivets across your wings as you look right or left on a circling approach, all with enough realism to make you sweat. Full instrumentation, like programmable GPS, HSI, RMI, Moving Map and auto pilot is just half of it. In On Top, you decide what instruments you fly with, and you decide where they’ll go. Some IFR sim makers decide years before you ever get your copy what kind of equipment you’ll fly with and where it will go in your panel, but in On Top you can change it every time. On Top’s Real-World Weather is as variable as tomorrow’s weather. Define winds aloft and then surface winds, then dial in the degree of swing and speed of gusts. Create turbulence, cloud bases and visibility with as much variability as you can handle, so you’ll never know if you’ll have to fly the missed approach until you get to the bottom of the funnel. And best of all, make your virtual conditions change, deteriorating, improving or randomly changing, over any given time frame. In the real world, getting your procedures down pat with a methodical and practiced scan is just the beginning, and there’s always more to learn.

THE COMPLETE G1000 COURSE FROM ASA

The Complete G1000 Course will help you transition from steam-gauge “round dials” to the Technically Advanced Aircraft (TAA) glass cockpit environment. This interactive software allows you to practice becoming proficient in operating the G1000 from the safety and privacy of your home or office computer.

The intuitive, software interface makes this as easy to use as reading a book. Computer learning tools in the form of cockpit representations and demonstrations of the tasks combine with a Part 141 and FITS-certified G1000 course, which is given by Skyline Aeronautics and in forums around the country. In this way the software teaches you how to safely and efficiently use the G1000 without running up the Kobol.

ASA INSTRUMENT REFRESHER SIMULATOR

Instrument Refresher is specifically designed for instrument-rated pilots to get some dual on the maneuvers required to maintain currency. Everything Necessary to Omit Instrument Procedures Check (IPC) is here. Build confidence in your instrument skills and get over the refresher hurdle with the guidance of our qualified mentors. A knowledgeable virtual CFII, Intercept / Track NAVALIDS, holding procedures and approaches are all supported with interactive lessons. Use Instrument Refresher to stay fresh on the 6-month instrument currency requirements! P/N 13-04264

HARDWARE OPTIONS FOR ON TOP AND IP TRAINER

FLIGHT SIM YOKE USB - Top of the line yoke features 15 button functions, throttle, prop, mix- ture controls, X&Y trims, gear and flap switches. Requires USB computer connection and Windows 98SE. Prop and mixture controls work only with Fly and FlightSim 2000 software. P/N 13-00737

CH PRO Rudder Pedals USB - Features forward/ backward slide motion for real simulation flying. Also works well as gas and brake controls for racing simulators. Requires USB computer connection and Windows 98SE. P/N 007-234

VRTR400 CONSOLE SIMULATOR

The VR Aircraft VRTR400 Console Simulator offers the ultimate in realism, flexibility, mobility, reliability, and cost effective flight training! This high quality instrument panel simulation system represents what you would find in a real single engine aircraft. The VRTR400 is as real as it gets! With today’s rapidly escalating operating costs, you can keep flying without burning a drop of fuel, or worrying about the weather. With a small 42” x 18” footprint, the VR400 console simulator will fit in very compact areas, on a desk or small table. Built to rugged specifications, VR simulators will give years of trouble free service. VR simulators are built tough enough to let big kids and non-pilots fly I/R/HARD! Not supplied: PC Computer system capable of operating Microsoft flight simulator 2004 or F/SX. Suggest 2.2ghz or higher 2mb ram video card(s) capable of having three video outputs. Microsoft flight simulator Rudder Pedals (USB) VRTR400 Standard Radios P/N 13-06760

VRTR400-G Dual Screen Glass(G1000) P/N 13-06761

MICROSOFT FLIGHT SIMULATOR AS A TRAINING AID

Microsoft® Flight Simulator has inspired many thousands of young “gamers” to pursue flight training in real life and has pro- vided certificated pilots with countless hours of entertainment. And even though there is an awareness that PC-based simulators—Microsoft Flight Simulator, in particular—are helpful as in-flight training and pilot proficiency, for many it is still unclear how best to benefit from the experience of virtual flying. P/N 13-04937

MICROSOFT FLIGHT SIMULATOR DELUXE EDITION

Flight Simulator, the 25th anniversary of the landmark “Flight Simulator” franchise and the most significant addition to date. The 10th addition to the highly successful “Flight Simulator” franchise, this newest edition will immerse players in a beautifully rich and realistic world, offering a completely new and innovative gaming experience with dozens of new aircraft to choose from, including the AirCreations Kiss Ultralight and Maule MT-260C Orion with wheels and skis. Gamers of all ages, types and skills levels will experience firsthand what it’s like to be an aviator traveling the globe either alone or online with others. FEATURES: Immersive World., Mission-based Gameplay, New Aircraft, Connected World, Interactive Airports. DVD-ROM for the Microsoft® Windows® 98, Windows 2000, Windows Millennium Edition (Windows Me), Windows XP and Windows Vista, operating systems P/N 13-04958

VTS MULTIMEDIA TRAINING SOFTWARE

VTS training tools are priced affordably to allow each student to own a personal copy of the software.Each aircrafts systems are covered in detail far surpassing general flight information provided in Pilot’s Information Manual. For example, the electrical schematic is presented on-screen just as it appears in the information manual. But instead of just sitting there looking mysterious and intimidating, this virtual schematic comes to life with a click of the mouse. Controls and indicators from the cockpit are also available on-screen, creating an immediately usable system.

AirCraft Systems - Skyhawk P/N 13-03387

AirCraft Systems - Warrior P/N 13-03388

AirCraft Systems - Seminole P/N 13-03389
FLIGHT SIMULATORS

CH VIDEO GAME JOYSTICKS

Your pulse quickens, your muscles tighten, adrenaline surges through your veins as you engage enemy aircraft in gut-wrenching aerial combat. With CH Products simulation controllers, the realism of your next combat mission ascends to new heights.

FLIGHTSTICK PRO
- Windows 98, ME, 2000, XP, XP 64bit, Vista – 3 axes and 12 buttons – X, Y, and Z axes for Aileron, Elevator, and Throttle control – 6 traditional push buttons – 1 eight direction POH VAT switch • Total of 80 programmable functions with Control Manager software (included) • Six analog 10 bit axes for precise adjustment of ailerons and elevators • Side Throttle wheel • Large sturdy base with 7 foot USB cable • Plug and Play driveless USB installation • Quality industrial components and construction • Two year limited warranty P/N 13-05613

COMBATSTICK 568
- Windows 98, ME, 2000, XP, XP 64bit, Vista – 3 axes and 18 buttons – X, Y, and Z axes for Aileron, Elevator, and Throttle control – 4 traditional push buttons – 1 eight direction POH VAT switch • Total of 128 programmable functions with Control Manager software (included) • Three color LED selector dial giving you a total of 240 programmable functions with CH Control Manager software • Six analog 10 bit axes for precise adjustment of ailerons and elevators • Side Throttle wheel • Large sturdy base with 7 foot USB cable • Plug and Play driveless USB installation • Quality industrial components and construction • Two year limited warranty P/N 13-05614

FLIGHTSTICK
- Windows 98, ME, 2000, XP, XP 64bit, Vista – 3 axes and 24 buttons – X and Y axes for Aileron, Elevator, and Throttle control – 3 traditional push buttons – 1 mode switch button – 3 four direction HAT switches • Total of 176 programmable functions with Control Manager software (included) • Three color mode indicator LEDs on base • Realistic F-16 handle • Dual rotary trim wheels for precise adjustment of ailerons and elevators • Side Throttle wheel • Large sturdy base with 7 foot USB cable • Plug and Play driveless USB installation • Quality industrial components and construction • Two year limited warranty P/N 13-05615

PRO THRUSTLE
- Windows 98, ME, 2000, XP, XP 64bit, Vista – 3 axes and 24 buttons – X and Y axes on miniature joystick – 2 axes and 4 buttons on accurate throttle sliding motion – 3 traditional push buttons – 1 mode switch button – 3 four direction HAT switches • Total of 176 programmable functions with Control Manager software (included) • Three color mode indicator LEDs on base • Ergonomic left hand HOTAS design • Large sturdy base with 7 foot USB cable • Plug and Play driveless USB installation • Quality industrial components and construction • Two year limited warranty P/N 13-05616

MULTI-FUNCTION PANEL
- Fully Programmable Keyboard for Gamers! Gain domination with the first revolutionary, fully programmable keyboard designed specifically for gamers! Expanding on the role of the traditional keyboard, the MFP gives the gamer the power to program individual keys to emulate any combination of the following: • Keystrokes • Joystick buttons • Mouse buttons • Joystick axis • Mouse axis Each wireless, programmable key is re-usable, inexhaustible and can be re-located anywhere on the MFP tray, enabling a completely new configurable layout for each of your gaming needs. System requirements: Windows 98, ME, 2000, XP, XP 64bit • Control Manager 4.2 installed (included) • USB port

HOTSEAT FLIGHT SIM®
Practice Makes Perfect. The very latest, HotSeat FLIGHT SIM® where you’ll fly in a way you’ve never experienced. Flying on our available PC, you are as close to the real cockpit as possible. With its 6-speaker Dolby Digital® 5.1 Surround Sound, the sound moves with your view. Fully capable for pilot training and upgrade training. Includes our custom LCD stand. You supply the flight controls, monitor and PC, or we can supply it for you.

Available colors: Red, Blue, Yellow, Black. Custom colors available upon request.

FLIGHT SIM ENTRY LEVEL

FLIGHT SIM EXTREME PC BUNDLE FLIGHT READY W/27” HD READY MONITOR

HOTCOMBAT SIM WITH DUAL SCREEN DISPLAYS
- Includes freight anywhere in the 48 contiguous United States. Chassis: Hotseat Flight SIM - a powder coated, steel tubular frame Monitor: 27” and 28” HD LCD Monitors Gaming System: Intel Quad Core Processor with 2.4 Mgs each, NVIDIA 512mb graphics card, 4 gigs ram, DVD Drive. Included Accessories: Flight SIM extended gaming console for flight controls and flight stacks, pedal mounts, cup holder, integrated power strip. Included Software: Microsoft Flight SIM 2004 (P/N 13-06391)

ALSO AVAILABLE:
- HotSeat Helicopter Sim P/N 13-06393
- HotSeat Pilot Pro P/N 13-06392

Visit our website or call for complete details on these additional models.
### JEPPESEN AIRWAY SERVICES

#### JEPPESEN ENROUTE LOW & TERMINAL CHARTS

<table>
<thead>
<tr>
<th>Geographic Coverage</th>
<th>Part No.</th>
<th>First Year</th>
<th>Total</th>
<th># of 2&quot; Binders Required</th>
<th>Order Separately</th>
</tr>
</thead>
<tbody>
<tr>
<td>Full USA</td>
<td>USA05</td>
<td></td>
<td>7</td>
<td></td>
<td></td>
</tr>
<tr>
<td>East</td>
<td>US05</td>
<td></td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AL, CT, DE, DC, FL, GA, IL, IN, KY, MA, MD, ME, MI, MO, MS, NC, ND, NE, NH, NJ, NY, OH, PA, RI, SC, SD, TN, TX, VA, WI, WV</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>East &amp; Central</td>
<td>US005</td>
<td></td>
<td>6</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AL, AR, CT, DE, DC, FL, GA, IA, IL, IN, KS, KY, LA, MA, MD, ME, MI, MN, MO, MS, NC, ND, NE, NH, NJ, NY, OH, PA, RI, SC, SD, TN, TX, VA, WI, WV</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central</td>
<td>US005</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AR, IA, IL, IN, KS, LA, MI, MN, MO, ND, NE, OK, SD, TX, WI</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Central &amp; West</td>
<td>USE05</td>
<td></td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AR, AZ, CA, CO, IA, ID, IL, IN, KS, LA, MI, MN, MO, MT, ND, NE, NM, NV, OK, OR, SD, TX, UT, WA, WI, WY</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>West</td>
<td>US005</td>
<td></td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AZ, CA, CO, ID, MT, NM, NV, OR, UT, WA, WY</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Southwest</td>
<td>US005</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AZ, CA, CO, NM, NV, UT</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Northeast</td>
<td>US005</td>
<td></td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CT, DE, DC, MA, MD, ME, NH, NJ, NY, PA, RI, VA, VT, WY</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Southeast</td>
<td>US005</td>
<td></td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AL, FL, GA, MS, NC, SC, TN</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>South Central</td>
<td>US005</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AR, LA, NM, OK, TX</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>N. Cntl. &amp; Gt. Lakes</td>
<td>US005</td>
<td></td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>CO, IA, IL, IN, KS, KY, MI, MN, MO, MT, ND, NE, OH, SD, WI, WY</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>S. &amp; S. Central</td>
<td>US005</td>
<td></td>
<td>2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>AL, AR, FL, GA, LA, MS, NC, NM, OK, SC, TN, TX</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>California</td>
<td>CAL05</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Florida</td>
<td>FLA05</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Texas</td>
<td>TEX05</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Gulf of Mexico</td>
<td>USY05</td>
<td></td>
<td>1</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Gulf of Mexico (Helicopter Service), instrument approaches within 200nm of the coast at airports with weather reporting capability. Also includes Gulf of Mexico Area chart.

---

#### JEPPESEN AIRWAY MANUAL EXPRESS

### WESTERN AREA

- **Northwest**, J-NW: Washington, Oregon, Idaho
- **West Central**, J-WC: Montana, Wyoming, North Dakota, South Dakota
- **Southwest**, J-SW: Nevada, Utah, Arizona, New Mexico, Colorado
- **California**, J-CA: California
- **Alaska**, J-AK: Alaska

### CENTRAL AREA

- **Central**, J-CN: Colorado, Nebraska, Kansas, Missouri
- **North Central**, J-NC: Minnesota, Iowa, Wisconsin
- **East Central**, J-EC: Indiana, Ohio
- **South Central**, J-SC: Oklahoma, Arkansas, Louisiana
- **Texas**, J-TX: Texas
- **Michigan**, J-MI: Michigan

### EASTERN AREA

- **Mid-Atlantic**, J-MA: Virginia, Maryland, Delaware, West Virginia, D.C.
- **Southeast**, J-SE: Georgia, North Carolina, South Carolina
- **Mid-South**, J-MS: Kentucky, Tennessee, Mississippi, Alabama
- **Florida**, J-FL: Florida

1-1/2" Vinyl Binder (Holds 1 single issue) P/N 13-22792

---

<table>
<thead>
<tr>
<th></th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Florida</td>
<td>13-22710</td>
<td></td>
</tr>
<tr>
<td>Mid-South</td>
<td>13-22715</td>
<td></td>
</tr>
<tr>
<td>Southeast</td>
<td>13-22720</td>
<td></td>
</tr>
<tr>
<td>Mid-Atlantic</td>
<td>13-22725</td>
<td></td>
</tr>
<tr>
<td>Texas</td>
<td>13-22730</td>
<td></td>
</tr>
<tr>
<td>South Central</td>
<td>13-22735</td>
<td></td>
</tr>
<tr>
<td>Central</td>
<td>13-22740</td>
<td></td>
</tr>
<tr>
<td>California</td>
<td>13-22745</td>
<td></td>
</tr>
<tr>
<td>South Central</td>
<td>13-22755</td>
<td></td>
</tr>
<tr>
<td>Northwest</td>
<td>13-22760</td>
<td></td>
</tr>
<tr>
<td>East</td>
<td>13-22765</td>
<td></td>
</tr>
<tr>
<td>Northeast</td>
<td>13-22770</td>
<td></td>
</tr>
<tr>
<td>Michigan</td>
<td>13-22775</td>
<td></td>
</tr>
<tr>
<td>East Central</td>
<td>13-22780</td>
<td></td>
</tr>
<tr>
<td>Great Lakes</td>
<td>13-22785</td>
<td></td>
</tr>
<tr>
<td>North Central</td>
<td>13-22790</td>
<td></td>
</tr>
<tr>
<td>West Central</td>
<td>13-22795</td>
<td></td>
</tr>
</tbody>
</table>

Subscription Service available by Special Order Only. Please call or submit order by email and specify which area is required.
JEPPSENE AIRWAY ACCESSORIES

LEATHER BINDERS

Standard leather 1” Binder..................P/N 13-03251..............
Standard leather 2” Binder..................P/N 13-03250..............
LB-2 Leather, 2” Rings, Stay-Open Bar........P/N 13-21738..............
PLASTIC BINDERS
PB-2 Denlon wrapped, 2” Rings, No Stay-Open Bar........P/N 13-21744..............
PB-1.5 Denlon wrapped, 1.5” Rings, No Stay-Open Bar........P/N 13-22792

CD-POCKET
Durable vinyl pocket holds 2 CD-ROMs, 7 hole punched for binder. Set of 10.
P/N 13-62800

PILOTS NOTES
Write it down! Handy for flight planning, enroute notes.
Fits Jeppesen Binders. Pkg of 500 sheets.
Lined Pilots notes................P/N 13-06806
Unlined Pilots notes.................P/N 13-06805
PV-S IFR Enroute Plotter
Size 3-3/16” x 8-1/2”
P/N 13-21718

CHARTPocket
Transparent durable vinyl pocket holds two enroute charts. 7-hole punched for binder.
P/N 8063

CHART WALLETS
Keep up to 10 enroute charts at your finger tips.
Space saving accordion-fold. Made of durable blue vinyl.
P/N 13-21746

MULTI-CHARTS
Set of 3..................P/N 13-21752

WORKbench

MULTI PURPOSE PRINTER PAPER FOR JEPPSENE BINDERS
Perforated, 7 hole (center & edge) • 500 Letter size sheets • Print up to 1,000 Jeppesen size sheets (5.5”x 8.5”) • Create print from your software • Checklist/Procedures • Schedule/itinerary • Phone/address • Pilot Notes • Flight time/ Expense Log • Approach Charts
P/N 13-33003

JEPP VIEW PRINTER PAPER FOR JEPPSENE BINDERS
Perforated, 7 hole (edge only) • 500 Letter size sheets • Print up to 1,000 Jeppesen size sheets (5.5”x8.5”) • Create & print from your software – area charts & approach charts
P/N 13-33002

JEPPSENE BINDERS

Functional, durable, protects & lasts. Jeppesen’s leather binders are made from top-grain cowhide and include steel hinges and safety locks to secure the rings. The sturdy Durafo binder has the look and feel of our leather binders. The foil-mold process laminates and binds sturdy, ethylene acetate with a clear tough surlyn outer surface. Available in brown and black.

LINED PILOTS NOTES
Fits Jeppesen Binders. Pkg of 500 sheets.

VFR/NAVIGATION LOG PAD
Record all of your flight information in a single convenient log. 50 sheets. Size: 11”x 8.5”
P/N 8846

NAVIGATION LOG / VFR FLIGHT PLAN FORM
Perfect Flight Planning partner. Features a weather log. Two sides fits into Jeppesen binders for easy in flight reference. Package of 100. Size: 5.5” x 8.5”
P/N 13-21754

IFR NAVIGATION LOG
P/N 13-33005

APPROACH CHART PROTECTOR
Protection plus. Transparent plastic envelopes protect your most frequently used approach charts, while accepting marks from almost any writing instrument.
Easy Erase. Set of 10.
P/N 8455

MULTI-TABS
Set of Sectional Tabs..............P/N 13-62513-5
Set of Alphabetical Tabs ......... P/N 13-62541-5

BINDER IDENTIFIERS
Pick up the right binder the first time. Easy to read self-adhesive labels for top and spine of 2” binders.
United States, 2 sets
P/N 13-63000-2

INDE TABS
Simplify Location of desired charts and index sections in your airway manual or trip kit.

Set of Sectional Tabs.............P/N 13-62513-5

AIRWAY MANUAL ACCESSORY PACK
Each pkg Contains: • Chartabs (set of 3) • Approach chart protectors (set of 10) • Chart Tabs (set of 50) • Multi-tabs (set of 13) • Pilot Notes (set of 25 lined)
P/N 13-62804-6

JOG-15/JOG-30 CHART ORGANIZER
Transparent Pockets are ideal for holding trip charts, flight plans, aircraft checklists, etc. Index tabs & spiral binding make it easy to access the chart you want.
15 pocket........P/N 13-62116-5
30 pocket........P/N 13-62116-6
Published by INEGI - Mexico’s National Institute of Statistics, Information & Geography. These World Aeronautical Charts (WAC) were released in 2008 and contain topographical, airport and navaid information. Mexico is divided into 12 regions and 2 regions are printed on each chart for a total of 6 individual charts. Updated every 4 years. SCALE 1:1,000,000. Note that aircraft landing in Mexico that departed from Central America, South America or the Caribbean are subject to special AES requirements and can only use the Cozumel and Tapachula airports as AOE’s. Detailed airport information and fuel availability can be found in the PIlot’s Guide.

<table>
<thead>
<tr>
<th>Description</th>
<th>Part No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Monterey-N Laredo</td>
<td>13-06079</td>
<td></td>
</tr>
<tr>
<td>Acapulco-Mexico</td>
<td>13-06080</td>
<td></td>
</tr>
<tr>
<td>Tuxtla Gutierrez-Mer</td>
<td>13-06081</td>
<td></td>
</tr>
<tr>
<td>Chihuahua-Juarez</td>
<td>13-06082</td>
<td></td>
</tr>
<tr>
<td>Hermosillo-Mexicali</td>
<td>13-06083</td>
<td></td>
</tr>
<tr>
<td>Guadalajara-Culiacan</td>
<td>13-06084</td>
<td></td>
</tr>
</tbody>
</table>

**AVIATOR’S QUICK REFERENCE MAPS**

**Flight Case Map - US 5th Edition**

This is the map that actually started it all and launched our business in 1988. The Aviators’ Quick Reference Map has become standard equipment in the flight bags of thousands of professional pilots all over the world and is standard issue to the pilots of several major airlines.

Colorful and accurate, these maps clearly depict state boundaries, time zones, major cities and towns, rivers, lakes, mountain ranges, national parks and points of interest. Also listed are major airports and VOR’s (with frequencies for easy identification). Hundreds of interesting state by state facts and figures are listed on the back side.

Two finishes: laminated or tearproof. The laminated version has a write-on/wipe-off surface. Either is durable enough to withstand years of use. A great aid for making more interesting PA’s when folded, laminated map measures 10.5” x 16” and tearproof is 8” x 10.75”. Both fit perfectly in a seat pocket or briefcase, making it a great gift for the “Frequent Flier”! The wall map is shipped to you rolled, has no folds and has a write-on/wipe-off surface. Makes for an attractive wall mount anywhere! Shipped to you rolled with no creases. Scale: 1” = 90 miles.

**U.S. QUICK REFERENCE WALL MAP**

Due to popular demand, we have come up with an extra large version of our popular Aviators’ Quick Reference Map and made it wall-size. Perfect for use at home, office, hangar, briefing room, etc. This map depicts state boundaries, time zones, major cities and towns, rivers, lakes, mountain ranges, national parks and other points of interest. Also listed are major airports and VOR’s (with frequencies for easy identification). It is ideal for flight planning or “pinning” your favorite destinations. Measures 33” x 23” or 52” x 36” and is laminated so that you can write on it and just wipe it off. Makes for an attractive wall mount anywhere! Shipped to you rolled with no creases. Scale: 1” = 90 miles.

**AVIATOR’S QUICK REFERENCE FLIGHT CASE MAP - EUROPE**

Designed exactly with the same detail and colors as our U.S. Map, this Aviator’s Quick Reference Map of Europe clearly depicts national boundaries, time zones, major cities and towns, rivers, lakes, mountain ranges, national parks as well as other points of interest. Listed are major airports as well as VOR’s with names, frequencies and identifier codes. The tear-proof flight case-size maps measure 32.5” x 23” when unfolded and only 8” x 11” when folded. For mounting on a wall, we have a wall-sized laminated version that has a write-on/write-off surface and measures 35” x 27.5”. Scale: 1” = 80 miles.

**CAPTAIN’S ATLAS OF U.S.**

Intended for the airline or business jet passenger, this flight reference map is designed primarily for trip planning and referencing landmarks of the USA while in flight.

Two versions of the map are offered: folded and a wall map. They are both packed with useful information on cities, parks, highways, and other points of interest from California to Maine. The folded flight map is printed on durable tear-proof paper and fits perfectly in a seat pocket or briefcase. Using it a great gift for the “Frequent Flyer”! The wall map is shipped to you rolled, has no folds and has a write-on/write-off surface. Flight Map measures 8 1/2” x 11” when folded and the Wall Map is 34” wide x 23” high.
WAC scale charts for the 48 contiguous US states. In addition, all 30 class B Airspaces and 130 Class C Airspaces are reproduced from Sectional Scale charts. With Air Chart’s exclusive NOTAM update service, you’ll have current and legal VFR charts for the whole country. Easy to use key chart and page numbering makes navigation within the Atlas simple. You’d have to spend over $400 to get all the charts contained in the Aviation Topographic Atlas. Comes with coupon for 1-yr of 56 day updates from the publisher at no extra cost. P/N 13-01144.

V SPEEDERS PILOT CARDS
Set of 5. Provide a quick reference for aircraft data such as useful load, fuel capacity, and all V speeds. These are durable write-on cards. (2”x3.5”) which are excellent as useful load, fuel capacity, and all V speeds. These are durable write-on cards. (2”x3.5”) which are excellent for instructors and students. Prepare a card for each aircraft you fly and keep them in your pocket. P/N 13-00463.

IFR FLIGHT FILE
This handy chart planner and organizer holds NOS or Jeppesen approach plates, SIDs and STARs, and airport diagrams. Features easy to load static hold chart protectors, and fits yoke clips & keen-boards. Contains a wealth of important reference information relating to IFR departures, enroute, approach, and alternate. P/N 13-55016.

IFR AREA CHARTS - U.S.
**VISUAL NAVIGATION CHARTS**

**FAA SECTIONAL CHARTS**

Sectional aeronautical charts are designed for visual navigation of slow to medium speed aircraft. The topographic information featured consists of the relief and a judicious selection of visual checkpoints used for flight under visual flight rules. The checkpoints include populated places, drainage patterns, roads, railroads, and other distinctive landmarks. The aeronautical info on Sectional Charts includes visual and radio aids to navigation, airports, controlled airspace, restricted areas, obstructions, & related data. (Scale 1"=6.86 nm/ 1:500,000. 60"x20" folded to 5"x10") Revised semi-annually, except most Alaskan charts are revised annually.

Sectional Charts ................. P/N 8403 .................
Set of 37 charts (w/o AK & HI) .......... P/N 8557 .................

**CHART MASTER**

Chart Master is Aircraft Spruce’s online chart selection program designed to tell you exactly which aviation charts you will need for the route you intend to fly. Just plug in the 3 letter airport identifiers for your departure and destination airports, and Chart Master will provide you with a list of all of the charts needed for your route. Select VFR (sectional, terminal, WAC, AFD, or IFR (Low altitude enroute)) or both and order any or all of the charts listed by Chart Master. This program is available on line at www.aircraftspruce.com.

**FAA VFR TERMINAL AREA CHARTS**

Sectional Charts depict the airspace designated as Class B Airspace. The information found on these charts, while similar to that found on Sectional Charts, is shown in much more detail because of the larger scale. These charts should be used by pilots intending to operate from airfield within or near a Terminal Control Area or an Airport Radar Service Area. Locations of Terminal Area Charts are indicated by a on the Sectional Chart indexes. (Scale 1 inch = 3.43nm/1:250,000. 25 x 20 inches folded to 5 x 10 inches.) Revised semi-annually, except Puerto Rico/Virgin Islands is revised annually.

NOTE: When ordering charts, complete part no. with first 3 letters of chart title. Ex: Los Angeles terminal chart is P/N 8064LOS.

For Subscription service: Add -SUB (example: 8064LOS-SUB) and a new chart will be shipped & billed to you automatically at every revision until you cancel the subscription. Subscription chart orders require credit card number on file.

**CINCINNATI VFR TERMINAL AREA & FLYWAY CHART**
P/N 13-21000 .................

**AIRPORT / FACILITY DIRECTORY**

The Airport/Facility directory is a pilot’s manual which contains data on public and joint use airports, seaplane bases, heliports, VFR airport sketches, NAVAIDS, communications data, weather data sources, airspace, special notices, VFR waypoints and operational procedures. The seven volumes cover the conterminous United States, Puerto Rico, and the Virgin Islands. Includes data that cannot be readily depicted in graphic form, e.g., airport hours of operation, types of fuel available, runway data, lighting codes, etc.

**LARGE-FORMAT CHART WALLET**

This chart wallet helps pilots organize, hold, carry, and display 22 standard NOS charts conveniently. The black padded cover features the silver wings logo. There are ten double-sided, clear vinyl organizer pockets riveted to the cover. Along with the pockets in the front and back covers, these pages hold the charts so you can easily find them in a busy or turbulent cockpit environment. Measures 6.5"x 11.5" w/ 2.5" spine.

Large Book-Style Chart Wallet ................. P/N 13-00412 .................
CHART MASTER

World Aeronautical Charts by NOS are designed to provide standard for the land areas of the world in a size and scale convenient for navigation by moderate-speed aircraft. Topographic information includes cities and towns, principle roads, railroads, distinctive landmarks, drainage, and relief. Aeronautical information includes visual and radio aids to navigation, airports, airways, restricted areas, obstructions, and other data considered pertinent. Scale 1:1,000,000 or 1" to 13.7 nautical miles, less detailed than Sectional & Terminal Area Charts, but useful for longer distance planning. Revised annually. 12 charts cover the US.

WAC Charts.............................P/N 8567.................
NOTE: When ordering charts, complete part no. with chart number.
Example: WAC chart CF-17 is P/N 8567CF-17.

For SUBSCRIPTION service: Add -SUB (example: 8567CF-17-SUB) and a new WAC chart will be shipped and billed to you automatically at every revision until you cancel the subscription. Subscription chart orders require a credit card number on file.

TERMIAL PROCEDURES COVERAGE OF THE CONTERMINOUS U.S.
Includes: • Instrument Approach Procedure (IAP) Charts • Departure Procedure (DP) Charts • Standard Terminal Arrival (STAR) Charts • Charted Visual Flight Procedures (CVFP) • Airport Diagrams
IAP Charts are designed to provide an IFR descent from the enroute environment to a point where a safe landing can be made. DP charts are Air Traffic Control (ATC)-coded departure procedures which have been established at certain airports to simplify clearance delivery procedures. STAR charts are ATC-coded IFR arrival routes established for certain airports to simplify clearance delivery procedures. CVFPs are an operational technique designed to move air traffic safely and expeditiously. In addition to conventional visual approach procedures, it has been necessary to specify routes/altitudes to enhance noise abatement at some locations. CVFPs have been developed to provide a pictorial display of these visual arrival routes. Airport Diagrams are specifically designed to assist in the movement of ground traffic at locations with complex runway-taxiway configurations and provide information for updating geodetic position navigational systems aboard aircraft.

Bound Volumes ...............$4.25
Loose Leaf Volumes...........$4.25

VFR-IFR Wall Planning Chart (U.S.)..............P/N 13-30703..............
U.S. Gulf Coast VFR Chart........................P/N 13-30704..............
Grand Canyon VFR Chart........................P/N 13-30706..............
Baltimore-Washington Helicopter Route Chart........P/N 13-30707..............
Chicago Helicopter Route Chart....................P/N 13-30709..............
Houston Helicopter Route Chart....................P/N 13-30711..............
Los Angeles Helicopter Route Chart.................P/N 13-30712..............
New York Helicopter Route Chart....................P/N 13-30713..............

OTHER VFR CHARTS:

World Aeronautical Charts for Alaska

World Aeronautical Charts for the conterminous U.S., Mexico, & Caribbean Areas

California Aeronautical Chart

If you are planning a flight within the state of California, check out the 2002-2003 California Aeronautical Chart, which covers the entire state on one page and also include 5 sectional charts (Klamath Falls, San Francisco, Los Angeles, Phoenix and Las Vegas). The chart is designed for planning purposes, not for navigation.

P/N 13-30800.................
Jeppesen's new VFR+GPS Charts offer a fresh perspective on what a VFR chart should be with better use of color and contrast, coverage areas based on the way you fly, intuitive symbols for easier interpretation, and Space Shuttle radar data to more accurately depict terrain. Jeppesen VFR+GPS Charts are easier to use in the cockpit or at the kitchen table, they're designed to help you get more from your GPS, and they come from one of the most trusted names in aviation.

A VFR chart is only as good as your trust in the information provided and your ability to quickly interpret and act upon it. For students learning to fly, Jeppesen VFR+GPS Charts are easier to use and read, thanks to a more simplified layout. For instructors, they are easier to use as a teaching aid. And for all aviators, Jeppesen VFR+GPS Charts makes your VFR chart a more effective tool for flight planning, and you a more effective pilot, through enhancements like: Clear Airspace Boundaries — Easier recognition of controlled airspace with color-coding and clear labels to show airspace class and altitude segments. Streamlined Airport Symbology—Jeppesen has updated familiar VFR chart symbology, making it easier to understand. This is especially important when approaching a busy unfamiliar airspace. GPS Waypoints—Jeppesen has updated familiar VFR chart symbology, making it easier to understand. This is especially important when approaching a busy unfamiliar airspace. JepGuide® Airport Diagrams – With airport diagrams on the back, your VFR chart can be a useful guide from engine start-up to shut-down.

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
<th>Part No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Enroute</td>
<td>GL-3, Chicago (CHI)</td>
<td>13-06520</td>
<td>.</td>
</tr>
<tr>
<td>Enroute</td>
<td>NC-14, Denver - Cheyene (DEN)</td>
<td>13-06521</td>
<td>.</td>
</tr>
<tr>
<td>Enroute</td>
<td>SC-1, Dallas - Houston (DAL)</td>
<td>13-06522</td>
<td>.</td>
</tr>
<tr>
<td>Enroute</td>
<td>SC-2, Houston - New Orleans (HOU)</td>
<td>13-06523</td>
<td>.</td>
</tr>
<tr>
<td>Enroute</td>
<td>SE-4, Georgia</td>
<td>13-06524</td>
<td>.</td>
</tr>
<tr>
<td>Enroute</td>
<td>SE-7, Northern Florida</td>
<td>13-06525</td>
<td>.</td>
</tr>
<tr>
<td>Enroute</td>
<td>SE-8, Southern Florida</td>
<td>13-06526</td>
<td>.</td>
</tr>
<tr>
<td>Enroute</td>
<td>NW-1, Northern California</td>
<td>13-06527</td>
<td>.</td>
</tr>
<tr>
<td>Enroute</td>
<td>W-2, Southern California</td>
<td>13-06528</td>
<td>.</td>
</tr>
<tr>
<td>Area</td>
<td>Atlanta (ALT)</td>
<td>13-06536</td>
<td>.</td>
</tr>
<tr>
<td>Area</td>
<td>Chicago (CHI)</td>
<td>13-06537</td>
<td>.</td>
</tr>
<tr>
<td>Area</td>
<td>Dallas - Ft. Worth (DAL)</td>
<td>13-06538</td>
<td>.</td>
</tr>
<tr>
<td>Area</td>
<td>Denver</td>
<td>13-06539</td>
<td>.</td>
</tr>
<tr>
<td>Area</td>
<td>Houston (HOU)</td>
<td>13-06540</td>
<td>.</td>
</tr>
<tr>
<td>Area</td>
<td>Los Angeles - San Diego (LA)</td>
<td>13-06541</td>
<td>.</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Type</th>
<th>Description</th>
<th>Part No.</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>Area</td>
<td>Miami (MIA)</td>
<td>13-06542</td>
<td>.</td>
</tr>
<tr>
<td>Area</td>
<td>New Orleans (NO)</td>
<td>13-06543</td>
<td>.</td>
</tr>
<tr>
<td>Area</td>
<td>San Francisco (SF)</td>
<td>13-06544</td>
<td>.</td>
</tr>
<tr>
<td>Area</td>
<td>Tampa - Orlando (TAM)</td>
<td>13-06545</td>
<td>.</td>
</tr>
<tr>
<td>Enroute</td>
<td>SE-1, South Carolina</td>
<td>13-06529</td>
<td>.</td>
</tr>
<tr>
<td>Enroute</td>
<td>SE-2, Charlotte (CHA)</td>
<td>13-06530</td>
<td>.</td>
</tr>
<tr>
<td>Area</td>
<td>Charlotte (CHA)</td>
<td>13-06546</td>
<td>.</td>
</tr>
<tr>
<td>Enroute</td>
<td>W-3, Phoenix</td>
<td>13-06532</td>
<td>.</td>
</tr>
<tr>
<td>Area</td>
<td>Phoenix (PHO)</td>
<td>13-06547</td>
<td>.</td>
</tr>
<tr>
<td>Enroute</td>
<td>NE-1, BOSTON (BOS)</td>
<td>13-06533</td>
<td>.</td>
</tr>
<tr>
<td>Enroute</td>
<td>SE-3, Memphis (MEM)</td>
<td>13-06535</td>
<td>.</td>
</tr>
<tr>
<td>Area</td>
<td>Boston (BOS)</td>
<td>13-06548</td>
<td>.</td>
</tr>
<tr>
<td>Area</td>
<td>Memphis (MEM)</td>
<td>13-06549</td>
<td>.</td>
</tr>
</tbody>
</table>
**Enroute Low Altitude Charts**

Enroute Low Altitude charts (Conterminous U.S. and Alaska) provide aeronautical information for navigation under instrument flight rules below 18,000 feet MSL. Information includes: airways; limits of controlled airspace; position, identification, and frequencies of radio aids to navigation (Alaska 4-color series includes geographic coordinates); airports with terminal air/ground communications; minimum enroute and obstruction clearance altitudes; airway distances; reporting points; special use airspace areas; military training routes. Scales vary from 1 inch = 5nm to 1 inch = 20nm. 50 x 20 inches folded to 5 x 10 inches. Revised every 8 weeks. Area charts, which show congested terminal areas at a large scale, are included with subscriptions to any conterminous U.S. Set Low (Full set, East or West sets). Chart L-28 covers the Washington-Boston corridor at a scale similar to an Area Chart. Charts are revised every 8 weeks.

- Enroute Low Altitude Charts........ P/N 8070L.............. ./ea.
- Full Set (L1/2-L27/28 & Area Chart) P/N 13-30714 ..............
- Western U.S. Set (L1/2-L15/16 & Area Chart) P/N 13-30715 ..............
- Eastern U.S. Set (L11/12, L13/14, L17/18-L27/28 & Area Chart) P/N 13-30717 ..............
- Alaskan Set (Alaskan L1/2-Alaskan L3/4)................ P/N 13-30718 ..............

For individual charts please call 877-4-SPRUCE or visit our website at: www.aircraftspruce.com

**IFR Gulf of Mexico Vertical Flight Reference Chart (Helicopters)**

This Chart features: IFR GPS waypoint grid system for direct routing to and from offshore platforms; Oil lease block information; NAVAID data, Airport data; Chart scale of 1:500,000; Two-sided printing; Available folded (5" x 9") or flat (45" x 36").

- Area of coverage: From latitude 26° 20' north to the U.S. Gulf Coast. From approximately longitude 87° 30' west to the Texas Coast.
- P/N 13-30721......................................

**Enroute High Altitude Charts**

IFR Enroute High Altitude Charts (Conterminous U.S. and Alaska) are designed for navigation at or above 18,000 feet MSL. This four color chart series includes: Jet route structure; VHF radio aid to navigation (frequency, ID, channel, geographic coordinates); selected airports; reporting points. (Scales vary from 1" = 78nm to 1" = 30nm. 55 x 20" folded to 5 x 10"). Revised every 8 weeks.

- Full Set (H1/2, H3/4, H5/6, H9/H10, H11), (H3/H4, H5/H6, H7/H8-very small area, H9/H10), (H3/H4-very small area, H5/H6, H7/H8, H9/H10, H11) P/N 8075-1 ............

For SUBSCRIPTION service: Add -SUB (example: 8075-H1/2-SUB) and a new chart will be shipped and billed to you automatically at every revision until you cancel the subscription. Subscription chart orders require a credit card number on file.
The VNC is used by VFR pilots on short to extended cross-country flight at medium altitudes and at low to medium airspeeds. These charts show aerodrome data, airspace information, radio aids to navigation, air/ground communications, and elevation with contour lines, tints and shaded relief.

### CANADIAN WAC CHARTS

<table>
<thead>
<tr>
<th>Item</th>
<th>Title</th>
<th>Spruce PN</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>WAC5</td>
<td>C-WAC A5</td>
<td>13-04517</td>
<td>.</td>
</tr>
<tr>
<td>WAC7</td>
<td>C-WAC B-7</td>
<td>13-04518</td>
<td>.</td>
</tr>
<tr>
<td>WAC8</td>
<td>C-WAC B-8</td>
<td>13-04519</td>
<td>.</td>
</tr>
<tr>
<td>WACC9</td>
<td>C-WAC C-9</td>
<td>13-04520</td>
<td>.</td>
</tr>
<tr>
<td>WACC10</td>
<td>C-WAC C-10</td>
<td>13-04521</td>
<td>.</td>
</tr>
<tr>
<td>WACC11</td>
<td>C-WAC C-11</td>
<td>13-04522</td>
<td>.</td>
</tr>
<tr>
<td>WACD12</td>
<td>C-WAC D-12</td>
<td>13-04524</td>
<td>.</td>
</tr>
<tr>
<td>WACD14</td>
<td>C-WAC D-14</td>
<td>13-04526</td>
<td>.</td>
</tr>
<tr>
<td>WACD15</td>
<td>C-WAC D-15</td>
<td>13-04527</td>
<td>.</td>
</tr>
<tr>
<td>WACE17</td>
<td>C-WAC E-17</td>
<td>13-04530</td>
<td>.</td>
</tr>
<tr>
<td>WACE18</td>
<td>C-WAC E-18</td>
<td>13-04531</td>
<td>.</td>
</tr>
<tr>
<td>WACE19</td>
<td>C-WAC E-19</td>
<td>13-04532</td>
<td>.</td>
</tr>
</tbody>
</table>

### CANADA AIR PILOT

The Canada Air Pilot contains aeronautical information related to the conduct of the arrival or departure portion of flight instrument approach procedures, standard instrument departure procedures and noise abatement procedures.

<table>
<thead>
<tr>
<th>Item</th>
<th>Title</th>
<th>Spruce PN</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>CAP1</td>
<td>NWT Canada Air Pilot</td>
<td>13-04553</td>
<td>.</td>
</tr>
<tr>
<td>CAP2</td>
<td>British Columbia Canada Air Pilot</td>
<td>13-04554</td>
<td>.</td>
</tr>
<tr>
<td>CAP3</td>
<td>Prairies Canada Air Pilot</td>
<td>13-04555</td>
<td>.</td>
</tr>
<tr>
<td>CAP4</td>
<td>Ontario Canada Air Pilot</td>
<td>13-04556</td>
<td>.</td>
</tr>
<tr>
<td>CAP5</td>
<td>Quebec (English) Canada Air Pilot</td>
<td>13-04557</td>
<td>.</td>
</tr>
<tr>
<td>CAP6</td>
<td>Quebec (French) Canada Air Pilot</td>
<td>13-04558</td>
<td>.</td>
</tr>
<tr>
<td>CAP7</td>
<td>Atlantic Canada Air Pilot</td>
<td>13-04559</td>
<td>.</td>
</tr>
</tbody>
</table>

### LOW ALTITUDE ENROUTE CHARTS

Enroute Low and High Altitude charts provide aeronautical information for instrument navigation in the low and high airway structure of the Canadian Domestic Airspace. The airspace over foreign territory and international waters in which Canada accepts responsibility for the provision of air traffic services, and other areas required for military use. The primary purpose of Enroute charts is to depict radio navigation data to provide rapid and precise location and identification of information requisite to radio instrument navigation.

<table>
<thead>
<tr>
<th>Item</th>
<th>Title</th>
<th>Spruce PN</th>
<th>Price</th>
</tr>
</thead>
<tbody>
<tr>
<td>LE12</td>
<td>LE12 Low Enroute Chart 1-2</td>
<td>13-04539</td>
<td>.</td>
</tr>
<tr>
<td>LE34</td>
<td>LE34 Low Enroute Chart 3-4</td>
<td>13-04541</td>
<td>.</td>
</tr>
<tr>
<td>LE56</td>
<td>LE56 Low Enroute Chart 5-6</td>
<td>13-04542</td>
<td>.</td>
</tr>
<tr>
<td>LE78</td>
<td>LE78 Low Enroute Chart 7-8</td>
<td>13-04543</td>
<td>.</td>
</tr>
<tr>
<td>LE910</td>
<td>LE910 Low Enroute Chart 9-10</td>
<td>13-04544</td>
<td>.</td>
</tr>
</tbody>
</table>